

PRODUCT CATALOG



Started in 1954 by a young Silvio Bonomi, Bonomi Industries led product and process innovations of the brass valve industry for over 70 years

Our founder's motto was "Quality and trust". This is the legacy we bring forward every day.





About us

BONOMI INDUSTRIES is an Italian manufacturer of high quality shut-off brass valves, actuators and custom-engineered solutions. Under the RuB brand, its products are globally trusted for their reliability and performance in a variety of applications.

BONOMI INDUSTRIES is part of Hadron group — a private holding company established in 2018 during the strategic reorganization of Rubinetterie Utensilerie Bonomi (RuB), which also led to the creation of Shedstone, a real estate company — BONOMI INDUSTRIES continues to grow and innovate. Started in 1954, with entrepreneurial roots tracing back to 1828, the company upholds the values and tradition of a family business while embracing a vision focused towards the future.

Growth at BONOMI INDUSTRIES is driven by continuous investments in product improvements, advanced machining, assembly, and logistics technologies, as well as expanded manufacturing capabilities, enhanced system interconnectivity, database analysis and strengthened engineering and R&D efforts. At the same time, sustainability — encompassing environmental, social, and governance topics — has always been part of the company's DNA and inspires meaningful actions.

For BONOMI INDUSTRIES, innovation and responsibility go hand in hand. This commitment shapes a journey aimed at safeguarding the environment, empowering people, and fostering resilient governance for a better tomorrow.







Companies

RuB valves and actuators are trusted worldwide, installed across five continents and proven in the most demanding applications.

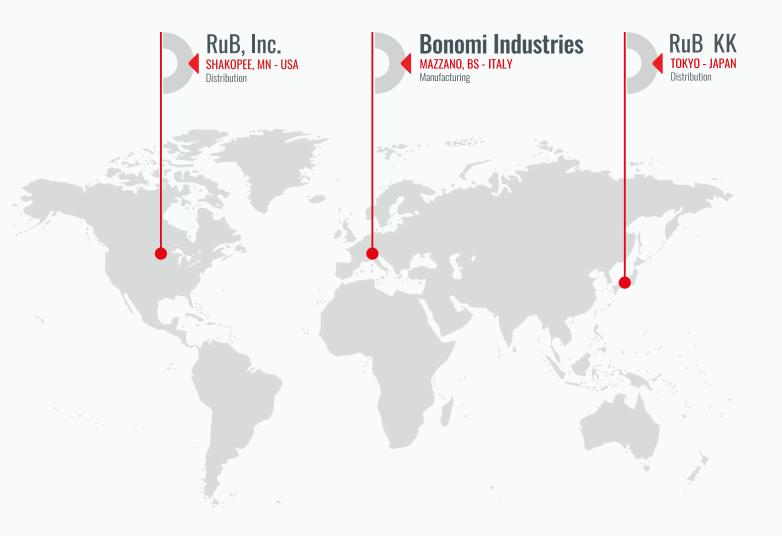
Production takes place entirely at our headquarters, BONOMI INDUSTRIES S.r.l., in Mazzano (Brescia), Italy. Finished products are then distributed globally from Italy and through our international branches. In North America, *RuB, Incorporated* operates from a modern 5.000 sqm (50,000 sqf) facility, handling both assembly and distribution. In Japan, *RuB kk* serves as a strategic presence in a peculiar market.

With a strong global presence, we provide proximity, reliability, and outstanding service to our customers. Our sales team builds lasting partnerships with distributors and OEMs by offering responsive support and technical expertise. Certified, high-quality products, combined with deep knowledge of local cultures and regulations, make BONOMI INDUSTRIES the trusted partner in fluid control solutions.











Quality you can trust, proven through generations of experience.

From rigorous incoming goods inspections to double leak testing, 24-72 hour valve assessments, and visual inspections for top markets/applications, BONOMI INDUSTRIES ensures consistent reliability and precision in every product. Advanced traceability systems, calibrated instruments, and statistical software enhance quality control throughout the production process.

Our dedicated Quality Control team supports continuous monitoring and improvement, ensuring that each production batch meets exactly applicable standards. Paired with robust testing protocols and expert technical support, we deliver solutions designed to meet the most challenging applications.



Approved by Lloyd's Register Quality Assurance:

ISO 9001:2015 (Quality Management) since 1998. ISO 14001:2018 (Environmental Management System) since 2021. ISO 45001:2018 (Occupational Health & Safety) since 2021.



Environment: Air and water are filtered and recovered. Use of recycled environment-friendly packaging materials. Scrap is recycled.



Product Quality Assessment: recognized by certifying bodies in all major industrialized countries worldwide



Safety: compliance with the provisions of decree 81/2008 for the safety system, extensive staff training, and continuous monitoring

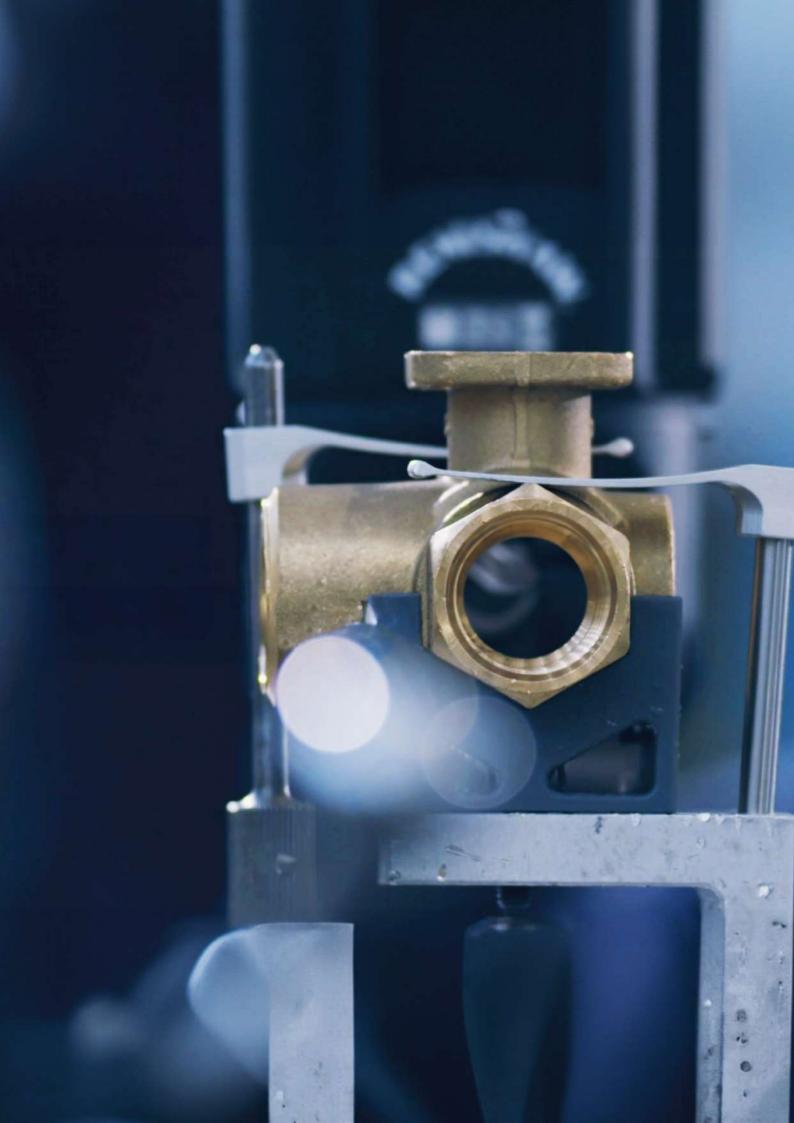


Customized products developed by the Engineering Center



In compliance with the **PED Directive** since 2002





Sustainability

Sustainability has always been a necessity, not a choice. The adoption of sustainable practices at corporate level lays the foundation for creating virtuous cycles that inspire future generations.

Our commitment is stronger than ever, and we're proud to share with you here below figures that mark the tasks we focus on our actions, achievements, and the vision we have for the future. Localized production of electricity is now a reality and we have not been shy with our investments towards clean renewable energy.

Companies are finally waking up to producing their own electricity. Aside from covering the needs of our production manufacturing facility with through solar panels, we constantly reduce energy consumption by investing in smart technology and minimizing heavy material handling.

The diligence with which we strive to make our process and products less impactful on the environment is confirmed by the certifications awarded by international bodies, in particular ISO 14001:2018 and the "silver" medal in the EcoVadis sustainability assessment.

HOW WE WALK THE TALK.

100% of our brass ball valves prevent unnecessary waste – lifetime guaranteed

- **96%** manufacturing scrap is reused
- **30%** of energy comes from our own renewable sources
- **100%** cooling waters are recovered and reused









Every year, OEMs all over the world rely on RuB custom solutions to reduce leaks, equipment breakages and production downtime. We're heavily invested in OEM customizations with custom-made machinery for innovative products and solutions.

We have proven expertise in solving technical and operational challenges for leading boilers, heat pumps and burners manufacturers, LPG gas tank and system manufacturers, manufacturers of watering systems, fire protection, refrigeration, HVAC manufacturers, marine applications with shipbuilders, compressors, tanks, machine tools manufacturers, filtration, chemical, food processing and pharmaceutical companies.

We are intrigued to learn about your obstacles and bring your custom, top shelf solution to life.

PRIVATE LABEL

We strive to meet the needs of our customers in every way possible. And we do so not only through specifically designed, engineered and manufactured OEM products, but also by customizing standard RuB ball valves.

The possible branding options to choose from include:

- Changing the lever marking to the customer's trademark
- Packing with a custom label
- Customized handle colors and materials
- Customized valve fittings
- Dedicated valve body stamping
- Special marking on the valve body
- Custom installation instructions



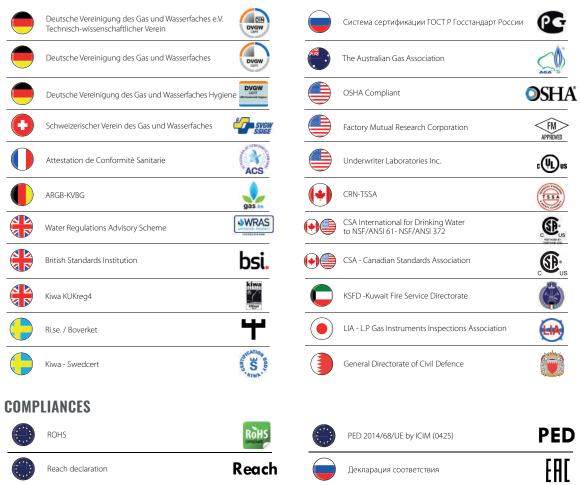




Certifications

We are proud to offer 100% made-in-Italy shut-off brass valves, actuators, and OEM-engineered products, all manufactured in our ISO 9001:2015 certified headquarters in Brescia, Italy. Since adopting this quality management system in 1992 under Lloyd's Register, we have continuously improved product reliability, performance and traceability.

Our certifications, granted by leading global laboratories and agencies, demonstrate compliance with the highest standards for major applications and markets. Supported by rigorous testing and state of art technology, our products meet the demanding requirements of top manufacturers and distributors worldwide.

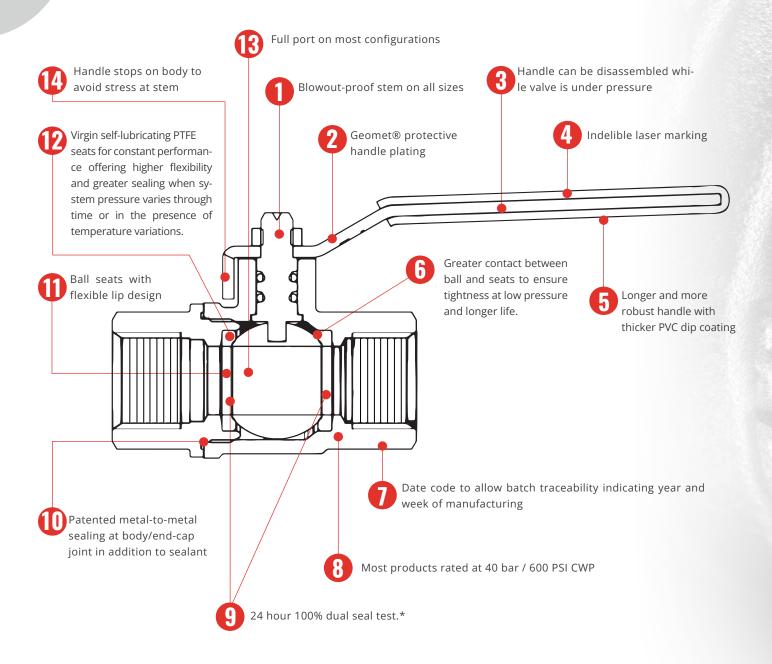


PRODUCT TYPE APPROVALS





RuB valve features



RuB seal test

Valve in half open position is pressurized at 6 bar (87 psig), then closed, trapping compressed air in between ball seats and stem sealing. After adequate preset time, based upon valve size, any leaks are verified using extremely accurate electronic sensors and any defective valve is automatically rejected; all valves passing this initial seal test are filled with compressed air again and remain closed and under pressure for minimum 24 hours; after 24 hours, the valves go back again under the same accurate a new set of electronic pressure sensors and any leaking valve is automatically rejected.

* Certain products are not suitable for double seal test



Our solutions come with an added benefit: maximizing your revenue Scan the QR code to discover our products





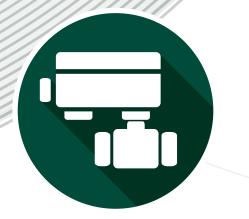
Application INDEX

ACTUATION	Page 20
INDUSTRY	Page 106
PNEUMATIC	Page 160
GAS	Page 190
FIREFIGHTING	Page 232
DRINKING WATER	Page 264
PLUMBING	
ACCESSORIES	

ACTUATION

Reliable valve automation requires precision and durability. RuB electric and pneumatic actuators, designed for 100,000 cycles, deliver consistent performance across diverse applications, including energy, HVAC, and water treatment systems.

Trusted by leading food, pharmaceutical, and chemical manufacturers, they streamline processes like automated dosing, ensuring efficiency, quality, and cost savings.



ACTUATION Scan the QR code to discover our products







CP electric actuator	Page 22
C-Tork light weight electric actuator	Page 26
CH electric actuator	Page 44
EA pneumatic actuator	Page 52
s.31 1/4"- 3/4" EN 10226-1	Page 60
s.31 NPT 1/4"- 3/4"	Page 62
s.31 BSPT 1/4"- 3/4"	Page 64
s.6400 1/2"- 4" EN 10226-1, ISO 5211	Page 66
s.6400LT 1"- 2" EN 10226-1, ISO 5211, low torque	Page 68
k.6405 1/2"- 2" EN 10226-1, ISO 5211, pure PTFE seats, DIN 16722 M3	Page 70
s.6439 NPT 1/2"- 2", SS trim, ISO 5211	Page 72
s.6439LT NPT 1" - 2", SS trim, ISO 5211, low torque	Page 74
s.6441 NPT 1/2" - 4", brass trim, ISO 5211	Page 76
s.6500 1/2"- 1 1/4" ISO 5211	Page 78
s.6541 NPT 1/2"- 1 ¼" ISO 5211	Page 80
s.6550 BSPT 1/2"- 1 1/4" ISO 5211	Page 82
s.7200 3-way 4 seats (diverting) 1/2" - 1" EN 10226-1, ISO 5211	Page 84
s.7241 NPT 3-way 4 seats (diverting) 1/2" - 1" EN 10226-1, ISO 5211	Page 86
s.7300 3-way 4 seats T-port 1/2" - 2" EN 10226-1, ISO 5211	Page 88
s.7341 NPT 3-way 4 seats T-port 1/2 -2" ISO 5211	Page 92
s.7350 BSPT 3-way 4 seats T-port 1/2" - 2" ISO 7/1, BS21 ISO 5211	Page 96
s.7600 3-way 2 seats L-port (diverting) 1/2"- 2" EN 10226-1, ISO 5211	Page 100
s.7641 NPT 3-way 2 seats L-port (diverting) 1/2 - 2" ISO 5211	Page 102
s.7650 BSPT 3-way 2 seats L-port (diverting) 1/2" - 2" ISO 7/1, BS21 ISO 5211	Page 104





COMPACT POWER Electric actuator

The CP series Electric actuator provide an output torque to suit up to 1" valves, and it is available in AC and DC voltage.

Compact package to fit in restricted spaces. The CP series has an ISO 5211mounting interface for direct assembly.

QUALITY

- Bidirectional motor
- DC brushless motor
- Over 100.000 cycle life tests made
- Duty cycle 60%
- Direct mount on valve for perfect shaft alignment
- · Positive orientation between ball valve and actuator
- Actuator easily removable for manual operating by screwdriver (s.31)
- Visual position indicator
- Standard power cable lenght: 0,8 m (31")
- Micro-switches can pass up to 1A

BODY

- Corrosion resistant PC plastic housing
- The gearbox structure is made of steel

WORKING TEMPERATURE

- -20°C (-4°F) to +80°C (+180°F)*
- *UL approval up to +70°C (+160°F)

UPON REQUEST

- DC models with negative command
- Custom cable length
- Terminal with connector

APPROVED BY OR IN COMPLIANCE WITH

- UL-listed Class XABE/XABE7
- IEC/CE:
- Low voltage directive (LVD) 2014/35/EU
- Electromagnetic Compatibility Directive (EMCD) 2014/30/EU
- IEC/EN 60730-1 Automatic electrical controls for household and similar
- use Part 1: General requirements

- IEC/EN 60730-2-14 Automatic electrical controls for household and simi-

- lar use Part 2-14: Particular requirements for electric actuators
- IEC 60529: IP65 degrees
- ANSI/NEMA 250: Enclosures for Electrical Equipment NEMA 4X
- IEC/EN 60730-1: IEC Electric Protection Class
- 110VAC e 220VAC: Class 2 (II)
- Other voltage: Class 3 (III)

HOW TO ORDER:

				CO			
POWER SUPPLY	CONTROL TYPE	OPERATING TIME 90°	POWER CONSUMPTION	with 2 Motor-voltage Switches	with 2 Free Auxiliary Switches	UL APPROVAL	
220 - 240V AC	2 wires	15/20 sec*	8W	-	CP08A2K00100	-	
220 - 240V AC	3 wires	15/20 sec*	8W	-	CP08A3K00100	-	
110 - 120V AC	2 wires	15/20 sec*	8W	-	CP08B2K00100	-	
110 - 120V AC	3 wires	15/20 sec*	8W	-	CP08B3K00100	-	
24V AC	2 wires	15/20 sec*	8W	-	CP08C2K00100	-	
24V AC	3 wires	15/20 sec*	8W	-	CP08C3K00100	-	
24V DC	2 wires	3 sec	5.5W	CP08D2J00200	CP08D2K00200	•	
24V DC	3 wires	3 sec	5.5W	CP08D3J00200	CP08D3K00200	•	
24V AC DC	2 wires	3 sec	5.5W	-	CP08E2K00300	-	
24V AC DC	3 wires	3 sec	5.5W	-	CP08E3K00300	-	
12V DC	2 wires	3 sec	5.5W	CP08F2J00200	CP08F2K00200	-	
12V DC	3 wires	3 sec	5.5W	CP08F3J00200	CP08F3K00200	-	
3.5 - 12V DC	2 wires	3 sec	5.5W	-	CP08G2K00200	-	
3.5 - 12V DC	3 wires	3 sec	5.5W	-	CP08G3K00200	-	

*AC 50Hz: 20 sec; AC 60Hz: 15 sec



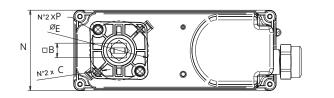


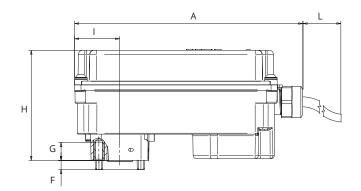
COMPACT POWER XCESCP8 - rev.5711

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



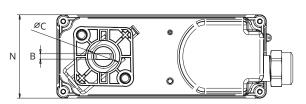
FLANGE ISO 5211 FO3

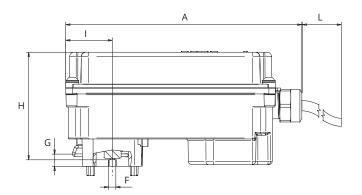




	Size mm	Size inch		
Α	138.5	5.45		
L	~800	~31.50		
I	27.5	1.08		
н	67	2.64		
G	11	0.43		
F	5.5	0,22		
N	49	1.93		
Square B	9	0.35		
ØC	5.5	0.22		
ØE	36	1.42		
Р	M5	M5		

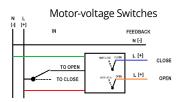
S.31

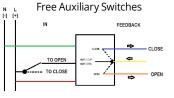




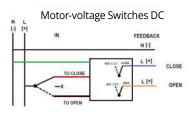
	Size mm	Size inch		
Α	138.5	5.45		
L	~800	~31.50		
I.	27.5	1.08		
Н	63.2	2.49		
G	7.3	0.29		
F	4.3	0.17		
N	49	1.93		
В	3.18	0.13		
ØC	18.7	0.74		

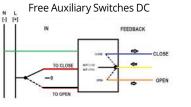
WIRING DIAGRAM FOR 2 WIRES CONTROL - V AC / V DC MODEL



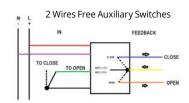


WIRING DIAGRAM FOR 3 WIRES CONTROL - V AC / V DC MODEL

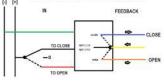




WIRING DIAGRAM FOR 2 AND 3 WIRES CONTROL - V AC-DC MODEL



Free Auxiliary Switches AC





CP8 VALVES COMBINATIONS

Simple assembly operation DUAL ACTUATOR-VALVE INTERFACE



QUICK CONNECT MOUNTING KIT TO BE ORDERED SEPARATELY "KCPA0AA00100"

INTEGRATED ISO 5211 FLANGE MOUNTING KIT INCLUDED



S.31	ΔΡ	1/4" AV31BF3	3/8" AV31CF3	1/2" AV31DF3	3/4" AV31EF3
3.51	0 ÷ 16 Bar (0 ÷ 232 PSI)	•	•	•	٠



	ΔΡ	1/2" S64DxxA	3/4" S64ExxA	1" S64FxxA
S.64 Low Torque	0 ÷ 6 Bar (0 ÷ 87 PSI)	-	-	•
	6 ÷ 16 Bar (87 ÷ 232 PSI)	-	-	•



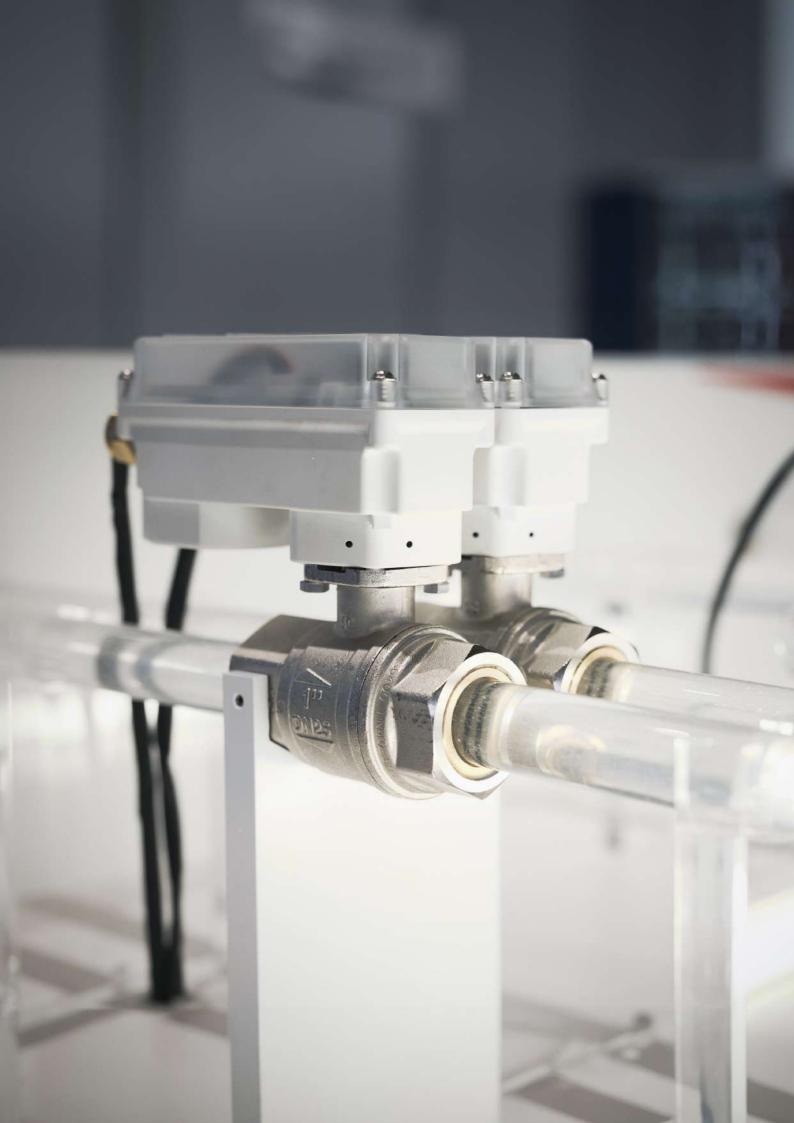
	ΔΡ	1/2"	3/4"	1"
	۵r	S64Dxx	S64Exx	S64Fxx
S.64 K.64	0 ÷ 15 Bar (0 ÷ 217 PSI)	٠	•	•
N.04	15 ÷ 40 Bar (217 ÷ 580 PSI)	•	•	•



	ΔΡ	1/2" S65Dxx	3/4" S65Exx	1" S65Fxx
S.65	0 ÷ 16 Bar (0 ÷ 232 PSI)	٠	٠	•



S.76	ΔР	1/2" \$76Dxx	3/4" \$76Exx	1" S76Fxx
0.70	0 ÷ 16 Bar (0 ÷ 232 PSI)	•	•	•







C-Tork Actuator

Compact lightweight electric actuator

The CT electric actuators are designed to drive ball and butterfly valves with ISO5211 mounting pad, providing a quarter turn motion.

In combination with *RUB* valves are used in wastewater treatment plants, power plants, refineries, mining processes, food factories and in the fluid automated control in HVAC.



THE CT FAMILY PROVIDES THE FOLLOWING OUTPUT TORQUES:

Model	Nominal Torque
CT1	8 Nm (71 lb-in)
CT2	11 Nm (97.5 lb-in)
СТ3	22 Nm (195 lb-in)
CT4	40 Nm (354 lb-in)

TECHNICAL FEATURES & BENEFITS:

$\cdot\,$ Direct ISO 5211 mount on valves.

Requires no separate linkage because the CT Series Actuators (CT2, CT3 & CT4) are ready for direct attachment to ISO5211 mounting pad.

· Compact package with perfect shaft alignment.

Smaller actuator footprint enables installation in confined spaces; direct mount on ball valves reduces the mounting space requirement.

· Several voltage ratings available.

Available with the most common power supplies around the globe.

• Fire retardant plastic with high IP ratings enclosure.

Provides a high degree of protection from dust, splashing water, rough handling and tough environments.

· Auxiliary Switches.

Provides line voltage capable switch up to 1 A Resistive.

· Special models available.

The CT family fits the customer needs extending the application coverage on request.

C-TORK XCESCT - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



KEY CODES:

For available options see single model sheet.

СТ	X	Х	Х	Х	X	Х		
								R = Anti-condensation Resistance***
							Option:	FO = Failsafe Valve Open
								FC = Failsafe Valve Close
								0 = No Micro
							Auxiliary Switches:	1 = 1 Aux. Switch
								2 = 2 Aux. Switches
							Manual Override:	M = Manual Override
							Mandar Overhae.	N = No Manual
								A = 2 Wires
								B = 3 Wires
								C = 2 and 3 Wires
							Control Type:	D = Prop. 0 - 10 Vdc
								E = Prop. 2 - 10 Vdc
								F = Prop. 0 - 20 mA
								G = Prop. 4 - 20 mA
								A = 230Vac 50/60 Hz *
								B = 110Vac 50/60 Hz *
								C = 24Vac 50/60 Hz *
								D = 24Vdc
							Power Supply:	E = 12Vdc
								F = 24Vac/dc
								G = 100 - 230Vac
								H = 230Vac 60 Hz **
								I = 110Vac 60Hz **
								L = 24Vac 60Hz **
								CT1 = 8Nm (71 lb-in)
							Model:	CT2 = 11Nm (97.5 lb-in)
								CT3 = 22Nm (195 lb-in)
								CT4 = 40Nm (354 lb-in)

Note: * Not valid for CT4 (50 Hz only), ** Valid for CT4 only, *** Not available for CT1

Ask for additional information on the whole range of **BONOMI INDUSTRIES** products and consult with your supplier for special applications.



CT1 8 N.m (71 lb-in)



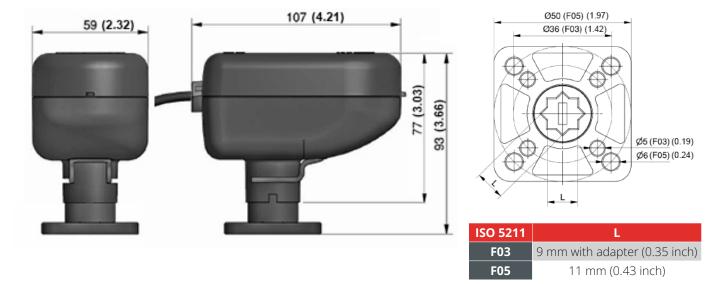
ORDERING CODES

Code	Power supply	Control Type	Running time (0°-90°)	Feedback type	UL approval
CT1AAN1	230 Vac 50/60 Hz	2 Wires	45 sec @ 50Hz		
CITAANT	230 Vac 50/60 Hz	2 WITES	38 sec @ 60Hz		-
CT1BAN1	110 Vac 50/60 Hz	2 Wires	45 sec @ 50Hz		_
CTIDANT	110 Vac 50/00112	2 WIES	38 sec @ 60Hz		-
CT1CAN1	24 Vac 50/60 Hz	2 Wires	45 sec @ 50Hz	1 microswitch	_
	24 Vac 30/00 112	2 WITES	38 sec @ 60Hz	opened position & 1 output phase opened position	
CT1ABN1	N1 230 Vac 50/60 Hz	3 wires	35 sec @ 50Hz		
	230 Vac 30/00 Hz		30 sec @ 60Hz		
CT1BBN1	110 Vac 50/60 Hz	3 wires	35 sec @ 50Hz		
	110 Vac 50/00 112	J WIIES	30 sec @ 60Hz		
CT1CBN1	24 Vac 50/60 Hz	3 wires	35 sec @ 50Hz		
	24 Vac 30/00 112	5 Wiles	30 sec @ 60Hz		
CT1DCN0	24V DC	2/3 Wires	60 sec.	2 output phases	-
CT1FDN0	24V DC / AC ± 20% 50/60 Hz	Modulating 0-10Vdc	60 sec.	2 -10 Vdc	-

OPTIONAL MODELS ON REQUEST:

- 5Nm with 15 sec running time, Vac only
- Vdc 2/3 wires 30 sec running time
- 12 Vdc power supply, 2/3 wires 60 secs running time
- Different Input signal on modulating: 0(2)-10 Vdc, 0(4)-20 mA
- Modbus Communication (only with 24V AC/DC power supply)
- + On/Off 3 positions (0°, 45° and 90°) (only with 12/24 V DC power supply)

DIMENSIONS MM (INCHES)

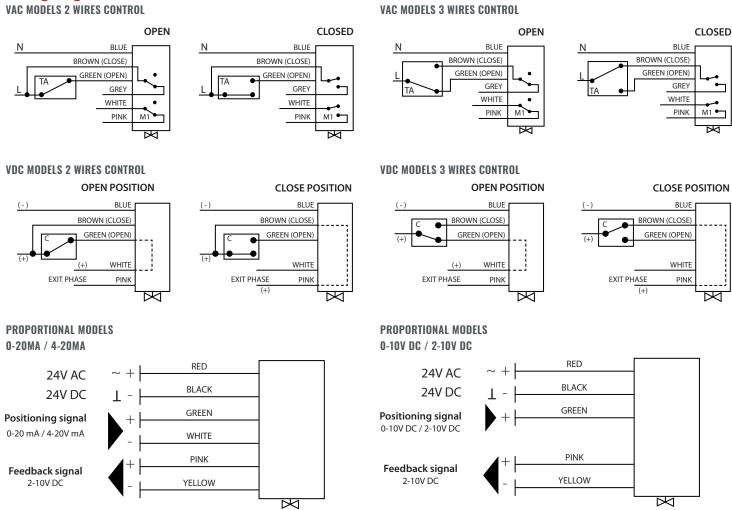


C-TORK XCESCT - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



Wiring diagrams



TECHNICAL SPECIFICATION

	2 wires Vac	3 wires Vac	2/3 wires Vdc	Modulating
Position indicator		Rotating arrow, indicatin	g the position of the ball	
	230 V - 50/60 Hz		24Vdc	
Power supply	24 V - 5	0/60 Hz		24V DC / AC ± 20% 50/60 Hz
	110 V - 50/60 Hz		12Vdc	
Power cable length		80 cm (31.5 inches) (o	ther sizes on request)	
Operating time (90°) and related starting torque	45 sec @ 50Hz 38 sec @ 60Hz	35 sec @ 50Hz 30 sec @ 60Hz	60 sec	60 sec
Absorbed power	3.9 VA		2 VA	3.5 W
Electrical capacity of the additional microswitch	1 A resistive - 250V		Not av	vailable
Maximum noise (1 meter away)	40 dB (A)			
Operating ambient temperature		+5 °C ÷ +50°C	(41°F ÷ 122°F)	
Degree of protection	IP 54 (Equivalent to NEMA3)			
Insulation class	III - double insulation 🔲			
Outer shell material	Polyamide PA 6 - 30% glass fibers			
Certification	CE			

BONOMI INDUSTRIES SRL - www.bonomiindustries.com



CT2 11 N.m (97.5 lb-in)



ORDERING CODES

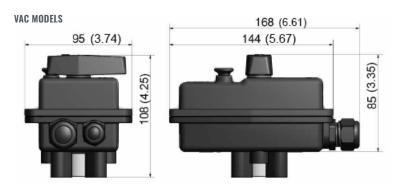
Code	Power supply	Control Type	Running time (0°-90°)	Feedback type	UL approval
CT2ACM2	230 Vac - 50/60 Hz	2/3 Wires	35 sec @ 50Hz		
CTZACIVIZ	250 Vac - 50/00 Hz	275 WILES	30 sec @ 60Hz		•
СТ2ВСМ2	110 Vac - 50/60 Hz	2/3 Wires	35 sec @ 50Hz		
	110 Vac - 50/60 Hz	273 WITES	30 sec @ 60Hz	2 x Free auxiliary switches	•
СТ2ССМ2	24 Vac - 50/60 Hz	2/3 Wires	35 sec @ 50Hz	Switches	
	24 Vac - 50/60 Hz	273 WITES	30 sec @ 60Hz		•
CT2DCN2	24V DC	2/3 Wires	12 sec.		-
CT2ADN0	230 Vac - 50/60 Hz	Proportional 0-10V	30 sec		-
CT2FDN0	24V DC / AC ± 10% 50/60 Hz	Proportional 0-10V	30 sec.	2 x Free auxiliary switches	-
CT2GCM2FC	100-230 Vac	2/3 Wires fail safe close	15 sec.	2 -10 Vdc	-

OPTIONAL MODELS ON REQUEST:

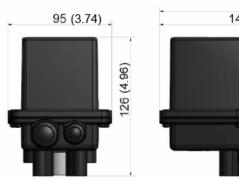
- 12 Vdc power supply
- Optional speed: Vac only : 12 sec or 4 sec (5Nm) - Vdc only : 8 sec and 5 sec (11Nm);
 - 3 sec (8Nm); 1 sec (5Nm)

• Proportional models: 2-10 Vdc, 0(4)-20 mA, Modbus • Electronic fail safe (see pag 41)

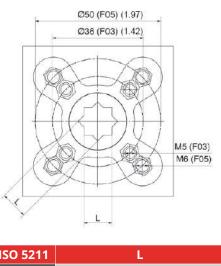
DIMENSIONS MM (INCHES)



VDC MODELS







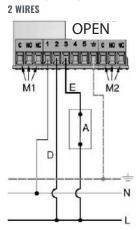
150 5211	<u> </u>
F03	9 mm with adapter (0.35 inch)
F05	11 mm (0.43 inch)

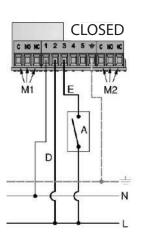
C-TORK XCESCT - 5466

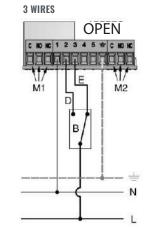
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

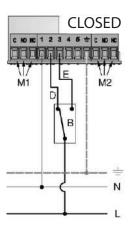


Wiring diagrams

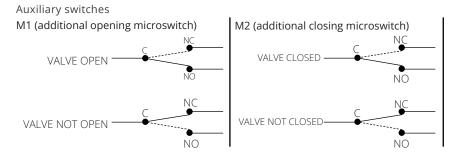








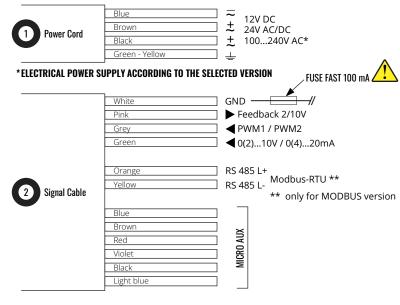
Vac models: Move the jumper to have the desired electrical connection.Vdc models: No jumper change is needed

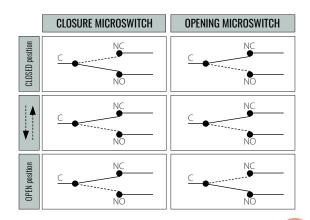


PROPORTIONAL CONTROL

SJ 230V~

A 15 #90





AUXILIARIES

	С	BROWN
OPENING	NC	BLUE
	NO	RED
CLOSING	С	BLACK
	NC	VIOLET
	NO	LIGHT BLUE



TECHNICAL SPECIFICATION

	ALL IN ONE - 2/3 wires Vac	Proportional	Fail safe	
Position indicator and manual override	Manual lever with arrow indicating the position of the ball (not available for Vdc models)			
	230 V - 50/60 Hz	230 Vac - 50/60 Hz		
	110 V - 50/60 Hz	24V Vdc / Vac ± 10% 50/60 Hz		
Power supply	24 V - 50/60 Hz		100-230 Vac - 50/60 Hz	
	24 Vdc			
	12 Vdc			
Electric connections		Via terminal board inside the actuator		
	35 sec @ 50Hz			
Operating time (90°)	30 sec @ 60Hz	30 sec	15 sec (20 sec fail safe)	
	12 sec Vdc			
	7,5 VA (Vac 30/35 sec)			
Absorbed power	13 VA (Vac 1/12 sec)	10W	10W	
	1A (24 Vdc)	1000		
	1,5A (12 Vdc)			
Maximum current supported by the additional microswitches	1 A resistive	max 30Vdc - 0,1 A resistive	max 30Vdc - 0,1 A resistive	
Maximum noise (1 meter away)	35 dB (A) standard version			
Maximum hoise (1 meter away)	47 dB (A) Vdc standard version	45 dB (A)	45 dB (A)	
Operating ambient temperature	-10 °C ÷ +50°C (14°F ÷ 122°F)			
Degree of protection	IP 67 (Equivalent to NEMA6)			
Outer case	Characterized by a ribbed shape made of glass-filled "polyarylamide" technopolymer, particularly robust and impermeable to humidity			
Certification	CE / UL (where applicable)			







CT3 - 22Nm 22 N.m (195 lb-in)



ORDERING CODES

Code	Power supply	Control Type	Running time (0°-90°)	Feedback type	UL approval
CT3ACM2	230 Vac - 50/60 Hz	2/3 Wires	45 sec @ 50Hz 38 sec @ 60Hz		•
CT3BCM2	110 Vac - 50/60 Hz	2/3 Wires	45 sec @ 50Hz 38 sec @ 60Hz	2 x Free auxiliary	•
СТЗССМ2	24 Vac - 50/60 Hz	2/3 Wires	45 sec @ 50Hz 38 sec @ 60Hz	switches	•
CT3DCN2	24V DC	2/3 Wires	30 sec.		-
CT3ADN0	230 Vac - 50/60 Hz	Proportional 0-10V	35 sec @ 60Hz	2 x Free auxiliary	-
CT3FDN0	24V DC / AC ± 20% 50/60 Hz	Proportional 0-10V	30 sec.	switches 2 -10 Vdc	-

OPTIONAL MODELS ON REQUEST:

- 12 Vdc power supply
- Optional speed: Vac only : 9 sec
 Vdc only: 10 sec

- Proportional models: 2-10 Vdc, 0(4)-20 mA, Modbus
- Electronic fail safe (see pag 41)

DIMENSIONS MM (INCHES)

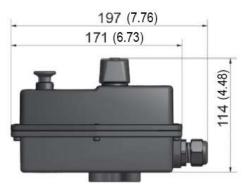
VAC MODELS

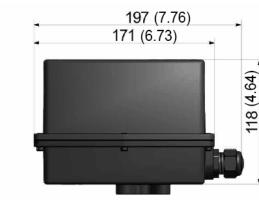
VDC MODELS

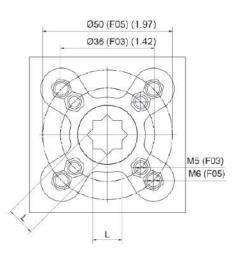
127 (5)



112 (4.41)







ISO 5211	L	
F03	9 mm with adapter (0.35 inch)	
F05	11 mm (0.43 inch)	

C-TORK XCESCT - 5466

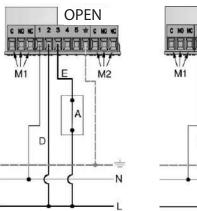
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

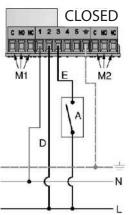
F



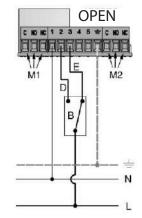
Wiring diagrams

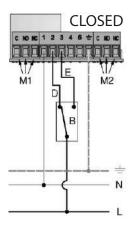




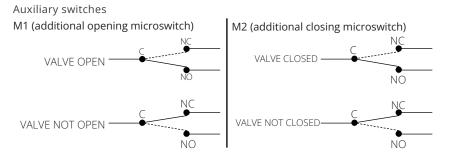


3 WIRES CONTROL

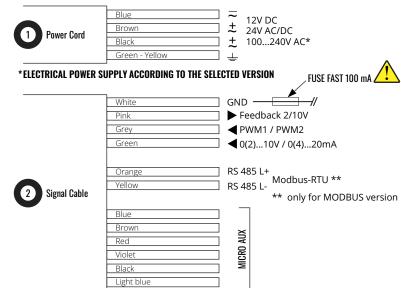


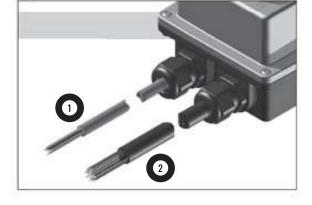


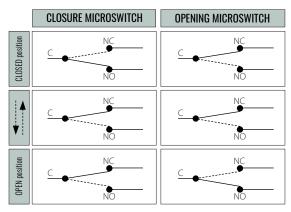
Vac models: Move the jumper to have the desired electrical connection.Vdc models: No jumper change is needed



PROPORTIONAL CONTROL







AUXILIARIES

	C	BLACK	
OPENING	NC	LIGHT BLUE	
	NO	VIOLET	
	С	BROWN	
CLOSING	NC	RED	
	NO	BLUE	



TECHNICAL SPECIFICATION

	ALL IN ONE - 2/3 wires Vac	Proportional	
Position indicator and manual override	Manual lever with arrow indicating the posit	ion of the ball (not available for Vdc models)	
	230 V - 50/60 Hz	230 Vac - 50/60 Hz	
Power supply	110 V - 50/60 Hz	24V Vdc / Vac ± 10% 50/60 Hz	
	24 V - 50/60 Hz		
	24 Vdc		
Electric connections	Via terminal board	inside the actuator	
	45 sec @ 50Hz Vac		
Operating time (90°)	38 sec @ 60Hz Vac	35 sec Vac 30 sec Vdc	
	30 sec Vdc		
Absorbed power	24 VA (Vac)	25 W	
	1A (24 Vdc)	VV C2	
Maximum current supported by the additional microswitches	1 A resistive	max 30Vdc - 0,1 A resistive	
Maximum noise (1 meter away)	42 dB (A) Vac standard version		
Maximum noise (1 meter away)	52 dB (A) Vdc standard version	60 dB (A)	
Operating ambient temperature	-10 °C ÷ +50°C (14°F ÷ 122°F)		
Degree of protection	IP 67 (Equivalent to NEMA6)		
Outer case	Characterized by a ribbed shape made of glass-filled "polyarylamide" technopolymer, particularly robust and impermeable to humidity		
Certification	CE / UL (where applicable)		







CT4 40 N.m (354 lb-in)



ORDERING CODES

Code	Power supply	Control Type	Running time (0°-90°)	Feedback type	UL approval
CT4ACM2	230 Vac 50 Hz	2/3 Wires	55 sec.		•
CT4BCM2	110 Vac 50 Hz	2/3 Wires	55 sec.		•
CT4CCM2	24 Vac 50 Hz	2/3 Wires	55 sec.	2 x Free auxiliary	•
CT4HCM2	230 Vac 60Hz	2/3 Wires	45 sec.	switches	-
CT4ICM2	110 Vac 60Hz	2/3 Wires	45 sec.		-
CT4LCM2	24 Vac 60Hz	2/3 Wires	45 sec.		-
CT4HDN0	230 Vac - 50/60 Hz	Proportional 0-10V	30 sec @ 60Hz	2 x Free auxiliary	-
CT4FDN0	24V DC / AC ± 20% 50/60 Hz	Proportional 0-10V	30 sec.	switches 2 -10 Vdc	-

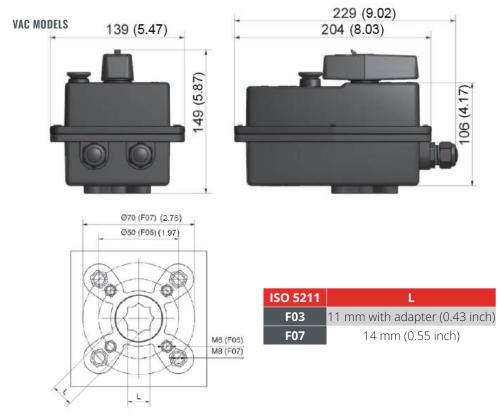
OPTIONAL MODELS ON REQUEST:

- 24Vdc and 12 Vdc power supply
- Optional speed: Vac only : 14 sec and 32 sec

• Proportional models: 2-10 Vdc, 0(4)-20 mA, Modbus

• Electronic fail safe (see pag 41)

DIMENSIONS MM (INCHES)

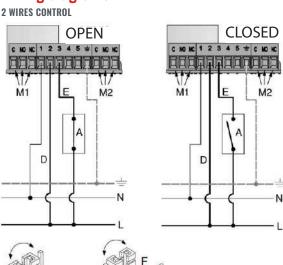


C-TORK XCESCT - 5466

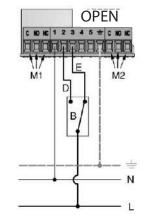
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

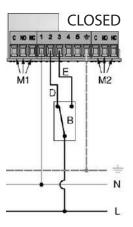


Wiring diagrams

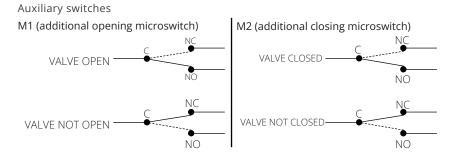


3 WIRES CONTROL



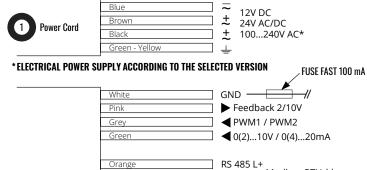


Vac models: Move the jumper to have the desired electrical connection. Vdc models: No jumper change is needed

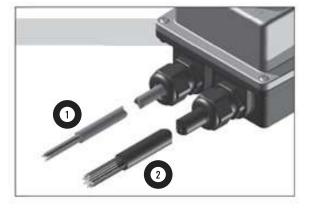


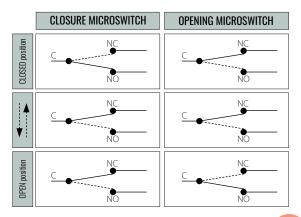
PROPORTIONAL CONTROL

S 230V ~ #



Modbus-RTU ** RS 485 L-Yellow Signal Cable ** only for MODBUS version Blue Brown MICRO AUX Red





AUXILIARIES

	С	BLACK
OPENING	NC	LIGHT BLUE
	NO	VIOLET
	С	BROWN
CLOSING	NC	RED
	NO	BLUE

Violet

Light blue



TECHNICAL SPECIFICATION

	ALL IN ONE - 2/3 wires Vac	Proportional			
Position indicator and manual override	Manual lever with arrow indicating the position of the ball				
	230 V - 50 Hz	230 Vac - 50/60 Hz			
	110 V - 50 Hz	24V Vdc / Vac ± 10% 50/60 Hz			
Power supply	24 V - 50Hz				
	230 V - 60 Hz				
	110 V - 60 Hz				
	24 V - 60 Hz				
Electric connections	Via terminal board	inside the actuator			
Operating time (00°)	55 sec @ 50Hz Vac	30 sec			
Operating time (90°)	45 sec @ 60Hz Vac	20.20			
Absorbed power	24 VA (Vac)	25 W			
Maximum current on the output phase at terminals 4 and 5	1 A resistive	-			
Maximum current supported by the additional microswitches	1 A resistive	max 30Vdc - 0,1 A resistive			
Maximum noise (1 meter away)	50 dB (A) standard version	65 dB (A)			
Operating ambient temperature	-10 °C ÷ +50°C	-10 °C ÷ +50°C (14°F ÷ 122°F)			
Degree of protection	IP 67 (Equivale	ent to NEMA6)			
Outer case	Characterized by a ribbed shape made of glass-filled "polyarylamide" technopolymer, particularly robust and impermeable to humidity				
Certification	CE / UL (whe	re applicable)			



Super capacitors electronic Fail Safe actuators

Using the SuperCaps technology the CT2, CT3 and CT4 actuators can store the necessary energy to drive open or close the valve in a safety position during an electrical power supply interruption. Fail safe open or close position in valves is crucial to prevent serious damages in critical applications such as coils freezing or steam exchangers overpressure. By default they are all provided with a 2-10 Vdc feedback, two auxiliary switches and 1m cable lenght.

ORDERING CODES

Code	Torque (Nm)	Power supply
CT2FCM2Fx	11	24Vdc - 24V 50/60 Hz
CT2GCM2Fx	11	100240V 50/60 Hz
CT3FCM2Fx	22	24Vdc - 24V 50/60 Hz
CT3GCM2Fx	22	100240V 50/60 Hz
CT4FCM2Fx	40	24Vdc - 24V 50/60 Hz
CT4GCM2Fx	40	100240V 50/60 Hz

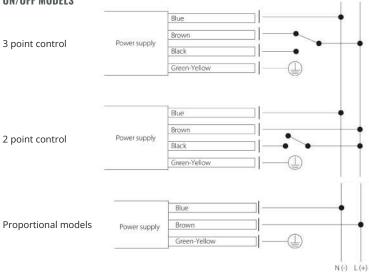
Note: X=O for Fail safe valve open; C for Fail Safe valve close X

TECHNICAL SPECIFICATION - FAIL SAFE MODELS

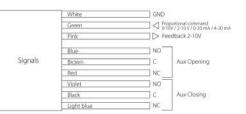
	CT2	СТЗ	CT4		
Available power supply	24Vdc - 24V 50/60 Hz - 100240V 50/60Hz				
Max. Running power consumption	10W	25W	25W		
Power supply cable		1 m (40 in.) length AWG20			
Signal cable		1 m (40 in.) length AWG24			
Auxiliary switches rating	max 30V DC - 0.1 A	max 30V DC - 0.1 A	max 30V DC - 0.1 A		
Nominal Torque	11 Nm	22 Nm	40 Nm		
Available control type	On/off 3&2 wires - proportional				
Valve position feedback	2 -10V DC				
Manual Override	Manual lever with arrow indicating the position of the sphere				
Running Speed (90°)		30s			
Fail safe speed(90°)	20 s	26 s	30 s		
Max Noise	45 dB (A)	60 dB (A)	65 dB (A)		
Degree of protection		IP67			
SuperCaps recharging time	15 min (90°) 15 min (90°)		50 min (90°)		
Operating ambient temperature	-10°C ÷ 50°C (14°F ÷ 122°F)				
Certification		CE / UL (where applicable)			

24V AC/DC 100...240V AC

WIRING DIAGRAMS ON/OFF MODELS









ALVES COMBINATION				•	2		2
s.64 Low Torque	code	size	ΔΡ	CT1 - 8Nm	CT2 - 11Nm	CT3 - 22Nm	CT4 - 40Nm
Sior Lon Torque	S64FxxA	1"		•	•		
	S64GxxA	1 1⁄4''	0 ÷ 6 Bar	•	•		
	S64HxxA	1 1/2"	(0 ÷ 87 PSI)	•	•		
A CONTRACTOR	S64IxxA	2"		•	•		
	code	size	ΔΡ	CT1 - 8Nm	CT2 - 11Nm	CT3 - 22Nm	CT4 - 40Nm
	S64FxxA	1"		•	•		
	S64GxxA	1 1⁄4''	6 ÷ 16 Bar	•	•		
	S64HxxA	1 1⁄2"	(87 ÷ 232 PSI)	•	•		
	S64IxxA	2"			•		
s.64	code	size	ΔΡ	CT1 - 8Nm	CT2 - 11Nm	CT3 - 22Nm	CT4 - 40Nm
	S64Dxx	1/2"		•	•		
	S64Exx	3/4"		•	•		
	S64Fxx	1"	0 ÷ 15 Bar	•	•		
	S64Gxx	1 1⁄4"	(0 ÷ 217PSI)		•		
Contraction of the second	S64Hxx	1 1⁄2''					•
AL IL	S64lxx code	2″ size	ΔΡ	CT1 - 8Nm	CT2 - 11Nm	CT3 - 22Nm	• CT4 - 40Nn
	S64Dxx	1/2"	ΔΡ	•	•	CT3 - 22INIII	C14 - 40Mi
	S64Exx	3/4"		•	•		
	S64Fxx	1"	15 ÷ 40 Bar	•	•		
	S64Gxx	1 1⁄4"	(217 ÷ 580 PSI)			•	
	S64Hxx	1 1⁄2''					•
	S64lxx	2"					•
s.65	code	size	ΔΡ	CT1 - 8Nm	CT2 - 11Nm	CT3 - 22Nm	CT4 - 40Nn
	S65Dxx	1/2"		•	•		
STATE -	S65Exx	3/4"	0 ÷ 16 Bar	•	•		
	S65Fxx	1"	(0 ÷ 232 PSI)	•	•		
	S65Gxx	1 1⁄4″		•	•		
s.134	code	size	ΔΡ	CT4 ONL		CT3 - 22Nm	CT4 - 40Nr
2	134Dxx			CT1 - 8Nm	CT2 - 11Nm	C13 - 22INIII	
	1310//	1/2"		•	CT2 - 11Nm •	CT3 - 22INIII	
A. C.	134Exx	1/2" 3/4"				C13 - 22Nm	
A L	134Exx 134Fxx	3/4" 1"	0 ÷ 14 Bar	•	•	•	
	134Exx 134Fxx 134Gxx	3/4" 1" 1 ¼"		•	•		
	134Exx 134Fxx 134Gxx 134Hxx	3/4" 1" 1 ¼" 1 ½"	0 ÷ 14 Bar	•	•	•	•
	134Exx 134Fxx 134Gxx	3/4" 1" 1 ¼"	0 ÷ 14 Bar	•	•	•	
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx	3/4" 1" 1 ¼" 1 ½"	0 ÷ 14 Bar	•	•	•	•
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 134Ixx code S73Dxx	3/4" 1" 1 ¼" 1 ½" 2" size 1/2"	0 ÷ 14 Bar (0 ÷ 203 PSI)		•	• • CT3 - 22Nm •	•
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 134Ixx code \$73Dxx \$73Exx	3/4" 1" 1 ¼" 1 ½" 2" size 1/2" 3/4"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ		• • CT2 - 11Nm	• • • • •	•
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 134 Ixx code \$73Dxx \$73Exx \$73Exx	3/4" 1" 1 ¼" 1 ½" 2" size 1/2" 3/4" 1"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar		• • CT2 - 11Nm	• • CT3 - 22Nm •	• • CT4 - 40Nn
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx code S73Dxx S73Exx S73Exx S73Fxx S73Gxx	3/4" 1" 1 ½" 2" size 1/2" 3/4" 1" 1 ¼"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ		• • CT2 - 11Nm	• • • • •	• • CT4 - 40Nn
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 573Dxx 573Dxx 573Exx 573Fxx 573Gxx 573Hxx	3/4" 1" 1 ¼" 1 ½" 2" size 1/2" 3/4" 1" 1 ¼" 1 ¼" 1 ½"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar		• • CT2 - 11Nm	• • • • •	• CT4 - 40Nn •
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 573Dxx 573Dxx 573Exx 573Fxx 573Fxx 573Gxx 573Hxx 573Hxx	3/4" 1" 1 ¼" 1 ½" 2" size 1/2" 3/4" 1" 1 ¼" 1 ½" 2"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar (0 ÷ 232 PSI)	• • CT1 - 8Nm	• • CT2 - 11Nm •	• • • • • •	• CT4 - 40Nn • •
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 573Dxx 573Exx 573Fxx 573Fxx 573Gxx 573Gxx 573Hxx 573Ixx 573Ixx	3/4" 1" 1 ½" 2" size 1/2" 3/4" 1" 1 ¼" 1 ½" 2" size	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar	• • CT1 - 8Nm	• • CT2 - 11Nm • CT2 - 11Nm	• • • • • • • • • • • •	• CT4 - 40Nn • •
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 573Dxx 573Exx 573Fxx 573Fxx 573Gxx 573Gxx 573Hxx 573Ixx 573Ixx 573Ixx	3/4" 1" 1 ½" 2" size 1/2" 3/4" 1 ½" 1 ½" 2" size 1/2" size 1/2"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar (0 ÷ 232 PSI)	• • CT1 - 8Nm	• • CT2 - 11Nm •	• • • • • •	• CT4 - 40Nn • •
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 573Dxx 573Exx 573Fxx 573Fxx 573Gxx 573Gxx 573Hxx 573Ixx 573Ixx	3/4" 1" 1 ¼" 1 ½" 2" size 1/2" 3/4" 1 ¼" 1 ¼" 1 ½" 2" size 1/2" 3/4" 3/4"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar (0 ÷ 232 PSI) ΔΡ	• • CT1 - 8Nm CT1 - 8Nm	• • CT2 - 11Nm • CT2 - 11Nm	• • • • • • • • • • • •	• CT4 - 40Nn • •
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 573Dxx 573Exx 573Fxx 573Fxx 573Gxx 573Hxx 573Hxx 573Ixx 573Ixx 573Hxx 573Hxx 573Hxx 573Exx	3/4" 1" 1 ½" 2" size 1/2" 3/4" 1 ½" 1 ½" 2" size 1/2" size 1/2"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar (0 ÷ 232 PSI)	• • CT1 - 8Nm CT1 - 8Nm • •	• • CT2 - 11Nm • CT2 - 11Nm • •	• • • • • • • • • • • • • • • • • • •	• CT4 - 40Nn • •
s.73 & s.76	134Exx 134Fxx 134Gxx 134Hxx 134Hxx 573Dxx 573Dxx 573Exx 573Fxx 573Fxx 573Hxx 573Hxx 573Hxx 573Hxx 573Hxx 573Hxx 576Exx	3/4" 1" 1 ¼" 1 ½" 2" size 1/2" 3/4" 1 ¼" 1 ½" 2" size 1/2" 3/4" 1 ½" 2"	0 ÷ 14 Bar (0 ÷ 203 PSI) ΔΡ 0 ÷ 16 Bar (0 ÷ 232 PSI) ΔΡ 0 ÷ 16 Bar	• • CT1 - 8Nm CT1 - 8Nm • •	• • CT2 - 11Nm • CT2 - 11Nm • •	• • • • • • • • • • • • • • • • • • •	• • CT4 - 40Nm • •









CH Actuator

High Torque electric actuator

The CH valve actuators are used on ball or butterfly valves.

This quarter turn actuators are available from 50 Nm to 400Nm. As standard, this actuator offers an IP67 ABS housing, dome position indicator, end of travel limit switches, manual override and an internal heater.

The new Series offers multi-voltage capability and failsafe functionality utilizing a supercapacitor back-up system.

The CH family provides the following output running torques:

Model	Nominal Torque		
CH1	50 Nm (443 lb-in)		
CH2	80 Nm (708 lb-in)		
CH3	110 Nm (974 lb-in)		
CH4	200 Nm (1770 lb-in)		
CH5	400 Nm (3540 lb-in)		



TECHNICAL FEATURES & BENEFITS:

• Multiple ISO 5211 mountings.

The CH Series Actuators are ready for direct attachment on valves providing two size ISO 5211 and an octagonal female drive output.

· Dome style local visual indicator.

A clearly visible indicator allows intuitive indication of the valve position.

· Hand operation.

by hexagonal wrench, supplied in clip under the actuator, it's possible to do open/close operation when no power is being applied.

• Fully weatherproof to IP67.

Enhances the range of application environments.

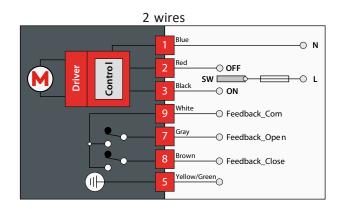
· End of travel confirmation switches.

Provides line voltage capable switch up to 1 A Resistive.

· Special models available.

The CH family fits the customer needs extending the application coverage on request.

WIRING DIAGRAMS - ON/OFF MODELS



CH XCESCH - 5637

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



CH1

50 N.m (443 lb-in)

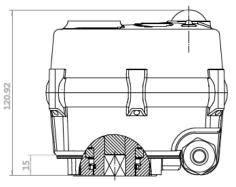
Available versions CH1 model						
Part number	Voltage	Function	Torque (Nm)	Torque (lb-in)		
CH1FCM2	24VAC/DC	ON OFF	50 Nm	443 lb-in		
CH1GCM2	95-265VAC	ON OFF	50 Nm	443 lb-in		
CH1FCM2Fx	24VAC/DC	FAILSAFE	50 Nm	443 lb-in		
CH1GCM2Fx	95-265VAC	FAILSAFE	50 Nm	443 lb-in		
CH1GGM2	95-265VAC	4-20MA	50 Nm	443 lb-in		
CH1FGM2	24VAC/DC	4-20MA	50 Nm	443 lb-in		

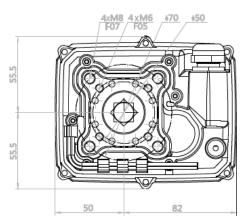
TECHNICAL SPECIFICATION

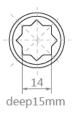
	ON-OFF ELECT	RIC ACTUATOR	ON-OFF FAILSAFE EL	ECTRIC ACTUATOR	
Ordering code	CH1GCM2	CH1FCM2	CH1GCM2Fx*	CH1FCM2Fx*	
Rated voltage	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)	
Voltage range	AC: 95-265V DC: 100-300V	AC: 18-26V DC: 22-28V	AC: 95-265V DC: 100-300V	AC: 18-26V DC: 22-28V	
Consumption	25 W	25 W	40 W	40 W	
Peak current	6.25 A	6.25 A	6.25 A	6.25 A	
Fuse	2 A	4 A	4 A	4 A	
Maximum break Torque Nm	1 0 0	Nm	1 00	Nm	
Manual operation	Yes, t	by hexagonal wrench (supplied in	clip) when no power is being app	lied.	
Run time		≈ 10	sec		
Operating frequency	Not continuous, allow ≥ 1 minute between cycles				
Position confirmation	Mechanically driven dome style visual 2 colour indicator				
Mounting restriction	Do not install underslung/upside down. Can install upright horizontally or vertically.				
End position indication	Micro-switches ope	rated by adjustable internal cam	s , set slightly ahead of the final m	otor stop position.	
ISO 5211	F05 & F07				
Working angle	Factory	set at 90° ± 2°, maximum angle	of rotation 360° unless multi turn	series.	
Female drive		14mm x 15	5mm deep		
Ingress protection		IP	67		
Max media temperature		≤ 80)° C		
Ambient temperature	-20° C to 60° C				
Non-operating temperature	-40° C to 80° C				
Ambient humidity	5-95% RH non-condensing				
Housing		Plastic (A	BS) cover		

*Note: x = O Failsafe Valve Open; C Failsafe Valve Closed

DIMENSIONS MM









CH 2 80 N.m (708 lb-in)

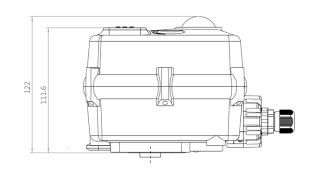
Available versions CH2 model						
Part number	Voltage	Function	Torque (Nm)	Torque (lb-in)		
CH2FCM2	24VAC/DC	ON OFF	80 Nm	708 lb-in		
CH2GCM2	95-265VAC	ON OFF	80 Nm	708 lb-in		
CH2FCM2Fx	24VAC/DC	FAILSAFE	60 Nm	531 lb-in		
CH2GCM2Fx	95-265VAC	FAILSAFE	60 Nm	531 lb-in		
CH2GGM2	95-265VAC	4-20MA	80 Nm	708 lb-in		
CH2FGM2	24VAC/DC	4-20MA	80 Nm	708 lb-in		

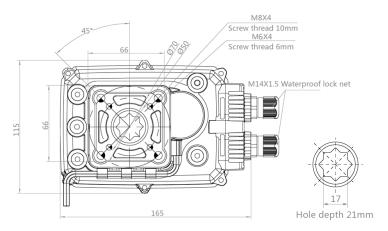
TECHNICAL SPECIFICATION

	ON-OFF ELECTR		ON-OFF FAILSAFE ELECTRIC ACTUATOR		
Ordering code	CH2GCM2	CH2FCM2	CH2GCM2Fx*	CH2FCM2Fx*	
Rated voltage	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)	
Voltage range	AC: 95-265V DC: 100-300V	AC: 18-26V DC: 22-28V	AC: 95-265V DC: 100-300V	AC: 18-26V DC: 22-28V	
Consumption	60 W	60 W	60 W	60 W	
Peak current	3.75 A	3.75 A	3.75 A	3.75 A	
Fuse	4 A	4 A	4 A	4 A	
Maximum break Torque Nm	90 Nm	90 Nm	90 Nm	90 Nm	
Manual operation	Yes, b	y hexagonal wrench (supplied ir	n clip) when no power is being app	lied.	
Run time		≈ 10) sec		
Operating frequency	Not continuous, allow ≥ 1 minute between cycles				
Position confirmation	Mechanically driven dome style visual 2 colour indicator				
Mounting restriction	Do not in	stall underslung/upside down. C	an install upright horizontally or v	ertically.	
End position indication	Micro-switches oper	rated by adjustable internal cam	s , set slightly ahead of the final m	otor stop position.	
ISO 5211	F05 & F07				
Working angle	Factory	set at 90° ± 2°, maximum angle	of rotation 360° unless multi turn	series.	
Female drive		17mm x 2	1mm deep		
Ingress protection		IP	67		
Max media temperature		≤ 81	0° C		
Ambient temperature	-20° C to 60° C				
Non-operating temperature		-40° C t	to 80° C		
Ambient humidity		5-95% RH no	n-condensing		
Housing		Plastic (A	BS) cover		

*Note: x=O Failsafe Valve Open; C Failsafe Valve Closed

DIMENSIONS MM





CH XCESCH - 5637

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



CH 3 110 N.m (974 lb-in)

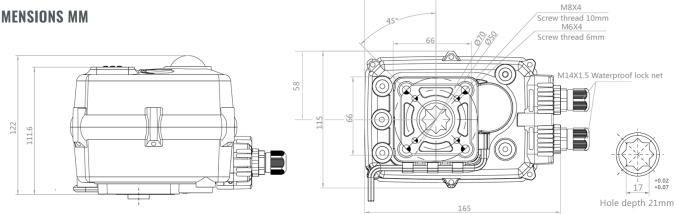
Available versions CH3 model						
Part number	Voltage	Function	Torque (Nm)	Torque (lb-in)		
CH3FCM2	24VAC/DC	ON OFF	110 Nm	974 lb-in		
CH3GCM2	95-265VAC	ON OFF	110 Nm	974 lb-in		
CH3FCM2Fx	24VAC/DC	FAILSAFE	90 Nm	796 in-lb		
CH3GCM2Fx	95-265VAC	FAILSAFE	90 Nm	796 in-lb		
CH3GGM2	95-265VAC	4-20MA	110 Nm	974 lb-in		
CH3FGM2	24VAC/DC	4-20MA	110 Nm	974 lb-in		

TECHNICAL SPECIFICATION

	ON-OFF ELECTR		ON-OFF FAILSAFE EL	ECTRIC ACTUATOR									
Ordering code	CH3GCM2	CH3FCM2	CH3GCM2Fx*	CH3FCM2Fx*									
Rated voltage	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)									
Voltage range	AC 95-265V / DC 100-300V	AC 20-28 / DC 22-32V	AC 95-265V / DC 100-300V	AC 20-28 / DC 22-32V									
Consumption	100 W	100 W	100 W	100 W									
Peak current	6.25 A	6.25 A	6.25 A	6.25 A									
Fuse	2 A	10 A	2 A	10 A									
Maximum break Torque Nm	1401	Nm	140	Nm									
Manual operation	Yes, by he	xagonal wrench (supplied in clip) when no power is being applied I	Run time									
Run time		≈ 10 sec											
Operating frequency	AC not continuous,	75% duty cycle but recommend	d allowing ≥1 min between cycles.	DC is continuous.									
Position confirmation		Mechanically driven dome	style visual 2 color indicator										
Mounting restriction	None, it can be m	ounted at any angle. Leave spac	ce for manual operation and electr	ical connection.									
End position indication	Micro-switches oper	rated by adjustable internal cam	s , set slightly ahead of the final m	otor stop position.									
ISO 5211		F05 8	& F07										
Working angle		Factory set	at 90° ± 2°										
Female drive		17mm octagor	n x 21mm deep										
Ingress protection		IP	67										
Max media temperature		≤ 8	0° C										
Ambient temperature		-20° C t	to 60° C										
Non-operating temperature		-40° C t	to 80° C										
Ambient humidity		5-95% RH no	n-condensing										
Housing		Plastic (A	BS) cover										

*Note: x=O Failsafe Valve Open; C Failsafe Valve Closed

DIMENSIONS MM



60



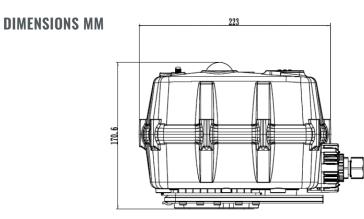
CH 4 200 N.m (1770 lb-in)

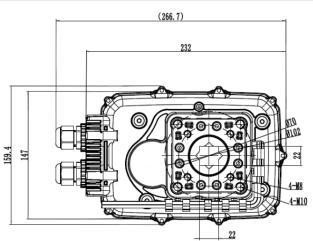
	Available versions CH4 model												
Part number	Voltage	Function	Torque	Torque (lb-in)									
CH4FCM2	24VAC/DC	ON OFF	200 Nm	1770 lb-in									
CH4GCM2	95-265VAC	ON OFF	200 Nm	1770 lb-in									
CH4FCM2Fx	24VAC/DC	FAILSAFE	200 Nm	1770 lb-in									
CH4GCM2Fx	95-265VAC	FAILSAFE	200 Nm	1770 lb-in									
CH4GGM2	95-265VAC	4-20MA	200 Nm	1770 lb-in									
CH4FGM2	24VAC/DC	4-20MA	200 Nm	1770 lb-in									

TECHNICAL SPECIFICATION

	ON-OFF ELECTR	RIC ACTUATOR	ON-OFF FAILSAFE EL	LECTRIC ACTUATOR				
Ordering code	CH4GCM2	CH4FCM2	CH4GCM2Fx*	CH4FCM2Fx*				
Rated voltage	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)				
Voltage range	AC: 95-265V DC: 100-300V	AC: 18-26V DC: 22-28V	AC: 95-265V DC: 100-300V	AC: 18-26V DC: 22-28V				
Consumption	120 W	120 W	150 W	150 W				
Peak current	7.5 A	7.5 A	7.5 A	7.5 A				
Fuse	10 A	10 A	10 A	10 A				
Maximum break Torque Nm	240	Nm	240	240 Nm lust engage declutch button on cover first.				
Manual operation	Yes, by hexagonal wrench	n (supplied in clip) when no power	is being applied. Must engage declut	ch button on cover first.				
Run time		≈ 25	5 sec					
Operating frequency		Not continuous, allow \geq	1 minute between cycles					
Position confirmation		Mechanically driven dome s	style visual 2 colour indicator					
Mounting restriction	Do not in	stall underslung/upside down. C	Can install upright horizontally or v	ertically.				
End position indication	Micro-switches oper	rated by adjustable internal cam	ns , set slightly ahead of the final m	notor stop position.				
ISO 5211		F07 a	& F10					
Working angle	Factory	set at 90° ± 2°, maximum angle	of rotation 360° unless multi turn	series.				
Female drive		22mm x 2	7mm deep					
Ingress protection		IP	67					
Max media temperature		≤ 8	0° C					
Ambient temperature		-20° C 1	to 60° C					
Non-operating temperature		-40° C 1	to 80° C					
Ambient humidity		5-95% RH no	on-condensing					
Housing		Plastic (A	NBS) cover					

***Note:** x=O Failsafe Valve Open; C Failsafe Valve Closed





CH XCESCH - 5637

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



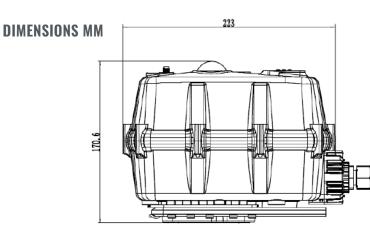
CH 5

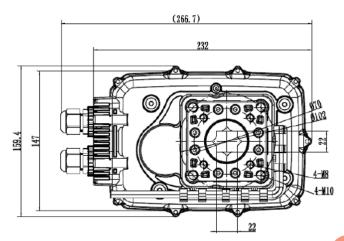
400 N.m (3540 lb-in)

	Available versions CH5 model												
Part number	Voltage	Function	Torque	Torque (lb-in)									
CH5FCM2	24VAC/DC	ON OFF	400 Nm	3540 lb-in									
CH5GCM2	95-265VAC	ON OFF	400 Nm	3540 lb-in									
CH5GGM2	95-265VAC	4-20MA	400 Nm	3540 lb-in									
CH5FGM2	24VAC/DC	4-20MA	400 Nm	3540 lb-in									

TECHNICAL SPECIFICATION

	ON-OFF ELECTR		ON-OFF FAILSAFE E	LECTRIC ACTUATOR								
Ordering code	CH5GCM2	CH5FCM2	NA	NA								
Rated voltage	95-265VAC/DC (50/60Hz)	24VAC/DC (50/60Hz)										
Voltage range	AC: 95-265V DC: 100-300V	AC: 18-26V DC: 22-28V										
Consumption	150 W	150 W										
Peak current	9.3 A	9.3 A										
Fuse	15 A	15 A										
Maximum break Torque Nm	450	Nm										
Manual operation	Yes, by hexagonal wrencl	Yes, by hexagonal wrench (supplied in clip) when no power is being applied. Must engage declutch button on cover first										
Run time		≈ 25 sec										
Operating frequency		Not continuous, allow \geq	1 minute between cycles									
Position confirmation		Mechanically driven dome s	style visual 2 colour indicator									
Mounting restriction	Do not in	istall underslung/upside down. (Can install upright horizontally or	vertically								
End position indication	Micro-switches ope	rated by adjustable internal carr	ns , set slightly ahead of the final r	notor stop position								
ISO 5211		F07 8	& F10									
Working angle	Factory	set at 90° ± 2°, maximum angle	of rotation 360° unless multi turr	n series								
Female drive		22mm x 2	7mm deep									
Ingress protection		IP	67									
Max media temperature		≤ 81	0° C									
Ambient temperature		-20° C 1	to 60° C									
Non-operating temperature		-40° C 1	to 80° C									
Ambient humidity		5-95% RH no	n-condensing									
Housing		Plastic (A	BS) cover									

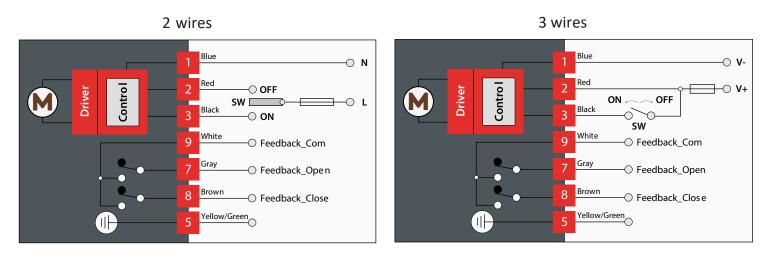






WIRING DIAGRAMS

On/Off models



VALVES COMBINATION

s.84 AM	code	size	ΔΡ	CH1 - 50Nm	CH2 - 80Nm	CH3 - 110Nm	CH4 - 200Nm	CH5 - 400Nm
	S84L00AM	2 1⁄2″		•				
	S84M00AM	3″	0 ÷ 15 Bar 0 ÷ 200 PSI			•		
	S84N00AM	4″					•	
	code	size	ΔΡ	CH1 - 50Nm	CH2 - 80Nm	CH3 - 110Nm	CH4 - 200Nm	CH5 - 400Nm
	S84L00AM	2 1⁄2″				•		
	S84M00AM	3″	15 ÷ 30 Bar 200 ÷ 450 PSI				•	
	S84N00AM	4"	200 100101					•

s.95 AM	code	size	ΔΡ	CH1 - 50Nm	CH2 - 80Nm	CH3 - 110Nm	CH4 - 200Nm	CH5 - 400Nm
	S95L41AM	2 1⁄2″		•				
	S95M41AM	3″	0 ÷ 15 Bar 0 ÷ 200 PSI			•		
	S95N41AM	4"	0 200 1 51				•	
	code	size	ΔΡ	CH1 - 50Nm	CH2 - 80Nm	CH3 - 110Nm	CH4 - 200Nm	CH5 - 400Nm
	S95L41AM	2 1⁄2″				•		
	S95M41AM	3″	15 ÷ 30 Bar 200 ÷ 450 PSI				•	
	S95N41AM	4"						•

CH XCESCH - 5637

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.









Pneumatic actuator

The EA actuators series is designed for quarter turn applications on RUB ball valves in a compact and lightweight design. They can be supplied single (spring return) or double acting with a wide range of output torques offering a complete valve automation solution.

