



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.

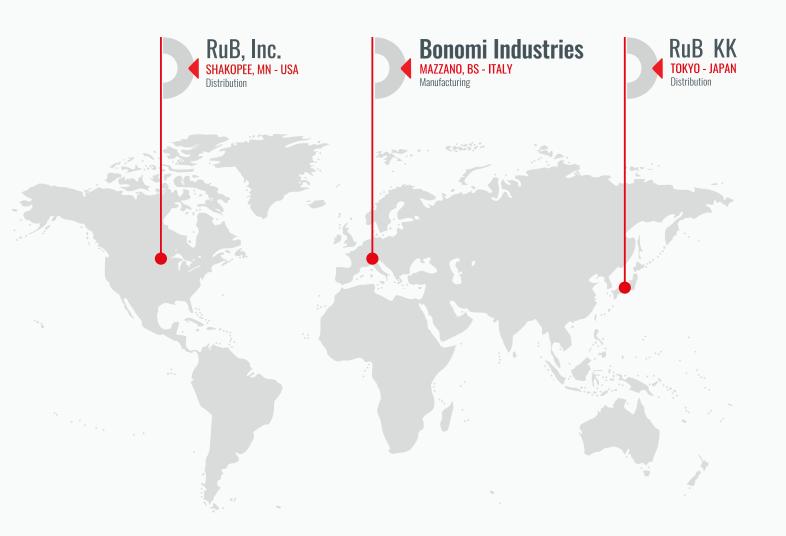
Production takes place entirely at our headquarters, BONOMI INDUSTRIES S.r.l., in Mazzano (Brescia), Italy. Finished products are then distributed globally from Italy and through our international branches. In North America, *RuB, Incorporated* operates from a modern 5.000 sqm (50,000 sqf) facility, 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

