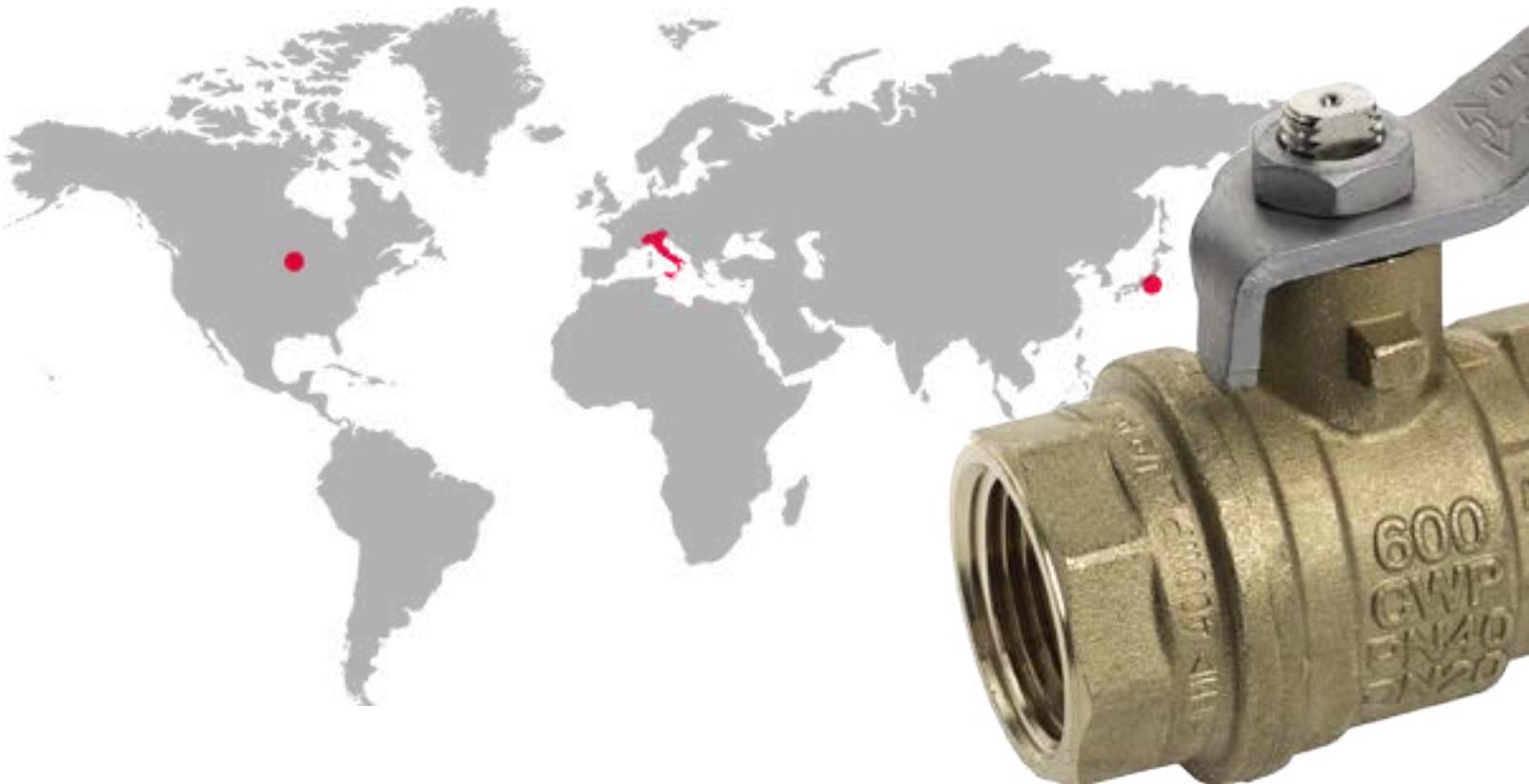


RuB, Inc.

MEETING STANDARDS IS OUR STANDARD



PRODUCTS CATALOG

BALL VALVES AND ACTUATORS





VALVES & ACTUATORS

PRODUCTS CATALOG



RUBINETTERIE UTENSILERIE **BONOMI**



ISO 9001





VALVES & ACTUATORS



RuB is a manufacturer of hot forged brass shut-off valves with a focus on gas, water, air and oil applications. A family owned company that has grown globally by continuously understanding market requirements and satisfying customer needs.

Many major international manufacturers rely on **RuB** and, as a result, great emphasis is put on quality: ISO 9001 and PED plant compliance are certified by well-known organizations. We offer a verified package of Quality Assurance that is based on testing services and state of the art technology. **RuB** performs a unique 100% 24 hour dual seal test on every valve before it is released from manufacturing.

Efficiency and automation are found everywhere in **RuB** with a continuing allocation of investments geared to provide **RuB** with a manufacturing edge and to enhance **RuB**'s ability to compete in the demanding markets of today.

Both team members and management are committed to the company's long term global strategy making our relentless pursuit for excellence a #1 priority.

Our products are designed to reliably perform according to specs and to exceed expectations of longevity.

Our engineering team is relentlessly engaged in continuous improvement and innovative solutions as well as creative and useful options for products and accessories.

Our sales team views customers as long term partners, and happily stands ready to help on any inquiry, question or feedback regarding standard products, special applications, custom products or OEM products.





Quality

Quality is the result of combining several focused initiatives, all with one common goal, that being

TOTAL CUSTOMER SATISFACTION

All our production is made in our Corporate Headquarters in Brescia, in order to preserve **our proud 100% made in Italy!**

Our Headquarters is certificated
ISO 9001:2008



ISO 9001



We could have chosen any inexpensive rubber stamp certification and the result would have been an official piece of paper. However, based on our corporate motto "Meeting Standards is our Standard", we decided to go with the best: Lloyd's ISO 9001 certification process is a rigorous one and passing its audits is the most reliable indicator of quality products.

Lloyd's certification logo is the benchmark quality standard around the globe.



RuB's quality procedures utilize the most innovative yet time tested technology available including computerized inspection creating the database for immediate monitoring of production, for several statistical analysis and machine capability surveillance.

Product identification is also highly regarded using dedicated bar-coding tools, FIFO and avoiding manual entries to ensure efficiency.

To us quality also means providing maximum information, communication and cooperation from our professional team of experts.

RuB is steadily growing and improving at all levels.
Join us and you will earn a reliable partner.



Approvals

Our products meet the highest standards and are approved by the main laboratories and quality agencies around the world.



Underwriter Laboratories Inc.



CSA International



Factory Mutual Research Corporation



Underwriter Laboratories Inc.



CSA International



Deutsche Vereinigung des Gas und Wasserfaches
e.V. Technisch-wissenschaftlicher Verein



Schweizerischer Verein des Gas und
Wasserfaches



Water Regulations Advisory Scheme



British Standards Institution



Swedcert AB



Danish Governmental Gas Institute



Japan L.P. Gas Instruments Inspection
Association



The Australian Gas Association



Система сертификации ГОСТ Р
Госстандарт России



Федеральная служба по надзору в сфере
защиты прав потребителей и
благополучия человека



Public Utilities Board



Suruhanjaya Tenaga



UkrSepro



Go to www.rubinc.com to learn which approvals apply to specific valves.

RUB, Inc. History

Philosophy! It's incredible how important this word is.
The things you do and the way you do them, depend on your philosophy. Philosophy leads decisions that make your future



NA Headquarters

When you decide to purchase a valve, your philosophy will lead you to choose **RUB**, because **RUB** meets your standards, makes a quality valve and makes the difference! **RUB** specializes in brass ball valves and delivers highest quality for many applications.

Our philosophy leads us to believe in technology, automation, quality, tradition, personal relationship and competition. The philosophy helps **RUB** grow step by step as we strengthen our customer relationships with enthusiasm.

Automation is the key to making a first class valve; **RUB** uses high-tech machinery operated by qualified people and materials are sourced from certified subcontractors.

Visit our factory and you will learn the meaning of having the right people in the right place at the right time. This allows us to build Quality into each and every one of the millions of valves we manufacture each year and for every valve we deliver to you - our most valued customer.

Mr. Silvio Bonomi and his sons, Sandro & Luciano Bonomi, have been successfully selling **RUB** Italian made valves into the North American market for over 30 years. In the early 1990's they decided to explore the possibility of **RUB** opening up a new company to service other markets not yet covered by existing customers.

In April 1994, after surveying the competitive climate and new market opportunities, they opened up **RUB, Inc.** a wholly owned subsidiary of **RUB**, and located the headquarters in Minnesota. The first sale was to a customer in Florida. Initially warehousing was in MA, utilizing a public warehouse with contract employees and then was transitioned to a dedicated facility with **RUB** employees. There also was a smaller stock warehousing facility in Southern CA servicing west coast customers.

In 2006 **RUB, Inc.** moved the MA inventory to a new headquarters office/warehouse complex in a western suburb of Minneapolis MN that included a 17,000 ft² warehouse with 5 tier racking system.

In 2014 **RUB, Inc.** built its new headquarters office/warehouse complex in Shakopee, MN that features a 50,000 ft² office/warehouse with 5 tier racking and barcodes managed by SAP. Actuation assembly as well as other off line functions like pressure testing and customizing are performed in the new premises and Southern CA stock remains a service depot.



Italian Headquarters



Our Strengths

- 100% Made in Italy
- Unique 24h seal test on every ball valve*
- High Quality Standards
- Over 100 employees, with strong experience within each specific department. Constant training and updates provided specifically to all staff members
- Product liability insurance beyond the terms of law
- Custom tailored solutions and special products according to specific customer requirements.
- The decision makers are available for direct contact
- Complete marketing and technical support for our distributor

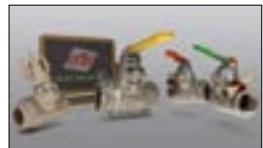
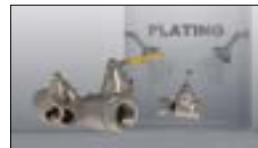
100 %

MADE IN ITALY

* Check with your sales representative for details.



The episodes of our "School of Valves" are available in our Download Area on www.rubinc.com or watch it on YouTube



Design specifications

- **RuB** manual shut-off valves are designed to last at least 25,000 open/close cycles without leaks.
- Valves for automation are designed for minimum 100,000 open/close cycles without leaks.
- Burst pressure is four times the rated working pressure and max allowed leak rate is 40 times smaller than that of most restrictive gas specs in the industry.
- All our products and our whole manufacturing process is silicone-free, allowing **RuB** valves to be used in many fields and the coldest and hottest climates on earth!

Philosophy

A computerized Quality Assurance System monitors production and incoming material, in accordance with ISO Quality Assurance handbook, procedures and specifications.

X bar and R charts, for inspection of machine capability, are used constantly and several inspections on products, processes and projects, assure top quality is delivered to the field: inward, machining and assembly operations are severely checked; among the control equipment used in the plant, auditors can see calipers and gauges for dimensions, roughness and hardness measures, stereoscope, couloscope, and contour projectors.

All instruments for Quality Assurance are put in an isolated purpose-built metrological room which guarantees constancy of measurements. Material and machining certificates are available.

Zero leakage is guaranteed by 100% seal test performed for a minimum of 24 hours on each single valve using the unique **RUB** double test method. **RUB** valves have been designed with long life and reliability criteria.

Our literature describes features, specifications and options available for each product.

Focus on quality together with continuous investments in new machinery, equipment and automation allow **RUB** to also supply other manufacturers; our company is well reputed for fine quality, good service and competitive prices.

Today, over 99% of the production is exported to the most industrialized countries in the world; we are confident our company can supply the best quality/price ratio available in the market and would be honored if you would test our valves! An audit at the plant would be an excellent opportunity to supply additional information and to reply to your questions and inquiries.

The **RUB** range of products includes several standard and full port, heavy duty and low pressure 2-way and 3-way brass ball valves suitable for many media such as all families of gas, drinking water, steam, sewage, oil, petrol, compressed air, paint, lubricants, etc., plus 90° angle valves, valves for actuation, pneumatic and electric actuators with relevant accessories, gate valves and check valves.

The range of products includes NPT, BSP parallel, BSPT taper and ISO FIPxFIP, MIPxFIP, MIPxMIP threads, compression ends, union ends, sweat ends, flare ends, side drain, sizes from 1/8" through 4". Our options are interchangeable between most lines and new projects are always under evaluation so we encourage you to present them to us. Silicone-free lubricant is used in all valves and no ozone depleting substances are used. In addition to the standard valves, **RUB** offers its organization for manufacturing of special customized products.