EA actuator has a patented guide bar which keeps the rack and pinion gear teeth in perfect engagement in all directions of operations. The contact between the teeth is pure rolling contact - no rubbing or friction which means minimum wear and long cycle life.



Superior appearance and better corrosion resistance. It has a dense jet black anodized finish which makes the EA line suitable for indoor and outdoor applications.

Actuators are designed in compliance with the following standards:

- ISO 5211 - Actuator to Valve Interface Standard
- VDI/VDE 3845 Standard for Namur mounting of accessories (switchboxes, solenoid valves, positioners)
- ATEX

• PED

- Explosive Atmosphere Directive (2014/34/EU) - Pressure Equipment Directive (97/23/CE)

TECHNICAL FEATURES

- ISO 5211 direct mount on valve
- Indoor or outdoor installation
- Pilot ring for perfect alignment of shaft and stem
- · Nickel plated steel shaft
- · Stainless steel fasteners
- High tensile long life return springs
- · Visual position indicator

- Fast field conversion between double acting and spring return, fail open or fail closed
- Ambient and operating temperature range: -30°C (-22°F) / +100°C (+212°F)
- NAMUR pads for direct mount of solenoid and limit switch
- Extruded aluminum body hard anodized cylinder bore rock hard and glass smooth

EA XCESEA - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



ORDERING CODES:

Code	ISO5211 Flange	Square shaft	Code	ISO5211 Flange	Square shaft
EAx-1	F03	9 mm	EAx-1	F03	0.35 inch
EAx-2	F03/05	9 mm	EAx-2	F03/05	0.35 inch
EAx-2A	F03/05	11 mm	EAx-3	F05/07	0.55 inch
EAx-2B	F04	11 mm	EAx-4	F05/07	0.55 inch
EAx-3	F05/07	14 mm	EAx-5	F05/07	0.67 inch
EAx-4	F05/07	14 mm	EAx-6	F07/10	0.67 inch
EAx-5	F05/07	17 mm	EAx-7	F07/10	0.87 inch
EAx-6	F07/10	17 mm	EAx-9	F10/12	1.06 inch
EAx-7	F07/10	22 mm	EAx-10	F14	1.42 inch
			EAx-12	F16	1.81 inch

Note for code:

x=2 for metric threads; 4 for Imperial threads

ACCESSORIES

- Limit switch box
- Solenoid valves
- Visual position indicator
- Link kit
- Springs











Limit switch box

Solenoid valve

Springs

Link kit

Visual position indicator



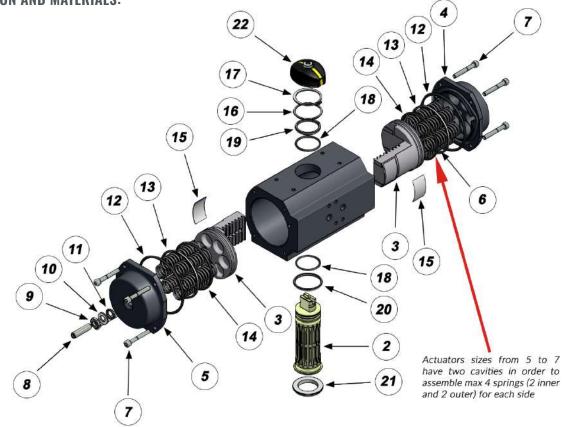
Solenoid Valve Code	Description
AD-00001	AD-1 (UCI) COMPLETE
AD-00002	AD-1 DUAL COIL 120 VAC SOLENOID
AD-00003	SOLENOID VLV AD-1 5/2 3/2 110 VAC
AD-00009	COILS 12 DC (28)
AD-00012	COILS 24AC (16)
AD-00013	COILS 24 DC (12)
AD-00015	SINGLE PILOT SOLENOID
AD-00016	AD-1 DUAL COIL 24 AC SOLENOID
AD-00017	AD-1 (UCI) COMPLETE COIL 24 DC
AD-00018	AD-1 (UCI) COMPLETE COIL 24 AC
AD-00019	SOLENOID VLV AD-1 5/2 3/2 24 VAC
AD-00020	COILS 220 VAC



Auxiliary switches Code	Description
EA2-LS	Auxiliary switches box



CONSTRUCTION AND MATERIALS:



BILL OF MATERIALS

EA-4 is shown. Smaller sizes have similar construction except EA-1 that has Nylon endcaps and pistons

	Part description	Q.ty	Material
1	Body	1	Anod, aluminum
2	Shaft	1	Steel - zinc plated
3	Piston	2	Aluminum
4	End-cap	1	Anod, aluminum
5	End-cap (stop bolt)	1	Anod, aluminum
6	Spring	12 Max	Cr-Si steel
7	Cap bolt	8	St steel
8	Stop bolt	1	Hi tensile steel
9	Stop bolt nut	1	Hi tensile steel
10	Washer	1	Polyethylene
11	O-ring (end stop)	1	NBR
12	O-ring (end cover)	2	NBR
13	Piston ring	2	POM**
14	Piston ring	2	NBR
15	Wear pad	2	POM**
16	Shaft washer	1	Polyethylene
17	Snap ring	1	Steel
18	O-ring (drive shaft)	2	NBR
19	Shaft bearing upper	1	POM**
20	Shaft bearing lower	1	POM**
21	Alignment ring	1	POM**
22	Indicator	1	Nylon

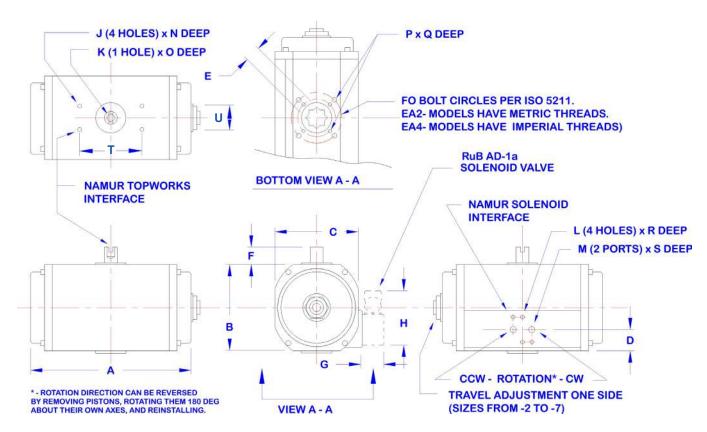
** Polyoxymethylene commonly "Delrin"

EA XCESEA - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



DIMENSIONS:



Size									Μ	etric	syster	n - mr	n								
	FO	А	В	С	D	Е	F	G	Н	J	К	L	М	Ν	0	Ρ	Q	R	S	Т	U
1	F03	103	45	51	22,5	9	20	26	67	M5	M6	M5	G1/8	5	12	M5	8	8	7	80	30
2	F03/05	150	70	70	23	9	20	26	67	M5	M6	M5	G1/8	8	12	M5 / M6	8/10	8	10	80	30
2A	F03/05	150	70	70	23	11	20	26	67	M5	M6	M5	G1/8	8	12	M5 / M6	8/10	8	10	80	30
2B	F04	150	70	70	23	11	20	26	67	M5	M6	M5	G1/8	8	12	M5 / M6	8/10	8	10	80	30
3	F05/07	187	87	91	34,5	14	20	26	67	M5	M6	M5	G1/8	8	12	M6 / M8	10/13	8	10	80	30
4	F05/07	206	118	113	29,5	14	20	26	67	M5	M6	M5	G1/8	8	12	M6 / M8	10/13	8	10	80	30
5	F05/07	194	118,5	121	29,5	17	20	26	67	M5	M6	M5	G1/4	5	12	M6 / M8	10/10	8	12	80	30
6	F07/10	218	140,5	136,5	29,5	17	20	26	67	M5	M6	M5	G1/4	5	12	M8 / M10	10/16	8	12	80	30
7	F07/10	266	166,5	156	30	22	20	26	67	M5	M6	M5	G1/4	5	12	M8 / M10	13/16	8	12	80	30

Size									Im	perial	systei	m - incl	h						
	ISO5211	А	В	С	D	E	F	G	Н	J	К	L	М	Ν	0	Ρ	Q	R	S
1	F03	4.06	1.77	2.01	0.89	0.35	0.79	1.02	2.64	10-32	M6	10-32	1/8 NPT	0.20	0.47	10-32	0.31	0.31	0.28
2	F03/05	5.91	2.76	2.76	0.91	0.35	0.79	1.02	2.64	10-32	M6	10-32	1/8 NPT	0.31	0.47	10-32 / 1/4"-20	0.31 / 0.39	0.31	0.39
3	F05/07	7.36	3.43	3.58	1.36	0.55	0.79	1.02	2.64	10-32	M6	10-32	1/8 NPT	0.31	0.47	1/4"-20 / 5/16"-18	0.39 / 0.51	0.31	0.39
4	F05/07	8.11	4.65	4.45	1.16	0.55	0.79	1.02	2.64	10-32	M6	10-32	1/8 NPT	0.31	0.47	1/4"-20 / 5/16"-18	0.39 / 0.51	0.31	0.39
5	F05/07	7.64	4.67	4.76	1.16	0.67	0.79	1.02	2.64	10-32	M6	10-32	1/4 NPT	0.20	0.47	1/4"-20 / 5/16"-18	0.47 / 0.47	0.31	0.50
6	F07/10	8.58	5.53	5.37	1.16	0.67	0.79	1.02	2.64	10-32	M6	10-32	1/4 NPT	0.20	0.47	5/16"-18 / 3/8"-16	0.51 / 0.63	0.31	0.50
7	F07/10	10.47	6.56	6.14	1.18	0.87	0.79	1.02	2.64	10-32	M6	10-32	1/4 NPT	0.20	0.47	5/16"-18 / 3/8"-16	0.51 / 0.63	0.31	0.50
9	F10/F12	13.39	8.17	7.52	1.65	1.06	1.18	1.02	2.64	10-32	M6	10-32	1/4 NPT	0.20	0.47	1-2	0.79	0.31	0.50
10	F14	14.21	9.84	8.94	2.4	1.42	1.18	1.02	2.64	10-32	M6	10-32	1/4 NPT	0.20	0.47	3-4	0.98	0.31	0.50
12	F16	19.52	13.31	11.81	-	1.81	1.18	1.02	2.64	10-32	M6	10-32	1/4 NPT	0.47	0.47	3-4	1.26	0.31	0.50



TORQUE RATING CHARTS FOR EA2 ACTUATORS - METRIC THREADS

				Double acting	- torque in Nm				
					Air pressure	supply (bar)			
EA2-	Springs	3	4	5	6	7	8	9	10
1	0	4.4	5.8	7.3	8.7	10.2	11.6	13.1	14.5
2-2A	0	11.8	15.8	19.7	23.7	27.6	31.6	35.5	39.5
3	0	25.4	33.8	42.3	50.7	59.2	67.6	76.1	84.5
4	0	50.7	67.6	84.5	101.5	118.4	135.3	152.2	169.1
5	0	61.3	81.7	102.1	122.5	142.9	163.3	183.8	204.2
6	0	101.0	134.6	168.3	201.9	235.6	269.2	302.9	336.5
7	0	187.1	249.5	311.8	374.2	436.5	498.9	561.3	623.6

								Sprin	g retur	n - Torq	ue in N	m								
							ā	ir strol	ke - star	ť						air stro	ke - end	ł		
	Springs	Springs	Spring	stroke			Air p	ressure	supply	(bar)					Air p	ressure	supply	(bar)		
EA2-	total	outerinner		end	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
	2		2.62	1.34	10.5	14.4	18.4	22.3	26.3	30.2	34.2	38.1	9.2	13.2	17.1	21.1	25.0	28.9	32.9	36.8
	3		3.93	2.01	9.8	13.8	17.7	21.7	25.6	29.6	33.5	37.4	7.9	11.9	15.8	19.7	23.7	27.6	31.6	35.5
	4		5.24	2.68	9.2	13.1	17.0	21.0	24.9	28.9	32.8	36.8	6.6	10.5	14.5	18.4	22.4	26.3	30.3	34.2
	5		6.55	3.35	8.5	12.4	16.4	20.3	24.3	28.2	32.2	36.1	5.3	9.2	13.2	17.1	21.1	25.0	29.0	32.9
	6		7.86	4.02	7.8	11.8	15.7	19.7	23.6	27.5	31.5	35.4	4.0	7.9	11.9	15.8	19.8	23.7	27.6	31.6
-2A	7		9.17	4.69		11.1	15.0	19.0	22.9	26.9	30.8	34.8		6.6	10.6	14.5	18.4	22.4	26.3	30.3
	8		10.48	5.36		10.4	14.4	18.3	22.3	26.2	30.1	34.1		5.3	9.2	13.2	17.1	21.1	25.0	29.0
	9		11.79	6.03			13.7	17.6	21.6	25.5	29.5	33.4			7.9	11.9	15.8	19.8	23.7	27.7
	10		13.1	6.7			13.0	17.0	20.9	24.9	28.8	32.8			6.6	10.6	14.5	18.5	22.4	26.4
	11		14.41	7.37				16.3	20.2	24.2	28.1	32.1				9.3	13.2	17.2	21.1	25.0
	12		15.72	8.04				15.6	19.6	23.5	27.5	31.4				8.0	11.9	15.8	19.8	23.7
	2		5.44	3	22.4	30.8	39.3	47.7	56.2	64.6	73.1	81.5	19.9	28.4	36.8	45.3	53.7	62.2	70.7	79.1
	3		8.16	4.5	20.9	29.3	37.8	46.2	54.7	63.1	71.6	80.0	17.2	25.7	34.1	42.6	51.0	59.5	67.9	76.4
	4		10.88	6	19.4	27.8	36.3	44.7	53.2	61.6	70.1	78.5	14.5	22.9	31.4	39.8	48.3	56.8	65.2	73.7
	5		13.6	7.5	17.9	26.3	34.8	43.2	51.7	60.1	68.6	77.0	11.8	20.2	28.7	37.1	45.6	54.0	62.5	70.9
	6		16.32	9	16.4	24.8	33.3	41.7	50.2	58.6	67.1	75.5	9.0	17.5	26.0	34.4	42.9	51.3	59.8	68.2
3	7		19.04	10.5		23.3	31.8	40.2	48.7	57.1	65.6	74.0		14.8	23.2	31.7	40.1	48.6	57.1	65.5
	8		21.76	12		21.8	30.3	38.7	47.2	55.6	64.1	72.5		12.1	20.5	29.0	37.4	45.9	54.3	62.8
	9		24.48	13.5			28.8	37.2	45.7	54.1	62.6	71.0			17.8	26.2	34.7	43.2	51.6	60.1
	10		27.2	15			27.3	35.7	44.2	52.6	61.1	69.5			15.1	23.5	32.0	40.4	48.9	57.3
	11		29.92	16.5				34.2	42.7	51.1	59.6	68.0				20.8	29.3	37.7	46.2	54.6
	12		32.64 10.24	18 6.68	44.0	61.0	77.0	32.7	41.2	49.6	58.1 145.5	66.5 162.4	40.5	57.4	74.3	18.1 91.2	26.5	35.0 125.0	43.5 141.9	51.9
	3		15.36	10.02	44.0 40.7	61.0 57.6	77.9 74.5	94.8 91.4	111.7 108.3	128.6 125.3	145.5	162.4	40.5 35.4	57.4	74.3 69.2	91.2 86.1	108.1 103.0	125.0	136.8	158.9 153.7
	4		20.48	13.36	37.4	54.3	74.5	88.1	105.0	123.5	138.8	155.7	30.2	47.2	64.1	81.0	97.9	114.8	131.7	148.6
	5		25.6	16.7	34.0	50.9	67.8	84.8	103.0	121.9	135.5	152.4	25.1	42.0	58.9	75.9	97.9	109.7	126.6	140.0
	6		30.72	20.04	30.7	47.6	64.5	81.4	98.3	115.2	132.1	149.1	20.0	36.9	53.8	70.7	87.6	104.6	121.5	138.4
4	7		35.84	23.38	50.7	44.3	61.2	78.1	95.0	111.9	128.8	145.7	20.0	31.8	48.7	65.6	82.5	99.4	116.3	133.3
-	8		40.96	26.72		40.9	57.8	74.7	91.6	108.6	125.5	142.4		26.7	43.6	60.5	77.4	94.3	111.2	128.1
	9		46.08	30.06		10.5	54.5	71.4	88.3	105.2	122.1	139.0		20.7	38.5	55.4	72.3	89.2	106.1	123.0
	10		51.2	33.4			51.1	68.1	85.0	101.9	118.8	135.7			33.3	50.3	67.2	84.1	101.0	117.9
	11		56.32	36.74				64.7	81.6	98.5	115.4	132.4				45.1	62.0	79.0	95.9	112.8
	12		61.44	40.08				61.4	78.3	95.2	112.1	129.0				40.0	56.9	73.8	90.7	107.7
	4	4 0	52.4	28.8	32.5	52.9	73.3	93.7	114.1	134.5	155.0	175.4	8.9	29.3	49.7	70.1	90.5	110.9	131.4	151.8
	5	4 1	58.95	32.4		49.3	69.7	90.1	110.5	130.9	151.4	171.8		22.7	43.1	63.6	84.0	104.4	124.8	145.2
5	6	4 2	65.5	36		45.7	66.1	86.5	106.9	127.3	147.8	168.2		16.2	36.6	57.0	77.4	97.8	118.3	138.7
	7	4 3	72.05	39.6			62.5	82.9	103.3	123.7	144.2	164.6			30.0	50.5	70.9	91.3	111.7	132.1
	8	4 4	78.6	43.2			58.9	79.3	99.7	120.1	140.6	161.0			23.5	43.9	64.3	84.7	105.2	125.6
	4	4 0	86.8	47.7	53.3	86.9	120.6	154.2	187.9	221.5	255.2	288.8	14.2	47.8	81.5	115.1	148.8	182.4	216.1	249.7
	5	4 1	97.65	53.675		80.9	114.6	148.3	181.9	215.6	249.2	282.9		37.0	70.6	104.3	137.9	171.6	205.2	238.9
6	6	4 2	108.5	59.65		75.0	108.6	142.3	175.9	209.6	243.2	276.9		26.1	59.8	93.4	127.1	160.7	194.4	228.0
	7	4 3	119.35	65.625			102.6	136.3	170.0	203.6	237.3	270.9			48.9	82.6	116.2	149.9	183.5	217.2
	8	4 4	130.2	71.6			96.7	130.3	164.0	197.6	231.3	264.9			38.1	71.7	105.4	139.0	172.7	206.3
	4	4 0	160.8	88.4	98.7	161.1	223.4	285.8	348.1	410.5	472.9	535.2	26.3	88.7	151.0	213.4	275.7	338.1	400.5	462.8
	5	4 1	180.9	99.45		150.0	212.4	274.7	337.1	399.5	461.8	524.2		68.6	130.9	193.3	255.6	318.0	380.4	442.7
7	6	4 2	201	110.5		139.0	201.3	263.7	326.0	388.4	450.8	513.1		48.5	110.8	173.2	235.5	297.9	360.3	422.6
	7	4 3	221.1	121.55			190.3	252.6	315.0	377.4	439.7	502.1			90.7	153.1	215.4	277.8	340.2	402.5
	8	4 4	241.2	132.6			179.2	241.6	303.9	366.3	428.7	491.0			70.6	133.0	195.3	257.7	320.1	382.4

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



TORQUE RATING CHARTS FOR EA4 ACTUATORS - IMPERIAL THREADS

			Double acting	g - torque in lb			
			l l	Air pressure supply (PSI	I)		
EA4-	40	50	60	70	80	90	100
1	35	44	53	62	71	80	89
2	96	120	144	168	193	217	241
3	206	258	309	361	413	464	516
4	413	516	619	722	825	928	1032
5	498	623	747	872	996	1121	1246
6	821	1027	1232	1437	1642	1848	2053
7	1522	1902	2283	2663	3044	3424	3804
9	3344.5	4180.6	5016.8	5852.9	6689.0	7525.1	8361.3
10	4552.5	5690.6	6828.8	7966.9	9105.0	10243.1	11381.3
12	10740.0	13425.0	16110.0	18795.0	21480.0	24165.0	26850.0

| rings 2
2
3
4
5
6
7
8
9
10
11
12
2 | Spring
buter in
 | ner st | 23
35
46
58
70
81 | Torque
end
12
18
24
30
36 | 40
84
78
73
67
 | 50
108
103
97 | 60
133 | r press
70 | troke -
ure su
80 | pply (P
 | SI) | | |
 | | Ai
 |
 | troke -
ure su | end
pply (P | |
 | |

---|--------|----------------------------------|---
--|---|---|---|---
--
---|---|---|--

---|---
--	--	---
otal otal 2 3 4 5 6 7 7 8 9 10 111 12		
 | ner st | 23
35
46
58
70
81 | end
12
18
24
30
36 | 84
78
73
 | 108
103 | 60
133 | 70 | |
 | SI) | | |
 | | Ai
 | r <mark>press</mark>
 | ure su | pply (P | |
 | |
| 2 3
4 5
6 7
8 9
10 11
11 12 | outer in
 | | 23
35
46
58
70
81 | 12
18
24
30
36 | 84
78
73
 | 108
103 | 133 | | 20 |
 | | | |
 | |
 |
 | | | |
 | |
| 3
4
5
6
7
8
9
10
11
12 |
 | | 35
46
58
70
81 | 18
24
30
36 | 78
73
 | 103 | | | | 90
 | 100 | 110 | 120 | 40
 | 50 | 60
 | 70
 | 80 | 90 | 100 | 110
 | 120 |
| 4 5
6 7
8 9
10 11
12 |
 | | 46
58
70
81 | 24
30
36 | 73
 | | 127 | 157
151 | 181
175 | 205
199
 | 229
223 | 253
247 | 277
271 | 73
62
 | 97
86 | 121
110
 | 145
134
 | 169
158 | 193
182 | 218
206 | 242
230
 | 266
254 |
| 6
7
8
9
10
11
12 |
 | | 70
81 | 36 | 67
 | | 121 | 145 | 169 | 193
 | 217 | 241 | 265 | 50
 | 74 | 98
 | 122
 | 146 | 170 | 194 | 218
 | 242 |
| 7
8
9
10
11
12 |
 | | 81 | |
 | 91 | 115 | 139 | 163 | 187
 | 211 | 235 | 259 | 38
 | 82 | 86
 | 111
 | 135 | 159 | 183 | 207
 | 231 |
| 8
9
10
11
12 |
 | | | |
 | 85 | 109 | 133 | 157 | 181
 | 205 | 229 | 253 |
 | 51 | 75
 | 99
 | 123 | 147 | 171 | 195
 | 219 |
| 9
10
11
12 |
 | | | 41 |
 | 79 | 103 | 127 | 151 | 175
 | 199 | 223 | 247 |
 | 39 | 63
 | 87
 | 111 | 135 | 160 | 184
 | 208 |
| 10
11
12 |
 | | 93
104 | 47
53 |
 | | 97 | 121
115 | 145
139 | 169
163
 | 193
187 | 217 | 241
235 |
 | | 52
 | 76
84
 | 100
88 | 124
112 | 148
136 | 172
160
 | 196
185 |
| 11
12 |
 | 1 | 116 | 59 |
 | | | 109 | 139 | 157
 | 181 | 211
205 | 235 |
 | |
 | 53
 | 77 | 101 | 125 | 149
 | 173 |
| |
 | | 127 | 65 |
 | | | 105 | 127 | 151
 | 175 | 200 | 224 |
 | |
 | 55
 | 65 | 89 | 113 | 137
 | 161 |
| 2 |
 | 1 | 139 | 71 |
 | | | | | 145
 | 170 | 194 | 218 |
 | |
 |
 | | 78 | 102 | 126
 | 150 |
| | _
 | | 48 | 27 | 180
 | 231 | 283 | 334 | 386 | 436
 | 489 | 541 | 592 | 158
 | 210 | 261
 | 313
 | 364 | 416 | 488 | 519
 | 571 |
| 3 |
 | | 72 | 40 | 166
 | 218 | 270 | 321 | 373 | 424
 | 476 | 528 | 579 | 134
 | 186 | 237
 | 289
 | 340 | 392 | 444 | 495
 | 547 |
| 4 |
 | | | | |
 | | | | |
 | | | |
 | |
 |
 | | | |
 | 523
499 |
| 6 |
 | | | | 1-0
 | 178 | | | |
 | | | | 00
 | |
 |
 | | | |
 | 475 |
| 7 |
 | | | 93 |
 | 165 | 217 | 268 | 320 | 371
 | 423 | 474 | 526 |
 | 89 | 141
 | 193
 | 244 | 296 | 347 | 399
 | 450 |
| 8 |
 | | | 106 |
 | | 203 | 255 | 306 | 358
 | 410 | 461 | 513 |
 | | 117
 | 169
 | 220 | 272 | 323 | 375
 | 426 |
| 9 |
 | | | | |
 | | | | |
 | | | |
 | |
 |
 | | | |
 | 402 |
| 10
11 |
 | | | | |
 | | | 228 | |
 | | | |
 | |
 | 120
 | | | |
 | 378
354 |
| 12 |
 | | | | |
 | | | | 207 |
 | | | |
 | |
 |
 | 140 | | |
 | 330 |
| 2 |
 | | | | 354
 | 457 | 560 | 663 | 766 |
 | | | | 322
 | 425 | 528
 | 631
 | 735 | | |
 | 1147 |
| 3 |
 | | - | 89 | 324
 | 427 | 530 | 633 | 737 | 840
 | 943 | 1046 | 1149 | 277
 | 380 | 483
 | 586
 | 689 | 792 | 896 | 999
 | 1102 |
| 4 |
 | 1 | 181 | 118 | 294
 | 398 | 501 | 604 | 707 | 810
 | 913 | 1016 | 1120 | 231
 | 335 | 438
 | 541
 | 644 | 747 | 850 | 953
 | 1057 |
| 5 |
 | | | 148 | 265
 | 368 | 471 | 574 | 677 | 781
 | 884 | 987 | 1090 | 186
 | 289 | 392
 | 496
 | 599 | 702 | 805 | 908
 | 1011 |
| 6 |
 | | | | |
 | | | | |
 | | | |
 | |
 |
 | | | |
 | 966 |
| 7 |
 | | | | |
 | 309 | | | 1 |
 | | | |
 | 199 |
 | 1
 | | | |
 | 921
875 |
| 9 |
 | | | | |
 | | 202 | | |
 | | | |
 | | 237
 |
 | | | |
 | 830 |
| 10 |
 | | | 296 |
 | | | 427 | 530 | 633
 | 736 | 839 | 942 |
 | |
 | 269
 | 372 | 475 | 579 | 682
 | 785 |
| 11 |
 | 2 | 498 | 325 |
 | | | | 500 | 603
 | 706 | 810 | 913 |
 | |
 |
 | 327 | 430 | 533 | 636
 | 740 |
| 12 |
 | | | 355 |
 | | | | | 574
 | 677 | 780 | 883 |
 | |
 |
 | | 385 | 488 | 591
 | 694 |
| 4 |
 | | | | |
 | 368 | | () | |
 | | | |
 | 159 |
 | 1
 | | | |
 | 1031 |
| 6 |
 | | | | |
 | | | | |
 | | | |
 | |
 |
 | | | |
 | 973
915 |
| 7 |
 | | | | |
 | | 42.5 | 522 | |
 | | | 1144 |
 | | 100
 | 234
 | | | |
 | 857 |
| 8 | 4
 | | | 382 |
 | | | | 614 | 739
 | 863 | 988 | 1112 |
 | |
 |
 | 301 | 426 | 550 | 675
 | 799 |
| 4 | 4
 | | | 422 |
 | 604 | 810 | 1015 | 1220 | 1426
 | 1631 | 1836 | 2042 |
 | 259 | 464
 | 669
 | 874 | 1080 | 1285 | 1490
 | 1696 |
| 5 |
 | | | |
 | | 757 | 962 | 1168 | 1373
 | 1578 | 1783 | |
 | | 368
 | 573
 | 778 | 984 | 1189 |
 | 1600 |
| 6 |
 | | | | |
 | | 704 | | |
 | | | |
 | | 272
 |
 | | | |
 | 1504 |
| 8 |
 | | | | |
 | | | | |
 | | | |
 | |
 |
 | | | |
 | 1408
1312 |
| 4 |
 | | | 782 |
 | 1120 | 1500 | 1881 | 2261 | 2642
 | 3022 | 3403 | 3783 |
 | 479 | 860
 | 1240
 | 1621 | 2.001 | 2382 | 2762
 | 3143 |
| 5 | 4
 | | | 880 |
 | 1022 | 1403 | 1783 | 2164 | 2544
 | 2924 | 3305 | 3685 |
 | 302 | 682
 | 1063
 | 1443 | 1823 | 2.204 | 2584
 | 2965 |
| 6 | 4
 | | | 978 |
 | | 1305 | 1685 | 2.066 | 2446
 | 2827 | 3207 | 3588 |
 | | 504
 | 885
 | 1265 | 1646 | 2026 | 2406
 | 2787 |
| 7 | 4
 | 3 1 | | |
 | | 1207 | 1568 | 1968 | 2349
 | 2729 | 3109 | 3490 |
 | | 326
 | 707
 | 1087 | 1468 | 1648 | 2229
 | 2609 |
| 8 |
 | | | | |
 | | 2202 | | |
 | 2631 | 3012 | 3392 |
 | | 1077
 |
 | | | 1670 | 2051
 | 2431 |
| 4
6 |
 | | | | |
 | | | | |
 | | | |
 | |
 |
 | | | |
 | |
| 7 |
 | | | |
 | | 2000 | 3472 | | 5141
 | | | |
 | | 1000
 | 1538
 | | 3209 | |
 | |
| 8 |
 | | | 2584 |
 | | | | 4095 | 4929
 | | | |
 | |
 |
 | 1986 | 2821 | |
 | |
| 4 | 4
 | | | 2345 |
 | | 4470 | | | 7878
 | | | |
 | |
 |
 | 4827 | 5964 | |
 | |
| 6 |
 | | | 2929 |
 | | 3881 | 5016 | 6151 | 7286
 | | | |
 | | 1485
 | 2622
 | 3759 | 4896 | |
 | _ |
| 7 |
 | | | | |
 | | | 4723 | |
 | | | |
 | |
 | 2093
 | | | |
 | |
| 8 | 4
 | | | | |
 | | 10711 | 13201 | |
 | | | |
 | | 7707
 | 10/177
 | | | |
 | |
| 8 |
 | | | | |
 | | | | |
 | | | |
 | |
 |
 | | | |
 | |
| 10 |
 | | | 8939 | |
 | | 0,520 | | |
 | | | |
 | | 5012
 |
 | | | |
 | |
| 12 |
 | | | 10726 | |
 | | | | |
 | | | |
 | |
 |
 | 4898 | 7581 | |
 | |
| | 5 5 7 3 9 0 1 2 3 5 5 5 6 7 3 9 0 1 2 3 9 0 1 2 3 9 0 1 2 3 4 5 5 7 3 4 5 7 3 4 5 7 3 4 5 7 3 4 5 7 3 4 5 7 3 4 <td< td=""><td>5 </td><td>5 </td><td>120 144 144 144 144 144 144 144 144 144 144 145 217 0 241 1 265 2 289 2 289 2 272 3 136 4 181 5 2272 7 317 3 362 9 408 1 498 2 44 4 152 5 4 4 4 5 4 5 4 4 0 5 4 4 0 5 4 5 4 7 4 3 1056 3 4 4 0 5 4 4</td><td>5 120 66 144 80 188 93 193 106 2 217 2 289 11 265 14 80 2 289 159 146 2 289 159 91 2 91 3 272 141 118 5 277 181 118 5 277 181 118 5 277 181 118 5 277 177 317 207 408 226 404 40 463 29 408 362 287 5 4 4 0 44 0 5 4 2 580 4 1</td><td>5 120 66 140 5 144 80 7 188 93 8 193 106 9 217 119 0 241 133 1 265 146 2 289 159 2 289 159 2 289 159 2 289 159 2 289 159 2 289 159 2 289 159 2 272 148 265 272 177 317 207 317 38 325 236 9 408 266 0 453 296 1 498 325 2 544 355 4 1 52 54 2 580 7 4 3 7 4 637 3 1056 54 2</td><td>5 120 66 140 192 5 144 80 178 7 188 93 165 8 193 106 179 90 241 133 1 10 265 146 12 2 289 159 159 2 289 159 354 457 3 118 118 294 398 5 227 148 265 368 5 227 148 265 368 5 272 177 338 362 236 60 408 266 60 604 65 7 43 637 350 5 368 4 0 464 255 368 319 7 4 3 637 350 5 4 6 4 1 522 287 5 4 7 4 3 637 350 5</td><td>5 120 66 140 192 243 5 144 80 178 230 7 188 93 165 217 8 193 106 203 9 1277 119 203 0 241 133 1 203 11 265 146 14 203 2 289 159 159 14 38 2 289 159 354 457 560 3 136 89 324 427 530 5 227 148 265 368 471 5 227 148 265 368 471 5 227 148 265 368 471 5 362 236 382 422 382 6 461 255 368 493 324 7 4 3 637 350 14 429 7 4 3 637</td><td>5 120 66 140 192 243 295 5 144 80 178 230 281 7 188 93 165 217 268 8 193 106 203 255 9 0 241 133 223 255 1 265 146 0 223 258 1 265 146 0 12 228 2 289 159 159 159 154 457 560 663 3 136 89 324 427 530 633 3 136 89 324 427 530 633 3 362 272 177 338 442 545 3 362 236 382 486 466 0 483 296 427 515 368 493 617 5 4 2 580 319 429 552 368 493 617</td></td<> <td>5 120 66 140 192 243 295 346 5 144 80 178 230 281 333 7 188 93 165 217 268 320 8 171 119 203 255 366 9 1 241 133 228 280 1 265 146 1 242 293 0 241 133 228 280 1 265 146 1 247 530 633 737 2 289 159 354 457 560 663 766 3 136 89 324 427 530 633 737 4 181 118 294 398 501 604 707 5 277 148 265 368 471 574 678 7 408 362 236 1 427 530 7 408 355 1<!--</td--><td>5 120 66 140 192 243 295 346 398 5 144 80 178 230 281 333 385 7 188 93 165 217 268 320 311 8 193 106 203 255 306 358 9 241 133 228 280 331 1 265 146 203 77 318 2 289 159 324 427 530 633 737 840 3 136 89 324 427 530 643 766 859 3 136 89 324 427 530 648 751 781 5 277 148 265 368 471 574 677 781 5 277 177 338 442 545 648 751 7 317 207 309 412 516 618 722</td><td>5 120 66 140 192 243 295 346 398 449 5 144 80 178 230 281 333 385 436 7 188 93 106 203 255 306 358 410 9 241 133 106 203 255 306 358 383 0 241 133 228 280 333 385 366 0 244 188 93 344 427 506 663 766 869 972 36 91 59 354 457 560 663 766 869 972 36 181 118 294 398 501 604 707 810 913 5 272 148 265 368 471 574 677 781 854 5 362 236 236 382 466 589 692 795 6 403 255</td><td>5 120 66 140 192 243 295 346 398 449 501 5 144 80 178 230 281 333 355 436 488 7 188 93 106 203 255 306 358 410 461 9 217 1265 146 203 255 306 358 435 10 265 146 1217 50 556 663 766 869 972 1076 2 91 59 354 457 560 663 766 869 972 1076 3 136 89 324 427 530 633 737 840 943 1046 4 181 118 294 398 501 644 77181 844 987 5 272 148 265 368 471 574 677 781 884 987 5 4 367 317 207</td><td>5 120 66 140 192 243 295 346 398 449 501 553 5 188 93 165 217 286 320 371 422 474 485 590 3 193 106 203 255 306 358
 410 461 513 30 217 119 119 242 293 345 396 448 499 0 241 133 255 306 458 410 411 473 2 289 159 242 293 345 386 460 2 289 159 354 457 560 663 766 869 972 1076 1179 3 382 427 500 633 737 840 943 1046 149 3 127 177 303 342 442 546 859 602 795 898 1011 3 272 177 <td< td=""><td>5 120 66 140 192 243 295 346 398 449 501 553 86 5 188 93 165 217 268 333 385 436 486 593 3 193 106 203 255 306 358 410 415 513 4 2177 1193 106 242 229 345 366 448 499 0 241 133 242 228 280 331 383 435 460 2 289 159 554 457 560 663 766 869 972 1076 1179 922 2 289 159 554 427 530 633 737 840 937 1061 1149 277 4 181 118 294 938 501 604 707 818 849 971 1061 5 277 148 265 588 591 618</td><td>5 120 666 140 192 243 295 246 333 385 436 488 539 113 5 188 93 165 210 268 330 385 436 488 539 113 8 173 106 203 255 366 388 410 441 513 9 217 1193 106 203 255 366 488 496 1 0 265 146 127 118 242 280 311 333 435 366 448 499 17 322 427 305 356 403 460 277 305 356 403 1046 1170 322 425 336 376 97 106 1242 285 378 978 903 1046 1170 322 425 337 361 993 1046 1170 322 425 337 361 997 1061 1243 335 376 893 972<td>5 120 66 140 192 243 295 346 398 449 501 553 66 138 189 7 188 93 106 178 230 281 333 385 436 488 530 181 165 17 268 320 371 423 444 520 18 11 165 217 281 333 385 436 448 499 17 18 14 17 18 18 18 18 18 18 18 18 18 18 18 18 18 <t< td=""><td>5 140 66 140 192 243 295 246 398 449 501 553 66 133 185 217 7 188 93 106 200 281 333 385 436 488 539 113 165 217 7 193 106 2017 220 285 306 358 410 461 513 111 165 217 8 217 133 106 203 255 306 358 410 461 513 112 144 90 227 146 133 228 280 311 838 435 486 127 144 140 265 146 147 560 663 766 869 972 1076 1179 222 425 528 631 14 181 118 294 595 663 766 869 972 1061 244 347 450 15 18 497 1061 244 347 50 53 668 771 874 977 1061 244 347 450 <td< td=""><td>5 140 66 140 90 28 295 36 380 849 501 553 113 165 217 288 333 854 46 853 113 165 217 288 3 193 106 217 113 106 217 114 193 244 0 241 133 106 228 293 355 356 408 449 117 117 169 244 0 241 133 24 275 318 333 335 408 407 114 196 117 128 473 148 196 117 128 428 538 401 100 117 328 438 566 631 756 637 751 844 957 100 188 498 497 100 188 498 498 497 100 180 333 438 566</td></td<></td></t<><td>5 144 80 178 230 284 284 284 501 553 651 38 165 217 268 333 383 480 441 193 244 220 272 3 173 106 203 255 306 358 410 461 513 496 484 0 2414 133 106 203 255 306 358 410 461 513 117 169 220 2 272 144 133 146 173 316 499 473 473 170 170 172 224 2 289 159 554 450 766 870 972 176 179 322 425 528 631 775 834 3 181 181 294 355 560 667 766 870 170 170 320 423 348 546 549 3 181 181 294 356 568 471 574 677 781 884 977 1061 124 347 450 550 657 750 876 <t< td=""><td>1 144 80 144 80 144 80 938 449 90 533 85 165 27 288 300 371 7 148 93 165 277 198 105 277 288 300 371 473 474 535 89 141 193 244 290 324 390</td><td>3 1</td></t<></td></td></td></td<></td></td> | 5 | 5 | 120 144 144 144 144 144 144 144 144 144 144 145 217 0 241 1 265 2 289 2 289 2 272 3 136 4 181 5 2272 7 317 3 362 9 408 1 498 2 44 4 152 5 4 4 4 5 4 5 4 4 0 5 4 4 0 5 4 5 4 7 4 3 1056 3 4 4 0 5 4 4 | 5 120 66 144 80 188 93 193 106 2 217 2 289 11 265 14 80 2 289 159 146 2 289 159 91 2 91 3 272 141 118 5 277 181 118 5 277
 181 118 5 277 181 118 5 277 177 317 207 408 226 404 40 463 29 408 362 287 5 4 4 0 44 0 5 4 2 580 4 1 | 5 120 66 140 5 144 80 7 188 93 8 193 106 9 217 119 0 241 133 1 265 146 2 289 159 2 289 159 2 289 159 2 289 159 2 289 159 2 289 159 2 289 159 2 272 148 265 272 177 317 207 317 38 325 236 9 408 266 0 453 296 1 498 325 2 544 355 4 1 52 54 2 580 7 4 3 7 4 637 3 1056 54 2 | 5 120 66 140 192 5 144 80 178 7 188 93 165 8 193 106 179 90 241 133 1 10 265 146 12 2 289 159 159 2 289 159 354 457 3 118 118 294 398 5 227 148 265 368 5 227 148 265 368 5 272 177 338 362 236 60 408 266 60 604 65 7 43 637 350 5 368 4 0 464 255 368 319 7 4 3 637 350 5 4 6 4 1 522 287 5 4 7 4 3 637 350 5 | 5 120 66 140 192 243 5 144 80 178 230 7 188 93 165 217 8 193 106 203 9 1277 119 203 0 241 133 1 203 11 265 146 14 203 2 289 159 159 14 38 2 289 159 354 457 560 3 136 89 324 427 530 5 227 148 265 368 471 5 227 148 265 368 471 5 227 148 265 368 471 5 362 236 382 422 382 6 461 255 368 493 324 7 4 3 637 350 14 429 7 4 3 637 | 5 120 66 140 192 243 295 5 144 80 178 230 281 7 188 93 165 217 268 8 193 106 203 255 9 0 241 133 223 255 1 265 146 0 223 258 1 265 146 0 12 228 2 289 159 159 159 154 457 560 663 3 136 89 324 427 530 633 3 136 89 324 427 530 633 3 362 272 177 338 442 545 3 362 236 382 486 466 0 483 296 427 515 368 493 617 5 4 2 580 319 429 552 368 493 617 | 5 120 66 140 192 243 295 346 5 144 80 178 230 281 333 7 188 93 165 217 268 320 8 171 119 203 255 366 9 1 241 133 228 280 1 265 146 1 242 293 0 241 133 228 280 1 265 146 1 247 530 633 737 2 289 159 354 457 560 663 766 3 136 89 324 427 530 633 737 4 181 118 294 398 501 604 707 5 277 148 265 368 471 574 678 7 408 362 236 1 427 530 7 408 355 1 </td <td>5 120 66 140 192 243 295 346 398 5 144 80 178 230 281 333 385 7 188 93 165 217 268 320 311 8 193 106 203 255 306 358 9 241 133 228 280 331 1 265 146 203 77 318 2 289 159 324 427 530 633 737 840 3 136 89 324 427 530 643 766 859 3 136 89 324 427 530 648 751 781 5 277 148 265 368 471 574 677 781 5 277 177 338 442 545 648 751 7 317 207 309 412 516 618 722</td> <td>5 120 66 140 192 243 295 346 398 449 5 144 80 178 230 281 333 385 436 7 188 93 106 203 255 306 358 410 9 241 133 106 203 255 306 358 383 0 241 133 228 280 333 385 366 0 244 188 93 344 427 506 663 766 869 972 36 91 59 354 457 560 663 766 869 972 36 181 118 294 398 501 604 707 810 913 5 272 148 265 368 471 574 677 781 854 5 362 236 236 382 466 589 692 795 6 403 255</td> <td>5 120 66 140 192 243 295 346 398 449 501 5 144 80 178 230 281 333 355 436 488 7 188 93 106 203 255 306 358 410 461 9 217 1265 146 203 255 306 358 435 10 265 146 1217 50 556 663 766 869 972 1076 2 91 59 354 457 560 663 766 869 972 1076 3 136 89 324 427 530 633 737 840 943 1046 4 181 118 294 398 501 644 77181 844 987 5 272 148 265 368 471 574 677 781 884 987 5 4 367 317 207</td> <td>5 120 66 140 192 243 295 346 398 449 501 553 5 188 93 165 217 286 320 371 422 474 485 590 3 193 106 203 255 306 358 410 461 513 30 217 119 119 242 293 345 396 448 499 0 241 133 255 306 458 410 411 473 2 289 159 242 293 345 386 460 2 289 159 354 457 560 663 766 869 972 1076 1179 3 382 427 500 633 737 840 943 1046 149 3 127 177 303 342 442 546 859 602 795 898 1011 3 272 177 <td< td=""><td>5 120 66 140 192 243 295 346 398 449 501 553 86 5 188 93 165 217 268 333 385 436 486 593 3 193 106 203 255 306 358 410 415 513 4 2177 1193 106 242 229 345 366 448 499 0 241 133 242 228 280 331 383 435 460 2 289 159 554 457 560 663 766 869 972 1076 1179 922 2 289 159 554 427 530 633 737 840 937 1061 1149 277 4 181 118 294 938 501 604 707 818 849 971 1061 5 277 148 265 588 591 618</td><td>5 120 666 140 192 243 295 246 333 385 436 488 539 113 5 188 93 165 210 268
330 385 436 488 539 113 8 173 106 203 255 366 388 410 441 513 9 217 1193 106 203 255 366 488 496 1 0 265 146 127 118 242 280 311 333 435 366 448 499 17 322 427 305 356 403 460 277 305 356 403 1046 1170 322 425 336 376 97 106 1242 285 378 978 903 1046 1170 322 425 337 361 993 1046 1170 322 425 337 361 997 1061 1243 335 376 893 972<td>5 120 66 140 192 243 295 346 398 449 501 553 66 138 189 7 188 93 106 178 230 281 333 385 436 488 530 181 165 17 268 320 371 423 444 520 18 11 165 217 281 333 385 436 448 499 17 18 14 17 18 18 18 18 18 18 18 18 18 18 18 18 18 <t< td=""><td>5 140 66 140 192 243 295 246 398 449 501 553 66 133 185 217 7 188 93 106 200 281 333 385 436 488 539 113 165 217 7 193 106 2017 220 285 306 358 410 461 513 111 165 217 8 217 133 106 203 255 306 358 410 461 513 112 144 90 227 146 133 228 280 311 838 435 486 127 144 140 265 146 147 560 663 766 869 972 1076 1179 222 425 528 631 14 181 118 294 595 663 766 869 972 1061 244 347 450 15 18 497 1061 244 347 50 53 668 771 874 977 1061 244 347 450 <td< td=""><td>5 140 66 140 90 28 295 36 380 849 501 553 113 165 217 288 333 854 46 853 113 165 217 288 3 193 106 217 113 106 217 114 193 244 0 241 133 106 228 293 355 356 408 449 117 117 169 244 0 241 133 24 275 318 333 335 408 407 114 196 117 128 473 148 196 117 128 428 538 401 100 117 328 438 566 631 756 637 751 844 957 100 188 498 497 100 188 498 498 497 100 180 333 438 566</td></td<></td></t<><td>5 144 80 178 230 284 284 284 501 553 651 38 165 217 268 333 383 480 441 193 244 220 272 3 173 106 203 255 306 358 410 461 513 496 484 0 2414 133 106 203 255 306 358 410 461 513 117 169 220 2 272 144 133 146 173 316 499 473 473 170 170 172 224 2 289 159 554 450 766 870 972 176 179 322 425 528 631 775 834 3 181 181 294 355 560 667 766 870 170 170 320 423 348 546 549 3 181 181 294 356 568 471 574 677 781 884 977 1061 124 347 450 550 657 750 876 <t< td=""><td>1 144 80 144 80 144 80 938 449 90 533 85 165 27 288 300 371 7 148 93 165 277 198 105 277 288 300 371 473 474 535 89 141 193 244 290 324 390</td><td>3 1</td></t<></td></td></td></td<></td> | 5 120 66 140 192 243 295 346 398 5 144 80 178 230 281 333 385 7 188 93 165 217 268 320 311 8 193 106 203 255 306 358 9 241 133 228 280 331 1 265 146 203 77 318 2 289 159 324 427 530 633 737 840 3 136 89 324 427 530 643 766 859 3 136 89 324 427 530 648 751 781 5 277 148 265 368 471 574 677 781 5 277 177 338 442 545 648 751 7 317 207 309 412 516 618 722 | 5 120 66 140 192 243 295 346 398 449 5 144 80 178 230 281 333 385 436 7 188 93 106 203 255 306 358 410 9 241 133 106 203 255 306 358 383 0 241 133 228 280 333 385 366 0 244 188 93 344 427 506 663 766 869 972 36 91 59 354 457 560 663 766 869 972 36 181 118 294 398 501 604 707 810 913 5 272 148 265 368 471 574 677 781 854 5 362 236 236 382 466 589 692 795 6 403 255 | 5 120 66 140 192 243 295 346 398 449 501 5 144 80 178 230 281 333 355 436 488 7 188 93 106 203 255 306 358 410 461 9 217 1265 146 203 255 306 358 435 10 265 146 1217 50 556 663 766 869 972 1076 2 91 59 354 457 560 663 766 869 972 1076 3 136 89 324 427 530 633 737 840 943 1046 4 181 118 294 398 501 644 77181 844 987 5 272 148 265 368 471 574 677 781 884 987 5 4 367 317 207 | 5 120 66 140 192 243 295 346 398 449 501 553 5 188 93 165 217 286
 320 371 422 474 485 590 3 193 106 203 255 306 358 410 461 513 30 217 119 119 242 293 345 396 448 499 0 241 133 255 306 458 410 411 473 2 289 159 242 293 345 386 460 2 289 159 354 457 560 663 766 869 972 1076 1179 3 382 427 500 633 737 840 943 1046 149 3 127 177 303 342 442 546 859 602 795 898 1011 3 272 177 <td< td=""><td>5 120 66 140 192 243 295 346 398 449 501 553 86 5 188 93 165 217 268 333 385 436 486 593 3 193 106 203 255 306 358 410 415 513 4 2177 1193 106 242 229 345 366 448 499 0 241 133 242 228 280 331 383 435 460 2 289 159 554 457 560 663 766 869 972 1076 1179 922 2 289 159 554 427 530 633 737 840 937 1061 1149 277 4 181 118 294 938 501 604 707 818 849 971 1061 5 277 148 265 588 591 618</td><td>5 120 666 140 192 243 295 246 333 385 436 488 539 113 5 188 93 165 210 268 330 385 436 488 539 113 8 173 106 203 255 366 388 410 441 513 9 217 1193 106 203 255 366 488 496 1 0 265 146 127 118 242 280 311 333 435 366 448 499 17 322 427 305 356 403 460 277 305 356 403 1046 1170 322 425 336 376 97 106 1242 285 378 978 903 1046 1170 322 425 337 361 993 1046 1170 322 425 337 361 997 1061 1243 335 376 893 972<td>5 120 66 140 192 243 295 346 398 449 501 553 66 138 189 7 188 93 106 178 230 281 333 385 436 488 530 181 165 17 268 320 371 423 444 520 18 11 165 217 281 333 385 436 448 499 17 18 14 17 18 18 18 18 18 18 18 18 18 18 18 18 18 <t< td=""><td>5 140 66 140 192 243 295 246 398 449 501 553 66 133 185 217 7 188 93 106 200 281 333 385 436 488 539 113 165 217 7 193 106 2017 220 285 306 358 410 461 513 111 165 217 8 217 133 106 203 255 306 358 410 461 513 112 144 90 227 146 133 228 280 311 838 435 486 127 144 140 265 146 147 560 663 766 869 972 1076 1179 222 425 528 631 14 181 118 294 595 663 766 869 972 1061 244 347 450 15 18 497 1061 244 347 50 53 668 771 874 977 1061 244 347 450 <td< td=""><td>5 140 66 140 90 28 295 36 380 849 501 553 113 165 217 288 333 854 46 853 113 165 217 288 3 193 106 217 113 106 217 114 193 244 0 241 133 106 228 293 355 356 408 449 117 117 169 244 0 241 133 24 275 318 333 335 408 407 114 196 117 128 473 148 196 117 128 428 538 401 100 117 328 438 566 631 756 637 751 844 957 100 188 498 497 100 188 498 498 497 100 180 333 438 566</td></td<></td></t<><td>5 144 80 178 230 284 284 284 501 553 651 38 165 217 268 333 383 480 441 193 244 220 272 3 173 106 203 255 306 358 410 461 513 496 484 0 2414 133 106 203 255 306 358 410 461 513 117 169 220 2 272 144 133 146 173 316 499 473 473 170 170 172 224 2 289 159 554 450 766 870 972 176 179 322 425 528 631 775 834 3 181 181 294 355 560 667 766 870 170 170 320 423 348 546 549 3 181 181 294 356 568 471 574 677 781 884 977 1061 124 347 450 550 657 750 876 <t< td=""><td>1 144 80 144 80 144 80 938 449 90 533 85 165 27 288 300 371 7 148 93 165 277 198 105 277 288 300 371 473 474 535 89 141 193 244 290 324 390</td><td>3 1</td></t<></td></td></td></td<> | 5 120 66 140 192 243 295 346 398 449 501 553 86 5 188 93 165 217 268 333 385 436 486 593 3 193 106 203 255 306 358 410 415 513 4 2177 1193 106 242 229 345 366 448 499 0 241 133 242 228 280 331 383 435 460 2 289 159 554 457 560 663 766 869 972 1076 1179 922 2 289 159 554 427 530 633 737 840 937 1061 1149 277 4 181 118 294 938 501 604 707 818 849 971 1061 5 277 148 265 588 591 618 | 5 120 666 140 192 243 295 246 333
 385 436 488 539 113 5 188 93 165 210 268 330 385 436 488 539 113 8 173 106 203 255 366 388 410 441 513 9 217 1193 106 203 255 366 488 496 1 0 265 146 127 118 242 280 311 333 435 366 448 499 17 322 427 305 356 403 460 277 305 356 403 1046 1170 322 425 336 376 97 106 1242 285 378 978 903 1046 1170 322 425 337 361 993 1046 1170 322 425 337 361 997 1061 1243 335 376 893 972 <td>5 120 66 140 192 243 295 346 398 449 501 553 66 138 189 7 188 93 106 178 230 281 333 385 436 488 530 181 165 17 268 320 371 423 444 520 18 11 165 217 281 333 385 436 448 499 17 18 14 17 18 18 18 18 18 18 18 18 18 18 18 18 18 <t< td=""><td>5 140 66 140 192 243 295 246 398 449 501 553 66 133 185 217 7 188 93 106 200 281 333 385 436 488 539 113 165 217 7 193 106 2017 220 285 306 358 410 461 513 111 165 217 8 217 133 106 203 255 306 358 410 461 513 112 144 90 227 146 133 228 280 311 838 435 486 127 144 140 265 146 147 560 663 766 869 972 1076 1179 222 425 528 631 14 181 118 294 595 663 766 869 972 1061 244 347 450 15 18 497 1061 244 347 50 53 668 771 874 977 1061 244 347 450 <td< td=""><td>5 140 66 140 90 28 295 36 380 849 501 553 113 165 217 288 333 854 46 853 113 165 217 288 3 193 106 217 113 106 217 114 193 244 0 241 133 106 228 293 355 356 408 449 117 117 169 244 0 241 133 24 275 318 333 335 408 407 114 196 117 128 473 148 196 117 128 428 538 401 100 117 328 438 566 631 756 637 751 844 957 100 188 498 497 100 188 498 498 497 100 180 333 438 566</td></td<></td></t<><td>5 144 80 178 230 284 284 284 501 553 651 38 165 217 268 333 383 480 441 193 244 220 272 3 173 106 203 255 306 358 410 461 513 496 484 0 2414 133 106 203 255 306 358 410 461 513 117 169 220 2 272 144 133 146 173 316 499 473 473 170 170 172 224 2 289 159 554 450 766 870 972 176 179 322 425 528 631 775 834 3 181 181 294 355 560 667 766 870 170 170 320 423 348 546 549 3 181 181 294 356 568 471 574 677 781 884 977 1061 124 347 450 550 657 750 876 <t< td=""><td>1 144 80 144 80 144 80 938 449 90 533 85 165 27 288 300 371 7 148 93 165 277 198 105 277 288 300 371 473 474 535 89 141 193 244 290 324 390</td><td>3 1</td></t<></td></td> | 5 120 66 140 192 243 295 346 398 449 501 553 66 138 189 7 188 93 106 178 230 281 333 385 436 488 530 181 165 17 268 320 371 423 444 520 18 11 165 217 281 333 385 436 448 499 17 18 14 17 18 18 18 18 18 18 18 18 18 18 18 18 18 <t< td=""><td>5 140 66 140 192 243 295 246 398 449 501 553 66 133 185 217 7 188 93 106 200 281 333 385 436 488 539 113 165 217 7 193 106 2017 220 285 306 358 410 461 513 111 165 217 8 217 133 106 203 255 306 358 410 461 513 112 144 90 227 146 133 228 280 311 838 435 486 127 144 140 265 146 147 560 663 766 869 972 1076 1179 222 425 528 631 14 181 118 294 595 663 766 869 972 1061 244 347 450 15 18 497 1061 244 347 50 53 668 771 874 977 1061 244 347 450 <td< td=""><td>5 140 66 140 90 28 295 36 380 849 501 553 113 165 217 288 333 854 46 853 113 165 217 288 3 193 106 217 113 106 217 114 193 244 0 241 133 106 228 293 355 356 408 449 117 117 169 244 0 241 133 24 275 318 333 335 408 407 114 196 117 128 473 148 196 117 128 428 538 401 100 117 328 438 566 631 756 637 751 844 957 100 188 498 497 100 188
 498 498 497 100 180 333 438 566</td></td<></td></t<> <td>5 144 80 178 230 284 284 284 501 553 651 38 165 217 268 333 383 480 441 193 244 220 272 3 173 106 203 255 306 358 410 461 513 496 484 0 2414 133 106 203 255 306 358 410 461 513 117 169 220 2 272 144 133 146 173 316 499 473 473 170 170 172 224 2 289 159 554 450 766 870 972 176 179 322 425 528 631 775 834 3 181 181 294 355 560 667 766 870 170 170 320 423 348 546 549 3 181 181 294 356 568 471 574 677 781 884 977 1061 124 347 450 550 657 750 876 <t< td=""><td>1 144 80 144 80 144 80 938 449 90 533 85 165 27 288 300 371 7 148 93 165 277 198 105 277 288 300 371 473 474 535 89 141 193 244 290 324 390</td><td>3 1</td></t<></td> | 5 140 66 140 192 243 295 246 398 449 501 553 66 133 185 217 7 188 93 106 200 281 333 385 436 488 539 113 165 217 7 193 106 2017 220 285 306 358 410 461 513 111 165 217 8 217 133 106 203 255 306 358 410 461 513 112 144 90 227 146 133 228 280 311 838 435 486 127 144 140 265 146 147 560 663 766 869 972 1076 1179 222 425 528 631 14 181 118 294 595 663 766 869 972 1061 244 347 450 15 18 497 1061 244 347 50 53 668 771 874 977 1061 244 347 450 <td< td=""><td>5 140 66 140 90 28 295 36 380 849 501 553 113 165 217 288 333 854 46 853 113 165 217 288 3 193 106 217 113 106 217 114 193 244 0 241 133 106 228 293 355 356 408 449 117 117 169 244 0 241 133 24 275 318 333 335 408 407 114 196 117 128 473 148 196 117 128 428 538 401 100 117 328 438 566 631 756 637 751 844 957 100 188 498 497 100 188 498 498 497 100 180 333 438 566</td></td<> | 5 140 66 140 90 28 295 36 380 849 501 553 113 165 217 288 333 854 46 853 113 165 217 288 3 193 106 217 113 106 217 114 193 244 0 241 133 106 228 293 355 356 408 449 117 117 169 244 0 241 133 24 275 318 333 335 408 407 114 196 117 128 473 148 196 117 128 428 538 401 100 117 328 438 566 631 756 637 751 844 957 100 188 498 497 100 188 498 498 497 100 180 333 438 566 | 5 144 80 178 230 284 284 284 501 553 651 38 165 217 268 333 383 480 441 193 244 220 272 3 173 106 203 255 306 358 410 461 513 496 484 0 2414 133 106 203 255 306 358 410 461 513 117 169 220 2 272 144 133 146 173 316 499 473 473 170 170 172 224 2 289 159 554 450 766 870 972 176 179 322 425 528 631 775 834 3 181 181 294 355 560 667 766 870 170 170 320 423 348 546 549 3 181 181 294 356 568 471 574 677 781 884 977 1061 124 347 450 550 657 750 876 <t< td=""><td>1 144 80 144 80 144 80 938 449 90 533 85 165 27 288 300 371 7 148 93 165 277 198 105 277 288 300 371 473 474 535 89 141 193 244 290 324 390</td><td>3 1</td></t<> | 1 144 80 144 80 144 80 938 449 90 533 85 165 27 288 300 371 7 148 93 165 277 198 105 277 288 300 371 473 474 535 89 141 193 244 290 324
 290 324 290 324 290 324 290 324 290 324 290 324 290 324 290 324 290 324 290 324 390 | 3 1 |



QUICK PICK CHART FOR EA2 (METRIC) PNEUMATIC ACTUATORS ASSEMBLED ON S64, S65, S73 AND S76 RUB BALL VALVES

For service with pipeline ΔP lower than the maximum limits shown below, and for media having friction characteristics similar to clean water or moist/lubricated gases the following actuator selections can be used. For higher pipeline pressures or more difficult media the selection must be made using the valve torque charts found on each valve data sheet, and the actuator torque rating chart found on the following page. For assistance in actuator selection please contact *RuB* at the following email address: sales@rubvalves.com or your *RuB* distributor.

												Air pr	essure	supply	(bar)										
VALVE		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
s64 LT	ΔP Media (bar)		D	ouble	Acting	Actuat	ors EA	2-			Sp	ring-to	-Close	Actuat	ors EA	42-			Sp	ring-to	-Open	Actuat	ors EA	2-	
1″	6	1	1	1	1	1	1	1	1	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2	2s2
1 1/4″	6	1	1	1	1	1	1	1	1	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3
1 1/2″	6	2A	2A	2A	2A	2A	2A	2A	2A	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6	2As6
2″	6	2A	2A	2A	2A	2A	2A	2A	2A	3s4	2As8	2As8	2As8	2As8	2As8	2As8	2As8	3s4	2As8	2As8	2As8	2As8	2As8	2As8	2As8
1″	16 Max	1	1	1	1	1	1	1	1	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4
1 1/4″	16 Max	1	1	1	1	1	1	1	1	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4
1 1/2″	16 Max	2A	2A	2A	2A	2A	2A	2A	2A	3s4	3s4	2As9	2As9	2As9	2As9	2As9	2As9	3s4	3s4	2As9	2As9	2As9	2As9	2As9	2As9
2″	16 May	2	20	20	20	20	20	2∆	20	346	346	346	2∆c12	2∆c12	2∆c12	2∆c12	24c12	346	346	306	2∆c12	2∆c12	2∆c12	2∆c12	2∆c12

3 4 5 6 7 8 9 10 Spring-to-Open Actuators EA2- s3 2s3 2s3 <t< th=""></t<>
s3 2s3 2s3 2s3 2s3 2s3 2s3 2s3 2s3
s4 2s4 2s4 2s4 2s4 2s4 2s4 2s4
s7 2s7 2s7 2s7 2s7 2s7 2s7 2s7 2s7
s5 3s5 3s5 2As11 2As11 2As11 2As11 2As11 2As11
s5 4s5 3s10 3s10 3s10 3s10 3s10 3s10
s6 4s6 4s6 3s12 3s12 3s12 3s12 3s12 3s12
s4 5s4 5s4 5s4 5s4 5s4 5s4 5s4 5s4
7s4 7s4 6s7 6s7 6s7 6s7 6s7
7s7 7s7 7s7 7s7 7s7 7s7
s s s

* Selections apply for valves used with ΔP up to 15 bar Max. For ΔP over 15 bar and up to 40 bar (30 bar for sizes over 2"), please consult **BONOMI INDUSTRIES** for sizing recommendations.

												Air pı	ressure	e supply	/ (bar)										
VALVE		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
s65	ΔP Media (bar)		C	ouble	Acting	Actuat	ors EA	2-			S	oring-to	-Close	Actuat	ors E/	42-			Sp	oring-to	o-Open	Actuat	ors E/	\2 -	
1/2″	16 Max	1	1	1	1	1	1	1	1	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s3	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4
3/4″	16 Max	1	1	1	1	1	1	1	1	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4
1″	16 Max	2	1	1	1	1	1	1	1	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5
1 1/4"	16 Max	2	1	1	1	1	1	1	1	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5

												Air p	ressure	supply	(bar)										
VALVE		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
s73	ΔP Media (bar)		C	ouble	Acting	Actuat	ors EA	2-			Sp	oring-to	o-Close	Actuat	ors E/	42-	-		Sp	oring-to	-Open	Actuat	ors E/	42-	
1/2″	16	2	2	2	2	2	1	1	1	4s3	3s7	3s7	3s7	3s7	3s7	3s7	3s7	4s3	3s7	3s7	3s7	3s7	3s7	3s7	3s7
3/4″	16	3	2	2	2	2	2	1	1	4s4	3s8	3s8	3s8	3s8	3s8	3s8	3s8	4s4	3s8	3s8	3s8	3s8	3s8	3s8	3s8
1″	16	3	3	3	2	2	2	2	2	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6	4s6
1 1/4″	16	3	3	3	3	3	3	3	3	4s4	4s4	3s9	3s9	3s9	3s9	3s9	3s9	4s4	4s4	3s9	3s9	3s9	3s9	3s9	3s9
1 1/2″	16	3	3	3	3	3	3	3	3		4s7					4s7		[4s7	4s7	4s7	4s7	4s7	4s7	4s7
2″	16	4	4	3	3	3	3	3	3		6s4	5s6	4s11	4s11	4s11	4s11	4s11		6s4	5s4	4s11	4s11	4s11	4s11	4s11
									· · ·																

* Selections apply for valves used with ΔP up to 16 bar Max. For ΔP over 16 bar and up to 20 bar, please consult BONOMI INDUSTRIES for sizing recommendations.

9 10	3	4 St	5 pring-to	6	7	8	9 10	3	4	5	6	7	8	9	10
		S	nring-to	Cloco	A -++										10
				J-Close	Actuat	ors EA	2-		S	pring-to	o-Open	Actuat	tors EA	2-	
1 1	2s4	2s4	2s4	2s4	2s4	2s4	2s4 2s4	1 2s4	2s4	2s4	2s4	2s4	2s4	2s4	2s4
1 1	2s5	2s5	2s5	2s5	2s5	2s5	2s5 2s	5 2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5
1 1	2s5	2s5	2s5	2s5	2s5	2s5	2s5 2s	5 2s5	2s5	2s5	2s5	2s5	2s5	2s5	2s5
2A 2A	3s5	3s5	3s5	2As11	2As11	2As11	2As11 2As	1 3s5	3s5	3s5	2As11	2As11	2As11	2As11	2As11
2A 2A	4s5	4s5	3s9	3s9	3s9	3s9	3s9 3s9) 4s5	4s5	3s9	3s9	3s9	3s9	3s9	3s9
3 3	4s6	4s6	4s6	3s12	3s12	3s12	3s12 3s1	2 4s6	4s6	4s6	3s12	3s12	3s12	3s12	3s12
2	2A 2A 3 3	1 1 2s5 1 1 2s5 2A 3s5 3s5 2A 2A 4s5 3 3 4s6	1 1 2s5 2s5 1 1 2s5 2s5 2A 3s5 3s5 2A 2A 4s5 4s5 3 3 4s6 4s6	1 2s5 2s5 2s5 1 1 2s5 2s5 2s5 2A 3s5 3s5 3s5 2A 2A 4s5 4s5 3s9 3 3 4s6 4s6 4s6	1 2 2 2 5 2 5 2 5 2 5 1 1 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 5 2 3 2 3 3 3 3 5 3 5 2 5 3 5 2 5 1 3 4 5 3 5 3 5 2 4 1 3 3 4 5 4 5 3 5 3 5 2 5 1 3 3 4 5 4 5 4 5 3 5 3 1 2 3 1 3 3 4	1 2 <th2< th=""> <th2< th=""> <th2< th=""> <th2< th=""></th2<></th2<></th2<></th2<>	1 2 2 2 2 5 2 5 2 5 2 5 2 5 1 1 2 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 5 3 3 3 4 5 4 5	1 2	1 2 2 5 2 5 2 2 5 2 2 5 2 2 2 5 2	1 2 2 5 2 5 2	1 1 255	1 1 2s5 2s5	1 2s5 2s5	1 2s5 2s5	1 2s5 2s5

* Selections apply for valves used with ΔP up to 16 bar. For ΔP over 16 bar and up to 20/30 bar, please consult BONOMI INDUSTRIES for sizing recommendations. Red font = selection driven by valve stem size

LINKAGE KIT SELECTION TABLE

						Actuator size				
Valve	Valve size	EA2	-1	-2	-2A	-3	-4	-5	-6	-7
	1/2" ~ 1"	LK-	1	1	-	3	3	-	-	-
s64	1 ¼″ ~ 1 ½″	LK-	-	-	4	6	6	13	7	-
504	2″	LK-	-	-	-	4	4	14	5	21
	2 ½" ~ 4"	LK-	-	-	-	-	-	15	15	22
s64 LT	1″ ~ 1 ¼″	LK-	1	1	-	3	3	-	-	-
504 L I	1 ½" ~ 2"	LK-	-	-	4	6	6	-	-	-
s65	1/2" ~ 1 ¼"	LK-	1	1	-	3	-	-	-	-
s73	1/2" ~ 1"	LK-	1	1	-	3	3	-	-	
\$75	1 ¼" ~ 2"	LK-	-	-	-	4	4	14	5	-
	1/2" ~ 1"	LK-	1	1	-	3	3	-	-	-
s76	1 ¼″ ~ 1 ½″	LK-	-	-	4	6	6	13	7	-
	2″	LK-		_	_	1	1	1/	5	_

QUICK PICK CHART FOR EA4 (IMPERIAL) PNEUMATIC ACTUATORS ASSEMBLED ON S64, S65, S134, AND S73, S76 RUB BALL VALVES



For service with pipeline ΔP lower than the maximum limits shown below, and for media having friction characteristics similar to clean water or moist/lubricated gases the following actuator selections can be used. For higher pipeline pressures or more difficult media the selection must be made using the valve torque charts found on each valve data sheet, and the actuator torque rating chart found on the following page.