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

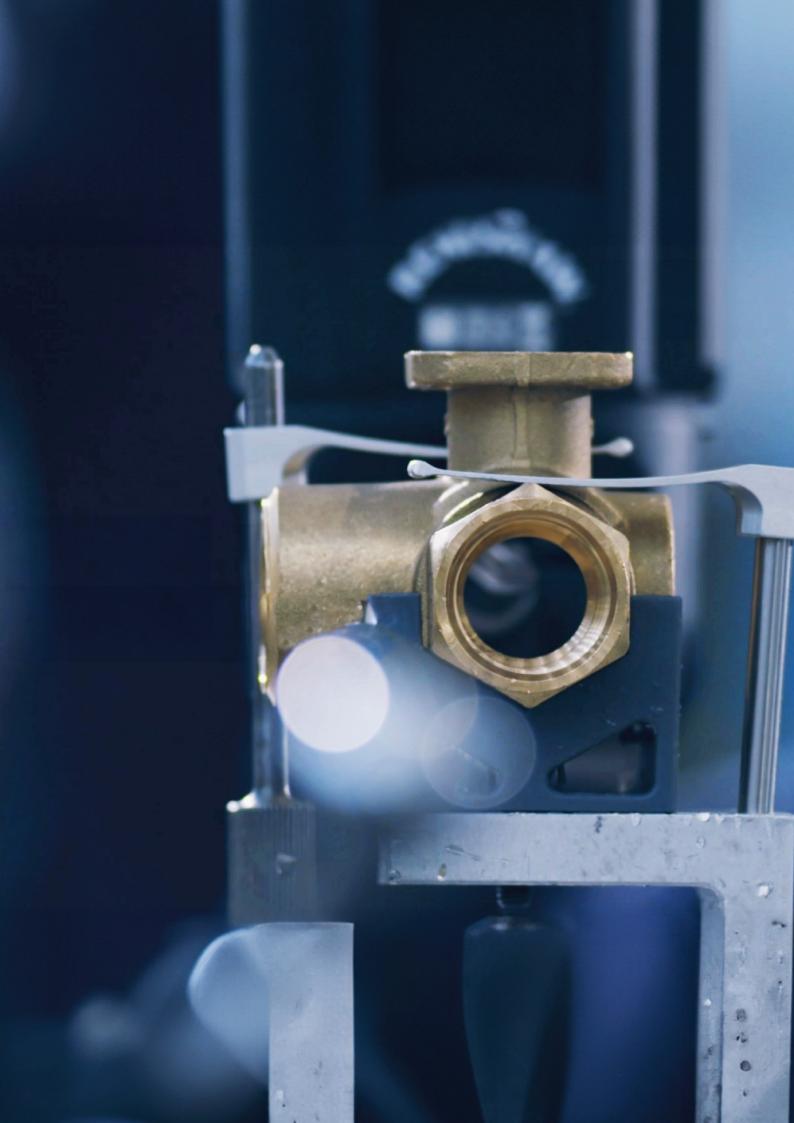


**Customized products** developed by the Engineering Center



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





## OEM

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.

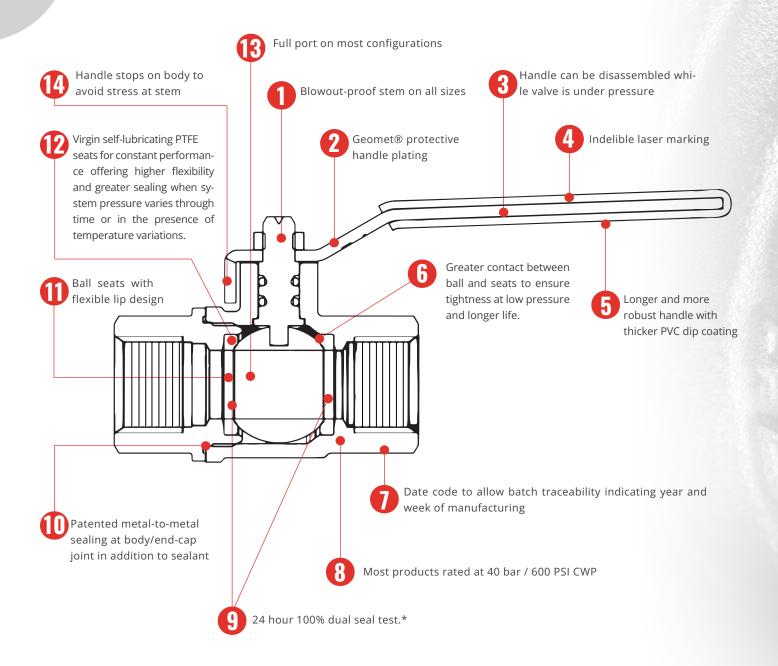
## PRODUCT TYPE APPROVALS







## 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











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s.50

Female/Female 1/4" - 2" ISO 228









## **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
- · 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**

- $\cdot~$  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)
- $\bullet$   $\,$  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
- 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

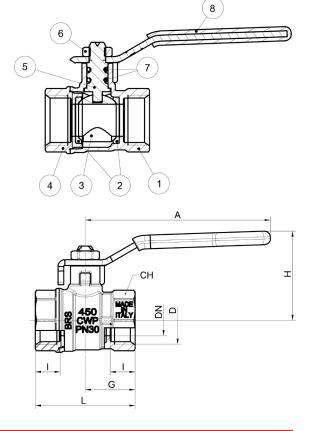
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability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



|   | Part description   | Q.ty | Material          |
|---|--|------|-------------------|
| 1 | Nickel plated body (external nickel plated,<br>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)    |



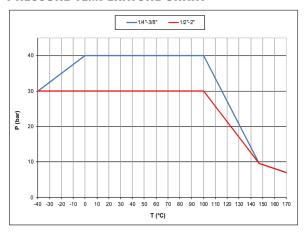
NOTE: drawings refer to 1/2" up to 2" sizes

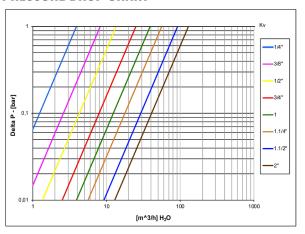


| Code      | S50B00 | S50C00 | S50D00 | S50E00 | S50F00 | S50G00 | S50H00 | S50100 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|
| D (Size)  | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     |
| DN (mm)   | 8      | 10     | 13,5   | 18     | 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









## **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
- · 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**

· 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**

- $\cdot~$  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)
- $\bullet$   $\,$  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)
- T-handle 4
- · Stubby handle
- $\textit{\textbf{RuB}}$  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.