Why should you choose **RUB** rather than any other valve manufacturer in the market? Because **RUB**'s management is quality oriented, because **RUB** is an organization which always assists you, because **RUB** is a focused factory, because the size of the organization allows for flexibility and because **we supply the price/performance you deserve!!!**



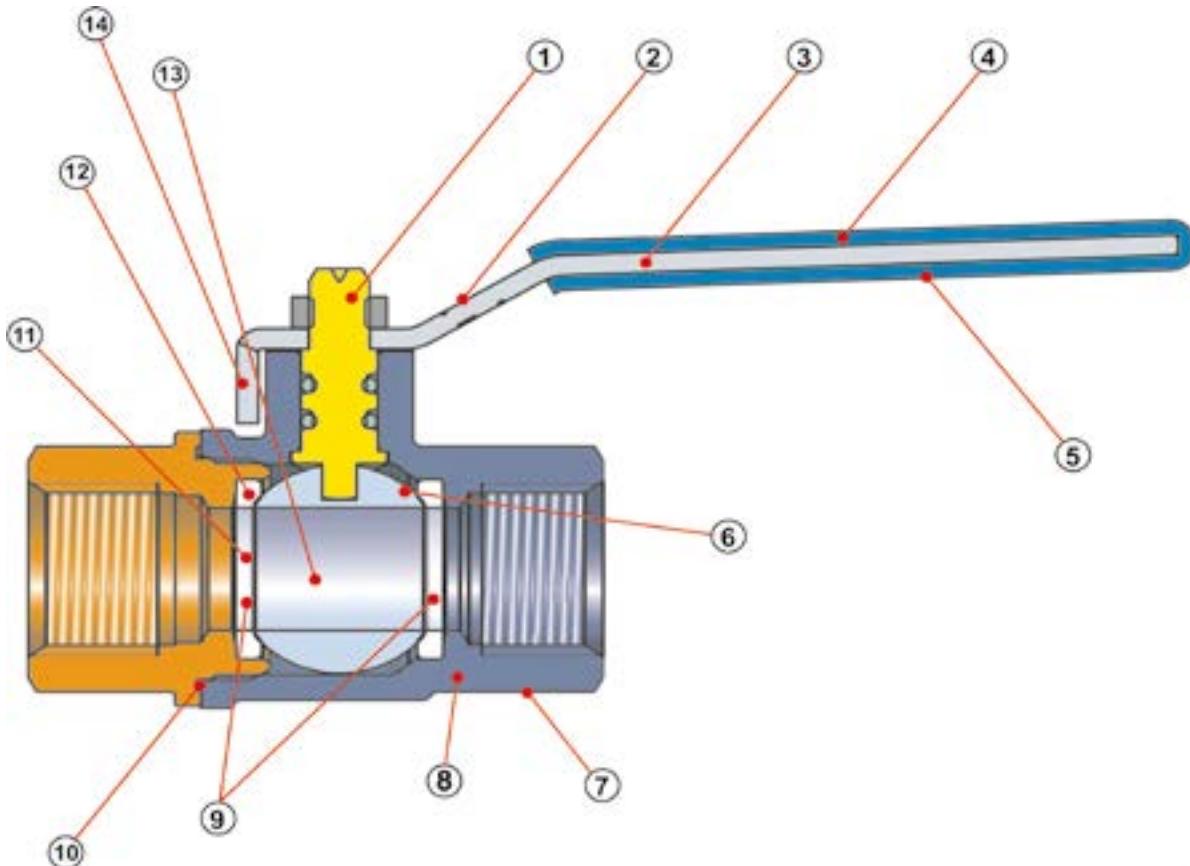
MEETING STANDARDS IS OUR STANDARD!



Inside the valve

100 %

MADE IN ITALY



- 1) Blowout-proof stem on all dimensions
- 2) Geomet® protective handle plating that resists corrosion three times better than normal zinc plating
- 3) Handle can be disassembled while valve is under pressure
- 4) Indelible laser marking
- 5) Longer and more robust handle with thicker PVC dip coating
- 6) Greater contact between ball and seats to ensure tightness at low pressure and longer life
- 7) Date code to allow batch traceability
- 8) Most products rated at 600 PSI CWP
- 9) Dual sealing system to operate in either direction
- 10) Patented metal-to-metal sealing at body/end-cap joint in addition to sealant
- 11) Ball seats with flexible lip design
- 12) Virgin self-lubricating PTFE seats for constant performance
- 13) Full port on most configurations
- 14) Handle stops on body to avoid stress on stem



Limited Lifetime Warranty Certificate

RUBINETTERIE UTENSILERIE BONOMI
MEETING STANDARDS IS OUR STANDARD



LIMITED LIFETIME WARRANTY CERTIFICATE

Quality is the result of combining several focused initiatives, all with one common goal, that being Total Customer Satisfaction and we produce our valves by applying the highest standards of quality and making the most rigorous controls to guarantee that they are free from defects.

We put utmost care in the quality and performance of our products and guarantee conformity to the sales contract with our customer.

RuB warrants its standard brass valves bearing **RuB** trademark, to be free from defects in material and workmanship for their entire life. For any other product, **RuB** warranty lasts for two years from the date marked on the product and remains limited to defects in material and workmanship.



Warranty coverage only applies to products purchased directly from either **RuB** or its authorized distributors. In any event, the warranty is valid only if the installation, maintenance and use of the product complies with the applications and working conditions listed in **RuB** instructions/specifications, product datasheet, catalogue, IMO. For any further information see **RuB SALES TERMS AND CONDITIONS**.

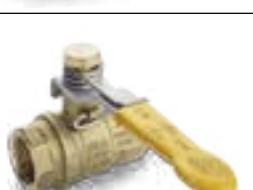




RUBINETTERIE UTENSILERIE BONOMI



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RUBINETTERIE UTENSILERIE BONOMI



GAS

GAS

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s.8043 NPT Dielectric - Full Port 3/4"-1.1/4"	Page 30
s.80SP NPT - Bypassing Gas Meter - Full Port 3/4"-1"	Page 32
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s.95 NPT

full port 1/4"-4"

hot forged brass ball valves



rated sizes 1/4" through 1"



Suruhanjaya Tenaga

Quality:

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

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

- 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
- Handle removable with valve in service

Working Pressure:

- 600 PSI up to 2", 450 PSI over 2"
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options up to 2" size:

- Stem extension
- T-handle
- AISI 430 stainless steel handle
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"

Upon Request:

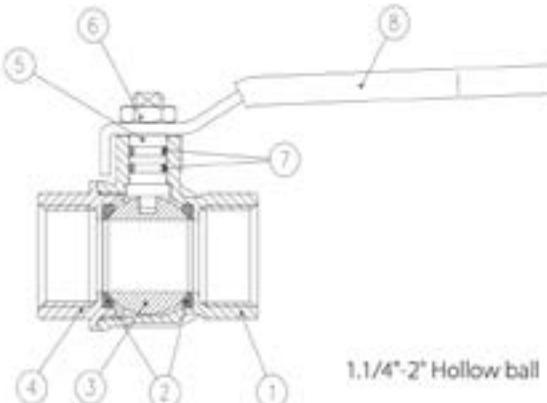
- AISI 316 stainless steel ball
- Glass filled PTFE seals
- Custom Design
- Special configuration for industrial oxygen application

Approved by or in compliance with:

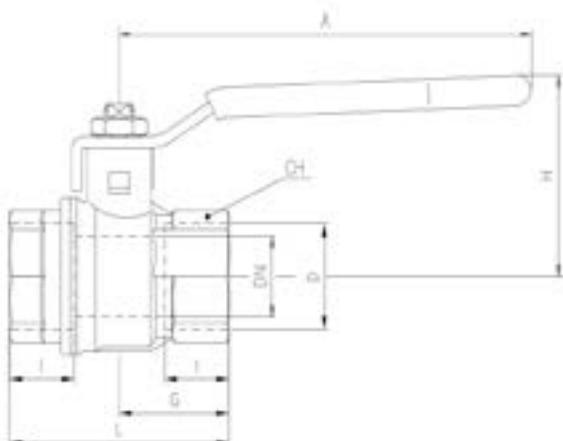
- Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- Suruhanjaya Tenaga (Malaysia)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)

- Meeting WW-V-35C Federal U.S. Specification
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)
- Underwriters Laboratories (United States & Canada)
- RoHS Compliant

NOTE: Approvals apply to specific configurations/sizes only.



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	CB4FF
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11

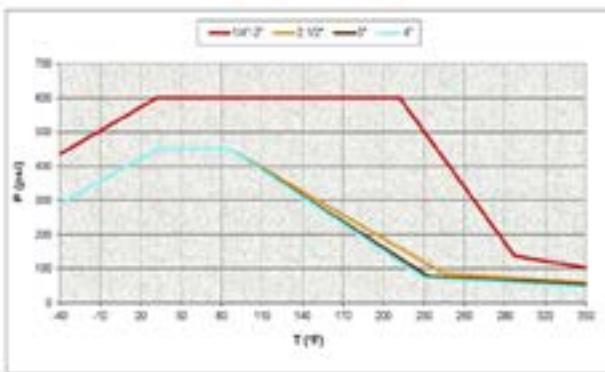


Code	S95B41	S95C41	S95D41	S95E41	S95F41	S95G41	S95H41	S95H1	S95L41	S95M41	S95N41
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.314	0.393	0.580	0.787	0.964	1.259	1.574	1.968	2.559	3.149	3.937
I (inch)	0.472	0.472	0.610	0.689	0.826	0.905	0.905	1.043	1.260	1.377	1.633
L (inch)	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.763	6.141	6.968	8.504
G (inch)	0.885	0.885	1.161	1.259	1.584	1.830	2.007	2.381	3.070	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)	1.563	1.563	1.695	1.988	2.153	2.988	3.236	3.500	5.196	5.511	6.062
CH (inch)	0.787	0.787	0.964	1.220	1.574	1.929	2.125	2.696	3.346	3.897	4.921

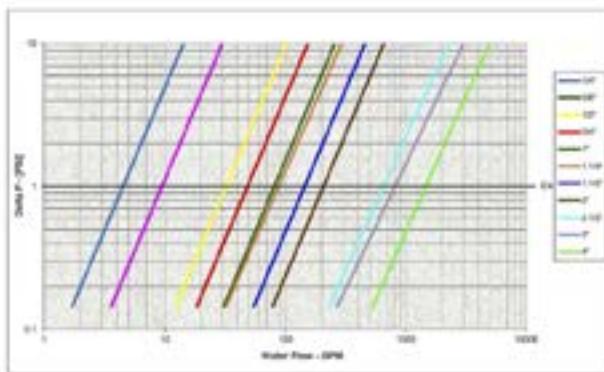
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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X2295 - Rev. 3488



s.95 NPT nickel plated

Full Port 1/4"- 4"
hot forged brass ball valves



C rated sizes 1/4" through 1"



Quality:

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

Body:

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

- 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
- Handle removable with valve in service

Working Pressure:

- 600 PSI up to 2", 450 PSI over 2"
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options up to 2" size:

- Stem extension
- T-handle
- AISI 430 stainless steel handle
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"

Upon Request:

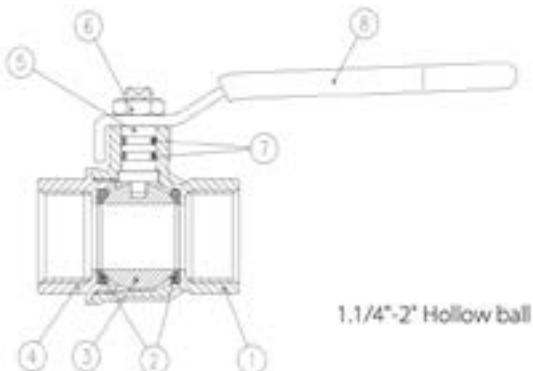
- AISI 316 stainless steel ball
- Glass filled PTFE seals
- Custom Design
- Special configuration for industrial oxygen application

Approved by or in compliance with:

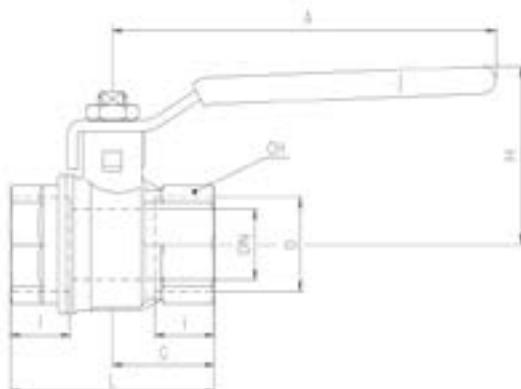
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- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)

- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)
- Underwriters Laboratories (United States & Canada)
- RoHS Compliant

NOTE: Approvals apply to specific configurations/sizes only.