			Air pressure supply (PSI)	
VALVE s64 LT	ΔP Media (PSI)	40 50 60 70 80 90 100 110 120 Double Acting Actuators EA4-	40 50 60 70 80 90 100 110 120 Spring-to-Close Actuators EA4-	40 50 60 70 80 90 100 110 120 Spring-to-Open Actuators EA4-
1"	90		2s2 2s2 <th>2s2 2s2 2s2</th>	2s2
1-1/4" 1-1/2"	90 90		2s3 3s3 3s3 <th>2s3 2s3 <th2s3< th=""> <th2s3< th=""> <th2s3< th=""></th2s3<></th2s3<></th2s3<></th>	2s3 2s3 <th2s3< th=""> <th2s3< th=""> <th2s3< th=""></th2s3<></th2s3<></th2s3<>
2"	90	3 3 3 3 3 3 3 3 3	3s4	3s4
1"	230 Max		2s4	254 254 254 254 254 254 254 254 254 254
1-1/4"	230 Max 230 Max		2s4 2s4 <th>2s4 2s4 2s4</th>	2s4
2"	230 Max 230 Max	3 3 3 3 3 3 3 3 3	4s3 3s6 3s6 3s6 3s6 3s6 3s6 3s6 3s6 3s6	4s3 3s6 3s6 3s6 3s6 3s6 3s6 3s6 3s6 3s6 3
			Air pressure supply (PSI)	
VALVE s64	ΔP* Media (PSI)	40 50 60 70 80 90 100 110 120 Double Acting Actuators EA4-	40 50 60 70 80 90 100 110 120 Spring-to-Close Actuators EA4-	40 50 60 70 80 90 100 110 120 Spring-to-Open Actuators
1/2"	200		2s2 2s2 <th>2s3 2s3 2s4 2s4</th>	2s3 2s4
3/4"	200 200	2 2 2 2 1 1 1 1 1	2s3 2s4 2s4 <th>2s4 2s4 2s4</th>	2s4
1-1/4"	200	3 3 3 3 3 3 3 3 3	4s3 3s6 3s6 3s6 3s6 3s6 3s6 3s6 3s6 3s6	3s5
1-1/2"	200	4 3 3 3 3 3 3 3 3	4s4 4s4 4s4 3s9 3s9 3s9 3s9 3s9 3s9 3s9	4s5 4s5 4s5 3s10 3s10 3s10 3s10 3s10 3s10 3s10
2" 2-1/2"	200 200	4 4 3 3 3 3 3 3 3 5 5 5 5 5 5 5 5 5	4s5 4s5 4s5 4s5 3s11 3s11 3s11 3s11 6s4 5s4 5s4 5s4 5s4 5s4 5s4 5s4	4s6 4s6 4s6 4s6 3s12 3s1
3"	200	7 6 6 6 5 5 5 5 5	7s4 7s4 6s7 6s7 6s7 6s7 6s7	7s4 7s4 6s7 6s7 6s7 6s7 6s7
4"	200	7 7 7 7 7 6 6 6 6 6	7s7 7s7 7s7 7s7 7s7	7s7 7s7 7s7 7s7 7s7 7s7
- selection	apply for valves us	ed with ΔP up to 200 PSI Max. For ΔP over 200 PSI and up to 600 PSI (ig recommendations.
VALVE		40 50 60 70 80 90 100 110 120	Air pressure supply (PSI) 40 50 60 70 80 90 100 110 120	40 50 60 70 80 90 100 110 120
s134	ΔP* Media (PSI)	Double Acting Actuators EA4-	Spring-to-Close Actuators EA4-	Spring-to-Open Actuators EA4-
1/2″	200	2 2 1 1 1 1 1 1 1	2s4	2s5
3/4"	200	2 2 2 2 2 1 1 1 1	354 2s7 2s7 <th>3s4 3s4 2s7 2s7 2s7 2s7 2s7 2s7 2s7</th>	3s4 3s4 2s7 2s7 2s7 2s7 2s7 2s7 2s7
1" 1-1/4"	200 200	<u> </u>	3s4 3s4 <th>3s6 3s6 3s6</th>	3s6
1-1/2"	200	4 3 3 3 3 3 3 3 3 3 3	4s4 4s4 4s4 3s8 3s8 3s8 3s8 3s8 3s8 3s8 3s8	4s6 4s6 4s6 4s6 3s11 3s11 3s11 3s11 3s11
2"	200	4 4 3 3 3 3 3 3 3 3 3 4 4 4 4 3 4 4 4 4	4s6 4s6 4s6 4s6 4s6 3s12 3s12 3s12	4s7 4s7 4s7 4s7 4s7 4s7 4s7 4s7
Selection				
VALVE		40 50 60 70 80 90 100 110 120	Air pressure supply (PSI) 40 50 60 70 80 90 100 110 120	40 50 60 70 80 90 100 110 120
s65	ΔP Media (PSI)	Double Acting Actuators EA4-	Spring-to-Close Actuators EA4-	Spring-to-Open Actuators EA4-
1/2" 3/4"	230 max 230 max		2s3 2s3 <th>2s4 2s4 2s4</th>	2s4
1"	230 max	2 1 1 1 1 1 1 1 1	2s4 2s4 2s4 2s4 2s4 2s4 2s4 2s4 2s4	2s5 2s5 2s5 2s5 2s5 2s5 2s5 2s5 2s5
1-1/4"	230 max	2 2 1 1 1 1 1 1 1 1	2s5 2s5 2s5 2s5 2s5 2s5 2s5 2s5 2s5	2s5 2s5 2s5 2s5 2s5 2s5 2s5 2s5 2s5
			Air pressure supply (PSI)	
VALVE s73	ΔP* Media (PSI)	40 50 60 70 80 90 100 110 120 Double Acting Actuators EA4-	40 50 60 70 80 90 100 110 120 Spring-to-Close Actuators	40 50 60 70 80 90 100 110 120 Spring-to-Open Actuators EA4-
1/2"	230	2 2 2 2 2 2 2 1 1	4s3 3s7 3s7 <th>4s3 3s7 3s7</th>	4s3 3s7
3/4" 1"	230 230	3 2 2 2 2 2 2 2 2 3 3 3 3 3 2 2 2 2	4s4 4s4 3s8 3s8 <th>4s4 4s4 3s8 3s8</th>	4s4 4s4 3s8
1-1/4"	230	3 3 3 3 3 3 3 3 3	4s4 4s4 3s9 3s9 3s9 3s9 3s9 3s9 3s9 3s9 3s9	4s4 4s4 3s9 3s9 3s9 3s9 3s9 3s9 3s9 3s9 3s9
1-1/2"	230	3 3 3 3 3 3 3 3 3	4s7 4s7 4s7 4s7 4s7 4s7 4s7 4s7 4s7	457 457 457 457 457 457 457 457 457
2" * Selection	230 s apply for valves us	4 4 4 3 3 3 3 3 3 eed with ΔP up to 230 PSI Max. For ΔP over 230 PSI and up to 300 PSI.	6s4 6s4 4s11 4s11 4s11 4s11 4s11 4s11 4s	6s4 6s4 4s11 4s11 4s11 4s11 4s11 4s11
			Air pressure supply (PSI)	
VALVE		40 50 60 70 80 90 100 110 120	40 50 60 70 80 90 100 110 120	40 50 60 70 80 90 100 110 120
s76	Δp Media (PSI)	Double Acting Actuators EA4-	Spring-to-Close Actuators EA4-	Spring-to-Open Actuators EA4-
1/2"	230	1 1 1 1 1 1 1 1 1	<u>2s4</u>	2s4
3/4"	230	2 1 1 1 1 1 1 1 1	2s5 2s5 <th>2s5 2s5 2s5</th>	2s5
1" 1-1/4"	230 230	2 1 1 1 1 1 1 1 1 3 3 3 3 3 3 3 3 3 3 3	2s5 2s5 <th>2s5 2s5 2s5</th>	2s5
1-1/2"	230	3 3 3 3 3 3 3 3 3 3 3	4s5 4s5 4s5 3s3 3s3 <th>353 353</th>	353 353
2"	230	4 3 3 3 3 3 3 3 3 3 3	4s6 4s6 4s6 4s6 3s12 3s12 3s12 3s12	4s6 4s6 4s6 4s6 3s12 3s12 3s12 3s12 3s12
* Selection	s apply for valves us	sed with ΔP up to 230 PSI. For ΔP over 230 PSI and up to 300/450 PSI,	lease consult BONOMI INDUSTRIES for sizing recommendations.	Pad font - coloction driven by value story size
ΙΝΚΛ	CE KIT CE	FCTION TARIF		Red font = selection driven by valve stem size

LINKAGE KIT SELECTION TABLE

Actuator size Valve Valve size -5 -6 EA2 -2 -3 -4 -7 1/2" ~ 1" IK-8 9 8 9 1 ¼″ ~ 2″ s64 LK-10 10 16 17 23 2 1⁄2" ~ 4" LK-18 18 24 1" ~ 1 ¼" 9 LK-8 8 s64 LT 1 1⁄2″ ~ 2″ IK-6 s65 1/2" ~ 1 ¼" LK-8 8 9 1/2" ~ 1" 9 8 8 9 IKs73 - s76 10 10 16 LK-1 ¼″ ~ 2″ 1/2" ~ 3/4" LK-8 8 9 9 s134 19 11 11 20 1"~1 ½" LK-LK-18 18 16 17 23 2″







Female/Female 1/4" - 3/4"

This newly engineered valve features all the good characteristics of the s.31 *RuB* mini valve, in particular:





QUALITY:

- 100% seal test guaranteed in according to EN12266-1 RATE A in either direction

- Compatible with most industrial fluids including those too viscous for pilot operated valves
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant
- Chrome plated ball for longer life
- Can operate also in vacuum line

BODY:

- Finest brass according to EN 12165 and EN 12164 specifications
- Strong one piece body construction
- Mounting kit to be ordered sperately "KCPA0AA00100"

STEM:

- Blowout-proof brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING:

Pure PTFE self-lubricating seats

THREADS:

• EN 10226-1, ISO 228 parallel female by female threads

WORKING PRESSURE AND TEMPERATURE:

- Shell rating: 40 bar (600 PSI) non-shock cold working pressure
- Seat rating: Delta P max permissible 16 bar (230 PSI)
- -20°C to +120°C (-4°F to +250°F)

• **WARNING**: freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH:

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

Quick Connection with CP actuators



s.31 XCE3100 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

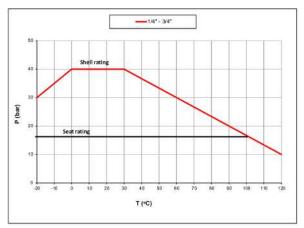
	Part description	Q.ty	Material
1	Sand blasted unplated NPT body	1	CW617N
2	Unplated retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem O-Ring design	1	CW617N
7	O-Ring	2	FPM

Code	AV31BF3	AV31CF3	AV31DF3	AV31EF3
D (inch)	1/4"	3/8"	1/2"	3/4"
DN (mm)	8	10	10	12.7
l (mm)	12	12	15.5	17
L (mm)	45.5	45.5	53.5	61.5
G (mm)	23.8	23.8	28	32.5
A (mm)	18.5	18.5	18.5	18.5
H (mm)	22.5	22.5	22.5	25.5
CH (mm)	25	25	25	31
Kv (m3/h)	5.8	9.5	9.5	25.4

TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0 ÷16 bar
Valve size	N.m
1/4" ÷ 1/2"	1.8
3/4"	2.5

PRESSURE-TEMPERATURE CHART



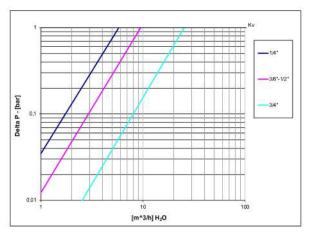


Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

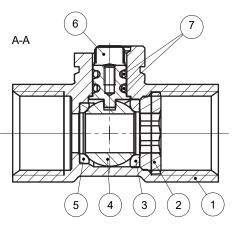
If media has more or less friction than water, multiply torque by the following factors:

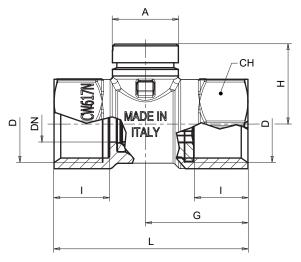
Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART











1/4" - 3/4"



S.31 NPT Mini Valve Female/Female

This newly engineered valve features all the good characteristics of the s.31 **RuB** mini valve, in particular:

QUALITY:

- 100% seal test guaranteed in according to EN12266-1 RATE A in either direction

- Compatible with most industrial fluids including those too viscous for pilot operated valves
- Dual sealing system allows valve to be operated in either direction making installation easier
- · No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant
- Chrome plated ball for longer life
- Can operate also in vacuum line

BODY:

- Finest brass according to EN 12165 and EN 12164 specifications
- Strong one piece body construction
- Mounting kit to be ordered sperately "KCPA0AA00100"

STEM:

- Blowout-proof brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING:

Pure PTFE self-lubricating seats

THREADS:

• NPT taper ANSI B.1.20.1 threads

WORKING PRESSURE AND TEMPERATURE:

- Shell rating: 600 PSI (40 bar) non-shock cold working pressure
- Seat rating: Delta P max permissible 230 PSI (16 bar)
- -4°F to +250°F (-20°C to +120°C)

• **WARNING**: freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH:

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

Quick Connection with CP actuators



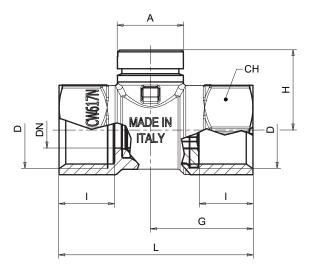


s.31 NPT XCE3141 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Sand blasted unplated NPT body	1	CW617N
2	Unplated retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem O-Ring design	1	CW617N
7	O-Ring	2	FPM

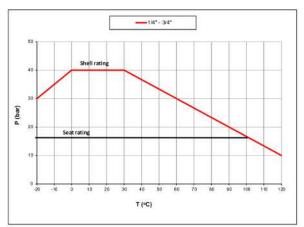
Code	AV31BX3	AV31CX3	AV31DX3	AV31EX3
D (inch)	1/4"	3/8"	1/2"	3/4"
DN (mm)	0.31	0.39	0.39	0.50
l (mm)	0.47	0.47	0.61	0.67
L (mm)	1.79	1.79	2.11	2.42
G (mm)	0.94	0.94	1.10	1.28
A (mm)	0.73	0.73	0.73	0.73
H (mm)	0.89	0.89	0.89	1.00
CH (mm)	0.98	0.98	0.98	1.22



TORQUE FOR ACTUATOR SIZING LB-IN

Delta P>	0 ÷230 PSI
Valve size	lb-in
1/4" ÷ 1/2"	16
3/4″	22

PRESSURE-TEMPERATURE CHART



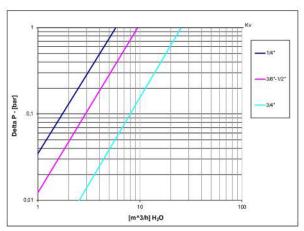
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

0	
Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART









s.31 BSPT Mini Valve

Female/Female 1/4" - 3/4"

This newly engineered valve features all the good characteristics of the s.31 **RuB** mini valve, in particular:





QUALITY:

- 100% seal test guaranteed in according to EN12266-1 RATE A in either direction

- Compatible with most industrial fluids including those too viscous for pilot operated valves
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant
- Chrome plated ball for longer life
- Can operate also in vacuum line

BODY:

- Finest brass according to EN 12165 and EN 12164 specifications
- Strong one piece body construction
- Mounting kit to be ordered sperately "KCPA0AA00100"

STEM:

- Blowout-proof brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING:

Pure PTFE self-lubricating seats

THREADS:

• ISO 7/1, BS 21 BSPT taper threads

WORKING PRESSURE AND TEMPERATURE:

- Shell rating: 40 bar (600 PSI) non-shock cold working pressure
- Seat rating: Delta P max permissible 16 bar (230 PSI)
- -20°C to +120°C (-4°F to +250°F)

• **WARNING**: freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH:

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

Quick Connection with CP actuators



s.31 BSPT XCE3150 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

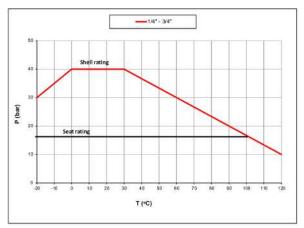
	Part description	Q.ty	Material
1	Sand blasted unplated NPT body	1	CW617N
2	Unplated retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem O-Ring design	1	CW617N
7	O-Ring	2	FPM

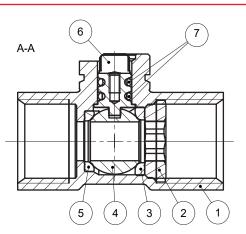
Code	AV31BW3	AV31CW3	AV31DW3	AV31EW3
D (inch)	1/4"	3/8"	1/2"	3/4"
DN (mm)	8	10	10	12.7
l (mm)	12	12	15.5	17
L (mm)	45.5	45.5	53.5	61.5
G (mm)	23.8	23.8	28	32.5
A (mm)	18.5	18.5	18.5	18.5
H (mm)	22.5	22.5	22.5	25.5
CH (mm)	25	25	25	31
Kv (m3/h)	5.8	9.5	9.5	25.4

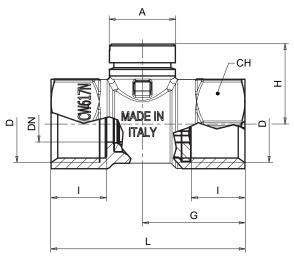
TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0 ÷16 bar
Valve size	N.m
1/4" ÷ 1/2"	1.8
3/4"	2.5

PRESSURE-TEMPERATURE CHART







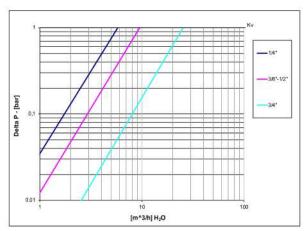
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART









s.6400

Female/Female 1/2" - 4" EN 10226-1, ISO 5211, heavy duty





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- · Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm e}$ or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

 Reinforced PTFE self- lubricating seats with flexible-lip and wear compensation design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100% full port for maximum flow

OPERATING MECHANISM

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure
- · For use with dangerous fluids pressure rating is 5 bar
- -20°C to +170°C (-4°F to +350°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve
- For use with dangerous fluids temperature rating is -20°C +60°C

UPON REQUEST

• Custom design

PED DIRECTIVE

• Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- Water Regulations Advisory Scheme (United Kingdom)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

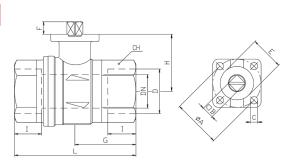
- · CW511L brass (lead-free and DZR) for drinking water applications with compression ends
- Configuration for use with slurries or liquid bearing abrasive particles
- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle



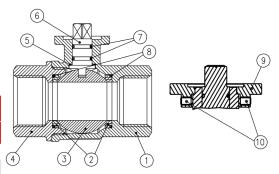
s.6400 xces6400 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Black anodized flange (only from 2 1/2" to 4")	1	Aluminum
10	Grub Screw (only from 2 ½" to 4")	2	CB4FF



ACTUATION



Ball valves are marked CE on end-cap from $1\frac{1}{4}$ " to 4" as follow:

CE 0425 cat IIIB+D PS: 5 GAS TS1:-20°C TS2:+60°C

10	Grub	Screw	(only	from	2	1/2

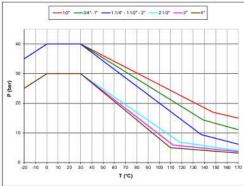
Valves configuration up to 2" Valve ball seats and stem configuration of valves over 2" is different.

Compliant to CE 2014/68/UE product Equipment category III Module B+D S64D00 S64E00 Code S64F00 \$841,00AM \$84M00AM \$84N00AM \$64100 \$64600 S64H00 D (Size) 1/2" 3/4" 1" 1 1⁄4" 1 1/2" 2" 2 1/2" 3" 4" 15 25 40 50 100 DN (mm) 20 32 65 80 16.5 22.5 l (mm) 19 25 26 29 32 35 41.5 L (mm) 75 80 90 110 120 140 156 177 216 G (mm) 30.5 37 45.5 52 59 67.5 78 88.5 108 H (mm) 31 38.5 42.5 55.5 62 69 89 96 111 CH (mm) 27 32 41 50 55 70 85 99 125 ØA (mm) 36 36 36 50 50 50 70 70 70 🗆 B (mm) 9 9 9 11 11 14 17 17 17 5.6 C (mm) 5.6 5.6 6.6 6.6 6.6 8.5 8.5 8.5 25 25 25 35 35 55 55 55 E (mm) 35 7.5 8.5 8.5 10 10 14.5 18 18 18 F (mm) lange connection DIN ISO 522 F03 F03 F03 F05 F05 F05 F07 F07 F07 **DIN 3337** 1120 <mark>⟨v (m³/h</mark>) 28 60 100 155 245 290 516 770

TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷15 bar 40 bar (30		bar over 2")	
Valve size	to open	to close	to open	to close
1/2″	2,8	1,7	2,8	1,7
3/4″	3,8	2,3	3,8	2,3
1″	7,1	4,2	7,1	4,2
1 ¼″	11,7	12,6	13,6	12,6
1 ½″	24,9	20,3	30,9	20,3
2″	29,6	25,1	37	25,1
2 ½"	42	42	105	105
3″	102	102	120	120
4″	186	186	225	225

PRESSURE-TEMPERATURE CHART



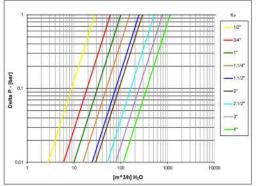
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART







s.6400LT

Female/Female 1" - 2" EN 10226-1, ISO 5211, low torque





QUALITY

• Dual sealing system allows valve to be operated in either direction making installation easier

- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- 100% seal test guaranteed in according to EN 12266- 1 RATE A

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {s}}$ or equivalent thread sealant

- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100% full port for maximum flow

OPERATING MECHANISM

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- Shell rating: 40 bar (600 PSI) non shock cold working pressure
- Seat rating: Delta P max permissible 16 bar (230 PSI)
- -20°C to +170°C (-4°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

• Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- Water Regulations Advisory Scheme (United Kingdom)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- · Rack and pinion pneumatic actuator (spring return or double acting)
- · Compact power electric actuator for some sizes



BONOMI INDUSTRIES SRL - www.bonomiindustries.com

s.6400LT XCES6400LT - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Ball seat	2	PTFE carbo-graphite filled
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM

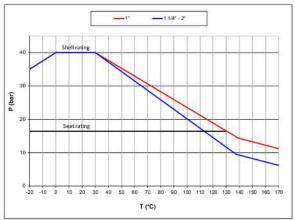
Code	S64F00A	S64G00A	S64H00A	S64100A
D (inch)	1″	1 1⁄4″	1 1⁄2″	2″
DN (mm)	25	32	40	50
l (mm)	22.5	25	26	29
L (mm)	90	110	120	140
G (mm)	45.5	52	59	67.5
H (mm)	42.5	55.5	62	69
CH (mm)	41	50	55	70
ØA (mm)	36	36	50	50
□B (mm)	9	9	11	11
C (mm)	5.6	5.6	6.6	6.6
E (mm)	25	25	35	35
F (mm)	8.5	8.5	10	10
Flange connection DIN ISO 522 DIN 3337	F03	F03	F05	F05
Kv (m3/h)	100	155	245	290

Ball valves are marked CE on end-cap from 1 $\ensuremath{^{14''}}$ to 2" as follow: CE XXCODEXX Cat I-A

TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷6 bar		>6÷16 bar	
Valve size	to open	to close	to open	to close
1″	2,2	2,2	3,5	3,5
1 ¼″	2,5	2,5	4	4
1 ½″	5,8	5,8	9,5	9,5
2″	7,9	7,9	13	13

PRESSURE-TEMPERATURE CHART



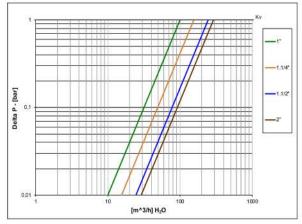
TORQUE CORRECTION FACTORS

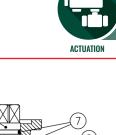
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

0	
Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

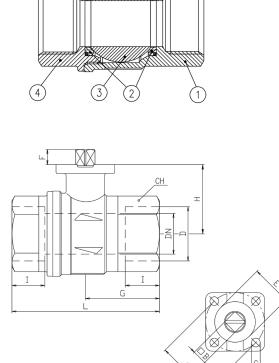
PRESSURE DROP CHART





(6)

5







k.6405

Female/Female 1/2" - 2" EN 10226-1, ISO 5211, pure PTFE seats, DIN 16722 M3

More and more automation is required at all levels in our society and the k.64 *RuB* range is the answer to all needs for reliable actuated ball valve. The line has successfully passed 100,000 cycle life tests and is available in a variety of standard and customized configurations some with special seat design to compensate for wear. HIGH TEMPERATURE RESISTANCE

Now approved for HTB use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes). H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)



- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm o}$ requivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- · Valve length according to DIN 16722 M3

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100% full port for maximum flow

OPERATING DEVICE

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- + For use with dangerous fluids pressure rating is 5 bar (72 PSI) / HTB Class B 0,1
- -40°C to +170°C (-40°F to +350°F)
- **WARNING**: freezing of the fluid in the installation may severely damage the valve
- + For use with dangerous fluids temperature rating is -20°C to +60°C (-4°F to +140°F)

PED DIRECTIVE

• Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

APPROVED BY OR IN COMPLIANCE WITH

- DVGW (Germany) MOP 5 B 0,1
- SVGW (Switzerland)
- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

You can purchase the valve alone or with the ${\it \it RuB}$ actuator already mounted.

OPTIONS

- Special valve configurations available upon request
- s.64 configuration featuring NPT taper ANSI B.1.20.1 female by female threads, unplated body, reinforced seats and brass or stainless stem and ball
- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle









k.6405 XCEK6405 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

Ball valves are marked CE on body from 1 1/4" to 2" as follow:

S64E05

3/4"

20

19

80

37

38.5

32

36

9

5.6

25

8.5

F03

60

CE 0425 cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

S64D05

1/2"

15

16.5

75

30.5

31

27

36

9

5.6

25

7.5

F03

28

Code

D (Size)

DN (mm)

l (mm)

L (mm)

G (mm)

H (mm)

CH (mm)

ØA (mm) 🗆 B (mm)

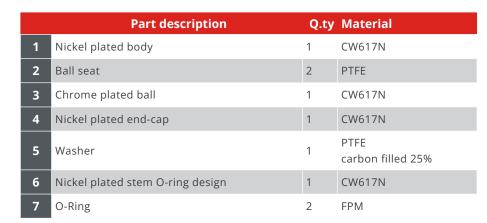
C (mm)

E (mm)

F (mm)

Flange connection DIN ISO 522

DIN 3337 Kv (m³/h)



S64F05

1"

25

22.5

90

45.5

42.5

41

36

9

5.6

25

8.5

F03

100

S64G05

1 1⁄4"

32

25

110

52

55.5

50

50

11

6.6

35

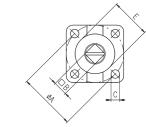
10

F05

155

ACTUATION

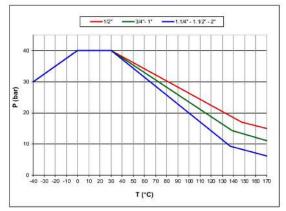
CH



TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷15 bar		40 bar	
Valve size	to open	to close	to open	to close
1/2"	3,2	2,4	3,2	2,4
3/4"	4,6	3,5	4,6	3,5
1″	11	8,2	11	8,2
1 ¼″	16	14,4	16	14,4
1 ½"	28,2	25,4	31	28
2″	38,9	35	49,5	44,5

PRESSURE-TEMPERATURE CHART



TORQUE CORRECTION FACTORS

S64105

2"

50

29

140

67.5

69

70

50

14

6.6

35

14.5

F05

290

Compliant to CE 2014/68/UE product Equipment category III Module B+D

S64H05

1 1/2"

40

26

120

59

62

55

50

11

6.6

35

10

F05

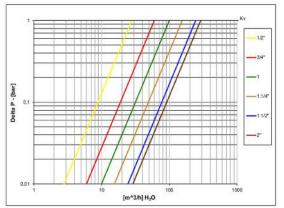
245

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART







Female/Female 1/2" - 2" SS trim, ISO 5211



is the answer to all needs for reliable actuated ball valve.

It features special seat design to automatically compensate for wear and it has successfully passed 100,000 cycle life tests.

You can purchase the valve alone or with ${\it RuB}$ actuator already mounted.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Stainless steel ball for longer life

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm o}$ requivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Blowout-proof stainless steel stem

SEALING

 Reinforced PTFE self- lubricating seats with flexible-lip and wear compensation design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• 100% full port for maximum flow

HANDLE

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 600 PSI non-shock cold working pressure
- -4°F to +350°F
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

• Custom design

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

• k.64 configuration featuring EN 10226-1, ISO 228 parallel female by female threads, plated body, valve length according to DIN 3357 specification, pure PTFE seats

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle
- Brass trim (s.6441)







20

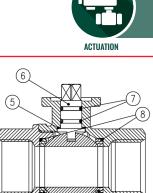


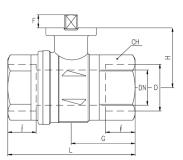
s.6439 NPT XCES6439 - rev.5466

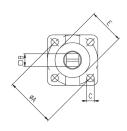
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Ball seat	2	PTFE carbographite filled
3	Stainless steel ball	1	1.4401 / AISI 316
4	Unplated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Stainless steel stem O-ring design	1	1.4401 / AISI 316
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	S64D39	S64E39	S64F39	S64G39	S64H39	S64I39
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 ½"	2"
DN (inch)	0.59	0.787	0.984	1.259	1.575	1.968
l (inch)	0.61	0.708	0.826	0.905	0.964	1.043
L (inch)	2.598	2.933	3.562	4.094	4.606	5.314
G (inch)	1.201	1.456	1.791	2.047	2.322	2.657
H (inch)	1.22	1.515	1.673	2.185	2.441	2.716
CH (inch)	1.063	1.259	1.614	1.968	2.165	2.756
ØA (inch)	1.417	1.417	1.417	1.968	1.968	1.968
□B (inch)	0.354	0.354	0.354	0.551	0.551	0.551
C (inch)	0.22	0.22	0.22	0.259	0.259	0.259
E (inch)	0.984	0.984	0.984	1.378	1.378	1.378
F (inch)	0.295	0.334	0.334	0.57	0.57	0.57
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F05	F05	F05
Cv (GPM)	32.3	69.3	115.5	179.1	283.1	335



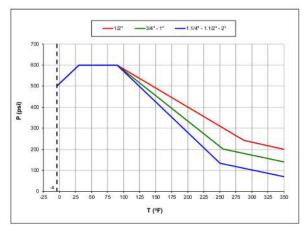




TORQUE FOR ACTUATOR SIZING IN-LB

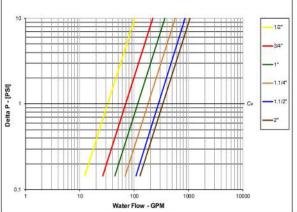
Delta P>	0÷200 PSI		600 PSI	
Valve size	to open	to open to close		to close
1/2″	25	15	25	15
3/4"	33	20	33	20
1″	62	37	62	37
1 1/4"	104	111	121	111
1 1/2"	220	180	273	180
2″	262	222	327	222

PRESSURE-TEMPERATURE CHART



TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors: Lubricating oils or liquids 0.8 Dry gases, natural gas 1.5 Slurries or liquids bearing abrasive particles 1.5÷2.5







s.6439LT NPT

Female/Female 1" - 2" SS trim, ISO 5211, low torque

More and more automation is required at all levels in our society and the s.64 *RuB* range is the answer to all needs for reliable actuated ball valve. It features special seat design to automatically compensate for wear and it has successfully passed 100,000 cycle life tests.

You can purchase the valve alone or with *RuB* actuator already mounted.

QUALITY

• Dual sealing system allows valve to be operated in either direction making installation easier

- No metal-to-metal moving parts
- No maintenance ever required
- · Silicone-free lubricant on all seals
- Stainless steel ball for longer life
- 100% seal test guaranteed in according to EN 12266-1 RATE A

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant

- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Blowout-proof stainless steel stem

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• 100% full port for maximum flow

HANDLE

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

• Shell rating: 600 PSI

Seat rating: Delta P max permissible 230 PSI non-shock cold working pressure

• -4°F to +350°F

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

• Custom design

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Brass trim
- k.64 configuration featuring EN 10226-1, ISO 228 parallel female by female threads, plated body, valve length according to DIN 3357 specification, pure PTFE seats
- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes



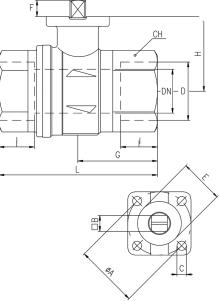
s.6439 LT XCES6439LT - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Ball seat	2	PTFE carbographite filled
3	Stainless steel ball	1	1.4401 / AISI 316
4	Unplated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Stainless steel stem O-ring design	1	1.4401 / AISI 316
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	S64F39A	S64G39A	S64H39A	S64I39A
Size (inch)	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.984	1.259	1.575	1.968
l (inch)	0.827	0.906	0.965	1.043
L (inch)	3.563	4.094	4.606	5.315
G (inch)	1.791	2.047	2.323	2.657
H (inch)	1.673	2.185	2.441	2.717
CH (inch)	1.614	1.968	2.165	2.756
ØA (inch)	1.417	1.417	1.968	1.968
□B (inch)	0.354	0.354	0.551	0.551
C (inch)	0.220	0.220	0.260	0.260
E (inch)	0.984	0.984	1.378	1.378
F (inch)	0.335	0.335	0.571	0.571
Flange connection DIN ISO 522 DIN 3337	F03	F05	F05	F05
Cv (GPM)	115.5	179.1	283.1	335.0

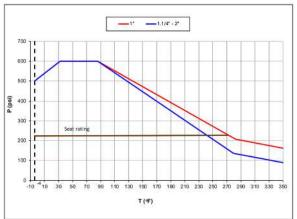
ACTUATION



TORQUE FOR ACTUATOR SIZING IN-LB

Delta P>	0÷90 PSI		>90÷230 PSI		
Valve size	to open	to close	to open	to close	
1″	19	19	31	31	
1 1/4"	22	22	35	35	
1 1/2"	51	51	84	84	
2″	70	70	115	115	

PRESSURE-TEMPERATURE CHART

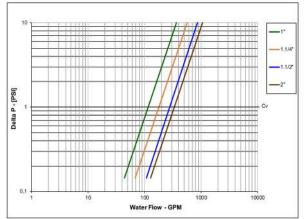


TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5







s.6441 NPT

Female/Female 1/2" - 4" brass trim, ISO 5211

More and more automation is required at all levels in our society and the s.64 RuB range is the answer to all needs for reliable actuated ball valve. It features special seat design to automatically compensate for wear and it has successfully passed 100,000 cycle* life tests. You can purchase the valve alone or with the *RuB* actuator already mounted.

*All sizes up to 2" included

OUALITY

- · 24h 100% seal test guaranteed
- · Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- · No maintenance ever required
- · Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- · Blowout-proof nickel plated brass stem
- · Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

· Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• 100% full port for maximum flow

HANDLE

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See **RuB** line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 600 PSI up to 2", 450 PSI over 2" non-shock cold working pressure -4°F to +350°F
- · WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

Custom design

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

• S.64 configuration featuring EN 10226-1, ISO 228 parallel female by female threads, plated body and brass trim

Stainless steel trim (s.6439)

- · Configuration for use with slurries or liquid bearing abrasive particles
- Rack and pinion pneumatic actuator (spring return or double acting)
- · Compact power electric actuator for some sizes







21

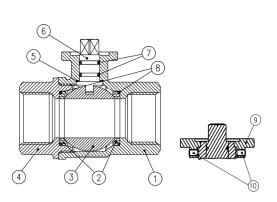
190



s.6441 NPT XCES6441 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Unplated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Black anodized flange (only from 2 ½" to 4")	1	Aluminum
10	Grub screw (only from 2 ½" to 4")	2	C4C (EN10263-2)



MX

CH

Ø

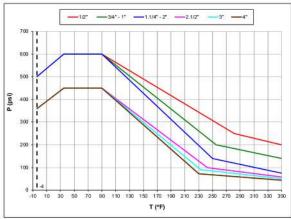
ACTUATION

Code	S64D41	S64E41	S64F41	S64G41	S64H41	S64I41	S95L41AM	S95M41AM	S95N41AM
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.59	0.787	0.984	1.259	1.575	1.968	2.520	2.992	3.937
l (inch)	0.61	0.708	0.826	0.905	0.964	1.043	1.26	1.378	1.634
L (inch)	2.598	2.933	3.562	4.094	4.606	5.314	6.142	6.969	8.504
G (inch)	1.201	1.456	1.791	2.047	2.322	2.657	3.071	3.484	4.252
H (inch)	1.22	1.515	1.673	2.185	2.441	2.716	3.502	3.779	4.366
CH (inch)	1.063	1.259	1.614	1.968	2.165	2.756	3.346	3.898	4.921
ØA (inch)	1.417	1.417	1.417	1.968	1.968	1.968	2.756	2.756	2.756
□B (inch)	0.354	0.354	0.354	0.551	0.551	0.551	0.669	0.669	0.669
C (inch)	0.22	0.22	0.22	0.259	0.259	0.259	0.335	0.335	0.335
E (inch)	0.984	0.984	0.984	1.378	1.378	1.378	2.165	2.165	2.165
F (inch)	0.295	0.334	0.334	0.57	0.57	0.57	0.709	0.709	0.709
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F05	F05	F05	F07	F07	F07
Cv (GPM)	32.3	69.3	115.5	179.1	283.1	335	596.2	896.5	1305.5

TORQUE FOR ACTUATOR SIZING IN-LB

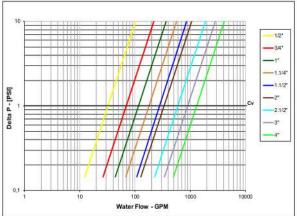
Delta P>	0÷200 PSI		600 PSI (450 PSI ov	ver 2")
Valve size	to open	to open to close		to close
1/2″	25	15	25	15
3/4″	33	20	33	20
1″	62	37	62	37
1 ¼″	104	111	121	111
1 1⁄2″	220	180	273	180
2″	262	222	327	222
2 1/2"	372	372	929	929
3″	902	902	1062	1062
4"	1646	1646	1991	1991

PRESSURE-TEMPERATURE CHART



TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency,temperature and friction characteristics of the media.If media has more or less friction than water, multiplytorque by the following factors:Lubricating oils or liquids0.8Dry gases, natural gas1.5Slurries or liquids bearing abrasive particles1.5÷2.5







s.6500

Female/Female ISO 5211 full port 1/2"- 1 1/4" hot forged brass ball valve





QUALITY

- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- 100% seal test guaranteed in according to EN 12266-1 RATE A (intended when the product is in brand new condition)

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance- free, double EPDM O-rings at the stem for maximum safety

SEALING

- $\ensuremath{\mathsf{Pure}}\xspace$ Pure PTFE self-lubricating seats with flexible-lip design and wear compensation design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

OPERATING MECHANISM

• Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See RuB line of electric and pneumatic actuators

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- · Compact power electric actuator for some sizes

FLOW

• Full port to DIN 3357 for maximum flow

WORKING PRESSURE & TEMPERATURE

- Shell rating: 40 bar (600 PSI) non shock cold working pressure
- Seat rating: Delta P max permissible 16 bar (230 PSI) non shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• * Limitations for potable water use: 10 bar (Kg/cm²) non- shock cold working pressure and +2°C / +65°C temperature (occasional excursions up to 85°C are permitted for a period of 1 h maximum)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- NPT taper ANSI B.1.20.1 female by female threads, unplated body

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- · Attestation de Conformité Sanitaire (France)
- DVGW Hygienic suitability (Germany)
- Water Regulations Advisory Scheme (United Kingdom)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.



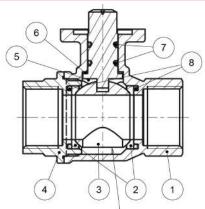
s.6500 XCES6500 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



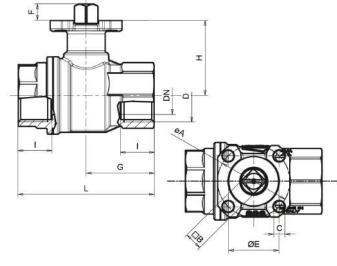
1 ¼" hollow ball

	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (rinse hole on sizes from 3/4" up to 1 1/4")	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	O-Ring	2	EPDM
8	O-Ring	2	EPDM



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves s.65 size 1 $\frac{1}{4}$ " are marked CE as follows: CE Cat I-A

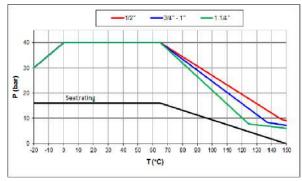
Code	S65D00	S65E00	S65F00	S65G00
D (inch)	1/2″	3/4″	1″	1 1⁄4″
DN (mm)	15	20	25	32
I	15.5	17	21	23
L	63.5	68	85	97
G	31.5	34	42.5	48.5
ØA	36	36	36	36
□B (mm)	9	9	9	9
С	5.6	5.6	5.6	5.6
ØE	25	25	25	25
F	7.3	8.3	8.3	8.3
н	31	38	41.3	48
СН	25	31	40	49
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F03
Kv (m3/h)	28	36	62	79



TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷16 bar	
Valve size	to open to close	
1/2"	3,5	3
3/4″	4,2	3,7
1″	4,5	4
1 ¼″	5	4,5

PRESSURE-TEMPERATURE CHART

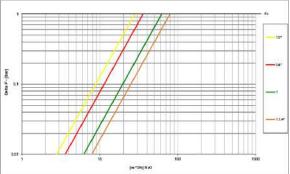


TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5









Female/Female ISO 5211 full port 1/2"- 1 1/4" hot forged brass ball valve



QUALITY

- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- 100% seal test guaranteed in according to EN 12266-1 RATE A (intended when the product is in brand new condition)

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance- free, double EPDM O-rings at the stem for maximum safety

SEALING

- $\ensuremath{\mathsf{Pure}}\xspace$ Pure PTFE self-lubricating seats with flexible-lip design and wear compensation design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

OPERATING MECHANISM

• Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See RuB line of electric and pneumatic actuators

OPTIONS

- · Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes

FLOW

• Full port to DIN 3357 for maximum flow

WORKING PRESSURE & TEMPERATURE

- Shell rating: 40 bar (600 PSI) non shock cold working pressure
- Seat rating: Delta P max permissible 16 bar (230 PSI) non shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- NPT taper ANSI B.1.20.1 female by female threads, unplated body

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.



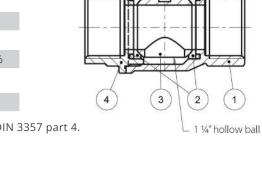


BONOMI INDUSTRIES SRL - www.bonomiindustries.com

s.6541 NPT XCES6541 - 5689

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (rinse hole on sizes from 3/4" up to 1 1/4")	1	CW617N
4	Unplated end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	O-Ring	2	EPDM
8	O-Ring	2	EPDM



6

5

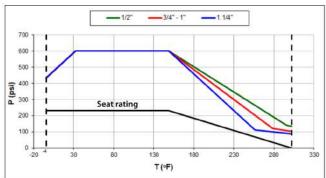
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves s.65 size 1 $\frac{1}{4}$ " are marked CE as follows: CE Cat I-A

Code	S65D41	S65E41	S65F41	S65G41
D (inch)	1/2″	3/4″	1″	1 1⁄4″
DN (inch)	0.59	0.79	0.98	1.26
l (inch)	0.61	0.67	0.83	0.91
L (inch)	2.5	2.68	3.35	3.82
G (inch)	1.24	1.34	1.67	1.91
ØA (inch)	1.42	1.42	1.42	1.42
□B (inch)	0.35	0.35	0.35	0.35
C (inch)	0.22	0.22	0.22	0.22
ØE (inch)	0.98	0.98	0.98	0.98
F (inch)	0.29	0.33	0.33	0.33
H (inch)	1.22	1.50	1.63	1.89
CH (inch)	0.98	1.22	1.57	1.93
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F03
CV (GPM)	32.30	41.60	71.60	91.30

TORQUE FOR ACTUATOR SIZING IN-LB

Delta P>	0÷230 PSI	
Valve size	to open to close	
1/2″	31	27
3/4"	37.5	33
1″	40	35.5
1 1⁄4″	44.5	40

PRESSURE-TEMPERATURE CHART



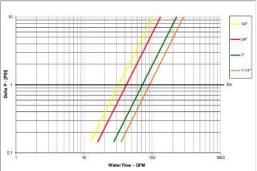
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART





8





s.6550 BSPT

Female/Female ISO 5211 full port 1/2"- 1" hot forged brass ball valve



QUALITY

- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- 100% seal test guaranteed in according to EN 12266-1 RATE A (intended when the product is in brand new condition)

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- · Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance- free, double EPDM O-rings at the stem for maximum safety

SEALING

 $\cdot\;$ Pure PTFE self-lubricating seats with flexible-lip design and wear compensation design

THREADS

• EN 10226-2, ISO 7/1, BS 21 BSPT taper female by female threads

OPERATING MECHANISM

• Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See RuB line of electric and pneumatic actuators

OPTIONS

- · Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes

FLOW

• Full port to DIN 3357 for maximum flow

WORKING PRESSURE & TEMPERATURE

- Shell rating: 40 bar (600 PSI) non shock cold working pressure
- Seat rating: Delta P max permissible 16 bar (230 PSI) non shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- NPT taper ANSI B.1.20.1 female by female threads, unplated body

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.





BONOMI INDUSTRIES SRL - www.bonomiindustries.com

83

s.6550 BSPT XCES6550 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (rinse hole on sizes from 3/4" up to 1 1/4")	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	O-Ring	2	EPDM
8	O-Ring	2	EPDM

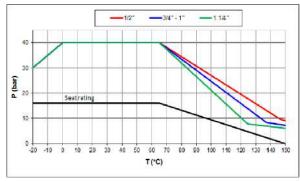
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

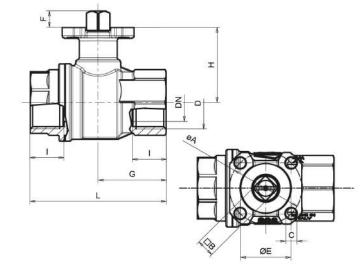
Code	S65D50	S65E50	S65F50
D (inch)	1/2″	3/4"	1″
DN (mm)	15	20	25
l I	15.5	17	21
L	63.5	68	85
G	31.5	34	42.5
ØA	36	36	36
□B (mm)	9	9	9
С	5.6	5.6	5.6
ØE	25	25	25
F	7.3	8.3	8.3
н	31	38	41.3
СН	25	31	40
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03
Kv (m3/h)	28	36	62

TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷16 bar	
Valve size	to open to close	
1/2″	3,5	3
3/4"	4,2	3,7
1″	4,5	4

PRESSURE-TEMPERATURE CHART





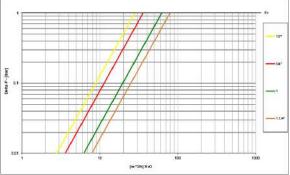
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

0	
Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART





1 ¼" hollow ball





Female/Female/Female 1/2" - 1" EN 10226-1, ISO 5211

The RuB S.7200 is the right choice for fluid diversion and is designed with robust maintenancefree components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. Our s.72 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by allowing the replacement of two or three conventional straight-line valves, eliminating excess fittings and simplifying automation.

QUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- · Blowout-proof nickel plated brass stem
- · Maintenance-free, double FPM O-rings at the stem for maximum safety
- Stem slot shows ball position

SEALING

- Four seats design for mixing of various fluids in the system
- Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Lockable handle as accessory or already mounted (s.7200L)
- Various actuator linkage kit

HANDLE

Integrated sturdy ISO 5211 flange allows direct mounting of actuators.
 See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve.

UPON REQUEST

- Custom design
- Stainless steel stem
- Configurations with 4 seats & T-port (s.7300) or 2 seats & L-port (s.7600)

PED DIRECTIVE

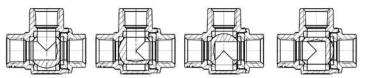
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

S.72 3-way "L" port operating positions







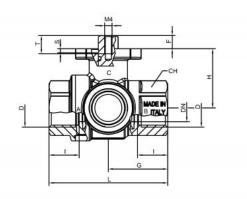


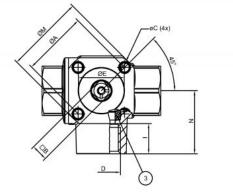
s.7200 XCES7200 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM

Code	S72D00	S72E00	S72F00
D (inch)	1/2″	3/4″	1″
DN (mm)	15	20	25
l (mm)	16.5	19	22.5
L (mm)	65	79	92.5
G (mm)	32.5	39.5	46.5
H (mm)	32.5	39.5	42.5
N (mm)	34.5	42	49.5
ØA (mm)	36	36	36
ØC (mm)	Ø5.6	Ø5.6	Ø5.6
ØE (mm)	25	25	25
Square B (mm)	9	9	9
ØM (mm)	43.4	43.4	43.4
S (mm)	2.2	2.2	2.2
T (mm)	10	10	10
F (mm)	7.3	8.3	8.3
CH (mm)	27	32	41
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03
P (ISO 262 Thread)	M4	M4	M4





TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷16 bar	
Valve size	to open to close	
1/2″	10.5	10.5
3/4″	13	13
1″	29.5	29.5

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5







s.7241 NPT 3-way 4 seats (diverting)



The *RuB* s.7641 is the right choice for fluid diversion and is designed with robust maintenancefree components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing selfcompensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L- port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Stem slot shows ball position

SEALING

- Four seats design for mixing of various fluids in the system
- Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Lockable handle as accessory or already mounted (s.7241L)
- Various actuator linkage kit

HANDLE

Integrated sturdy ISO 5211 flange allows direct mounting of actuators.
 See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 300 PSI non-shock cold working pressure
- -4°F to +302°F

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

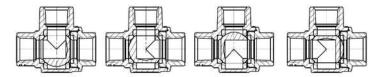
- Custom design
- Stainless steel stem
- Configurations with 4 seats & T-port (s.7341) or 2 seats & L-port (s.7641)

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

S.72 3-way "L" port operating positions





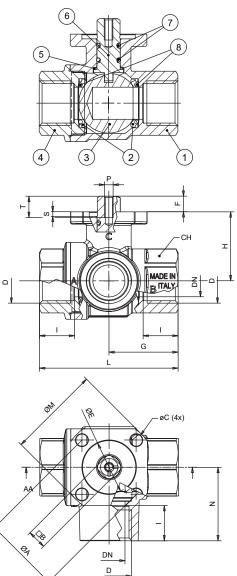


s.7241 NPT XCES7241 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Sand blasted unplated end cap	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM

Code	S72D41	S72E41	S72F41
D (inch)	1/2″	3/4″	1″
DN (inch)	0.591	0.787	0.984
l (inch)	0.610	0.709	0.827
L (inch)	2.559	3.110	3.642
G (inch)	1.280	1.555	1.831
H (inch)	1.820	1.555	1.673
N (inch)	1.358	1.654	1.949
ØA (inch)	1.417	1.417	1.417
ØC (inch)	Ø 0.205 (M6)	Ø 0.205 (M6)	Ø 0.205 (M6)
ØE (inch)	0.984	0.984	0.984
Square B (inch)	0.354	0.354	0.354
ØM (inch)	1.709	1.709	1.709
S (inch)	0.087	0.087	0.087
T (inch)	0.394	0.394	0.394
F (inch)	0.287	0.327	0.327
CH (inch)	1.063	1.260	1.614
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03



TORQUE FOR ACTUATOR SIZING IN-LB

Delta P>	0÷230 PSI		
Valve size	to open to close		
1/2″	93	93	
3/4″	115	115	
1″	261	261	

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5







s.7300 3-way 4 seats T-port

Female/Female/Female 1/4" - 2" EN 10226-1, ISO 5211

The s.7300 series has a ball seal at every port, and offers a wide variety of possible flow configurations. Positive shut-off can be achieved at any of the exiting ports.

By specifying the appropriate ball port configuration, the T-port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications.

Our s.73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by replacing two or three conventional 2-way valves, eliminating excess fittings, saving space and simplifying automation.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way T- port design for flow mixing

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance-free, double FPM O-rings at the stem for maximum safety
- Stem slot shows ball position

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- Four seats design for mixing of various fluids in the system

THREADS

· EN 10226-1/ ISO 228 parallel female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Lockable handle as accessory or already mounted (s.7300L)
- Various actuator linkage kit





HANDLE

Integrated sturdy ISO 5211 flange allows direct mounting of actuators.
 See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem
- Configurations with 2 seats & L-port (s.7600)

PED DIRECTIVE

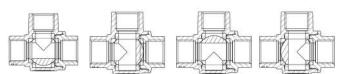
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

s73 3-way "T" port operating positions

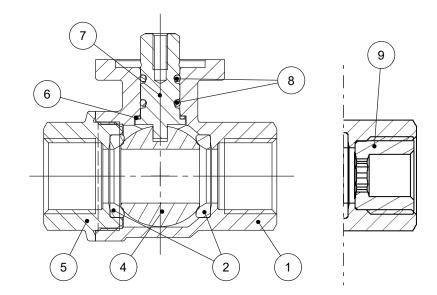




s.7300 XCES7300 - 5708

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Nickel plated end cap (external nickel plated, unplated inside)	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Unplated reduction (only 1/4" and 3/8" sizes)	3	CW617N

TORQUE FOR ACTUATOR SIZING N.M

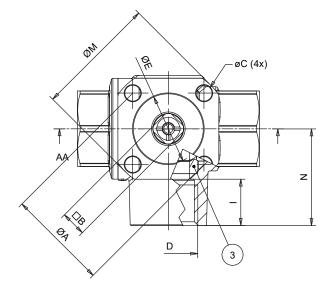
Delta P>	0÷16 bar		
Valve size	to open to close		
1/4" - 3/8" - 1/2″	10,5	10,5	
3/4"	13	13	
1″	22,0	22,0	
1 ¼″	14,0	14,0	
1 1⁄2″	23,0	23,0	
2″	38,0	38,0	

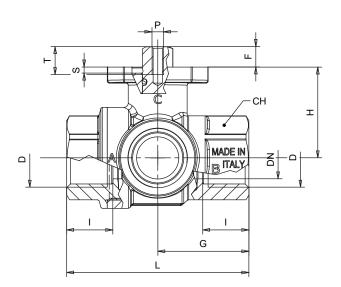
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5





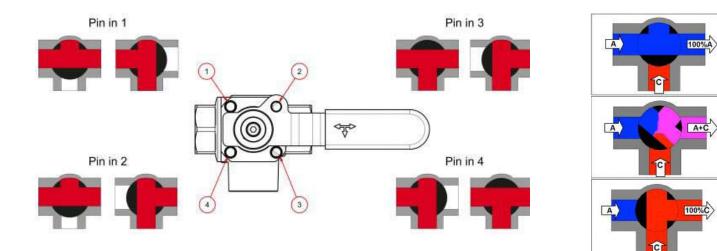


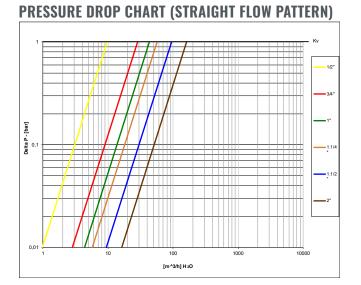
Code	S73B00	S73C00	\$73D00	S73E00	S73F00	\$73G00	S73H00	\$73100
D (inch)	1/4"	3/8"	1/2″	3/4″	1″	1 1⁄4″	1 1⁄2″	2″
DN (mm)	8	10	15	20	25	30.4	38	48
l (mm)	12	12	16.5	19	22.5	25	26	29
L (mm)	65	65	65	79	92.5	109.5	126	150
G (mm)	32.5	32.5	32.5	39.5	46.5	55	63	75
H (mm)	32.5	32.5	32.5	39.5	42.5	56	62.5	72
N (mm)	34.5	34.5	34.5	42	49.5	60	69	82
ØA (mm)	36	36	36	36	36	50	50	50
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
ØE (mm)	25	25	25	25	25	35	35	35
Square B (mm)	9	9	9	9	9	14	14	14
ØM (mm)	43.4	43.4	43.4	43.4	43.4	60.8	60.8	60.8
S (mm)	2.2	2.2	2.2	2.2	2.2	3.2	3.2	3.2
T (mm)	10	10	10	10	10	14	14	14
F (mm)	7.3	7.3	7.3	8.3	8.3	14.5	14.5	14.5
CH (mm)	27	27	27	32	41	50	55	70
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03	F03	F03	F05	F05	F05
P (ISO 262 Thread)	M4	M4	M4	M4	M4	M5	M5	M5
Kv (m³/h) straight pattern	TBD	TBD	9.7	28.2	43.3	57.0	94.5	161.0
Kv (m³/h) 90° pattern	TBD	TBD	5.3	11.6	16.8	26.7	43.3	69.2



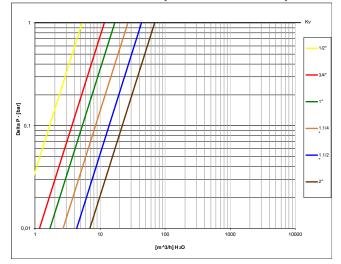
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the four possible positions. An alternative is to mount 2 pins in 2 near holes (e.g. 1 and 2). In this case, the valve does not assume a predetermined position but can be actuated just by pulling the lever towards the top.

The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.





PRESSURE DROP CHART (90° FLOW PATTERN)







s.7341 NPT 3-way 4 seats T-port

Female/Female/Female 1/2" - 2" ISO 5211

The s.7341 series has a ball seal at every port, and offers a wide variety of possible flow configurations. Positive shut-off can be achieved at any of the exiting ports.

By specifying the appropriate ball port configuration, the T-port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications.

Our s.73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by replacing two or three conventional 2-way valves, eliminating excess fittings, saving space and simplifying automation.

OUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- · No maintenance ever required
- · Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- · Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- · 3-way T- port design for flow mixing

STEM

- · Blowout-proof nickel plated brass stem
- · Maintenance- free, double FPM O-rings at the stem for maximum safety
- · Stem slot shows ball position

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- Four seats design for mixing of various fluids in the system

THREADS

• NPT taper ANSI B.1.20.1 female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- · Rack and pinion pneumatic actuator (spring return or double acting)
- · Lockable handle as accessory or already mounted (s.7341L)
- · Various actuator linkage kit

HANDLE

 Integrated sturdy ISO 5211 flange allows direct mounting of actuators. See **RuB** line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 300 PSI non-shock cold working pressure
- -4°F to +302°F

· WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem
- · Configuration with 2 seats & L-port (s.7641)

APPROVED BY OR IN COMPLIANCE WITH

RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

s73 3-way "T" port operating positions

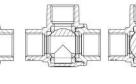








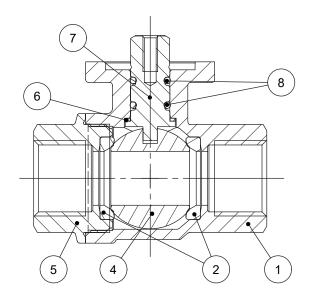




s.7341 NPT XCES7341 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Sand blasted unplated end-cap	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM

TORQUE FOR ACTUATOR SIZING IN-LB

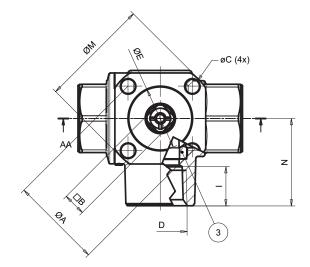
Delta P>	0÷230 PSI		
Valve size	to open to close		
1/2"	93	93	
3/4"	115	115	
1″	195	195	
1 ¼″	124	124	
1 1⁄2″	204	204	
2″	336	336	

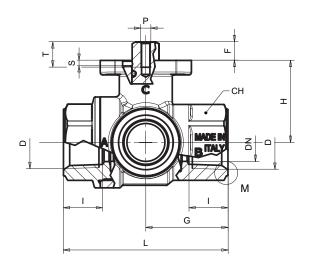
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5





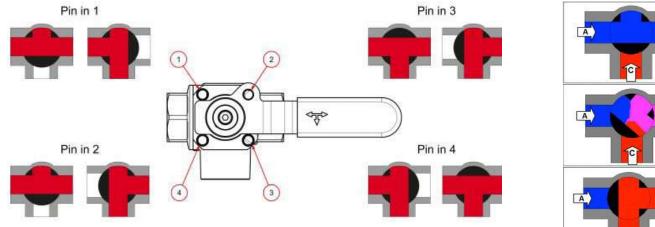


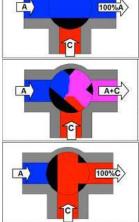
Code	S73D41	S73E41	S73F41	\$73G41	S73H41	S73I41
D (inch)	1/2"	3/4"	1″	1 1⁄4″	1 1⁄2″	2″
DN (inch)	0.591	0.787	0.984	1.197	1.496	1.890
l (inch)	0.610	0.709	0.827	0.906	0.965	1.043
L (inch)	2.559	3.110	3.642	4.311	4.961	5.906
G (inch)	1.280	1.555	1.831	2.165	2.480	2.953
H (inch)	1.280	1.555	1.673	2.205	2.460	2.854
N (inch)	1.358	1.654	1.949	2.362	2.717	3.228
ØA (inch)	1.417	1.417	1.417	1.969	1.969	1.969
ØC (inch)	Ø 0.22	Ø 0.22	Ø 0.22	Ø 0.26	Ø 0.26	Ø 0.26
ØE (inch)	0.984	0.984	0.984	1.378	1.378	1.378
Square B (inch)	0.354	0.354	0.354	0.551	0.551	0.551
ØM (inch)	1.709	1.709	1.709	2.394	2.394	2.394
S (inch)	0.087	0.087	0.087	0.126	0.126	0.126
T (inch)	0.394	0.394	0.394	0.551	0.551	0.551
F (inch)	0.287	0.327	0.327	0.571	0.571	0.571
CH (inch)	1.063	1.260	1.614	1.969	2.165	2.756
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03	F05	F05	F05
P (ISO 262 Th- read)	M4	M4	M4	M5	M5	M5
Cv (GPM) straight pattern	11.2	32.5	50.0	65.8	109.2	186
Cv (GPM) 90° pattern	6.1	13.4	19.5	30.9	50.0	80.0



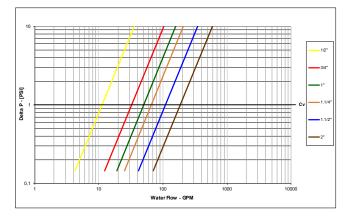
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the four possible positions. An alternative is to mount 2 pins in 2 near holes (e.g. 1 and 2). In this case, the valve does not assume a predetermined position but can be actuated just by pulling the lever towards the top.

The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.

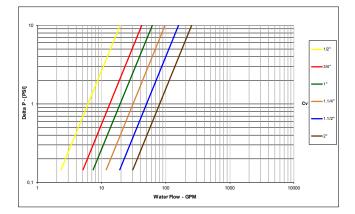




PRESSURE DROP CHART (STRAIGHT FLOW PATTERN)



PRESSURE DROP CHART (90° FLOW PATTERN)







s.7350 3-way 4 seats T-port

Female/Female/Female 1/2" - 2" ISO 7/1, BS21

The s.7350 series has a ball seal at every port, and offers a wide variety of possible flow configurations. Positive shut-off can be achieved at any of the exiting ports.

By specifying the appropriate ball port configuration, the T-port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications.

Our s.73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by replacing two or three conventional 2-way valves, eliminating excess fittings, saving space and simplifying automation.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way T- port design for flow mixing

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Stem slot shows ball position

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- Four seats design for mixing of various fluids in the system

THREADS

· ISO 7/1, BS 21 BSPT taper female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Lockable handle as accessory or already mounted (s.7350L)
- Various actuator linkage kit





HANDLE

Integrated sturdy ISO 5211 flange allows direct mounting of actuators.
 See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem
- Configurations with 2 seats & L-port (s.7600)

PED DIRECTIVE

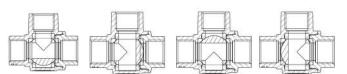
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

s73 3-way "T" port operating positions

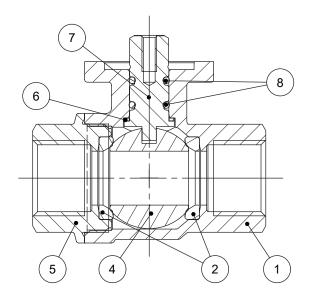




s.7350 BSPT XCES7350 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Nickel plated end cap (external nickel plated, unplated inside)	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM

TORQUE FOR ACTUATOR SIZING N.M

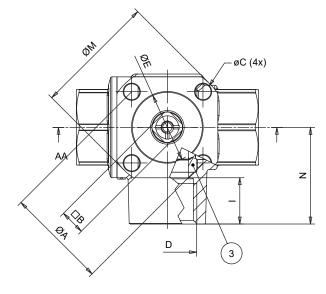
Delta P>	0÷16 bar		
Valve size	to open to close		
1/2″	10,5	10,5	
3/4"	13	13	
1″	22,0	22,0	
1 ¼″	14,0	14,0	
1 ½″	23,0	23,0	
2″	38,0	38,0	

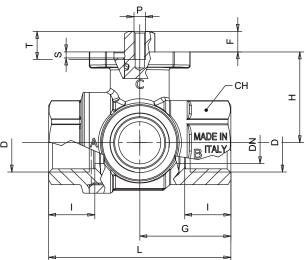
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5





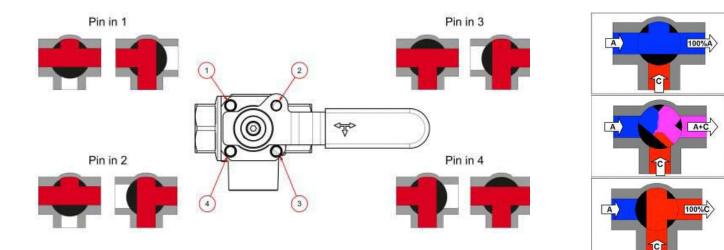


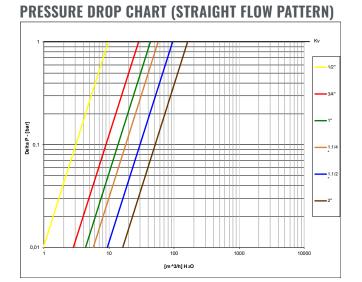
Code	S73D50	S73E50	S73F50	S73G50	S73H50	S73I50
D (inch)	1/2"	3/4"	1″	1 1⁄4″	1 1⁄2″	2″
DN (mm)	15	20	25	30.4	38	48
l (mm)	16.5	19	22.5	25	26	29
L (mm)	65	79	92.5	109.5	126	150
G (mm)	32.5	39.5	46.5	55	63	75
H (mm)	32.5	39.5	42.5	56	62.5	72
N (mm)	34.5	42	49.5	60	69	82
ØA (mm)	36	36	36	50	50	50
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
ØE (mm)	25	25	25	35	35	35
Square B (mm)	9	9	9	14	14	14
ØM (mm)	43.4	43.4	43.4	60.8	60.8	60.8
S (mm)	2.2	2.2	2.2	3.2	3.2	3.2
T (mm)	10	10	10	14	14	14
F (mm)	7.3	8.3	8.3	14.5	14.5	14.5
CH (mm)	27	32	41	50	55	70
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03	F05	F05	F05
P (ISO 262 Th- read)	M4	M4	M4	M5	M5	M5
Kv (m³/h) traight pattern	9.7	28.2	43.3	57.0	94.5	161.0
Kv (m³/h) 90° pattern	5.3	11.6	16.8	26.7	43.3	69.2



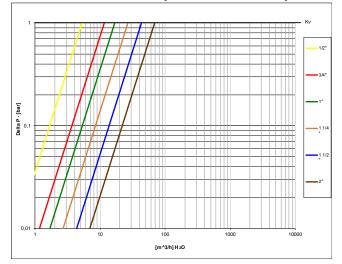
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the four possible positions. An alternative is to mount 2 pins in 2 near holes (e.g. 1 and 2). In this case, the valve does not assume a predetermined position but can be actuated just by pulling the lever towards the top.

The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.





PRESSURE DROP CHART (90° FLOW PATTERN)







s.76003-way 2 seats L-port (diverting)

Female/Female/Female 1/4" - 2" EN 10226-1, ISO 5211

The *RuB* s.7600 is the right choice for fluid diversion and is designed with robust maintenancefree components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing selfcompensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- · Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Stem slot shows ball position

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

· 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator
- Lockable handle as accessory or already mounted (s.7600L)
- Various actuator linkage kit

HANDLE

Integrated sturdy ISO 5211 flange allows direct mounting of actuators.
 See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 30 Bar up to 1", 20 bar over 1", non-shock cold working pressure
- -20°C to +170°C (-4°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve.

UPON REQUEST

- Custom design
- Stainless steel stem
- Configuration with 4 seats, T-port (s.7300)

PED DIRECTIVE

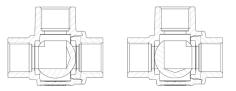
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

S.76 3-way "L" port operating positions







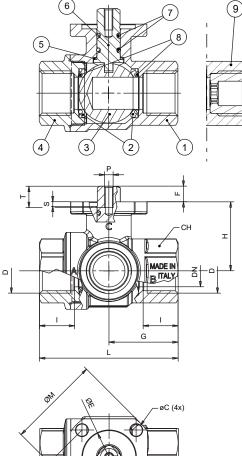


s.7600 XCES7600 - 5708

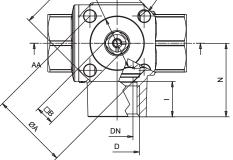
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

-			
	Part description	Q.ty	Material
1	Sand blasted nickel plated body (external ni- ckel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE graphite filled 15%, PTFE over 1"
3	Chrome plated ball	1	CW617N
4	Sand blasted nickel plated end cap (external nickel plated, unplated inside)	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Unplated reduction (only 1/4" and 3/8" sizes)	3	CW617N

Code	S76B00	S76C00	S76D00	S76E00	S76F00	S76G00	S76H00	S76100
D (inch)	1/4"	3/8"	1/2″	3/4″	1″	1 1⁄4″	1 1⁄2″	2″
DN (mm)	8	10	15	20	25	30.4	38	48
l (mm)	12	12	16.5	19	22.5	25	26	29
L (mm)	65	65	65	79	92.5	109.5	126	150
G (mm)	32.5	32.5	32.5	39.5	46.5	55	63	75
H (mm)	32.5	32.5	32.5	39.5	42.5	56	63.2	72
N (mm)	34.5	34.5	34.5	42	49.5	60	69	82
ØA (mm)	36	36	36	36	36	50	50	50
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
ØE (mm)	25	25	25	25	25	35	35	35
Square B (mm)	9	9	9	9	9	11	11	14
ØM (mm)	43.4	43.4	43.4	43.4	43.4	60.8	60.8	60.8
S (mm)	2.2	2.2	2.2	2.2	2.2	3.2	3.2	3.2
T (mm)	10	10	10	10	10	14	14	14
F (mm)	7.3	7.3	7.3	8.3	8.3	10	10	14.5
CH (mm)	27	27	27	32	41	50	55	70
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03	F03	F03	F05	F05	F05
P (ISO 262 Thread)	M4	M4	M4	M4	M4	M5	M5	M5
Kv (m³/h)	TBD	TBD	5.7	11.1	16.7	28.1	44.5	71.1



ACTUATION



TORQUE FOR ACTUATOR SIZING N.M

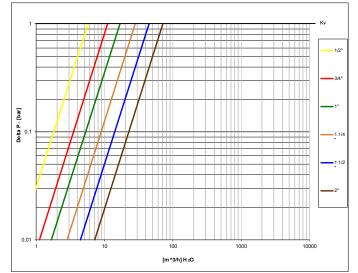
Delta P>	0÷16 bar			
Valve size	to open to close			
1/4" - 3/8" - 1/2″	3.5	3.5		
3/4″	4.0	4.0		
1″	4.5	4.5		
1 ¼″	11.7	11.7		
1 1⁄2″	21.5	21.5		
2″	28	28		

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

0	
Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5







s.7641 3-way 2 seats L-port (diverting)



Female/Female/Female 1/2" - 2" ISO 5211

The *RuB* s.7641 is the right choice for fluid diversion and is designed with robust maintenancefree components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing selfcompensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L- port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Stem slot shows ball position

SEALING

 Reinforced PTFE self- lubricating seats with flexible-lip and wear compensation design

THREADS

• NPT taper ANSI B.1.20.1 female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator
- Lockable handle as accessory or already mounted (s.7641L)
- Various actuator linkage kit

HANDLE

Integrated sturdy ISO 5211 flange allows direct mounting of actuators.
 See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 450 PSI up to 1", 300 PSI over 1", non-shock cold working pressure
- -4°F to +302°F

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

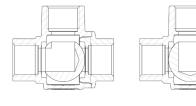
- Custom design
- Stainless steel stem
- Configuration with 4 seats, T-port (s.7341)

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

S.76 3-way "L" port operating positions





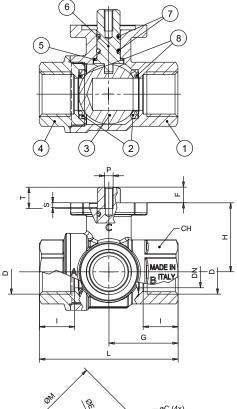
s.7641 NPT XCES7641 - 5466

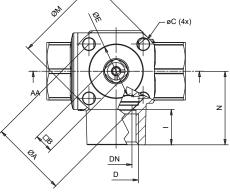
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE graphite filled 15%, PTFE over 1"
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	S76D41	S76E41	S76F41	S76G41	S76H41	S76I41
D (inch)	1/2″	3/4″	1″	1 1⁄4″	1 1⁄2″	2″
DN (inch)	0.591	0.787	0.984	1.197	1.496	1.890
l (inch)	0.610	0.709	0.827	0.906	0.965	1.043
L (inch)	2.559	3.110	3.642	4.311	4.961	5.906
G (inch)	1.280	1.555	1.831	2.165	2.480	2.953
H (inch)	1.820	1.555	1.673	2.205	2.500	2.854
N (inch)	1.358	1.654	1.949	2.362	2.717	3.228
ØA (inch)	1.417	1.417	1.417	1.969	1.969	1.969
ØC (inch)	Ø 0.22	Ø 0.22	Ø 0.22	Ø 0.26	Ø 0.26	Ø 0.26
ØE (inch)	0.984	0.984	0.984	1.378	1.378	1.378
Square B (inch)	0.354	0.354	0.354	0.551	0.551	0.551
ØM (inch)	1.709	1.709	1.709	2.394	2.394	2.394
S (inch)	0.087	0.087	0.087	0.126	0.126	0.126
T (inch)	0.394	0.394	0.394	0.551	0.551	0.551
F (inch)	0.287	0.327	0.327	0.571	0.571	0.571
CH (inch)	1.063	1.260	1.614	1.969	2.165	2.756
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03	F05	F05	F05
P (ISO 262 Thread)	M4	M4	M4	M5	M5	M5
CV (GPM)	6.6	12.9	19.3	32.5	51.4	82.2







TORQUE FOR ACTUATOR SIZING IN-LB

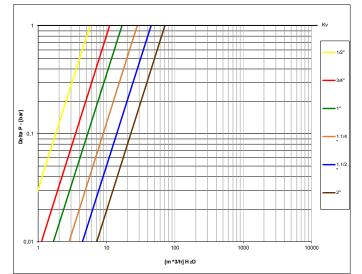
Delta P>	0÷230 PSI		
Valve size	to open to close		
1/2″	31	31	
3/4″	36	36	
1″	40	40	
1 ¼″	104	104	
1 ½″	190	190	
2″	248	248	

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5







s.76503-way 2 seats L-port (diverting)

Female/Female/Female 1/2" - 2" ISO 7/1, BS21

The *RuB* s.7650 is the right choice for fluid diversion and is designed with robust maintenancefree components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing selfcompensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance-free, double O-rings at the stem for maximum safety
- Stem slot shows ball position

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

· ISO 7/1, BS 21 BSPT taper female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator
- Lockable handle as accessory or already mounted (s.7650L)
- Various actuator linkage kit

HANDLE

Integrated sturdy ISO 5211 flange allows direct mounting of actuators.
 See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 30 Bar up to 1", 20 bar over 1", non-shock cold working pressure
- -20°C to +170°C (-4°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem
- Configurations with 4 seats, T-port (s.7350)

PED DIRECTIVE

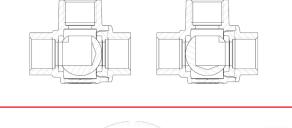
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

S.76 3-way "L" port operating positions







104

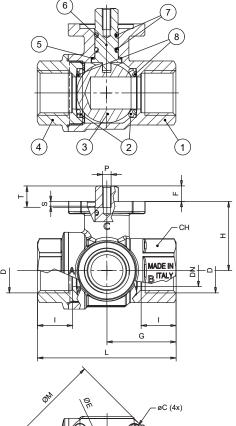


s.7650 BSPT XCES7650 - 5466

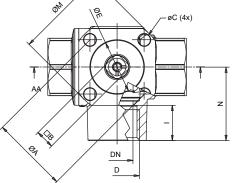
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Sand blasted nickel plated body (external ni- ckel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE graphite filled 15%, PTFE over 1"
3	Chrome plated ball	1	CW617N
4	Sand blasted nickel plated end cap (external nickel plated, unplated inside)	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	S76D50	S76E50	S76F50	S76G50	S76H50	S76I50
D (inch)	1/2″	3/4″	1″	1 1⁄4″	1 1/2"	2″
DN (mm)	15	20	25	30.4	38	48
l (mm)	16.5	19	22.5	25	26	29
L (mm)	65	79	92.5	109.5	126	150
G (mm)	32.5	39.5	46.5	55	63	75
H (mm)	32.5	39.5	42.5	56	63.2	72
N (mm)	34.5	42	49.5	60	69	82
ØA (mm)	36	36	36	50	50	50
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
ØE (mm)	25	25	25	35	35	35
Square B (mm)	9	9	9	11	11	14
ØM (mm)	43.4	43.4	43.4	60.8	60.8	60.8
S (mm)	2.2	2.2	2.2	3.2	3.2	3.2
T (mm)	10	10	10	14	14	14
F (mm)	7.3	8.3	8.3	10	10	14.5
CH (mm)	27	32	41	50	55	70
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03	F05	F05	F05
P (ISO 262 Thread)	M4	M4	M4	M5	M5	M5
Kv (m³/h)	5.7	11.1	16.7	28.1	44.5	71.1



ACTUATION



TORQUE FOR ACTUATOR SIZING N.M

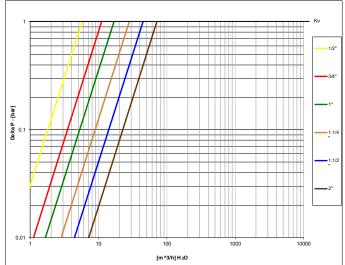
Delta P>	0÷16 bar		
Valve size	to open to close		
1/2″	3.5	3.5	
3/4″	4.0	4.0	
1″	4.5	4.5	
1 ¼″	11.7	11.7	
1 ½″	21.5	21.5	
2″	28	28	

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5





INDUSTRY

From automotive and food processing to chemical, pharmaceutical, and power generation sectors, RuB valves are designed to meet the toughest operational demands. Our thorough 24-72 hour doubletesting process ensures consistent performance, minimizing downtime and protecting your systems. Choose RuB for solutions that keep your operations running smoothly and efficiently, even in the most challenging environments.





s.17 motor-oil drain ball valve	Page 108
S.33 1/4" - 2" EN 10226-1, heavy duty packing gland	Page 110
s.33 M/F 1/4" - 2" EN 10226-1, heavy duty packing gland	Page 112
k.60 spring return 1/4" - 2", heavy duty - DIN 16722 M3, EN 10226-1	Page 114
s.7200L 3-way, lever, 4 seats 1/2" - 1"	Page 116
s.7241L 3-way, lever, 4 seats 1/2" - 1"	Page 118
s.7300L 3-way, lever, 4 seats, T-port 1/2" - 2" EN 10226-1	Page 122
s.7341L NPT 3-way, lever, 4 seats, T-port 1/2" - 2"	Page 126
s.7350L BSPT 3-way, lever, 4 seats, T-port 1/2" - 2"	Page 130
s.7600L 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2" EN 10226-1	Page 132
s.7641L NPT 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2"	Page 134
s.7650L BSPT 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2"	Page 136
s.84 EN331 spring return 1/4" - 2" EN 10226-1	Page 138
S.85 1/4" - 2" EN 10226-1, packing gland	Page 140
s.92 barrel drain 3/4" - 1"	Page 142
s.92S NPT solid ball 1/4" - 4"	Page 144
s.92 NPT SS trim 1/4" - 2"	Page 146
s.95 NPT spring return 1/4" - 2"	Page 148
s.100 3-way 4 seats T-port 1/4" - 2" ISO 228	Page 150
s.101 3-way 4 seats L-port 1/4" - 2" ISO 228	Page 152
s.172 motor-oil compact drain ball valve	Page 154
SNI7352 1/4" NPT needle valve	Page 156
Instrumentation package	Page 158







Specifically responding to a need in the automotive application, s.17 is fitted under the oil sump to ease drainage operations, and furthermore granting a most reliable tightness thanks to its special automatic locking device, even under severe conditions of vibration stress.

Frozen drain plug and stripped threads are eliminated, no more contact with hot oil, no messy hands or cloths and reduced oil changing time.

OUALITY

- · · 24h 100% seal test guaranteed
- No metal-to-metal moving parts
- • No maintenance ever required
- Handle clearly shows ball position
- · · Silicone-free lubricant on all seals
- Dual sealing system to prevent leakage
- · · Handle stops on body to avoid stresses at stem

BODY

- • Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- · · Compact design and solid structure
- · · Fines brass according to EN 12165 and EN 12164 to prevent corrosion

STEM

• • Blowout-proof unplated brass stem

• • Maintenance-free, double FPM O-ring at the stem for maximum safety

SEALING

- \cdot -Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• • M24x1.5 - 3/8" threads

HANDLE

- · · Tamper proof and sealed to prevent dirt or dust from entering the rotation mechanism
- • 90° opening rotation
- · · Automatic lock in closed position, to prevent accidental opening and thus warrant utmost safety

OPTIONS

- • M16x1.5 threads hose connection
- • M12x1.5 threads hose connection
- • M24x1.5 1/4" threads



WORKING PRESSURE & TEMPERATURE

- • 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +130°C (-4°F to +266°F)
- · · WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

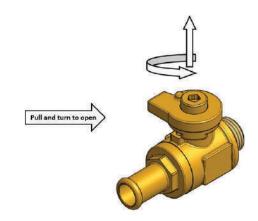
- • Stainless steel ball (1.4401 / AISI 316)
- Custom design

PED DIRECTIVE

- · The product meets the requirements of PED Directive
- · 2014/68/UE and according to art.4 par.3, it does not require
- CE marking

APPROVED BY OR IN COMPLIANCE WITH

- • GOST-R (Russia)
- RoHS Compliant (EU)
- NOTE: approvals apply to specific configurations/sizes only.





PATENTED



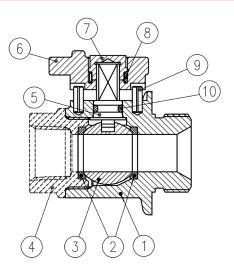


s.17 XCES17 - 5466

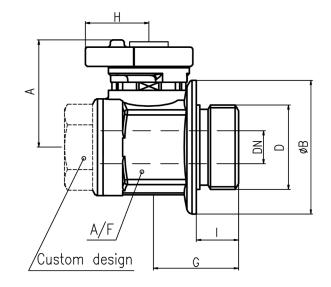
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



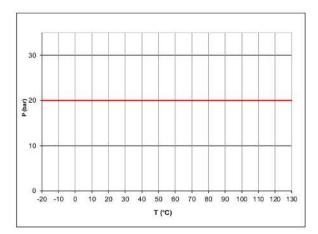
	Part description	Q.ty	Material
1	Unplated sand blasted body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Unplated end-cap - hose connection - custom	1	CW617N
5	Unplated stem O-ring design	1	CW617N
6	Unplated sand blasted handle	1	CW617N
7	Unplated handle cap	1	CW617N
8	Spring	1	X10CrNi 18-8
9	Spring pin Ø 3x8 ISO 8752	2	X10CrNi 18-8
10	O-Ring	1	FPM

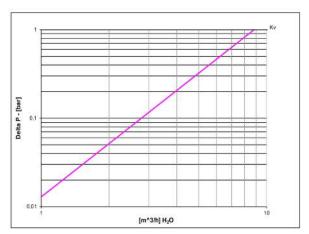


D (mm)	M12X1.5	M16X1.5	M24X1.5
DN (mm)	6	10	11.5
l (mm)	10	10	12
B (mm)	27	27	38
G (mm)	24.5	24.5	25.5
A (mm)	31.5	31.5	31.5
H (mm)	18	18	18
A/F (mm)	25	25	27
Kv (m³/h)		8.8	



PRESSURE-TEMPERATURE CHART









s.33

Female/Female 1/4" - 2" EN 10226-1, heavy duty, packing gland





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent threads sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100 % full port for maximum flow

HANDLE

- Geomet $\ensuremath{\circledast}$ carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 65 bar (940 PSI) up to 1", 40 bar (600 PSI) over 1" non- shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4

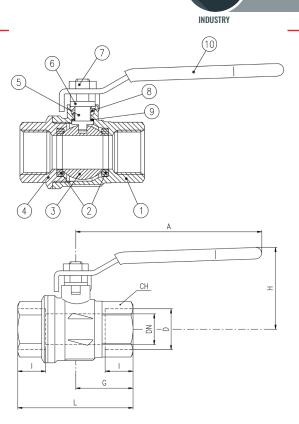


s.33 XCES33 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF (EN10263-2)
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Black PVC coated Geomet® steel handle	1	DD11 (EN10111)

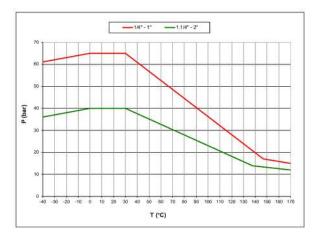
1 ¼"-2" hollow ball

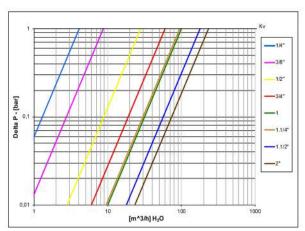


Code	S33B00	S33C00	S33D00	S33E00	S33F00	S33G00	S33H00	S33100
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	14	14	16.5	19	22.5	25	26	29
L (mm)	51	51	61	74.5	90.5	104	117	135
G (mm)	25.5	25.5	30.5	37	45.5	52	59	67.5
A (mm)	82	82	100	120	120	158	158	158
H (mm)	39.5	39.5	43	52.5	56.5	78	85	91.5
CH (mm)	22	22	27	32	41	50	55	70
PN (Bar)	65	65	65	65	65	40	40	40
Kv (m3/h)	4.1	8.7	28	60	100	95	179	233

Ball valves are marked CE on handle from 1 $\ensuremath{^{\prime\prime}}\xspace$ to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART









s.33 M/F

Male/Female 1/4" - 2" EN 10226-1, heavy duty, packing gland





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent threads sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

+ EN 10226-1, ISO 228 parallel female thread by EN 10226-1 taper male thread

FLOW

• 100 % full port for maximum flow

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4

HANDLE

- Geomet $\ensuremath{\mathbb{B}}$ carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 65 bar (940 PSI) up to 1", 40 bar (600 PSI) over 1" non- shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

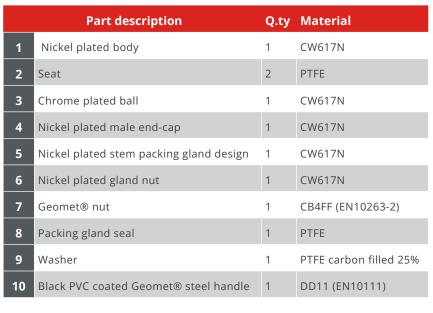
- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

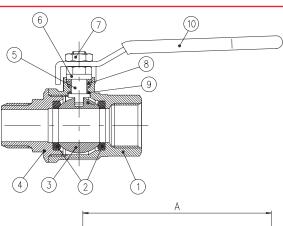


s.33 M/F XCE3321 - 0

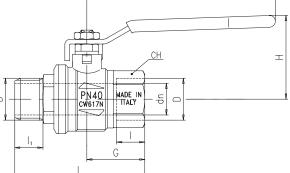
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



1 ¼"-2" hollow ball



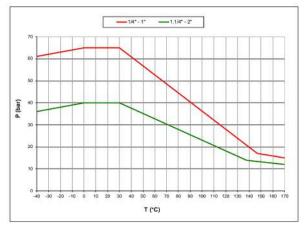
INDUSTRY

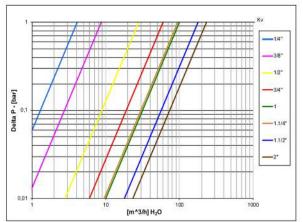


Code	S33B20	S33C20	S33D20	S33E20	S33F20	S33G20	S33H20	S33I20
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	14	14	16.5	19	22.5	25	26	29
l1 (mm)	13	13	16.5	18	22	24	24	27.5
L (mm)	62	62	72	83	99.5	112.5	127	143.5
G (mm)	25.5	25.5	30.5	37	45.5	52	59	67.5
A (mm)	82	82	100	120	120	158	158	158
H (mm)	39.5	39.5	43	52.5	56.5	78	85	91.5
CH (mm)	22	22	27	32	41	50	55	70
PN (Bar)	65	65	65	65	65	40	40	40
Kv (m3/h)	4.1	8.7	28	60	100	95	179	233

Ball valves are marked CE on handle from 1 $^{1\!\!\!\!/}_4$ to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART









k.60 spring return

Female/Female 1/4" - 2", heavy duty - DIN 16722 M3 EN 10226-1

Access to fluid systems in public places could potentially convert into costs and safety problems. In order to avoid unattended valves being left open with negative economic or environmental consequences, *RuB* developed the automatic self-closing valve. The valve can be opened normally by rotating the handle 90° and when the user releases the handle, the valve shuts off automatically. Best solution for service stations, trucks, public areas, gardens. The same feature is useful in industrial applications, where a valve must not be left open unattended. **HIGH TEMPERATURE RESISTANCE**

Now approved for HTB use (Hochtemperaturbeständigkeit) - Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore com-

Y patible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- · Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant

- Valve length according to DIN 16722 M3 for sizes from 3/8" to 2" (DN10 to DN50). Size 1/4" (DN 8) complies to DIN 3202 M3.
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100% full port for maximum flow

HANDLE

- Robust spring ensures auto shutt-off with max pressure in valve
- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 65 bar (940 PSI) up to 1", 40 bar (600 PSI) over 1" non-shock cold working pressure
- -20°C to +170°C (-4°F to +350°F)
- For use with dangerous fluids temperature rating is
- -20°C to +60°C (-4°F to +140°F)and pressure rating is
- 5 bar (72 PSI) / HTB Class B 0,1

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Custom design
- Stainless steel handle (1.4016 / AISI 430)

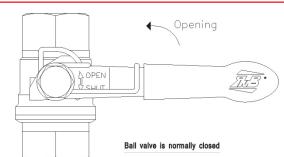
PED DIRECTIVE

 Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

APPROVED BY OR IN COMPLIANCE WITH

- DVGW (Germany) MOP 5 B 0,1
- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.