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|   | 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,<br>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)    |

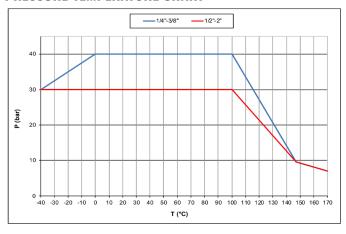




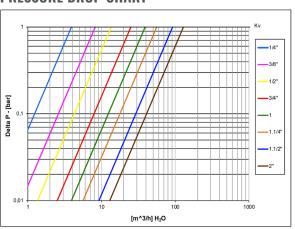
| Code        | S50B20 | S50C20 | S50D20 | S50E20 | S50F20 | S50G20 | S50H20 | S50I20 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Size (inch) | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 ½"   | 2"     |
| DN (mm)     | 8      | 10     | 15     | 20     | 25     | 32     | 40     | 50     |
| I (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



## PRESSURE DROP CHART



G





s.6400

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











## **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, 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

## **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**

- $\cdot~$  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.

- · 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

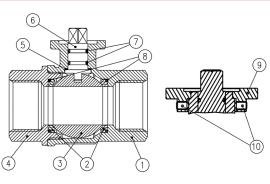


## s.6400 XCES6400 - 5466

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|    | 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                    |



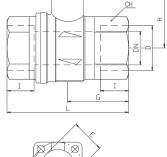
Valves configuration up to 2"

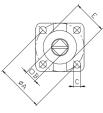
Valve ball seats and stem configuration

of valves over 2" is different.

| Complia | Compliant to CE 2014/68/UE product Equipment category III Module B+D |        |          |          |          |  |  |  |  |  |
|---------|--|--------|----------|----------|----------|--|--|--|--|--|
| S64G00  | S64H00   | S64I00 | S84L00AM | S84M00AM | S84N00AM |  |  |  |  |  |
| 1 1/4"  | 1 ½"   | 2"     | 2 1/2"   | 3"       | 4"       |  |  |  |  |  |
| 22      | 40   | Ε0     | CF       | 00       | 100      |  |  |  |  |  |

|  |        |        |        | III Wodule B+D |        |        |          |          |          |
|--|--------|--------|--------|----------------|--------|--------|----------|----------|----------|
| Code   | S64D00 | S64E00 | S64F00 | S64G00         | S64H00 | S64I00 | 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<br>DIN ISO 522<br>DIN 3337 | F03    | F03    | F03    | F03            | F05    | F05    | F07      | F07      | F07      |
| Kv (m³/h)                                    | 28     | 60     | 100    | 155            | 245    | 290    | 516      | 770      | 1120     |



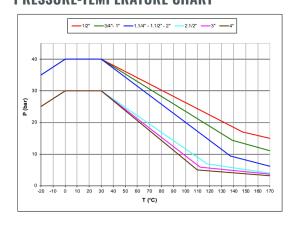


Ball valves are marked CE on end-cap from 11/4" to 4" as follow: CE 0425 cat IIIB+D PS: 5 GAS TS1:-20°C TS2:+60°C

## TORQUE FOR ACTUATOR SIZING N.M.

| Delta P>   | 0÷15    | bar      | 40 bar (30 l | 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          |

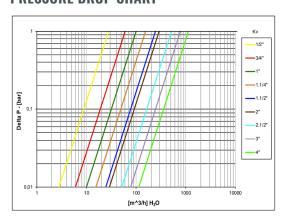
## PRESSURE-TEMPERATURE CHART



## **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 |







## **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 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, external nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- $\bullet\,$  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**

• EN 10226-1, ISO 228 parallel 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
- · 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









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





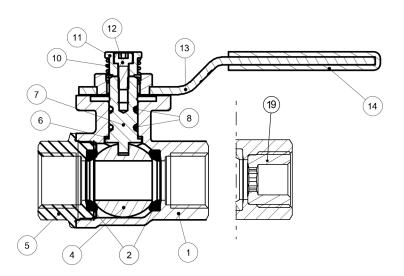


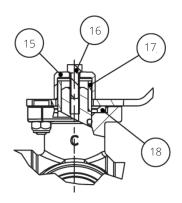
## **s.7300L** XCES7300L - 5708

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.