PART DESCRIPTION	Q.TY	MATERIAL
1 Nickel plated NPT body	1	CW617N
2 Seat	2	PTFE
3 Chrome plated ball	1	CW617N
4 Nickel plated NPT end cap	1	CW617N
5 Nickel plated stem O-ring design	1	CW617N
6 Geomet® nut	1	CB4FF
7 O-Ring	2	FPM
8 Yellow PVC coated Geomet® steel handle	1	DD11

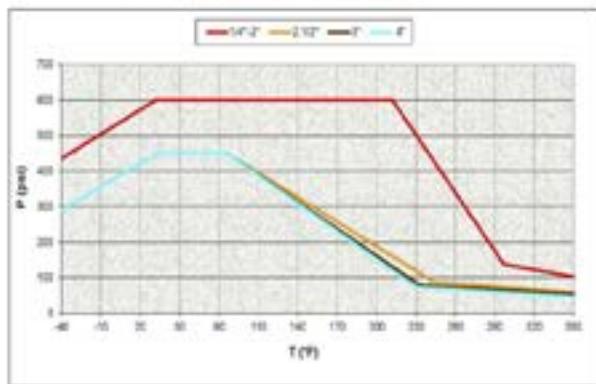


Code	S95B41N	S95C41N	S95D41N	S95E41N	S95F41N	S95G41N	S95H41N	S95I41N	S95L41N	S95M41N	S95N41N
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.315	0.364	0.580	0.787	0.984	1.260	1.575	1.968	2.568	3.150	3.937
I (inch)	0.472	0.472	0.610	0.609	0.826	0.905	0.905	1.043	1.266	1.377	1.633
L (inch)	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.763	6.141	6.968	8.504
G (inch)	0.885	0.885	1.161	1.259	1.594	1.830	2.007	2.381	3.070	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)	1.496	1.496	1.663	1.968	2.126	2.874	3.110	3.386	5.197	5.512	6.063
OH (inch)	0.787	0.787	0.964	1.220	1.574	1.929	2.125	2.696	3.346	3.897	4.921

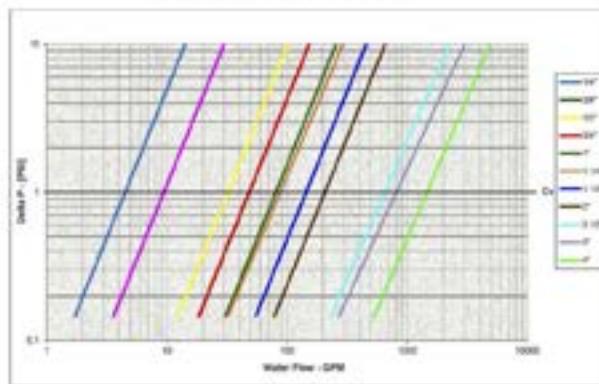
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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X0358N - Rev 3486



s.92 NPT

Full Port 1/4"-4" hot forged brass ball valves

*150 psig non-shock working steam pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid 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 (formerly DIN 17660 and UNI 5705-65) 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"

Seals:

- 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
- Handle removable with valve in service

Working Pressure:

- 600 PSI up to 2", 450 PSI over 2", (150 WSP all sizes)
- non-shock cold working pressure

Working Temperature:

- -40°F / +366°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options up to 2" size:

- Stem extension
- Lead free for safe drinking water (0.25% or less Pb)
- T-handle
- AISI 430 stainless steel handle
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- Male by female NPT threads up to 4"

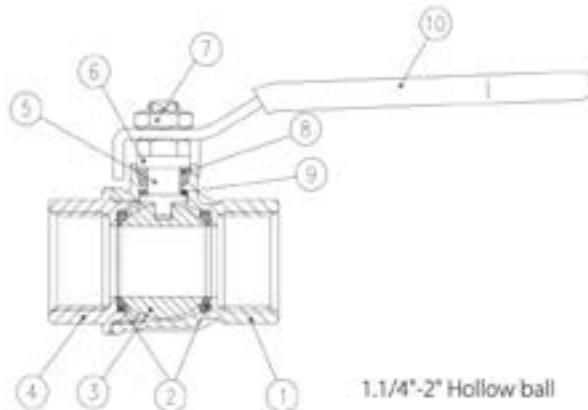
Upon Request:

- AISI 316 stainless steel ball and/or stem
- Custom Design
- Pure PTFE seals

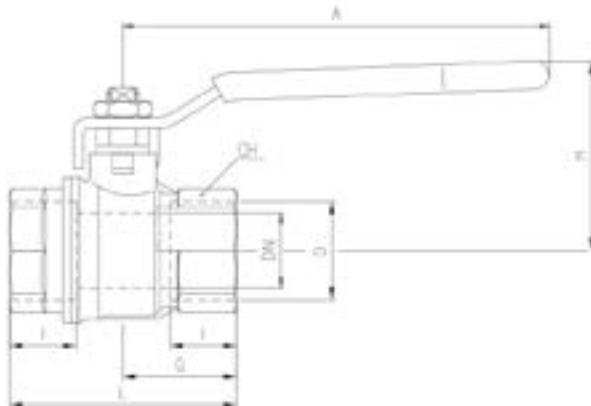
Approved by or in compliance with:

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- Factory Mutual (United States)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)
- Meeting WW-V-35C Federal U.S. Specification
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



1.1/4"-2" Hollow ball



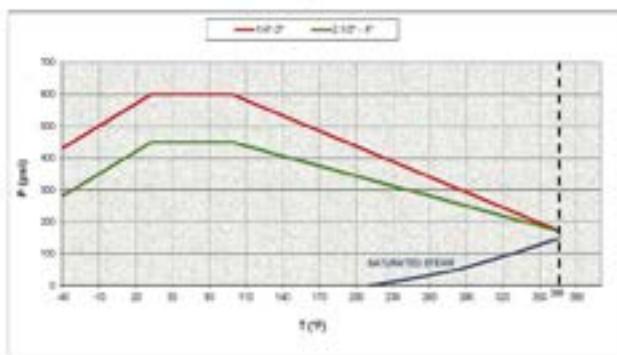
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

PART DESCRIPTION		Q.TY	MATERIAL
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Unplated NPT end cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Yellow PVC coated Geomet® steel handle	1	DD11

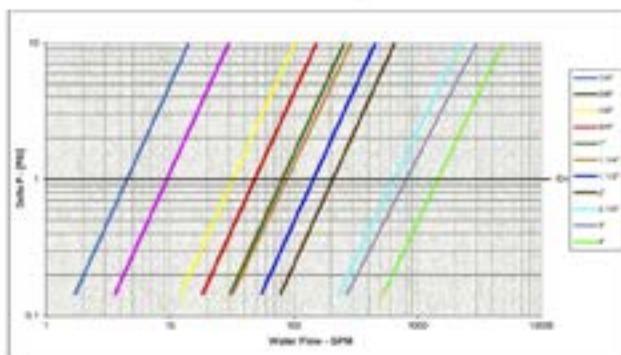
Code	S92B41	S92C41	S92D41	S92E41	S92F41	S92G41	S92H41	S92I41	S92L41	S92M41	S92N41
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968	2.559	3.149	3.937
I (inch)	0.472	0.472	0.610	0.669	0.826	0.905	0.905	1.043	1.260	1.377	1.633
L (inch)	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.763	6.141	6.966	8.504
G (inch)	0.885	0.885	1.161	1.259	1.594	1.830	2.007	2.381	3.070	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)	1.563	1.563	1.695	1.988	2.153	2.988	3.236	3.500	5.196	5.511	6.062
CH (inch)	0.787	0.787	0.984	1.220	1.574	1.929	2.125	2.606	3.346	3.897	4.921

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart

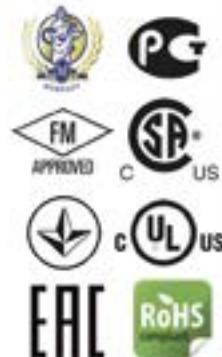




s.92 MIP x FIP NPT

Full Port 1/4"-4" hot forged brass ball valves

*150 psig non-shock Working Steam Pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid 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 (formerly DIN 17660 and UNI 5705-65) 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"

Seals:

- 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
- Handle removable with valve in service

Working Pressure:

- 600 PSI up to 2", 450 PSI over 2", (150 WSP all sizes)
- non-shock cold working pressure

Working Temperature:

- -40°F / +366°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options up to 2" size:

- Stem extension
- T-handle
- AISI 430 stainless steel handle
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- Female by female NPT threads up to 4"

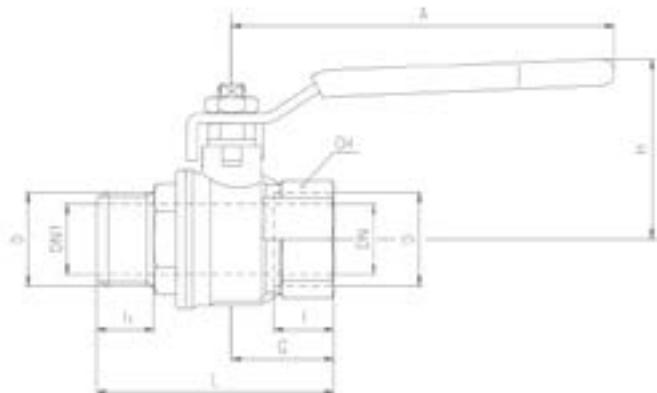
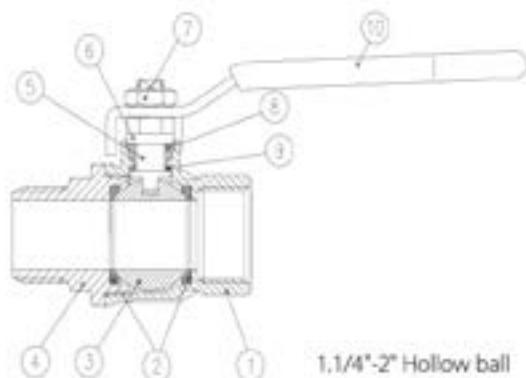
Upon Request:

- AISI 316 stainless steel ball and/or stem
- Custom Design
- Pure PTFE seals

Approved by or in compliance with:

- Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)
- Meeting WW-V-35C Federal U.S. Specification
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



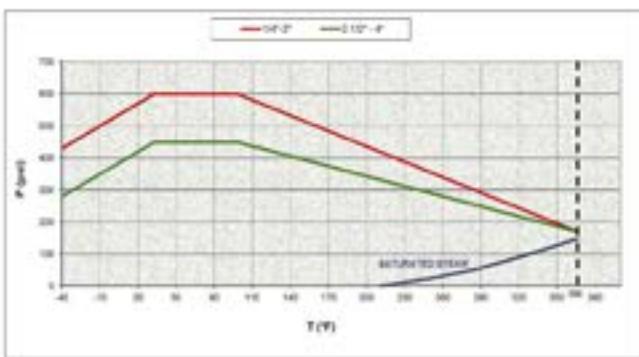
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2" is slightly different.

PART DESCRIPTION	Q.TY	MATERIAL
1 Unplated NPT body	1	CW617N
2 Seat	2	PTFE glass filled 5-15%
3 Chrome plated ball	1	CW617N
4 Unplated NPT end cap	1	CW617N
5 Nickel plated stem packing gland design	1	CW617N
6 Nickel plated gland nut	1	CW617N
7 Geomet® nut	1	CB4FF
8 Packing gland seal	1	PTFE
9 Washer	1	PTFE carbon filled 25%
10 Yellow PVC coated Geomet® steel handle	1	DD11

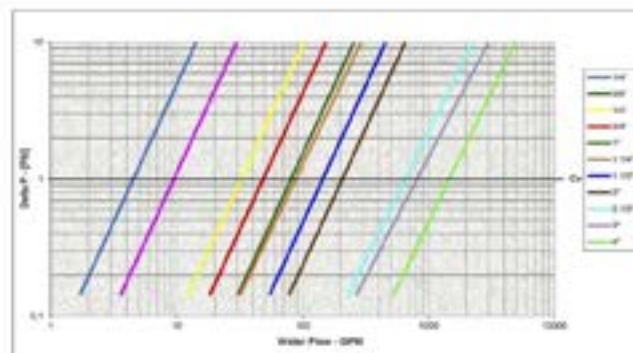
Code	S92B42	S92C42	S92D42	S92E42	S92F42	S92G42	S92H42	S92I42	S92L42	S92M42	S92N42
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968	2.559	3.149	3.837
DN1 (inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968	2.205	2.756	3.701
I (inch)	0.472	0.472	0.613	0.669	0.826	0.905	0.905	1.043	1.260	1.377	1.633
I1 (inch)	0.531	0.531	0.650	0.709	0.866	0.945	0.945	1.083	1.457	1.555	1.732
L (inch)	2.224	2.224	2.758	2.992	3.642	4.173	4.449	5.236	7.106	8.051	9.370
G (inch)	0.665	0.665	1.181	1.259	1.594	1.830	2.007	2.381	3.070	3.484	4.252
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	10.039	10.039	10.039	10.039
H (inch)	1.563	1.563	1.695	1.368	2.153	2.968	3.236	3.500	5.196	5.511	6.062
CH (inch)	0.767	0.787	0.964	1.220	1.574	1.929	2.125	2.696	3.346	3.897	4.921

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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ICES00M - Rev. 2580



s.82 NPT side drain

full port 1/2"-2"

hot forged brass ball valves



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Travel 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
- Side drain allows easy and safe downstream line venting
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads
- 1/4" NPT side tap

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Stem extension
- T-handle
- Oval lockable handle
- AISI 430 stainless steel handle
- Patented locking device

Upon Request:

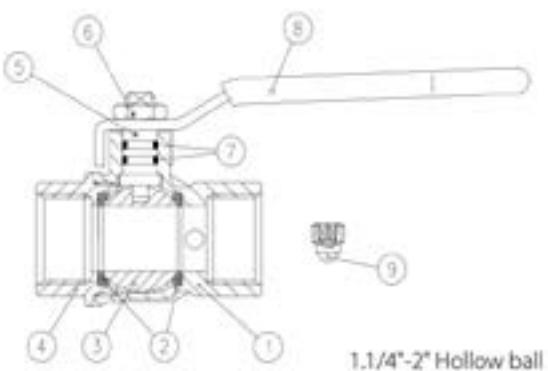
- AISI 316 stainless steel ball and/or stem
- Glass filled PTFE seals
- Custom Design
- Dual side drain port

Approved by or in compliance with:

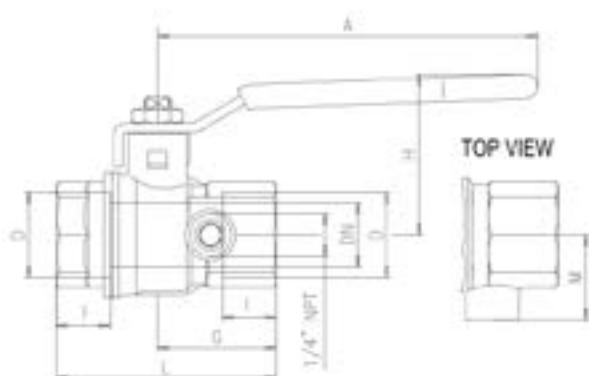
- Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)

- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Q.ty'	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated end cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	CB4FF
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11
9	Unplated plug	1	CW617N

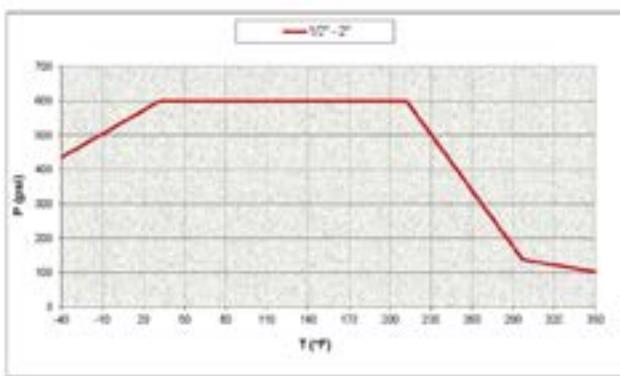


Code	S82D41	S82E41	S82F41	S82G41	S82H41	S82I41
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2
DN (inch)	0.590	0.787	0.984	1.259	1.574	1.968
I (inch)	0.610	0.669	0.826	0.905	0.905	1.043
L (inch)	2.559	2.736	3.405	3.878	4.232	4.960
G (inch)	1.397	1.476	1.811	2.047	2.224	2.578
A (inch)	3.937	4.724	4.724	6.220	6.220	6.220
H (inch)	1.679	1.956	2.114	2.858	3.094	3.370
M (inch)	0.964	1.063	1.200	1.338	1.516	1.752
CH (inch)	0.984	1.220	1.574	1.929	2.125	2.696

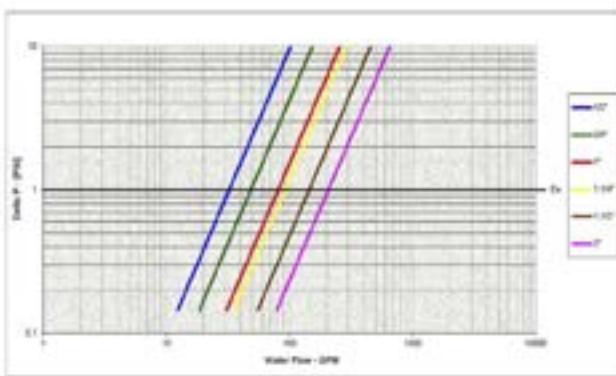
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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J02582 · Rev. 3486



s.80 NPT

full port 3/4"-2"

hot forged brass gas cock
with tamper proof lockwing



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Cover clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Travel 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
- Special design to combine newest technologies in valve and traditional gas-cock requirements
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI S705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

- Hot forged brass tamper proof lockwing

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Male by female NPT threads

Upon Request:

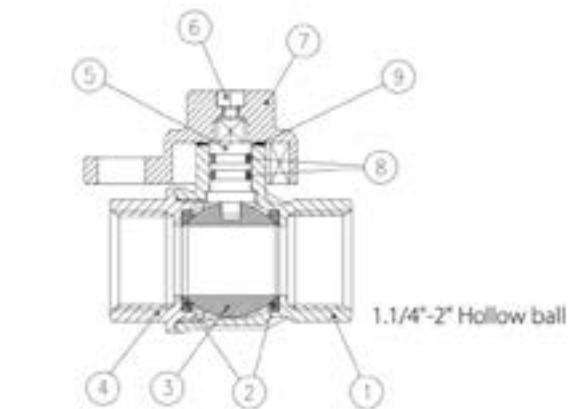
- Painted Gray

Approved by or in compliance with:

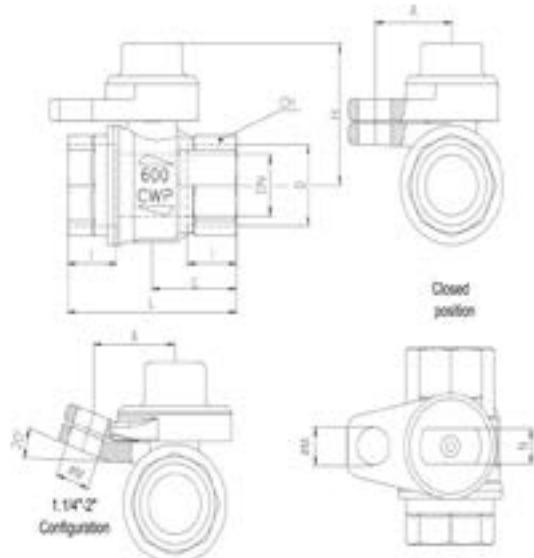
- Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)

- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



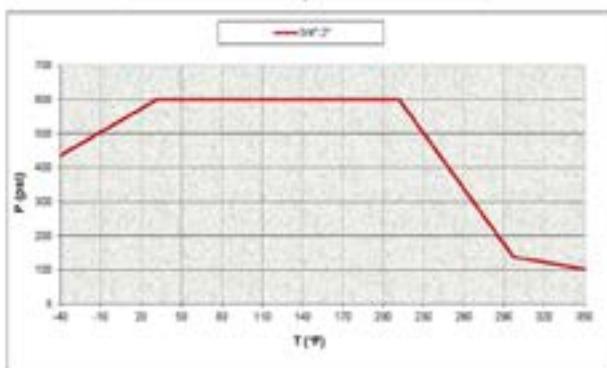
PART DESCRIPTION		Q.TY	MATERIAL
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end cap	1	CW617N
5	Unplated stem O-ring design	1	CW617N
6	Stainless steel screw	1	AISI304
7	Unplated lockwing	1	CW617N
8	O-Ring	2	FPM
9	Washer (from 3/4" to 1.1/2")	1	PTFE glass filled 25%



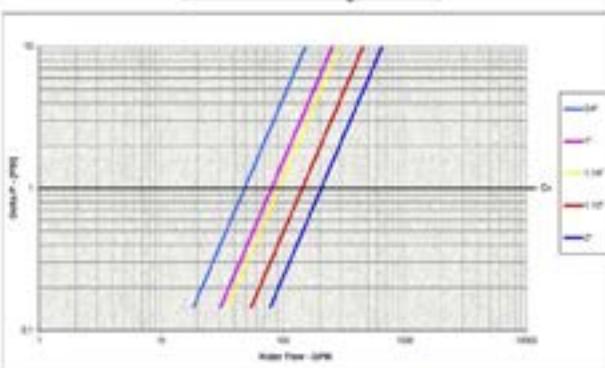
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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IEFMO - Rev. 3486



s.8042 NPT

full port 3/4"-2"

hot forged brass gas cock with tamper proof lockwing



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Cover clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Travel 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
- Special design to combine newest technologies in valve and traditional gas-cock requirements
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

- 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:

- Hot forged brass tamper proof lockwing

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

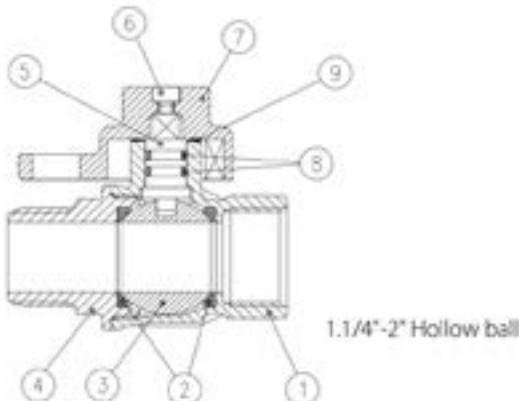
- Female by female NPT threads

Approved by or in compliance with:

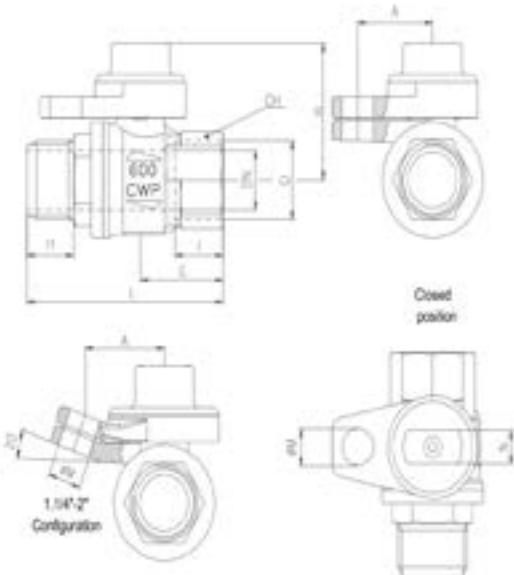
- Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)

- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



PART DESCRIPTION		Q.TY	MATERIAL
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT male end cap	1	CW617N
5	Unplated stem O-ring design	1	CW617N
6	Stainless steel screw	1	AISI304
7	Unplated lockwing	1	CW617N
8	O-Ring	2	FPM
9	Washer (from 3/4" to 1.1/2")	1	PTFE glass filled 25%

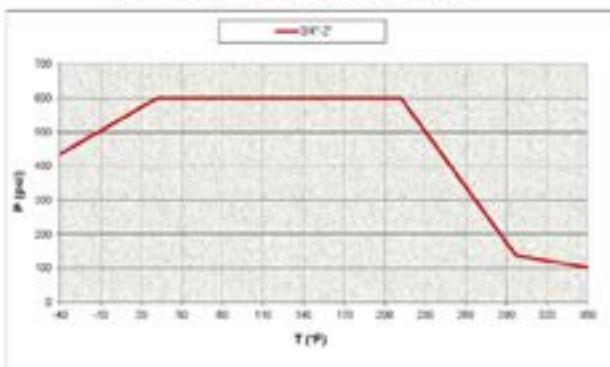


DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

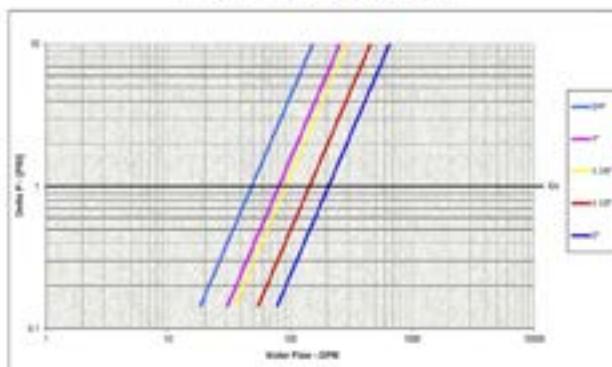
Code	S80E42	S80F42	S80G42	S80H42	S80I42
D (inch)	3/4	1	1 1/4	1 1/2	2
DN (inch)	0.787	0.984	1.259	1.574	1.968
I (inch)	0.669	0.826	0.905	0.905	1.043
I1 (inch)	0.709	0.866	0.945	0.945	1.083
L (inch)	2.992	3.642	4.173	4.449	5.236
G (inch)	1.259	1.594	1.830	2.007	2.381
A (inch)	1.142	1.142	1.208	1.208	1.208
H (inch)	1.801	1.958	2.519	2.756	3.031
M (inch)	0.492	0.492	0.472	0.472	0.472
N (inch)	0.449	0.449	0.563	0.563	0.563
CH (inch)	1.220	1.574	1.929	2.125	2.696

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart

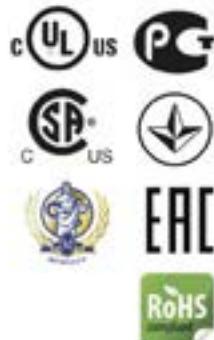




s.8043 NPT dielectric

full port 3/4"-1.1/4"

hot forged brass ball valves with tamper proof lockwing



Quality:

- 24h 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Cover clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Travel 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
- Special design to combine newest technologies in valve and traditional gas-cock requirements
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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

Threads:

- NPT taper ANSI B1.20.1 Female by dielectric union female threads

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

- Hot forged brass tamper proof lockwing

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Upon Request:

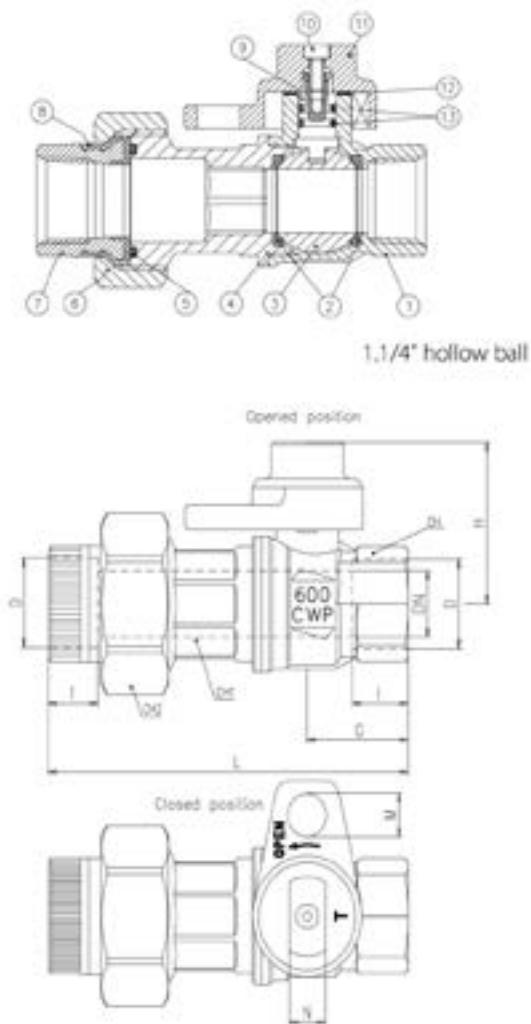
- See s.80

Approved by or in compliance with:

- Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)

- RoHS Compliant
- Underwriters Laboratories (United States & Canada)
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



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

PART DESCRIPTION	Q.TY	MATERIAL
1 Unplated body	1	CW617N
2 Seat	2	PTFE
3 Chrome plated ball	1	CW617N
4 Unplated spacer	1	CW617N
5 Tail piece O-Ring	1	NBR
6 Unplated nut	1	CW617N
7 Dielectric tail piece	1	CW617N
8 Insulation	1	Polyamide
9 Unplated stem O-ring design	1	CW617N
10 Stainless steel screw	1	AISI304
11 Unplated lockwing	1	CW617N
12 Washer	1	PTFE glass filled 25%
13 Stem O-ring	2	FPM

Code	S80E43	S80F43	S80G43
D (inch)	3/4	1	1.14
DN (inch)	0.748	0.945	1.181
I (inch)	0.669	0.826	0.905
L (inch)	4.507	5.157	5.238
G (inch)	1.260	1.594	1.831
A (inch)	1.141	1.141	1.209
H (inch)	1.831	1.988	2.559
M (inch)	0.492	0.492	0.472
N (inch)	0.449	0.449	0.563
CH (inch)	1.220	1.575	1.929
CH1 (inch)	1.220	1.575	1.929
CH2 (inch)	2.047	2.401	2.441

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart

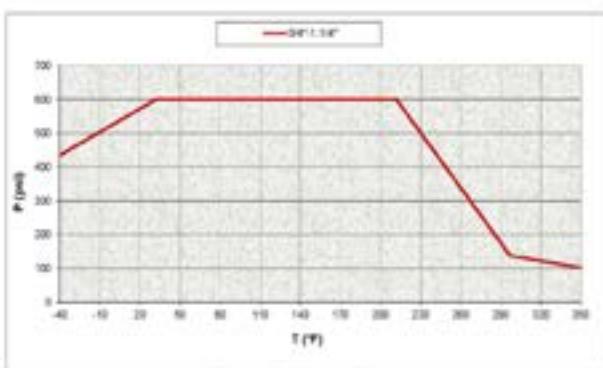
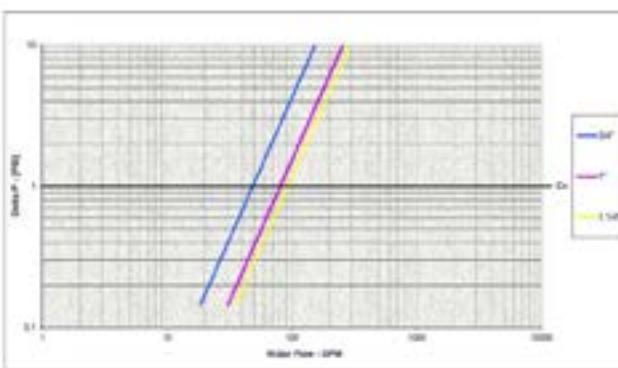


Chart applies to valve

Pressure Drop Chart



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JCE5043 - Rev. 3488



s.80 SurePass

3/4"-1" Full Port 175 psi
Bypassing gas meter valves

One quick turn switches valve from normal metered flow to bypass mode for rapid on-line servicing of meter or regulator.



Quality:

- No metal-to-metal moving parts
- No maintenance or lubrication ever required
- Every valve production tested twice for internal or external leakage
- Meets all applicable parts of DoT 192
- Customer service never interrupted
- Chrome plated brass ball
- Gas theft discouraged by plastic security plug in bypass port and port inaccessible when barrel lock in use

Body:

- Rust-proof forged brass body, ball, stem and lockwing

Seals:

- Double FPM stem seals eliminate gas emissions
- Pure PTFE seats with flexible-lip design

Tamper proof seal



Threads:

- NPT threads for ANSI B.1.20.1

Flow:

- Full port to DIN 3357 for maximum flow
- Full 100 SCFH gas flow during bypassing

Handle:

- Tamper proof lockwing
- Single lever operation for positive switch from metering to bypassing

Working Pressure:

- 175 PSI
- non-shock cold working pressure

Working Temperature:

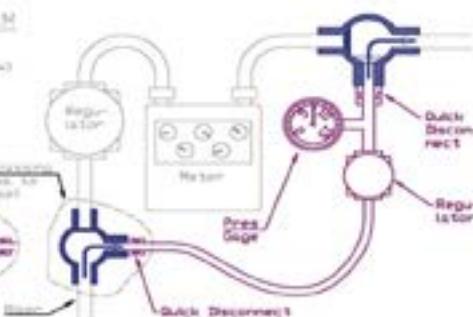
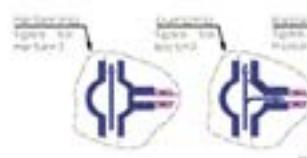
- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Painted Gray
- By-Pass Hose Assembly
- Dielectric union end long or short pattern

SUREPASS BYPASS SYSTEM

Schematic Drawing
 Drawing Number and Revision Set: 040003
 SurePass Ball Valves Drawing
 Bypass Valve Assembly Drawing



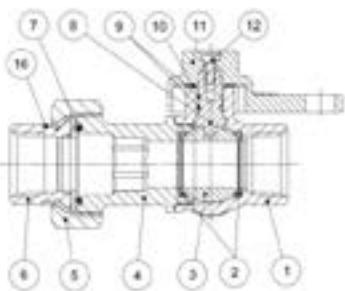
Approved by or in compliance with:

- GOST-R (Russia)
 - Hygiene and epidemic center in Moscow city (Russia)
 - UkrSepro (Ukraine)
 - RoHS Compliant

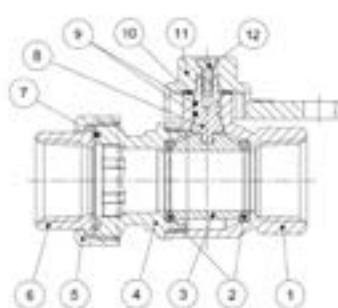
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.

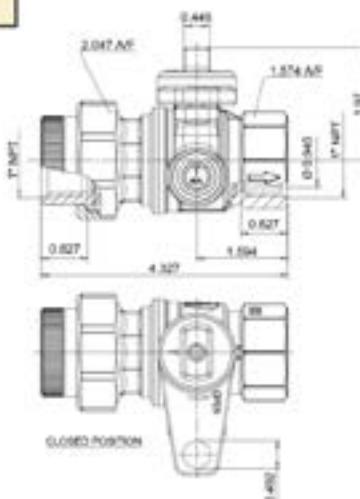
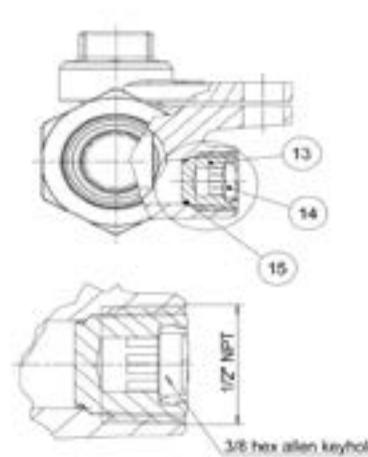
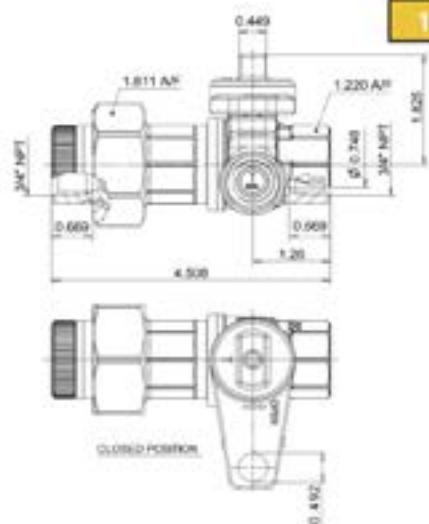
S80E43B5



SB0F43BL

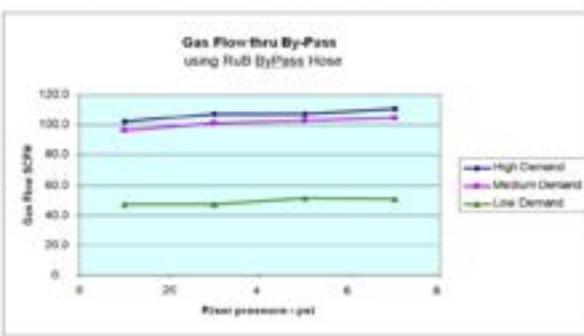
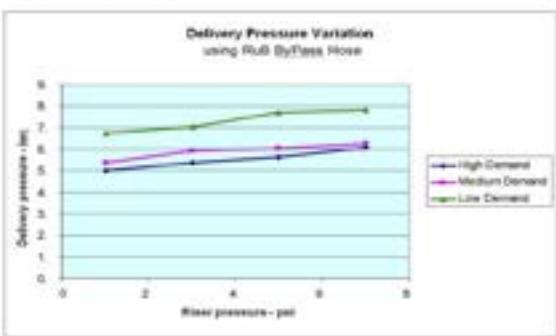


Part Description		Q.TY	MATERIAL
1	Sand blasted body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Sand blasted end cap	1	CW617N
5	Nut	1	CW617N
6	NPT female tail piece	1	CW617N
7	O-Ring	1	NBR
8	Stem O-Ring design	1	CW617N
9	O-Ring	2	FPM
10	Washer	1	PTFE glass filled 25%
11	Sand blasted lockwing	1	CW617N
12	Stainless steel screw	1	AISI304
13	Plug	1	CW617N
14	Security plug	1	Polystyrene
15	O-Ring	1	FPM
16	Insulation (for 3/4")	1	Polyamide



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

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.



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ANSWER - Page 348



s.195 NPT+FLARE

3/8"-1" gas cock
hot forged



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Travel 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 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- Standard Port for compact design

Handle:

- Aluminum wedge handle enameled red

Working Pressure:

- 450 PSI
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

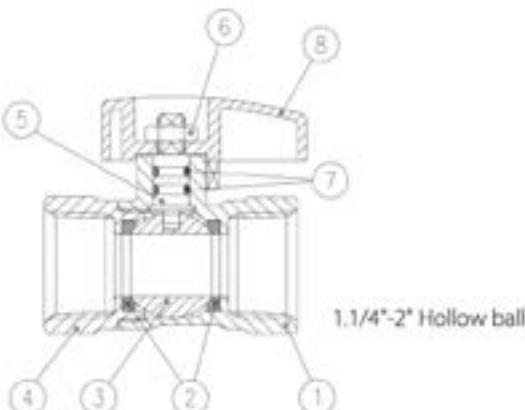
- Stem extension
- T-handle
- AISI 430 stainless steel handle
- 3/8" through 1" NPT female by NPT female (suffix 41)
- 3/8", 1/2" and 5/8" flare by flare (suffix 30)
- 1/2" NPT female by 1/2" flare (suffix 31)
- 1/2" NPT male by 1/2" flare (suffix 34)
- 1/2" NPT male by 3/8" flare (suffix 34)
- 1/2" NPT female by 3/8" flare (suffix 33)
- 1/2" flare by 3/8" flare (suffix 32)
- 1/8" NPT side tap for some versions/sizes

Approved by or in compliance with:

- Canadian standards Association (United States, Canada)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)

- Meeting WW-V-35C Federal U.S. Specification
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



PART DESCRIPTION		Q.TY	MATERIAL
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet* nut	1	CB4FF
7	O-Ring	2	FPM
8	Red T-handle	1	EN AC-46100

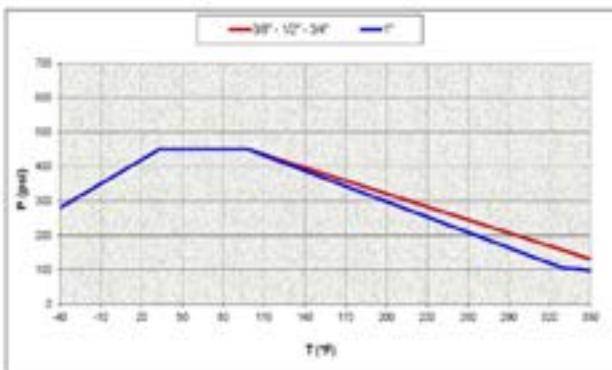


Code	195C41	195D41	195E41	195F41
D (inch)	3/8	1/2	3/4	1
DN(inch)	0.393	0.453	0.590	0.787
I (inch)	0.472	0.610	0.669	0.827
L (inch)	1.772	2.126	2.441	2.835
G (inch)	0.886	1.043	1.220	1.417
A (inch)	1.299	1.299	1.299	1.299
H (inch)	1.437	1.535	1.614	1.752
CH(inch)	0.787	0.984	1.220	1.496

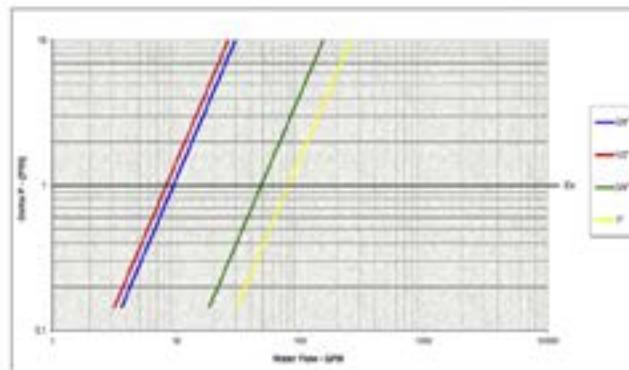
DN shows the nominal flow diameter.