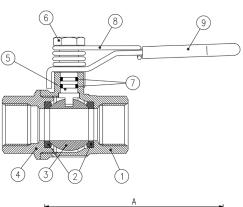
FÆſ€€

k.60 spring return XCEK60MR - 5466

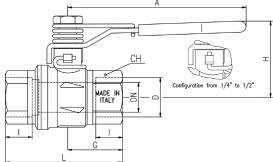
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Unplated spring nut	1	CW617N
7	O-Ring	2	FPM
8	Spring return	1	1.4310 (AISI 302)
9	Yellow PVC coated Geomet® steel handle	1	DC01

1 ¼"-2" hollow ball



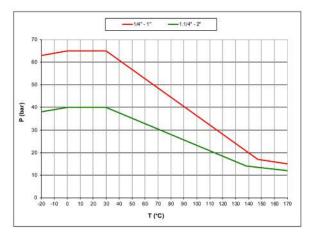
INDUSTRY

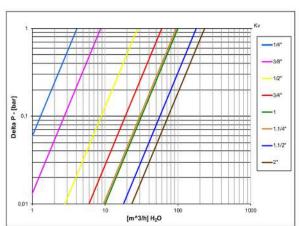


							E 2014/68/UE prod egory III Module	
Code	S60B05M	S60C05M	S60D05M	S60E05M	S60F05M	S60G05M	S60H05M	S60105M
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	14	14	16.5	19	22.5	25	26	29
L (mm)	50	60	75	80	90	110	120	140
G (mm)	25.5	25.5	30.5	37	45.5	52	59	67.5
A (mm)	100	100	100	120	120	158	158	158
H (mm)	40	40	43	51	55.5	75	81	88.5
CH (mm)	22	22	27	32	41	50	55	70
PN (bar)	65	65	65	65	65	40	40	40
Kv (m3/h)	4.1	8.7	28	60	100	95	179	233

Ball valves are marked CE on handle from 1 1/4" to 2" as follow: CE 0425 Cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART









S.7200L 3-way, lever, 4 seats, L-port (diverting)

Female/Female/Female 1/2" - 1"



The RuB S.7200L is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn of the handle, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. The valve can be purchased separately, with handle or with a RuB actuator alreadymounted.

QUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- $\cdot\;$ Four seats design for mixing of various fluids in the system

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- S.7200 without handle, actuator ready
- Various actuator linkage kit

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 Bar up to 1", 20 bar over 1", non-shock cold working pressure
- -20°C to +170°C (-4°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- · Stainless steel stem (1.4401/ AISI 316)
- · Configurations with 4 seats, L-port (s.7200L) or T-port (s.7300L)

PED DIRECTIVE

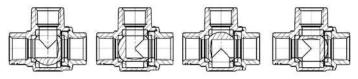
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia Kazakhstan Belarus)

NOTE: approvals apply to specific configurations/sizes only.

S.72 3-WAY "L" PORT OPERATING POSITIONS



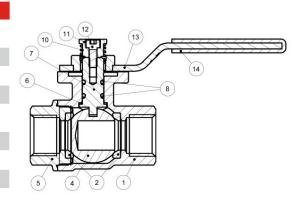


s.7200L XCES7200L - 5466

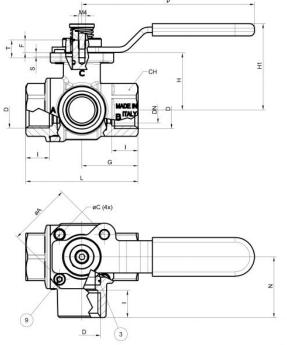
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
	Nickel plated body (External nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
	Nickel plated end-cap (External nickel plated, unplated inside)	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw handle stop	1	CW617N
10	Spring	1	1.4310 / AISI 302
11	Unplated spring bushing	1	CW617N
12	Stainless steel screw	1	1.4301 / AISI 304
13	Geomet® plated steel handle	1	DD11 (EN10111)
14	Black dipped coating	1	PVC



Code	S72D00L	S72E00L	S72F00L
Size (inch)	1/2"	3/4"	1"
DN (mm)	15	20	25
l (mm)	16.5	19	22.5
L (mm)	65	79	92.5
G (mm)	32.5	39.5	46.5
H (mm)	32.5	39.5	42.5
N (mm)	34.5	42	49.5
ØA (mm)	36	36	36
ØC (mm)	Ø5.2 (M6)	Ø5.2 (M6)	Ø5.2 (M6)
p (mm)	100	100	100
H1 (mm)	49	56	59
S (mm)	2.2	2.2	2.2
T (mm)	10	10	10
F (mm)	7.3	8.3	8.3
CH (mm)	27	32	41
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03



TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷16 bar	
Valve size	to open	to close
1/2"	10.5	10.5
3/4"	13	13
1″	29.5	29.5

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5





s.7241L NPT 3-way, lever, 4 seats, L-port (diverting)

Female/Female/Female 1/2" - 1"

The RuB S.7241L is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn of the handle, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation.

It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly.

The valve can be purchased separately, with handle or with a RuB actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- No maintenance ever required
- · Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- Four seats design for mixing of various fluids in the system

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- S.7241 without handle, actuator ready
- Various actuator linkage kit

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- · 300 PSI non-shock cold working pressure
- -4°F to +302°F (-20°C to +150°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

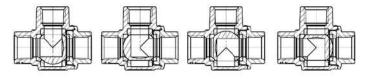
- Custom design
- Stainless steel stem (1.4401/ AISI 316)
- · Configurations with 4 seats & T-port (s.7341L) or 2 seats & L-port (s.7641L)

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

S.72 3-WAY "L" PORT OPERATING POSITIONS









BONOMI INDUSTRIES SRL - www.bonomiindustries.com

s.7241L NPT XCES7241L - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Sand blasted unplated end-cap	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw handle stop	1	CW617N
10	Black dipped coating	1	1.4310 / AISI302
11	Stainless steel screw	1	CW617N
12	Unplated stop	1	1.4301 / AISI304
13	Zinc plated steel nut	1	DD11 (EN10111)
14	Stainless steel Exagonal screw	1	PVC

Code	S72D41L	S72E41L	S72F41L
Size (inch)	1/2"	3/4"	1"
DN (inch)	0.591	0.787	0.984
l (inch)	0.610	0.709	0.827
L (inch)	2.559	3.110	3.642
G (inch)	1.280	1.555	1.831
H (inch)	1.280	1.555	1.673
N (inch)	1.358	1.654	1.949
ØA (inch)	1.417	1.417	1.417
ØC (inch)	Ø 0.205 (M6)	Ø 0.205 (M6)	Ø 0.205 (M6)
p (inch)	3.937	3.937	3.937
H1 (inch)	1.929	2.210	2.328
S (inch)	0.087	0.087	0.087
T (inch)	0.394	0.394	0.394
F (inch)	0.287	0.327	0.327
CH (inch)	1.063	1.260	1.614
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03

TORQUE FOR ACTUATOR SIZING IN-LB

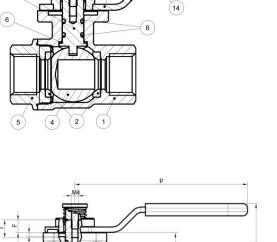
Delta P>	0÷230 PSI		
Valve size	to open to close		
1/2"	93	93	
3/4"	115	115	
1″	261	261	

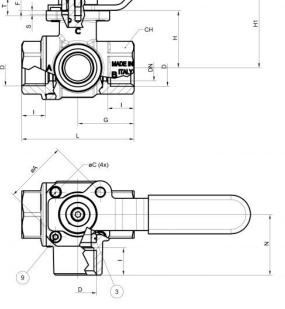
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5











s.7300L 3-way, lever, 4 seats, T-port

Female/Female/Female 1/4" - 2" EN 10226-1

The s.7300L series has a ball seal at every port, and offers a wide variety of possible flow configurations. Positive shutoff can be achieved at any of the exiting ports. By specifying the appropriate ball port configuration, the T-port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications. Our s.73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by replacing two or three conventional 2-way valves, eliminating excess fittings, saving space and simplifying automation.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO 5211 /DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- · 3-way T-port design for flow mixing

STEM

- · Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- $\cdot\;$ Four seats design for mixing of various fluids in the system

THREADS

• EN 10226-1, ISO 228 parallel female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- S.7300 without handle actuator ready
- Various actuator linkage kit

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem
- · Configurations with 4 seats & L-port (s.7200L) or 2 seats & L-port (s.7600L)

PED DIRECTIVE

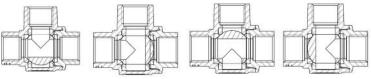
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

S.73 3-WAY "T" PORT OPERATING POSITIONS







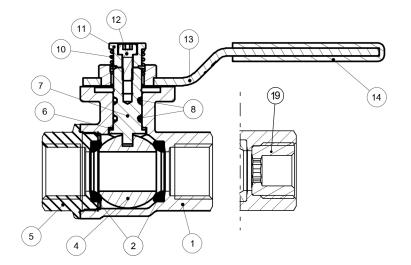


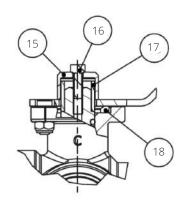
s.7300L XCES7300L - 5708

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



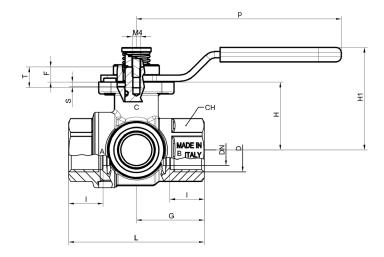
	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Nickel plated end cap (external nickel plated, unplated inside)	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw handle stop	1	CW617N
10	Spring	1	1.4310 / AISI 302
11	Unplated spring bushing	1	CW617N
12	Stainless steel screw	1	1.4301 / AISI 304
13	Geomet® plated steel handle	1	DD11 (EN10111)
14	Black dipped coating	1	PVC
15	Unplated cap	1	CW614N
16	Stainless steel Hexagonal screw	1	1.4301 / AISI304
17	Square adapter 11-14 (only for 1 1/4" size)	1	Steel
18	Washer	1	PTFE
19	Unplated reduction (only 1/4" and 3/8" sizes)	3	CW617N

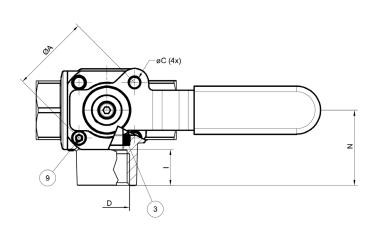






Code	S73B00L	S73C00L	S73D00L	S73E00L	S73F00L	S73G00L	S73H00L	S73100L
Size (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	30.4	38	48
l (mm)	12	12	16.5	19	22.5	25	26	29
L (mm)	65	65	65	79	92.5	109.5	126	150
G (mm)	32.5	32.5	32.5	39.5	46.5	55	63	75
H (mm)	32.5	32.5	32.5	39.5	42.5	56	62.5	72
N (mm)	34.5	34.5	34.5	42	49.5	60	69	82
ØA (mm)	36	36	36	36	36	50	50	50
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
p (mm)	103	103	103	103	103	145	145	145
H1 (mm)	49	49	49	56	59	79.3	85.5	93.4
S (mm)	2.2	2.2	2.2	2.2	2.2	3.2	3.2	3.2
T (mm)	10	10	10	10	10	14	14	14
F (mm)	7.3	7.3	7.3	8.3	8.3	14.5	14.5	14.5
CH (mm)	27	27	27	32	41	50	55	70
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F03	F03	F05	F05	F05
Kv (m³/h) straight pattern	TBD	TBD	9.7	28.2	43.3	57.0	94.5	161.0
Kv (m³/h) 90° pattern	TBD	TBD	5.3	11.6	16.8	26.7	43.3	69.2







TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷16 bar		
Valve size	to open	to close	
1/4" - 3/8" - 1/2″	10,5	10,5	
3/4″	13	13	
1″	29,5	29,5	
1 ¼"	14	14	
1 ½"	23	23	
2"	38	38	

TORQUE CORRECTION FACTORS

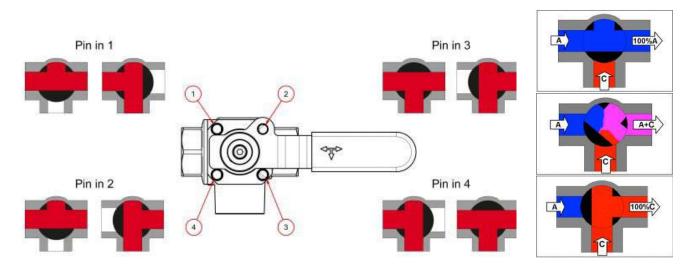
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

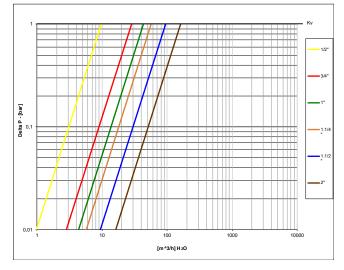
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the four possible positions.

An alternative is to mount 2 pins in 2 near holes (e.g. 1 and 2). In this case, the valve does not assume a predetermined position but can be actuated just by pulling the lever towards the top.

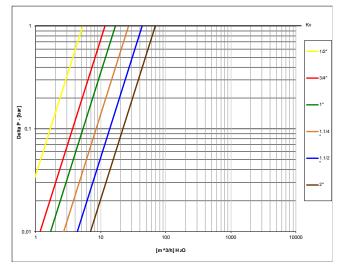
The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.



PRESSURE DROP CHART (STRAIGHT FLOW PATTERN)



PRESSURE DROP CHART (90° FLOW PATTERN)







s.7341L 3-way, lever, 4 seats, T-port

Female/Female/Female 1/2" - 2" ISO 5211

The s.7341L series has a ball seal at every port, and offers a wide variety of possible flow configurations. Positive shut-off can be achieved at any of the exiting ports. By specifying the appropriate ball port configuration, the T-port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications. Our s.73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by replacing two or three conventional 2-way valves, eliminating excess fittings, saving space and simplifying automation.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO 5211 /DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- · 3-way T-port design for flow mixing

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- Four seats design for mixing of various fluids in the system

THREADS

• NPT taper ANSI B.1.20.1 female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- S.7341 without handle actuator ready
- Various actuator linkage kit

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 300 PSI (20 bar) non-shock cold working pressure
- -4°F to +302°F (-20°C to +150°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

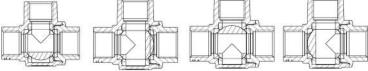
- Custom design
- Stainless steel stem
- · Configurations with 4 seats & L-port (s.7241L) or 2 seats & L-port (s.7641L)

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

S.73 3-WAY "T" PORT OPERATING POSITIONS









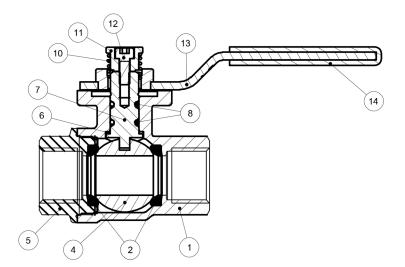


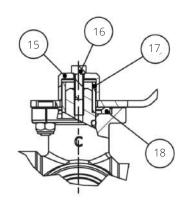
s.7341L XCES7341L - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



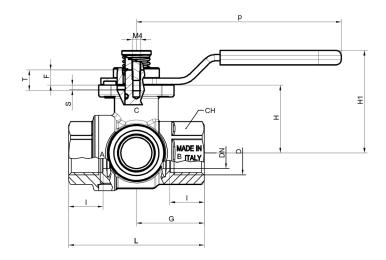
	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Sand blasted unplated end-cap	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw handle stop	1	CW617N
10	Spring	1	1.4310 / AISI 302
11	Unplated spring bushing	1	CW617N
12	Stainless steel screw	1	1.4301 / AISI 304
13	Geomet® plated steel handle	1	DD11 (EN10111)
14	Black dipped coating	1	PVC
15	Unplated cap	1	CW614N
16	Stainless steel Hexagonal screw	1	1.4301 / AISI304
17	Square adapter 11-14 (only for 1 1/4" size)	1	Steel
18	Washer	1	PTFE

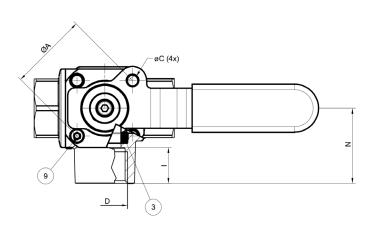






Code	S73D41L	S73E41L	S73F41L	S73G41L	S73H41L	S73I41L
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.591	0.787	0.984	1.197	1.496	1.890
l (inch)	0.610	0.709	0.827	0.906	0.965	1.043
L (inch)	2.559	3.110	3.642	4.331	4.961	5.906
G (inch)	1.280	1.555	1.831	2.165	2.480	2.953
H (inch)	1.280	1.555	1.673	2.205	2.460	2.854
N (inch)	1.358	1.654	1.949	2.362	2.717	3.228
ØA (inch)	1.417	1.417	1.417	1.969	1.969	1.969
ØC (inch)	Ø 0.22	Ø 0.22	Ø 0.22	Ø 0.26	Ø 0.26	Ø 0.26
p (inch)	4.055	4.055	4.055	5.709	5.709	5.709
H1 (inch)	1.929	2.210	2.328	3.122	3.366	3.677
S (inch)	0.087	0.087	0.087	0.126	0.126	0.126
T (inch)	0.394	0.394	0.394	0.551	0.551	0.551
F (inch)	0.287	0.327	0.327	0.571	0.571	0.571
CH (inch)	1.063	1.260	1.614	1.969	2.165	2.756
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F05	F05	F05
P (ISO 262 Thread)	M4	M4	M4	M5	M5	M5
Cv (GPM) straight pattern	11.2	32.5	50.0	65.8	109.2	186
Cv (GPM) 90° pattern	6.1	13.4	19.5	30.9	50.0	80.0







TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷230 PSI		
Valve size	to open to close		
1/2″	93	93	
3/4″	115	115	
1″	261	261	
1 ¼"	124	124	
1 ½"	204	204	
2"	336	336	

TORQUE CORRECTION FACTORS

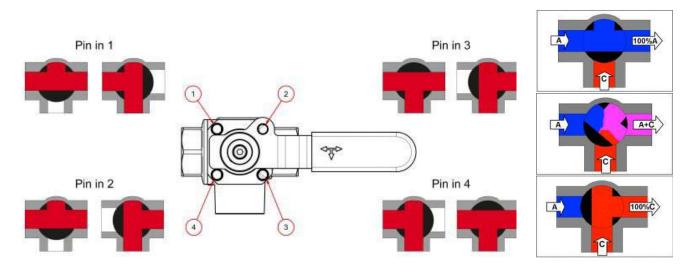
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

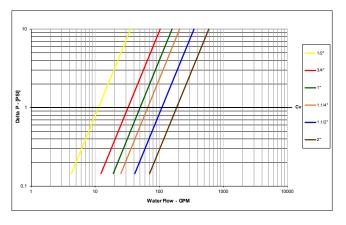
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the four possible positions.

An alternative is to mount 2 pins in 2 near holes (e.g. 1 and 2). In this case, the valve does not assume a predetermined position but can be actuated just by pulling the lever towards the top.

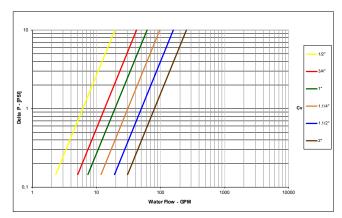
The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.



PRESSURE DROP CHART (STRAIGHT FLOW PATTERN)



PRESSURE DROP CHART (90° FLOW PATTERN)







s.7350L 3-way, lever, 4 seats, T-port

Female/Female/Female 1/2" - 2" ISO 7/1, BS21

The s.7350L series has a ball seal at every port, and offers a wide variety of possible flow configurations. Positive shutoff can be achieved at any of the exiting ports. By specifying the appropriate ball port configuration, the T-port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications. Our s.73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by replacing two or three conventional 2-way valves, eliminating excess fittings, saving space and simplifying automation.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Integrated ISO 5211 /DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- · 3-way T-port design for flow mixing

STEM

- · Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

- $\ensuremath{\mathsf{PTFE}}$ self-lubricating seats with flexible-lip design
- $\cdot\;$ Four seats design for mixing of various fluids in the system

THREADS

• ISO71, BS21 BSPT taper female threads

FLOW

• 100% full port for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem
- · Configuration with 2 seats & L-port (s.7650L)

PED DIRECTIVE

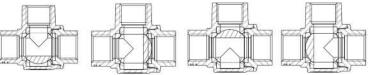
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

S.73 3-WAY "T" PORT OPERATING POSITIONS



OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- S.7350 without handle actuator ready
- Various actuator linkage kit



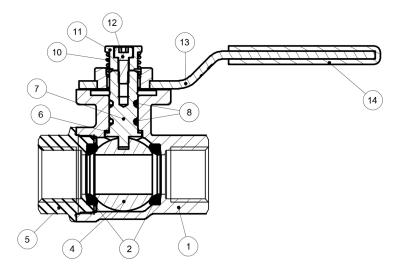


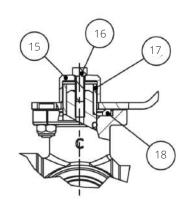
s.7350L XCES7350L - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



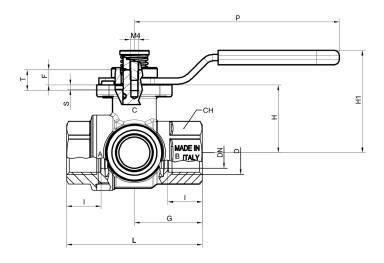
	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Nickel plated end cap (external nickel plated, unplated inside)	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw handle stop	1	CW617N
10	Spring	1	1.4310 / AISI 302
11	Unplated spring bushing	1	CW617N
12	Stainless steel screw	1	1.4301 / AISI 304
13	Geomet® plated steel handle	1	DD11 (EN10111)
14	Black dipped coating	1	PVC
15	Unplated cap	1	CW614N
16	Stainless steel Hexagonal screw	1	1.4301 / AISI304
17	Square adapter 11-14 (only for 1 ¼" size)	1	Steel
18	Washer	1	PTFE

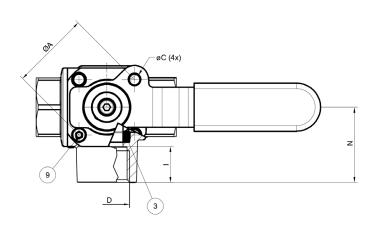






Code	S73D50L	S73E50L	S73F50L	S73G50L	S73H50L	S73I50L
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	15	20	25	30.4	38	48
l (mm)	16.5	19	22.5	25	26	29
L (mm)	65	79	92.5	109.5	126	150
G (mm)	32.5	39.5	46.5	55	63	75
H (mm)	32.5	39.5	42.5	56	62.5	72
N (mm)	34.5	42	49.5	60	69	82
ØA (mm)	36	36	36	50	50	50
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
p (mm)	103	103	103	145	145	145
H1 (mm)	49	56	59	79.3	85.5	93.4
S (mm)	2.2	2.2	2.2	3.2	3.2	3.2
T (mm)	10	10	10	14	14	14
F (mm)	7.3	8.3	8.3	14.5	14.5	14.5
CH (mm)	27	32	41	50	55	70
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F05	F05	F05
Kv (m³/h) straight pattern	9.7	28.2	43.3	57.0	94.5	161.0
Kv (m³/h) 90° pattern	5.3	11.6	16.8	26.7	43.3	69.2







TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷16 bar		
Valve size	to open	to close	
1/2″	10,5	10,5	
3/4″	13	13	
1″	22	22	
1 ¼"	14	14	
1 ½"	23	23	
2"	38	38	

TORQUE CORRECTION FACTORS

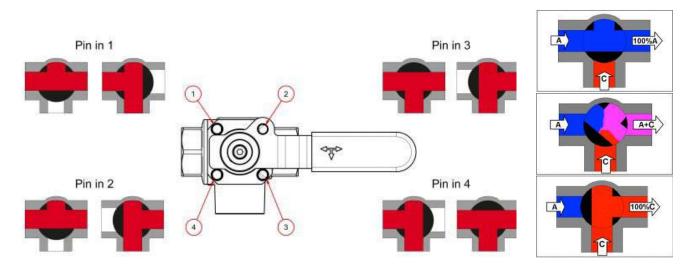
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

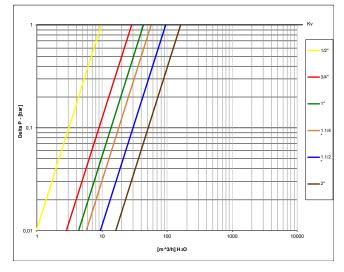
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the four possible positions.

An alternative is to mount 2 pins in 2 near holes (e.g. 1 and 2). In this case, the valve does not assume a predetermined position but can be actuated just by pulling the lever towards the top.

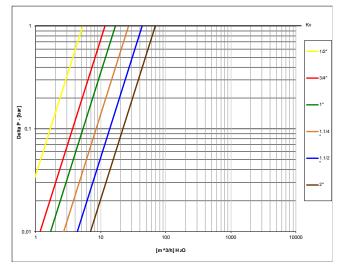
The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.



PRESSURE DROP CHART (STRAIGHT FLOW PATTERN)



PRESSURE DROP CHART (90° FLOW PATTERN)







s.7600L 3-way, lever, 2 seats, L-port (diverting)

Female/Female/Female 1/4" - 2" EN 10226-1

The *RuB* s.7600L is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double O-rings at the stem for maximum safety

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

+ 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator
- ISO 7/1, BS 21 BSPT taper female threads
- S.7600 without handle, actuator ready
- Various actuator linkage kit

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem (1.4401/ AISI 316)
- · Configurations with 4 seats & T-port (s.7300L) or 2 seats & L-port (s.7600L)

PED DIRECTIVE

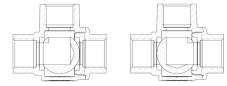
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia Kazakhstan Belarus)

NOTE: approvals apply to specific configurations/sizes only.

S.76 3-WAY "L" PORT OPERATING POSITIONS









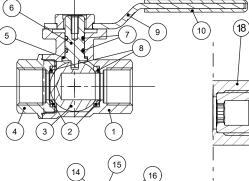
s.7600L XCES7600L - 5708

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

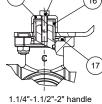


	Part description	O tv	Material
	Nickel plated body		
1	(External nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Sand blasted nickel plated end cap (External nickel plated, unplated inside)	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Geomet® plated steel handle	1	DD11 (EN10111)
10	Black dipped coating	1	PVC
11	Stainless steel screw	1	1.4301 / AISI304
12	Unplated stop	1	CW617N
13	Zinc plated steel nut	1	Class 8 (UNI7474)
14	Unplated cap	1	CW614N
15	Stainless steel Exagonal screw	1	1.4301 / AISI304
16	Square adaptor 11-14 (only for 1 1/4 size)	1	Steel
17	Washer	1	PTFE
18	Unplated reduction (only 1/4" and 3/8" sizes)	3	CW617N

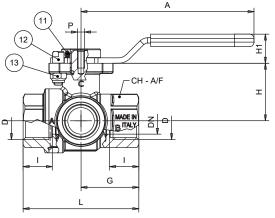
Code	S76B00L	S76C00L	S76D00L	S76E00L	S76F00L	S76G00L	S76H00L	S76100L
Size (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	30.4	38	48
l (mm)	12	12	16.5	19	22.5	25	26	29
L (mm)	65	65	65	79	92.5	109.5	126	150
G (mm)	32.5	32.5	32.5	39.5	46.5	55	63	75
H (mm)	32.5	32.5	32.5	39.5	42.5	56	63.2	72
N (mm)	34.5	34.5	34.5	42	49.5	60	69	82
A (mm)	97	97	97	97	97	145	145	145
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
H1 (mm)	16.5	16.5	16.5	16.5	16.5	23	23	23
Square B (mm)	9	9	9	9	9	11	11	14
CH A/F (mm)	27	27	27	32	41	50	55	70
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F03	F03	F05	F05	F05
P (ISO 262 Thread)	M4	M4	M4	M4	M4	M5	M5	M5
Kv (m³/h)	TBD	TBD	5.7	11.1	16.7	28.1	44.5	71.1

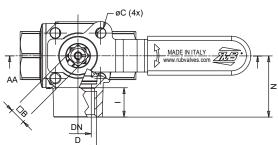


5









TORQUE FOR ACTUATOR SIZING N.M

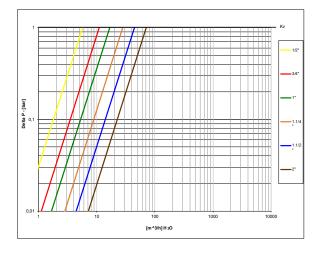
Delta P>	0÷1	6 bar
Valve size	to open	to close
14" - 3/8" - 1/2″	3,5	3,5
3/4"	4,0	4,0
1″	4,5	4,5
1 1/4"	11,7	11,7
1 1/2"	21,5	21,5
2"	28,0	28,0

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5







s.7641L 3-way, lever, 2 seats, L-port (diverting)

Female/Female/Female 1/2" - 2" **ISO 5211**

The RuB s.7641L is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a RuB actuator already mounted.

OUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- · No maintenance ever required
- · Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- · Performs well in any orientation
- Strong configuration

BODY

- · Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double O-rings at the stem for maximum safety

SEALING

· Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

· 100% full port for maximum flow

OPTIONS

- · Rack and pinion pneumatic actuator (spring return or double acting)
- · Compact Power electric actuator
- · S.7641 without handle, actuator ready
- · Various actuator linkage kit

HANDLE

· Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 450 PSI up to 1", 300 PSI over 1", non-shock cold working pressure
- -4°F to +350°F (-20°C to +170°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

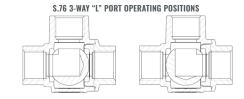
UPON REQUEST

- Custom design
- Stainless steel stem (1.4401/ AISI 316)
- · Configurations with 4 seats, L-port (s.7241L) or T-port (s.7341L)

APPROVED BY OR IN COMPLIANCE WITH

RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.









s.7641L XCES7641L - 5466

Code

Size (inch)

DN (inch)

I (inch)

L (inch)

G (inch)

H (inch)

N (inch)

A (inch)

ØC (inch)

H1 (inch)

Square B (inch)

CH A/F (inch)

Flange connection DIN ISO 5211 DIN 3337

P (ISO 262 Thread)

CV (GPM)

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Geomet® plated steel handle	1	DD11(EN10111)
10	Black dipped coating	1	PVC
11	Stainless steel screw	1	1.4401 / AISI304
12	Unplated stop	1	CW617N
13	Zinc plated steel nut	1	Class 8 (UNI7474)
14	Stainless steel Exagonal screw	1	1.4401 / AISI304
15	Unplated cap	1	CW614N
16	Washer	1	PTFE

S76E41L

3/4"

0.787

0.709

3.110

1.555

1.555

1.654

3.819

Ø 0.22

0.984

0.354

1.260

F03

M4

12.9

S76F41L

1"

0.984

0.827

3.642

1.831

1.673

1.949

3.819

Ø 0.22

0.984

0.354

1.614

F03

M4

19.3

S76G41L

1 1⁄4"

1.197

0.906

4.311

2.165

2.205

2.362

5.709

Ø 0.26

1.378

0.551

1.969

F05

M5

32.5

S76H41L

1 1⁄2"

1.496

0.965

4.961

2.480

2.500

2.717

5.709

Ø 0.26

1.378

0.551

2.165

F05

M5

51.4

S76I41L

2"

1.890

1.043

5.906

2.953

2.854

3.228

5.709

Ø 0.26

1.378

0.551

2.756

F05

M5

82.2

S76D41L

1/2"

0.591

0.610

2.559

1.280

1.280

1.358

3.819

Ø 0.22

0.984

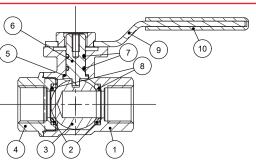
0.354

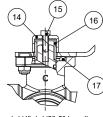
1.063

F03

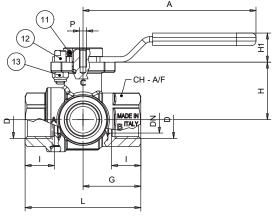
M4

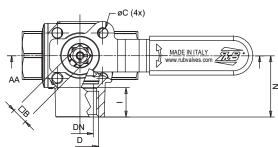
6.6





1.1/4"-1.1/2"-2" handle configuration





TORQUE FOR ACTUATOR SIZING IN-LB

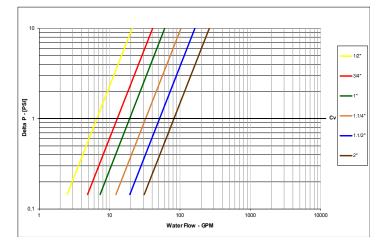
Delta P>	0÷230 PSI		
Valve size	to open	to close	
1/2"	31	31	
3/4"	36	36	
1″	40	40	
1 1/4"	104	104	
1 1/2"	190	190	
2″	248	248	

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5







s.7650L 3-way, lever, 2 seats, L-port (diverting)

Female/Female/Female 1/2" - 2" ISO 7/1, BS21

The *RuB* s.7650L is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double O-rings at the stem for maximum safety

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

· ISO 7/1, BS 21 BSPT taper female threads

FLOW

100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator
- S.7650 without handle, actuator ready
- Various actuator linkage kit

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 Bar up to 1", 20 bar over 1", non-shock cold working pressure
- -20°C to +170°C (-4°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- · Stainless steel stem (1.4401/ AISI 316)
- Configurations with 4 seats, L-port (s.7250L) or T-port (s.7350L)

PED DIRECTIVE

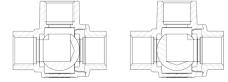
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

S.76 3-WAY "L" PORT OPERATING POSITIONS









s.7650L XCES7650L - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Sand blasted nickel plated body (External nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Sand blasted nickel plated end cap (External nickel plated, unplated inside)	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Geomet® plated steel handle	1	DD11 (EN10111)
10	Black dipped coating	1	PVC
11	Stainless steel screw	1	1.4301 / AISI304
12	Unplated stop	1	CW617N
13	Zinc plated steel nut	1	Class 8 (UNI7474)
14	Unplated cap	1	CW614N
15	Stainless steel Exagonal screw	1	1.4301 / AISI304
16	Square adaptor 11-14 (only for 1 1/4 size)	1	Steel
17	Washer	1	PTFE

S76E50L S76F50L

1"

25

22.5

92.5

46 5

42.5

49.5

97

Ø5.6

16.5

9

41

F03

M4

16.7

3/4"

20

19

79

39.5

39.5

42

97

Ø5.6

16.5

9

32

F03

M4

11.1

S76G50L

1 1⁄4"

30.4

25

109.5

55

56

60

145

Ø6.6

23

11

50

F05

M5

28.1

S76H50L

1 1/2'

38

26

126

63

63.2

69

145

Ø6.6

23

11

55

F05

M5

44.5

S76I50L

2"

48

29

150

75

72

82

145

Ø6.6

23

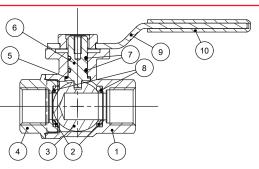
14

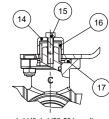
70

F05

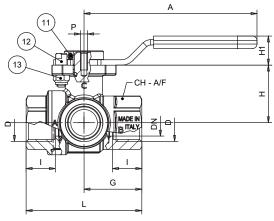
M5

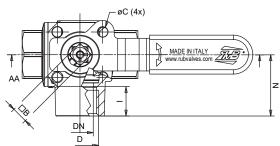
71.1





1.1/4"-1.1/2"-2" handle configuration





TORQUE FOR ACTUATOR SIZING N.M

Code

Size (inch)

DN (mm)

l (mm)

L (mm)

G (mm)

H (mm)

N (mm)

A (mm)

ØC (mm)

H1 (mm)

Square B (mm)

CH A/F (mm)

Flange connection DIN ISO 522 DIN 3337

P (ISO 262 Thread)

Kv (m³/h)

S76D50L

1/2"

15

16.5

65

32.5

32.5

34.5

97

Ø5.6

16.5

9

27

F03

M4

5.7

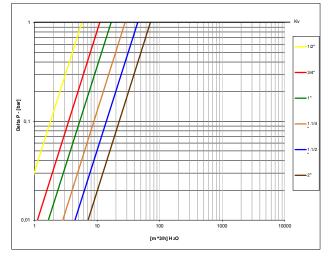
Delta P>	0÷16 bar		
Valve size	to open	to close	
1/2"	3,5	3,5	
3/4"	4,0	4,0	
1″	4,5	4,5	
1 1/4"	11,7	11,7	
1 1/2"	21,5	21,5	
2"	28,0	28,0	

TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

0	
Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5





s.84 EN331 spring return

Female/Female 1/4" - 2", EN 10226-1

Access to fluid systems in public places could potentially convert into costs and safety problems. In order to avoid unattended valves being left open with negative economic or environmental consequences, *RuB* developed the automatic self-closing valve.

The valve can be opened normally by rotating the handle 90° and when the user releases the handle, the valve shuts off automatically. Best solution for service stations, trucks, public areas, gardens. The same features are also useful in industrial applications, where a valve must not be left open unattended.

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Travel stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Robust spring ensures auto shutt-off with max pressure in valve
- Geomet $\ensuremath{\mathbb{R}}$ carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Custom Design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25 mm.

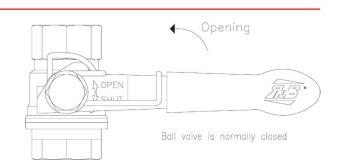
APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stainless steel handle (1.4016 / AISI 430)
- Taper male by parallel female threads







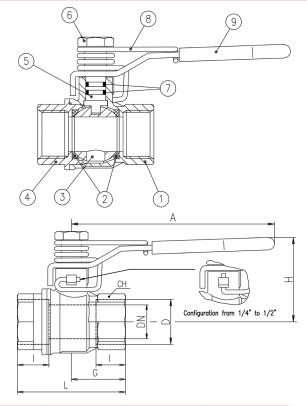


s.84 EN331 spring return XCES84EMR - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole onsizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Unplated spring nut	1	CW617N
7	O-Ring	2	FPM
8	Spring return	1	1.4310 (AISI 302)
9	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

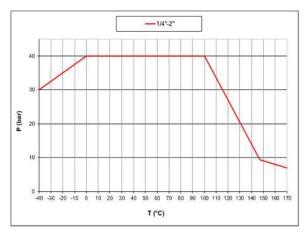


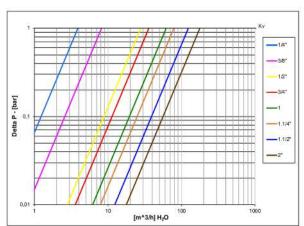
1 ¼" - 2" hollow ball

Code	S84B00M	S84C00M	S84D00M	S84E00M	S84F00M	S84G00M	S84H00M	S84100M
D (Inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	12	12	15,5	17	21	23	23	26,5
L (mm)	45	45	59	64	81	93	102	121
G (mm)	22,5	22,5	29,5	32	40,5	46,5	51	60,5
A (mm)	100	100	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	40	49	54	68,5
Kv (m3/h)	3,9	8,2	28	36	62	79	124	178

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 ¼" to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART















QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- · Handle clearly shows ball position
- Silicone-free lubricant on all seals
- + Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet $\ensuremath{\mathbb{B}}$ carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stem extension
- Stubby handle



s.85 XCES85 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1 N	lickel plated body (external treatment)	1	CW617N
2 S	Seat	2	PTFE
3 C	Chrome plated ball	1	CW617N
4 N	lickel plated end-cap (external treatment)	1	CW617N
5 N	lickel plated stem packing gland design	1	CW617N
6 N	lickel plated gland nut	1	CW617N
7 G	Geomet® nut	1	C4C (EN10263-2)
8 P	Packing gland seal	1	PTFE
9 W	Vasher	1	PTFE carbon filled 25%
10 B	Black PVC coated Geomet® steel handle	1	DD11 (EN10111)

G

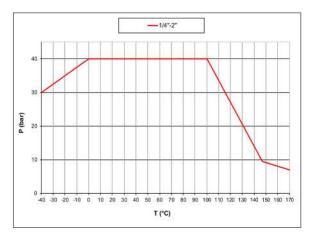
INDUSTRY

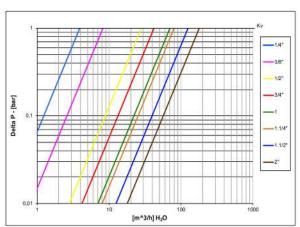
1 ¼"-2" hollow ball

Code	S85B01	S85C01	S85D01	S85E01	S85F01	S85G01	S85H01	S85I01
D (Inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	12	12	15,5	17	21	23	23	26,5
L (mm)	45	45	59	64	81	93	102	121
G (mm)	22,5	22,5	29,5	32	40,5	46,5	51	60,5
A (mm)	82	82	100	120	120	158	158	158
H (mm)	39,5	39,5	43	50,5	54,5	76	82	89
CH (mm)	17	20	25	31	40	49	54	68,5
Kv (m3/h)	3,9	8,2	28	42	70	80	125	179

Ball valves are marked CE on handle from 1 $^{1\!\!\!\!/}_4$ to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART









S.92 barrel drain

The s.92 *RuB* brass ball valve is specifically designed to offer easy and effective drainage of storage tanks and can be installed at the bottom of your barrel or tank and operated with a simple 90° turn to allow full flow accessibility to quickly drain your water, oil, gasoline or other fluids. Its 45° threaded elbow allows for additional pipe connection to conveniently install the drain valve in the best location and in addition the valve features a patented *RuB* tamper-proof locking handle to ensure there is no unauthorized access to the tank. The s.92 can easily be installed on small tanks, utility tanks, overhead farm tanks, and drums as a gravity flow shut-off valve. Another good idea from *RuB*!

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- · Finest brass according to EN 12165 and EN 12164 specications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

SEALING

Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel lockable handle patent n. 7074-B/90 with thick PVC dip coating. Handle coating oers both thermal and electrical protection

Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- + 600 PSI (40 bar), (150 WSP / -10 bar all sizes) non-shock cold working pressure
- * 150 psig (10 bar) non-shock steam working pressure. Not suitable for throttling steam
- -40°F to +366°F (-40°C to + 170 °C)

- WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Custom design
- Pure PTFE seals
- EN 10226-1, ISO 228 parallel female by female threads
- ISO 7/1, BS 21 BSPT taper female by female threads

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle
- Stainless steel handle (1.4016 / AISI 430)
- Stubby handle 3
- T-handle 4
- Non-locking Geomet® carbon steel lever handle

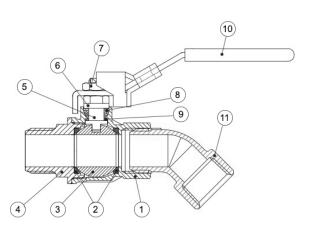




s.92 barrel drain XCES92S2 - 5466

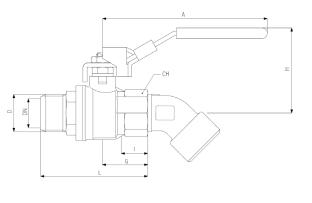
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF (EN10263-2)
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Light blue PVC coated Geomet® steel lockable handle	1	DD11 (EN10111)
11	Elbow	1	CW617N



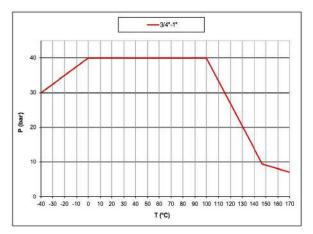
INDUSTRY

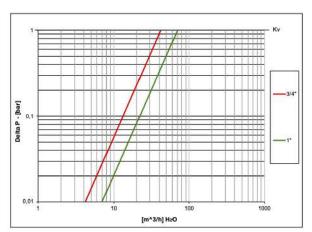
Code	S92ES2MO	S92FS2MO
D (inch)	3/4"	1″
DN (mm)	20	25
l (mm)	17	21
L (mm)	76,5	92,4
G (mm)	32	40,5
A (mm)	117	117
H (mm)	60	64
CH (mm)	31	40
Kv (m3/h)	42	70



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









Female/Female 1/4" - 4"



QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- $\cdot \,$ Chrome plated brass solid ball for longer life
- + Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant

Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Triple stem seals in sizes over 2"

SEALING

Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B. 1.20.1 female by female threads

FLOW

- Full port to DIN 3357 for maximum flow
- Solid ball for optimum CV

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2", (150 WSP / -10 bar all sizes) non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- * 150 psig (10 bar) non-shock steam working pressure. Not suitable for throttling steam
- -40°F to+366°F (-40°C to +185°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Custom design
- Pure PTFE seals

APPROVED BY OR IN COMPLIANCE WITH

- Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- CRN-TSSA acc. to MSS SP110 (Canada)
- Kuwait Fire Service Directorate (Kuwait)
- Meeting WW-V-35C Federal U.S. Specification (United States)
- **NOTE:** approvals apply to specific configurations/sizes only.

OPTIONS UP TO 2" SIZE

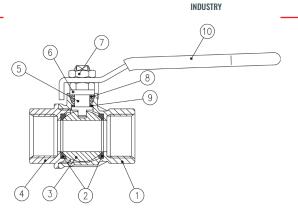
- Oval lockable handle up to 2", round over 2" 1
- Patented locking device for valves up to 4"
- Stainless steel handle (1.4016 / AISI 430) 3
- Stem extension
- Stubby handle
- T-handle 5

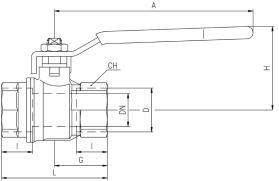


s.92S NPT solid ball XCES92S - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated solid ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	C4C (EN10263-2)
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

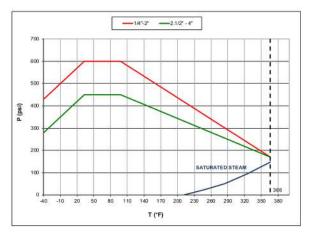


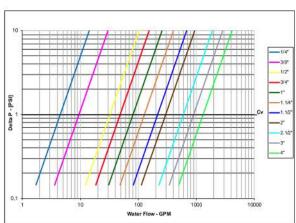


Code	S92B41	S92C41	S92D41	S92E41	S92F41	S92GP41	S92GH41	S92GI41	S92L41	S92M41	S92N41
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0,315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3,937
l (inch)	0,472	0,472	0,61	0,669	0,827	0,906	0,906	1,043	1,26	1,378	1,634
L (inch)	1,772	1,772	2,323	2,520	3,189	3,661	4,016	4,764	6,142	6,969	8,504
G (inch)	0,886	0,886	1,161	1,260	1,594	1,831	2,008	2,382	3,071	3,484	4,252
A (inch)	3,228	3,228	3,937	4,724	4,724	6,22	6,22	6,22	10,039	10,039	10,039
H (inch)	1,563	1,563	1,695	1,988	2,153	2,988	3,236	3,5	5,197	5,512	6,063
CH (inch)	0,669	0,787	0,984	1,22	1,575	1,929	2,126	2,697	3,346	3,898	4,921
Cv (GPM)	4,5	9,5	32,3	48,5	80,9	127.1	214.9	295.8	596,2	896,5	1305,5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART









s.92 NPT SS trim

Female/Female 1/4" - 2"

Abrasive media? Life problems with your current valves?

RuB has the solution! Thanks to its long experience in industrial applications, **RuB** offers a variety of configurations specifically designed to solve critical situations. Brass is notably a "soft" alloy with high copper content having features that make it ideal for plumbing and sanitary installations. When it comes to industrial applications, however, you may need the tough chemistry of stainless steel.

And here we are: *RuB* combines the properties of a brass body with strength of stainless steel ball and stem. Ideal for abrasive media and other severe applications.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- Stainless steel ball and stem for abrasive liquids
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

Blowout-proof stainless steel stem

• Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

SEALING

· Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B. 1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

*150 WSP STEAN RATED

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

+ 600 PSI (40 bar) up to 2", (150 WSP / -10 bar) non-shock cold working pressure

* 150 psig (10 bar) non-shock steam working pressure. Not suitable for throttling steam

-40°F to +366°F (-40°C to +185°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Zure PTFE seals
- Male by female NPT threads

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to speficic configurations/sizes only.

OPTIONS

- Oval lockable handle **1**
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle
- T-handle 😏



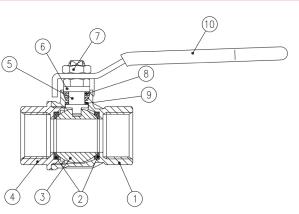


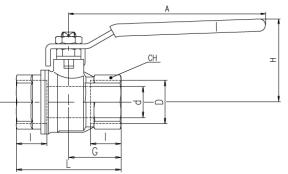
s.92 NPT SS TRIM XCES9248 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Stainless steel ball	1	1.4401 / AISI 316
4	Unplated NPT end-cap	1	CW617N
5	Stainless steel stem packing gland design	1	1.4401 / AISI 316
6	Nickel plated gland nut	1	CW617N
7	Nickel plated handle nut	1	CW617N
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

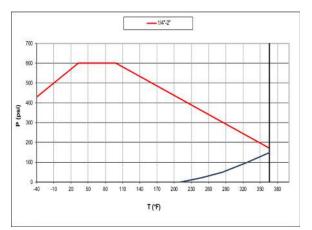


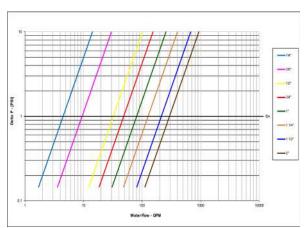


Code	S92B48	S92C48	S92D48	S92E48	S92F48	S92G48	S92H48	S92148
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0,315	0,374	0,591	0,748	0,945	1,181	1,496	1,890
l (inch)	0,472	0,472	0,610	0,669	0,827	0,906	0,906	1,043
L (inch)	1,772	1,772	2,323	2,520	3,189	3,661	4,016	4,764
G (inch)	0,886	0,886	1,161	1,260	1,594	1,831	2,008	2,382
A (inch)	3,228	3,228	3,937	4,724	4,724	6,220	6,220	6,220
H (inch)	1,563	1,563	1,695	1,988	2,153	2,988	3,236	3,500
CH (inch)	0,669	0,787	0,984	1,22	1,575	1,929	2,126	2,697
Cv (GPM)	4,5	9,5	32,3	48,5	80,9	127,10	214,90	295,80

d shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









s.95 NPT spring return

Female/Female 1/4" - 2"

Access to fluid systems in public places could potentially convert into costs and safety problems.

In order to avoid unattended valves being left open with negative economic of environmental consequences, *RuB* developed the automatic self-closing valve.

The valve can be opened normally by rotating the handle 90° and when the user releases the handle, the valve shuts off automatically.

Best solution for service stations, trucks, public areas, gardens. The same feature is useful in industrial applications, where a valve must not be left open unattended.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm o}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Robust spring ensures auto shutt-off with max pressure in valve
- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) non-shock cold working pressure
- · 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F/ +350°F (-40°C / +170°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Custom design

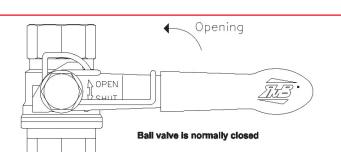
APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases Guide MHKZ: No. 6 oil at 250°F
- · Canadian stadards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- Meeting WW-V-35C Federal U.S. Specification (United States)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

Stainless steel handle (1.4016 / AISI 430)



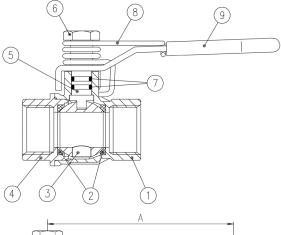


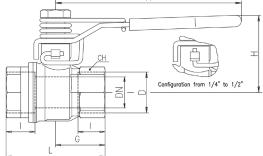
s.95 NPT SPRING RETURN XCES95MR - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Unplated spring nut	1	CW617N
7	O-Ring	2	FPM
8	Spring return	1	1.4310 (AISI 302)
9	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)
1 1/4"-	2" hollow ball		

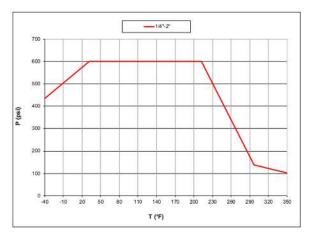


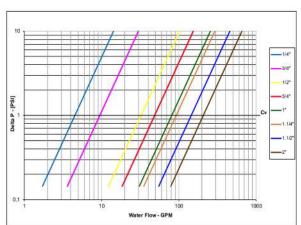


Code	S95B41MR	S95C41MR	S95D41MR	S95E41MR	S95F41MR	S95G41MR	S95H41MR	S95I41MR
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.315	0.375	0.591	0.748	0.945	1.181	1.496	1.890
l (inch)	0.472	0.472	0.610	0.669	0.827	0.906	0.906	1.043
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764
G (inch)	0.886	0.886	1.162	1.260	1.594	1.831	2.008	2.382
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	6.220
H (inch)	1.480	1.480	1.679	1.956	2.114	2.858	3.094	3.370
CH (inch)	0.669	0.787	0.984	1.220	1.575	1.929	2.126	2.697
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









s.100 3-way 4 seats T-port

Female/Female/Female 1/4" - 2", ISO 228





QUALITY

- Chrome plated brass ball for longer life
- UNI 8858 cycle and torque tests performed

BODY

- Hot forged sand blasted nickel plated brass body and caps
- + 3- way T design allows complete range of flow handling applications
- Copper alloy brass according to EN 12165 and EN 12164 specifications

STEM

Maintenance-free, double NBR O-rings at the stem for maximum safety

SEALING

- $\cdot\;$ Four seats design limits mixture among various fluids in the system
- PTFE seats

THREADS

• ISO 228 female threads

FLOW

• Extra port for lowest pressure drop

WORKING PRESSURE & TEMPERATURE

- See non- shock cold working pressure on chart
- -10°C to + 120°C (+15°F to +250°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

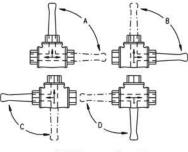
PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm; it cannot be used with non-dangerous gases in size larger than 32 mm

APPROVED BY OR IN COMPLIANCE WITH

• GOST-R (Russia)

NOTE: approvals apply to specific configurations/ sizes only.



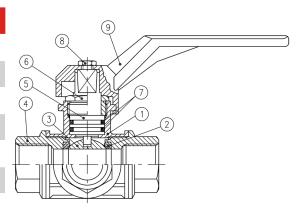
s.100 3-way T port

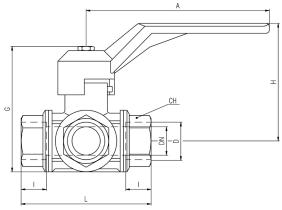
s.100 XCE100 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



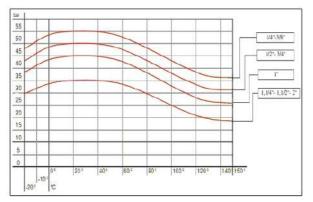
	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Seat	4	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	3	CW617N
5	Nickel plated stem O-ring design	1	CW614N
6	Nickel plated nut	1	CW614N
7	O-Ring	2	NBR
8	Screw	1	Steel
9	Red handle	1	Aluminum

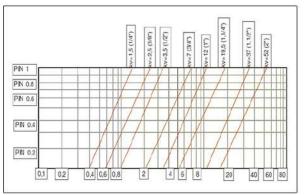




Code	100B00	100C00	100D00	100E00	100F00	100G00	100H00	100100
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	10	12	14	18	23	29	36	45
l (mm)	19	19	19	23	25	27	31	36
L (mm)	77	77	77	92	104	118	138	162
G (mm)	75	75	75	91	105	115	128	165
A (mm)	125	125	125	145	170	170	170	260
H (mm)	65	65	65	83	96	102	109	139
CH (mm)	22	22	27	34	41	50	57	70
Kv (m³/h)	1.5	2.5	3.5	7.0	12	19.5	37	52

PRESSURE-TEMPERATURE CHART









S.101 3-way 4 seats L-port

Female/Female/Female 1/4" - 2", ISO 228





QUALITY

- Chrome plated brass ball for longer life
- UNI 8858 cycle and torque tests performed

BODY

- Hot forged sand blasted nickel plated brass body and caps
- 3- way L design allows complete range of flow handling applications
- Copper alloy brass according to EN 12165 and EN 12164 specifications

STEM

Maintenance-free, double NBR O-rings at the stem for maximum safety

SEALING

- $\cdot\;$ Four seats design limits mixture among various fluids in the system
- PTFE seats

THREADS

• ISO 228 female threads

FLOW

• Extra port for lowest pressure drop

WORKING PRESSURE & TEMPERATURE

- See non- shock cold working pressure on chart
- -10°C to + 120°C (+15°F to +250°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

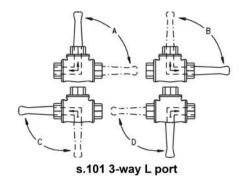
PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm; it cannot be used with non-dangerous gases in size larger than 32 mm

APPROVED BY OR IN COMPLIANCE WITH

• GOST-R (Russia)

NOTE: approvals apply to specific configurations/ sizes only.

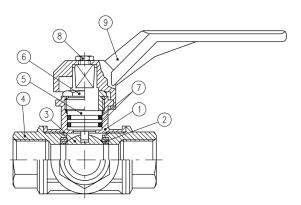


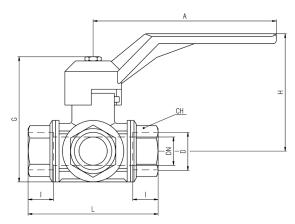
s.101 XCE101 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



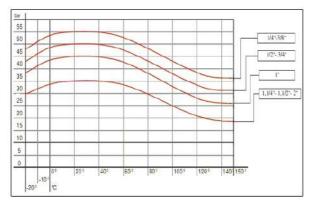
	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Seat	4	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	3	CW617N
5	Nickel plated stem O-ring design	1	CW614N
6	Nickel plated nut	1	CW614N
7	O-Ring	2	NBR
8	Screw	1	Steel
9	Red handle	1	Aluminum

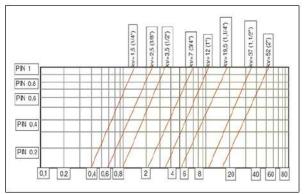




Code	101B00	101C00	101D00	101E00	101F00	101G00	101H00	101100
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	10	12	14	18	23	29	36	45
l (mm)	19	19	19	23	25	27	31	36
L (mm)	77	77	77	92	104	118	138	162
G (mm)	75	75	75	91	105	115	128	165
A (mm)	125	125	125	145	170	170	170	260
H (mm)	65	65	65	83	96	102	109	139
CH (mm)	22	22	27	34	41	50	57	70
Kv (m³/h)	1.5	2.5	3.5	7.0	12	19.5	37	52

PRESSURE-TEMPERATURE CHART









S.172 motor-oil compact drain ball valve

Specifically responding to a need in the automotive application, s.17 is fitted under the oil sum to ease drainage operations, and furthermore granting a most reliable tightness thanks to its special automatic locking device, even under severe conditions of vibration stress. Frozen drain plug and stripped threads are eliminated, no more contact with hot oil, no messy hands or cloths and reduced oil changing time.

PATENT PENDING

QUALITY

- · 24h 100% seal test guaranteed
- · No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Screwdriver slot, the slot orientation shows the ball position

BODY

Hot forged sand blasted, unplated brass body and cap sealed with
metacrylate sealant

- · Compact design and solid structure
- Finest brass according to EN 12165 and EN 12164 to prevent corrosion

STEM

- Blowout-proof AISI 316 stainless steel stem
- · Maintenance-free, double FPM O-ring at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats

THREADS

• M22X1.5 thread with seat for O-ring seal

HANDLE

• 90° open / close

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +130°C (-4°F to +266°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- AISI 316 stainless steel ball
- Custom design
- Aluminum body

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.



- Elbow version with hose connection
- Allen stem



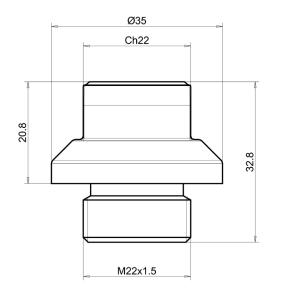




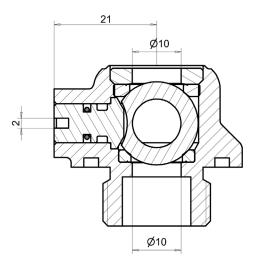
s.172 XCES172 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

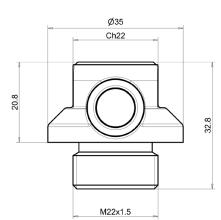




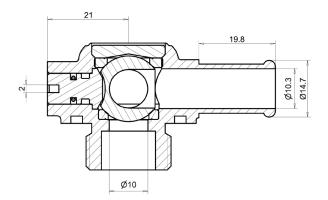




EXAMPLES OF VALVE DIMENSIONS AND CONFIGURATIONS



ELBOW CONFIGURATION







SNI7352

Female/Female 1/4" NPT needle valve

The new **RuB** needle valve proves the state of the art of RuB innovation capabilities. This inexpensive valve is designed to ease flow regulation in all applications where drops are counted like gold!

The flow chart on reverse compares the *RuB* linear curve performance with competition and it is obvious how by counting the number of turns, the operator can easily adjust flow. All details of the *RuB* needle valve have been optimized to provide utmost performance, reliability and no maintenance. Another "install and forget" *RuB* product.

QUALITY

- Innovative design
- No maintenance ever required
- Performance guaranteed
- Tamper proof

BODY

- Hot forged brass body
- One piece body construction

STEM

- FPM stem seal design
- Handle stop on stem prevents stem blow-out

THREADS

• Fip x Fip NPT threads

FLOW

• Easy flow regulation

WORKING PRESSURE & TEMPERATURE

- 2000 PSI non-shock cold working pressure
- -40°F to +350°F
- WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

• 1/8" NPT threads

• Applications include shut off and throttling for pressure gauges and instruments.



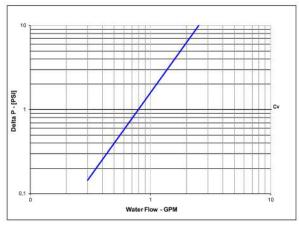
• Mip x Fip NPT threads

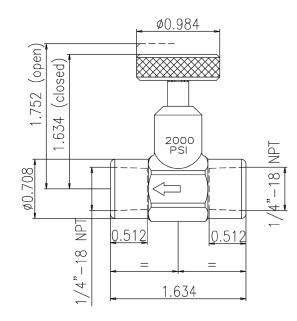


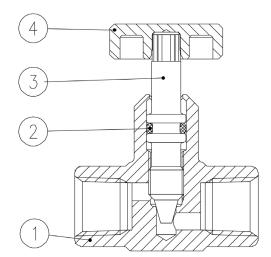
SNI7352 XCE7352 - 5466

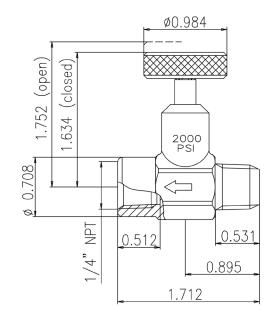
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated valve body	1	CW617N
2	O-Ring	1	FPM
3	Retainer	1	CW617N
4	Handwheel	1	CW617N













Instrumentation package

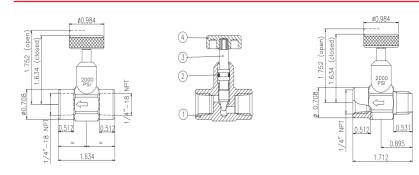


1/4" VALVE (2000 PSI), #SNI7352 1 ¼" THERMOMETER WELL (1000 PSI), #PNI34F2 1/4" SNUBBER (1000 PSI), #SNI8722

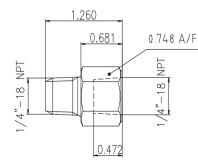
INSTRUMENTAL PACKAGE XCEWSN - 5466

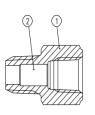
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





	Needle Valve Part description	Q.ty	Material
1	Unplated valve body	1	CW617N
2	O-Ring	1	FPM
3	Retainer	1	CW617N
4	Handwheel	1	CW617N





	Snubber Part description	Q.ty	Material
1	Unplated valve body	1	CW617N
2	Bronze core	1	Bronze

Well Part description

1 Unplated valve body

Q.ty Material

CW617N

1

NEEDLE VALVE:

2000 PSI (CWP) One piece body construction Forged brass body Fip x Fip NPT threads Temp range -40°F to +350°F FPM stem seal design

Applications include shut off and throttling for pressure gauges and instruments

SNUBBER:

1000 PSI (CWP) Forged brass with bronze core Temp range -40°F to +350°F Installed on gauges and instruments where pressure pulsations are present. The snubber is used to damp the pulsations, giving more stable readings and reducing instrument wear.

THERMOMETER WELL:

1000 PSI (CWP) Forged brass construction Meets Fed. Spec GG-T-321 Meets SAMA RC-17-10

Installed on gauges and instruments where pressure pulsations are present. The snubber is used to damp the pulsations, giving more stable readings and reducing instrument wear.

PNEUMATIC

120

RuB solutions for pneumatic applications are engineered to deliver reliable performance ranging from industrial to domestic settings. Designed to control compressed air and inert gases, RuB ball valves ensure efficiency, safety, and precision in fluid management.



PNEUMATIC Scan the QR code to discover our products





- 24	
S.34 1/8" - 1/2" ISO 228 mini ball valve, suitable for panel mounting	Page 162
s.34 MF 1/8" - 1/2" ISO 228 mini ball valve, suitable for panel mounting	Page 164
s.34 NPT 1/8" - 1/2" mini ball valve, suitable for panel mounting	Page 166
	Tuge 100
a 25 high pressure was service and the t	
s.35 high pressure 1/8" - 1/2" ISO 228 mini ball valve	Page 168
s.35 M/F high pressure 1/8" - 1/2" ISO 228 mini ball valve	Page 170
s.35 NPT high pressure 1/8" - 1/2" mini ball valve	Page 172
	1080172
e 25 BCDT high procedure along along the line	D 474
s.35 BSPT high pressure 1/8" - 1/2" mini ball valve	Page 174
s.35 BSPT M/F high pressure 1/8" - 1/2" mini ball valve	Page 176
S.39 forged, micro 1/8" - 1/4" ISO 228 high pressure ball valve	Page 178
e 20 NDT (and a size 1/0) - 1/4) high and any half of a	Da == 100
s.39 NPT forged, micro 1/8" - 1/4" high pressure ball valve	Page 180
s.39 BSPT forged, micro 1/8" - 1/4" high pressure ball valve	Page 182
s.93 downstream exhaust 1/4" - 2" EN 10226-1 with patented locking handle	Page 184
s.93 NPT downstream exhaust 1/4" - 2" with patented locking handle	Dage 190
3.30 HT I UUMIISLI GAIII GAIIAUSL 174 - 2 With patented locking handle	Page 186
44 B4B7	
s.93 BSPT downstream exhaust 1/2" - 2" with patented locking handle	Page 188





s.34

Female/Female 1/8" - 1/2" ISO 228 mini ball valve, suitable for panel mounting





QUALITY

- Each valve is seal tested for maximum safety
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

BODY

• One piece drawn sand blasted brass body incorporating stem neck which provides excellent guidance of the stem

• Finest brass according to EN 12164 specification

STEM

• Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel female by female threads

HANDLE

- Lever and T-handle clearly show ball position
- Nylon black lever or T-handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 15 bar (200 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

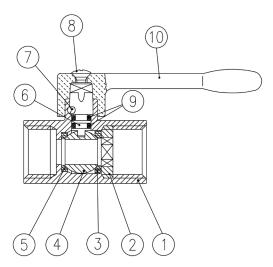
- Screw driver or wrench operated
- Yellow lever or T-handle



s.34 XCES34 - 5466

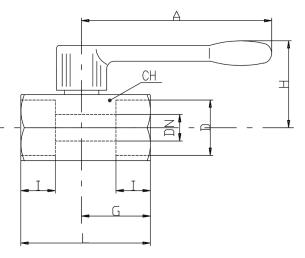
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





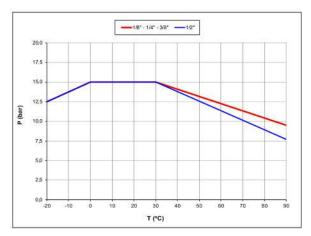
PNEUMATIC

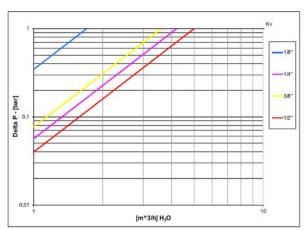
Code	S34AF0	S34BF0	S34CF0	S34DF0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (mm)	6	8	8	10
l (mm)	10	11	11	13
L (mm)	41.5	41.5	41.5	49
G (mm)	22	22	22	26
A (mm)	72	72	72	72
H (mm)	30.5	30.5	30.5	32.5
CH (mm)	21	21	21	25
Kv (m³/h)	1.7	4.2	3.6	5



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART









s.34 M/F

Male/Female 1/8" - 1/2" ISO 228 mini ball valve, suitable for panel mounting





QUALITY

- Each valve is seal tested for maximum safety
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

BODY

- One piece drawn sand blasted brass body incorporating stem neck which provides excellent guidance of the stem
- Finest brass according to EN 12164 specification

STEM

Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• ISO 228 parallel male by female threads

HANDLE

- Lever and T-handle clearly show ball position
- Nylon black lever or T-handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 15 bar (200 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.