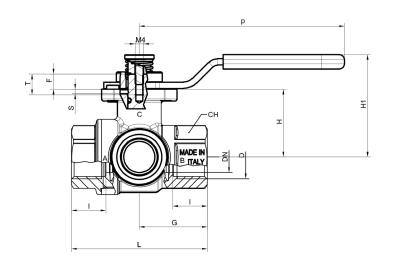
|    | Part description  | Q.ty | Material               |
|----|---|------|------------------------|
| 1  | Nickel plated body (external nickel plated, unplated inside)    | 1    | CW617N                 |
| 2  | Seat  | 2    | PTFE                   |
| 3  | Seat  | 2    | PTFE                   |
| 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                 |

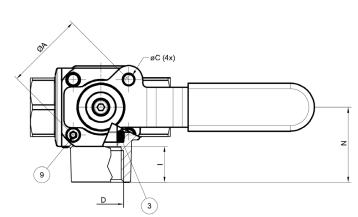






| Code   | S73B00L | S73C00L | S73D00L | S73E00L | S73F00L | S73G00L | S73H00L | \$73100L |
|--|---------|---------|---------|---------|---------|---------|---------|----------|
| Size (inch)                                  | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1 1/4"  | 1 ½"    | 2"       |
| DN (mm)                                      | 8       | 10      | 15      | 20      | 25      | 30.4    | 38      | 48       |
| I (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<br>DIN ISO 522<br>DIN 3337 | F03     | F03     | F03     | F03     | F03     | F05     | F05     | F05      |
| Kv (m³/h)<br>straight pattern                | TBD     | TBD     | 9.7     | 28.2    | 43.3    | 57.0    | 94.5    | 161.0    |
| Kv (m³/h)<br>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**

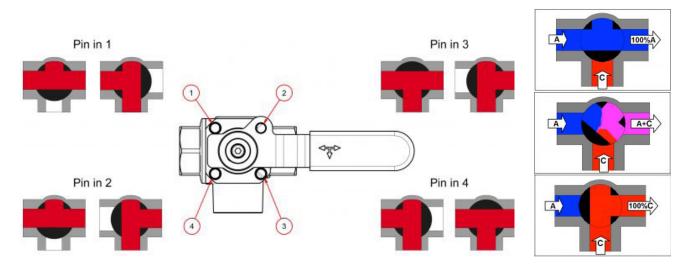
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media. If media has more or less friction than water, multiply torque by the following factors:

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

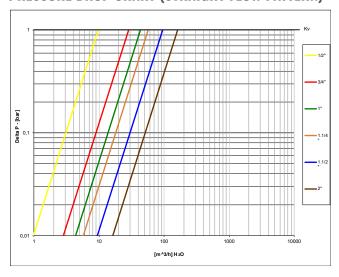
With the configuration of T-port a stop pin can be fixed in any position of the 4 provided in the flange (1, 2, 3 or 4) and the lever can be rotated freely through 90°, the flow assumes the directions indicated in the diagram; in case of need the lever can be pulled upwards and you can reach any of the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

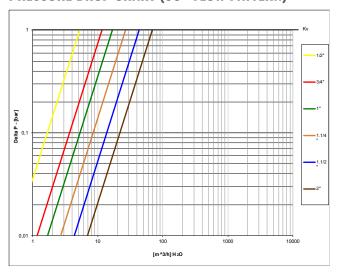
The valve allows also to block the lever thanks to the addition of a lock on the lever's protrusion (in the drawing you can see position 2). The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit through A+C.