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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RC2195 - Rev. 3488



s.195

flare 37° + solder end
1/2"- 3/4" hot forged

**Quality:**

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

Body:

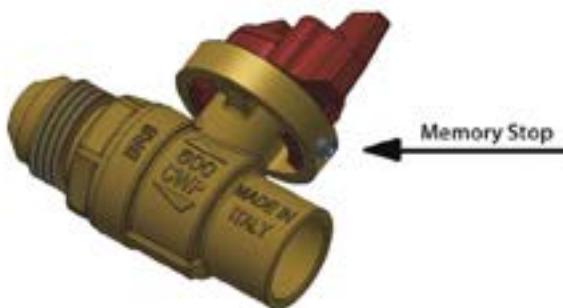
- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

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

Seals:

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

**Threads:**

- 1/2" flare 37° by 1/2" solder end
- 3/4" flare 37° by 3/4" solder end

Flow:

- Standard Port for compact design

Handle:

- Aluminum T-handle enameled red
- Handle removable with valve in service

Working Pressure:

- 600 PSI (for solder joints rating see table 1)
- non-shock cold working pressure

Working Temperature:

- -4°F / +350°F (for solder joints rating see table 1)
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- AISI 430 stainless steel handle
- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection.

Upon Request:

- Memory stop

Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSopro (Ukraine)
- RoHS Compliant

• EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.

PART DESCRIPTION		Q.TY	MATERIAL
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Packing gland seal	1	PTFE
7	Nickel plated gland nut	1	CW617N
8	Geomet® nut	1	CB4FF
9	Washer	1	PTFE carbon filled 25%
10	Red T-handle	1	EN AC-46100

Code	195D40	195E40
D (inch)	0.63	0.877
D1 (inch)	34-18 UNF 2A	1.1/16-12 UN 2A
DN(inch)	0.39	0.61
I (inch)	0.49	0.748
I1 (inch)	0.66	0.862
L (inch)	2.33	3.031
G (inch)	0.94	1.319
A (inch)	0.98	0.98
H (inch)	1.63	1.705

TABLE 1

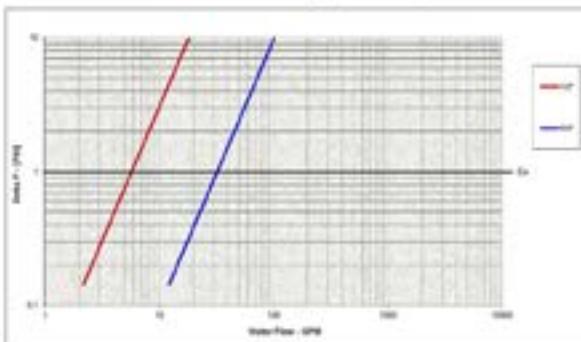
Pressure - Temperature Ratings

Joining material	melting range degrees °F °C	working temperature degrees °F °C	maximum working gauge pressure							
			size 1 1/2"-1"		size 1 1/4"-2"		size 2 1/2"-4"			
			psi	kPa	psi	kPa	psi	kPa		
50-50 tin-lead solder ASTM B32 alloy grade 50A	365I421	185/215	0/+100	-18/+38	200	1400	175	1200	150	1050
			0/+150	-18/+68	150	1050	125	850	100	700
			0/+200	-18/+93	100	700	90	600	75	500
			0/+250	-18/+121	85	600	75	500	50	350
95-5 tin-antimony solder ASTM B32 alloy grade 95TA	450I464	230/240	0/+100	-18/+38	500	3500	400	2800	300	2100
			0/+150	-18/+68	400	2800	350	2400	275	2000
			0/+200	-18/+93	300	2100	250	1700	200	1400
			0/+250	-18/+121	200	1400	175	1200	150	1050

DN shows the nominal flow diameter.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

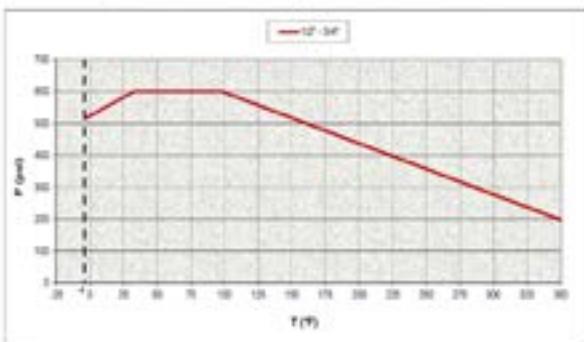
Pressure Drop Chart



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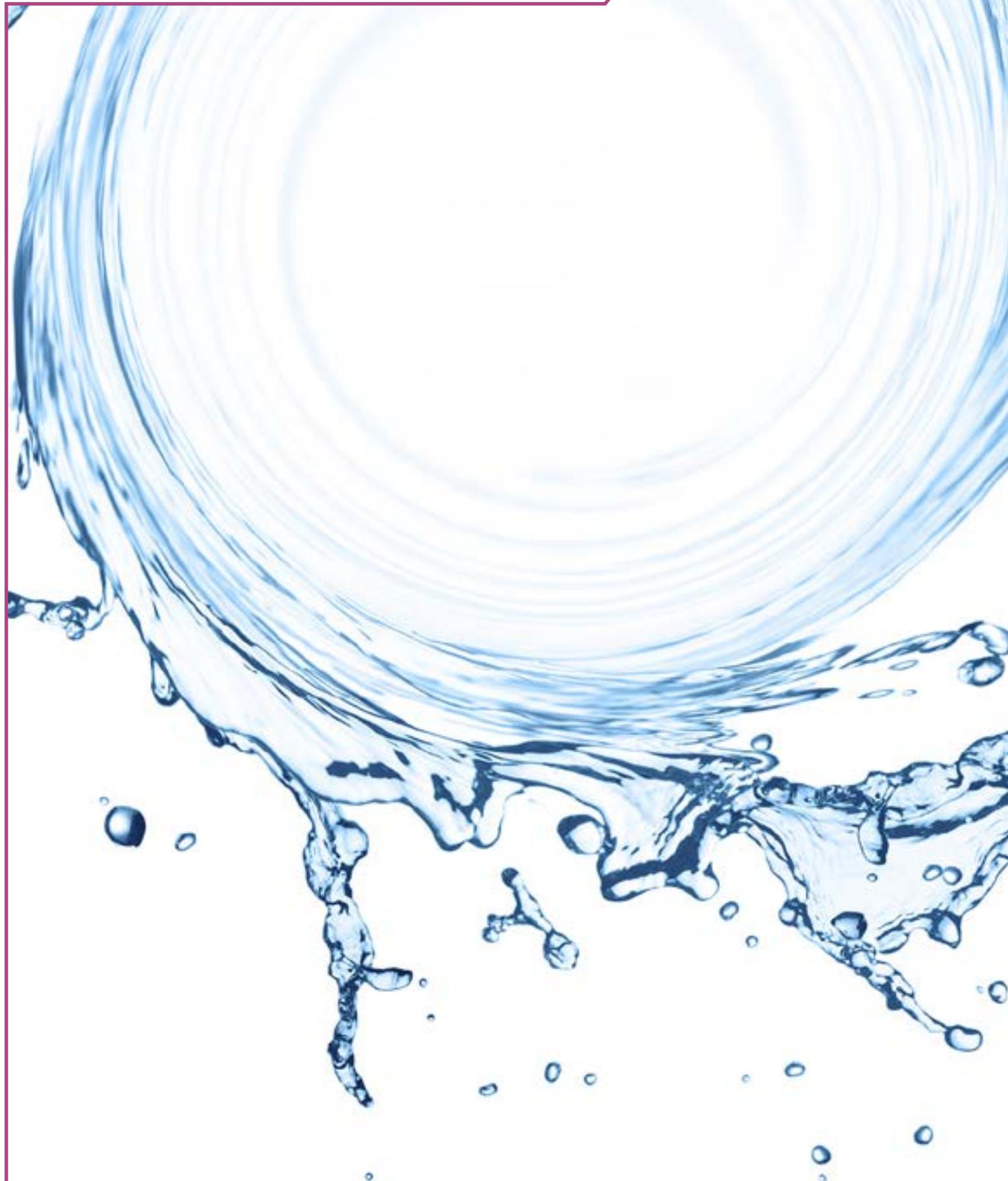
XDF19540 - Rev. 3486

Pressure-Temperature Chart





RUBINETTERIE UTENSILERIE BONOMI



PLUMBING

s.42 Solder Ends - Full Port 1/2"-3"	Page 38
s.71 NPT - Standard Port 1/2"-4"	Page 40
s.90 NPT Economy - Full Port 1/4"-2"	Page 42
s.112 NPT - Gate Valve 1/2"-2"	Page 44
s.114 NPT - Gate Valve Heavy Pattern 1/2"-4"	Page 46





s.42 solder ends

full port 1/2"- 3"

hot forged brass ball valves

*150 psig non-shock working steam pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Handle stops on body to avoid 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 (formerly DIN 17660 and UNI S705-65) specifications

Stem:

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

Seals:

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



Threads:

- Solder end Female by Female connections

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 600 PSI up to 2", 450 PSI over 2", (150 WSP all sizes) - NOTE: for solder joints ratings see Table 1 below
- non-shock cold working pressure

Working Temperature:

- -4°F / +366°F (for solder joints ratings see Table 1 below)
- Warning: freezing of the fluid in the installation may severely damage the valve

Options up to 2" size:

- Stem extension (Assemble after soldering)
- Lead free for safe drinking water (0.25% or less Pb)
- AISI 430 stainless steel handle
- 1/8"NPT side tap only for 1/2" and 3/4"
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 3"

Upon Request:

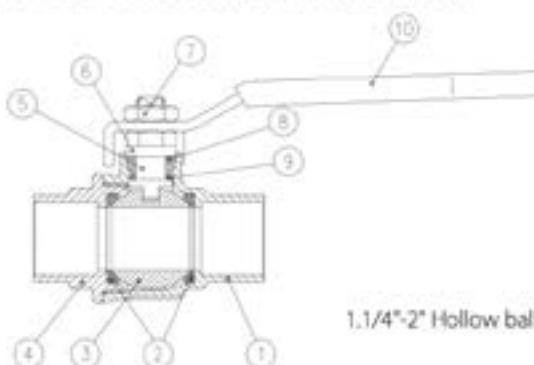
- AISI 316 stainless steel ball and/or stem
- Glass filled PTFE seals
- Custom Design

Approved by or in compliance with:

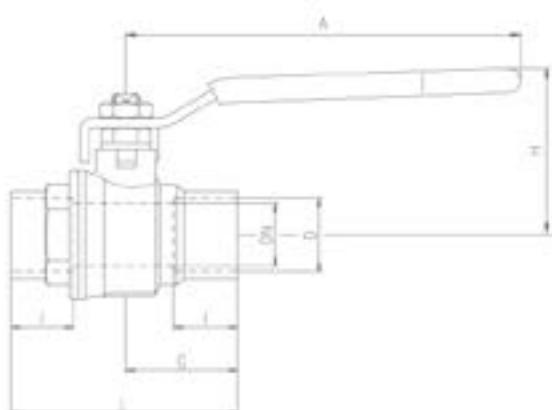
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)

- Meeting WW-V-35C Federal U.S. Specification
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



1.1/4"-2" Hollow ball



Part Description	Q.ty'	Material
1 Unplated solder end body	1	CW617N
2 Seat	2	PTFE
3 Chrome plated ball	1	CW617N
4 Unplated solder end cap	1	CW617N
5 Nickel plated stem packing gland design	1	CW617N
6 Nickel plated gland nut	1	CW617N
7 Geomet® nut	1	CB4FF
8 Packing gland seal	1	PTFE
9 Washer	1	PTFE carbon filled 25%
10 Yellow PVC coated Geomet® steel handle	1	DD11

Code	S42D00	S42E00	S42F00	S42G00	S42H00	S42I00	S42L00	S42M00
D (inch) Nominal actual	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
DN (inch)	0.590	0.787	0.964	1.259	1.574	1.968	2.559	3.149
I (inch)	0.492	0.748	0.905	0.964	1.102	1.338	1.476	1.673
L (inch)	2.244	2.854	3.346	3.819	4.488	5.433	6.614	7.598
G (inch)	1.181	1.476	1.673	1.909	2.244	2.715	3.307	3.799
A (inch)	3.937	4.724	4.724	6.220	6.220	6.220	10.039	10.039
H (inch)	1.695	1.988	2.153	2.988	3.236	3.500	5.196	5.511

TABLE 1									
				maximum working gauge pressure					
Jacketing material	Working temp. degrees -F -C	Working temperature degrees -F -C		400°F/120°C	300°F/114°C	200°F/93°C			
		PSI	MPa	PSI	MPa	PSI	MPa	PSI	MPa
SS-316 hollow handle valve*	300/420	1000/300	200	1400	175	1200	150	1000	130
ASTM B33 alloy grade 50A				300	200	120	80	100	70
SS-316 hollow handle valve*	400/480	1000/300	100	700	90	500	75	500	60
ASTM B33 alloy grade 50A				80	500	75	50	80	55
SS-316 hollow handle valve*	400/480	1000/300	500	3500	400	2800	300	2100	250
ASTM B33 alloy grade 50A				400	2800	350	250	400	300
SS-316 hollow handle valve*	400/480	1000/300	200	1400	175	1200	150	1000	130
ASTM B33 alloy grade 50A				150	1000	125	85	150	130

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

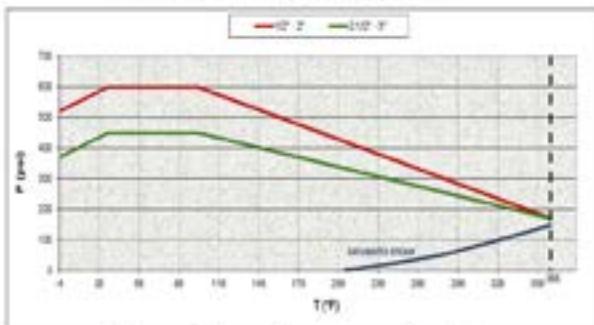


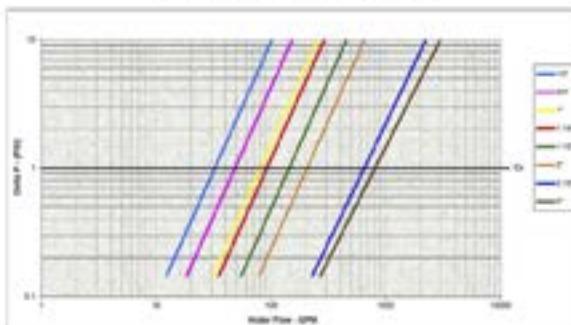
Chart applies to valve, not to solder joints.