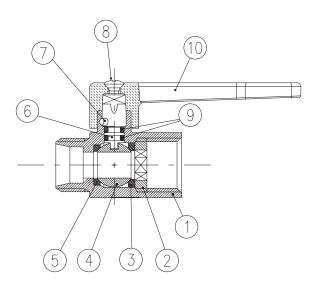
- Female by female threads
- Screw driver or wrench operated
- Yellow lever or T-handle



s.34 MF XCES34M - 5466

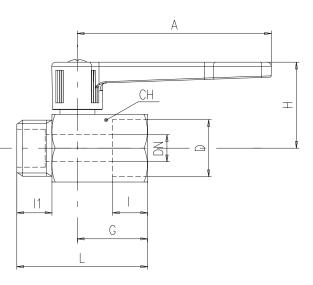
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Pin	1	1.4301 / AISI304
8	Zinc plated screw	1	CB4FF (EN10263-2)
9	O-Ring	2	FPM
10	Black handle	1	Nylon glass filled 30%



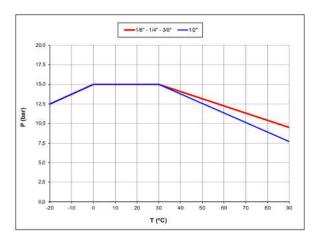
PNEUMATIC

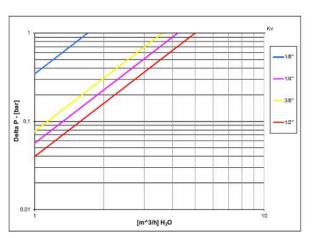
Code	S34AM0	S34BM0	S34CM0	S34DM0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (mm)	5	8	8	10
l (mm)	10	11	11	13
l 1 (mm)	9.5	9.5	9.5	13
L (mm)	41.5	41.5	41.5	49
G (mm)	22	22	22	26
A (mm)	72	72	72	72
H (mm)	30.5	30.5	30.5	32.5
CH (mm)	21	21	21	25
Kv (m³/h)	1.7	4.2	3.6	5



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART









s.34 NPT

Female/Female 1/8" - 1/2" mini ball valve, suitable for panel mounting





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

BODY

• One piece drawn sand blasted brass body incorporating stem neck which provides excellent guidance of the stem

• Finest brass according to EN 12164 specification

STEM

• Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

HANDLE

- Lever and T-handle clearly show ball position
- Nylon black lever or T-handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- · 200 PSI (15 bar) non-shock cold working pressure
- -4°F to +200°F (-20°C to +90°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

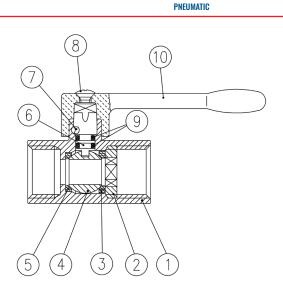
- Male by female threads
- · Screw driver or wrench operated
- Yellow lever or T-handle



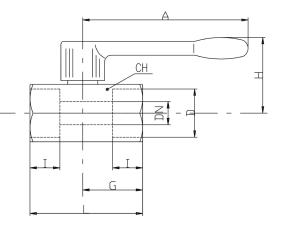
s.34 NPT XCES34N - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Pin	1	1.4301 / AISI304
8	Zinc plated screw	1	C4C
9	O-Ring	2	FPM
10	Black handle	1	Nylon glass filled 30%

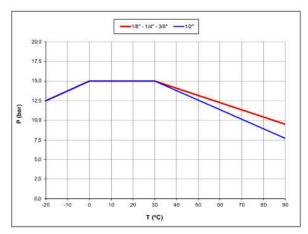


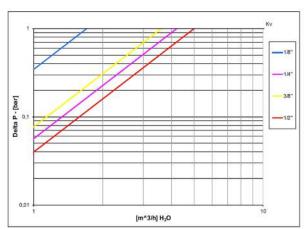
Code	S34AX0	S34BX0	S34CX0	S34DX0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (inch)	0.236	0.314	0.314	0.393
l (inch)	0.354	0.472	0.472	0.610
L (inch)	1.712	1.712	1.712	2.106
G (inch)	0.905	0.905	0.905	1.102
A (inch)	2.834	2.834	2.834	2.834
H (inch)	1.200	1.200	1.200	1.279
CH (inch)	0.826	0.826	0.826	0.984
Cv (GPM)	2.0	4.9	4.2	5.8



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART





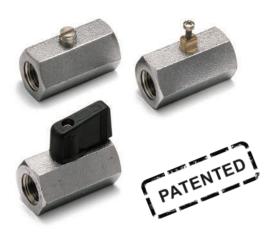






Female/Female 1/8" - 1/2" ISO 228 mini ball valve







QUALITY

• Dual sealing system allows valve to be operated in either direction making instaallation easier

- No metal-to-metal moving parts
- No maintenance ever required
- · Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Handle/ stem clearly shows ball position

BODY

- One piece drawn sand blasted brass body with extremely compact design
- · Finest brass according to EN 12164 specification
- Patent n. 7011-B/89

STEM

- Blowout-proof brass stem with FPM O-ring
- Maintenance-free thanks to FPM O-ring at the stem for maximum safety

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

THREADS

· ISO 228 parallel female by female threads

HANDLE

- Reinforced nylon black wedge handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)
- +120°C (+250°F) screw driver version and metal wedge handle
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Aluminum body
- ISO 7/1 BSPT taper threads
- Dezincification resistant brass CW602N

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

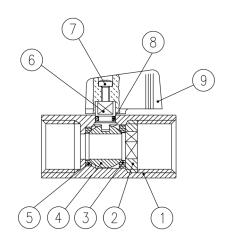
- Male by female threads
- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- Metal wedge handle available in colours red, black, yellow, green, light blue, chrome plated
- Grey wedge handle in Grivory® -high performing polymer
- Additional connection options on demand



s.35 XCES35 - 5466

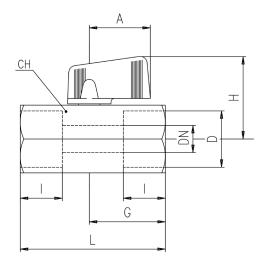
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Zinc plated screw	1	CB4FF (EN10263-2)
8	O-Ring	1	FPM
9	Black handle	1	Nylon glass filled 30%



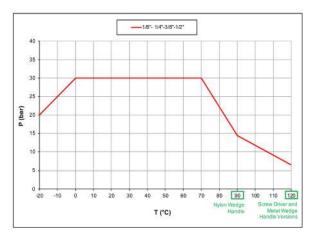
PNEUMATIC

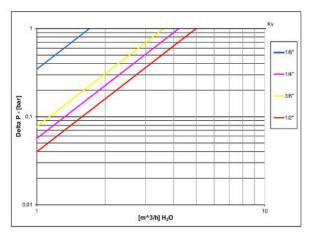
Code	S35AF0	S35BF0	S35CF0	S35DF0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (mm)	6	8	8	10
l (mm)	10	11	11	13
L (mm)	41.5	41.5	41.5	49
G (mm)	22	22	22	26
A (mm)	22.5	22.5	22.5	22.5
H (mm)	31	31	31	33
CH (mm)	21	21	21	25
Kv (m³/h)	1.7	4.2	3.6	5

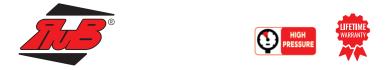


DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART







s.35 M/F high pressure

1/8" - 1/2" mini ball valve





QUALITY

• Dual sealing system allows valve to be operated in either direction making instaallation easier

- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Handle/ stem clearly shows ball position

BODY

- One piece drawn sand blasted brass body with extremely compact design
- · Finest brass according to EN 12164 specification
- Patent n. 7011-B/89

STEM

- Blowout-proof brass stem with FPM O-ring
- · Maintenance-free thanks to FPM O-ring at the stem for maximum safety

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by female threads

HANDLE

- Reinforced nylon black wedge handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)
- +120°C (+250°F) screw driver version and metal wedge handle
- WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Aluminum body
- ISO 7/1 BSPT taper threads
- Dezincification resistant brass CW602N

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

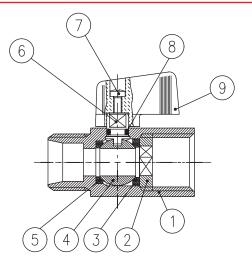
- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- · Metal wedge handle available in colours red, black, yellow, green, light blue, chrome plated
- Grey wedge handle in Grivory® -high performing polymer



s.35 MF XCES3520 - 0

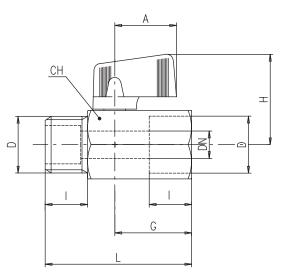
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Zinc plated screw	1	C10C (EN10263-2)
8	O-Ring	1	FPM
9	Black handle	1	Nylon glass filled 30%



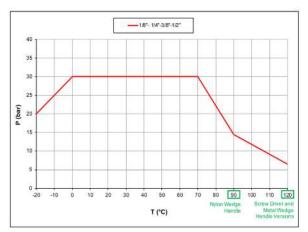
PNEUMATIC

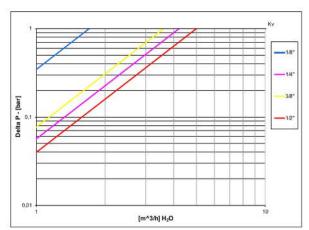
Code	S35AM0	S35BM0	S35CM0	S35DM0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (mm)	5	8	8	10
l (mm)	10	11	11	13
L (mm)	41.5	41.5	41.5	49
G (mm)	22	22	22	26
A (mm)	22.5	22.5	22.5	22.5
H (mm)	31	31	31	33
CH (mm)	21	21	21	25
Kv (m³/h)	1.7	4.2	3.6	5



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART









s.35 NPT high pressure

Female/Female 1/8" - 1/2" mini ball valve







QUALITY

• Dual sealing system allows valve to be operated in either direction making instaallation easier

- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- + Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Handle/ stem clearly shows ball position

BODY

- One piece drawn sand blasted brass body with extremely compact design
- Finest brass according to EN 12164 specification
- Patent n. 7011-B/89

STEM

- Blowout-proof brass stem with FPM O-ring
- · Maintenance-free thanks to FPM O-ring at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 threads

HANDLE

- Reinforced nylon black wedge handle removable with valve in service
- $\cdot\;$ WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 450 PSI (30 bar) non-shock cold working pressure
- -4°F to +200°F (-20°C to +90°C)
- +250°F (+120°C) screw driver version and metal wedge handle
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Aluminum body
- ISO 7/1 BSPT taper threads
- Dezincification resistant brass CW602N

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

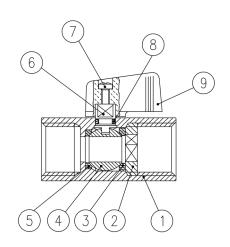
- Male by female threads
- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- Metal wedge handle available in colours red, black, yellow, green, light blue, chrome plated
- Grey wedge handle in Grivory® -high performing polymer
- Additional connection options on demand



s.35 NPT XCES35N - 5466

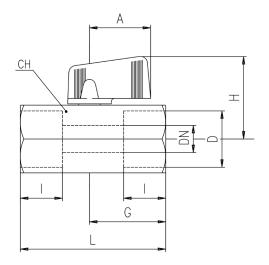
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Zinc plated screw	1	CB4FF (EN10263-2)
8	O-Ring	1	FPM
9	Black handle	1	Nylon glass filled 30%



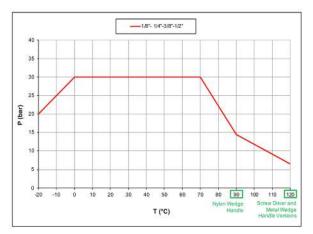
PNEUMATIC

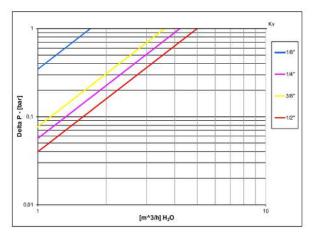
Code	S35AX0	S35BX0	S35CX0	S35DX0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (inch)	0.236	0.314	0.314	0.393
l (inch)	0.354	0.472	0.472	0.610
L (inch)	1.712	1.712	1.712	2.106
G (inch)	0.905	0.905	0.905	1.102
A (inch)	0.885	0.885	0.885	0.885
H (inch)	1.220	1.220	1.220	1.299
CH (inch)	0.826	0.826	0.826	0.984
Cv (GPM)	2.0	4.9	4.2	5.8



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART









s.35 BSPT high pressure

Female/Female 1/8" - 1/2" ISO 7/1, BS21 mini ball valve







QUALITY

• Dual sealing system allows valve to be operated in either direction making instaallation easier

- $\cdot\,$ No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Handle/ stem clearly shows ball position

BODY

- One piece drawn sand blasted brass body with extremely compact design
- Finest brass according to EN 12164 specification
- Patent n. 7011-B/89

STEM

- Blowout-proof brass stem with FPM O-ring
- · Maintenance-free thanks to FPM O-ring at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• ISO 7/1 BSPT taper threads

HANDLE

- $\cdot\;$ Reinforced nylon black wedge handle removable with valve in service
- $\cdot\;$ WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)
- +120°C (+250°F) screw driver version and metal wedge handle
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Aluminum body
- Dezincification resistant brass CW602N

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

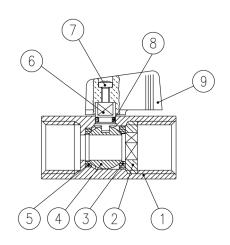
- Male by female threads
- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- Metal wedge handle available in colours red, black, yellow, green, light blue, chrome plated
- + Grey wedge handle in Grivory $\ensuremath{\mathbb{R}}$ -high performing polymer
- Additional connection options on demand



s.35 BSPT XCES35B - 5466

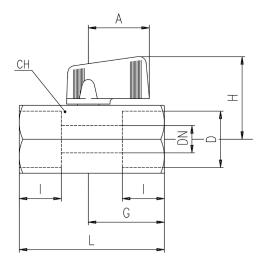
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Zinc plated screw	1	C10C (EN10263-2)
8	O-Ring	1	FPM
9	Black handle	1	Nylon glass filled 30%



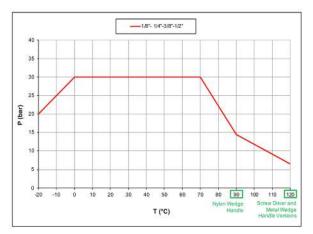
PNEUMATIC

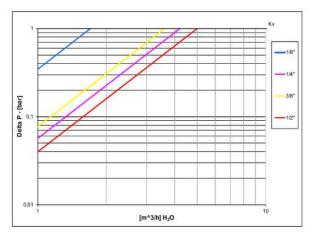
Code	S35AW0	S35BW0	S35CW0	S35DW0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (mm)	6	8	8	10
l (mm)	11	12	12	15.5
L (mm)	43.5	43.5	43.5	53.5
G (mm)	23	23	23	28
A (mm)	22.5	22.5	22.5	22.5
H (mm)	31	31	31	33
CH (mm)	21	21	21	25
Kv (m³/h)	1.7	4.2	3.6	5



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART







s.35 BSPT M/F high pressure

1/8" - 1/2" mini ball valve ISO 7/1, BS21





• Dual sealing system allows valve to be operated in either direction making installation easier

- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Handle/ stem clearly shows ball position

BODY

- One piece drawn sand blasted brass body with extremely compact design
- Finest brass according to EN 12164 specification
- Patent n. 7011-B/89

STEM

· Blowout-proof brass stem with FPM O-ring

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• ISO7/1, BS 21 taper female by female threads

HANDLE

- Reinforced nylon black wedge handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)
- +120°C (+250°F) screw driver version and metal wedge handle
- WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Aluminum body
- Dezincification resistant brass CW602N

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.



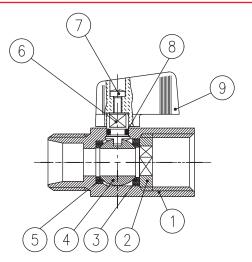
- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- Metal wedge handle available in colours red, black, yellow, green, light blue, chrome plated
- Grey wedge handle in Grivory® -high performing polymer



s.35 MF BSPT XCES35MB - 5466

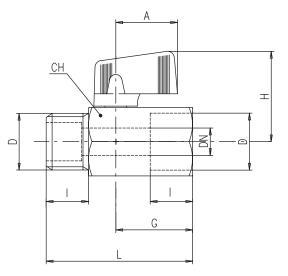
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Zinc plated screw	1	C10C (EN10263-2)
8	O-Ring	1	FPM
9	Black handle	1	Nylon glass filled 30%



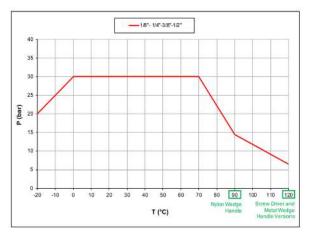
PNEUMATIC

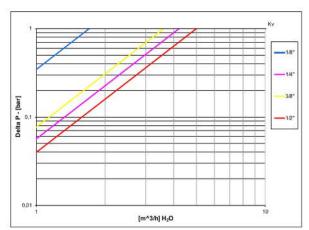
Code	S35AJ0	S35BJ0	S35CJ0	S35DJ0
D (inch)	1/8″	1/4″	3/8″	1/2″
DN (mm)	5	8	8	10
l (mm)	11	12	12	15.5
L (mm)	43.5	43.5	43.5	53.5
G (mm)	23	23	23	28
A (mm)	22.5	22.5	22.5	22.5
H (mm)	31	31	31	33
CH (mm)	21	21	21	25
Kv (m³/h)	1.7	4.2	3.6	5



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART











Female/Female 1/8" - 1/4" ISO 228, high pressure ball valve







QUALITY

• Dual sealing system allows valve to be operated in either direction making installation easier

- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- + Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- $\cdot \,$ Handle stops on body to avoid stresses at stem
- Handle / stem clearly shows ball position

BODY

- Hot forged sand blasted brass body
- Finest brass according to EN 12165 specification

STEM

- Blowout-proof brass stem
- Maintenance-free, double FPM O-ring at the stem for maximum safety

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

THREADS

· ISO 228 parallel female by female threads

HANDLE

- Reinforced nylon black wedge handle
- WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 60 bar (900 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)
- +120°C (+250°F) metal wedge handle (mini configuration only)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- ISO 7/1 BSPT taper threads
- · Other brass alloys or aluminum
- Additional connection options

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.



- Male by female threads
- · Nylon wedge handle yellow, red or blue

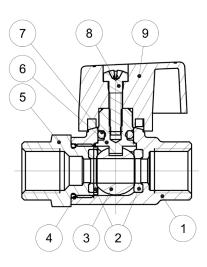


s.39 XCES39 - 5466

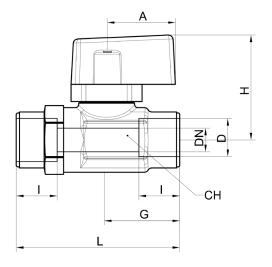
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	O-Ring	1	HNBR
5	Nickel plated end cap (external nickel pla- ted, unplated inside)	1	CW617N
6	Unplated stem	1	CW617N
7	O-Ring	1	FPM
8	Zinc plated screw	1	C10C (EN10263-2)
9	Black handle	1	Nylon glass filled 30%

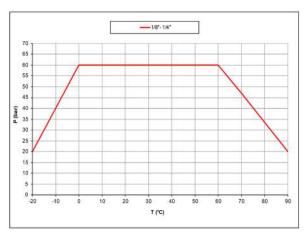


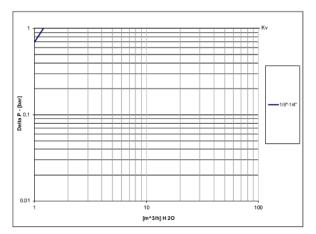
Code	S39AF0M	S39BF0M
D (inch)	1/8″	1/4″
DN (mm)	5.3	5.3
l (mm)	9.5	11
L (mm)	38	43
G (mm)	17	20
A (mm)	16	16
H (mm)	24.4	24.7
CH (mm)	15	15
Kv (m³/h)	1.2	1.2



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART









s.39 NPT forged, micro

Female/Female 1/8" - 1/4" high pressure ball valve





QUALITY

• Dual sealing system allows valve to be operated in either direction making installation easier

- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- + Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- $\cdot \,$ Handle stops on body to avoid stresses at stem
- Handle / stem clearly shows ball position

BODY

- Hot forged sand blasted brass body
- Finest brass according to EN 12165 specification

STEM

- Blowout-proof brass stem
- Maintenance-free, double FPM O-ring at the stem for maximum safety

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 threads I ISO 228 parallel female by female threads

HANDLE

- Reinforced nylon black wedge handle
- $\cdot\;$ WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

OPTIONS

- Male by female threads
- Nylon wedge handle yellow, red or blue

WORKING PRESSURE & TEMPERATURE

- 900 PSI (60 bar) non-shock cold working pressure
- -4°F to +200°F (-20°C to +90°C)
- · +250°F (+120°C) metal wedge handle (mini configuration only)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- ISO 7/1 BSPT taper threads
- Other brass alloys or aluminum
- Additional connection options

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

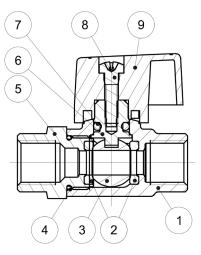


s.39 NPT XCES39N - 5466

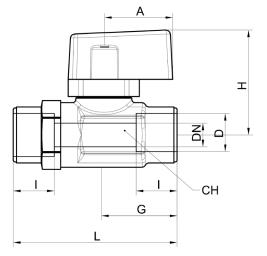
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	O-Ring	1	HNBR
5	Nickel plated end cap (external nickel pla- ted, unplated inside)	1	CW617N
6	Unplated stem	1	CW617N
7	O-Ring	1	FPM
8	Zinc plated screw	1	C10C (EN10263-2)
9	Black handle	1	Nylon glass filled 30%

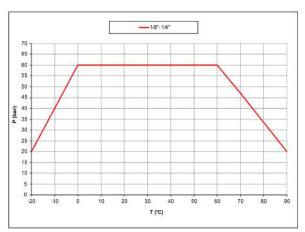


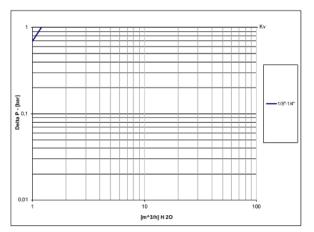
Code	S39AX0M	S39BX0M
D (inch)	1/8″	1/4″
DN (inch)	0.209	0.209
l (inch)	0.374	0.472
L (inch)	1.496	1.732
G (inch)	0.669	0.787
A (inch)	0.630	0.630
H (inch)	0.965	0.965
CH (inch)	0.591	0.591
Cv (GPM)	1.4	1.4



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART







s.39 BSPT forged, micro

Female/Female 1/8" - 1/4" ISO 7/1, BS21, high pressure ball valve







QUALITY

• Dual sealing system allows valve to be operated in either direction making installation easier

- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- + Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- $\cdot \,$ Handle stops on body to avoid stresses at stem
- + Handle / stem clearly shows ball position

BODY

- Hot forged sand blasted brass body
- Finest brass according to EN 12165 specification

STEM

- Blowout-proof brass stem
- Maintenance-free, double FPM O-ring at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• ISO 7/1 BSPT taper threads

HANDLE

- Reinforced nylon black wedge handle
- WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 60 bar (900 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)
- +120°C (+250°F) metal wedge handle (mini configuration only)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Other brass alloys or aluminum
- Additional connection options

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Male by female threads
- Nylon wedge handle yellow, red or blue

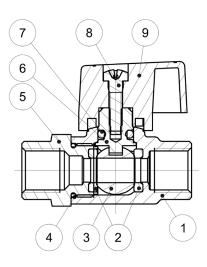


s.39 BSPT XCES39B - 5466

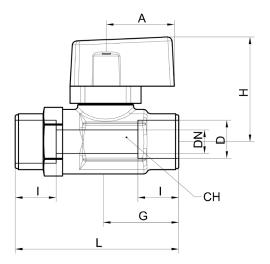
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	O-Ring	1	HNBR
5	Nickel plated end cap (external nickel pla- ted, unplated inside)	1	CW617N
6	Unplated stem	1	CW617N
7	O-Ring	1	FPM
8	Zinc plated screw	1	C10C (EN10263-2)
9	Black handle	1	Nylon glass filled 30%

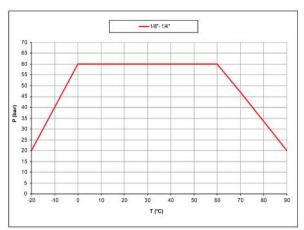


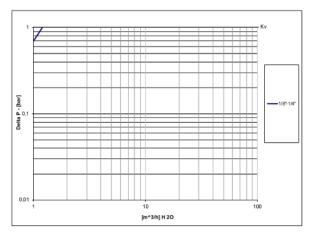
Code	S39AW0M	S39BW0M
D (inch)	1/8″	1/4″
DN (mm)	5.3	5.3
l (mm)	9.5	12
L (mm)	38	44
G (mm)	17	20
A (mm)	16	16
H (mm)	24.4	24.4
CH (mm)	15	15
Kv (m³/h)	1.2	1.2



DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART









Female/Female 1/4" - 2" EN 10226-1, with patented locking handle

Featuring patented tamper-proof lockable handle that has no equal in the market. *RuB* s.93 range exhausts automatically and continuously downstream air pressure as soon as turned in the closed position.

Valve is lockable in the closed position only, according to Part. 1910.147 safety OSHA (USA) requirements allowing safe maintenance of the air-supplied equipment; when valve is open, one simple 90° turn of the handle shuts flow immediately.

We care for those you care for.

QUALITY

- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent threads sealant
- The valve body includes a tapped downstream depressurization venting outlet to direct exhaust air or assemble mufflers for noise control
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Molybdenum filled PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel lockable handle patent n. 7074-B/90 with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

OPTIONS

- Stainless steel handle (1.4016 / AISI 430)
- Non-locking Geomet® carbon steel lever handle
- Safety pin
- Muffler, hose





WORKING PRESSURE & TEMPERATURE

- 14 bar (200 PSI) non-shock cold working pressure
- -10°C to +100°C (+15°F to +210°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

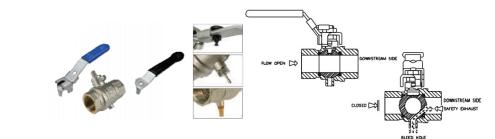
- Stainless steel ball (1.4401 / AISI 316)
- Custom design
- T-handle

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm

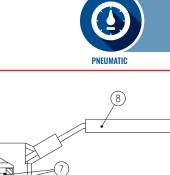
APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)
- OSHA Compliant (United States)

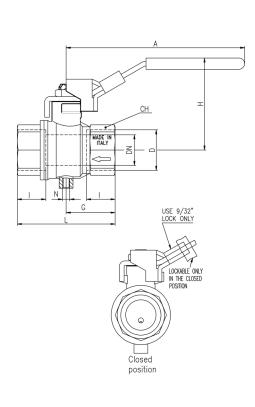


s.93 XCES93 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



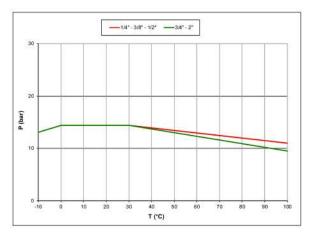
	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE molybdenum filled
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-Ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Light blue PVC coated Geomet® steel lockable handle	1	DD11 (EN10111)



Code S93B00 S93C00 S93D00 S93E00 S93F00 S93G00 S93H00 S93I00 1/4" 3/8" 3/4" 1" 1 1⁄4" 2" D (inch) 1/2" 1 1/2" 8 10 15 20 25 32 40 50 DN (mm) 15.5 17 23 26.5 12 12 21 23 l (mm) 93 45 45 59 81 102 L (mm) 64 121 40.5 46.5 51 G (mm) 22.5 22.5 29.5 32 60.5 A (mm) 96 96 117 117 156.5 156.5 156.5 96 77 H (mm) 46 46 51 59 63 83 90 CH (mm) 17 20 25 31 40 49 54 68.5 Ν M5 G 1/4" Kv (m3/h) 3.9 8.2 28 42 70 110 186 256

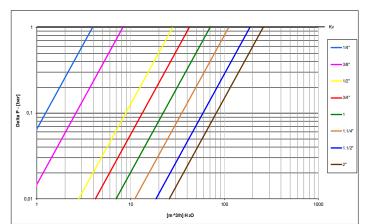
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART

(5)





s.93 NPT downstream exhaust

Female/Female 1/4" - 2" with patented locking handle

Featuring patented tamper-proof lockable handle that has no equal in the market. *RuB* s.93 range exhausts automatically and continuously downstream air pressure as soon as turned in the closed position.

Valve is lockable in the closed position only, according to Part. 1910.147 safety OSHA (USA) requirements allowing safe maintenance of the air-supplied equipment; when valve is open, one simple 90° turn of the handle shuts flow immediately.

We care for those you care for.

QUALITY

- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent threads sealant
- The valve body includes a tapped downstream depressurization venting outlet to direct exhaust air or assemble mufflers for noise control
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Molybdenum filled PTFE self-lubricating seats with flexible-lip design

THREADS

NPT taper ANSI B.1.20.1 threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel lockable handle patent n. 7074-B/90 with thick PVC dip coating. Handle coating offers both thermal and electrical protection

Handle removable with valve in service

OPTIONS

- Stainless steel handle (1.4016 / AISI 430)
- Non-locking Geomet® carbon steel lever handle
- Safety pin
- Muffler, hose

WORKING PRESSURE & TEMPERATURE

- 200 PSI (14 bar) non-shock cold working pressure
- +15°F to +210°F (-10°C to +100°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

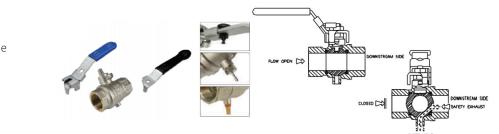
- Stainless steel ball (1.4401 / AISI 316)
- Custom design
- T-handle

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- OSHA Compliant (United States)

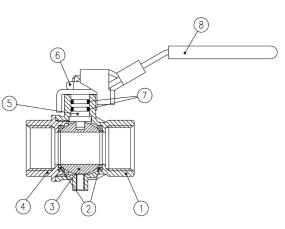




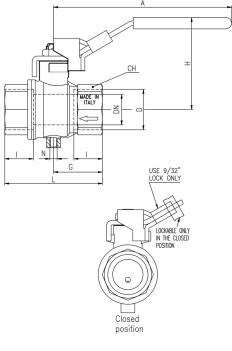
s.93 NPT XCES93N - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



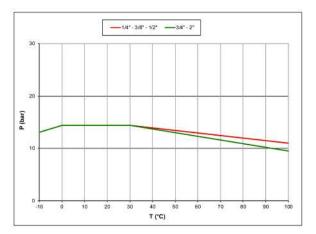


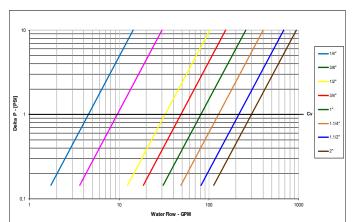
Code	S93B41	S93C41	S93D41	S93E41	S93F41	S93G41	S93H41	S93I41
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.315	0.374	0.591	0.787	0.945	1.181	1.496	1.890
l (inch)	0.472	0.472	0.610	0.669	0.827	0.906	0.906	1.043
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764
G (inch)	0.886	0.886	1.161	1.259	1.594	1.831	2.008	2.382
A (inch)	3.779	3.779	3.759	4.606	4.606	6.161	6.161	6.161
H (inch)	1.823	1.823	1.998	2.333	2.490	3.018	3.254	3.530
CH (inch)	0.669	0.787	0.984	1.220	1.575	1.929	2.126	2.697
N		10-32 UNF					1/4" NPT	
CV (GPM)	4.5	9.5	32.3	48.5	80.9	127.1	214.9	295.8



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART







s.93 BSPT downstream exhaust

Female/Female 1/2" - 2" ISO 7/1, BS21, with patented locking handle

Featuring patented tamper-proof lockable handle that has no equal in the market. *RuB* s.93 range exhausts automatically and continuously downstream air pressure as soon as turned in the closed position.

Valve is lockable in the closed position only, according to Part. 1910.147 safety OSHA (USA) requirements allowing safe maintenance of the air-supplied equipment; when valve is open, one simple 90° turn of the handle shuts flow immediately.

We care for those you care for.

QUALITY

- No metal-to-metal moving parts
- No maintenance ever required
- · Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- · Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent threads sealant
- The valve body includes a tapped downstream depressurization venting outlet to direct exhaust air or assemble mufflers for noise control
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Molybdenum filled PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 7/1 BSPT taper threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel lockable handle patent n. 7074-B/90 with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

OPTIONS

- Stainless steel handle (1.4016 / AISI 430)
- Non-locking Geomet® carbon steel lever handle
- Safety pin
- Muffler, hose

WORKING PRESSURE & TEMPERATURE

- 14 bar (200 PSI) non-shock cold working pressure
- -10°C to +100°C (+15°F to +210°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Custom design
- T-handle

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- OSHA Compliant (United States)

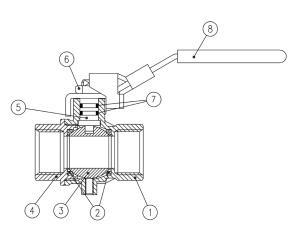




s.93 BSPT XCES93B - 5466

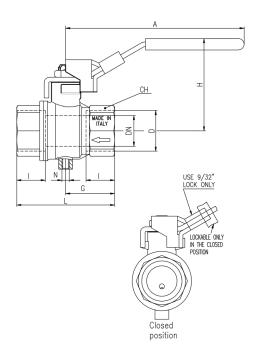
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE molybdenum filled
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-Ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Light blue PVC coated Geomet® steel locka- ble handle	1	DD11 (EN10111)



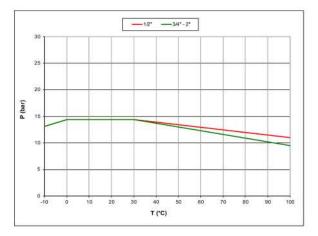
PNEUMATIC

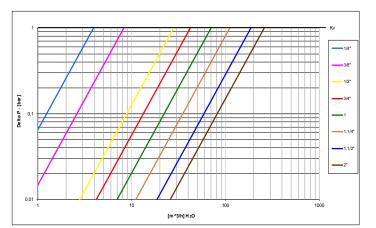
Code	S93D50	S93E50	S93F50	S93G50	S93H50	S93I50
D (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	15	20	25	32	40	50
l (mm)	15.5	17	21	23	23	26.5
L (mm)	59	64	81	93	102	121
G (mm)	29.5	32	40.5	46.5	51	60.5
A (mm)	96	117	117	156.5	156.5	156.5
H (mm)	51	59	63	77	83	90
CH (mm)	25	31	40	49	54	68.5
N		M5			G 1/4"	
Kv (m3/h)	28	42	70	110	186	256



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART







Our valves are chosen to ensure gas metering plants, boilers and burners, HVAC systems and water heaters have zero gas leakages. We are chosen to handle even refinery, chemical and pharmaceutical gases like methane, propane and butane. Each of our gas valves is pluri-awarded and certified because we manufacture them to perform flawlessly with any gas type, in any environment and under any local government regulation



k.84 1/4" - 2" EN 10226-1, DIN 16722 M3	Page 204
S.84 IR6 1/2" - 1" EN 10226-1	
s.84 EN331 1/4" - 4" EN 10226-1	Page 208
s.84 EN331 M/F 1/4" - 4" EN 10226-1	Page 210
s.84 BSPT 1/4" - 4"	Page 212
s.84 BSPT T-handle 1/4" - 1.1/2"	
s.92 NPT 1/4" - 4" packing gland	Page 216
s.92 NPT M/F 1/2" - 2" packing gland	Page 218
s.95 NPT 1/4" - 4"	Page 220
s.95 NPT T-handle 1/4" - 4"	Page 222
s.95 NPT nickel plated 1/4" - 4"	Page 224
s.128A 3/4" Y-strainer	Page 226
s.195 NPT 3/8" - 1" standard port gas cock	Page 228
s.195 & flare flare 37° by solder end $1/2'' - 3/4''$, standard port	Page 230

s.195 & flare flare 37° by solder end 1/2" – 3/4", standard port





k.60

Female/Female 1/4" - 2" EN 10226-1, heavy duty DIN 16722 M3

HIGH TEMPERATURE RESISTANCE

Now approved for **HTB** use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

• Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant

• Valve length according to DIN 16722 M3 for sizes from 3/8" to 2" (DN10 to DN50). Size 1/4" (DN 8) complies to DIN 3202 M3.

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

• Blowout-proof nickel plated brass stem

• Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

+ 100% full port for maximum flow

OPTIONS

- Stem extension
- Oval lockable handle
- **RuB** memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle 4
- T-handle 5
- Patented locking device



HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 65 bar (940 PSI) up to 1"; 40 bar (600 PSI) over 1" non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- For use with dangerous fluids temperature rating is -20°C to +60°C
- (-4°F to +140°F) and pressure rating is 5 bar (72 PSI) / HTB Class B 0,1

• **WARNING**: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

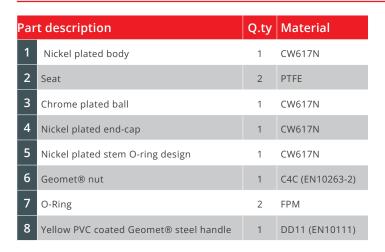
APPROVED BY OR IN COMPLIANCE WITH

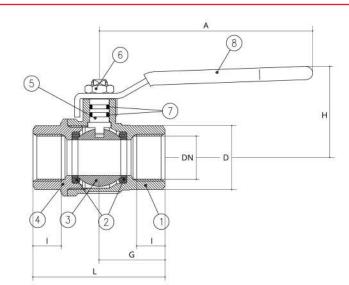
- SVGW (Switzerland)
- GOST-R (Russia)
- RoHS Compliant (EU)
- DVGW (Germany) MOP 5 B 0,1
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)



K.60 XCEK60 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



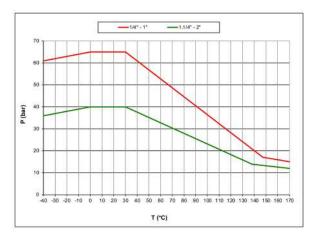


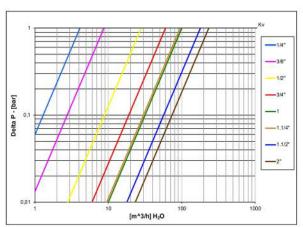
1 ¼"-2" hollow ball

							to CE 2014/68, t category III N	
Code	S60B05	S60C05	S60D05	S60E05	S60F05	S60G05	S60H05	S60105
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	14	14	16.5	19	22	25	26	29
L (mm)	50	60	75	80	90	110	120	140
G (mm)	25,5	25,5	30,5	37	45,5	52	59	67,5
A (mm)	82	82	100	120	120	158	158	158
H (mm)	40	40	43	51	55,5	75	81	88
CH (mm)	22	22	27	32	41	50	55	70
PN (bar)	65	65	65	65	65	40	40	40
Kv (m3/h)	4,1	8,7	28	60	100	95	179	233

Ball valves are marked CE on handle from 1 ¼" to 2" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART











s.80 NPT

Female/Female 3/4" - 2" gas cock with tamper, proof lockwing





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Cover clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {s}}$ or equivalent thread sealant
- Special design to combine newest technologies in valve and traditional gascock requirements
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof unplated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

Hot forged brass tamper proof lockwing

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F/ +350°F (-40°C / +170°C)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

Painted gray

APPROVED BY OR IN COMPLIANCE WITH

- Underwriters Laboratories (United States, Canada)
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- GOST-R (Russia)
- · Canadian standards Association (United States, Canada)
- RoHS Compliant (EU)
- Kuwait Fire Service Directorate (Kuwait)

NOTE: approvals apply to specific configurations/sizes only.



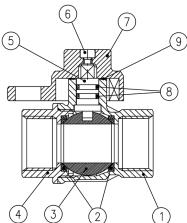
• Male by female NPT threads



s.80 NPT XCES80 - 5466

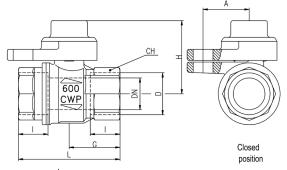
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

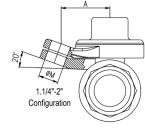
	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Unplated stem O-ring design	1	CW617N
6	Stainless steel screw	1	1.4301 / AISI304
7	Unplated lockwing	1	CW617N
8	O-Ring	2	FPM
9	Washer (from 3/4" to 2")	1	PTFE glass filled 25%



1 ¼"-2" hollow ball

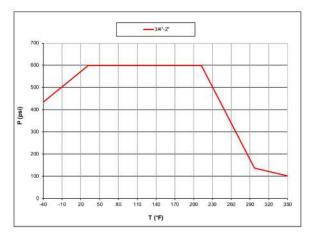
Code	S80E41	S80F41	S80G41	S80H41	S80I41
D (inch)	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.748	0.945	1.181	1.496	1.890
l (inch)	0.669	0.827	0.906	0.906	1.043
L (inch)	2.520	3.189	3.661	4.016	4.764
G (inch)	1.260	1.594	1.831	2.008	2.382
A (inch)	1.142	1.142	1.209	1.209	1.209
H (inch)	1.831	1.988	2.559	2.795	3.071
M (inch)	0.492	0.492	0.472	0.472	0.472
N (inch)	0.449	0.449	0.563	0.563	0.563
CH (inch)	1.220	1.575	1.929	2.126	2.697
Cv (GPM)	48.5	80.9	92.4	144.4	206.8

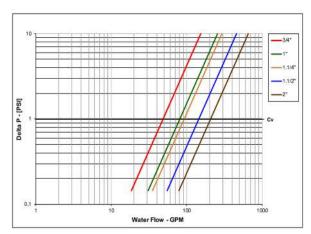


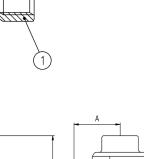


DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART











s.80 NPT surepass

3/4" - 1" 175 PSI bypassing gas meter valve





One quick turn switches valve from normal metered flow to bypass mode for rapid on-line servicing of meter or regulator.

QUALITY

- No metal-to-metal moving parts
- No maintenance or lubrication ever required
- Every valve production tested twice for internal or external leakage
- Meets all applicable parts to DoT 192
- Customer service never interrupted
- Chrome plated brass ball
- Gas theft discouraged by plastic security plug in bypass port and port inacessible when barrel lock in use

BODY

• Rust-proof forged brass body, ball, stem and lockwing

STEM

• Maintenance-free, double FPM O-rings at the stem for maximum safety, eliminate gas emissions

SEALING

Pure PTFE seats with flexible-lip design

THREADS

• NPT taper ANSI B1.20.1 female by dielectric union female threads

FLOW

- Full port to DIN 3357 for maximum flow
- Full 100 SCFH gas flow during bypassing

HANDLE

- Tamper proof lockwing
- $\cdot \,$ Single lever operation for positive switch from metering to bypassing

OPTIONS

- Painted gray
- By-pass hose assembly
- Dielectric union end long or short pattern

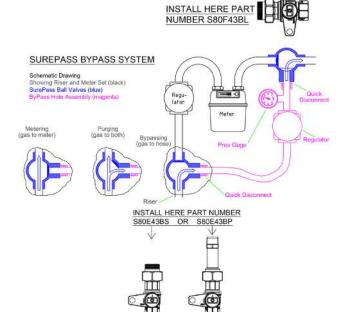


- 175 PSI non-shock cold working pressure
- -40°F/ +350°F
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.





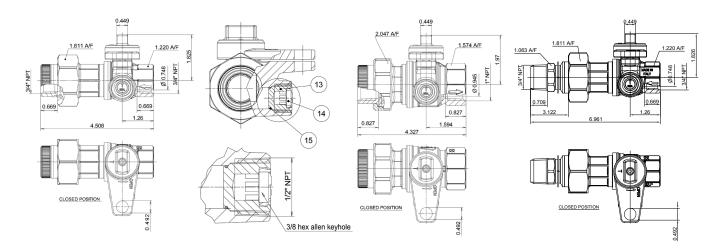
Tamper proof seal

s.80 NPT SUREPASS XCES80SP - 5466

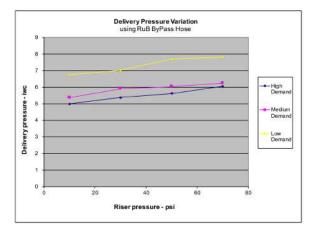
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

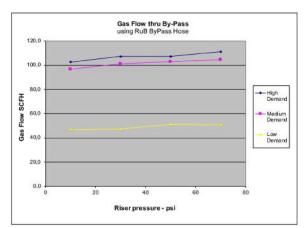


	Part description	Q.ty	Material
1	Sand blasted body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Sand blasted end-cap	1	CW617N
5	Nut	1	CW617N
6	NPT female tail piece	1	CW617N
7	O-Ring	1	FPM
8	Stem O-Ring design	1	CW617N
9	O-Ring	2	FPM
10	Washer	1	PTFE glass filled 25%
11	Sand blasted lockwing	1	CW617N
12	Stainless steel screw	1	1.4301 / AISI304
13	Plug	1	CW617N
14	Security plug	1	Polystyrene
15	O-Ring	1	FPM
16	Insulation (for 3/4")	1	Polyamide



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.







s.8042 NPT

MxF 3/4" - 2" with tamper proof lockwing







QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Cover clearly shows ball position
- · Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Special design to combine newest technologies in valve and traditional gascock requirements
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel unplated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS

• Female by female NPT threads

HANDLE

· Hot forged brass tamper proof lockwing

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F to +350°F (-40°C / +170°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

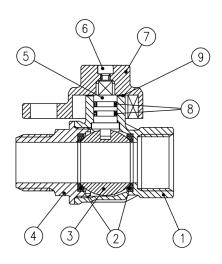
APPROVED BY OR IN COMPLIANCE WITH

- Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- RoHS Compliant (EU)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F

s.8042 NPT XCES8042 - 5466

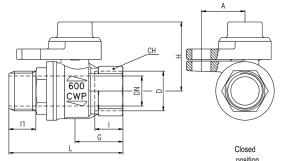
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

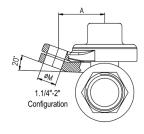
	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT male end-cap	1	CW617N
5	Unplated stem O-ring design	1	CW617N
6	Stainless steel screw	1	1.4301 / AISI 304
7	Unplated lockwing	1	CW617N
8	O-Ring	2	FPM
9	Washer (from 3/4" to 2")	1	PTFE glass filled 25%

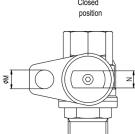


1 ¼"-2" hollow ball

Code	S80E42	S80F42	S80G42	S80H42	S80I42
D (inch)	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.748	0.945	1.181	1.496	1.890
l (inch)	0.669	0.827	0.906	0.906	1.043
l1 (inch)	0.709	0.866	0.945	0.945	1.083
L (inch)	2.992	3.642	4.173	4.449	5.236
G (inch)	1.260	1.594	1.831	2.008	2.382
A (inch)	1.142	1.142	1.209	1.209	1.209
H (inch)	1.831	1.988	2.559	2.795	3.071
M (inch)	0.492	0.492	0.472	0.472	0.472
N (inch)	0.449	0.449	0.563	0.563	0.563
CH (inch)	1.220	1.575	1.929	2.126	2.697
Cv (GPM)	48.5	80.9	92.4	144.4	206.8

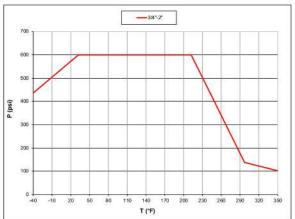


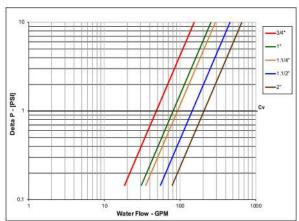




DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









3/4" - 1 ¼" with tamper proof lockwing





QUALITY

- 24h 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Cover clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {s}}$ or equivalent thread sealant

• Special design to combine newest technologies in valve and traditional gascock requirements

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof unplated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by dielectric union female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

Hot forged brass tamper proof lockwing

OPTIONS

- Painted gray
- · Dielectric union end long or short pattern

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F to +350°F (-40°C / +170°C)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

• See s.80

APPROVED BY OR IN COMPLIANCE WITH

- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve

- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases

- GOST-R (Russia)
- RoHS Compliant (EU)
- Canadian standards Association (United States, Cananda)

s.8043 NPT XCES8043 - 5466

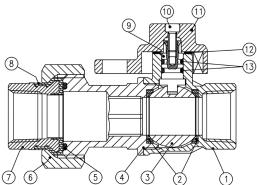
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated spacer	1	CW617N
5	Tail piece O-Ring	1	FPM
6	Unplated nut	1	CW617N
7	Dielectric tail piece	1	CW617N
8	Insulation	1	Polyamide
9	Unplated stem O-ring design	1	CW617N
10	Stainless steel screw	1	1.4301 / AISI 304
11	Unplated lockwing	1	CW617N
12	Washer	1	PTFE glass filed 25%
13	Stem O-ring	2	FPM

Code	S80E43	S80F43	S80G43
D (inch)	3/4"	1″	1 1⁄4″
DN (inch)	0.748	0.945	1.181
l (inch)	0.669	0.827	0.906
L (inch)	4.508	5.157	5.236
G (inch)	1.260	1.594	1.831
A (inch)	1.141	1.141	1.209
H (inch)	1.831	1.988	2.559
M (inch)	0.492	0.492	0.472
N (inch)	0.449	0.449	0.563
CH (inch)	1.220	1.575	1.929
CH1 (inch)	1.220	1.575	1.929
CH2 (inch)	1.811	2.402	2.441
Cv (GPM)	48.5	80.9	92.4

1 ¼" hollow ball



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART

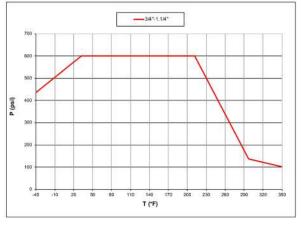
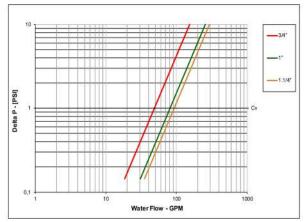


Chart applies to valve

Open position





S.82 NPT Female/Female 1/2" - 2" side drain







QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- · Side drain allows easy and safe downstream line venting
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- · Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

- NPT taper ANSI B.1.20.1 female by female threads
- 1/4" NPT side tap

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

Geomet® carbon steel handle with thick PVC dip coating. Handle coa-

- ting offers both thermal and electrical protection
- Handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) non-shock cold working pressure
- · 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F/+350°F (-40°C / +170°C)
- · WARNING: freezing of the fluid in the installation may severely dama-
- ge the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- Dual side drain port

APPROVED BY OR IN COMPLIANCE WITH

- · Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- RoHS Compliant (EU)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stem extension
- Oval lockable handle 1
- *RuB* memory stop designed to be installed with our stubby handle ²
- Stainless steel handle (1.4016 / AISI 430) 3

• Stubby handle 4

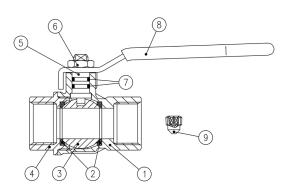
- T-handle 5
- Patented locking device



s.82 NPT XCES82 - 5466

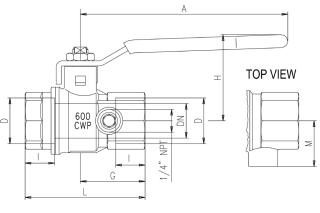
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)
9	Unplated plug	1	CW617N



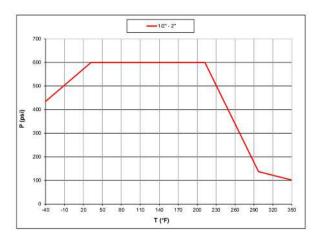
1 ¼"-2" hollow ball

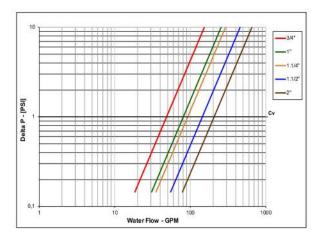
Code	S82D41	S82E41	S82F41	S82G41	S82H41	S82I41	
D (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	
DN (inch)	0.591	0.748	0.945	1.181	1.496	1.890	
l (inch)	0.610	0.669	0.827	0.906	0.906	1.043	
L (inch)	2.559	2.736	3.406	3.878	4.232	4.961	6
G (inch)	1.398	1.476	1.811	2.047	2.224	2.579	
A (inch)	3.937	4.724	4.724	6.220	6.220	6.220	
H (inch)	1.679	1.956	2.114	2.858	3.094	3.370	
M (inch)	0.964	1.063	1.200	1.338	1.516	1.752	
CH (inch)	0.984	1.220	1.575	1.929	2.126	2.697	
Cv (GPM)	32.3	48.5	80.9	92.4	144.4	206.8	



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









k.84 Female/Female 1/4" - 2"

1/4" - 2" En 10226-1, din 16722 M3

HIGH TEMPERATURE RESISTANCE

Now approved for HTB use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Valve length according to DIN 16722 M3 for sizes from 3/8" to 2" (DN10 to DN50). Size 1/4" (DN 8) complies to DIN 3202 M3.
- Finest brass according to EN 12165 and EN 12164 specifications
- Hot forged sand blasted external nickel plated brass body and cap sealed with Loctite® or equivalent threads sealant

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 7/1, ISO 228 parallel female by female threads

PED DIRECTIVE

- Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

<image><image><image><image><image><image><image>

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coa-
- ting offers both thermal and electrical protection
- WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- For use with dangerous fluids temperature rating is
- 20°C to +60°C (-4°F to +140°F) and pressure rating is 5 bar (72 PSI) /
- HTB Class B 0,1

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

APPROVED BY OR IN COMPLIANCE WITH

- BSI Group (United Kingdom)
- SVGW (Switzerland)
- RoHS Compliant (EU)
- DIN-DVGW (Germany) MOP 5 B 0,1
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stem extension
- Oval lockable handle 1
- **RuB** memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle 4
- T-handle 5
- Patented locking device

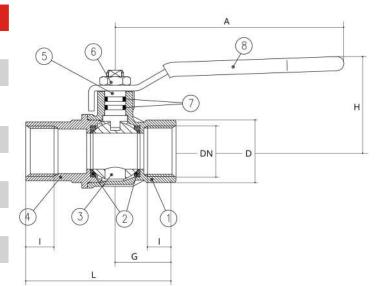


K.84 XCEK84 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Ball seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)



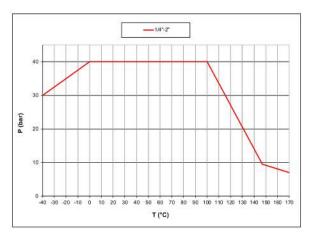
1 1/4"-2" hollow ball

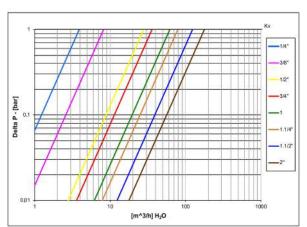
							to CE 2014/68. t category III N	
Code	S84B05	S84C05	S84D05	S84E05	S84F05	S84G05	S84H05	S84I05
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	12	12	15.5	17	21	23	23	26.5
L (mm)	50	60	75	80	90	110	120	140
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	40	49	54	68.5
Kv (m3/h)	3.9	8.2	28	36	62	79	124	178

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 $\frac{1}{4}$ " to 2" as follow:

CE 0425 cat IIIB+D PS: 5 GAS TS1:-20°C TS2:+60°C

PRESSURE-TEMPERATURE CHART







s.84 IR6





HIGH TEMPERATURE RESISTANCE

Now approved for HTB use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance- free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

OPTIONS

- Stem extension
- Geomet[®] carbon steel handle with PVC dip coating
- · Stainless steel handle (1.4016 / AISI 430)
- Taper male by union end
- Oval lockable handle
- Patented locking device
- Stubby handle
- · RuB memory stop designed to be installed with our stubby handle





PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Aluminum T-handle, painted yellow.
- · WARNING: do not exceed reasonable temperature and/or electrical load
- T-handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar / ${\rm HTB}$ Class B 0,1

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- DIN-DVGW (Germany) MOP 5 B 0,1*
- ARGB-KVBG (Belgium) MOP 5 bar for outside building gas installation*

NOTE: approvals apply to specific configurations/sizes only.

* = valve only is approved to EN331 / EN1775.



s.84 IR6 XCES84IR6 - 5466

Code

D (inch)

DN (mm)

l (mm)

L (mm)

G (mm)

H (mm)

Kv (m3/h)

S84D1R6

1/2"

15

15.5

84.2

55

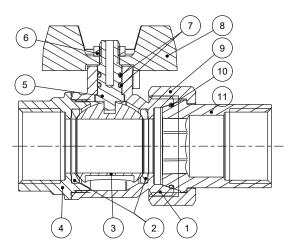
43

28

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

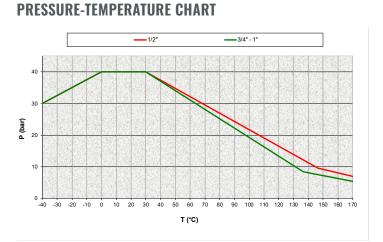


	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow T-handle	1	EN AC-46100 (EN1676)
9	Nickel plated union nut	1	CW617N
10	O-Ring	1	FPM
11	Nickel plated union end	1	CW617N

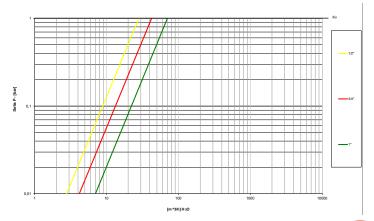


S84E1R6	S84F1R6
3/4"	1"
20	25
17	21
95.5	112
63.5	71.7
49.5	53.5
42	62

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.



PRESSURE DROP CHART



н

Rp 1" EN10226

I



s.84 EN331

Female/Female 1/4" - 4" EN 10226-1

HIGH TEMPERATURE RESISTANCE

Now approved for HTB use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm o}$ requivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS UP TO 2" SIZE

- Oval lockable handle up to 2", round over 2" 1
- *RuB* memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle
- T-handle 5
- Stem extension
- Patented locking device for valves up to 4"



PED DIRECTIVE

 Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- · WARNING: do not exceed reasonable temperature and/or electrical load
- · Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure

- -40°C to +170°C (-40°F to +350°F)
- + For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar / $\rm HTB$ Class B 0,1
- AS4617 Limitation for GAS: 2100 Kpa up to 2" and 1500 Kpa from
- 2 ½" to 4" rated working pressure and 0°C / +60°C temperature
- · WARNING: freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- The Australian Gas Association (Australia)
- SVGW (Switzerland)
- Factory Mutual (United States)
- BSI Group (United Kingdom)
- RoHS Compliant (EU)
- GOST-R (Russia)
- DIN-DVGW (Germany) MOP 5 B 0,1
- · EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- ARGB-KVBG (Belgium) MOP 5 bar for outside building gas installation, MOP 100 mbar for inside the buildings

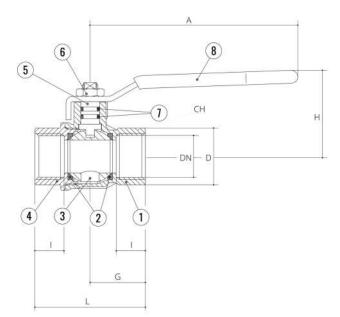


s.84EN331 XCES84E - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside up to 2")	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside up to 2")	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

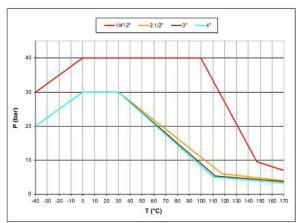


1 ¼" - 2" hollow ball

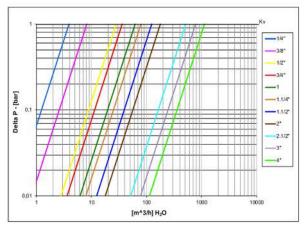
						Compliant to CE 2014/68/UE product Equipment category III Mod					lodule B+D
Code	S84B00	S84C00	S84D00	S84E00	S84F00	S84G00	S84H00	S84100	S84L00	S84M00	S84N00
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2	2"	2 1⁄2"	3"	4"
DN (mm)	8	10	15	20	25	32	40	50	65	80	100
l (mm)	12	12	15.5	17	21	23	23	26.5	32	35	41.5
L (mm)	45	45	59	64	81	93	102	121	156	177	216
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5	78	88.5	108
A (mm)	82	82	100	120	120	158	158	158	255	255	255
H (mm)	38	38	43	50	54	73	79	86	132	140	154
CH (mm)	17	20	25	31	40	49	54	68.5	85	99	125
Kv (m3/h)	3.9	8.2	28	36	62	79	124	178	516	776	1130

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 ¼" to 2", on body over 2" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART



AS4617 limitations for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2 $^{1\!/}_2$ " to 4" rated working pressure and 0°C +60°C temperature





s.84 EN331 M/F

Male/Female 1/4" - 4" EN 10226-1

HIGH TEMPERATURE RESISTANCE

Now approved for HTB use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- · Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm o}$ requivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female thread by EN10226-1, ISO7/1 taper male thread

PED DIRECTIVE

 Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS UP TO 2" SIZE

- Oval lockable handle up to 2", round over 2"
- *RuB* memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle 4
- T-handle 😏
- Stem extension
- Patented locking device for valves up to 4"



HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- + For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar / $\rm HTB$ Class B 0,1
- AS4617 Limitation for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2 $^{1\!\!/}_2$ " to 4" rated working pressure and 0°C / +60°C temperature

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

APPROVED BY OR IN COMPLIANCE WITH

- The Australian Gas Association (Australia)
- SVGW (Switzerland)
- Factory Mutual (United States)
- BSI Group (United Kingdom)
- RoHS Compliant (EU)
- GOST-R (Russia)
- DIN-DVGW (Germany) MOP 5 B 0,1
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- ARGB-KVBG (Belgium) MOP 5 bar for outside building gas installation

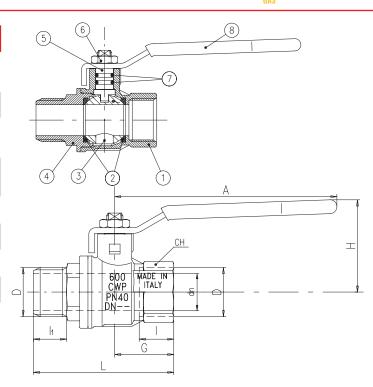


s.84 EN331 MF XCES84EM - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside up to 2")	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside up to 2")	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

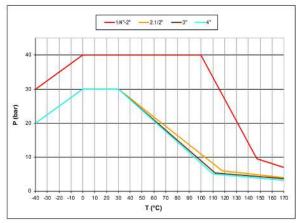
1 1/4" - 2" hollow ball



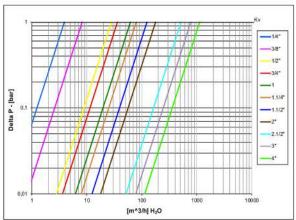
						Compliant	to CE 2014/68	8/UE product	: Equipment	category III M	lodule B+D
Code	S84B20	S84C20	S84D20	S84E20	S84F20	S84G20	S84H20	S84I20	S84L20	S84M20	S84N20
D (inch)	1/4″	3/8″	1/2″	3/4″	1″	1 1⁄4″	1 1⁄2″	2″	2 1⁄2″	3″	4"
DN (mm)	8	10	15	20	25	32	40	50	65	80	100
l (mm)	12	12	15.5	17	21	23	23	26.5	32	35	41.5
l1 (mm)	13.5	13.5	16.5	18	22	24	24	27.5	37	39.5	44
L (mm)	56.5	56.5	70	76.5	92.5	106	113	133	180.5	204.5	238
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5	78	88.5	108
A (mm)	82	82	100	120	120	158	158	158	255	255	255
H (mm)	38	38	43	50	54	73	79	86	132	140	154
CH (mm)	17	20	25	31	40	49	54	68.5	85	99	125
Kv (m3/h)	3.9	8.2	28	36	62	79	124	178	516	776	1130

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 ¼" to 2", on body over 2" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART



AS4617 limitations for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2 ${\it V_2}''$ to 4" rated working pressure and 0°C +60°C temperature





s.84 BSPT

Female/Female 1/4" - 4"





H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- $\cdot\;$ Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN10226-2, ISO 7/1, BS 21 BSPT taper female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

bsi.

({

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure

- -40°C to +170°C (-40°F to +350°F)
- + For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

 Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

APPROVED BY OR IN COMPLIANCE WITH

- The Australian Gas Association (Australia)
- Factory Mutual (United States)
- BSI Group (United Kingdom)
- RoHS Compliant (EU)
- DIN-DVGW (Germany) MOP 5 B 0,1

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS UP TO 2" SIZE

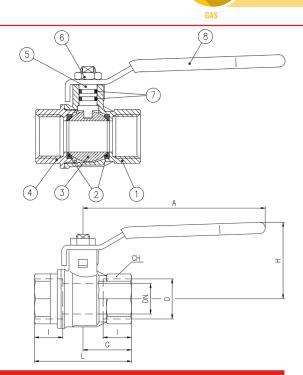
- Stem extension
- Oval lockable handle up to 2", round over 2"
- *RuB* memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Patented locking device for valves up to 4"
- Stubby handle
- T-handle 5



s.84 BSPT XCES84 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside up to 2")	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel pla- ted, unplated inside up to 2")	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

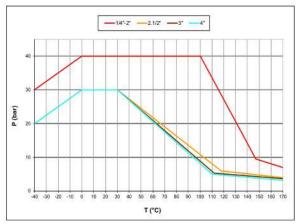


1 ¼"-2" hollow ball

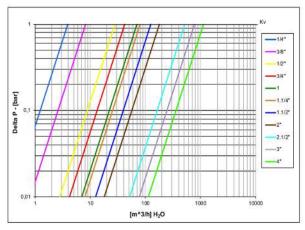
						Compliant to CE 2014/68/UE product Equipment category III Module B+D						
Code	S84B50	S84C50	S84D50	S84E50	S84F50	S84G50	S84H50	S84I50	S84L50	S84M50	S84N50	
D (inch)	1/4″	3/8″	1/2″	3/4"	1″	1 1⁄4″	1 1⁄2″	2″	2 1/2"	3″	4"	
DN (mm)	8	10	15	20	25	32	40	50	65	80	100	
l (mm)	12	12	15.5	17	21	23	23	26.5	32	35	41.5	
L (mm)	45	45	59	64	81	93	102	121	156	177	216	
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5	78	88.5	108	
A (mm)	82	82	100	120	120	158	158	158	255	255	255	
H (mm)	38	38	43	50	54	73	79	86	132	140	154	
CH (mm)	17	20	25	31	40	49	54	68.5	85	99	105	

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 ¼" to 2", on body over 2" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1:-20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART



AS4617 limitations for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2 $\frac{1}{2}$ " to 4" rated working pressure and 0°C +60°C temperature







s.84 BSPT T-handle

Female/Female 1/4" - 1 ½"



H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- T-Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN10226-2, ISO 7/1, BS 21 BSPT taper female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Aluminum T-handle up to 1", Geomet® carbon steel T-handle with thick PVC dip coating over 1"

• Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- + For use with dangerous fluids temperature rating is -20°C +60°C and
- pressure rating is 5 bar
- AS4617 Limitation for GAS: 2100 Kpa rated working pressure and 0°C / +60°C temperature

• WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

APPROVED BY OR IN COMPLIANCE WITH

- The Australian Gas Association (Australia)
- Factory Mutual (United States)
- BSI Group (United Kingdom)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stem extension
- Oval lockable handle
- **RuB** memory stop designed to be installed with our stubby handle ²
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle 4
- Geomet® carbon steel handle with thick PVC dip coating
- Patented locking device



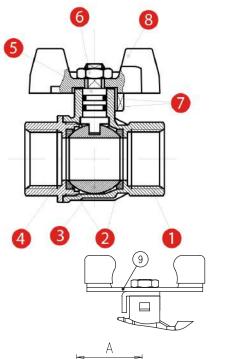


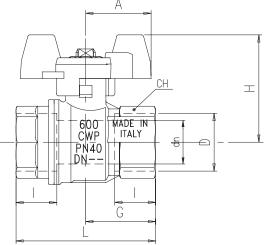
s.84 BSPT T-handle XCES84T - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (External nickel plated, unpla- ted inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end cap (External nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC T-handle	1	EN AC-46100
9	Yellow PVC coated Geomet [®] steel T-handle	1	DD11 (EN10111)



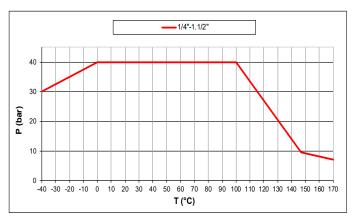


2014/68/UE product **Equipment category** III Module B+D Code S84B56 S84C56 S84D56 S84E56 S84F56 S84H56 S84G56 1″ 1/4″ 3/8″ 1/2″ 3/4″ 1 1⁄4″ 1 1⁄2″ D (inch) DN (mm) 8 10 15 20 24 32 40 l (mm) 12 12 15.5 17 21 23 23 L (mm) 45 45 59 64 81 93 102 G (mm) 22.5 22.5 29.5 32 40.5 46.5 51 25 25 25 30 30 57 57 A (mm) 39 43 49.5 84.5 90.5 H (mm) 39 53.5 40 49 CH (mm) 17 20 25 31 54

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

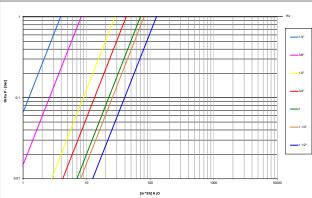
Ball valves are marked CE on body from 1 $\frac{1}{4}$ " to 1 $\frac{1}{2}$ ": CE 0425 cat IIIB+D PS: 5 GAS TS1:-20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART

Compliant to CE



AS4617 limitations for GAS: 2100 Kpa rated working pressure and 0°C +60°C temperature

215



s.92 NPT

Female/Female 1/4" - 4" packing gland



QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- + Chrome plated brass ball for longer life
- $\cdot\;$ Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm s}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Triple stem seals in sizes over 2"

SEALING

Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B. 1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet $\ensuremath{\circledast}$ carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2", (150 WSP -10 bar all sizes) non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- * 150 psig (10 bar) non-shock steam working pressure. Not suitable for throttling steam
- -40°F/+366°F (-40°C / +170°C)

WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Custom design
- Pure PTFE seals

APPROVED BY OR IN COMPLIANCE WITH

- Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- CRN-TSSA acc. to MSS SP110 (Canada)
- Kuwait Fire Service Directorate (Kuwait)
- Meeting WW-V-35C Federal U.S. Specification (United States)
- NOTE: approvals apply to speficic configurations/sizes only.

OPTIONS UP TO 2" SIZE

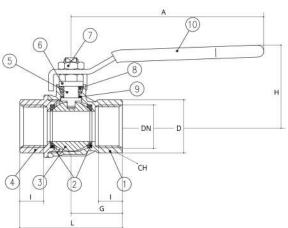
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- Stem extension
- Lead free for safe drinking water (0.25% or less Pb)
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle 4
- T-handle 5



s.92 NPT XCES92 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



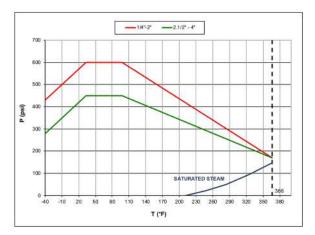


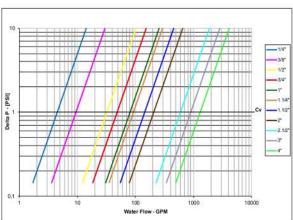
1 ¼"-2" hollow ball

Code	S92B41	S92C41	S92D41	S92E41	S92F41	S92G41	S92H41	S92I41	S92L41	S92M41	S92N41
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3.937
l (inch)	0.472	0.472	0.61	0.669	0.827	0.906	0.906	1.043	1.26	1.377	1.633
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764	6.142	6.969	8.504
G (inch)	0.886	0.886	1.161	1.260	1.594	1.831	2.008	2.382	3.071	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.22	6.22	6.22	10.039	10.039	10.039
H (inch)	1.563	1.563	1.695	1.988	2.153	2.988	3.236	3.5	5.197	5.512	6.063
CH (inch)	0.669	0.787	0.984	1.22	1.575	1.929	2.126	2.697	3.346	3.898	4.921
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8	596.2	896.5	1305.5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration od valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART







s.92 NPT M/F

Male/Female 1/2" - 2" packing gland







QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- \cdot $\,$ No metal-to-metal moving parts $\,$
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {s}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Triple stem seals in sizes over 2"

SEALING

Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2", (150 WSP -10 bar all sizes) non-shock cold working pressure

- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- * 150 psig (10 bar) non-shock steam working pressure. Not suitable for throttling steam
- -40°F/+366°F (-40°C / +185°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Custom design
- Pure PTFE seals

APPROVED BY OR IN COMPLIANCE WITH

- · Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- GOST-R (Russia)
- RoHS Compliant (EU)
- Meeting WW-V-35C Federal U.S. Specification (United States)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS UP TO 2" SIZE

- Oval lockable handle up to 2", round over 2" 1
- Patented locking device for valves up to 4" 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3

Stubby handle

• T-handle 5

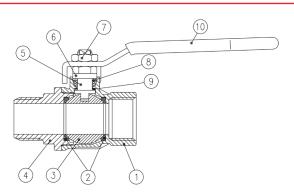


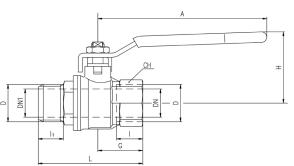
s.92 NPT M/F XCES92M - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	C4C (EN10263-2)
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%

1 ¼"-2" hollow ball

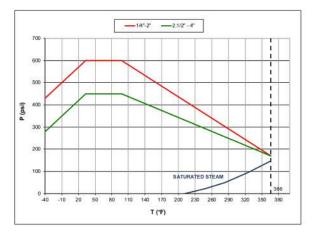


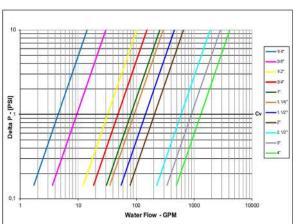


Code	S92B42	S92C42	S92D42	S92E42	S92F42	S92G42	S92H42	S92I42	S92L42	S92M42	S92N42
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3.937
DN1 (inch)	-	-	-	-	-	-	-	-	2.205	2.756	3.701
l (inch)	0.472	0.472	0.61	0.669	0.827	0.906	0.906	1.043	1.26	1.378	1.634
l1 (inch)	0.531	0.531	0.65	0.709	0.866	0.945	0.945	1.083	1.457	1.555	1.732
L (inch)	2.224	2.224	2.756	2.992	3.642	4.173	4.449	5.236	7.106	8.051	9.37
G (inch)	0.886	0.886	1.161	1.260	1.594	1.831	2.008	2.382	3.071	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.22	6.22	6.22	10.039	10.039	10.039
H (inch)	1.563	1.563	1.695	1.988	2.153	2.988	3.236	3.5	5.197	5.512	6.063
CH (inch)	0.669	0.787	0.984	1.22	1.575	1.929	2.126	2.697	3.346	3.898	4.921
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8	596.2	896.5	1305.5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part4. Stem configuration of valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART







S.95 NPT Female/Female





QUALITY

1/4" - 4"

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- WARNING: do not exceed reasonable temperature and/or electrical

OPTIONS UP TO 2" SIZE

- Stem extension
- Oval lockable handle up to 2", round over 2" \bigcirc
- \cdot **RuB** memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430)
- + Patented locking device for valves up to $4^{\prime\prime}$
- Stubby handle
- T-handle 5

load

· Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2" non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F/+350°F (-40°C / +170°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- · Special configuration for industrial oxygen application

APPROVED BY OR IN COMPLIANCE WITH

- · Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- CRN-TSSA acc. to MSS SP110 (Canada)
- Meeting WW-V-35C Federal U.S. Specification (United States)

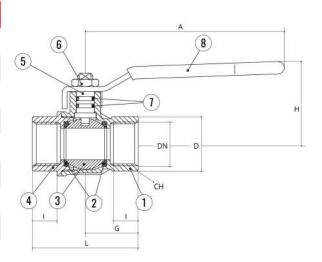
NOTE: approvals apply to specific configurations/sizes only.



s.95 NPT XCES95 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

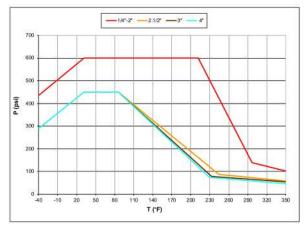


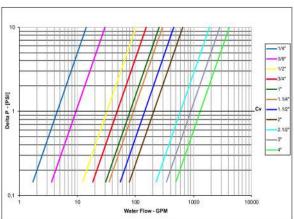
1 ¼"-2" hollow ball

Code	S95B41	S95C41	S95D41	S95E41	S95F41	S95G41	S95H41	S95I41	S95L41	S95M41	S95N41
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3.937
l (inch)	0.472	0.472	0.610	0.669	0.827	0.906	0.906	1.043	1.260	1.377	1.633
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764	6.142	6.969	8.504
G (inch)	0.886	0.886	1.162	1.260	1.594	1.831	2.008	2.382	3.071	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	6.220	10.039	10.039	10.039
H (inch)	1.480	1.480	1.679	1.956	2.114	2.858	3.094	3.370	5.197	5.512	6.063
CH (inch)	0.669	0.787	0.984	1.220	1.575	1.929	2.126	2.697	3.346	3.898	4.921
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8	596.2	896.5	1305.5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART









s.95 NPT T-handle

Female/Female 1/4" - 2"



QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm o}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

NPT taper ANSI B.1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Aluminium T-handle, painted yellow up to 1", Geomet® steel T-handle with PVC dip coating for 1 $1\!\!\!/ 4''$ - 2" sizes

- · WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) non-shock cold working pressure
- · 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F/+350°F (-40°C / +170°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- · Special configuration for industrial oxygen application

APPROVED BY OR IN COMPLIANCE WITH

- · Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- CRN-TSSA acc. to MSS SP110 (Canada)
- Meeting WW-V-35C Federal U.S. Specification (United States)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stem extension
- Oval lockable handle 1
- *RuB* memory stop designed to be installed with our stubby handle 2
- + Geomet $\ensuremath{\mathbb{R}}$ carbon steel handle with thick PVC dip coating
- Stainless steel handle (1.4016 / AISI 430)
- Patented locking device
- Stubby handle

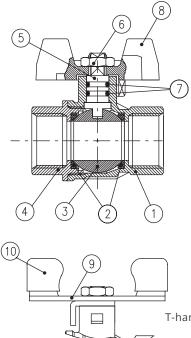


s.95 NPT T-handle XCES9546 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



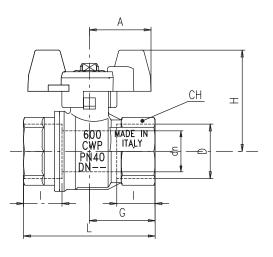
	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow T-handle	1	EN AC-46100 (EN1676)
9	Geomet® steel T-handle	1	DD01 (EN10111)
10	Yellow dipped coating	2	PVC



T-handle configuration for 1 $^{1\!\!/}_{4^{\prime\prime}}$ - 2"

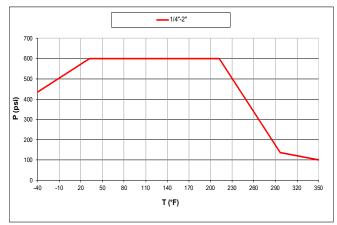
1 ¼"-2" hollow ball

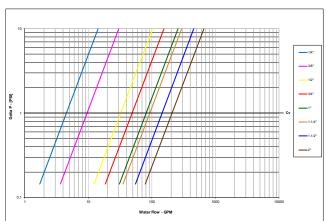
Code	S95B46	S95C46	S95D46	S95E46	S95F46	S95G46
D (inch)	1/4″	3/8″	1/2″	3/4″	1″	1 1⁄4″
DN (mm)	0.315	0.374	0.591	0.748	0.945	1.181
l (mm)	0.472	0.472	0.610	0.669	0.827	0.906
L (mm)	1.772	1.772	2.323	2.520	3.189	3.661
G (mm)	0.886	0.886	1.131	1.260	1.594	1.831
A (mm)	0.984	0.984	0.984	1.181	1.181	2.244
H (mm)	1.535	1.535	1.692	1.850	2.008	3.326
CH (mm)	0.669	0.787	0.984	1.220	1.575	1.929
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









s.95 NPT nickel plated

Female/Female 1/4" - 4"



QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet $\ensuremath{\mathbb{R}}$ carbon steel handle with thick PVC dip coating. Handle coa-

- ting offers both thermal and electrical protection
- Handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2" non-shock cold working pressure

- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F/+350°F (-40°C / +170°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- Special configuration for industrial oxygen application

APPROVED BY OR IN COMPLIANCE WITH

- · Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS UP TO 2" SIZE

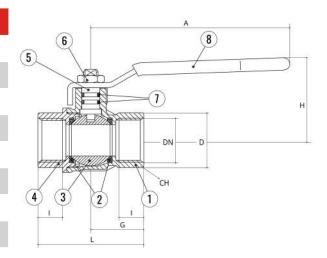
- Stem extension
- Oval lockable handle up to 2", round over 2"
- *RuB* memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430)
- Patented locking device for valves up to 4"
- Stubby handle
- T-handle 😏



s.95 NPT NICKEL PLATED XCES95N - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated NPT end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

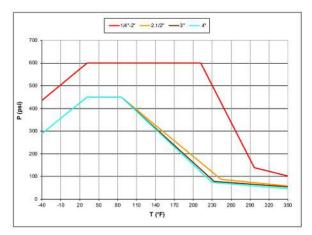


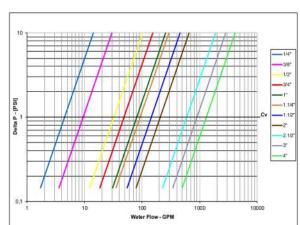
1 ¼"-2" hollow ball

Code	S95B41N	S95C41N	S95D41N	S95E41N	S95F41N	S95G41N	S95H41N	S95I41N	S95L41N	S95M41N	S95N41N
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3.937
l (inch)	0.472	0.472	0.610	0.669	0.827	0.906	0.906	1.043	1.260	1.377	1.633
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764	6.142	6.969	8.504
G (inch)	0.886	0.886	1.161	1.260	1.594	1.831	2.008	2.382	3.071	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	6.220	10.039	10.039	10.039
H (inch)	1.480	1.480	1.679	1.956	2.114	2.858	3.094	3.370	5.197	5.512	6.063
CH (inch)	0.669	0.787	0.984	1.220	1.575	1.929	2.126	2.697	3.346	3.898	4.921
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8	596.2	896.5	1305.5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART









S.128A Female/Female 3/4" Y-strainer



QUALITY

• Suitable for gas, industrial, pneumatic and hydraulic installations

BODY

- Hot forged sand blasted, nickel plated brass body
- Stainless steel (1.4301 / AISI 304) filter
- Degree of filtration: 50µm

THREADS

• ISO 228/1 female by female parallel threads and inspection plug

WORKING PRESSURE & TEMPERATURE

- 6 bar non-shock cold working pressure
- -40°C to +60°C (-40°F to +140°F)
- WARNING: freezing of the fluid in the installation may severely damage the valve

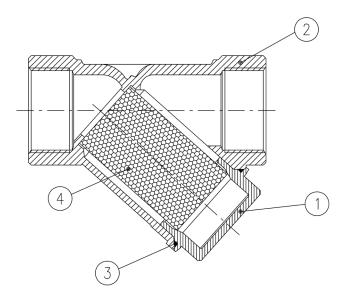
s.128A XCE128A - 5466

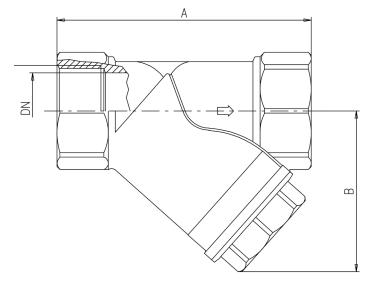
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated end-cap	1	CW617N
2	Nickel plated body	1	CW617N
3	O-ring	1	NBR
4	Stainless steel strainer 50µm	1	1.4301 / AISI 304

D (inch)	3/4"
A (mm)	70
B (mm)	48
DN	20









s.195 NPT

Female/Female 3/8" - 1" standard port gas cock





QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

Standard port for compact design

HANDLE

- Aluminum wedge handle enameled red
- WARNING: do not exceed reasonable temperature and/or electrical load
- · Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 450 PSI (30 bar) non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F to +350°F (-40°C / +170°C)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- GOST-R (Russia)
- Canadian standards Association (United States, Canada)
- RoHS Complaint (Russia)
- Meeting WW-V-35C Federal U.S. Specification (United States)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stem extension
- T-handle
- Stainless steel handle (1.4016 / AISI 430)
- 3/8" through 1" NPT female by NPT female (suffix 41)
- 3/8", 1/2" and 5/8" flare by flare (suffix 30)
- 1/2" NPT female by 1/2" flare (suffix 31)
- 1/2" NPT male by 1/2" flare (suffix 34)
- 1/2" NPT male by 3/8" flare (suffix 34)
- 1/2" NPT female by 3/8" flare (suffix 33)

• 1/8" NPT side tap for some versions/ sizes

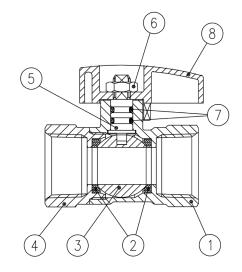


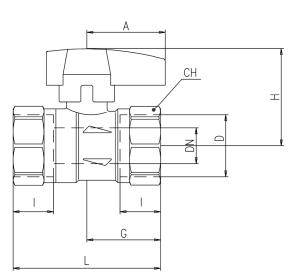
s.195 NPT XCE195 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Red T-handle	1	EN AC- 46100

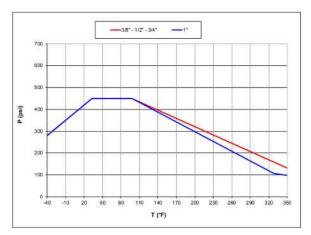
Code	195C41	195D41	195E41	195F41
D (inch)	3/8"	1/2"	3/4"	1"
DN (inch)	0.374	0.453	0.590	0.748
l (inch)	0.472	0.610	0.669	0.827
L (inch)	1.772	2.126	2.441	2.835
G (inch)	0.886	1.043	1.220	1.417
A (inch)	1.299	1.299	1.299	1.575
H (inch)	1.437	1.535	1.614	1.850
CH (inch)	0.787	0.984	1.220	1.496
Cv (GPM)	9.5	8.3	15.0	22.0

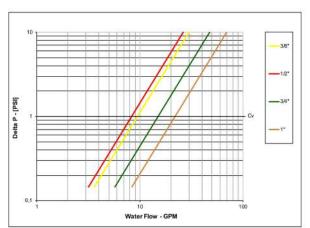




DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART







s.195 & flare

Female/Female flare 37° by solder end 1/2" – 3/4", standard port





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

- 1/2" flare 37° by 1/2" solder end
- 3/4" flare 37° by 3/4" solder end

FLOW

Standard port for compact design

HANDLE

- Aluminum T-handle enameled red
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- + 600 PSI (for solder joints rating see table 1) non-shock cold working pressure
- -4°F to +350°F (for solder joints rating see table 1)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

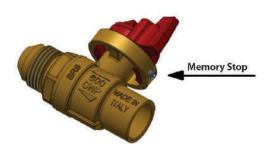
- GOST-R (Russia)
- · Canadian standards Association (United States, Canada)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stainless steel handle (1.4016 / AISI 430)
- $\cdot \;$ Geomet® carbon steel handle with thick PVC dip coating.
- Handle coating offers both thermal and electrical protection

 Stubby handle
- Upon request
- Memory stop



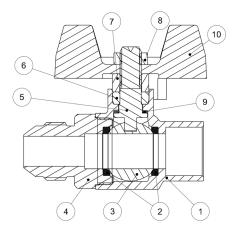
s.195 NPT & FLARE XCE19540 - 5466

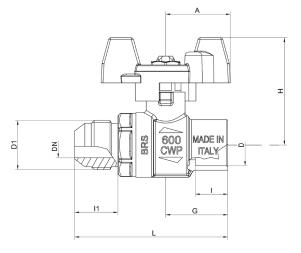
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end-cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Packing gland seal	1	PTFE
7	Nickel plated gland nut	1	CW617N
8	Geomet® nut	1	C4C (EN10263-2)
9	Washer	1	PTFE carbon filled 25%
10	Red T-handle	1	EN AC- 46100

Code	195D40	195E40
D (inch)	0.63"	0.877"
D1 (inch)	3/4-16 UNF 2A	1.1/16-12 UN 2A
DN (inch)	0.39	0.61
l (inch)	0.49	0.748
l1 (inch)	0.66	0.862
L (inch)	2.33	3.031
G (inch)	0.94	1.319
A (inch)	0.98	0.98
H (inch)	1.63	1.705
Cv (GPM)	5.8	14.5





DN shows the nominal flow diameter.