## PRESSURE DROP CHART (STRAIGHT FLOW PATTERN)



## PRESSURE DROP CHART (90° FLOW PATTERN)







# \$.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.







## **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**

 $\bullet~$  EN 10226-1, ISO 228 parallel female by female threads

## **FLOW**

100% full port for maximum flow

## HANDIF

- 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

- 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









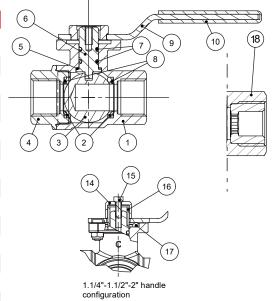
## **s.7600L** XCES7600L - 5708

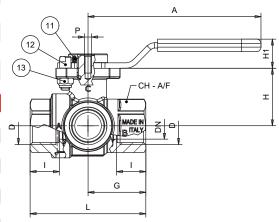
Each user should perform his own tests to find out the suitability for his particular application. BONOMI INDUSTRIES makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability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

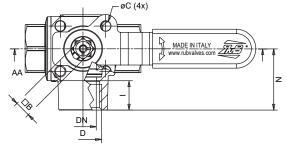


|    | Part description  | Q.ty | Material                 |
|----|---|------|--------------------------|
| 1  | Nickel plated body<br>(External nickel plated, unplated inside)                 | 1    | CW617N                   |
| 2  | Seat  | 2    | PTFE graphite filled 15% |
| 3  | Chrome plated ball  | 1    | CW617N                   |
| 4  | Sand blasted nickel plated end cap<br>(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 ½"    | 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<br>DIN ISO 522<br>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

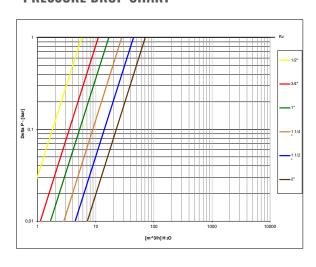
| Delta P>          | 0÷16 bar         |      |  |  |  |
|-------------------|------------------|------|--|--|--|
| Valve size        | to open to close |      |  |  |  |
| 14" - 3/8" - 1/2" | 3,5              | 3,5  |  |  |  |
| 3/4"              | 4,0              | 4,0  |  |  |  |
| 1"                | 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:

| 8  |         |
|--|---------|
| 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

## Female/Female 1/4" - 4" FN 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)





















## 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
- · 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

## **FLOW**

- Full port to DIN 3357 for maximum flow

## **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**

- $\cdot~$  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 /  ${\bf HTB}$  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.

## **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 4
- T-handle **5**
- Stem extension
- Patented locking device for valves up to 4"

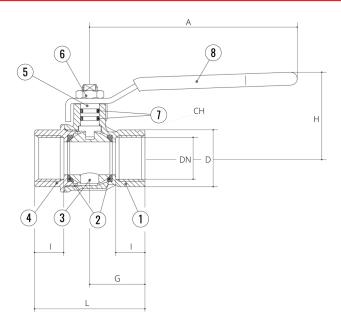


## **s.84EN331** xces84e - 5466

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)  |



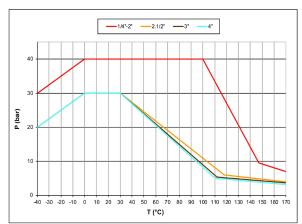
1 1/4" - 2" hollow ball

|           |        |        |        |        |        | Compliant | to CE 2014/6 | 8/UE produc | t Equipment | category III N | lodule B+D |
|-----------|--------|--------|--------|--------|--------|-----------|--------------|-------------|-------------|----------------|------------|
| Code      | S84B00 | S84C00 | S84D00 | S84E00 | S84F00 | S84G00    | S84H00       | S84I00      | S84L00      | S84M00         | S84N00     |
| D (inch)  | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4"    | 1 ½"         | 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       |

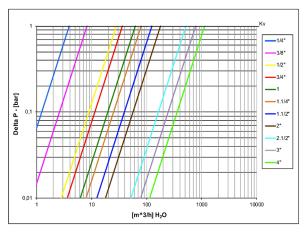
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 1/4" to 2", on body over 2" as follow:

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" FN 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)

















## **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
- · 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**

 $\bullet\,$  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

## 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)
- $\cdot\,$  For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar / 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

## **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.

## **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 4
- T-handle 6
- Stem extension
- Patented locking device for valves up to 4"