Above stated limits are not imposed by the valve, but by the strength of the soldering joint according to ASME B16.22.

*This alloy contains more than 0.2% lead and, according to certain specifications, cannot be used for potable water or other foods.

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.

Pressure Drop Chart



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JCE542 - Rev. 2590



s.71 NPT

standard port 1/2"- 4"
hot forged brass ball valves

*150 psig non-shock steam working pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Travel 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 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Triple stem seals in sizes over 2 1/2"

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- Standard Port for compact design

Handle:

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 40 Bar (600 PSI)
- non-shock cold working pressure

Working Temperature:

- -40°F / +366°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Oval lockable handle up to 2 1/2", round over 2 1/2"
- Stem extension up to 2 1/2"
- T-handle up to 2 1/2"
- AISI 316 stainless steel handle up to 2 1/2"
- Patented locking device for valves up to 4"

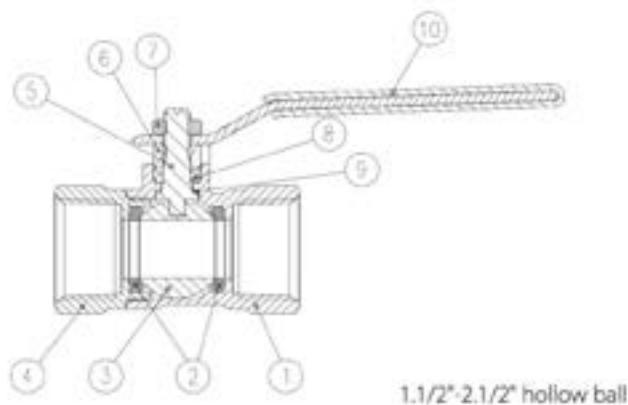
Upon Request:

- AISI 316 stainless steel ball and/or stem
- Glass filled PTFE seals
- Custom Design

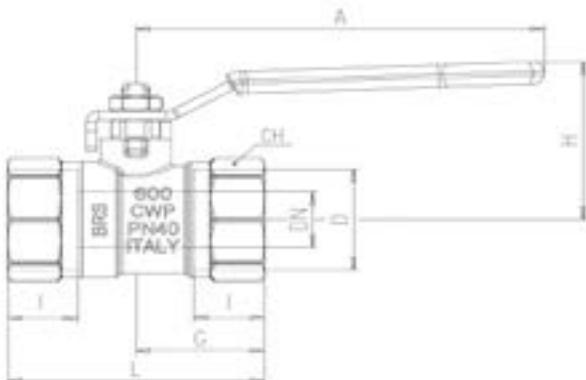
Approved by or in compliance with:

- Canadian standards Association (United States, Canada)
- RoHS Compliant

NOTE: Approvals apply to specific configurations/sizes only.



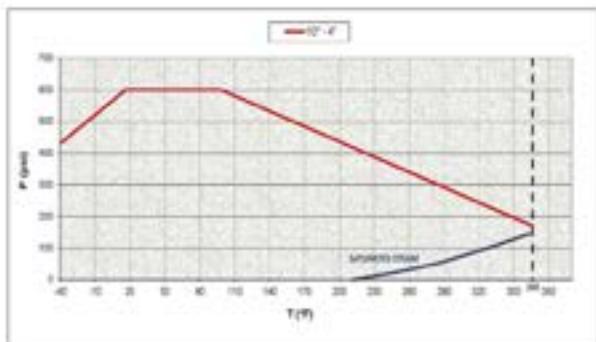
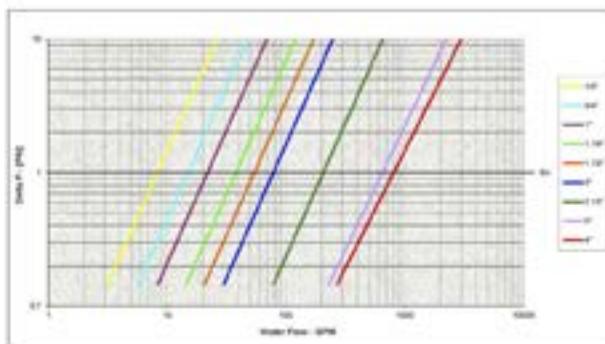
Part Description		Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated end cap	1	CW617N
5	Nickel plated stem packing gland design	1	CW617N
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF
8	Packing gland seal	1	PTFE
9	Washer	1	PTFE carbon filled 25%
10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



Code	S71D41	S71E41	S71F41	S71G41	S71H41	S71I41	S71L41	S71MM41	S71N41
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.453	0.591	0.787	0.984	1.260	1.575	1.968	2.559	3.150
I (inch)	0.610	0.669	0.827	0.905	0.905	1.043	1.260	1.378	1.634
L (inch)	2.126	2.441	2.835	3.464	3.779	4.409	5.276	6.378	7.480
G (inch)	1.043	1.220	1.417	1.732	1.890	2.205	2.638	3.189	3.740
A (inch)	3.937	3.937	4.724	4.724	6.220	6.220	6.220	10.039	10.039
H (inch)	1.693	1.695	1.984	2.153	2.988	3.236	3.500	5.197	5.512
CH (inch)	0.984	1.220	1.496	1.929	2.126	2.677	3.346	3.898	4.921

DN shows the nominal flow diameter. Stem configuration of valves over 2.1/2" is slightly different.

Ask for additional information on the whole range of **RUB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart**Pressure Drop Chart**



s.90 NPT economy

full port 1/4"-2"

hot forged brass ball valves



Quality:

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

Body:

- Hot forged full port sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

- PTFE self-lubricating seats with flexible-lip design



Threads:

- NPT short taper Female by Female threads

Handle:

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

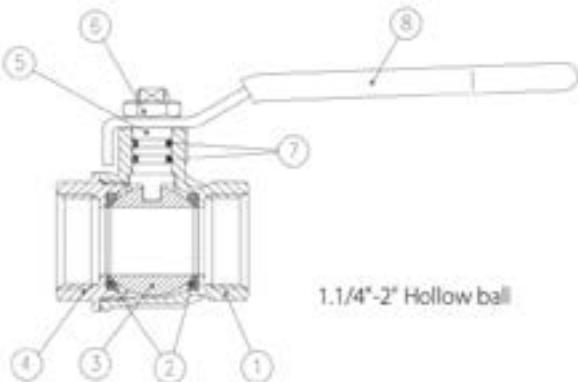
Options:

- Stem extension
- T-handle
- Oval lockable handle
- AISI 430 stainless steel handle
- Patented locking device

Approved by or in compliance with:

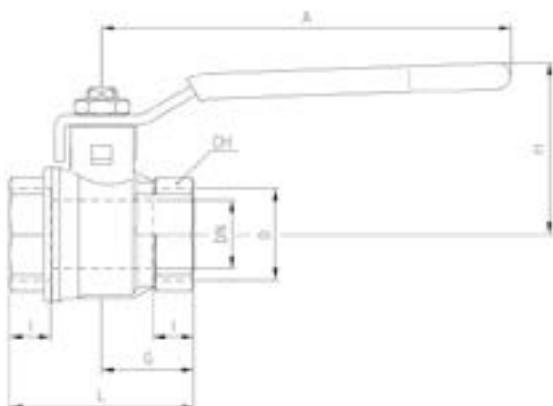
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



1.1/4"-2" Hollow ball

	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	CB4FF
7	O-Ring	2	FPM
8	Red PVC coated Geomet® steel handle	1	DD11

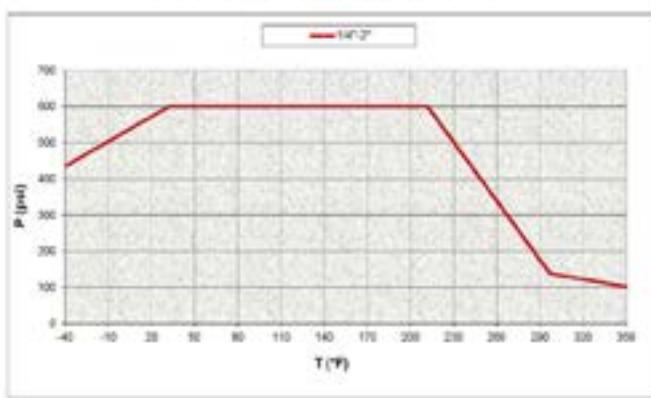


Code	S90G41	S90C41	S90D41	S90E41	S90F41	S90G41	S90H41	S90I41
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN(inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968
I (inch)	0.354	0.354	0.433	0.472	0.551	0.590	0.669	0.748
L (inch)	1.535	1.535	1.968	2.125	2.637	3.031	3.543	4.173
G (inch)	0.767	0.767	0.984	1.062	1.318	1.515	1.771	2.086
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	6.220
H (inch)	1.480	1.480	1.679	1.956	2.114	2.858	3.094	3.370
CH(inch)	0.787	0.787	0.984	1.220	1.496	1.889	2.125	2.598

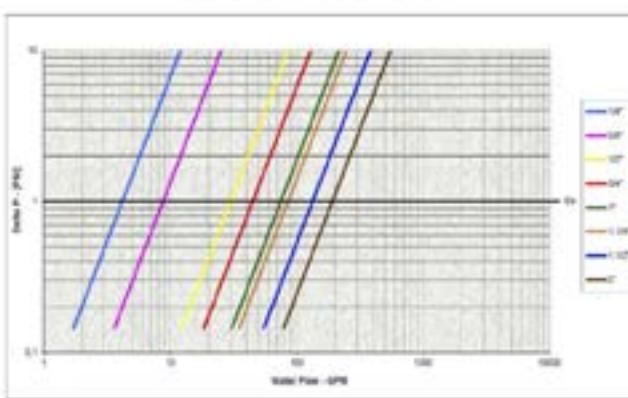
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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JETSON - Rev. 34M



s.112

1/2"-4"

hot forged brass gate valves



Quality:

- Suitable for water-works, domestic and agricultural installations
- Non rising stem suitable to most difficult applications

Body:

- Hot forged sand blasted brass body
- Low pressure drop

Stem:

- High performance EPDM stem seal

Threads:

- NPT Female by Female taper threads

Handle:

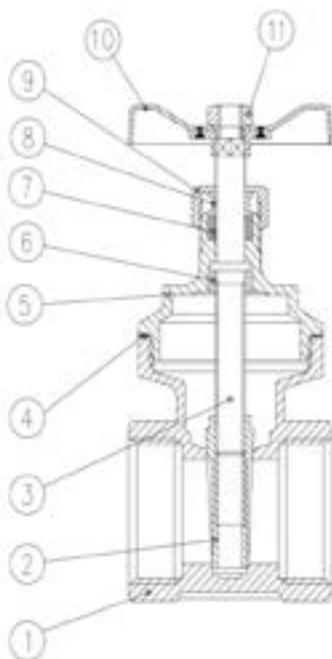
- Red coated steel hand-wheel
- Zinc plated steel top nut

Working Pressure:

- 150 PSI
- non-shock cold working pressure

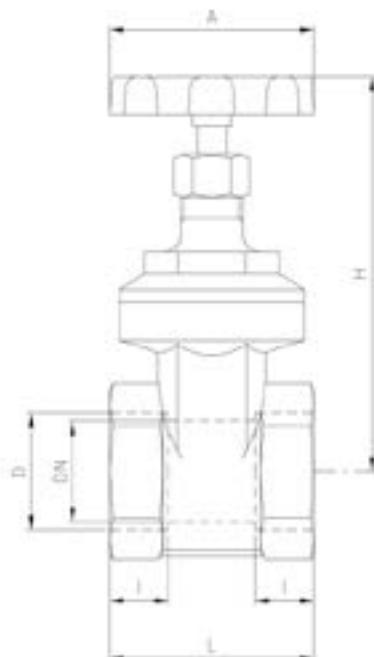
Working Temperature:

- +40°F / +200°F
- Warning: freezing of the fluid in the installation may severely damage the valve



NOTE: Approvals apply to specific configurations/sizes only.