TABLE 1 PRESSURE - TEMPERATURE RATINGS											
	Meltin	g range	Working			Maximum working gauge pressure					
Joning material	degrees		temperature degrees		Size 1/8" - 1"		Size 1 ¼" - 2"		Size 2 ½" - 4"		
	٩F	°C	٩F	°C	PSI	kPa	PSI	kPa	PSI	kPa	
		1/421 185/215	0/+100	-18/+38	200	1400	176	1200	150	1050	
50-50 tin-lead solder* ASTM B32	361/421		0/+150	-18/+66	150	1050	125	850	100	700	
alloy grade 50 A			0/+200	-18/+93	100	700	90	600	75	500	
			0/+250	-18/+121	85	600	75	500	50	350	
			0/+100	-18/+38	500**	3500**	400**	2800**	300**	2100**	
95-5 tin-antimony solder ASTM B32	450/464	230/240	0/+150	-18/+66	400**	2800**	350**	2400**	275**	2000**	
alloy grade 95TA	400/404	230/240	0/+200	-18/+93	300**	** 2100** 250** 1700	1700**	200	1400		
			0/+250	-18/+121	200	1400	175	1200	150	1050	

Note:

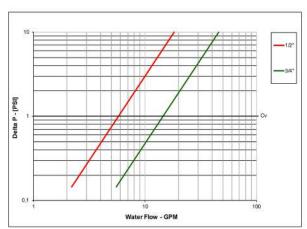
Above stated limits are not imposed by the valve, but by the strength of the soldering joint according to ASME B16.22.

* This alloy contains more than 0,2% lead and, according to certain specifications, cannot be used for potable water or other foods.

** Soldered copper tube joints have been tested at 230 PSI (1600 kPa) in accordance with ISO 2016

PRESSURE-TEMPERATURE CHART





FIREFIGHTING

In firefighting systems, reliability is non-negotiable. RuB ball valves are engineered to perform flawlessly under critical conditions, ensuring seamless operation when emergencies strike. Designed for low-frequency use and high-stakes scenarios, they meet the rigorous demands of fire protection systems, offering durability and precision for professionals who prioritize safety and performance.



FIREFIGHTING Scan the QR code to discover our products





S.50 1/4" - 2" standard port	Page 234
s.50 MF 1/4" - 2" standard port	Page 236
s.6400 1/2" - 4", EN 10226-1, ISO 5211 heavy duty	Page 238
s.7300L 3-way, lever, 4 seats, T-port 1/2" - 2" EN 10226-1	Page 240
s.7600L 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2" EN 10226-1	Page 244
s.84 EN331 1/4" - 4", EN 10226-1	Page 246
s.84 EN331 MF 1/4" - 4", EN 10226-1	Page 248
s.90 1/4" - 4", ISO228	Page 250
s.90 MF 1/4" - 4", ISO228	Page 252
s.90 MM 1/4" - 4", ISO228	Page 254
s.92 NPT 1/4" - 4" packing gland	Page 256
s.92 NPT MF 1/2" - 2" packing gland	Page 258
s.95 NPT 1/4" - 4"	Page 260
s.128 1/4"-4" ISO228, Y-strainer	Page 262





S.JU Female/Female 1/4" - 2" ISO 228





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball for longer life with rinse hole (the rinse hole is expected from 1/2'' up to 2'' sizes)

BODY

• Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel female by female threads

FLOW

+ Full port to DIN 3357 for 1/4" and 3/8" sizes, nominal port for compact design from 1/2" to 2" sizes.

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 3/8", 30 bar (450 PSI) over 3/8" non-shock cold working pressure

• -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle
- **RuB** memory stop is designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430)
- T-handle 4
- Stem extension
- Patented locking device
- Stubby handle



s.50 XCES50 - 5466

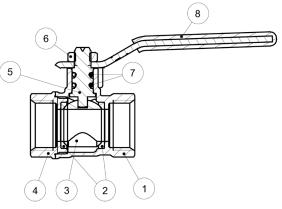
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

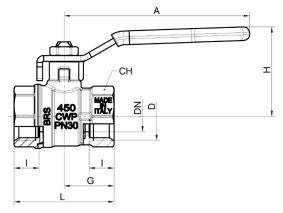


	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 1/2" up to 2")	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	CB4FF (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet [®] steel handle	1	DD11 (EN10111)

1 ¼"-2" hollow ball

NOTE: drawings refer to 1/2" up to 2" sizes

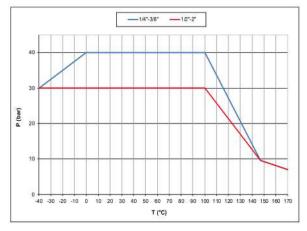


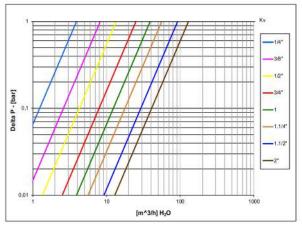


Code	S50B00	S50C00	S50D00	S50E00	S50F00	S50G00	S50H00	S50100
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	13,5	18	22,5	28,5	36	45
l (mm)	9	9	11	12	14	15	17	19
L (mm)	39	39	44	52	61,5	73	86	101
G (mm)	19,5	19,5	22	26	30,7	36,5	43	50,5
A (mm)	82	82	82	100	120	120	158	158
H (mm)	38	38	39,5	43,5	52	57	75,5	82,5
CH (mm)	17	20	25	31	38	48	54	66
Kv (m³/h)	3,9	8,2	13,5	25	39	56	92	129

DN shows actual flow diameter. Configuration of valves 1/4" and 3/8" sizes is slightly different. Ball valves are marked CE on handle from $1 \frac{1}{4}"$ to 2" as follow: CE XXCODEXX Cat. I-A

PRESSURE-TEMPERATURE CHART







s.50 M/F

Male/Female 1/4" - 2" ISO 228







QUALITY

- 24h 100% seal test guaranteed
- $\cdot\;$ Dual sealing system allows valve to be operated in either direction making installation easier
- \cdot $\,$ No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by female threads

FLOW

+ Full port to DIN 3357 for 1/4" and 3/8" sizes, nominal port for compact design from 1/2" to 2" sizes.

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 3/8", 30 bar (450 PSI) over 3/8" non-shock cold working pressure

• -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle **1**
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- RuB memory stop is designed to be installed with our stubby handle



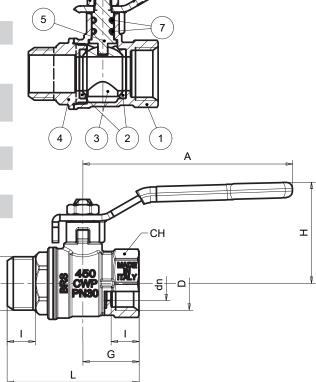
s.50 MF XCES50M - 5735

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unpla- ted inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 1/2" up to 2")	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	CB4FF (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)

1 ¼"-2" hollow ball

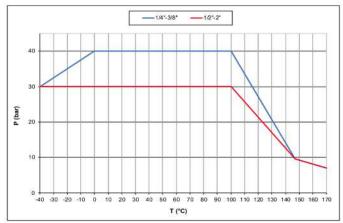


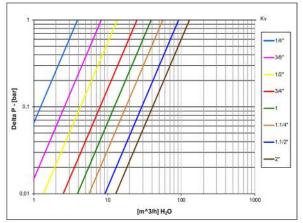
8

Code	S50B20	S50C20	S50D20	S50E20	S50F20	S50G20	S50H20	S50I20
Size (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	49	49	51.5	60.5	70	82	95	111.5
G (mm)	19,5	195	22	26	30.7	36.5	43	50.5
A (mm)	82	82	82	100	120	120	158	158
H (mm)	38	38	39.5	43.5	52	57	75.5	82.5
CH (mm)	17	20	25	31	38	48	54	66
Kv (m3/h)	3,9	8,2	13.5	25	39	56	92	129

DN shows actual flow diameter. Ball valves are marked CE on handle from 1 1/4" to 2" as follow: CE XXCODEXX Cat. I-A

PRESSURE-TEMPERATURE CHART







s.6400

Female/Female 1/2" - 4" EN 10226-1 ISO 5211, heavy duty









QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- · Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

- Reinforced PTFE self- lubricating seats with flexible-lip and wear compensation design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• 100% full port for maximum flow

OPERATING MECHANISM

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure

- For use with dangerous fluids pressure rating is 5 bar
- -20°C to +170°C (-4°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

• For use with dangerous fluids temperature rating is -20°C +60°C

UPON REQUEST

• Custom design

PED DIRECTIVE

• Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- Water Regulations Advisory Scheme (United Kingdom)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- · Configuration for use with slurries or liquid bearing abrasive particles
- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle

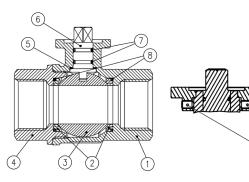


s.6400 XCES6400 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Black anodized flange (only from 2 1/2" to 4")	1	Aluminum
10	Grub Screw (only from 2 1/2" to 4")	2	CB4FF



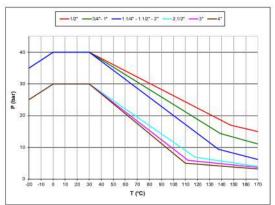
Valves configuration up to 2" Valve ball seats and stem configuration

of valves over 2	Complia	nt to CE 2		product E dule B+D	quipment	category			
Code	S64D00	S64E00	S64F00	S64G00	S64H00	S64100	S84L00AM	S84M00AM	S84N00AM
D (Size)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	15	20	25	32	40	50	65	80	100
l (mm)	15,5	18	21	23	24,5	26,5	32	35	41,5
L (mm)	75	80	90	110	120	140	156	177	216
G (mm)	30,5	37	45,5	52	59	67,5	78	88,5	108
H (mm)	31	38,5	42,5	55,5	62	69	89	96	111
CH (mm)	27	32	41	50	55	70	85	99	125
ØA (mm)	36	36	36	36	50	50	70	70	70
□B (mm)	9	9	9	9	11	11	17	17	17
C (mm)	5,6	5,6	5,6	5,6	6,6	6,6	8,5	8,5	8,5
E (mm)	25	25	25	25	35	35	55	55	55
F (mm)	7,5	8,5	8,5	8,5	10	10	14,5	18	18
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F03	F05	F05	F07	F07	F07
Kv (m³/h)	28	60	100	155	245	290	516	770	1120

TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷15 bar 40 bar (3			oar over 2")
Valve size	to open	to close	to open	to close
1/2″	2,8	1,7	2,8	1,7
3/4″	3,8	2,3	3,8	2,3
1″	7,1	4,2	7,1	4,2
1 1/4″	11,7	12,6	13,6	12,6
1 1/2"	24,9	20,3	30,9	20,3
2″	29,6	25,1	37	25,1
2 1/2"	42	42	105	105
3″	102	102	120	120
4″	186	186	225	225

PRESSURE-TEMPERATURE CHART

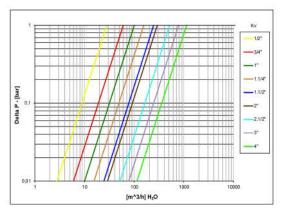


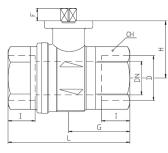
TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

PRESSURE DROP CHART







Ball valves are marked CE on end-cap from 1¹⁄₄" to 4" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1:-20°C TS2:+60°C





s.7300L 3-way, lever, 4 seats, T-port

Female/Female/Female 1/4" - 2" EN 10226-1

The s.7300L series has a ball seal at every port, and offers a wide variety of possible flow configurations. Positive shutoff can be achieved at any of the exiting ports. By specifying the appropriate ball port configuration, the T-port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications. Our s.73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by replacing two or three conventional 2-way valves, eliminating excess fittings, saving space and simplifying automation.

QUALITY

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Integrated ISO 5211 /DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- · 3-way T-port design for flow mixing

STEM

- · Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

- Pure PTFE self-lubricating seats with flexible-lip design
- $\cdot\;$ Four seats design for mixing of various fluids in the system

THREADS

• EN 10226-1, ISO 228 parallel female threads

FLOW

• 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- S.7300 without handle actuator ready
- Various actuator linkage kit

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem
- · Configurations with 4 seats & L-port (s.7200L) or 2 seats & L-port (s.7600L)

PED DIRECTIVE

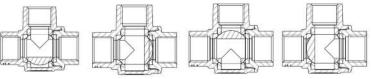
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

S.73 3-WAY "T" PORT OPERATING POSITIONS





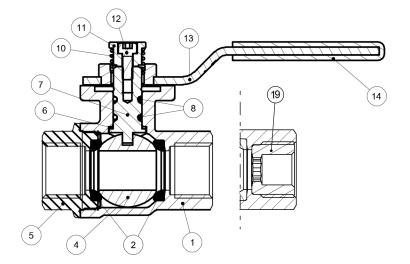


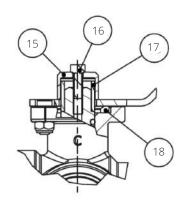
s.7300L XCES7300L - 5708

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



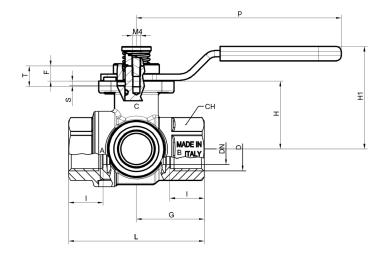
	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Nickel plated end cap (external nickel plated, unplated inside)	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw handle stop	1	CW617N
10	Spring	1	1.4310 / AISI 302
11	Unplated spring bushing	1	CW617N
12	Stainless steel screw	1	1.4301 / AISI 304
13	Geomet® plated steel handle	1	DD11 (EN10111)
14	Black dipped coating	1	PVC
15	Unplated cap	1	CW614N
16	Stainless steel Hexagonal screw	1	1.4301 / AISI304
17	Square adapter 11-14 (only for 1 1/4" size)	1	Steel
18	Washer	1	PTFE
19	Unplated reduction (only 1/4" and 3/8" sizes)	3	CW617N

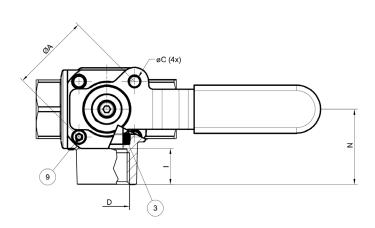






Code	S73B00L	S73C00L	S73D00L	S73E00L	S73F00L	S73G00L	S73H00L	S73100L
Size (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	30.4	38	48
l (mm)	12	12	16.5	19	22.5	25	26	29
L (mm)	65	65	65	79	92.5	109.5	126	150
G (mm)	32.5	32.5	32.5	39.5	46.5	55	63	75
H (mm)	32.5	32.5	32.5	39.5	42.5	56	62.5	72
N (mm)	34.5	34.5	34.5	42	49.5	60	69	82
ØA (mm)	36	36	36	36	36	50	50	50
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
p (mm)	103	103	103	103	103	145	145	145
H1 (mm)	49	49	49	56	59	79.3	85.5	93.4
S (mm)	2.2	2.2	2.2	2.2	2.2	3.2	3.2	3.2
T (mm)	10	10	10	10	10	14	14	14
F (mm)	7.3	7.3	7.3	8.3	8.3	14.5	14.5	14.5
CH (mm)	27	27	27	32	41	50	55	70
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F03	F03	F05	F05	F05
Kv (m³/h) straight pattern	TBD	TBD	9.7	28.2	43.3	57.0	94.5	161.0
Kv (m³/h) 90° pattern	TBD	TBD	5.3	11.6	16.8	26.7	43.3	69.2







TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷16	i bar
Valve size	to open	to close
1/4" - 3/8" - 1/2″	10,5	10,5
3/4″	13	13
1″	29,5	29,5
1 ¼"	14	14
1 ½"	23	23
2"	38	38

TORQUE CORRECTION FACTORS

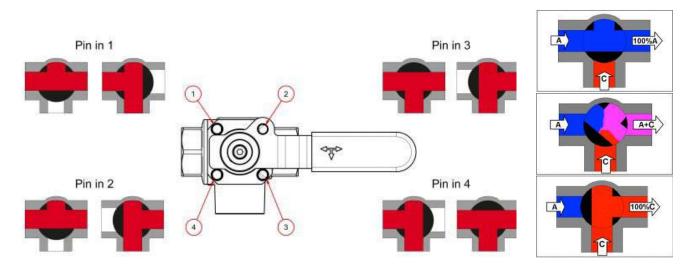
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5

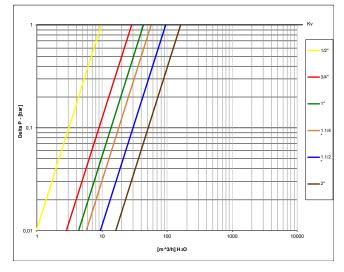
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the four possible positions.

An alternative is to mount 2 pins in 2 near holes (e.g. 1 and 2). In this case, the valve does not assume a predetermined position but can be actuated just by pulling the lever towards the top.

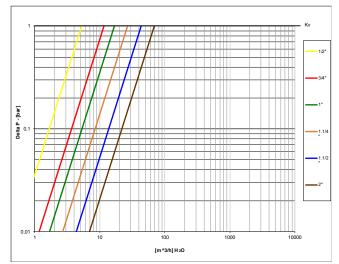
The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.



PRESSURE DROP CHART (STRAIGHT FLOW PATTERN)



PRESSURE DROP CHART (90° FLOW PATTERN)







s.7600L 3-way, lever, 2 seats, L-port (diverting)

Female/Female/Female 1/4" - 2" EN 10226-1

The *RuB* s.7600L is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.

QUALITY

- Electronic 100% seal test guaranteed for maximum safety
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Performs well in any orientation
- Strong configuration

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L-port design for flow diversion

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double O-rings at the stem for maximum safety

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

+ 100% full port for maximum flow

OPTIONS

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator
- ISO 7/1, BS 21 BSPT taper female threads
- S.7600 without handle, actuator ready
- Various actuator linkage kit

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -20°C to +150°C (-4°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Stainless steel stem (1.4401/ AISI 316)
- · Configurations with 4 seats & T-port (s.7300L) or 2 seats & L-port (s.7600L)

PED DIRECTIVE

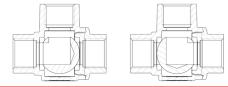
• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking.

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia Kazakhstan Belarus)

NOTE: approvals apply to specific configurations/sizes only.

S.76 3-WAY "L" PORT OPERATING POSITIONS









s.7600L XCES7600L - 5708

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



10

(18)

	Dout description	0.41	Matorial
	Part description	Q.ty	Material
1	Nickel plated body (External nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Sand blasted nickel plated end cap (External nickel plated, unplated inside)	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Geomet® plated steel handle	1	DD11 (EN10111)
10	Black dipped coating	1	PVC
11	Stainless steel screw	1	1.4301 / AISI304
12	Unplated stop	1	CW617N
13	Zinc plated steel nut	1	Class 8 (UNI7474)
14	Unplated cap	1	CW614N
15	Stainless steel Exagonal screw	1	1.4301 / AISI304
16	Square adaptor 11-14 (only for 1 1/4 size)	1	Steel
17	Washer	1	PTFE
18	Unplated reduction (only 1/4" and 3/8" sizes)	3	CW617N

18 Unplated	reduction	(only 1/4	" and 3/8	" sizes) :	S CV	V61/N		
Code	S76B00L	S76C00L	S76D00L	S76E00L	S76F00L	S76G00L	S76H00L	S76100L
Size (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	30.4	38	48
l (mm)	12	12	16.5	19	22.5	25	26	29
L (mm)	65	65	65	79	92.5	109.5	126	150
G (mm)	32.5	32.5	32.5	39.5	46.5	55	63	75
H (mm)	32.5	32.5	32.5	39.5	42.5	56	63.2	72
N (mm)	34.5	34.5	34.5	42	49.5	60	69	82
A (mm)	97	97	97	97	97	145	145	145
ØC (mm)	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø5.6	Ø6.6	Ø6.6	Ø6.6
H1 (mm)	16.5	16.5	16.5	16.5	16.5	23	23	23
Square B (mm)	9	9	9	9	9	11	11	14
CH A/F (mm)	27	27	27	32	41	50	55	70
Flange connection DIN ISO 522 DIN 3337	F03	F03	F03	F03	F03	F05	F05	F05
P (ISO 262 Thread)	M4	M4	M4	M4	M4	M5	M5	M5
Kv (m³/h)	TBD	TBD	5.7	11.1	16.7	28.1	44.5	71.1

TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷1	6 bar
Valve size	to open	to close
14" - 3/8" - 1/2″	3,5	3,5
3/4"	4,0	4,0
1″	4,5	4,5
1 1/4″	11,7	11,7
1 1/2"	21,5	21,5
2″	28,0	28,0

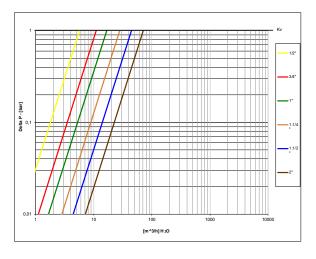
TORQUE CORRECTION FACTORS

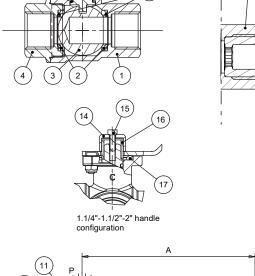
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5



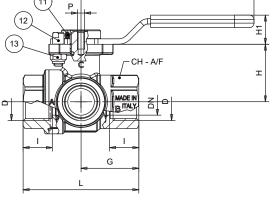


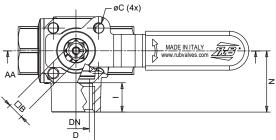


8

(6)

5







s.84 EN331

Female/Female 1/4" - 4" EN 10226-1

HIGH TEMPERATURE RESISTANCE

Now approved for HTB use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS UP TO 2" SIZE

- Oval lockable handle up to 2", round over 2" 1
- *RuB* memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle
- T-handle 5
- Stem extension
- Patented locking device for valves up to 4"



PED DIRECTIVE

 Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- · WARNING: do not exceed reasonable temperature and/or electrical load
- · Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

+ 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure

- -40°C to +170°C (-40°F to +350°F)
- + For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar / $\rm HTB$ Class B 0,1
- AS4617 Limitation for GAS: 2100 Kpa up to 2" and 1500 Kpa from
- 2 ½" to 4" rated working pressure and 0°C / +60°C temperature
- · WARNING: freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- The Australian Gas Association (Australia)
- SVGW (Switzerland)
- Factory Mutual (United States)
- BSI Group (United Kingdom)
- RoHS Compliant (EU)
- GOST-R (Russia)
- DIN-DVGW (Germany) MOP 5 B 0,1
- · EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- ARGB-KVBG (Belgium) MOP 5 bar for outside building gas installation, MOP 100 mbar for inside the buildings

NOTE: approvals apply to specific configurations/sizes only.

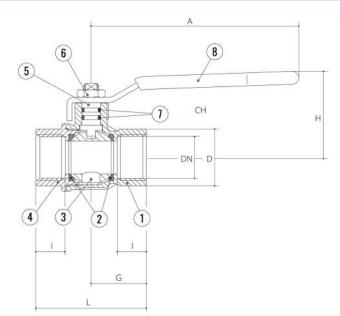


s.84EN331 XCES84E - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



		Part description	Q.ty	Material
	1	Nickel plated body (external nickel plated, unplated inside up to 2")	1	CW617N
2	2	Seat	2	PTFE
3	3	Chrome plated ball with rinse hole (read rinse hole on sizes from 3/4" up to 2")	1	CW617N
	4	Nickel plated end-cap (external nickel plated, unplated inside up to 2")	1	CW617N
2	5	Nickel plated stem O-ring design	1	CW617N
6	5	Geomet® nut	1	C4C (EN10263-2)
	7	O-Ring	2	FPM
8	8	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

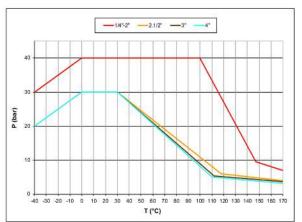


1 ¼" - 2" hollow ball

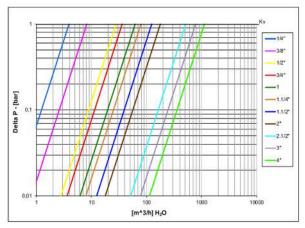
						Compliant to CE 2014/68/UE product Equipment category III Module E				lodule B+D	
Code	S84B00	S84C00	S84D00	S84E00	S84F00	S84G00	S84H00	S84100	S84L00	S84M00	S84N00
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	8	10	15	20	25	32	40	50	65	80	100
l (mm)	12	12	15.5	17	21	23	23	26.5	32	35	41.5
L (mm)	45	45	59	64	81	93	102	121	156	177	216
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5	78	88.5	108
A (mm)	82	82	100	120	120	158	158	158	255	255	255
H (mm)	38	38	43	50	54	73	79	86	132	140	154
CH (mm)	17	20	25	31	40	49	54	68.5	85	99	125
Kv (m3/h)	3.9	8.2	28	36	62	79	124	178	516	776	1130

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 ¼" to 2", on body over 2" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART



AS4617 limitations for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2 $\prime\!\!/_2$ " to 4" rated working pressure and 0°C +60°C temperature





s.84 EN331 M/F

Male/Female 1/4" - 4" EN 10226-1

HIGH TEMPERATURE RESISTANCE

Now approved for HTB use (Hochtemperaturbeständigkeit) Class B 0,1 (0,1 bar @650°C for at least 30 minutes).

H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbbm o}$ requivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female thread by EN10226-1, ISO7/1 taper male thread

PED DIRECTIVE

 Assessment according to Pressure Equipment Directive 2014/68/UE module B+D by ICIM (0425)

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS UP TO 2" SIZE

- Oval lockable handle up to 2", round over 2" 1
- *RuB* memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle
- T-handle 5
- Stem extension
- Patented locking device for valves up to 4"



HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- + For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar / $\rm HTB$ Class B 0,1
- AS4617 Limitation for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2 $\frac{1}{2}$ " to 4" rated working pressure and 0°C / +60°C temperature

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

APPROVED BY OR IN COMPLIANCE WITH

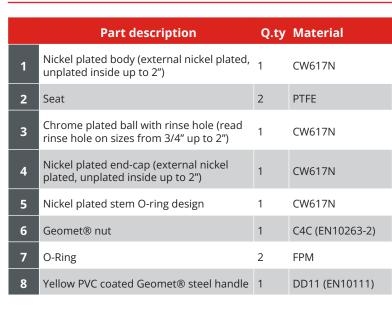
- The Australian Gas Association (Australia)
- SVGW (Switzerland)
- Factory Mutual (United States)
- BSI Group (United Kingdom)
- RoHS Compliant (EU)
- GOST-R (Russia)
- DIN-DVGW (Germany) MOP 5 B 0,1
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- ARGB-KVBG (Belgium) MOP 5 bar for outside building gas installation

NOTE: approvals apply to specific configurations/sizes only.

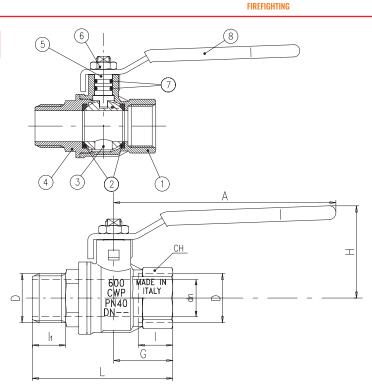


s.84 EN331 MF XCES84EM - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



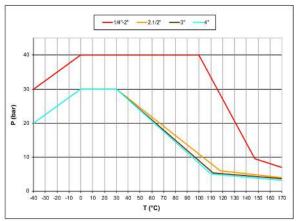
1 1/4" - 2" hollow ball



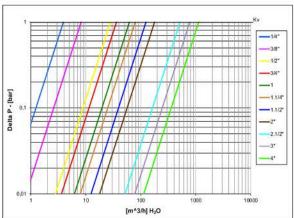
						Compliant	category III N	lodule B+D			
Code	S84B20	S84C20	S84D20	S84E20	S84F20	S84G20	S84H20	S84I20	S84L20	S84M20	S84N20
D (inch)	1/4″	3/8″	1/2″	3/4″	1″	1 1⁄4″	1 1⁄2″	2″	2 1⁄2″	3″	4″
DN (mm)	8	10	15	20	25	32	40	50	65	80	100
l (mm)	12	12	15.5	17	21	23	23	26.5	32	35	41.5
l1 (mm)	13.5	13.5	16.5	18	22	24	24	27.5	37	39.5	44
L (mm)	56.5	56.5	70	76.5	92.5	106	113	133	180.5	204.5	238
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5	78	88.5	108
A (mm)	82	82	100	120	120	158	158	158	255	255	255
H (mm)	38	38	43	50	54	73	79	86	132	140	154
CH (mm)	17	20	25	31	40	49	54	68.5	85	99	125
Kv (m3/h)	3.9	8.2	28	36	62	79	124	178	516	776	1130

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 ¼" to 2", on body over 2" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

PRESSURE-TEMPERATURE CHART



AS4617 limitations for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2 $\prime\prime_2$ " to 4" rated working pressure and 0°C +60°C temperature













QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- + Geomet $\ensuremath{\mathbb{R}}$ carbon steel handle with thick PVC dip coating. Handle coa-
- ting offers both thermal and electrical protection
- Handle removable with valve in service

OPTIONS

- Oval lockable handle up to 2", round over 2"
- *RuB* memory stop is designed to be installed with our stubby handle **2**
- Stainless steel handle (1.4016 / AlSI 430) 3
- T-handle 4
- Stem extension
- Patented locking device
- Dezincification resistant brass body and components
- Stubby handle up to 2"

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure

- -40°C to +180°C (-40°F to +356°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

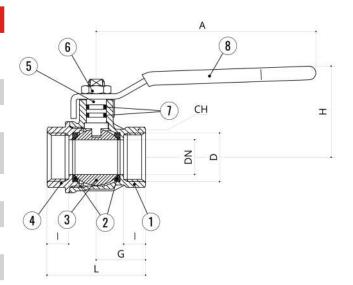


S.90 XCES90 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



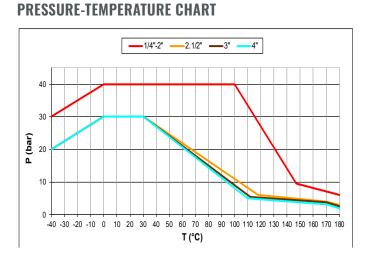
	Part description	Q.ty	Material			
1	Nickelplatedbody(externalnickelplated, unplated inside up to 2")	1	CW617N			
2	Seat	2	PTFE			
3	Chrome plated ball	1	CW617N			
4	Nickel plated end-cap (external nickel plated, unplated inside up to 2")	1	CW617N			
5	Nickel plated stem O-ring design	1	CW617N			
6	Geomet® nut	1	C4C (EN10263-2)			
7	O-ring	2	FPM			
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)			

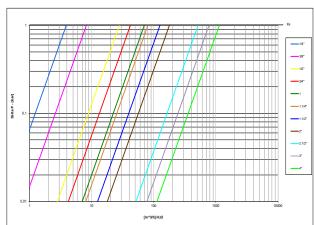


1 ¼"-2" hollow ball

Code	S90B00	S90C00	S90D00	S90E00	S90F00	S90G00	S90H00	S90100	S90L00	S90M00	S90N00
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	8	10	15	20	25	32	40	50	65	80	100
l (mm)	9	9	11	12	14	15	17	19	22	25	29
L (mm)	39	39	50	54	67	77	90	106	136	157	191
G (mm)	19,5	19,5	25	27	33,5	38,5	45	53	68	78,5	95,5
A (mm)	82	82	100	120	120	158	158	158	255	255	255
H (mm)	38	38	43	50	54	73	79	86	132	140	154
CH (mm)	17	20	25	31	38	48	54	66	85	99	125
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179	516	776	1130

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 ¼" to 2", on body over 2" as follow: CE XXCODEXX Cat I-A







s.90 M/F

Male/Female 1/4" - 2" ISO 228





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- $\cdot\;$ Geomet® carbon steel handle with thick PVC dip coating. Handle coa-
- ting offers both thermal and electrical protection
- $\cdot\;$ Handle removable with valve in service

OPTIONS

- Oval lockable handle up to 2", round over 2"
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430)
- T-handle 4
- Stem extension
- + $\ensuremath{\textit{RuB}}$ memory stop is designed to be installed with our stubby handle
- Dezincification resistant brass body and components
- Stubby handle up to 2"

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +180°C (-40°F to +356°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

MEREI

RANT

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

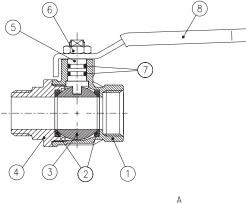


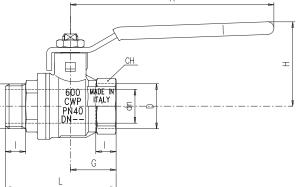
s.90 MF XCES90M - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



			·
	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)





1 1/4"-2" hollow ball

					~	-		
Code	S90B20	S90C20	S90D20	S90E20	S90F20	S90G20	S90H20	S90I20
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	49	49	60	65.5	77.5	89	100	117
G (mm)	19,5	19,5	25	27	33,5	38,5	45	53
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	38	48	54	66
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 1/4" to 2": CE XXCODEXX Cat I-A

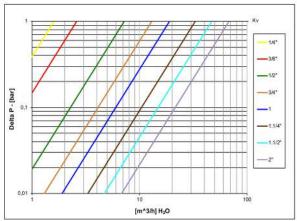
PRESSURE-TEMPERATURE CHART 1/4"-2" 40

T (°C)

30

D (bar)

10





s.90 M/M

Male/Male 1/4" - 2" ISO 228





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by male threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +180°C (-40°F to +356°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle up to 2", round over 2" 1
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stem extension
- **RuB** memory stop is designed to be installed with our stubby handle
- Dezincification resistant brass body and components
- Stubby handle up to 2"

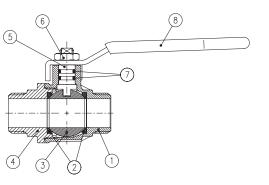


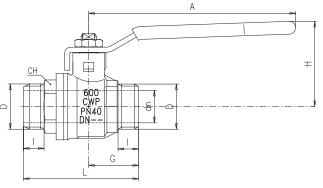
s.90 MM XCES90MM - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)



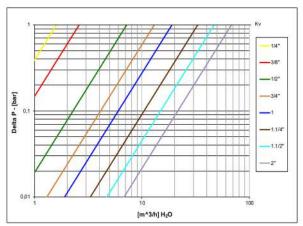


1 ¼"-2" hollow ball

Code	S90B22	S90C22	S90D22	S90E22	S90F22	S90G22	S90H22	S90122
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	50.5	50.5	62	67	80	91.5	103	120
G (mm)	21	21	27	29	36	41	48	56
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	15	18	22	27	35	44	54	68
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 ¼" to 2": CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART





s.92 NPT

Female/Female 1/4" - 4" packing gland



QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- $\cdot \;$ Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm s}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Triple stem seals in sizes over 2"

SEALING

Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B. 1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2", (150 WSP -10 bar all sizes) non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- * 150 psig (10 bar) non-shock steam working pressure. Not suitable for throttling steam
- -40°F/+366°F (-40°C / +170°C)

WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Custom design
- Pure PTFE seals

APPROVED BY OR IN COMPLIANCE WITH

- Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- CRN-TSSA acc. to MSS SP110 (Canada)
- Kuwait Fire Service Directorate (Kuwait)
- Meeting WW-V-35C Federal U.S. Specification (United States)
- NOTE: approvals apply to speficic configurations/sizes only.

OPTIONS UP TO 2" SIZE

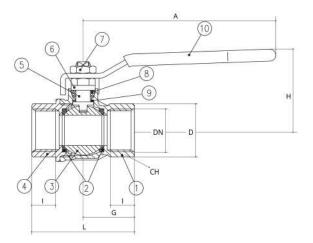
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- Stem extension
- Lead free for safe drinking water (0.25% or less Pb)
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle 4
- T-handle 5

s.92 NPT XCES92 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	C4C (EN10263-2)
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)

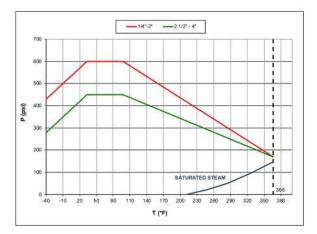


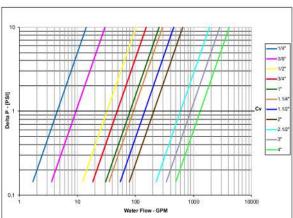
1 ¼"-2" hollow ball

Code	S92B41	S92C41	S92D41	S92E41	S92F41	S92G41	S92H41	S92I41	S92L41	S92M41	S92N41
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3.937
l (inch)	0.472	0.472	0.61	0.669	0.827	0.906	0.906	1.043	1.26	1.377	1.633
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764	6.142	6.969	8.504
G (inch)	0.886	0.886	1.161	1.260	1.594	1.831	2.008	2.382	3.071	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.22	6.22	6.22	10.039	10.039	10.039
H (inch)	1.563	1.563	1.695	1.988	2.153	2.988	3.236	3.5	5.197	5.512	6.063
CH (inch)	0.669	0.787	0.984	1.22	1.575	1.929	2.126	2.697	3.346	3.898	4.921
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8	596.2	896.5	1305.5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration od valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART







s.92 NPT M/F

Male/Female 1/2" - 2" packing gland







QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- \cdot No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- + Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {s}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Triple stem seals in sizes over 2"

SEALING

Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2", (150 WSP -10 bar all sizes) non-shock cold working pressure

- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- * 150 psig (10 bar) non-shock steam working pressure. Not suitable for throttling steam
- -40°F/+366°F (-40°C / +185°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Custom design
- Pure PTFE seals

APPROVED BY OR IN COMPLIANCE WITH

- · Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- GOST-R (Russia)
- RoHS Compliant (EU)
- Meeting WW-V-35C Federal U.S. Specification (United States)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS UP TO 2" SIZE

- Oval lockable handle up to 2", round over 2" 1
- Patented locking device for valves up to 4" 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3

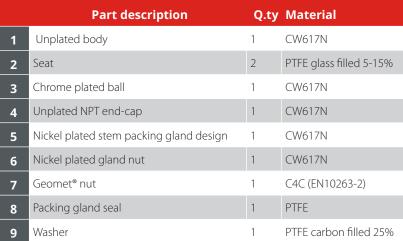
Stubby handle

• T-handle 5

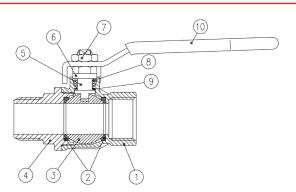


s.92 NPT M/F XCES92M - 5466

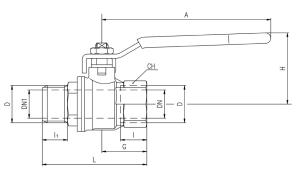
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



1 1/4"-2" hollow ball



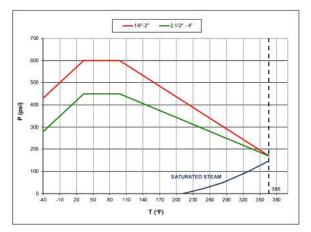
FIREFIGHTING

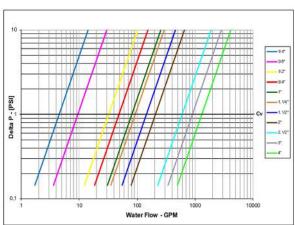


Code	S92B42	S92C42	S92D42	S92E42	S92F42	S92G42	S92H42	S92I42	S92L42	S92M42	S92N42
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3.937
DN1 (inch)	-	-	-	-	-	-	-	-	2.205	2.756	3.701
l (inch)	0.472	0.472	0.61	0.669	0.827	0.906	0.906	1.043	1.26	1.378	1.634
l1 (inch)	0.531	0.531	0.65	0.709	0.866	0.945	0.945	1.083	1.457	1.555	1.732
L (inch)	2.224	2.224	2.756	2.992	3.642	4.173	4.449	5.236	7.106	8.051	9.37
G (inch)	0.886	0.886	1.161	1.260	1.594	1.831	2.008	2.382	3.071	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.22	6.22	6.22	10.039	10.039	10.039
H (inch)	1.563	1.563	1.695	1.988	2.153	2.988	3.236	3.5	5.197	5.512	6.063
CH (inch)	0.669	0.787	0.984	1.22	1.575	1.929	2.126	2.697	3.346	3.898	4.921
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8	596.2	896.5	1305.5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part4. Stem configuration of valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART







S.95 NPT Female/Female





QUALITY

1/4" - 4"

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stresses at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- WARNING: do not exceed reasonable temperature and/or electrical

OPTIONS UP TO 2" SIZE

- Stem extension
- Oval lockable handle up to 2", round over 2" \bigcirc
- *RuB* memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- Patented locking device for valves up to 4"
- Stubby handle
- T-handle 5

load

· Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2" non-shock cold working pressure
- 250 PSI (17 bar) non-shock working pressure for LP-Gas
- -40°F/+350°F (-40°C / +170°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- · Special configuration for industrial oxygen application

APPROVED BY OR IN COMPLIANCE WITH

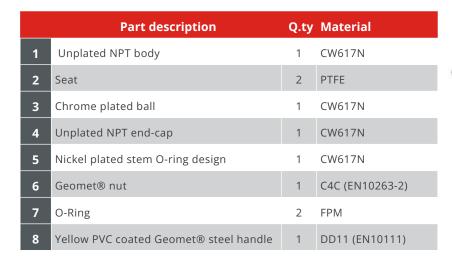
- · Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- RoHS Compliant (EU)
- GOST-R (Russia)
- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- CRN-TSSA acc. to MSS SP110 (Canada)
- Meeting WW-V-35C Federal U.S. Specification (United States)

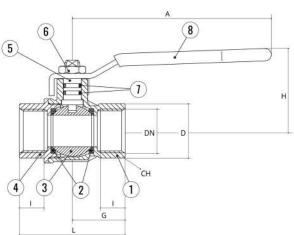
NOTE: approvals apply to specific configurations/sizes only.



s.95 NPT XCES95 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





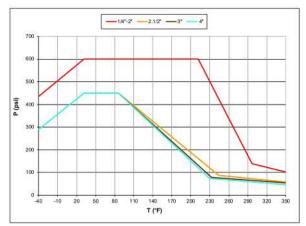
FIREFIGHTING

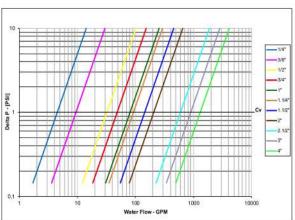
1 1/4"-2" hollow ball

Code	S95B41	S95C41	S95D41	S95E41	S95F41	S95G41	S95H41	S95I41	S95L41	S95M41	S95N41
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890	2.520	2.992	3.937
l (inch)	0.472	0.472	0.610	0.669	0.827	0.906	0.906	1.043	1.260	1.377	1.633
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764	6.142	6.969	8.504
G (inch)	0.886	0.886	1.162	1.260	1.594	1.831	2.008	2.382	3.071	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	6.220	10.039	10.039	10.039
H (inch)	1.480	1.480	1.679	1.956	2.114	2.858	3.094	3.370	5.197	5.512	6.063
CH (inch)	0.669	0.787	0.984	1.220	1.575	1.929	2.126	2.697	3.346	3.898	4.921
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8	596.2	896.5	1305.5

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

PRESSURE-TEMPERATURE CHART









S.128 Female/Female 1/4" - 4" ISO 228, Y-strainer



QUALITY

• Suitable for industrial, pneumatic and hydraulic installations

BODY

- Hot forged CW617N brass body
- Stainless steel (1.4301 / AISI 304) filter
- + Degree of filtration: 1/4" through 2" 500 $\mu m,$ 2 ½", 3", 4" 800 μm

THREADS

• ISO 228/1 female by female parallel threads and inspection plug

WORKING PRESSURE & TEMPERATURE

- 20 bar up to 2", 16 bar over 2" non-shock cold working pressure
- -20°C to +110°C (-4°F to +230°F) in absence of steam
- **WARNING**: freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm; it cannot be used with non-dangerous gases in sizes larger than 50mm

APPROVED BY OR IN COMPLIANCE WITH

• Attestation de Conformité Sanitaire (France)

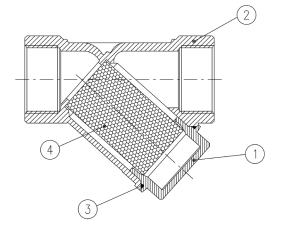
NOTE: approvals apply to specific configurations/sizes only.

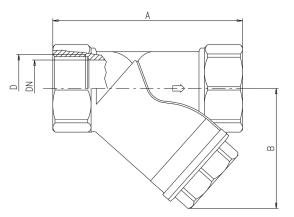
s.128 XCE128 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



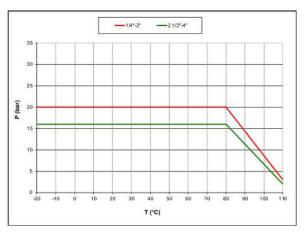
	Part description	Q.ty	Material
1	End-cap	1	CW617N
2	Body	1	CW617N
3	O-Ring	1	NBR
4	Stainless steel strainer	1	1.4301 / AISI 304

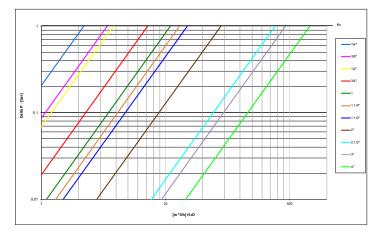




Code	128B00	128C00	128D00	128E00	128F00	128G00	128H00	128100	128L00	128M00	128N00
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
A (mm)	55	55	58	70	87	96	106	126	150	169	219
B (mm)	40	40	40	48	56	64	73	88,5	105	120	162
DN	8	10	15	20	25	32	40	50	65	80	100
PN (Kg/cm ²)	20	20	20	20	20	20	20	20	16	16	16
Kv (m³/h)	2.2	3.4	3.8	7.2	11	13	15	28	77	93	146

PRESSURE-TEMPERATURE CHART





DRINKING WATER

Water is life, and it deserves the utmost respect through the highest safety and hygiene standards. With decades of expertise, we manufacture ball valves using specialized alloys that meet regulations worldwide. Whether it's DZR brass CW602N, Lead-Free CW510L, CW511L, or UBAapproved CW617N, RuB valves are designed to meet your specific drinking water needs.



DRINKING WATER Scan the QR code to discover our products





s.20 DZR 1/4" - 2" ISO 228, dezincification-resistant	Page 266
s.20 DZR M/F 3/8" - 1 1/4" ISO 228, dezincification-resistant	Page 268
s.21 DZR 12 - 54 mm solder ends, for insulation, dezincification-resistant	Page 270
s.24 DZR 1/2" - 4" EN 10226-1, dezincification-resistant	Page 272
s.24 DZR press ends 15 - 54 mm, dezincification-resistant	Page 274
s.26 DZR 3/8" - 2" ISO 228, for insulation, dezincification-resistant	Page 276
s.28 DZR 12 - 54 mm compression ends, dezincification-resistant	Page 278
s.30 DZR 12 - 54 mm compression ends, for insulation, dezincification-resistant	Page 280
S.84 W 1/4" - 2", EN 10226-1	Page 282
S.84 W M/F 1/4" - 2", EN 10226-1	Page 284
s.84W M/F 3/4" for flat gasket	Page 286
S.090 1/4" - 2", ISO 228	Page 288
s.090 M/F 1/4" - 2", ISO 228	Page 290
s.468LF DZR 22 mm compression ends, ISO 5211, Lead-Free, dezincification-resistant	Page 292
Puri-T 292 NPT 1/4" - 2" Lead Free	Page 294
Puri-T 242 1/2" - 2" Lead Free, solder ends	Page 296
Puri-T 264 NPT 1/2" - 1 1/2" Lead Free, ISO 5211	Page 298





s.20 DZR

Female/Female 1/4" - 2" ISO 228, dezincification-resistant

Several governmental authorities recommend use of special alloys for valves handling water in areas where there is a problem of dezincification.

RuB DZR valves are designed to meet such requirements.

Through the use of new technology these valves retain the reliability and competitiveness of brass, but are comparable to bronze in corrosion resistance.

Be kind with yourself, make sure the valve that brings you pure fresh water is an **RuB** DZR valve.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- · Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated DZR brass ball for longer life
- · Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant

• Dezincification resistant ADZ-T and ADZ-P brass approved to SBN-PFS 1983:2 and NR-BFS 1988:18 specifications

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Blowout-proof unplated DZR brass stem

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

· ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- · Male by female threads

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- KIWA Regulation 4 a.k.a. KUKreg4 (United Kingdom)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- Water Regulations Advisory Scheme (United Kingdom)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle 1
- RuB memory stop designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430)
- Patented locking device
- T-handle 4
- CW617N brass body and components
- Brass stem extension 5
- Stubby handle





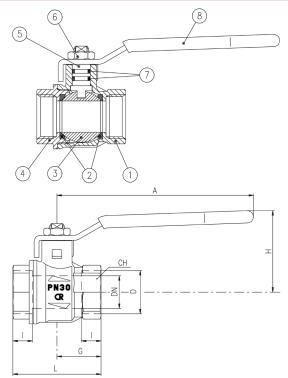
s.20 DZR XCES20 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated body	1	CW602N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW602N
4	Unplated end-cap	1	CW602N
5	Unplated stem O-ring design	1	CW602N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	White PVC coated Geomet® steel handle	1	DD11 (EN10111)

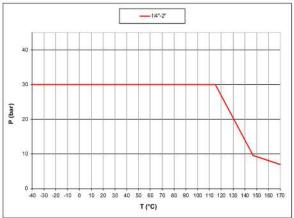
1 ¼"-2" hollow ball

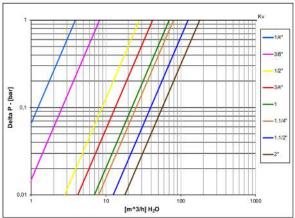


Code	S20B00	S20C00	S20D00	S20E00	S20F00	S20G00	S20H00	S20100
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	39	39	50	54	67	77	90	106
G (mm)	19.5	19.5	25	27	33.5	38.5	45	53
A (mm)	100	100	100	120	120	158	158	158
H (mm)	39	39	43	50	54	73	79	86
CH (mm)	17	20	25	31	38	48	54	66
Kv (m³/h)	3.9	8.2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.











s.20 DZR M/F

Male/Female 3/8" - 1 ¼" ISO 228, dezincification-resistant

Several governmental authorities recommend use of special alloys for valves handling water in areas where there is a problem of dezincification. *RuB* DZR valves are designed to meet such requirements.

Through the use of new technology these valves retain the reliability and competitiveness of brass, but are comparable to bronze in corrosion resistance.

Be kind with yourself, make sure the valve that brings you pure fresh water is an **RuB** DZR valve.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- · Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- Chrome plated DZR brass ball for longer life
- · Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant

• Dezincification resistant ADZ-T and ADZ-P brass approved to SBN-PFS 1983:2 and NR-BFS 1988:18 specifications

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Blowout-proof unplated DZR brass stem

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

THREADS

· ISO 228 parallel male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- Handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -40°C to+170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 /AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- KIWA Regulation 4 a.k.a. KUKreg4 (United Kingdom)
- Water Regulations Advisory Scheme (United Kingdom)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle 1
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430)
- *RuB* memory stop designed to be installed with our stubby handle
- T-handle 4
- CW617N brass body and components
- Brass stem extension
- Stubby handle

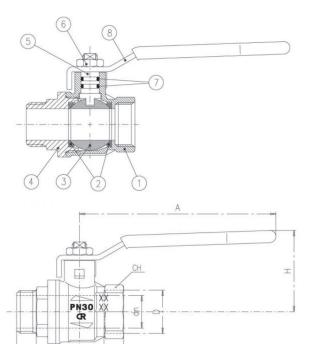


s.20 DZR MF XCES20M - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



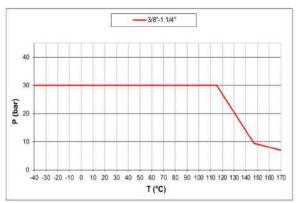
	Part description	Q.ty	Material
1	Unplated body	1	CW602N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW602N
4	Unplated end-cap	1	CW602N
5	Unplated stem O-ring design	1	CW602N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	White PVC coated Geomet® steel handle	1	DD11 (EN10111)

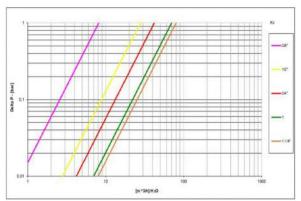


Code	S20C20	S20D20	S20E20	S20F00	S20200
D (inch)	3/8"	1/2"	3/4"	1"	1 1⁄4''
DN (mm)	10	15	20	25	32
l (mm)	9	11	12	14	15
L (mm)	49	60	65.5	77.5	89
G (mm)	19.5	25	27	33.5	38.5
A (mm)	82	100	120	120	158
H (mm)	38	43	50	54	73
CH (mm)	20	25	31	38	48
Kv (m³/h)	8.2	28	42	70	80

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4

PRESSURE-TEMPERATURE CHART









s.21 DZR

12 - 54 mm solder ends for insulation dezincification-resistant

Several governmental authorities recommend use of special alloys for valves handling water in areas where there is a problem of dezincification.

RuB DZR valves are designed to meet such requirements. Through the use of new technology these valves retain the reliability and competitiveness of brass, but are comparable to bronze in corrosion resistance. Be kind with yourself, make sure the valve that brings you pure fresh water is an *RuB* DZR valve.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated DZR brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant

 Dezincification resistant ADZ-T and ADZ-P brass approved to SBN- PFS 1983:2 and NR- BFS 1988:18 specifications

STEM

Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

CONNECTIONS

Solder ends to NS1759 and ISO 2016

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 16 bar (230 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- Applicable to valve, not to solder joints

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- Kiwa-Swedcert (Sweden)
- Ri.se. / Boverket (Sweden)

NOTE: approvals apply to specific configurations/sizes only.

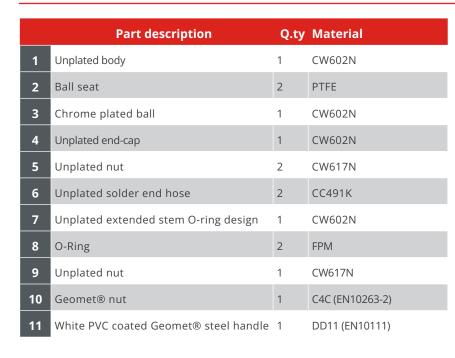
- Oval lockable handle
- Patented locking device 2
- + $\ensuremath{\textit{RuB}}$ memory stop designed to be installed with our stubby handle
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle
- T-handle 4

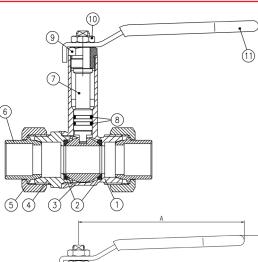




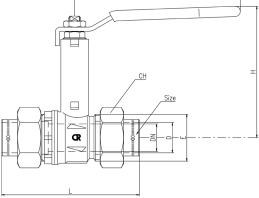
s.21 DZR XCES21 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





DRINKING WATER

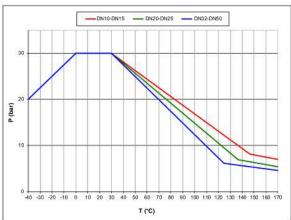


Hollow ball for D 35-42-54

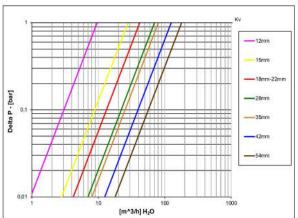
Code	S21C12W	S21D15W	S21E18W	S21E22W	S21F28W	S21G35W	S21H42W	S21I54W
D (mm)	12	15	18	22	28	35	42	54
E (mm)	M22x1.5	M26x1.5	M34x1.5	M34x1.5	M40x2	M50x2	M55x2	M70x2
DN (mm)	10	15R	16R	20R	25R	32R	40R	50R
L (mm)	80	90	100	100	115	129	143	161
A (mm)	100	100	120	120	120	158	158	158
H (mm)	85	88	95	95	99	124	130	137
CH (mm)	26	30	38	38	46	55	62	78
Kv (m³/h)	9.6	28	42	42	70	80	125	179

DN shows the nominal flow diameter.

PRESSURE-TEMPERATURE CHART



The given data of the pressure-temperature chart refer to the valve body







s.24 DZR press ends

15 - 54 mm dezincification-resistant

Time is of essence and valve technology has progressed to save time and ease on-site installation. *RuB* s.24 DZR with press ends combines first class features of our s.24 which have been optimized through years of field experience and innovative press fittings which can be pressed with all pressing jaws and tools provided for metal connections type M and V.

Be kind with yourself, make sure the valve that brings you pure fresh water is an *RuB* DZR ball valve. Press-end couplings are made of bronze, a material well known for its suitability to the press operation. Each coupling assembly is seal tested at the plant.

QUALITY

- 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated DZR brass ball for longer life

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite \mathbbm{B} or equivalent threads sealant

• Dezincification resistant ADZ-T and ADZ-P brass approved to SBN-PFS 1983:2 and NR-BFS 1988:18 specifications

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Blowout-proof unplated DZR brass stem

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

CONNECTIONS

Press ends connections to EN 1254-4 approved by DVGW

FLOW

• Full port to DIN 3357 for maximum flow



HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 16 bar (230 PSI) non-shock cold working pressure
- -20°C to +120°C (-4°F to +250°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom Design

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

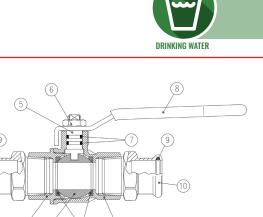
- Oval lockable handle 1
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- *RuB* memory stop designed to be installed with our stubby handle
- T-handle 4
- CW617N brass body and components 5
- Brass stem extension 5
- Stubby handle

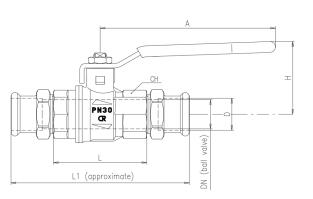


s.24 DZR PRESS ENDS XCES24C - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW602N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW602N
4	Unplated end-cap	1	CW602N
5	Unplated stem O-ring design	1	CW602N
6	Geomet® nut	1	CB4FF (EN10263-2)
7	O-Ring	2	FPM
8	White PVC coated Geomet® steel handle	1	DD11 (EN10111)
9	O-Ring	2	EPDM
10	Unplated press end connection	2	CW724R





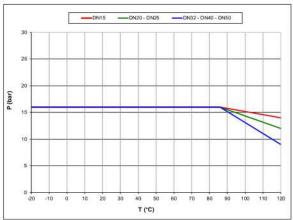
4

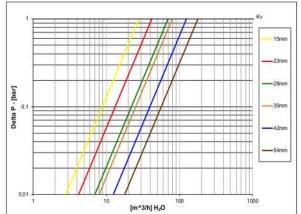
35-54 mm hollow ball

Code	S24DC15	S24EC22	S24FC28	S24GC35	S24HC42	S24IC54
D (mm)	15	22	28	35	42	54
DN (mm)	15	20	25	32	40	50
L (mm)	59	64	81	93	102	121
L1 (mm)	118	123	146	164	187	220
A (mm)	100	120	120	158	158	158
H (mm)	43	50	54	73	79	86
CH (mm)	25	31	40	49	54	68,5
Kv (m3/h)	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









s.24 DZR

Female/Female 1/2" - 4" EN 10226-1, dezincification-resistant

Several governmental authorities recommend use of special alloys for valves handling water in areas where there is a problem of dezincification.

RuB DZR valves are designed to meet such requirements.

Through the use of new technology these valves retain the reliability and competitiveness of brass, but are comparable to bronze in corrosion resistance.

Be kind with yourself, make sure the valve that brings you pure fresh water is an *RuB* DZR valve.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- · Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated DZR brass ball for longer life
- · Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite \mathbbm{B} or equivalent thread sealant
- Dezincification resistant ADZ-T and ADZ-P brass approved to SBN-PFS 1983:2 and NR-BFS 1988:18 specifications

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Blowout-proof unplated DZR brass stem

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Crimp/press end connections
- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- KIWA Regulation 4 a.k.a. KUKreg4 (United Kingdom)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- Water Regulations Advisory Scheme (United Kingdom)
- NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle up to 2", round over 2" \bigcirc
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- *RuB* memory stop designed to be installed with our stubby handle
- T-handle 4
- CW617N brass body and components
- Brass stem extension
- Stubby handle up to 2"





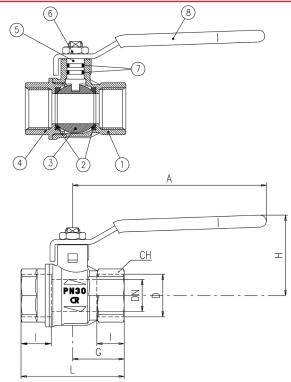
s.24 DZR XCES24 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated body	1	CW602N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW602N
4	Unplated end-cap	1	CW602N
5	Unplated stem O-ring design	1	CW602N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	White PVC coated Geomet® steel handle	1	DD11 (EN10111)

1 ¼"-2" hollow ball

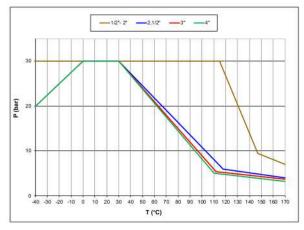


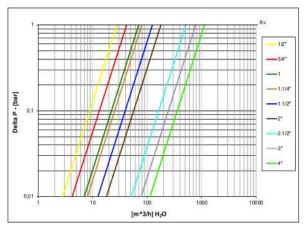
Code	S24D00	S24E00	S24F00	S24G00	S24H00	S24I00	S24L00	S24M00	S24N00
D (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	15	20	25	32	40	50	65	80	100
l (mm)	15.5	17	21	23	23	26.5	32	35	41.5
L (mm)	59	64	81	93	102	121	156	177	216
G (mm)	29.5	32	40.5	46.5	51	60.5	78	88.5	108
A (mm)	100	120	120	158	158	158	255	255	255
H (mm)	43	50	54	73	79	86	132	140	154
CH (mm)	25	31	40	49	54	68.5	85	99	125
Kv (m³/h)	28	42	70	80	125	179	516	776	1130

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

Ball valves are marked CE on handle from 1 1/4" to 2", on body over 2" as follow: CE XXCODEXX Cat. I-A

PRESSURE-TEMPERATURE CHART









Female/Female 3/8" - 2" ISO 228, for insulation, dezincification-resistant

Several governmental authorities recommend use of special alloys for valves handling water in areas where there is a problem of dezincification.

RuB DZR valves are designed to meet such requirements. Through the use of new technology these valves retain the reliability and competitiveness of brass, but are comparable to bronze in corrosion resistance.

Be kind with yourself, make sure the valve that brings you pure fresh water is an ${\it RuB}$ DZR valve.

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated DZR brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant
- Dezincification resistant ADZ-T and ADZ-P brass approved to SBN-PFS 1983:2 and NR-BFS 1988:18 specifications
- Extended stem forged in one piece with body allows perfect sealing and easy operation when valve is isolated

STEM

- · Maintenance-free, double FPM O-rings at the stem for maximum safety
- Unplated DZR brass stem

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

· ISO 228 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- **RuB** memory stop designed to be installed with our stubby handle
- T-handle 4
- Short stem design 5
- Stubby handle



HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · CW617N brass body and components
- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- Male by female threads

PED DIRECTIVE

 According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25 mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.



s.26 DZR XCES26 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



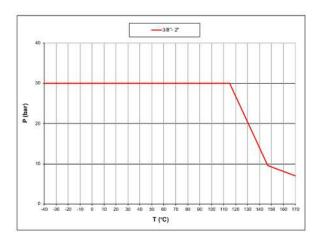
	Part description	Q.ty	Material
1	Unplated body	1	CW602N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW602N
4	Unplated end-cap	1	CW602N
5	Unplated extended stem O-ring design	1	CW602N
6	O-Ring	2	FPM
7	Unplated nut	1	CW617N
8	Geomet® nut	1	C4C EN10263-2)
9	White PVC coated Geomet® steel handle	1	DD11 EN10111)

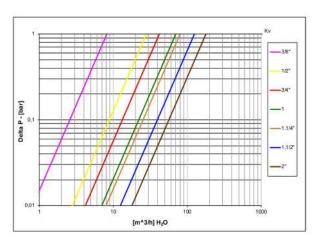
1 ¼"-2" hollow ball

Code	S26B00	S26C00	S26D00	S26E00	S26F00	S26G00	S26H00	S26100
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	39	39	50	54	67	77	90	106
G (mm)	19.5	19.5	25	27	33.5	38.5	45	53
A (mm)	100	100	100	120	120	158	158	158
H (mm)	85	85	88	95	99	124	130	137
CH (mm)	20	20	25	31	38	48	54	66
Kv (m3/h)	3.9	8.2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









s.28 DZR

12 - 54 mm compression ends dezincification-resistant

Several governmental authorities recommend use of special alloys for valves handling water in areas where there is a problem of dezincification.

RuB DZR valves are designed to meet such requirements. Through the use of new technology these valves retain the reliability and competitiveness of brass, but are comparable to bronze in corrosion resistance.

Be kind with yourself, make sure the valve that brings you pure fresh water is an *RuB* DZR valve.





QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated DZR brass ball for longer life

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite \mathbbm{B} or equivalent thread sealant

 Dezincification resistant ADZ-T and ADZ-P brass approved to SBN- PFS 1983:2 and NR-BFS 1988:18 specifications

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Blowout-proof unplated DZR brass stem

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

CONNECTIONS

Compression ends to EN 1254-2 and NKB no.12

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 16 bar (230 PSI) non-shock cold working pressure
- -20°C to +120°C (-4°F to +250°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- + KIWA Regulation 4 a.k.a. KUKreg4 (United Kingdom) for sizes 12mm through 35mm
- Kiwa-Swedcert (Sweden)
- · Ri.se. / Boverket (Sweden)
- Water Regulations Advisory Scheme (United Kingdom) for sizes 12mm through 35mm

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- + $\ensuremath{\textit{RuB}}$ memory stop designed to be installed with our stubby handle

• T-handle 4

• Compression ends with extended stem for insulation **5**

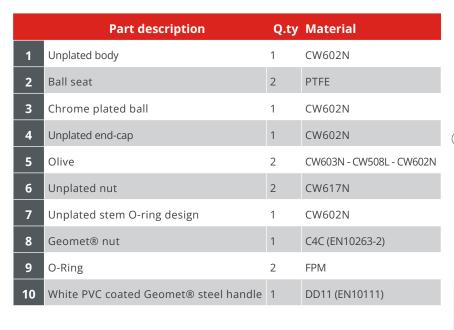
• Brass stem extension 5

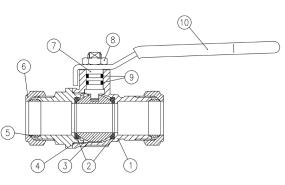
• Stubby handle



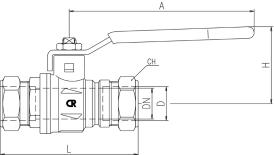
s.28 DZR XCES28 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





DRINKING WATER

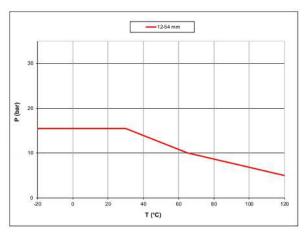


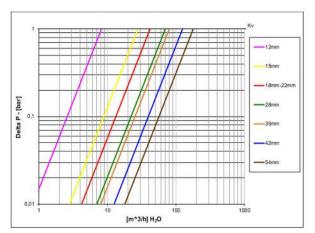
Hollow ball for D 35-42-54

Code	S28C12	S28D15	S28D18	S28E22	S28F28	S28G35	S28H42	S28I54
D (mm)	12	15	18	22	28	35	42	54
DN (mm)	10	15R	20R	20R	25R	32R	40R	50R
L (mm)	67	72	78.5	79	90.5	110	128.5	142
A (mm)	100	100	100	120	120	158	158	158
H (mm)	38	43	43	50	54	73	79	86
CH (mm)	19	24	27	32	38.5	48	54	70
Kv (m³/h)	8.2	28	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









s.30 DZR

12 - 54 mm compression ends for insulation dezincification-resistant

Several governmental authorities recommend use of special alloys for valves handling water in areas where there is a problem of dezincification.

RuB DZR valves are designed to meet such requirements. Through the use of new technology these valves retain the reliability and competitiveness of brass, but are comparable to bronze in corrosion resistance.

Be kind with yourself, make sure the valve that brings you pure fresh water is an **RuB** DZR valve.



- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated DZR brass ball for longer life

BODY

- Hot forged sand blasted DZR unplated body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant

- Dezincification resistant ADZ-T and ADZ-P brass approved to SBN-PFS 1983:2 and NR-BFS 1988:18 specifications
- Extended stem forged in one piece with body allows perfect sealing and easy operation when valve is isolated

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Unplated DZR brass stem

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

CONNECTIONS

Compression ends to EN 1254-2 and NKB no.12

FLOW

• Full port to DIN 3357 for maximum flow

Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection Handle removable with valve in service

HANDLE

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 16 bar (230 PSI) non-shock cold working pressure
- -20°C to +120°C (-4°F to +250°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• The product described in this document meets the requirements of the PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- Kiwa-Swedcert (Sweden)
- Ri.se. / Boverket (Sweden)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430)
- T-handle **4**
- **RuB** memory stop designed to be installed with our stubby handle
- Short stem design 6
- Stubby handle





s.30 DZR XCES30 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW602N
2	Ball seat	2	PTFE
3	Chrome plated ball	1	CW602N
4	Unplated end-cap	1	CW602N
5	Olive	2	CW603N - CW508L - CW602N
6	Unplated nut	2	CW617N
7	Unplated extended stem O-ring design	1	CW602N
8	O-Ring	2	FPM
9	Unplated nut	1	CW617N
10	Geomet® nut	1	C4C (EN10263-2)
11	White PVC coated Geomet® steel handle	1	DD11 (EN10111)

DRINKING WATER

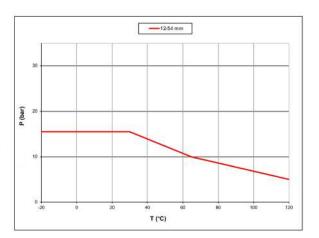
æ

Hollow ball for D 35-42-54

Code	S30C12	S30D15	S30D18	S30E22	S30F28	S30G35	S30H42	S30I54
D (mm)	12	15	18	22	28	35	42	54
DN (mm)	10	15R	15R	20R	25R	32R	40R	50R
L (mm)	67	72	78.5	79	90.5	110	128.5	142
A (mm)	100	100	100	120	120	158	158	158
H (mm)	85	88	88	95	99	124	130	137
CH (mm)	19	24	27	32	38.5	48	54	70
Kv (m³/h)	8.2	28	28	42	70	80	125	179

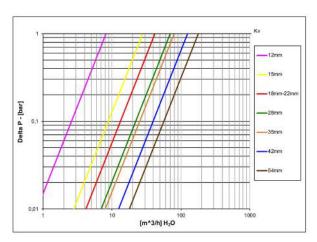
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART

5







S.84 W Female/Female 1/4" - 2" FN 10226-1

Legionella is a bacterium that lives and proliferates in natural and artificial aquatic environments at temperatures ranging between 5.7°C and 55°C and standing up to acidic and alkaline environments. New s.84W is approved for use with drinking water; the specific ball design avoids water stagnation and the spread of bacteria in the system.



QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball with rinse hole

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double EPDM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) non-shock cold working pressure

- DIN-EN 13828 limitations for potable water: 10 bar (Kg/cm²) non- shock cold working pressure and +65°C temperature (occasional excursions up to 90°C are permitted for a period of 1 h maximum)

• -40°C to +150°C (-40°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Glass filled PTFE seals
- Stainless steel handle (1.4016 / AISI 430)
- · Special configuration for industrial oxygen application
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- DVGW (Germany)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- Water Regulations Advisory Scheme (United Kingdom)
- Attestation de Conformité Sanitaire (France)
- NOTE: approvals apply to specific configurations/sizes only.

- Patented locking device 1
- T-handle 2
- Stubby handle
- Stem extension
- **RuB** memory stop designed to be installed with our stubby handle



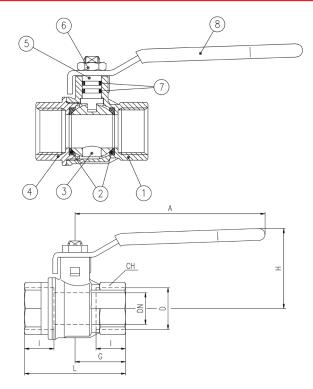
s.84 W XCES84W - 5647

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (rinse hole on sizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	EPDM
8	Green PVC coated Geomet® steel handle	1	DD11 (EN10111)

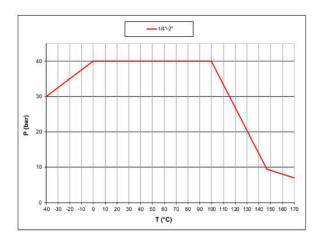
1 ¼" to 2" hollow ball

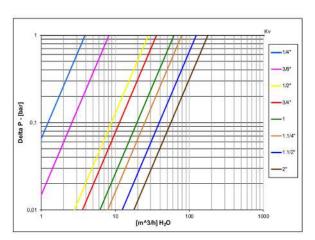


Code	S84B00W	S84C00W	S84D00W	S84E00W	S84F00W	S84G00W	S84H00W	S84100W
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN(mm)	8	10	15	20	25	32	40	50
l (mm)	12	12	15,5	17	21	23	23	26,5
L (mm)	45	45	59	64	81	93	102	121
G (mm)	22,5	22,5	29,5	32	40,5	46,5	51	60,5
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	40	49	54	68,5
Kv(m3/h)	3,9	8,2	28	36	62	79	124	178

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 ¼" to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART









s.84 W M/F

Male/Female 1/4" - 2" EN 10226-1

Legionella is a bacterium that lives and proliferates in natural and artificial aquatic environments at temperatures ranging between 5.7°C and 55°C and standing up to acidic and alkaline environments. New s.84W is approved for use with drinking water; the specific ball design avoids water stagnation and the spread of bacteria in the system.



QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball with rinse hole

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double EPDM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO 228 parallel female thread by EN10226-1, ISO7/1 taper male thread

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) non-shock cold working pressure

- DIN-EN 13828 limitations for potable water: 10 bar (Kg/cm²) non- shock cold working pressure and +65°C temperature (occasional excursions up to 90°C are permitted for a period of 1 h maximum)

• -40°C to +150°C (-40°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Glass filled PTFE seals
- · Stainless steel handle (1.4016 / AISI 430)
- · Special configuration for industrial oxygen application
- Custom design

PED DIRECTIVE

 According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- DVGW (Germany)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- Water Regulations Advisory Scheme (United Kingdom)
- Attestation de Conformité Sanitaire (France)
- NOTE: approvals apply to specific configurations/sizes only.