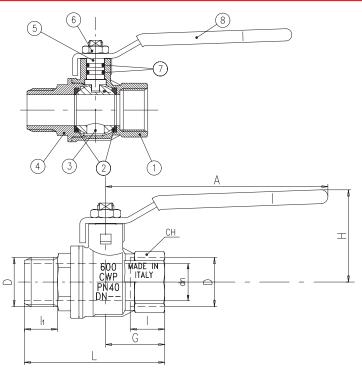
## s.84 EN331 MF XCES84EM - 5466

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,<br>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<br>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)  |





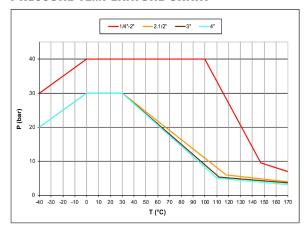
| Compliant to CE 2014/68/UE product Equipment category III Module B+D |
|--|
|--|

| 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 ½"   | 2"     | 2 1/2" | 3"     | 4"     |
| DN (mm)   | 8      | 10     | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    |
| I (mm)    | 12     | 12     | 15.5   | 17     | 21     | 23     | 23     | 26.5   | 32     | 35     | 41.5   |
| I1 (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   |

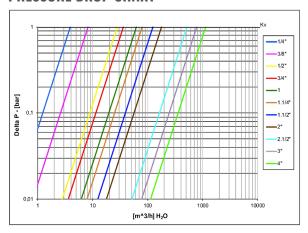
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different. Ball valves are marked CE on handle from 1 1/4" to 2", on body over 2" as follow:

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.90** 

Female/Female 1/4" - 4" ISO 228











## **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
- · 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**

 $\cdot\,\,$  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

## **WORKING PRESSURE & TEMPERATURE**

- $\cdot~$  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.

- 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 / AISI 430) 3
- T-handle
- · Stem extension
- Patented locking device
- · Dezincification resistant brass body and components
- · Stubby handle up to 2"

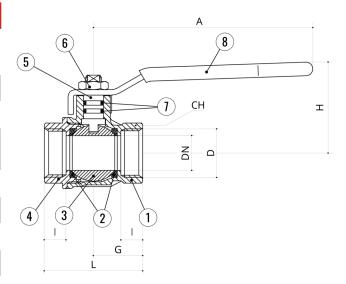


## **S.90** XCES90 - 5466

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|   | Part description   | Q.ty | Material        |
|---|--|------|-----------------|
| 1 | Nickelplatedbody(externalnickelplated,<br>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)  |



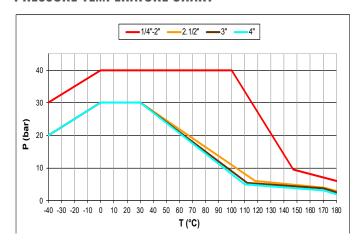
#### 1 1/4"-2" hollow ball

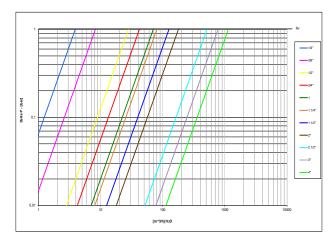
| Code       | S90B00 | S90C00 | S90D00 | S90E00 | S90F00 | S90G00 | S90H00 | S90100 | S90L00 | S90M00 | S90N00 |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| D (Size)   | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 ½"   | 2"     | 2 ½"   | 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 1/4" 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











#### **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
- · 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**

 $\cdot\,\,$  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

## **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 4
- · Stem extension
- $\cdot$  RuB memory stop is designed to be installed with our stubby handle
- Dezincification resistant brass body and components
- · Stubby handle up to 2"

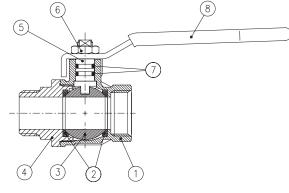


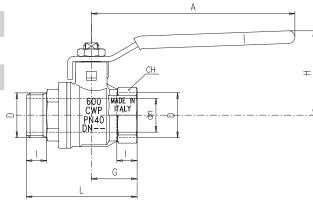
## s.90 MF XCES90M - 5466

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|   | 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)  |



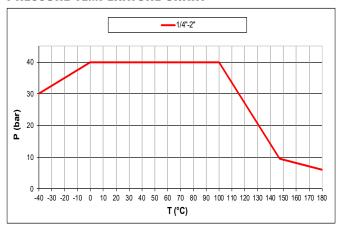


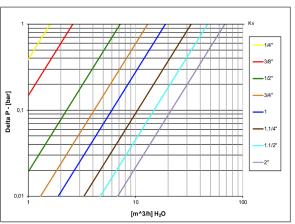
1 1/4"-2" hollow ball

| Code       | S90B20 | S90C20 | S90D20 | S90E20 | S90F20 | S90G20 | S90H20 | 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 1/4" to 2": CE XXCODEXX Cat I-A

## PRESSURE-TEMPERATURE CHART









## s.90 M/M

Male/Male 1/4" - 2" ISO 228











## **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
- · 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

- $\cdot \ \ \text{Water Regulations Advisory Scheme (United Kingdom)}$
- · 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
- 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"

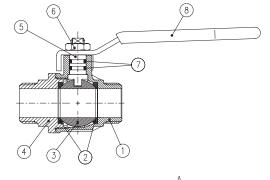


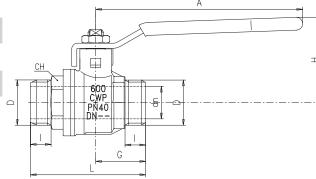
## **s.90 MM** XCES90MM - 5466

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|   | 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)  |



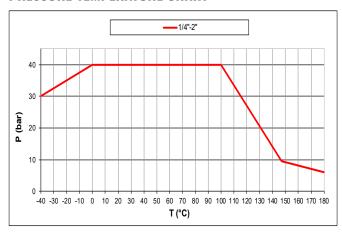


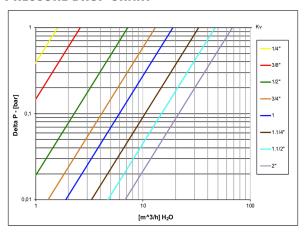
1 1/4"-2" hollow ball

| Code       | COORSS | 500522 | COODSS | CONESS | COOFTE | 500522 | coouss | coolaa |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|
|            | S90B22 | S90C22 | S90D22 | S90E22 | S90F22 | S90G22 | S90H22 | S90122 |
| D (Size)   | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 ½"   | 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



#### **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
- · 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**

- $\cdot\,$  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
- 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
- $\cdot~$  \*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 MHK7: 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 6



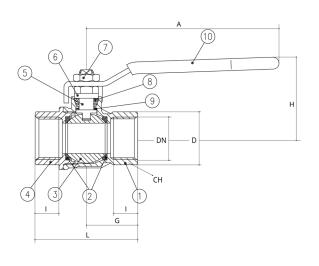


## s.92 NPT XCES92 - 5466

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)          |

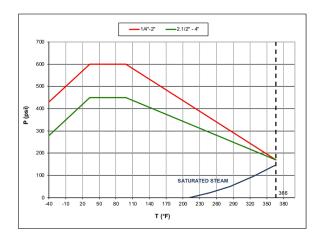


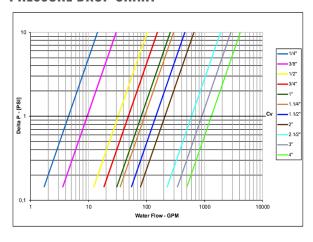
## 1 1/4"-2" hollow ball

| 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 ½"   | 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













## **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
- · 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® 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
- $\cdot~$  \*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"
- Patented locking device for valves up to 4"
- Stem extension
- Stainless steel handle (1.4016 / AISI 430)
- Stubby handle 4
- T-handle 5





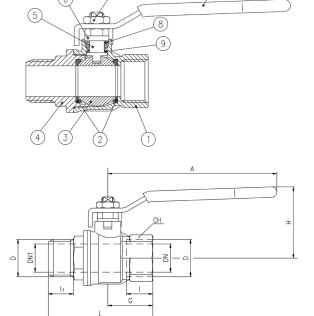
## s.92 NPT M/F XCES92M - 5466

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|   | 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%  |