- Patented locking device 1
- T-handle 2
- Stubby handle
- Stem extension
- **RuB** memory stop designed to be installed with our stubby handle

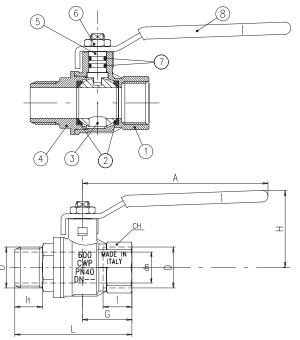


s.84 W MF XCES84WM - 5647

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (rinse hole on sizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	EPDM
8	Green PVC coated Geomet® steel handle	1	DD11 (EN10111)

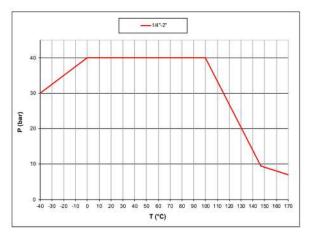


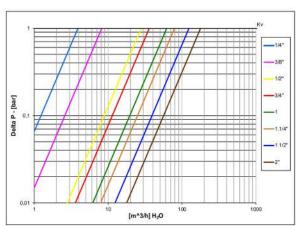
1 ¼" to 2" hollow ball

Code	S84B20W	S84C20W	S84D20W	S84E20W	S84F20W	S84G20W	S84H20W	S84I20W
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	12	12	15.5	17	21	23	23	26.5
l1 (mm)	13.5	13.5	16.5	18	22	24	24	27.5
L (mm)	56.5	56.5	70	76.5	92.5	106	113	133
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	40	49	54	68.5
Kv (m3/h)	3.9	8.2	28	36	62	79	124	178

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 $\frac{1}{4}$ " to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART









s.84W M/F

Male/Female 3/4" for flat gasket

Legionella is a bacterium that lives and proliferates in natural and artificial aquatic environments at temperatures ranging between 5.7°C and 55°C and standing up to acidic and alkaline environments.

New s.84AW is approved for use with drinking water; the specific ball design avoids water stagnation and the spread of bacteria in the system.



- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier

• The valve is provided with a flat sealing surface at male thread that offers an improved performance compared to conventional connections;

- a wider seal surface guarantees higher sealing, reliable over time
- No metal-to-metal moving parts
- No maintenance ever required
- T-handle clearly shows ball position
- Silicone-free lubricant on all seals
- + Handle stops on body to avoid stress at stem
- Chrome plated brass ball with rinse hole

BODY

• Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double EPDM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1, ISO228 parallel female by ISO228 male threads

FLOW

Full port to DIN 3357 for maximum flow

HANDLE

- Aluminum T-handle enameled green or red
- T-handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) non-shock cold working pressure

- DIN-EN 13828 limitations for potable water: 10 bar (Kg/cm²) non-shock cold working pressure and +65°C temperature (occasional excursions up to 90°C are permitted for a period of 1 h maximum)

-40°C to +150°C (-40°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stem extension
- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- DVGW (Germany)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- · Attestation de Conformité Sanitaire (France)

NOTE: approvals apply to specific configurations/sizes only

- Patented locking device
- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
 2
- Stubby handle
- RuB memory stop designed to be installed with our stubby handle





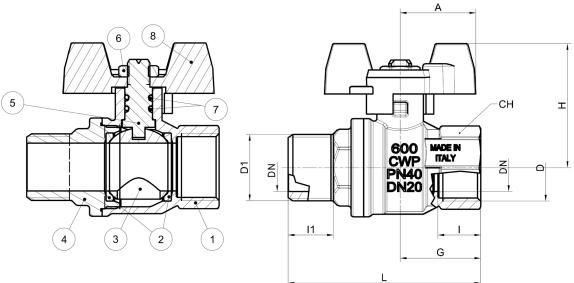
s.84 W MF FLAT GASKET XCES84AW - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



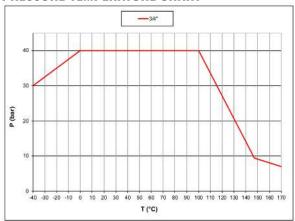
	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole	1	CW617N
4	Nickel plated male end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	EPDM
8	Green or red T-handle	1	EN AC-46100

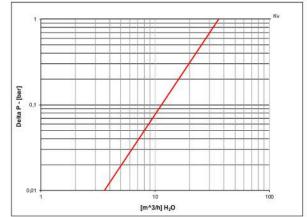
Code	S84E26AW	S84E26AWR		
D (inch)	Rp 3/4" (EN10226 - ISO228)	Rp 3/4" (EN10226 - ISO228)		
D1 (inch)	G3/4" B (ISO228)	G3/4" B (ISO228)		
DN (mm)	19	19		
l (mm)	17	17		
l1 (mm)	18	18		
L (mm)	76,5	76,5		
G (mm)	32	32		
A (mm)	30	30		
H (mm)	49	49		
CH (mm)	31	31		
T-handle	Green	Red		
Kv (m3/h)	36	36		



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART













QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, two O-rings at the stem (EPDM + FPM) for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

OPTIONS

- Oval lockable handle 1
- **RuB** memory stop is designed to be installed with our stubby handle 2
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stem extension
- Patented locking device
- Stubby handle

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

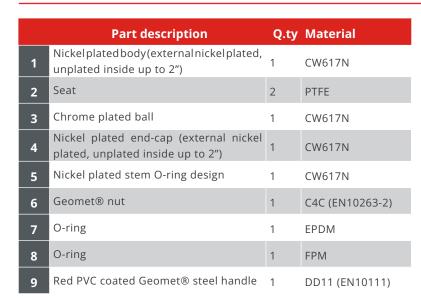
- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)
- · Attestation de Conformité Sanitaire (France)

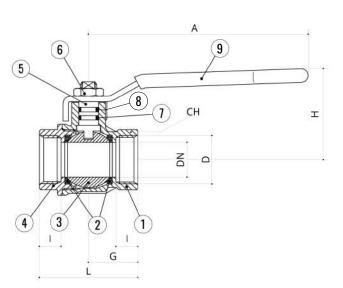
NOTE: approvals apply to specific configurations/sizes only.



S.090 XCE09000 - 0

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





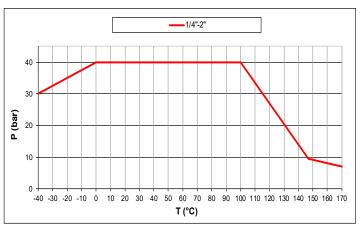
DRINKING WATER

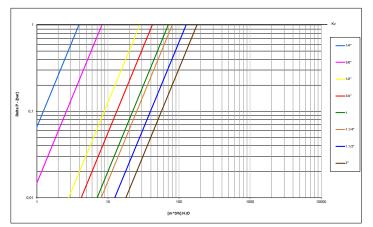
1 1/4"-2" hollow ball

Code	S090B00	S090C00	S090D00	S090E00	S090F00	S090G00	S090H00	S090100
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	39	39	50	54	67	77	90	106
G (mm)	19,5	19,5	25	27	33,5	38,5	45	53
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	38	48	54	66
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 ¼" to 2", as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART







s.090 M/F

Male/Female 1/4" - 2" ISO 228





2 - Contraction of the second

QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, two O-rings at the stem (EPDM + FPM) for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

OPTIONS

- Oval lockable handle 1
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430)
- T-handle 4
- Stem extension
- + $\ensuremath{\textit{RuB}}$ memory stop is designed to be installed with our stubby handle
- Stubby handle

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

MEREI

RACI

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)
- · Attestation de Conformité Sanitaire (France)

NOTE: approvals apply to specific configurations/sizes only.

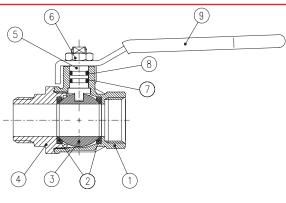


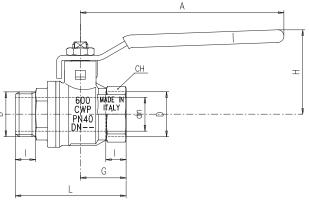
s.090 MF XCE09020 - 0

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	1	EPDM
8	O-ring	1	FPM
9	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)



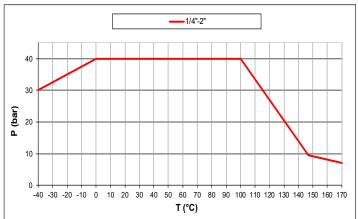


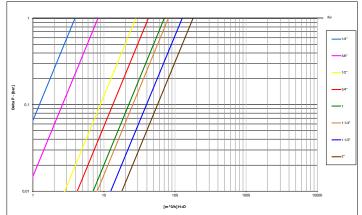
1 ¼"-2" hollow ball

Code	S090B20	S090C20	S090D20	S090E20	S090F20	S090G20	S090H20	S090I20
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	49	49	60	65.5	77.5	89	100	117
G (mm)	19,5	19,5	25	27	33,5	38,5	45	53
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	38	48	54	66
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 ¼" to 2": CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART









s.468LF DZR

22 mm compression ends ISO 5211 Lead-Free, dezincification-resistant





QUALITY

- 100% seal test guaranteed
- Arrow on the valve body clearly shows the flow direction
- No metal-to-metal moving parts
- No maintenance ever required
- Stem clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated DZR and lead free brass ball for longer life and with antifreeze function

BODY

- Hot forged sand blasted DZR and lead free unplated body and cap sealed with Loctite® or equivalent thread sealant
- Dezincification-resistant and lead free brass in compliance with HCACL Hygienic copper alloy composition (UBA list)

STEM

- Maintenance-free, double EPDM O-rings at the stem for maximum safety
- Blowout-proof unplated DZR and lead free brass stem

SEALING

• EPDM seats for lower torque

THREADS

Compression ends to EN 1254-2

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- Shell rating: 40 bar (600 PSI) non-shock cold working pressure
- Seat rating/compression ends: 16 bar max (230 PSI max) non-shock cold working pressure (see chart for pressure/temperature limits)
- -20°C to +120°C (-4°F to +250°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

Custom design

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

• Certified by CSA International for Drinking Water to NSF/ANSI 372 (United States)

• Water Regulations Advisory Scheme (United Kingdom)

NOTE: approvals apply to specific configurations/sizes only.

- S.468 DZR and lead free 7/8" compression ends
- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator
- Manual lockable handle

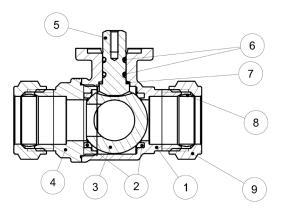
s.468LF DZR XCES468 - 5466

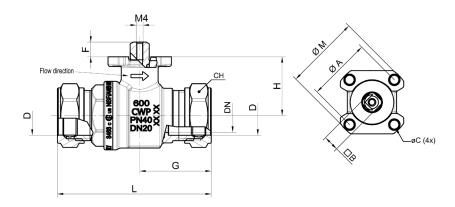
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW511L
2	Seat	2	EPDM
3	Chrome plated ball	1	CW511L
4	Unplated end-cap	1	CW511L
5	Unplated stem	1	CW511L
6	O-Ring	2	EPDM
7	Washer	1	PTFE carbon filled 25%
8	Olive	2	CW508L
9	Unplated nut	2	CW617N

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Code	S468E22
D (inch)	22
DN(mm)	19
L (mm)	87,5
G (mm)	40,7
H (mm)	33,5
ØA (mm)	36
ØC (mm)	Ø5.2 (M6)
Square B (mm)	9
ØM (mm)	43,4
F (mm)	8,3
CH (mm)	32
Kv (m3/h)	36

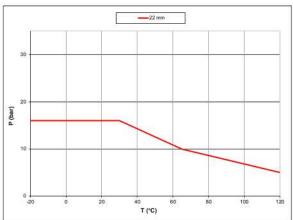


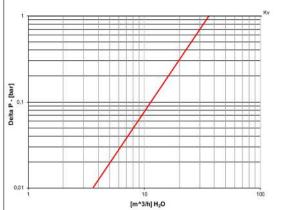


TORQUE FOR ACTUATOR SIZING N.M

Delta P>	0÷6 bar	6÷16 bar		
Valve size	to open/to close	to open/to close		
22 mm	2,5	3		

PRESSURE-TEMPERATURE CHART













Female/Female 1/4" - 2" Lead Free



All surfaces of this product in contact with drinking water contain less than 0.25% of lead in compliance with U.S. law

QUALITY

• Certified by CSA International to comply with U.S. s3874, California AB1953, and similar laws of other states for the safe handling of drinking water

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated lead free brass body and cap sealed with Loctite $\ensuremath{\$}$ or equivalent thread sealant

· Chrome plated lead free brass ball for longer life

STEM

• Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

Blowout-proof unplated lead free brass stem

SEALING

· Glass filled pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- Stubby handle
- T-handle 5

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both Thermal and electrical protection

WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 600 PSI non-shock cold working pressure
- For general use: -40°F / +350°F (-40°C to +170°C)
- NSF 61 limits (CSA approval): tested for use in continuous exposure to water of ambient temperature

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Custom design
- Pure PTFE seals

APPROVED BY OR IN COMPLIANCE WITH

• GOST-R (Russia)

 Certified by CSA International for Drinking Water to NSF/ANSI 61 – NSF/ ANSI 372 (United States)

• RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

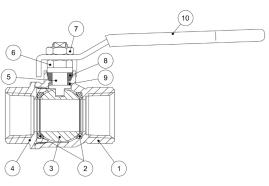


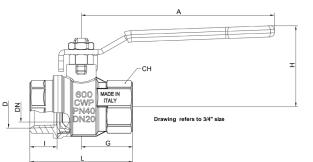
PURI-T 292 NPT XCET292 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated NPT body	1	CW510L
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW510L
4	Unplated NPT end-cap	1	CW510L
5	Unplated stem packing gland design	1	CW510L
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF (EN10263-2)
8	Packing gland seal	1	PTFE
9	Thrust washer	1	PTFE carbon filled 25%
10	Green PVC coated Geomet® steel handle	1	DD11 (EN10111)



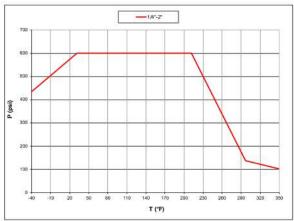


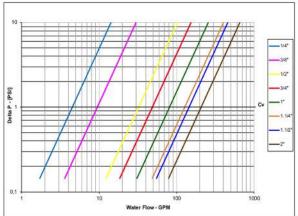
1 1/2"-2" hollow ball

Code	T292B41	T292C41	T292D41	T292E41	T292F41	T292G41	T292H41	T292I41
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890
l (inch)	0.472	0.472	0.610	0.669	0.827	0.906	0.906	1.043
L (inch)	1.772	1.772	2.323	2.520	3.189	3.661	4.016	4.764
G (inch)	0.886	0.886	1.161	1.259	1.594	1.831	2.007	2.381
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	6.220
H (inch)	1.575	1.575	1.693	1.968	2.165	2.992	3.228	3.504
CH (inch)	0.669	0.787	0.984	1.220	1.574	1.929	2.126	2.697
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	127.1	144.4	206.8

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









Puri-T 242

1/2" - 2" Lead Free solder ends

All surfaces of this product in contact with drinking water contain less than 0.25% of lead in compliance with U.S. law

OUALITY

· Certified by CSA International to comply with U.S. s3874, California AB1953, and similar laws of other states for the safe handling of drinking water

- · 24h 100% seal test guaranteed
- · Dual sealing system allows valve to be operated in either direction making installation easier
- · No metal-to-metal moving parts
- · Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- · Chrome plated lead free brass ball for longer life
- · Handle stops on body to avoid stresses at stem

BODY

· Hot forged sand blasted, unplated lead free brass body and cap sealed with Loctite® or equivalent thread sealant

STEM

· Pure PTFE adjustable packing gland and reinforced PTFE washer for lower torque and easy maintenance

· Blowout-proof unplated lead free brass stem

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

CONNECTIONS

Solder-end ANSI B16.18 female by female connections

FLOW

Full port to DIN 3357 for maximum flow

HANDLE

· Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 600 PSI (for solder joints rating see table 1) non-shock cold working pressure

- For general use: -4°F / +350°F (for solder joints rating see table 1)
- NSF 61 limits (CSA approval): tested for use in continuous exposure to water of ambient temperature

· WARNING: freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Glass filled PTFE seals
- Stainless steel handle (1.4016 / AISI 430)
- Custom design

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- Certified by CSA International for Drinking Water to NSF/ANSI 61 NSF/ ANSI 372 (United States)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configuartions/sizes only.

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stem extension (assemble after soldering)
- Stubby handle
- T-handle 4





A State of the second second second



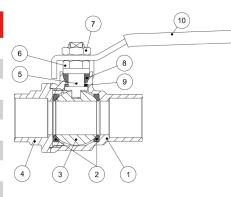


BONOMI INDUSTRIES SRL - www.bonomiindustries.com

PURI-T 242 XCET242 - 5466

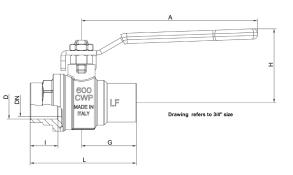
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated solder end body	1	CW510L
2	Seat	2	PTFE
3	Chrome plated ball	1	CW510L
4	Unplated solder end-cap	1	CW510L
5	Unplated stem packing gland design	1	CW510L
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF (EN10263-2)
8	Packing gland seal	1	PTFE
9	Thrust washer	1	PTFE carbon filled 25%
10	Green PVC coated Geomet® steel handle	1	DD11 (EN10111)



1 ½"-2" hollow ball

C	ode	T242D00	T242E00	T242F00	T242G00	T242H00	T242100	
D	Nominal	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	
(inch)	Actual	0,6271	0,8771	1,1279	1,3779	1,6279	2,1279	
DN ((inch)	0,551	0,748	0,944	1,181	1,496	1,889	
l (i	nch)	0,492	0,748	0,905	0,964	1,102	1,338	
L (i	nch)	2,244	2,854	3,346	3,819	4,488	5,433	
G (i	nch)	1,181	1,476	1,673	1,909	2,244	2,716	
A (i	nch)	3,937	4,724	4,724	6,22	6,22	6,22	
H (i	nch)	1,693	1,968	2,165	2,992	3,228	3,504	
Cv (GPM)	32,3	48,5	80,9	127,1	144,4	206,8	[



DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Above stated limits are not imposed by the valve, but by the strength of the soldering joint according to ASME B16.22. * This alloy contains more than 0,2% lead and, according to certain specifications, cannot be used for potable water

** Soldered copper tube joints have been tested at 230 PSI (1600 kPa) in ac-

297

Note:

or other foods.

cordance with ISO 2016

TABLE 1 PRESSURE - TEMPERATURE RATINGS											
	Meltin	g range		rking	Maximum working gauge pressure						
Joning material	degrees		temperature degrees		Size 1/8" - 1"		Size 1 1/4" - 2"		Size 2 1/2" - 4"		
	°F	°C	°F	°C	PSI	kPa	PSI	kPa	PSI	kPa	
	361/421	1 185/215	0/+100	-18/+38	200	1400	176	1200	150	1050	
50-50 tin-lead solder* ASTM B32			0/+150	-18/+66	150	1050	125	850	100	700	
alloy grade 50 A			0/+200	-18/+93	100	700	90	600	75	500	
			0/+250	-18/+121	85	600	75	500	50	350	
			0/+100	-18/+38	500**	3500**	400**	2800**	300**	2100**	
95-5 tin-antimony solder ASTM B32	450/464	220/240	0/+150	-18/+66	400**	2800**	350**	2400**	275**	2000**	
alloy grade 95TA	450/464 230/24	230/240	0/+200	-18/+93	300**	2100**	250**	1700**	200	1400	
			0/+250	-18/+121	200	1400	175	1200	150	1050	

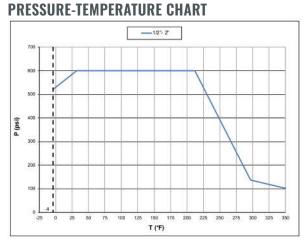
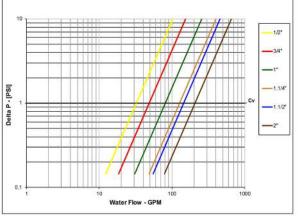


Chart applies to valve, not to solder joints for general use









Puri-T 264 NPT

Female/Female 1/2" - 1 ½" Lead Free, ISO 5211

All surfaces of this product in contact with drinking water contain less than 0.25% of lead in compliance with U.S. law

QUALITY

• Certified by CSA International to comply with U.S. s3874, California AB1953, and similar laws of other states for the safe handling of drinking water

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- · Silicone-free lubricant on all seals
- Chrome plated lead free brass ball for longer life

BODY

- Hot forged sand blasted, unplated lead free brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant

- Integrated ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated lead free brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

 Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

• 100% full port for maximum flow

OPERATING MECHANISM

 Integrated sturdy ISO 5211 flange allows direct mounting of electric and pneumatic actuators, with no bracket or coupling required. See *RuB* line of electric and pneumatic actuators.

WORKING PRESSURE & TEMPERATURE

- 600 PSI up to 3/4" size
- For 1" size up to 1 1/2" size:

-Shell rating: 600 PSI

-Seat rating: Delta P max permissible 230 PSI

- non-shock cold working pressure
- For general use: -4°F/+350°F
- NSF 61 limits (CSA approval): tested for use in continuous exposure to water of ambient temperature

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

• Custom design

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- Certified by CSA International for Drinking Water to NSF/ANSI 61 NSF/ ANSI 372 (United States)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle

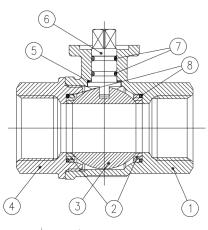


PURI-T 264 XCET264 - 5466

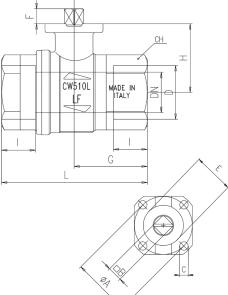
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated NPT body	1	CW510L
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW510L
4	Unplated NPT end-cap	1	CW510L
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW510L
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	T264D41	T264E41	T264F41	T264G41	T264H41
D (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"
DN (inch)	0,59	0,787	0,984	1,259	1,575
l (inch)	0,61	0,708	0,827	0,905	0,964
L (inch)	2,598	2,933	3,563	4,094	4,606
G (inch)	1,201	1,457	1,791	2,047	2,322
H (inch)	1,22	1,516	1,673	1,941	2,441
CH (inch)	1,063	1,260	1,614	1,968	2,165
ØA (inch)	1,417	1,417	1,417	1,417	1,968
□B (inch)	0,354	0,354	0,354	0,354	0,551
C (inch)	0,22	0,22	0,22	0,22	0,260
E (inch)	0,984	0,984	0,984	0,984	1,378
F (inch)	0,295	0,335	0,335	0,335	0,571
Flange connection	F03	F03	F03	F03	F05
Cv (GPM)	32,3	69,3	115,5	179,1	283,1



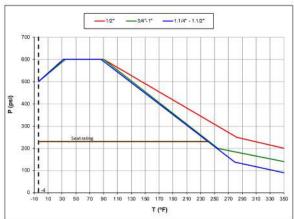
DRINKING WATER



TORQUE FOR ACTUATOR SIZING IN-LB

Delta P>	0÷200 PS	I	600 PSI		
Valve size	to open to close		to open	to close	
1/2″	25	15	25	15	
3/4″	33	20	33	20	
Delta P>	0÷90 PSI		>90÷230 PSI		
Valve size	to open	to close	to open	to close	
1″	19	19	31	31	
1 ¼″	22	22	35	35	
1 1⁄2″	51	51	84	84	

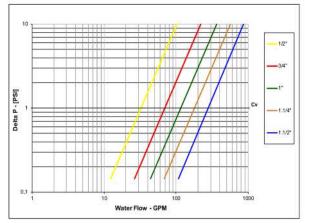
PRESSURE-TEMPERATURE CHART



TORQUE CORRECTION FACTORS

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

Lubricating oils or liquids	0.8
Dry gases, natural gas	1.5
Slurries or liquids bearing abrasive particles	1.5÷2.5



PLUMBING

RuB offers tailored precise and reliable solutions in managing water and other fluids. Our brass ball valves are crafted for long-term durability and seamless operation, prioritizing safety and sustainability.

Ideal for water supply, drainage, irrigation, HVAC systems, and more, RuB valves are the trusted choice for efficient, leak-proof solutions in residential, commercial, and industrial applications.





PLUMBING Scan the QR code to discover our products



S.42 1/2" - 3" solder-ends ball valve	Page 302
S.50 1/4" - 2" solder ends, standard port	Page 304
s.50 MF 1/4" - 2" solder ends, standard port	Page 306
S.51 1/2" - 2" EN 10226-1, standard port	Page 308
s.51 MF 1/2" - 2" EN 10226-1, standard port	Page 310
s.55 KFE 1/4" ISO 228, cap & strap	Page 312
S.63 1/2" - 3" reduced port, ISO 228	Page 314
s.71 NPT 1/2" - 4" standard port	Page 316
S.81 1/2" - 2" ISO 228, side drain	Page 318
s.88 BSPT 1/4" - 2" reduced port	Page 320
S.90 1/4" - 4", ISO 228	Page 322
s.90 M/F 1/4" - 4", ISO 228	Page 324
s.90 M/M 1/4" - 4", ISO 228	Page 326
s.90 NPT short 1/4" - 2"	Page 328
S.9036 1/2" - 1 1/4" ISO 228, union connection	Page 330
	Page 332
S.94 1/2" - 2" ISO 228, for sensors	
S.94 1/2" - 2" ISO 228, for sensors s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2"	Page 334
	Page 334 Page 336
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2"	
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve	Page 336
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve 	Page 336 Page 338
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve 	Page 336 Page 338 Page 340
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve 	Page 336 Page 338 Page 340 Page 342
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve 	Page 336 Page 338 Page 340 Page 342 Page 344
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 348
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 348 Page 350
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.123 1/4" - 1 1/4" heavy pattern check valve s.124 1/2" - 4" ISO 228 foot valve	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 348 Page 350 Page 352
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.123 NPT 1/4" - 1 ¼" heavy pattern check valve s.124 1/2" - 4" ISO 228 foot valve s.126 3/8" - 4" ISO 228 swing check valve 	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 348 Page 350 Page 352 Page 354
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 check valve s.123 NPT 1/4" - 1 Va" heavy pattern check valve s.124 1/2" - 4" ISO 228 foot valve s.126 3/8" - 4" ISO 228 foot valve s.126 M NPT 1/2" - 4" swing check valve s.126 M NPT 1/2" - 4" swing check valve s.126 M NPT 1/2" - 4" swing check valve s.126 M NPT 1/2" - 4" swing check valve s.126 M NPT 1/2" - 4" swing check valve s.128 1/4" - 4" ISO 228 Y-strainer	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 346 Page 348 Page 350 Page 352 Page 354 Page 356
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.123 NPT 1/4" - 1 ¼" heavy pattern check valve s.124 1/2" - 4" ISO 228 foot valve s.126 3/8" - 4" ISO 228 swing check valve s.126 M NPT 1/2" - 4" swing check valve s.128 1/4" - 4" ISO 228 restrainer s.140 bib-cock 1/2" - 3/4" with plain outlet 	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 348 Page 350 Page 352 Page 354 Page 356 Page 358
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.112 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.126 3/8" - 4" ISO 228 check valve s.126 3/8" - 4" ISO 228 check valve s.126 M NPT 1/2" - 4" swing check valve s.126 M NPT 1/2" - 4" swing check valve s.128 1/4" - 4" ISO 228 Y-strainer s.140 bib-cock 1/2" - 3/4" with plain outlet s.142 bib-cock 3/8" - 1" with 3/4" outlet and hose 	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 348 Page 350 Page 350 Page 352 Page 354 Page 356 Page 358 Page 360
 s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2" s.110 3/8" - 4" ISO 228 gate valve s.111 1/4" - 4" ISO 228 heavy pattern gate valve s.112 NPT 1/2" - 4" gate valve s.114 NPT 1/2" - 4" heavy pattern gate valve s.120 3/8" - 4" ISO 228 check valve s.122 3/8" - 4" ISO 228 check valve s.123 1/4" - 4" ISO 228 heavy pattern check valve s.123 NPT 1/4" - 1 ¼" heavy pattern check valve s.124 1/2" - 4" ISO 228 foot valve s.126 3/8" - 4" ISO 228 swing check valve s.126 M NPT 1/2" - 4" swing check valve s.128 1/4" - 4" ISO 228 restrainer s.140 bib-cock 1/2" - 3/4" with plain outlet 	Page 336 Page 338 Page 340 Page 342 Page 344 Page 346 Page 348 Page 348 Page 350 Page 350 Page 352 Page 354 Page 356 Page 358 Page 360 Page 362









QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

CONNECTIONS

Solder end female by female connections

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- WARNING: do not exceed reasonable temperature and/or electrical load

OPTIONS UP TO 2" SIZE

- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 3"
- Stem extension (assemble after soldering)
- Lead free for safe drinking water (0.25% or less Pb)
- T-handle 3
- Stubby handle

WORKING PRESSURE & TEMPERATURE

• 600 PSI (40 bar) up to 2", 450 PSI (30 bar) over 2", (150 WSP -10 bar all sizes) non-shock cold working pressure

- NOTE: for solder joints ratings see Table 1 on reverse
- 250 PSI (17 bar) non-shock working pressure for LP-Gas

* 150 psig (10 bar) non-shock working steam pressure. Not suitable for throttling steam.

• -4°F/+366°F (-20°C / +170°C) (for solder joints ratings see Table 1 on reverse)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Glass filled PTFE seals
- Stainless steel handle (1.4016 / AISI 430)
- Custom design

APPROVED BY OR IN COMPLIANCE WITH

- Underwriters Laboratories (United States, Canada):
- Guide YSDT: LP-Gas shut-off valve
- Guide YRBX: Flammable liquid shut-off valve
- Guide YRPV: Gas shut-off valve for use with natural and manufactured gases
- Guide MHKZ: No. 6 oil at 250°F
- GOST-R (Russia)
- RoHS Compliant (EU)
- CRN-TSSA acc. to MSS SP110 (Canada)
- Meeting WW-V-35C Federal U.S. Specification (United States)

NOTE: approvals apply to specific configurations/sizes only.

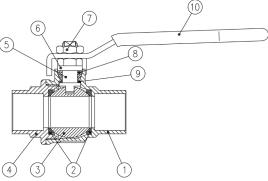


s.42 XCES42 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated solder end body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated solder end-cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	C4C (EN10263-2)
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Yellow PVC coated Geomet® steel handle	1	DD11 (EN10111)



1 ¼"-2" hollow ball

(Code	S42D00	S42E00	S42F00	S42G00	S42H00	S42100	S42L00	S42M00
D	Nominal	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"
(inch)	Actual	0.6271	0.8771	1.1279	1.3779	1.6279	2.1279	2.628	3.128
DN	(inch)	0.551	0.748	0.944	1.181	1.496	1.889	2.519	2.992
1 (inch)	0.492	0.748	0.905	0.964	1.102	1.338	1.476	1.673
L (inch)	2.244	2.854	3.346	3.819	4.488	5.433	6.614	7.598
G ((inch)	1.181	1.476	1.673	1.909	2.244	2.716	3.307	3.799
Α (inch)	3.937	4.724	4.724	6.220	6.220	6.220	10.039	10.039
Н ((inch)	1.695	1.988	2.153	2.988	3.236	3.500	5.196	5.511
Cv	(GPM)	32.3	48.5	80.9	127.1	144.4	206.8	596.20	896.50

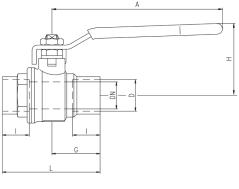


			TABLE 1	PRESSURE	- TEMPER	ATURE RA	TINGS			
La seta se	Melting range		Working		Maximum working gauge pressure					
Joning material	deg	rees	temperature degrees		Size 1	Size 1/8" - 1"		1⁄4″-2″	Size 2 ½" - 4"	
	°F	°C	°F	°C	psi	kPa	psi	kPa	psi	kPa
50-50 tin-lead solder* ASTM			0/+100	-18/+38	200	1400	176	1200	150	1050
	361/421	1/421 185/215	0/+150	-18/+66	150	1050	125	850	100	700
B32 alloy grade 50 A			0/+200	-18/+93	100	700	90	600	75	500
			0/+250	-18/+121	85	600	75	500	50	350
			0/+100	-18/+38	500**	3500**	400**	2800**	300**	2100**
95-5 tin-antimony			0/+150	-18/+66	400**	2800**	350**	2400**	275**	2000**
solder ASTM B32 alloy grade 95TA	450/464	230/240	0/+200	-18/+93	300**	2100**	250**	1700**	200	1400
2			0/+250	-18/+121	200	1400	175	1200	150	1050

PRESSURE-TEMPERATURE CHART

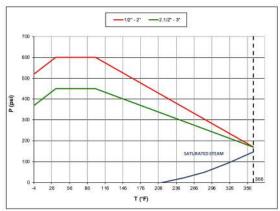


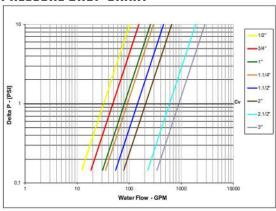
Chart applies to valve, not to solder joints

NOTE:

Above stated limits are not imposed by the valve, but by the strength of the soldering joint according to ASME B16.22.

* This alloy contains more than 0,2% lead and, according to certain specifications, cannot be used for potable water or other foods.

** Soldered copper tube joints have been tested at 230 PSI (1600 kPa) in accordance with ISO 2016







S.5U Female/Female 1/4" - 2" ISO 228





QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- \cdot $\,$ No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball for longer life with rinse hole (the rinse hole is expected from 1/2" up to 2" sizes)

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

· ISO 228 parallel female by female threads

FLOW

- Full port to DIN 3357 for 1/4" and 3/8" sizes, nominal port for compact design from 1/2" to 2" sizes.

HANDLE · Geomet

 Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 3/8", 30 bar (450 PSI) over 3/8" non-shock cold working pressure

-40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle **1**
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- RuB memory stop is designed to be installed with our stubby handle



s.50 XCES50 - 5466

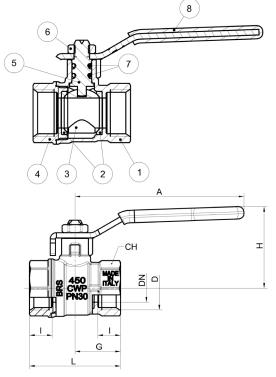
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 1/2" up to 2")	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet [®] steel handle	1	DD11 (EN10111)

1 ¼"-2" hollow ball

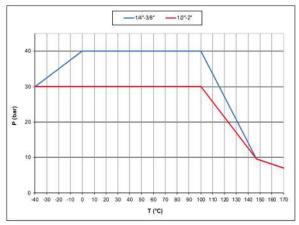
NOTE: drawings refer to 1/2" up to 2" sizes

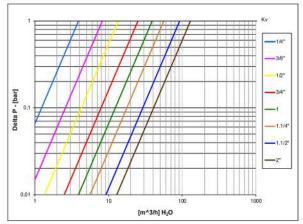


Code	S50B00	S50C00	S50D00	S50E00	S50F00	S50G00	S50H00	S50100
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	13,5	18	22,5	28,5	36	45
l (mm)	9	9	11	12	14	15	17	19
L (mm)	39	39	44	52	61,5	73	86	101
G (mm)	19,5	19,5	22	26	30,7	36,5	43	50,5
A (mm)	82	82	82	100	120	120	158	158
H (mm)	38	38	39,5	43,5	52	57	75,5	82,5
CH (mm)	17	20	25	31	38	48	54	66
Kv (m³/h)	3,9	8,2	13,5	25	39	56	92	129

DN shows actual flow diameter. Configuration of valves 1/4" and 3/8" sizes is slightly different. Ball valves are marked CE on handle from $1 \frac{1}{4}"$ to 2" as follow: CE XXCODEXX Cat. I-A

PRESSURE-TEMPERATURE CHART







s.50 M/F

Male/Female 1/4" - 2" ISO 228







QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by female threads

FLOW

+ Full port to DIN 3357 for 1/4" and 3/8" sizes, nominal port for compact design from 1/2" to 2" sizes.

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 3/8", 30 bar (450 PSI) over 3/8" non-shock cold working pressure

• -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle 1
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- **RuB** memory stop is designed to be installed with our stubby handle



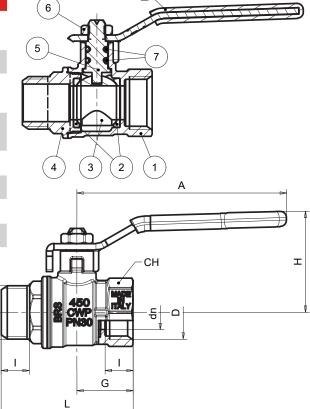
s.50 MF XCES50M - 5735

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unpla- ted inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 1/2" up to 2")	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)



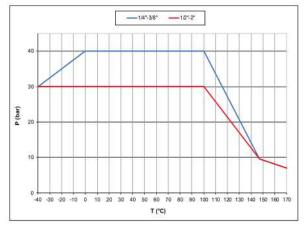


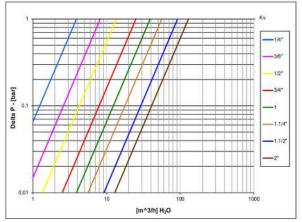
8

Code	S50B20	S50C20	S50D20	S50E20	S50F20	S50G20	S50H20	S50I20
Size (inch)	1/4"	3/8"	1/2"	3/4"	1''	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	13.5	18	22	28.5	36	45
l (mm)	9	9	11	12	14	15	17	19
L (mm)	49	49	51.5	60.5	70	82	95	111.5
G (mm)	19,5	195	22	26	30.7	36.5	43	50.5
A (mm)	82	82	82	100	120	120	158	158
H (mm)	38	38	39.5	43.5	52	57	75.5	82.5
CH (mm)	17	20	25	31	38	48	54	66
Kv (m3/h)	3,9	8,2	13.5	25	39	56	92	129

DN shows actual flow diameter. Ball valves are marked CE on handle from 1 1/4" to 2" as follow: CE XXCODEXX Cat. I-A

PRESSURE-TEMPERATURE CHART









S.J Female/Female 1/2" - 2" EN 10226-1





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1 parallel female by female threads

FLOW

Nominal port for compact design

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle 1
- Patented locking device (2)
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- RuB memory stop is designed to be installed with our stubby handle



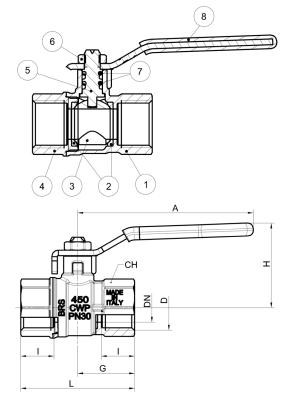
s.51 XCES51 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)

1 ¼"-2" hollow ball

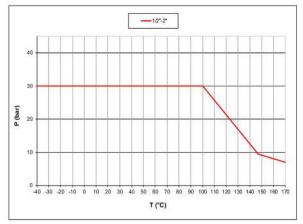


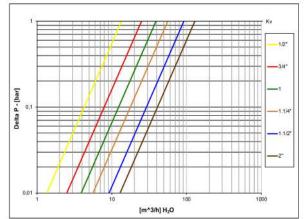
Code	S51D00	S51E00	S51F00	S51G00	S51H00	S51I00
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	13,5	18	22,5	28,5	36	45
l (mm)	15,5	17	21	23	23	26,5
L (mm)	53	62	75,5	89	98	116
G (mm)	26,5	31	37,7	44,5	49	58
A (mm)	82	100	120	120	158	158
H (mm)	39,5	43,5	52	57	75,5	82,5
CH (mm)	25	31	38	48	54	66
Kv (m³/h)	13,5	25	39	56	92	129

DN shows the nominal flow diameter.

Ball valves are marked CE on handle from 1 1/4" to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART







s.51 M/F Male/Female

Male/Female 1/2" - 2" EN 10226-1







QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stress at stem
- Chrome plated brass ball for longer life with rinse hole

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• EN 10226-1 taper male by parallel female threads

FLOW

Nominal port for compact design

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle **1**
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- RuB memory stop is designed to be installed with our stubby handle



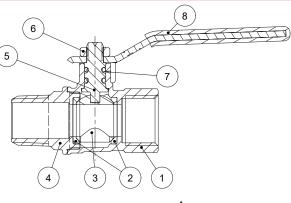
s.51 MF XCES51M - 5466

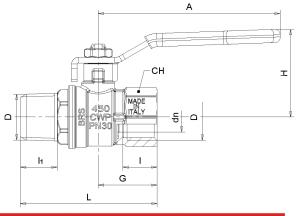
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball with rinse hole	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)

1 ¼"-2" hollow ball



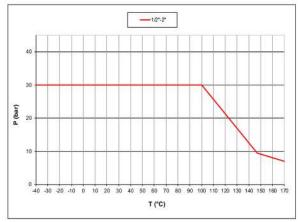


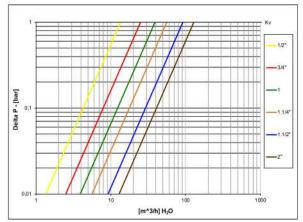
Code	S51D20	S51E20	S51F20	S51G20	S51H20	S51I20
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	13.5	18	22.5	28.5	36	45
l (mm)	15.5	17	21	23	23	26.5
l1 (mm)	16.5	18	22	24	24	27.5
L (mm)	61.5	71.5	85	99	108	127.5
G (mm)	26.5	31	37.7	44.5	49	58
A (mm)	82	100	120	120	158	158
H (mm)	39.5	43.5	52	57	75.5	82.5
CH (mm)	25	31	38	48	54	66
Kv (m3/h)	13.5	25	39	56	92	129

DN shows the nominal flow diameter.

Ball valves are marked CE on handle from 1 1/4" to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART









s.55 KFE

ISO 228 cap & strap

Many HVAC applications require a blowdown valve to drain water from the strainer. *RuB* 's new s.55 cap & strap valve is designed with a full port for maximum flow. Because of the O-ring stem seal design, no maintenance is ever required. 3/4" thread gives the possibility to easily fit a hose holder available as option, for the connection of a waste water collection pipe.

QUALITY

- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- Double seal system

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof brass stem with EPDM O-ring
- Maintenance-free, double EPDM O-ring at the stem for maximum safety

SEALING

· Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• 1/4" ISO 228 parallel male thread by 3/4" ISO 228 thread closed by cap

FLOW

• Full port for maximum flow

HANDLE

Reinforced nylon black wedge handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -20°C to +90°C (-4°F to +200°F)
- +120°C screw driver and wrench operated version
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- Grey wedge handle in Grivory® high performing polymer
- 1/4" NPT taper ANSI B.1.20.1 male thread by 3/4"NH hose thread
- $\cdot\;$ Hose holder for connection of waste water collection pipe
- Seal washer on 1/4" ISO 228 parallel male thread
- Additional connection options on demand







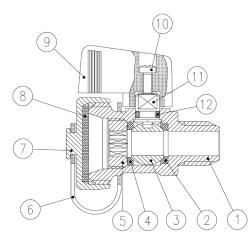
s.55 KFE xces55kFe - 5466

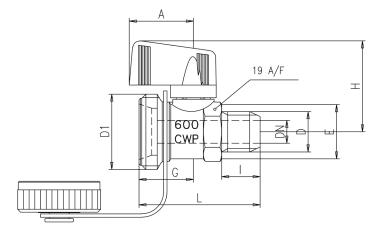
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



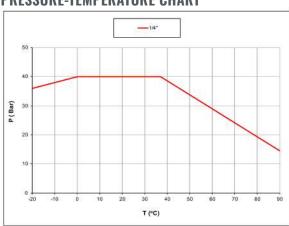
	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Body seat	1	PTFE
3	Chrome plated ball	1	CW617N
4	Retainer seat	1	PTFE
5	Unplated retainer nut	1	CW617N
6	Black strap	1	Plastic
7	Unplated cap	1	CW617N
8	Seal cap	1	EPDM
9	Black handle	1	Nylon glass filled 30%
10	Zinc plated screw	1	CB4FF (EN10263-2)
11	Unplated stem	1	CW617N
12	O-Ring	1	EPDM

Code	S55B00
D (inch)	1/4″
D1 (mm)	3/4″
DN (mm)	8
E (mm)	19
l (mm)	10
G (mm)	19.1
L (mm)	39
A (mm)	22.5
H (mm)	32
Kv (m3/h)	5.8



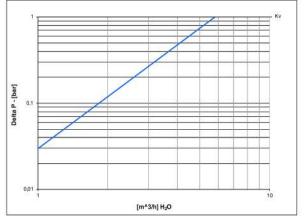


DN shows the nominal flow diameter.



PRESSURE-TEMPERATURE CHART









S.63 Female/Female 1/2" - 3" reduced port, ISO 228



QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction makaing installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 female by female threads

FLOW

One size reduced port for compact design

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/ sizes only.

- Oval lockable handle up to 2 1/2", round over 2 1/2"
- Patented locking device for valves up to 3"
- Male by female ISO 228 threads up to $2^{\prime\prime}$
- Stem extension up to 2 $\frac{1}{2}$ "
- Stainless steel handle (1.4016 / AISI 430) up to 2 $\frac{1}{2}$ 3
- T-handle up to 2 ½" **4**
- Stubby handle up to 2"
- + $\ensuremath{\textit{RuB}}$ memory stop is designed to be installed with our stubby handle



s.63 XCES63 - 5466

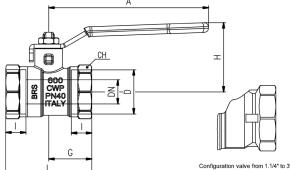
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



8

	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside up to 2")	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside up to 2")	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)

(6)

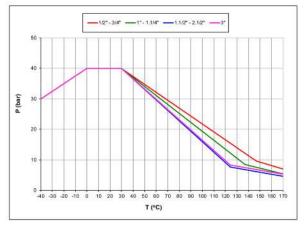


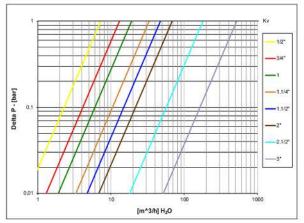
1 1/2"-2 1/2" hollow ball

Code	S63D00	S63E00	S63F00	S63G00	S63H00	S63100	S63L00	S63M00
D (Size)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"
DN (mm)	11,5	15	19	24	30	38	48	64
l (mm)	11	12	14	15	17	19	22	25
L (mm)	45	54	60	72	84	97	114	142
G (mm)	22	27	30	36	42	48,5	57	71
A (mm)	100	100	120	120	158	158	158	255
H (mm)	41	43	50	54	73	79	86	132
CH (mm)	25	31	38	49	54	68	85	99
Kv (m^3/h)	7,2	13	19	33	47	68	179	516

DN shows the nominal flow diameter. Stem configuration of valves over 2 $\frac{1}{2}$ " is slightly different. Ball valves are marked CE on handle from 1 $\frac{1}{2}$ " to 2 $\frac{1}{2}$ ", on body over 2 $\frac{1}{2}$ " as follow: CE XXCODEXX Cat. I-A

PRESSURE-TEMPERATURE CHART



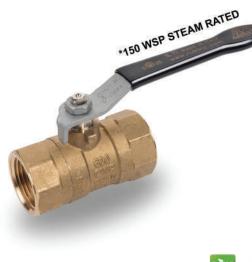




s.71 NPT

Female/Female 1/2" - 4" standard port







QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- $\cdot\;$ Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm {B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Triple stem seals in sizes over 2 1/2"

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

FLOW

Standard port for compact design

HANDLE

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

OPTIONS

- Oval lockable handle up to 2 ½", round over 2 ½"
- Patented locking device 2
- Stem extension up to 2 1/2"
- Stainless steel handle (1.4016 / AISI 430) up to 2 $\frac{1}{2}$ 3
- T-handle up to 2 ½" 4
- Stubby handle up to 2"
- **RuB** memory stop is designed to be installed with our stubby handle

WORKING PRESSURE & TEMPERATURE

- 600 PSI non-shock cold working pressure
- *150 psig non-shock steam working pressure. Not suitable for throttling steam.
- -40°F/+366°F

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball and/or stem (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

APPROVED BY OR IN COMPLIANCE WITH

- Canadian standards Association (United States, Canada)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

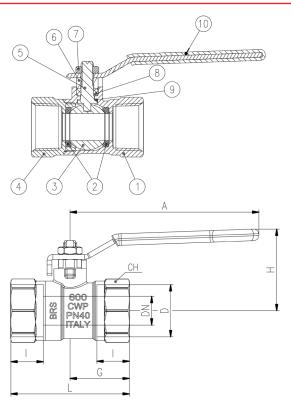


s.71 XCES71 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



1 1/2"-2 1/2" hollow ball



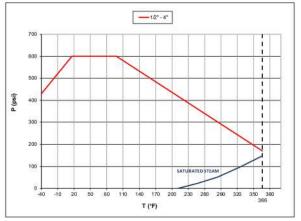
PLUMBING

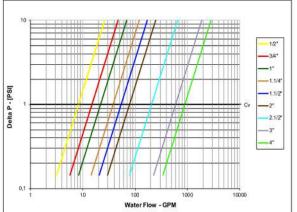
Code	S71D41	S71E41	S71F41	S71G41	S71H41	S71I41	S71L41	S71M41	S71N41
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0.453	0.590	0.748	0.945	1.181	1.496	1.890	2.520	2.992
l (inch)	0.61	0.669	0.827	0.905	0.905	1.043	1.26	1.378	1.634
L (inch)	2.126	2.441	2.835	3.464	3.779	4.409	5.276	6.378	7.48
G (inch)	1.043	1.22	1.417	1.732	1.89	2.205	2.638	3.189	3.74
A (inch)	3.937	3.937	4.724	4.724	6.22	6.22	6.22	10.039	10.039
H (inch)	1.693	1.695	1.984	2.153	2.988	3.236	3.5	5.197	5.512
CH (inch)	0.984	1.22	1.496	1.929	2.126	2.677	3.346	3.898	4.921
Cv (GPM)	8.3	15	22	38.1	54.3	78.6	206.8	596.2	896.5

DN shows the nominal flow diameter.

Stem configuration of valves over 2 1/2" is slightly different.

PRESSURE-TEMPERATURE CHART









S.81 Female/Female 1/2" - 2" ISO 228, side drain





QUALITY

- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications
- $\cdot\;$ Double side drain allows easy and safe downstream line venting

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

- ISO 228 parallel female by female threads
- G 1/4" ISO 228 drain on both side

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 16 bar (230 PSI) non-shock cold working pressure
- Pressure applicable to valve, not to side tap
- -20°C to +170°C (-4°F to +350°F)
- Temperature applicable to valve, not to side tap

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design
- Male by female threads

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

- Oval lockable handle 1
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- + $\ensuremath{\textit{RuB}}$ memory stop is designed to be installed with our stubby handle
- Compact drain 5

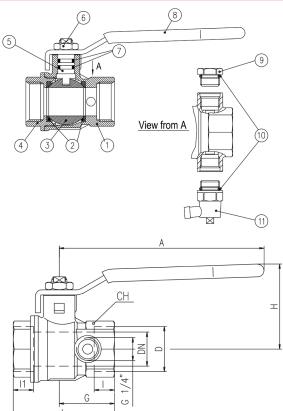


s.81 XCES81 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



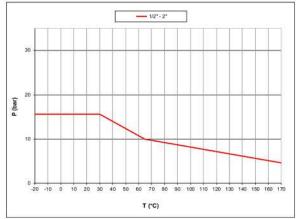
	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-Ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)
9	Nickel plated cap	1	CW617N
10	O-Ring	2	EPDM
11	Side tap	1	-
1 1⁄4″-2	2" hollow ball		

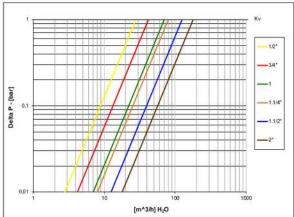


Code	S81D00	S81E00	S81F00	S81G00	S81H00	S81I00
D (mm)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	15	20	25	32	40	50
l1 (mm)	11	12	21	23	17	26,5
l (mm)	11	12	14	15	17	19
L (mm)	56	59,5	79,5	90,5	95,5	118,5
G (mm)	31	32,5	39	44	50,5	58
A (mm)	100	120	120	158	158	158
H (mm)	43	50	54	73	79	86
CH (mm)	25	31	40	49	54	68,5
Kv (m^3/h)	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART









s.88 BSPT



H2 READY: product approved in EU acc.to EN331 (sizes ¼" to 2") for the 1st, 2nd and 3rd gas families, therefore compatible with hydrogen use up to 50% in the gas mixture, as established in the 1st gas family of the EN437 (ref. G110)

QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite $\ensuremath{\mathbbm s}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• ISO 7/1, BS 21 BSPT taper female by female threads

FLOW

One size reduced port compact design

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

· Handle removable with valve in service

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom Design
- Male by female threads

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25 mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only

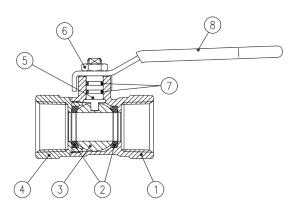
- NPT taper ANSI B.1.20.1 threads (s. 71 model with packing gland seal)
- Stem extension
- Oval lockable handle
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430)
- T-handle 4
- Stubby handle
- *RuB* memory stop designed to be installed with our stubby handle



s.88 BSPT XCES8850 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

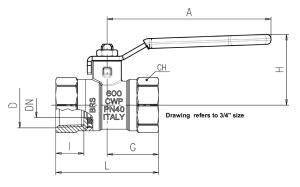
	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated end-cup	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)



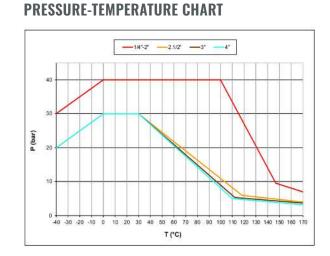
PLUMBING

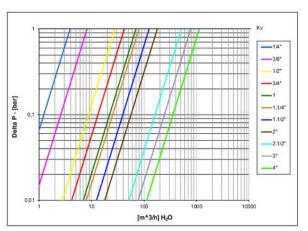
1 1/2"-2" hollow ball

Code	S88B50	S88C50	S88D50	S88E50	S88F50	S88G50	S88H50	S88150
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	6	8	11.5	15	20	25	32	40
l (mm)	12	12	15.5	17	21	23	23	26.5
L (mm)	45	45	54	62	72	88	96	112
G (mm)	22.5	22.5	26.5	31	36	44	48	56
A (mm)	82	82	100	100	120	120	158	158
H (mm)	38	38	41	43	50	54	73	79
CH (mm)	20	20	25	31	38	49	54	68
Kv (m³/h)	1.6	2.6	7.2	13.0	19.0	33.0	47.0	68.0



DN shows the nominal flow diameter. Ball valves are marked CE on handle from 1 $\frac{1}{2}$ " to 2" as follow: CE XXCODEXX Cat. I-A









S.90 Female/Female 1/4" - 4" ISO 228



QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Geomet $\ensuremath{\mathbb{R}}$ carbon steel handle with thick PVC dip coating. Handle coa-
- ting offers both thermal and electrical protection
- Handle removable with valve in service

OPTIONS

- Oval lockable handle up to 2", round over 2"
- Patented locking device
- Stainless steel handle (1.4016 / AISI 430)
- T-handle 4
- Stem extension
- + $\ensuremath{\textit{RuB}}$ memory stop is designed to be installed with our stubby handle
- Dezincification resistant brass body and components
- Stubby handle up to 2"

WORKING PRESSURE & TEMPERATURE

• 40 bar (600 PSI) up to 2", 30 bar (450 PSI) over 2" non-shock cold working pressure

- -40°C to +180°C (-40°F to +356°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

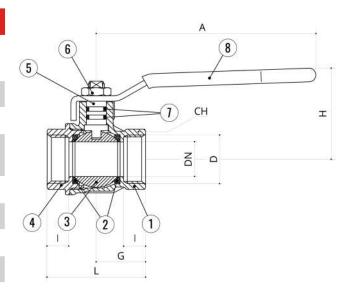


s.90 XCES90 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickelplatedbody(externalnickelplated, unplated inside up to 2")	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside up to 2")	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)

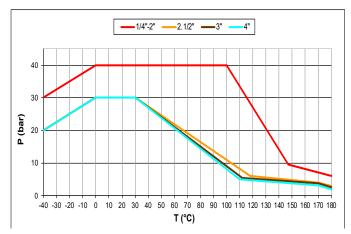


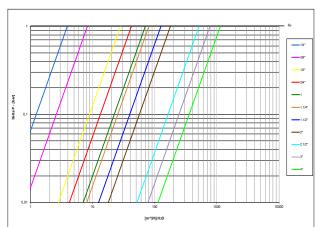
1 ¼"-2" hollow ball

Code	S90B00	S90C00	S90D00	S90E00	S90F00	S90G00	S90H00	S90100	S90L00	S90M00	S90N00
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	8	10	15	20	25	32	40	50	65	80	100
l (mm)	9	9	11	12	14	15	17	19	22	25	29
L (mm)	39	39	50	54	67	77	90	106	136	157	191
G (mm)	19,5	19,5	25	27	33,5	38,5	45	53	68	78,5	95,5
A (mm)	82	82	100	120	120	158	158	158	255	255	255
H (mm)	38	38	43	50	54	73	79	86	132	140	154
CH (mm)	17	20	25	31	38	48	54	66	85	99	125
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179	516	776	1130

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 ¼" to 2", on body over 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART







s.90 M/F

Male/Female 1/4" - 2" ISO 228





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- $\cdot\;$ Geomet® carbon steel handle with thick PVC dip coating. Handle coa-
- ting offers both thermal and electrical protection
- $\cdot\;$ Handle removable with valve in service

OPTIONS

- Oval lockable handle up to 2", round over 2"
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stem extension
- + $\ensuremath{\textit{RuB}}$ memory stop is designed to be installed with our stubby handle
- Dezincification resistant brass body and components
- Stubby handle up to 2"

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +180°C (-40°F to +356°F)
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

MEREI

RANY

UPON REQUEST

- · Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

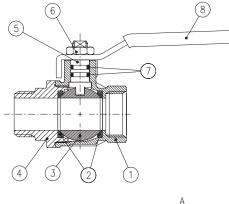


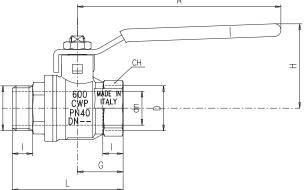
s.90 MF XCES90M - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



Part description	Q.ty	Material
Nickel plated body (external nickel plated, unplated inside)	1	CW617N
Seat	2	PTFE
Chrome plated ball	1	CW617N
Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
Nickel plated stem O-ring design	1	CW617N
Geomet® nut	1	C4C (EN10263-2)
O-ring	2	FPM
Red PVC coated Geomet® steel handle	1	DD11 (EN10111)
	Nickel plated body (external nickel plated, unplated inside) Seat Chrome plated ball Nickel plated end-cap (external nickel plated, unplated inside) Nickel plated stem O-ring design Geomet® nut	Nickel plated body (external nickel plated, unplated inside)1Seat2Chrome plated ball1Nickel plated end-cap (external nickel plated, unplated inside)1Nickel plated stem O-ring design1Geomet® nut1O-ring2



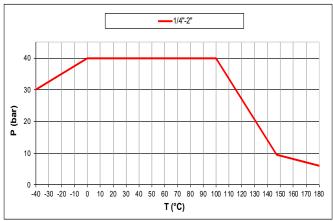


1 ¼"-2" hollow ball

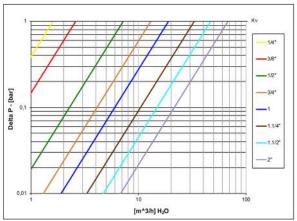
							-	2
Code	S90B20	S90C20	S90D20	S90E20	S90F20	S90G20	S90H20	S90120
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	49	49	60	65.5	77.5	89	100	117
G (mm)	19,5	19,5	25	27	33,5	38,5	45	53
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	17	20	25	31	38	48	54	66
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 ¼" to 2": CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART





s.90 M/M

Male/Male 1/4" - 2" ISO 228





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 parallel male by male threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +180°C (-40°F to +356°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

- According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- Water Regulations Advisory Scheme (United Kingdom)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle up to 2", round over 2" 1
- Patented locking device 2
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 🥝
- Stem extension
- **RuB** memory stop is designed to be installed with our stubby handle
- Dezincification resistant brass body and components
- Stubby handle up to 2"

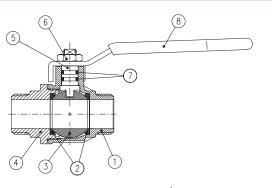


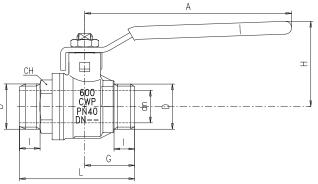
s.90 MM XCES90MM - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)





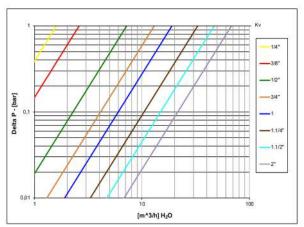
1 ¼"-2" hollow ball

Code	S90B22	S90C22	S90D22	S90E22	S90F22	S90G22	S90H22	S90122
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	50.5	50.5	62	67	80	91.5	103	120
G (mm)	21	21	27	29	36	41	48	56
A (mm)	82	82	100	120	120	158	158	158
H (mm)	38	38	43	50	54	73	79	86
CH (mm)	15	18	22	27	35	44	54	68
Kv (m^3/h)	3,9	8,2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 ¼" to 2": CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART

PRESSURE DROP CHART





s.90 NPT short

Female/Female 1/4" - 2"







OUALITY

- · 24h 100% seal test guaranteed
- · Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- · No maintenance ever required
- Handle clearly shows ball position
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

• Hot forged full port sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant

SEALING

· PTFE self-lubricating seats with flexible-lip design

THREADS

• NPT short taper female by female threads

HANDLE

- · Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- · Handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

WORKING PRESSURE & TEMPERATURE

- 600 PSI non-shock cold working pressure
- -40°F/+350°F (-40°C to +170°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- RuB memory stop is designed to be installed with our stubby handle



s.90 NPT SHORT XCES90N - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



(8)

 $\overline{7}$

А

т

CH

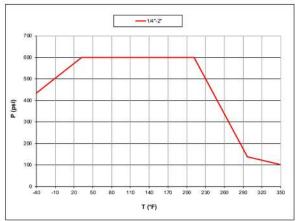
	Part description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)

1 ¼"-2" hollow ball

					, -			
Code	S90B41	S90C41	S90D41	S90E41	S90F41	S90G41	S90H41	S90I41
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (inch)	0.315	0.374	0.591	0.748	0.945	1.181	1.496	1.890
l (inch)	0.354	0.354	0.433	0.472	0.551	0.59	0.669	0.748
L (inch)	1.535	1.535	1.968	2.125	2.637	3.031	3.543	4.173
G (inch)	0.767	0.767	0.984	1.062	1.318	1.515	1.771	2.086
A (inch)	3.228	3.228	3.937	4.724	4.724	6.22	6.22	6.22
H (inch)	1.48	1.48	1.679	1.956	2.114	2.858	3.094	3.37
CH (inch)	0.669	0.787	0.984	1.22	1.496	1.889	2.125	2.598
Cv (GPM)	4.5	9.5	32.3	48.5	80.9	92.4	144.4	206.8

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

PRESSURE-TEMPERATURE CHART



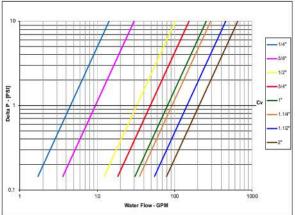
PRESSURE DROP CHART

5

6

2

G





s.9036 1/2" - 1 ¼"

1/2" - 1 ¼" ISO 228 union connection







QUALITY

- · 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- T-handle clearly shows ball position
- Silicone-free lubricant on all seals
- + Chrome plated brass ball for longer life
- + Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{B}}$ or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 female by union male threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

- Aluminum T-handle up to 1", Geomet® carbon steel T-handle with thick PVC dip coating over 1" $\,$

· Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 40 bar (600 PSI) non-shock cold working pressure
- -40°C to +150°C (-40°F to +302°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Stem extension
- Oval lockable handle
- Patented locking device
- Stainless steel handle (1.4016 / AISI 430)

+ Geomet $\ensuremath{\mathbb{R}}$ carbon steel handle with thick PVC dip coating.

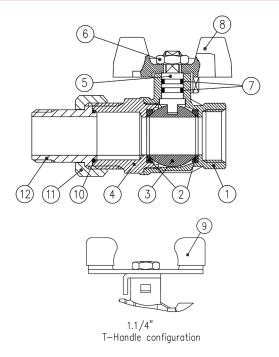
Handle coating offers both thermal and electrical protection

- Stubby handle
- RuB memory stop is designed to be installed with our stubby handle

s.9036 XCES9036 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

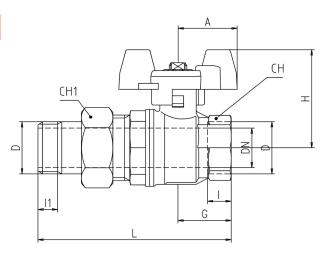
	Part description	O.tv	Material
1	Nickel plated body (external nickel plated, unplated inside)	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end-cap (external nickel plated excluding male thread, unplated inside)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	C4C (EN10263-2)
7	O-ring	2	FPM
8	Red T-handle	1	EN AC-46100
9	Red PVC coated Geomet® steel T-handle	1	DD11 (EN10111)
10	O-Ring	1	EPDM
11	Nickel plated nut	1	CW617N
12	Nickel plated hose	1	CW617N



PLUMBING

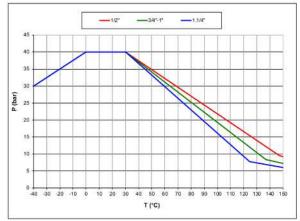
1 ¼" hollow ball

Code	S90D36	S90E36	S90F36	S90G36
D (inch)	1/2″	3/4″	1″	1 1⁄4″
DN (mm)	15	20	25	32
l1 (mm)	10	12	14	15
l (mm)	11	12	14	15
L (mm)	85	98	113	126,5
G (mm)	25	27	33,5	38,5
A (mm)	25	30	30	57
H (mm)	43	47	51	84,5
CH (mm)	25	31	38	48
CH1 (mm)	30	37	46	52
Kv (m^3/h)	28	42	70	80

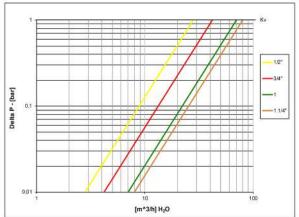


DN shower the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on body 1 ¼" size as follow: CE XXCODEXX Cat. I-A

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART







S. 94 Female/Female 1/2" - 2" ISO 228, for sensors





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite $\ensuremath{\mathbb{R}}$ or equivalent thread sealant

• Finest brass according to EN 12165 and EN 12164 specifications

- Tapped bottom M10x1 connection for temperature detector and other devices at user's option

STEM

- Blowout-proof nickel plated brass stem
- Maintenance-free, double FPM O-rings at the stem for maximum safety

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

• ISO 228 parallel female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- Handle removable with valve in service
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -20°C to +170°C (-4°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

- Oval lockable handle 1
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- RuB memory stop is designed to be installed with our stubby handle



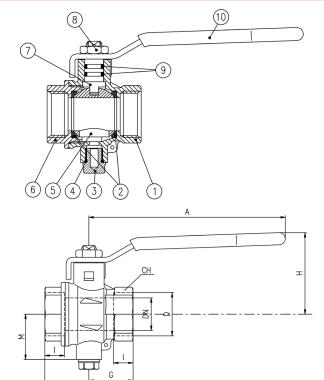
s.94 XCES94 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



		.	
	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Seat	2	PTFE
3	Сар	1	CW617N
4	O-Ring	1	FPM
5	Chrome plated ball	1	CW617N
6	Nickel plated end-cap (external treatment)	1	CW617N
7	Nickel plated stem O-ring design	1	CW617N
8	Geomet® nut	1	C4C (EN10263-2)
9	O-Ring	2	FPM
10	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)

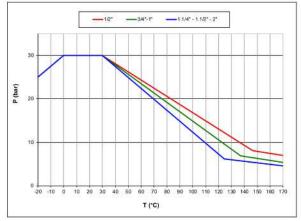
1 ¼" – 2" hollow ball



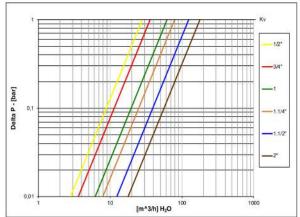
Code	S94D00	S94E00	S94F00	S94G00	S94H00	S94100
D (mm)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	15	20	25	32	40	50
l (mm)	11	12	14	15	17	19
L (mm)	50	54	67	77	90	106
G (mm)	25	27	33.5	38.5	45	53
M (mm)	32	30	32	38	44.3	51.3
A (mm)	100	120	120	158	158	158
H (mm)	43	50	54	73	79	86
CH (mm)	25	31	40	49	54	68,5
Kv (m^3/h)	28	36	62	79	124	178

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 $\frac{1}{4}$ " to 2" as follow: CE XXCODEXX Cat I-A

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART







s.96 extended stem

Female/Female full port 1/4" - 2" hot forged brass ball valve dezincification-resistant in sizes 3/8" - 2"





QUALITY

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life (DZR brass balls for sizes 3/8" 2")
- Handle stops on body to avoid stress at stem

BODY

• Hot forged sand blasted, nickel plated brass body and end cap (size 1/4") / Hot forged sand blasted DZR unplated body and end cap (sizes 3/8" - 2"), sealed with Loctite® or equivalent thread sealant

• Extended stem forged in one piece with body allows perfect sealing and easy operation when valve is isolated

• Finest brass according to EN 12165 and EN 12164 specifications (size 1/4"), Dezincification resistant ADZ-T and ADZ-P brass approved to SBN-PFS 1983:2 and NR-BFS 1988:18 specifications (sizes 3/8" - 2")

STEM

- Maintenance-free, double FPM O-rings at the stem for maximum safety
- Unplated brass stem (size 1/4") / DZR brass stem (sizes 3/8" 2")

SEALING

• Pure PTFE self-lubricating seats with flexible-lip design

THREADS

ISO 228 female by female threads

FLOW

• Full port to DIN 3357 for maximum flow

OPTIONS

- Oval lockable handle 1
- Patented locking device 2
- Stem extension
- Stainless steel handle (1.4016 / AISI 430) 3
- T-handle 4
- Stubby handle
- **RuB** memory stop is designed to be installed with our stubby handle

HANDLE

• Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

- · Handle removable with valve in service
- · WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure
- -40°C to +170°C (-40°F to +350°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

UPON REQUEST

- Stainless steel ball (1.4401 / AISI 316)
- Glass filled PTFE seals
- Custom design

PED DIRECTIVE

• According to 2014/68/UE module A: it cannot be used with dangerous gases in sizes larger than 25 mm

APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

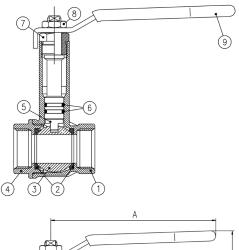


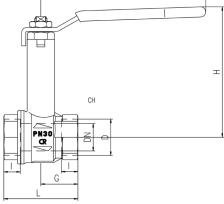
s.96 XCES96 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body (size 1/4") Unplated DZR body (sizes 3/8"- 2")	1	CW617N CW602N
2	Seat	2	PTFE
3	Chrome plated ball (size 1/4") Chrome plated DZR ball (sizes 3/8"- 2")	1	CW617N CW602N
4	Nickel plated end -cap (size 1/4") Unplated DZR end-cap (sizes 3/8"- 2")	1	CW617N CW602N
5	Unplated extended stem O-ring design (size 1/4") Unplated extended DZR stem O-ring design (sizes 3/8"- 2")	1	CW617N CW602N
6	O-Ring	2	FPM
7	Unplated nut	1	CW617N
8	Geomet® nut	1	C4C (EN10263-2)
9	Red PVC coated Geomet® steel handle	1	DD11 (EN10111)



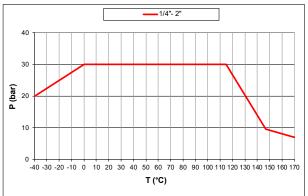


1 ¼"-2" hollow ball

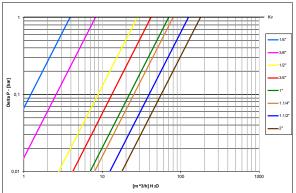
Code	S96B00	S96C00	S96D00	S96E00	S96F00	S96G00	S96H00	S96100
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	8	10	15	20	25	32	40	50
l (mm)	9	9	11	12	14	15	17	19
L (mm)	39	39	50	54	67	77	90	106
G (mm)	19.5	19.5	25	27	33.5	38.5	45	53
A (mm)	100	100	100	120	120	158	158	158
H (mm)	85	85	88	95	99	124	130	137
CH (mm)	20	20	25	31	38	48	54	66
Kv (m3/h)	3.9	8.2	28	42	70	80	125	179

DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Ball valves are marked CE on handle from 1 1/4" to 2" as follow: CE Cat I-A

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART







S.110 Female/Female 3/8" - 4" ISO 228, gate valve



QUALITY

Suitable for domestic and agricultural installations

THREADS

ISO 228 parallel female by female threads

BODY

- Hot forged sand blasted brass body
- Low pressure drop

STEM

• High performance EPDM stem seal

HANDLE

- Red coated steel hand-wheel
- Zinc plated steel top nut
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 10 bar non-shock cold working pressure
- -10°C to +80°C (+15°F to +175°F)

• WARNING: freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

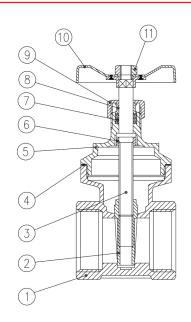
• GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

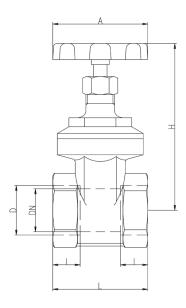
s.110 XCE110 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Body	1	CW617N
2	Gate	1	CB 754S
3	Stem	1	CW614N
4	Body cap sealing	1	Guarnital Fibre
5	Сар	1	CW617N
6	Stem ring	1	CW614N
7	Packing gland seal	1	EPDM90
8	Packing gland	1	CW614N
9	Packing gland nut	1	CW614N
10	Red round handle	1	Steel
11	Handle nut	1	Steel



PLUMBING



Code	110C00	110D00	110E00	110F00	110G00	110H00	110100	110L00	110M00	110N00
D (Size)	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	13	13.5	15.5	19	27	33	44	47	60	72
l (mm)	8	9	9	10	10	11	12	13	13	15
L (mm)	33	35	39	43	48	54	58	63	70	80
A (mm)	45	45	45	50	55	60	70	80	100	100
H (mm)	67	68	68	80	86	107	134	143	175	202





S.111 Female/Female 1/4" - 4" ISO 228, heavy pattern gate valve



QUALITY

- \cdot Suitable for water-works, domestic and agricultural installations
- Heavy configuration suitable to most difficult applications

BODY

- Hot forged sand blasted unplated brass body
- $\cdot\,$ Low pressure drop

STEM

• High performance EPDM stem seal

THREADS

ISO 228 parallel female by female threads

HANDLE

- Strong red coated steel hand-wheel
- Zinc plated steel top nut
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 20 bar (300 PSI) non-shock cold working pressure
- -10°C to +80°C (+15°F to +175°F)

• **WARNING**: freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm; it cannot be used with non-dangerous gases in sizes larger than 50mm

APPROVED BY OR IN COMPLIANCE WITH

• GOST-R (Russia)

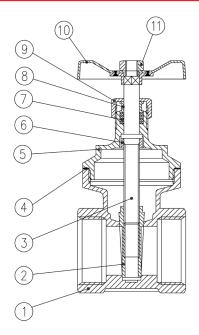
NOTE: approvals apply to specific configurations/sizes only.

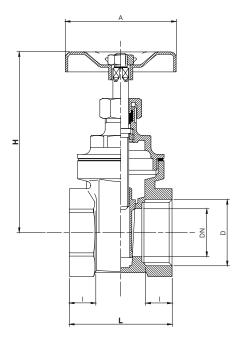
s.111 XCE111 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Body	1	CW617N
2	Gate	1	CB 754S
3	Stem	1	CW614N
4	Body cap sealing	1	Guarnital Fibre
5	Сар	1	CW617N
6	Stem ring	1	CW614N
7	Packing gland seal	1	EPDM90
8	Packing gland	1	CW614N
9	Packing gland nut	1	CW614N
10	Red round handle	1	Steel
11	Handle nut	1	Steel





Code	111B00	111C00	111D00	111E00	111F00	111G00	111H00	111100	111L00	111M00	111N00
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	11	13	15	19	24	32	37	47	60	72	93
l (mm)	8	8	11	12	14	14	14	16	17	19	22
L (mm)	32	32	43	47	51	57	60	66	74	85	98
A (mm)	45	45	45	50	55	60	70	80	100	100	120
H (mm)	67	67	68	78	91	108	125	143	175	205	235



s.112 NPT

Female/Female 1/2" - 4" gate valve





QUALITY

- Suitable for water-works, domestic and agricultural installations
- Non rising stem suitable to most difficult applications

BODY

- Hot forged sand blasted brass body
- Low pressure drop

HANDLE

- Red coated steel hand-wheel
- WARNING: do not exceed reasonable temperature and/or electrical load
- Zinc plated steel top nut

THREADS

• NPT female by female taper threads

STEM

• High performance EPDM stem seal

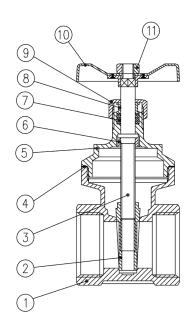
WORKING PRESSURE & TEMPERATURE

- 150 PSI non-shock cold working pressure
- +14°F to +176°F (-10°C to +80°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

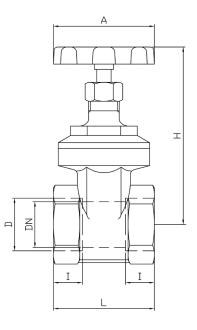
s.112 XCE112 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.