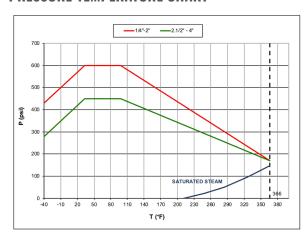


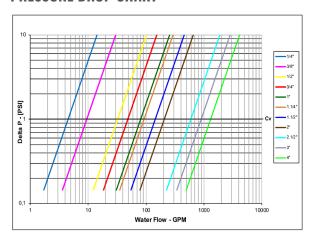


| Code       | S92B42 | S92C42 | S92D42 | S92E42 | S92F42 | S92G42 | S92H42 | S92I42 | S92L42 | S92M42 | S92N42 |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| D (inch)   | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 ½"   | 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  |
| I (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 1/4" - 4"















## **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
- · 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® 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

#### 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 REOUEST**

- 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 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 4
- T-handle



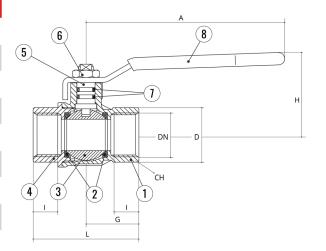


## s.95 NPT XCES95 - 5466

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|   | 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)  |

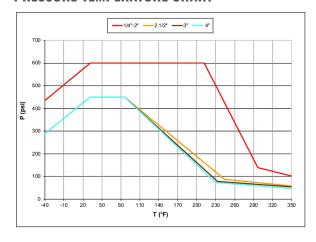


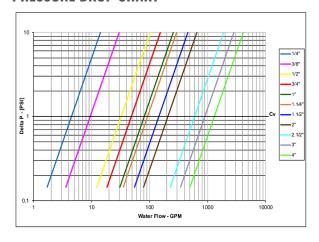
#### 1 1/4"-2" hollow ball

| 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 ½"   | 2"     | 2 ½"   | 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





## **OUALITY**

· 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 μm, 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

## **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)

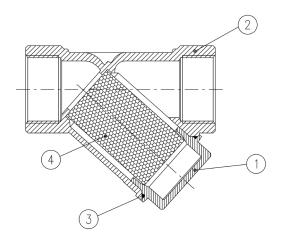
**NOTE:** approvals apply to specific configurations/sizes only.

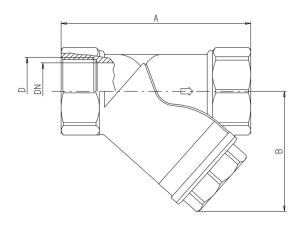
## **s.128** XCE128 - 5466

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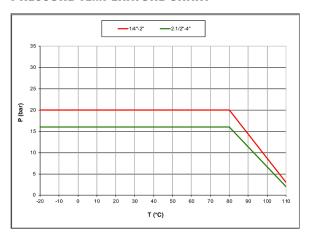
|   | Part description         | Q.ty | Material          |
|---|--------------------------|------|-------------------|
| 1 | End-cap                  | 1    | CW617N            |
| 2 | Body                     | 1    | CW617N            |
| 3 | O-Ring                   | 1    | NBR               |
| 4 | Stainless steel strainer | 1    | 1.4301 / AISI 304 |

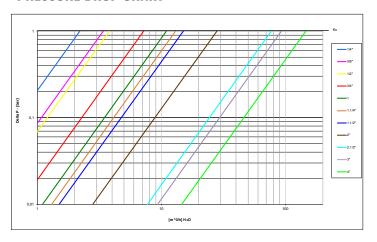




| Code        | 128B00 | 128C00 | 128D00 | 128E00 | 128F00 | 128G00 | 128H00 | 128100 | 128L00 | 128M00 | 128N00 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| D (inch)    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 ½"   | 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/cm²) | 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







# **Application Catalog**









Via Padana Superiore, 29, 25080 Mazzano (BS), Italy Tel.: +39 030 212441 - sales@rubvalves.com www.bonomiindustries.com