PLUMBING



Code	112D00	112E00	112F00	112G00	112H00	112100	112L00	112M00	112N00
D (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0,531	0,61	0,748	1,062	1,299	1,732	1,85	2,362	2,834
l (inch)	0,354	0,354	0,393	0,393	0,433	0,472	0,511	0,511	0,59
L (inch)	1,377	1,535	1,692	1,889	2,125	2,283	2,48	2,755	3,149
A (inch)	1,771	1,771	1,968	2,165	2,362	2,755	3,149	3,937	3,937
H (inch)	2,677	2,677	3,149	3,385	4,212	5,275	5,629	6,889	7,952





Female/Female 1/2" - 4" heavy pattern gate valve







- Suitable for water-works, domestic and agricultural installations
- Non rising stem suitable to most difficult applications

BODY

- Low pressure drop
- Finely cast sand blasted heavy brass body

STEM

• High performance PTFE stem seal

THREADS

NPT female by female taper threads

HANDLE

- Strong cast aluminum hand-wheel
- $\cdot \ \textbf{WARNING}: \text{do not exceed reasonable temperature and/or electrical load}$

WORKING PRESSURE & TEMPERATURE

- 200 PSI non-shock cold working pressure
- -4°F to +350°F
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

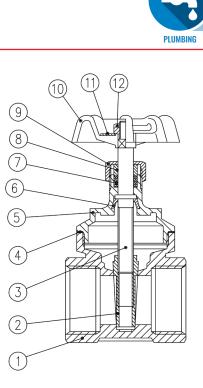
• GOST-R (Russia)

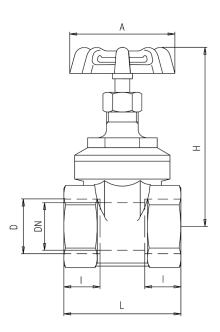
NOTE: approvals apply to specific configurations/sizes only.

s.114 XCE114 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Body	1	CW617N
2	Gate	1	CW617N
3	Stem	1	CW617N
4	Body cap sealing	1	PTFE
5	Сар	1	CW617N
6	Stem ring	1	CW617N
7	Packing gland seal	1	PTFE
8	Packing gland	1	CW617N
9	Packing gland nut	1	CW617N
10	Red round handle	1	Steel
11	Disc	1	Aluminum
12	Handle nut	1	CW617N





Code	114D41	114E41	114F41	114G41	114H41	114141	114L41	114M41	114N41
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (inch)	0,504	0,669	0,827	1,063	1,339	1,772	2,205	2,667	3,543
l (inch)	0,449	0,492	0,559	0,657	0,669	0,728	0,925	1,004	1,181
L (inch)	1,693	1,772	2,047	2,323	2,48	2,716	3,465	3,74	4,488
A (inch)	2,165	2,165	2,362	2,835	2,835	3,15	3,937	4,331	5,118
H (inch)	2,795	2,992	3,445	4,055	4,475	5,256	6,437	7,48	9,252
PSI	200	200	200	200	200	200	200	200	200





3/8" - 4" ISO 228 check valve







QUALITY

- $\cdot\;$ Suitable for domestic, industrial, pneumatic and hydraulic installations
- Performs well in any orientation

BODY

- Low pressure drop
- Hot forged CW617N brass body

STEM

Nylon stem allows wide range of applications

SEALING

NBR 65 SH/PS seal on nylon holder

THREADS

· ISO 228 parallel female by female threads

WORKING PRESSURE & TEMPERATURE

• 12 bar (174 PSI) up to 1", 10 bar (145 PSI) from 1.1/4" up to 2" and 8 bar (116 PSI) over 2" non-shock cold working pressure

• -20°C to +100°C (-4°F to +212°F)

- WARNING: freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- RoHS Compliant (EU)

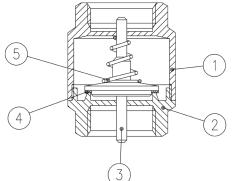
NOTE: approvals apply to specific configurations/sizes only.

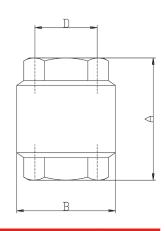
• Stainless steel filter (1.4301 / AISI 304)

s.120 XCE120 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

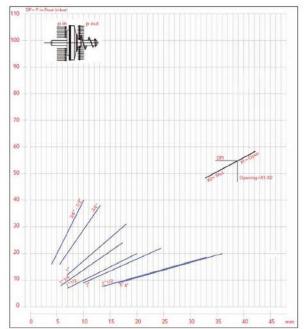
	Part description	Q.ty	Material
1	Body	1	CW617N
2	Seat	1	CW617N
3	Stem-seat	1	Nylon
4	Seat	1	NBR
5	Stainless steel spring	1	1.4325/AISI 302
6	Strainer	1	AISI304 (1.4301)



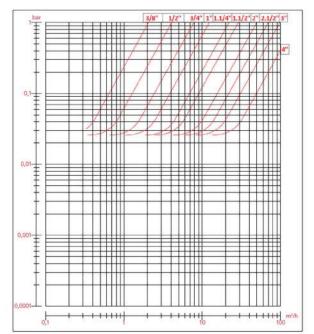


Code	120C00	120D00	120E00	120F00	120G00	120H00	120100	120L00	120M00	120N00
D (inch)	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
A (mm)	46,5	47	53	60,5	66,5	74	80	98	103	118,5
B (mm)	34,5	34,5	42	47,5	59,5	71	86,5	102	125	155
PN (Kg/cm ²)	12	12	12	12	10	10	10	8	8	8
Kv	2,11	4,22	7,92	11,67	22,42	29,39	51,4	69,9	98,49	157,91

DIAGRAM MINIMUM PRESSURE TO GET THE VALVES



OPENING PRESSURE DROP CHART









S.122 3/8" - 4" ISO 228 heavy pattern brass check valve







QUALITY

- $\cdot\;$ Suitable for domestic, industrial, pneumatic and hydraulic installations
- Performs well in any orientation
- Strong configuration suitable to most difficult applications
- + Brass stem for outstanding performance
- Lowest pressure drop

BODY

• Hot forged CW617N brass body

SEALING

• NBR 65 SH/PS seal assembled with stainless steel holder

THREADS

• ISO 228 parallel female by female threads

WORKING PRESSURE & TEMPERATURE

- Cracking pressure: min 0.025 bar
- Sealing pressure: min 0.05 bar
- See non-shock cold working pressure on chart
- -20°C to +100°C (-4°F to +212°F)
- WARNING: freezing of the fluid in the installation may severely damage

the valve

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 20mm; it cannot be used with non-dangerous gases in sizes larger than 40mm

APPROVED BY OR IN COMPLIANCE WITH

- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)
- · Attestation de Conformité Sanitaire (France) in sizes 1/4" to 2"
- RoHS Compliant (EU)

NOTE: approvals apply to specific configurations/sizes only.

OPTIONS

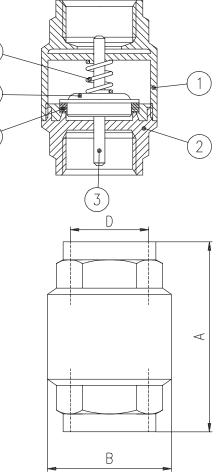
- Strainer in Polymer and Stainless steel 1.4301 (AISI 304)
- * NPT female by female threads ANSI B.1.20.1 in sizes 1/2" to 4"

s.122 XCE122 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

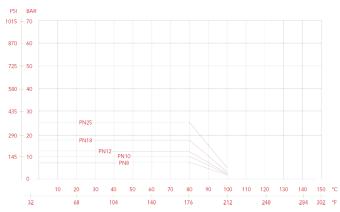


	Part description	Q.ty	Material
1	Body	1	CW617N
2	End-cap	1	CW617N
3	Stem	1	CW614N
4	Seat	1	NBR
5	Seat holder	1	1.4301 / AISI 304
6	Stainless steel spring	1	1.4325 / AISI 302



Code	122B00	122C00	122D00	122E00	122F00	122G00	122H00	122100	122L00	122M00
Size (inch)	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
A (mm)	55	58.5	65	74.5	83	93	101	122	141.5	158.5
ØB (mm)	34.5	34.5	41.5	48	60.5	71	87	120	140	172
PN (Kg/cm2)	25	25	25	25	18	18	18	12	12	12

PRESSURE-TEMPERATURE CHART

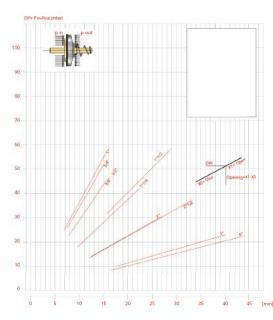


PRESSURE DROP CHART

6

5

4







S.123 Female/Female ^{1/4" - 4"} ISO 228, heavy pattern check valve





QUALITY

- Suitable for domestic, industrial, pneumatic and hydraulic installations
- Performs well in any orientation
- Strong configuration suitable to most difficult applications
- Low noise
- Low water hammer
- Lowest pressure drop

BODY

- Hot forged CW617N brass body
- Perfect seal at low and high pressure, within a wide temperature range

SEALING

• NBR seal from ¼" up to 3", FPM for 4" size

THREADS

• ISO 228 parallel female by female threads

WORKING PRESSURE & TEMPERATURE

- Cracking pressure: min 0.025 bar
- Sealing pressure: min 0.05 bar
- See non-shock cold working pressure on chart
- -20°C to +100°C (-4°F to +212°F)
- $\cdot\;$ WARNING: freezing of the fluid in the installation may severely dama-

ge the valve

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 20mm; it cannot be used with non-dangerous gases in sizes larger than 40mm

APPROVED BY OR IN COMPLIANCE WITH

• GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

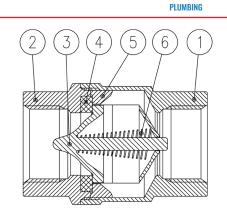
OPTIONS

• Stainless steel filter

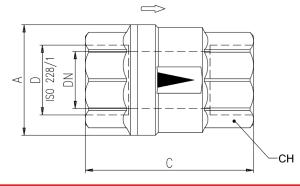
s.123 XCE123 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Body	1	CW617N
2	End-cap	1	CW617N
3	Disc	1	Hostaform
4	Seat	1	NBR (from 1/4" up to 3") FPM (from 4" size)
5	Disc guide	1	Hostaform
6	Stainless steel spring	1	1.4325 / AISI 302

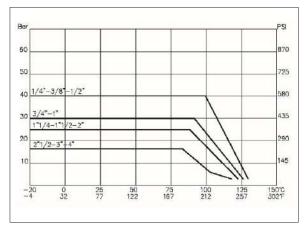


FLOW DIRECTION

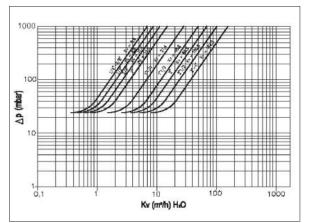


Code	123B00	123C00	123D00	123E00	123F00	123G00	123H00	123100	123L00	123M00	123N00
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
DN (mm)	10	10	15	20	25	32	40	50	65	80	80
A (mm)	28	28	34	41,5	50	60,5	73,5	89	114	137	142
C (mm)	46,5	46,5	50	59	67	76	90	101	127	150	133,5
CH (mm)	21	21	26	32	39	49	56	69	86	100	124
PN (bar)	40	40	40	30	30	25	25	25	16	16	16
Kv (m³/h)	6,9	6,9	8,8	11,4	14,5	27,4	48,8	68,9	100,6	162,3	162,3

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART







s.123 NPT

Female/Female 1/4" - 1 ¼" heavy pattern check valve





QUALITY

- $\cdot\;$ Suitable for domestic, industrial, pneumatic and hydraulic installations
- Performs well in any orientation
- Strong configuration suitable to most difficult applications
- Low noise
- Low water hammer
- Lowest pressure drop

BODY

- Hot forged CW617N brass body
- Perfect seal at low and high pressure, within a wide temperature range

SEALING

• NBR sealing

THREADS

• NPT taper ANSI B.1.20.1 female by female threads

WORKING PRESSURE & TEMPERATURE

- Cracking pressure: min 0.36 PSI (0.025 bar)
- Sealing pressure: min 0.72 PSI (0.05 bar)
- See nominal, non-shock cold working pressure in page 2
- -4°F to +212°F (-20°C to +100°C)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

APPROVED BY OR IN COMPLIANCE WITH

- GOST-R (Russia)
- Attestation de Conformité Sanitaire (France)
- NOTE: approvals apply to specific configurations/sizes only.

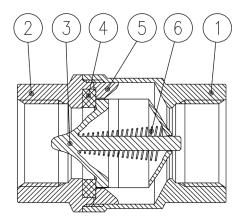
- Stainless steel filter
- ISO 228 parallel female by female threads

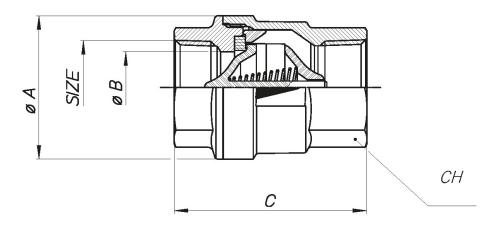
s.123 NPT XCE123N - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



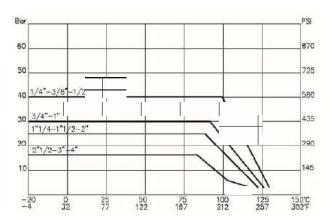
	Part description	Q.ty	Material
1	Body	1	CW617N
2	End-cap	1	CW617N
3	Disc	1	Hostaform
4	Seat	1	NBR
5	Disc guide	1	Hostaform
6	Stainless steel spring	1	1.4325 / AISI 302



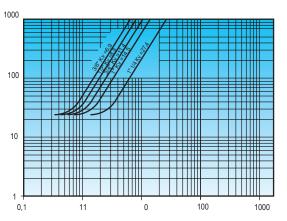


Code	123B41	123C41	123D41	123E41	123F41	123G41
Size (inch)	1/4"	3/8″	1/2"	3/4″	1″	1 1⁄4″
ØA (inch)	1,1	1,1	1,34	1,63	1,97	2,38
B (inch)	0,39	0,39	0,59	0,79	0,98	1,26
C (inch)	1,83	1,83	2,07	2,32	2,64	2,99
CH (inch)	0,83	0,83	1,02	1,26	1,54	1,93
PN (psi)	580	580	580	435	435	363
Cv (GPM)	5,96	5,96	7,6	9,85	12,53	23,67

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART







S.124 1/2" - 4" ISO 228 foot valve



QUALITY

- $\cdot\;$ Suitable for domestic, industrial, pneumatic and hydraulic installations
- Valve will perform its duty no matter if installed horizontally, vertically
- or half way
- Strong configuration

BODY

- Hot forged brass body
- * Stainless steel filter
- * Filtration degree 2400 μm

SEALING

Soft seat for positive shut-off

THREADS

• ISO 228 female parallel thread

WORKING PRESSURE & TEMPERATURE

- 10 bar up to 1", 8 bar from 1 $\ensuremath{\ensuremath{\mathcal{H}}}$ to 2", 6 Bar over 2" non-shock cold working pressure

• 0°C to +90°C (+32°F to +194°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

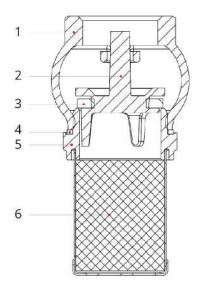
• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25mm

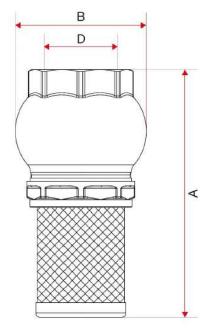
s.124 XCE124 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Body	1	CW617N
2	Seat	1	CW617N
3	Seal	1	NBR
4	Gasket	1	Fibre
5	Retainer	1	CW617N
6	Strainer	1	AISI304 (1.4301)





Code	124D00	1,24E+02	124F00	124G00	124H00	124100	124L00	124M00	124N00
D (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1/2"	3"	4"
A (mm)	68.5	84.5	99,00	113.5	112.5	142.5	168,00	194.5	216.5
B (mm)	39,00	45,00	51,00	61,00	68.5	80,00	100,00	121,00	145,00
PN (Kg/cm ²)	10,00	10,00	10,00	8,00	8,00	8,00	6,00	6,00	6,00





S.126 Female/Female 3/8" - 2" swing check valve with rubber seals



QUALITY

- $\cdot\;$ Suitable for domestic, industrial, pneumatic and hydraulic installations
- Strong configuration

BODY

• Hot forged brass body

SEALING

- Seals in NBR
- Compact inspection cap

THREADS

• ISO 228 female parallel thread

WORKING PRESSURE & TEMPERATURE

- 16 bar up to 3/4", 12 bar 1", 10 bar from 1 $\ensuremath{\ensuremath{\mathcal{H}}}$ up to 2", non-shock cold working pressure

• 0°C to +90°C (+32°F to +194°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

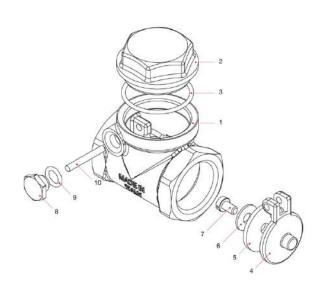
PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art .4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm

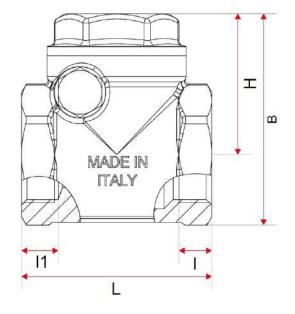
s.126 XCE126 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Unplated hexagonal cap	1	CW617N
3	Hexagonal cap O-ring	1	NBR
4	Bonnet	1	CW617N
5	Seal	1	NBR
6	Washer	1	CW508L
7	Screw	1	CW508L
8	Plug	1	CW614N
9	Plug O-ring	1	NBR
10	Nail	1	CW614N



Code	126C00	126D00	126E00	126F00	126G00	126H00	126100
D (Size)	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	10	15	20	25	32	40	50
l (mm)	8	8	9	11,5	11,5	14,5	13
l1 (mm)	12	9,5	10	13	13	13	13,5
L (mm)	43	43	52	62	72	81	94
H (mm)	35	35	38,5	42	47	54	61
B (mm)	50	50	58	66	76	86	100
PN (Kg/cm ²)	16	16	16	12	10	10	10



Ask for additional information on the whole range of *RUB* products and consult with your supplier for special applications. For complete disclaimer: www.rubvalves.com/disclaimer







S.126 M Female/Female 3/8" - 2" swing check valve with metal seals



QUALITY

- $\cdot\;$ Suitable for domestic, industrial, pneumatic and hydraulic installations
- Strong configuration

BODY

Hot forged brass body

SEALING

- Metal seals
- Compact inspection cap

THREADS

• ISO 228 female parallel thread

WORKING PRESSURE & TEMPERATURE

- 16 bar up to 3/4", 12 bar 1", 10 bar from 1 $\ensuremath{\ensuremath{\mathcal{H}}}$ up to 2", non-shock cold working pressure

• 0°C to +90°C (+32°F to +194°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

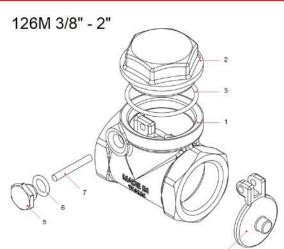
PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art .4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm

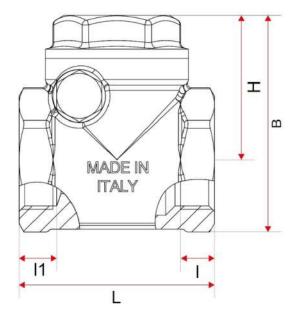
s.126 M XCE126M - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Unplated hexagonal cap	1	CW617N
3	Hexagonal cap O-ring	1	NBR
4	Bonnet	1	CW617N
5	Plug	1	CW614N
6	Plug O-ring	1	NBR
7	Nail	1	CW614N



Code	126C0M	126D0M	126E0M	126F0M	126G0M	126H0M	126I0M
D (Size)	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
DN (mm)	10	15	20	25	32	40	50
l (mm)	8	8	9	11,5	11,5	14,5	13
l1 (mm)	12	9,5	10	13	13	13	13,5
L (mm)	43	43	52	62	72	81	94
H (mm)	35	35	38,5	42	47	54	61
B (mm)	50	50	58	66	76	86	100
PN (Kg/cm²)	16	16	16	12	10	10	10



Ask for additional information on the whole range of *RUB* products and consult with your supplier for special applications. For complete disclaimer: www.rubvalves.com/disclaimer





s.126 M NPT

Female/Female 1/2" - 2" NPT swing check valve with metal seals



QUALITY

- $\cdot\;$ Suitable for domestic, industrial, pneumatic and hydraulic installations
- Robust construction
- Inspection cap

BODY

• Hot forged brass body

SEALING

Metal to metal sealing

THREADS

NPT taper ANSI B.1.20.1 female by female threads

WORKING PRESSURE & TEMPERATURE

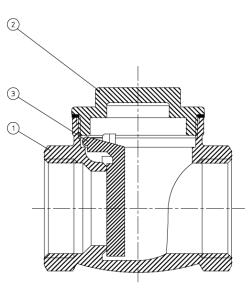
- 145 psi (10 bar) non-shock cold working pressure
- +32°F to +212°F (0°C to +100°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

s.126 M NPT XCE126MN - 5466

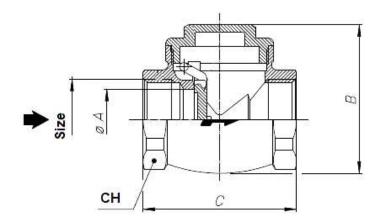
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Unplated bonnet	1	CW617N
3	Unplated sealing disc	1	CW617N



Code	126D4M	126E4M	126F4M	126G4M	126H4M	126DI4M
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
ØA (inch)	0,59	0,78	0,98	1,29	1,45	1,85
B (inch)	1,81	2	2,4	2,87	3,34	3,7
C (inch)	1,85	2,08	2,48	2,91	3,42	3,81
CH (inch)	0,98	1,22	1,49	1,85	2,12	2,63
PN (psi)	145	145	145	145	145	145







S.128 Female/Female 1/4" - 4" ISO 228, Y-strainer



QUALITY

• Suitable for industrial, pneumatic and hydraulic installations

BODY

- Hot forged CW617N brass body
- Stainless steel (1.4301 / AISI 304) filter
- + Degree of filtration: 1/4" through 2" 500 $\mu m,$ 2 ½", 3", 4" 800 μm

THREADS

• ISO 228/1 female by female parallel threads and inspection plug

WORKING PRESSURE & TEMPERATURE

- 20 bar up to 2", 16 bar over 2" non-shock cold working pressure
- -20°C to +110°C (-4°F to +230°F) in absence of steam
- **WARNING**: freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product described in this document meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking; it cannot be used with dangerous gases in sizes larger than 25 mm; it cannot be used with non-dangerous gases in sizes larger than 50mm

APPROVED BY OR IN COMPLIANCE WITH

• Attestation de Conformité Sanitaire (France)

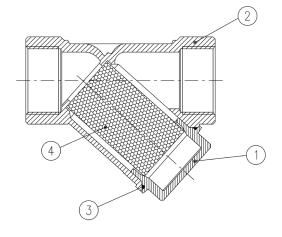
NOTE: approvals apply to specific configurations/sizes only.

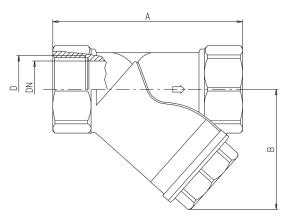
s.128 XCE128 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



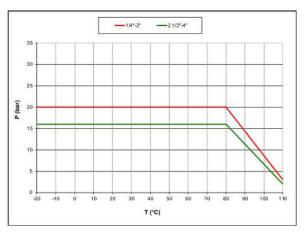
	Part description	Q.ty	Material
1	End-cap	1	CW617N
2	Body	1	CW617N
3	O-Ring	1	NBR
4	Stainless steel strainer	1	1.4301 / AISI 304



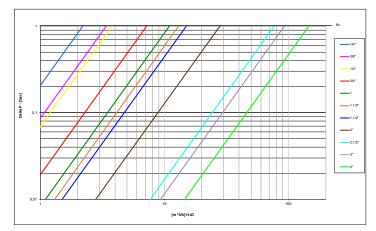


Code	128B00	128C00	128D00	128E00	128F00	128G00	128H00	128100	128L00	128M00	128N00
D (inch)	1/4"	3/8"	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"	2 1⁄2"	3"	4"
A (mm)	55	55	58	70	87	96	106	126	150	169	219
B (mm)	40	40	40	48	56	64	73	88,5	105	120	162
DN	8	10	15	20	25	32	40	50	65	80	100
PN (Kg/cm ²)	20	20	20	20	20	20	20	20	16	16	16
Kv (m³/h)	2.2	3.4	3.8	7.2	11	13	15	28	77	93	146

PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART







S.140 bib-cock 1/2" - 3/4" with plain outlet



QUALITY

- Chrome plated brass ball for longer life
- Plain outlet

BODY

- Hot forged sand blasted nickel plated brass body
- Angle pattern ball bib-cock
- Copper alloy brass according to EN 12165 and EN 12164 specifications

STEM

- Blowout-proof brass stem
- Maintenance-free, double O-rings (FPM and NBR) at the stem for maximum safety

SEALING

• Pure PTFE seats

THREADS

• UNI ISO 228 male inlet thread

HANDLE

- Enameled red steel handle
- WARNING: do not exceed reasonable temperature and/or electrical load
- Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 15 bar non-shock cold working pressure
- -20°C to +80°C (-4°F to +175°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

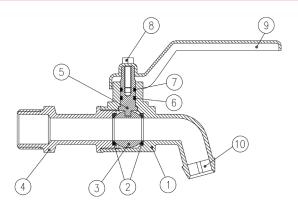
- GOST-R (Russia)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

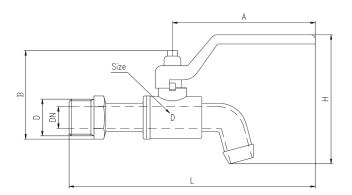
s.140 XCE140 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW614N
4	Nickel plated end-cap	1	CW617N
5	Stem O-Ring design	1	CW617N
6	O-Ring	1	FPM
7	O-Ring	1	NBR
8	Screw	1	Steel
9	Enameled red handle	1	Steel
10	Infuser	1	Vestolen



Code	142C0P	142D0P
D (inch)	1/2″	3/4"
DN (mm)	10	12
B (mm)	49	54
L (mm)	129	131.5
A (mm)	80	80
H (mm)	60	65.5











3/8" - 1" with 3/4" outlet and hose



QUALITY

Chrome plated brass ball for longer life

BODY

- Hot forged sand blasted nickel plated brass body
- Angle pattern ball bib-cock with hose fitting
- Copper alloy brass according to EN 12165 and EN 12164 specifications

STEM

- Maintenance-free, double O-rings (FPM and NBR) at the stem for maximum safety

SEALING

• Pure PTFE seats

THREADS

- UNI ISO 228 male inlet thread
- 3/4" threaded outlet complete with hose

HANDLE

- Enameled red steel handle
- WARNING: do not exceed reasonable temperature and/or electrical

load

Handle removable with valve in service

WORKING PRESSURE & TEMPERATURE

- 15 bar up to 3/4", 12 bar 1" non-shock cold working pressure
- -20°C to +80°C

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

• The product meets the requirements of PED Directive 2014/68/UE and according to art.4 par.3, it does not require CE marking

APPROVED BY OR IN COMPLIANCE WITH

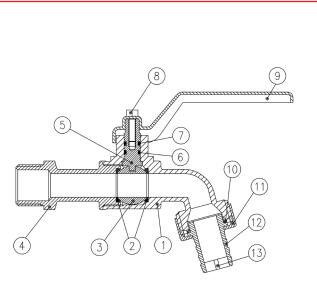
• GOST-R (Russia)

NOTE: approvals apply to specific configurations/sizes only.

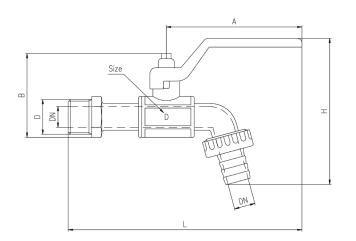
s.142 XCE142 - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW614N
4	Nickel plated end-cap	1	CW617N
5	Stem O-Ring design	1	CW614N
6	O-Ring	1	FPM
7	O-Ring	1	NBR
8	Zinc plated screw	1	CB4 (EN10263-2)
9	Enameled red handle	1	DC04 (EN10130)
10	Washer	1	PVC rubber
11	Nickel plated nut	1	CW617N
12	Nickel plated hose	1	CW617N
13	Infuser	1	Vestolen



Code	142C0P	142D0P	142E0P	142F0P
D (inch)	3/8″	1/2″	3/4″	1″
DN (mm)	10	12	12	15
B (mm)	53	53	61	65
L (mm)	135	137	148.5	158
A (mm)	80	80	88.5	88.5
H (mm)	93	93	108.5	126









S.190 1/2" - 2" ISO 228 with built-in filter

This ball valve with built-in vertical filter allows a large flow rate with a low pressure drop and supports a maximum pressure of 30 bar (PN).

This innovative product avoids the installation of two ball valves, before and after the filter. Quick and easy assembly, maintenance and cleaning.

QUALITY

- Substitutes 3 different components (2 ball valves and one filter)
- Reduces leakage risks due to lower sealing points
- Cost saving due to reduced number of components
- Time saving at installation and maintenance

• Built-in vertical filter with cartridge structure in AlSI304 + Nylon (filtration degree: 500 microns / 35 mesh). Size 1/2" has a central rib to ease filter extraction.

- Final test conforming with UNI EN 12266-1 points A3 / A4 (for 1 1/2" and
- 2" sizes: acc. to directive 2014/68/UE)
- · No metal-to-metal moving parts
- Handle clearly shows ball position
- · Chrome plated brass ball for longer life
- · Handle stop on body to avoid stress at stem

BODY

• Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant

- Finest brass according to EN 12165 and EN 12164 specifications
- Bottom plug for an easy filter maintenance

STEM

- Blowout-proof unplated brass stem
- Two O-rings at the stem (FKM + NBR) for maximum safety

SEALING

• Pure PTFE seats

THREADS

ISO 228 parallel female by female threads

OPTIONS

• T-handle for 1/2" to 1" sizes.

FLOW

Nominal port

HANDLE

- · Zinc plated steel handle with plastic dip coating
- WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

30 bar (450 PSI) non-shock cold working pressure for sizes 1/2" to 1",
 20 bar (290 PSI) for sizes 1 ¼" to 2"

-20°C to +150°C (-4°F to +300°F)

• **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

- According to 2014/68/UE, 1 $\ensuremath{\ensuremath{\mathcal{H}}}$ and superior sizes cannot be used with dangerous fluids

APPROVED BY OR IN COMPLIANCE WITH

Water Regulations Advisory Scheme (United Kingdom)

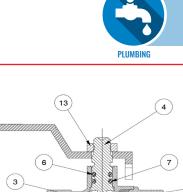
NOTE: approvals apply to specific configurations/sizes only.



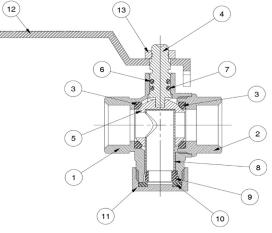


s.190 XCE190 - 5466

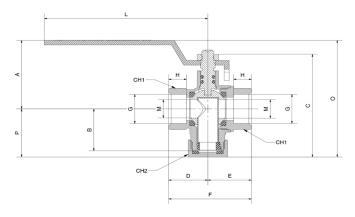
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



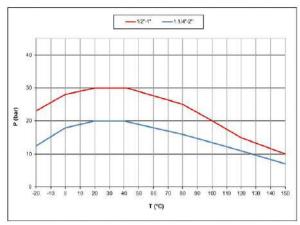
	Part description	Q.ty	Material
1	Nickel plated body (external treatment)	1	CW617N
2	Nickel plated end-cap (external treatment)	1	CW617N
3	Seat	1	PTFE
4	Unplated stem O-ring design	1	CW614N
5	Chrome plated ball	1	CW617N
6	O-Ring	1	NBR
7	O-Ring	1	FKM
8	Filter	1	AISI304 + Nylon
9	Filter	1	AISI304 + Nylon
10	Flat seal	1	NBR
11	Plug	1	CW614N
12	Black plastic coated zinc plated handle	1	Steel
13	Zinc plated nut	1	Steel



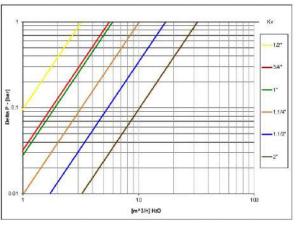
Code	190D00	190E00	190F00	190G00	190H00	190100
Size (inch)	1/2"	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
A (mm)	44,2	47,4	50,8	74	80	88,5
B (mm)	27	30,9	34,5	46,5	52,5	63,5
C (mm)	66,2	73,5	80,5	106	118	143
D (mm)	24	29	34,5	40	45,5	54
E (mm)	26,7	32,3	35,6	45	52	63
F (mm)	50,7	61,3	70,1	85	97,5	117
H (mm)	11	13	15	17	17	20
L (mm)	100	100	100	158	158	158
M (mm)	12	16	20	28	36	46
0 (mm)	75,2	82,5	89,5	125,5	137,5	157
P (mm)	31	35,1	38,7	51,5	57,5	68,5
CH1 (mm)	25	31	38	48	54	66
CH2 (mm)	24	30	38	46	55	65
PN (bar)	30	30	30	20	20	20
Kv (m³/h)	3,22	5,58	5,97	10,12	17,14	32,3



PRESSURE-TEMPERATURE CHART



PRESSURE DROP CHART







s.190M

3/4" - 2" ISO 228 with built-in filter and magnet

This ball valve with built-in vertical filter allows a large flow rate with a low pressure drop and supports a maximum pressure of 30 bar (PN).

This innovative product avoids the installation of two ball valves, before and after the filter.

Quick and easy assembly, maintenance and cleaning.

QUALITY

- · Substitutes 3 different components (2 ball valves and one filter)
- Reduces leakage risks due to lower sealing points
- Cost saving due to reduced number of components
- Time saving at installation and maintenance
- Built-in vertical filter with cartridge structure in 1.4301 / AISI304 +
- Nylon (filtration degree: 500 microns / 35 mesh).
- + Final test conforming with UNI EN 12266-1 points A3 / A4 (for 1 $^{\prime\prime\prime}_{2}$ and
- 2" sizes: acc. to directive 2014/68/UE)
- \cdot $\,$ No metal-to-metal moving parts
- Handle clearly shows ball position
- Chrome plated brass ball for longer life
- Handle stop on body to avoid stress at stem

BODY

- Hot forged sand blasted, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 specifications
- · Bottom plug for an easy filter maintenance

STEM

- · Blowout-proof unplated brass stem
- Two O-rings at the stem (FKM + NBR) for maximum safety

SEALING

• Pure PTFE seats

THREADS

· ISO 228/1 parallel female by female threads

FLOW

Nominal port

OPTIONS

• T-handle for 1/2" to 1" sizes

HANDLE

• Zinc plated steel handle with plastic cover

• WARNING: do not exceed reasonable temperature and/or electrical load

WORKING PRESSURE & TEMPERATURE

- 30 bar (450 PSI) non-shock cold working pressure for sizes 3/4" to 1", 20 bar (290 PSI) for sizes 1 ¼" to 2"
- -20°C to +100°C (-4°F to +212°F)
- Valve conforming with directive 2014/68/EU
- **WARNING:** freezing of the fluid in the installation may severely damage the valve

PED DIRECTIVE

- According to 2014/68/UE, 1 $\ensuremath{\ensuremath{\mathcal{H}}}$ and superior sizes cannot be used with dangerous fluids

APPROVED BY OR IN COMPLIANCE WITH

Water Regulations Advisory Scheme (United Kingdom)

NOTE: approvals apply to specific configurations/sizes only.



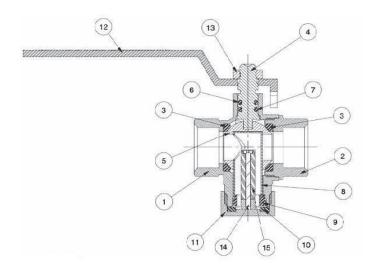


s.190 M XCE190M - 5466

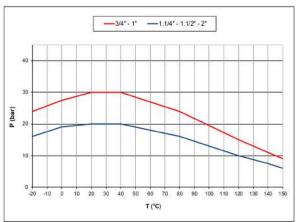
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



	Part description	Q.ty	Material
1	Nickel plated body	1	CW617N
2	End connection	1	CW617N
3	Seals	2	PTFE
4	Stem	1	CW614N
5	Chrome plated ball	1	CW617N
6	O-Ring	1	NBR
7	O-Ring	1	FKM
8	Filter	1	1.4301 / AISI304 + Nylon
9	Filter	1	1.4301 / AISI304 + Nylon
10	Flat seal	1	NBR
11	Plug	1	CW614N
12	Handle	1	Zinc plated steel, plastic cover
13	Nut	1	Zinc plated steel
14	Screw	1	Stainles steel
15	Magnet	1	Neodymium (12,000gauss) NdFeB

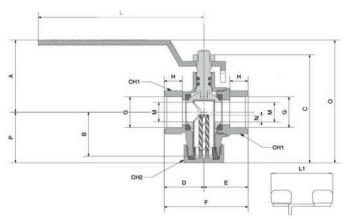


PRESSURE-TEMPERATURE CHART

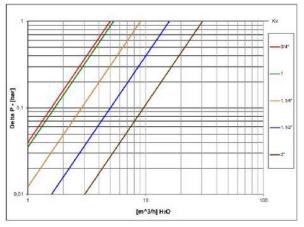


Code	190E00M	190F00M	190G00M	190H00M	190100M
D (inch)	3/4"	1"	1 1⁄4"	1 1⁄2"	2"
Α	47,4	50,8	74	80	88,5
В	30,9	34,5	46,5	52,5	63,5
С	73,5	80,5	106	118	143
D	29	34,5	40	45,5	54
E	32,3	35,6	45	52	63
F	61,3	70,1	85	97,5	117
н	13	15	17	17	20
L	100	100	158	158	158
L1	68	68	-	-	-
DN M	16	20	28	36	46
N	8	5,5	13	11	13
0	82,5	89,5	125,5	137,5	157
Р	35,1	38,7	51,5	57,5	68,5
СН1 ОСТ	31	38	48	54	66
CH2 HEX	30	38	46	55	65
PN Max bar	30	30	20	20	20
Kv (m3/h)	5,01	5,35	9,06	15,90	30,40

Suitable for dangerous fluids, in compliance with **DIRECTIVE** 2014/68/EU Group 1 fluids



PRESSURE DROP CHART



ACCESSORIES CATALOG

RuB accessories are designed to address diverse operational challenges, offering solutions for flow control, tamper resistance, space constraints, and thermal efficiency. With customizable options and tailored designs, we provide flexibility to meet unique requirements, ensuring optimal performance and functionality in every application.



DEK ONFA

Accessories to forged RuB ball valves

Geomet® carbon steel lever	Page 373
AISI 430 stainless steel lever	Page 373
Geomet® carbon steel left lever	Page 374
Geomet® carbon steel 90° reverse lever	Page 374
Aluminum - brass - Geomet® carbon steel T-handle	Page 375
Patented lockable handle for <i>RuB</i> manual ball valves	Page 376
Lockable handle for 3-way ball valves series s.76 (L-port) and s.64/T.264 with ISO5211 F03 mounting flange	Page 377
Lockable handle for 3-way ball valves series s.73 (T-port) with ISO5211 F03 mounting flange	Page 377
Oval lockable handle for <i>RuB</i> manual ball valves	Page 378
Memory stop Use together with <i>RuB</i> stubby handles with knurling	Page 379
Geomet® carbon steel stubby handle	Page 379
Stem Extension for <i>RuB</i> ball valves with O-ring stem design	Page 380
Accessories to mini and micro ball valves	
Nylon lever and T-handle for s.34	Page 382
Nylon wedge handle for s.35	Page 383
Metal wedge handle for s.35	Page 383
Nylon wedge handle for s.39 micro	Page 383
Miscellaneous accessories	
Union connection set for s.9036	Page 384
Union connection set for s.80	Page 384
Dielectric union connection set for s.80	Page 384
Filter for check valves s.120	Page 385
Filter for check valves s.123	Page 386
Filter (500 µm mesh) for s.190	Page 387
Drains and caps for s.81	Page 388
Top lever caps for RuB ball valves	Page 389
Accessories to actuators	
Limit switch box	Page 390



Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

Geomet[®] carbon steel lever

					A	
				1		
Full port		1/4"÷3/8"	1/2″	3/4÷1″	1 ¼″÷2″	2 ½÷4″
Standard port		1/4"÷3/8"	1/2"÷3/4"	1"÷1 ¼"	1 ½″÷2 ½″	3"÷4"
A (mm)		82	100	120	158	255
Red	Code	PLFR11	PLFR13	PLFR16	PLFR19	PMFR20
Yellow	Code	PLFG11	PLFG13	PLFG16	PLFG19	PMFG20
Black	Code	PLFN11	PLFN13	PLFN16	PLFN19	PMFN20
White	Code	PLFW11	PLFW13	PLFW16	PLFW19	PMFW20
Light Blue	Code	PLFA11	PLFA13	PLFA16	PLFA19	PMFA20
Green	Code	PLFV11	PLFV13	PLFV16	PLFV19	PMFV20
		Part	descriptior	n (Q.ty Materi	al



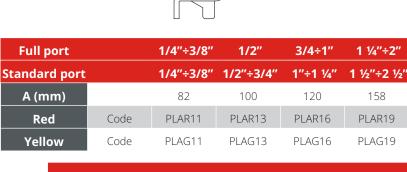
	Part description	Q.ty	Material
1	Geomet plated steel handle	1	DD11 (EN10111)
2	Dipped coating	1	PVC

ACCESSORIES

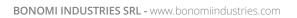
* PMFG20

AISI 430 stainless steel lever





	Part description	Q.ty	Material
1	Stainless steel handle	1	AISI 430
2	Dipped coating	1	PVC





Geomet® ca	rbon steel	left lever	AVAILABLE ON DEMAND
S Contraction			A

Description	Q.ty	Material
Geomet® plated steel handle	1	DD11 (EN10111)
Dipped coating	1	PVC

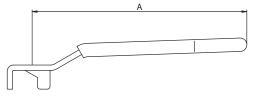
		1/4"÷3/8"	1/2″
		1/4"÷3/8"	1/2"÷3/4"
A (mm)		100	100
Black C	ode	PLFN10	PLFN10

The left handles are the solution where the valves are installed on a parallel piping system.

Geomet® carbon steel 90° reverse lever



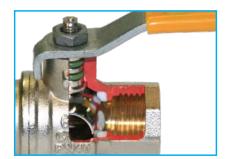




Full port			1/2″
Standard port		1/2"÷3/4"	
A (mm)			100
Yellow	Co	de	PLIG03
Light Blue	Blue Co		PLIA03
Light Blue SX Co		de	PLIA00
Description	Q.ty	Material	
Geomet® plated steel handle		1	DD11 (EN10111)
Dipped coating	1	PVC	

We have also reversed handle: in this version the handle is parallel to the pipe when the valve is closed and perpendicular when the valve is open. This option is available only in the small size for valves up to 1/2" (or 3/4" for reduced bore)

Stem flats show actual ball position



Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



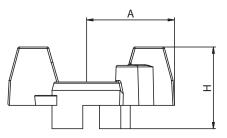
Aluminum - brass - Geomet® carbon steel T-handle



Corrosion is a big problem that many have to face when using valves in underground or outdoor installations, especially near sea, or when valves are used in swimming pools (chlorine), trucks or fire-fighting equipment.

Most people understand that brass components performance are quite high, while the problem with a ball valve may arise from a component you would have never thought about: the aluminum T-handle.

To benefit of brass resistance to corrosion, \pmb{RuB} has developed brass T-handles.



Description	Q.ty	Material
Aluminum T-handle	1	EN AC- 46100

Full port	1/4"÷3/8"	1/2″	3/4÷1″	
Standard port		1/4"÷3/8"	1/2"÷3/4"	1"÷1 ¼"
A (mm)		25	25	30
H (mm)		25	25	28
Red	Code	PFAR03	PFAR03	PFAR06
Yellow	Code	PFAG03	PFAG03	PFAG06
Light Blue	Code	PFAB03	PFAB03	PFAB06
Green	Code	PFAV03	PFAV03	PFAV06

Full port		1 ¼"÷2"
Standard port		1 ½″÷2 ½″
A (mm)		57
H (mm)		51
Red	Code	PFFR09
Yellow	Code	PFFG09
Light Blue	Code	PFFA09
Green	Code	PFFV09
Brass unplated	Code	
Brass nickel plated	Code	

Full port		1/4"÷3/8"	1/2″	3/4÷1″
Standard port		1/4"÷3/8"	1/2"÷3/4"	1"÷1 ¼"
A (mm)		25	25	30
H (mm)		25	25	28
Brass unplated	Code	PFOG03	PFOG03	PFOG06
Brass nickel plated	Code	PFON03	PFON03	PFON06

Description	Q.ty	Material
Geomet® plated steel T-handle	1	DD11 (EN10111)
Dipped coating	1	PVC

Description	Q.ty	Material
Unplated brass T-handle	1	CW617N
Nickel plated brass T-handle	1	CW617N



Patented lockable handle

for RuB manual ball valves



The *RuB* lockable handle is made of strong Geomet[®] carbon steel and designed to discourage tampering.

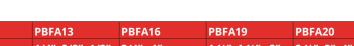
The *RuB* locking device covers the top nut of the valve making padlock removal impossible without a key.

Easy to install on valves in the field, the **RuB** lockable handle will lock s.93 **RuB** valves in closed position only in compliance with OSHA (USA) safety requirements, while other **RuB** valves can be locked in both the open and closed positions.

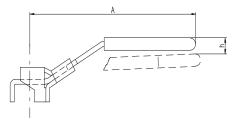




Lockable only in closed position when assembled on s.93 **RuB** range



Lockable in both open and closed positions when assemble on any other **RuB** range



Full port	1/4"÷3/8"÷1/2"	3/4"÷ 1"		1 ¼″÷1	½″ ÷2″	2 ½"÷3"÷4"		
Reduced port	1/2"÷3/4"	1"÷1 ¼"		1 ½″÷2′	′÷2 ½″	3"÷4"		
A (mm)	96	117		156.5		250		
h (mm)	8.5	9.5		4		8		
Description	Description Q.ty Material							
Geomet® plate	d steel handle		1	DD11 (EN10111)				
Dipped coating					1	PVC		

Dimension A shows handle length from center of stem; dimension h shows height of handle compared to standard handle assembled on valves. Two bottom lines show size of valve to fit wish each size of lockable handle. Use 9/32" size shackle padlock up to 2", and 5/16" over.

Code

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

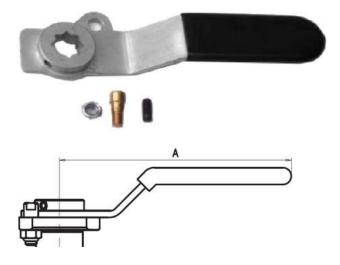


Lockable handle

for 3-way ball valves series s.76 (L-port) and s.64/T.264 with ISO5211 FO3 flange

Flange Size		F03
A (mm)		103
Black	Code	SLFD03

Description	Q.ty	Material
Geomet® plated steel handle	1	DD11 (EN10111)
Dipped coating	1	PVC
Stainless steel screw	1	AISI 304
Zinc plated steel nut	1	Class 8 (UNI7474)
Unplated stop	1	CW617N



This kit easily converts an actuated valve to a manual one. To lock valve in any position, use 4mm (5/32") shackle padlock.

Lockable push & turn handle

for 3-way ball valves series s.73 (T-port) with ISO5211 FO3 flange

Flange Size		F03		
A (mm)		103		
Black	Code	K731	N13	
Description		(Q.ty	Material
Geomet® plate	d steel han	dle 1	1	DD11 (EN10111)
Dipped coating		1	1	PVC
Screw		1	1	AISI 304
Retainer ring		1	1	CW617N
		1	1	AISI 302
Spring				CW617N

To lock valve in any position, use 4mm (5/32") shackle padlock.



Oval lockable handle

for **RuB** manual ball valves

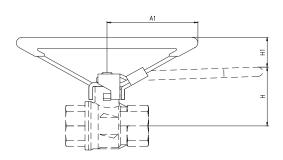


The **RuB** oval/round lockable handle is for service where there isn't enough space for levers or T-handles, or where lever handles might be moved unintentionally. It is made of steady carbon steel and it features the patented **RuB** lockable device.

The **RuB** oval lockable handle is available for all sizes of forged **RuB** valves up to 2" and in round shape for sizes 2 ½" thru 4"; it is easy to install on valves in the field or you can simply order your **RuB** valves with this option.







Code	PBOA03		PBO	A06	PBOA0	9	PBOA10
Size	1/4"÷3/8"	1/2″	3/4"-	÷1″	1 ¼"÷1	1⁄2″÷2′	" 2 ½"÷3"÷4"
A1 (mm)	58	58	70		70		155
H1 (mm)	20	19.5	22		15		3.2
Size				1/4"÷	2″		2 ½"÷ 4"
Locker shad	ckle			9/32"		1	5/16"
Description	n				Q.ty	Mat	erial
Geomet® plated steel handle				1	DD1	1 (EN10111)	
Dipped coa	ting				1	PVC	

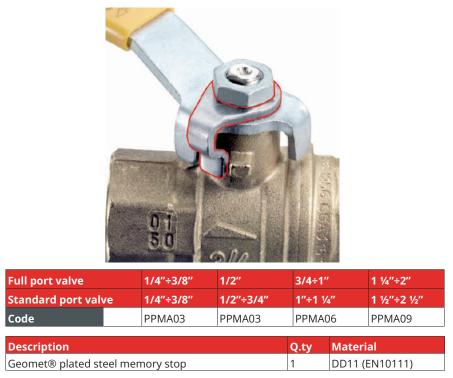
Dimension A1 shows handle dimension from centre of stem. Dimension H1 shows height of handle compared to standard handle assembled on valves.

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



Memory stop

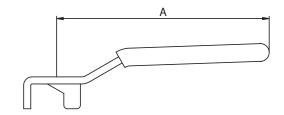
Use together with **RuB** stubby handles with knurling



Memory Stop allows to control flow passing through the valve by curbing ball movement from fully closed to a preset position. Installing a memory stop on a standard *RuB* valve is very easy and can be done even while valve is being used. Memory stops should be used only with *RuB* valves with O-Ring stem design

Geomet[®] carbon steel stubby handle





Full port valve		1/4"÷3/8"	1/2″	3/4÷1″	1 ¼″÷2″
Standard port valve		1/4"÷3/8"	1/2"÷3/4"	1″÷1 ¼″	1 ½″÷2 ½″
A (mm)		45	45	90	100
Yellow	Code	PLTG13	PLTG13	PLTG16	PLTG19

Description	Q.ty	Material
Geomet® plated steel handle	1	DD11 (EN10111)
Dipped coating	1	PVC

RuB levers are not only strong, but also long for easy maneuver. To solve space constraints issues, install our stubbies.



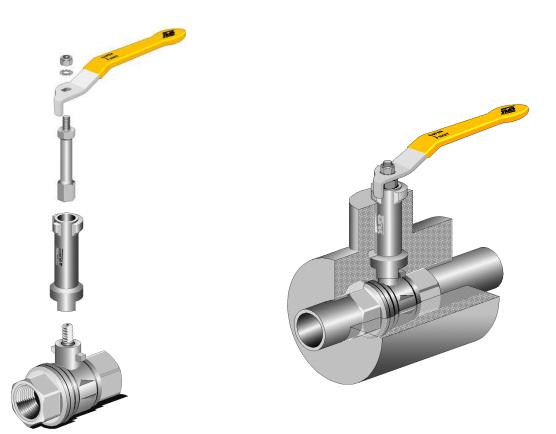
Stem Extension

for *RuB* ball valves with O-ring stem design



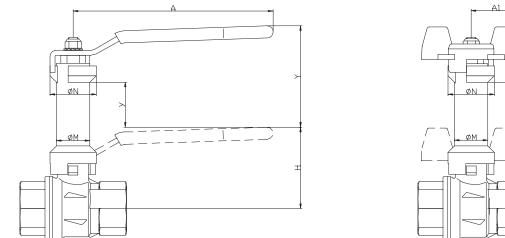
Today's world is conscious of the energy savings required to maintain resources for the future. To avoid heat loss from insulated pipes. *RuB* offers stem extensions which provide easy operation over insulation.

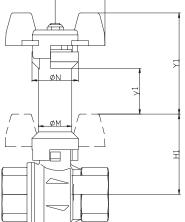
RuB stem extensions are made of strong hot forged brass and are designed for low heat losses from the pipe to the ambient environment. They are easy to install on **RuB** valves even while valves are in service.



Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



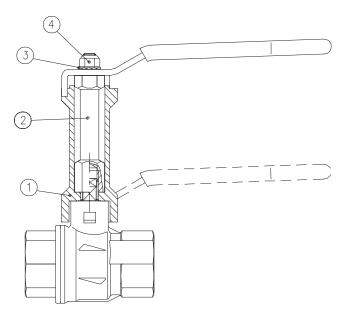


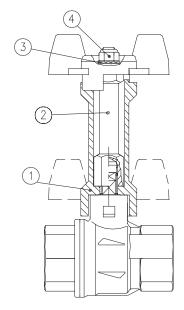


Dimensions Y, y, Y1 and y1 are additional to dimension H on the relevant valve drawing

Code	PPRO03		PPRO06	PPRO09
Full port valve	1/4"÷3/8"	1/2″	3/4"÷1"	1 ¼"÷1 ½"÷2"
Reduced port valve		1/2"÷3/4"	1"÷1 ¼"	1 ½"÷2"÷2 ½"
M (mm)	17	17	20	26
N (mm)	25	25	28	36
A (mm)	82	100	120	158
Y (mm)	56.5	56.5	62.5	67.5
y (mm)	26.5	26.5	27.5	20.5
A1 (mm)	25	25	30	
Y1 (mm)	56.5	56.5	62.5	
y1 (mm)	25.5	26	30.5	

Note: Stem extensions should not be used on valves with packing gland designs due to regular required maintenance adjustments.





ltei	m C	Description	Q.ty	Material
1	E	Body	1	CW617N
2	C	Connection	1	CW617N
3	Т	ab washer	1	Steel
4	S	Self-locking nut	1	Steel

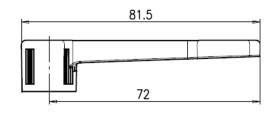


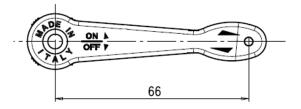


to mini and micro ball valves

Nylon lever and T-handle

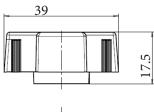
for s.34





Item No	Description	Colour
PLNB34	Blue nylon lever for s.34	RAL5017
PLNG34	Yellow nylon lever for s.34	RAL1028
PLNN34	Black nylon lever for s.34	RAL9005
PLNR34	Red nylon lever for s.34	RAL3000

Description	Q.ty	Material
Lever for s.34	1	Nylon glass filled 30%





ltem No	Description	Colour
PFNA34	Orange nylon T-handle for s.34	RAL2009
PFNB34	Blue nylon T-handle for s.34	RAL5017
PFNG34	Yellow nylon T-handle for s.34	RAL1028
PFNN34	Black nylon T-handle for s.34	RAL9005
PFNR34	Red nylon T-handle for s.34	RAL3000

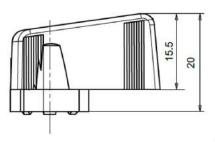
Description	Q.ty	Material
T-handle for s.34	1	Nylon glass filled 30%

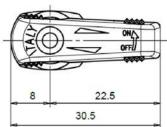
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



Nylon wedge handle

for s.35





k	tem No	Description	Colour
Ρ	LN35G	Yellow nylon wedge handle for s.35	RAL1028
-P	LN35N	Black nylon wedge handle for s.35	RAL9005
Ρ	LN35R	Red nylon wedge handle for s.35	RAL3000
Ρ	LN35V	Green nylon wedge handle for s.35	RAL6001
	LG35N Upon request)	Grey Grivory® wedge handle for s.35	RAL7012

Description	Q.ty	Material
Wedge handle for s.35	1	Nylon glass filled 30%

Metal wedge handle

for s.35



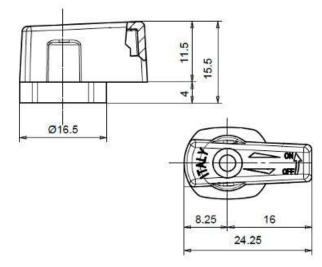
Colours	Yellow	Blue	Black	Red	Green	Chrome
Code	PLZ35G	PLZ35B	PLZ35N	PLZ35R	PLZ35V	PLZ35C

Description	Q.ty	Material
Metal wedge handle for s.35	1	ZAMA Z5

Thanks to the metal wedge handles mounted on s35 series, it's now possible to reach working temperatures up to 120°C (250°F). The metal wedge handles are available in red, black, yellow, green, light blue and chrome plated. Same dimensions as nylon wedge handle.

Nylon wedge handle

for s.39 micro



Item No	Description	Colour
PLN39N	Black nylon wedge handle for s.39	RAL9005

Description	Q.ty	Material
Wedge handle for s.39	1	Nylon glass filled 30%

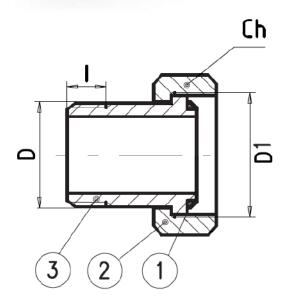


Miscellaneous accessories

Union connection set

for s.9036





s.	Description	Q.ty	Material	Size	1/2" x 3/4"	3/4″ x 1″	1″ x 1 ¼″	1 ¼″ x ′
	O-Ring	1	EPDM	D (inch)	1/2" ISO228	3/4" ISO228	1" ISO228	1 ¼" ISC
	Nickel plated union nut	1	CW617N	D1 (inch)	3/4" ISO228	1" ISO228	1 ¼" ISO228	1 ½" ISC
	Nickel plated union tailpiece	1	CW617N	l1 (mm)	10	12	14	15
				Ch (mm)	30	37	46	52

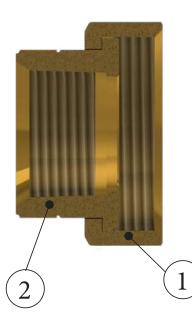
l1 (mm)	10	12	14	15
Ch (mm)	30	37	46	52
	l.			
Spare parts	S90D3*	S90E3*	S90F3*	S90G3*
Nut	PD90EN	PD90FN	PD90GN	PD90HN
Hose with OR	PB90DR	PB90ER	PB90FR	PB90GR

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



Union connection set

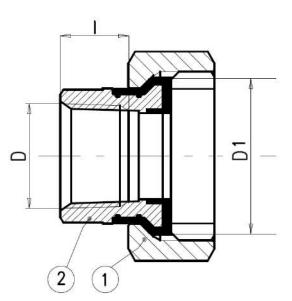
for s.80



ltem	Description		Thread type	Material
1	Sand blasted unplated nut	1	G 1.1/2" ISO228	CW617N
2	Unplated female tailpiece	1	1" NPT ANSI B1.20.1	CW617N

Dielectric union connection set

for s.80



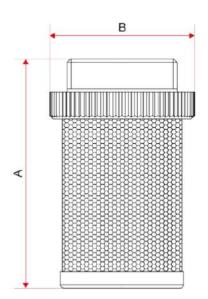
ltem	Description	Q.ty	D1	D	I	Material
1	Sand blasted unplated nut	1	G 1 ¼" ISO228			CW617N
2	Unplated female dielectric tailpiece	1		3/4" NPT ANSI B1.20.1	0.67"	CW617N + PA

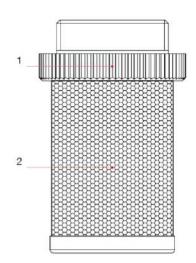


Filter for check valves s.120

- + Degree of filtration: from 3/8" to 2": 1200 μ m; from 2 ½" to 4": 2000 μ m.
- Threaded connection: ISO 228.







	3/8″	1/2″	3/4″	1″	1 ¼″	1 1⁄2″	2″	2 ½"	3"	4″
A	42	47	58	70	76	83	99,5	123	138	152,5
В	25,7	30	35,9	43,9	50,9	56,9	68,9	86	102	129

ltem	Description	Q.ty	Material
1	Hose	1	Polymer
2	Grid	1	AISI 304

Item No.	For ball valve s.190 size
PFILAC	3/8"
PFILAD	1/2"
PFILAE	3/4"
PFILAF	1″
PFILAG	1 ¼"
PFILAH	1 1⁄2″
PFILAI	2"
PFILAL	2 1/2"
PFILAM	3"
PFILAN	4"

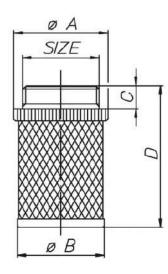
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.



Filter

for check valves s.123

• Threaded connection: ISO 228.





Code	PFI3AC	PFI3AD	PFI3AE	PFI3AF	PFI3AG	PFI3AH	PFI3AI	PFI3AL	PFI3AM	PFI3AN
Size (inch)	3/8″	1/2″	3/4″	1″	1 ¼″	1 1⁄2″	2″	2 ½″	3″	4″
Ø A mm	21	26	32	40	49	55	68	85	99	121
Ø B mm	19	23	29	37	44	50	61	80	93	116
C mm	7	8	9	10	11	11	12	13	14	14
D mm	46,5	50	57	62	68	78	90	97	110	128
Material (s)					Poly	mer				
					AISI	304				

Filter (500 µm mesh)

for s.190



Code	PF190D	PF190E	PF190F	PF190G	PF190H	PF190I
Size (inch)	1/2″	3/4″	1″	1 ¼″	1 ½″	2″
Ø A mm	12,9	16,8	20,8	29,5	37,5	47,5
Ø B mm	15,3	20,2	24	32,5	39,5	51
C mm	33,5	39,5	46	62	73	89
Material (s)	Nylon + AISI 304					



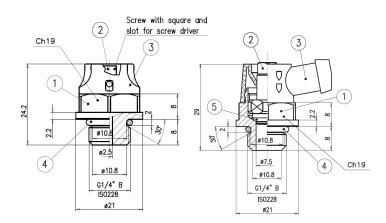
Drains and caps

for s.81





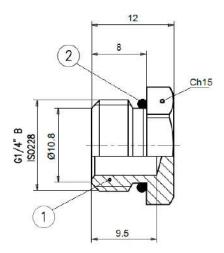
ltem No.	Description
PSPR811	Side drain valve G 1/4", compact version screwdriver operated
PSPR81	Side drain valve G 1/4" with hose connection
PTNR81	Side cap G 1/4"



PSPR81 - Side drain valve G 1/4" with hose PSPR811 - Side drain valve G 1/4", compact version screwdriver operated

connection

Pos.	Description	Q.ty	Material
1	Nickel plated body	1	CW614N
2	Nickel plated screw	1	CW612N
3	Rotating plastic head	1	Nylon-6
4	O-Ring	1	EPDM
5	O-Ring for PSPR81 only	1	EPDM



PTNR81 - Side cap G 1/4"

Pos.	Description	Q.ty	Material
1	Nickel plated cap	1	CW617N
2	O-Ring	1	EPDM

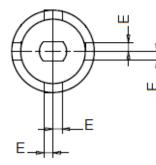
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

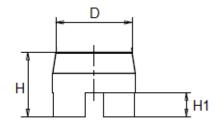


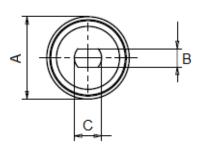
Top lever caps

for RuB ball valves









Code	SCOG03	SCOG06	SCOG09	
Full port	1/4" - 1/2"	3/4" - 1"	1 ¼" - 2"	
Standard port	1/4" - 3/4"	1" - 1 ¼"	1 1⁄2" - 2 1⁄2"	
ØA (mm)	24	27,5	36,5	
B (mm)	5,1	6,1	8	
C (mm)	7,1	9,1	12,1	
H (mm)	18,5	21,5	27	
H1 (mm)	7	8	10	
ØD (mm)	18,5	25,4	28,5	
E (mm)	2,5	3	4	
Material (s)	CW617N			



Limit Switch box



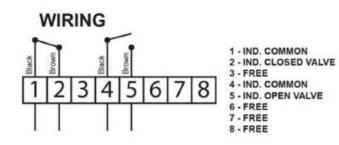
FEATURES AND SPECIFICATIONS:

- Enclosure: waterproof IP67, O-ring sealed
- Material: aluminum, polyester coated
- Ambient temperature: -20°C ~ +80°C
- Switch cams: adjustable, preset for 90°
- Cable entries: 2xM20x1.5
- Terminal block: 8 pos of terminal strips (6 for switches, 2 for solenoid valve power)
- Position indicator: dome type 0°C ~ 90°C
- Mounting bracket: stainless steel acc. to VDI/VDE3845, NAMUR
- Mechanical switches: 2 pcs. max 250V AC 16A, 125 V DC 0.6A

LIMIT SWITCH BOX XCESLSE - 5466

Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the BONOMI INDUSTRIES products with your specific field of use.

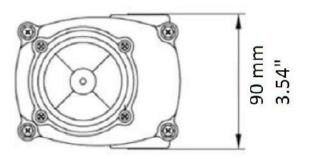




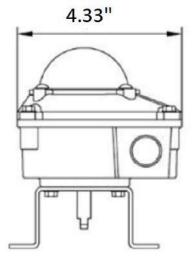


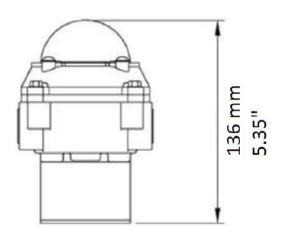
DIMENSIONS :

Dimensions are in mm/inch









MASTER INDEX

ACTUATION

CP electric actuator	Page 22
C-Tork light weight electric actuator	Page 26
CH electric actuator	Page 44
EA pneumatic actuator	Page 52
s.31 1/4″- 3/4″ EN 10226-1	Page 60
s.31 NPT 1/4"- 3/4"	Page 62
s.31 BSPT 1/4"- 3/4"	Page 64
s.6400 1/2"- 4" EN 10226-1, ISO 5211	Page 66
s.6400LT 1"- 2" EN 10226-1, ISO 5211, low torque	Page 68
k.6405 1/2"- 2" EN 10226-1, ISO 5211, pure PTFE seats, DIN 16722 M3	Page 70
s.6439 NPT 1/2"- 2", SS trim, ISO 5211	Page 72
s.6439LT NPT 1" - 2", SS trim, ISO 5211, low torque	Page 74
s.6441 NPT 1/2" - 4", brass trim, ISO 5211	Page 76
s.6500 1/2"- 1 1/4" actuator mounting	Page 78
s.6541 NPT 1/2"- 1 1/4" actuator mounting	Page 80
s.6550 BSPT 1/2"- 1 1/4" actuator mounting	Page 82
s.7200 3-way 4 seats (diverting) 1/2" - 1" EN 10226-1, ISO 5211	Page 84
s.7241 NPT 3-way 4 seats (diverting) 1/2" - 1" EN 10226-1, ISO 5211	Page 86
s.7300 3-way 4 seats T-port 1/2" - 2" EN 10226-1, ISO 5211	Page 88
s.7341 NPT 3-way 4 seats T-port 1/2 -2" ISO 5211	Page 92
s.7350 BSPT 3-way 4 seats T-port 1/2" - 2" ISO 5211	Page 96
s.7600 3-way 2 seats L-port (diverting) 1/2"- 2" EN 10226-1, ISO 5211	Page 100
s.7641 NPT 3-way 2 seats L-port (diverting) 1/2 - 2" ISO 5211	Page 102
s.7650 BSPT 3-way 2 seats L-port (diverting) 1/2" - 2" ISO 5211	Page 104

INDUSTRY

s.17 motor-oil drain ball valve	Page 108
s.33 1/4" - 2" EN 10226-1, heavy duty packing gland	Page 110
s.33 M/F 1/4" - 2" EN 10226-1, heavy duty packing gland	Page 112
k.60 spring return 1/4" - 2", heavy duty - DIN 16722 M3, EN 10226-1	Page 114
s.7200L 3-way, lever, 4 seats 1/2" - 1"	Page 116
s.7241L 3-way, lever, 4 seats 1/2" - 1"	Page 118
s.7300L 3-way, lever, 4 seats, T-port 1/2" - 2" EN 10226-1	Page 122
s.7341L NPT 3-way, lever, 4 seats, T-port 1/2" - 2"	Page 126
s.7350L BSPT 3-way, lever, 4 seats, T-port 1/2" - 2"	Page 130
s.7600L 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2" EN 10226-1	Page 132
s.7641L NPT 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2"	Page 134
s.7650L BSPT 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2"	Page 136
s.84 EN331 spring return 1/4" - 2" EN 10226-1	Page 138
s.85 1/4" - 2" EN 10226-1, packing gland	Page 140
s.92 barrel drain 3/4" – 1"	Page 142
s.92S NPT solid ball 1/4" - 4"	Page 144
s.92 NPT SS trim 1/4" - 2"	Page 146
s.95 NPT spring return 1/4" - 2"	Page 148
s.100 3-way 4 seats T-port 1/4" - 2" ISO 228	Page 150
s.101 3-way 4 seats L-port 1/4" - 2" ISO 228	Page 152
s.172 motor-oil compact drain ball valve	Page 154
SNI7352 1/4" NPT needle valve	Page 156
Instrumentation package	Page 158

PNEUMATIC

s.34 1/8" - 1/2" ISO 228 mini ball valve, suitable for panel mounting	Page 162
s.34 MF 1/8" - 1/2" ISO 228 mini ball valve, suitable for panel mounting	Page 164
s.34 NPT 1/8" - 1/2" mini ball valve, suitable for panel mounting	Page 166
s.35 high pressure 1/8" - 1/2" ISO 228 mini ball valve	Page 168
s.35 M/F high pressure 1/8" - 1/2" ISO 228 mini ball valve	Page 170
s.35 NPT high pressure 1/8" - 1/2" mini ball valve	Page 172
s.35 BSPT high pressure 1/8" - 1/2" mini ball valve	Page 174
s.35 BSPT M/F high pressure 1/8" - 1/2" mini ball valve	Page 176
s.39 forged, micro 1/8" - 1/4" ISO 228 high pressure ball valve	Page 178
s.39 NPT forged, micro 1/8" - 1/4" high pressure ball valve	Page 180
s.39 BSPT forged, micro 1/8" - 1/4" high pressure ball valve	Page 182
s.93 downstream exhaust 1/4" - 2" EN 10226-1 with patented locking handle	Page 184
s.93 NPT downstream exhaust 1/4" - 2" with patented locking handle	Page 186
s.93 BSPT downstream exhaust 1/2" - 2" with patented locking handle	Page 188

GAS

k.60 1/4" - 2" EN 10226-1, heavy duty DIN 16722 M3	Page 192
s.80 NPT 3/4" - 2" gas cock with tamper proof lockwing	Page 194
s.80 NPT surepass 3/4" - 1" 175 PSI bypassing gas meter valve	Page 196
s.8042 NPT 3/4" - 2" MIP x FIP with tamper proof lockwing	Page 198
s.8043 NPT dielectric 3/4" - 1 1/4" with tamper proof lockwing	Page 200
s.82 NPT 1/2" - 2" side drain	Page 202
k.84 1/4" - 2" EN 10226-1, DIN 16722 M3	Page 204
S.84 IR6 1/2" - 1" EN 10226-1	Page 206
s.84 EN331 1/4" - 4" EN 10226-1	Page 208
s.84 EN331 M/F 1/4" - 4" EN 10226-1	Page 210
s.84 BSPT 1/4" - 4"	Page 212
s.84 BSPT T-handle 1/4" - 1 ½"	Page 214
s.92 NPT 1/4" - 4" packing gland	Page 216
s.92 NPT M/F 1/2" - 2" packing gland	Page 218
s.95 NPT 1/4" - 4"	Page 220
s.95 NPT T-handle 1/4" - 4"	Page 222
s.95 NPT nickel plated 1/4" - 4"	Page 224
s.128A 3/4" Y-strainer	Page 226
s.195 NPT 3/8" - 1" standard port gas cock	Page 228
s.195 & flare flare 37° by solder end 1/2" – 3/4", standard port	Page 230

FIREFIGHTING

s.50 1/4" - 2" standard port	Page 234
s.50 MF 1/4" - 2" standard port	Page 236
s.6400 1/2" - 4", EN 10226-1, ISO 5211 heavy duty	Page 238
s.7300L 3-way, lever, 4 seats, T-port 1/2" - 2" EN 10226-1	Page 240
s.7600L 3-way, lever, 2 seats, L-port (diverting) 1/2" - 2" EN 10226-1	Page 244
s.84 EN331 1/4" - 4", EN 10226-1	Page 246
s.84 EN331 MF 1/4" - 4", EN 10226-1	Page 248
s.90 1/4" - 4", ISO228	Page 250
s.90 MF 1/4" - 4", ISO228	Page 252
s.90 MM 1/4" - 4", ISO228	Page 254

s.92 NPT 1/4" - 4" packing gland	Page 256
s.92 NPT MF 1/2" - 2" packing gland	Page 258
s.95 NPT 1/4" - 4"	Page 260
s.128 1/4"-4" ISO228, Y-strainer	Page 262

DRINKING WATER

s.20 DZR 1/4" - 2" ISO 228, dezincification-resistant	Page 266
s.20 DZR M/F 3/8" - 1 ¼" ISO 228, dezincification-resistant	Page 268
s.21 DZR 12 - 54 mm solder ends, for insulation, dezincification-resistant	Page 270
s.24 DZR 1/2" - 4" EN 10226-1, dezincification-resistant	Page 272
s.24 DZR press ends 15 - 54 mm, dezincification-resistant	Page 274
s.26 DZR 3/8" - 2" ISO 228, for insulation, dezincification-resistant	Page 276
s.28 DZR 12 - 54 mm compression ends, dezincification-resistant	Page 278
s.30 DZR 12 - 54 mm compression ends, for insulation, dezincification-resistant	Page 280
s.84 W 1/4" - 2", EN 10226-1	Page 282
s.84 W M/F 1/4" - 2", EN 10226-1	Page 284
s.84W M/F 3/4" for flat gasket	Page 286
s.090 1/4" - 2", ISO 228	Page 288
s.090 M/F 1/4" - 2", ISO 228	Page 290
s.468LF DZR 22 mm compression ends, ISO 5211, Lead-Free, dezincification-resistant	Page 292
Puri-T 292 NPT 1/4" - 2" Lead Free	Page 294
Puri-T 242 1/2" - 2" Lead Free, solder ends	Page 296
Puri-T 264 NPT 1/2" - 1 1/2" Lead Free, ISO 5211	Page 298

PLUMBING

s.42 1/2" - 3" solder-ends ball valve	Page 302
s.50 1/4" - 2" solder ends, standard port	Page 304
s.50 MF 1/4" - 2" solder ends, standard port	Page 306
s.51 1/2" - 2" EN 10226-1, standard port	Page 308
s.51 MF 1/2" - 2" EN 10226-1, standard port	Page 310
s.55 KFE 1/4" ISO 228, cap & strap	Page 312
s.63 1/2" - 3" reduced port, ISO 228	Page 314
s.71 NPT 1/2" - 4" standard port	Page 316
s.81 1/2" - 2" ISO 228, side drain	Page 318
s.88 BSPT 1/4" - 2" reduced port	Page 320
s.90 1/4" - 4", ISO 228	Page 322
s.90 M/F 1/4" - 4", ISO 228	Page 324
s.90 M/M 1/4" - 4", ISO 228	Page 326
s.90 NPT short 1/4" - 2"	Page 328
s.9036 1/2" - 1 ¼" ISO 228, union connection	Page 330
s.94 1/2" - 2" ISO 228, for sensors	Page 332
s.96 extended stem 1/4" - 2", dezincification-resistant in 3/8" - 2"	Page 334
s.110 3/8" - 4" ISO 228 gate valve	Page 336
s.111 1/4" - 4" ISO 228 heavy pattern gate valve	Page 338
s.112 NPT 1/2" - 4" gate valve	Page 340
s.114 NPT 1/2" - 4" heavy pattern gate valve	Page 342
s.120 3/8" - 4" ISO 228 check valve	Page 344
s.122 3/8" - 4" ISO 228 check valve	Page 346
s.123 1/4" - 4" ISO 228 heavy pattern check valve	Page 348
s.123 NPT 1/4" - 1 ¼" heavy pattern check valve	Page 350
s.124 1/2" - 4" ISO 228 foot valve	Page 352
s.126 3/8" - 4" ISO 228 swing check valve	Page 354
s.126 M 1/2" - 4" swing check valve	Page 356

s.126 M NPT 1/2" - 4" swing check valve	Page 358
s.128 1/4" - 4" ISO 228 Y-strainer	Page 360
s.140 bib-cock 1/2" - 3/4" with plain outlet	Page 362
s.142 bib-cock 3/8" - 1" with 3/4" outlet and hose	Page 364
s.190 1/2" - 2" ISO 228, with built-in filter	Page 366
s.190M 3/4" - 2" ISO 228, with built-in filter and magnet	Page 368

ACCESSORIES

Accessories to forged RUB ball valves

Geomet® carbon steel lever	Page 373
AISI 430 stainless steel lever	Page 373
Geomet® carbon steel left lever	Page 374
Geomet® carbon steel 90° reverse lever	Page 374
Aluminum - brass - Geomet® carbon steel T-handle	Page 375
Patented lockable handle for <i>RuB</i> manual ball valves	Page 376
Lockable handle for 3-way ball valves series s.76 (L-port) and s.64/T.264 with ISO5211 F03 mounting flange	Page 377
Lockable handle for 3-way ball valves series s.73 (T-port) with ISO5211 F03 mounting flange	Page 377
Oval lockable handle for RuB manual ball valves	Page 378
Memory stop Use together with <i>RuB</i> stubby handles with knurling	Page 379
Geomet® carbon steel stubby handle	Page 379
Stem Extension for <i>RuB</i> ball valves with O-ring stem design	Page 380
Accessories to mini and micro ball valves	
Nylon lever and T-handle for s.34	Page 382
Nylon wedge handle for s.35	Page 383
Metal wedge handle for s.35	Page 383
Nylon wedge handle for s.39 micro	Page 383
Miscellaneous accessories	
Union connection set for s.9036	Page 384
Union connection set for s.80	Page 384
Dielectric union connection set for s.80	Page 384
Filter for check valves s.120	Page 385
Filter for check valves s.123	Page 386
Filter (500 μm mesh) for s.190	Page 387
Drains and caps for s.81	Page 388
Top lever caps for RuB ball valves	Page 389
Accessories to actuators	
Limit switch box	Page 390





Application Catalog



Ask for additional information on the whole range of **RuB** products and consult with your supplier for special applications.

ALL RIGHTS RESERVED | COPYRIGHT© BONOMI INDUSTRIES 2025

BONOMI INDUSTRIES endeavors to provide comprehensive information about the installation, maintenance and operation of its products. For more details or clarification, please contact us. **BONOMI** INDUSTRIES reserves the right to change or modify product design, construction, specifications, materials or the information herein without prior notice and without incurring any obligation to make such changes and modifications on products previously or subsequently sold. Content of this document is proprietary to **BONOMI** INDUSTRIES and it may not be copied in part or in whole without prior written authorization. Recommendations on application design and material selection are based on available technical data and are offered as suggestions only. Each user should make his/her own tests to determine the suitability for his/her own particular use. **BONOMI** INDUSTRIES gives no express or implied warranties concerning the form, fit, or function of a product in any application. **BONOMI** INDUSTRIES does not accept liability for errors or omissions. Any undated reference to a code or standard shall be interpreted as referring to the latest edition.

BONOMI INDUSTRIES, RuB and triangles, are all registered trademarks of BONOMI INDUSTRIES. Other logos or trademarks are property of respective owners.





Via Padana Superiore, 29, 25080 Mazzano (BS), Italy Tel.: +39 030 212441 - sales@rubvalves.com www.bonomiindustries.com