	Part Description	Q.ty	Material
1	Body	1	CW617N
2	Gate	1	CB 754S
3	Stem	1	CW614N
4	Body cap sealing	1	Guanital Fibre
5	Cap	1	CW617N
6	Stem ring	1	CW614N
7	Packing gland seal	1	EPDM90
8	Packing gland	1	CW614N
9	Packing gland nut	1	CW614N
10	Red round handle	1	Steel
11	Handle nut	1	Steel



Code	112D00	112E00	112F00	112G00	112H00	112I00	112L00	112M00	112N00
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.531	0.610	0.748	1.062	1.299	1.732	1.850	2.362	2.834
I (inch)	0.354	0.354	0.393	0.393	0.433	0.472	0.511	0.511	0.590
L (inch)	1.377	1.535	1.692	1.889	2.125	2.283	2.480	2.755	3.149
A (inch)	1.771	1.771	1.968	2.165	2.362	2.755	3.149	3.937	3.937
H (inch)	2.677	2.677	3.149	3.385	4.212	5.275	5.629	6.889	7.952

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.



s.114 NPT

1/2"-4"

heavy pattern brass gate valves**Quality:**

- Suitable for water-works, domestic and agricultural installations
- Non rising stem suitable to most difficult applications

Body:

- Low pressure drop
- Finely cast sand blasted heavy brass body

Stem:

- High performance PTFE stem seal

Threads:

- NPT Female by Female taper threads

Handle:

- Strong cast aluminum hand-wheel

Working Pressure:

- 200 PSI
- non-shock cold working pressure

Working Temperature:

- -4°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

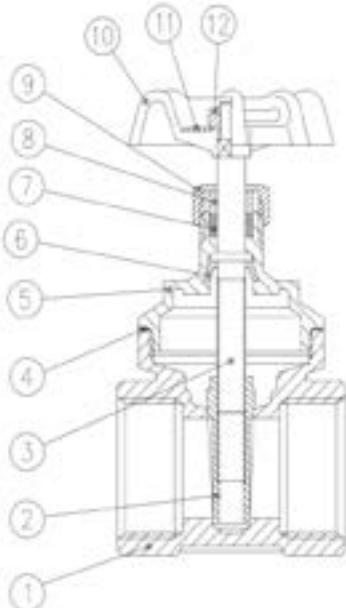
Options:

- S.115 solder end connections



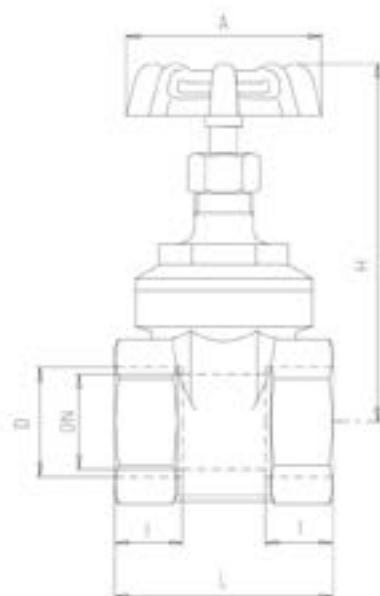
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)



NOTE: Approvals apply to specific configurations/sizes only.

	Part Description	Q.ty	Material
1	Body	1	CW617N
2	Gate	1	CW617N
3	Stem	1	CW617N
4	Body cap sealing	1	PTFE
5	Cap	1	CW617N
6	Stem ring	1	CW617N
7	Packing gland seal	1	PTFE
8	Packing gland	1	CW617N
9	Packing gland nut	1	CW617N
10	Red round handle	1	Steel
11	Disc	1	Aluminum
12	Handle nut	1	CW617N



Code	114D41	114E41	114F41	114G41	114H41	114I41	114L41	114M41	114N41
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.504	0.669	0.827	1.063	1.339	1.772	2.205	2.677	3.543
I (inch)	0.449	0.492	0.559	0.657	0.669	0.728	0.925	1.004	1.181
L (inch)	1.693	1.772	2.047	2.323	2.480	2.716	3.465	3.740	4.488
A (inch)	2.165	2.165	2.362	2.835	2.835	3.150	3.937	4.331	5.118
H (inch)	2.795	2.992	3.445	4.055	4.475	5.256	6.437	7.480	9.252
PSI	200	200	200	200	200	200	200	200	200

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.

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KZ114 - Rev. 3650



RUBINETTERIE UTENSILERIE BONOMI



DRINKING WATER

Activ valve Auto Water Shut-off & s.468 DZR - Full Port 7/8"	Page 52
Puri T.242 - Full Port 1/2"-2"	Page 56
Puri T.292 - Full Port 1/4"-2"	Page 58
Puri T.264 - Full Port 1/2"-1.1/2"	Page 60





Activ valve®

Auto Water Shut-off

Features:

- **Automatic shut off:** Activ valve® is temperature sensitive, so will automatically turn the mains water supply off if temperature drops low enough for pipes to freeze and rupture.
- **Easy to operate:** Activ valve® uses a unique gearing system which enables easy operation, a child could turn off the mains water in seconds.
- **Easy to identify:** Activ valve® is instantly identifiable as your mains water control.
- **Visual ON - OFF indicator:** Activ valve® has a status indicator window which shows if it is on or off at a glance.
- **Powerless operation:** Activ valve® operates without the need for power or battery back up... ever!
- **5 years warranty***



"Easy to install - Easy to operate"



RuB 5468



Bracket



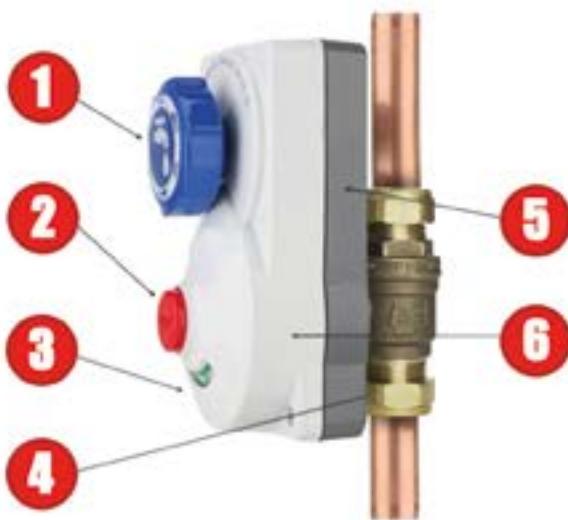
Activ valve®

- 1 Replace existing water main valve with the Activ valve® ball valve. Test for water tightness.
- 2 Fit the mounting plate to the ball valve using the four screws provided.
- 3 Fit the Activ valve® unit to the mounting plate by hooking the top over the plate and securing at the bottom using the two screws provided.

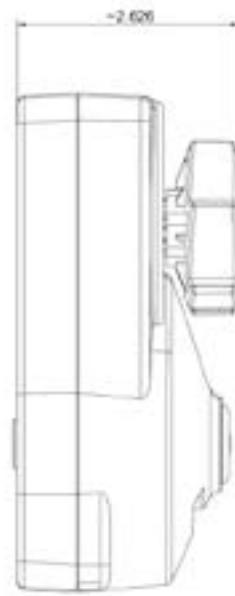
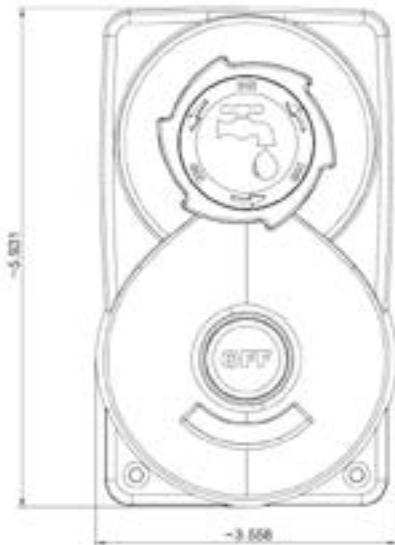
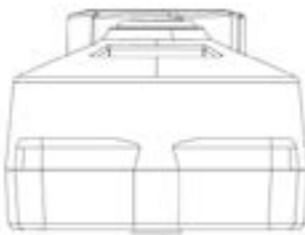
*See RuB terms & conditions

Technical Specifications:

- 1. Valve Wheel:** Rotate counter clockwise to open valve.
- 2. OFF Button:** Simply push button to turn water off.
- 3. ON - OFF indicator:** Indicator window shows if water is ON or OFF at a glance.
- 4. Valve:** s468 full port shut off ball valve.
Drinking Water Approvals Pending!
- 5. Temperature Sensor:** Manufactured in compliance to ISO 9001:2008 & AS 9100 - Aerospace quality system standard.
- 6. Spring:** Highest quality stainless steel spring.

**Actuator dimensions :**

Dimensions are in inches





s.468 DZR and LF compression ends

full port 7/8" dezincification-resistant and lead free
hot forged ball valves



Quality:

- 100% seal test guaranteed
- Arrow on the valve body clearly shows the flow direction
- No metal-to-metal moving parts
- Stem clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated DZR and lead free brass ball for longer life and with anti-freeze function

Body:

- Hot forged sand blasted DZR and lead free unplated body and cap sealed with Loctite® or equivalent thread sealant
- Dezincification-resistant and lead free brass in compliance with HCACL Hygenic copper alloy composition (UBA list)

Stem:

- Two EPDM O-rings at the stem for maximum safety
- Blowout-proof unplated DZR and lead free brass stem

Seals:

- EPDM seats for lower torque

Threads:

- Compression ends to EN 1254-2

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of RUB electric and pneumatic actuators, with no bracket or coupling required

Working Pressure:

- Shell rating: 600 PSI non shock cold working pressure
- Seat rating/compression ends: 230 PSI max non shock cold working pressure (see chart for pressure/temperature limits)

Working Temperature:

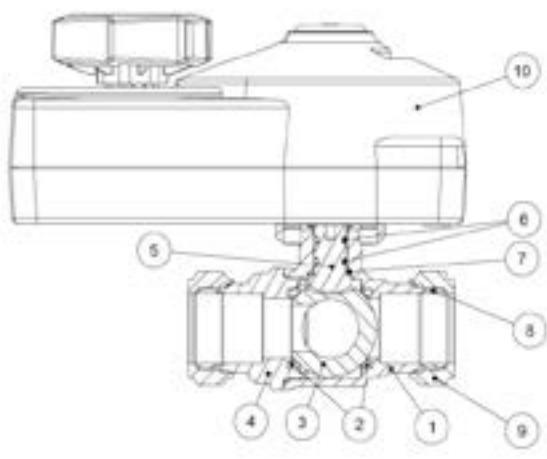
- -4°F / +250°F

Options:

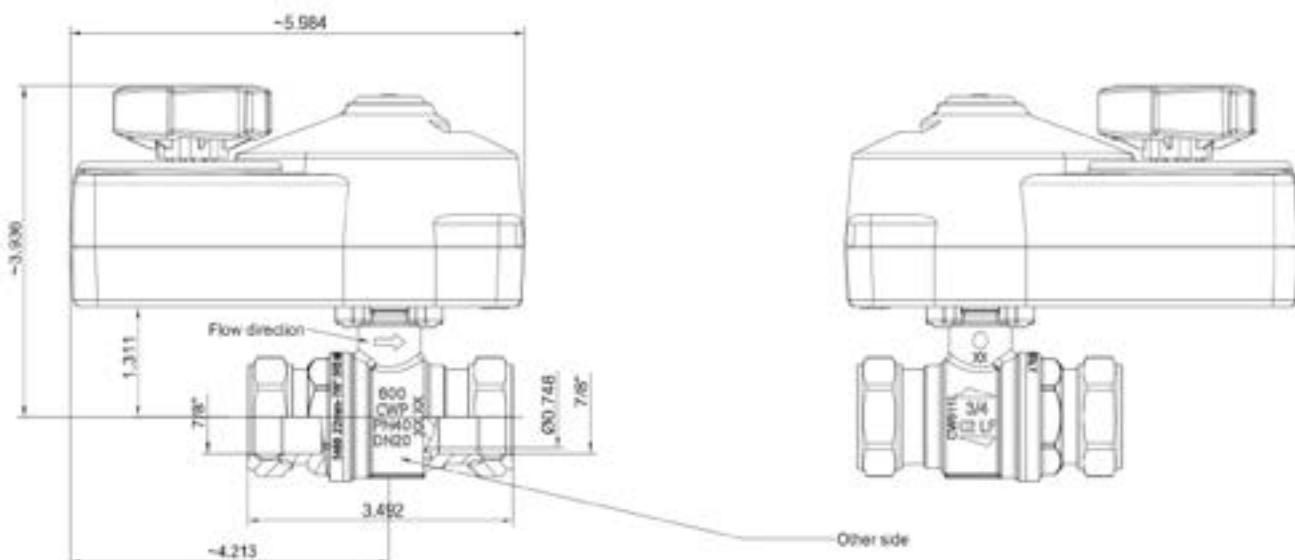
- S.468 DZR and lead free 22mm compression ends
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact power electric actuator
- Manual lockable handle

Upon Request:

- Custom Design



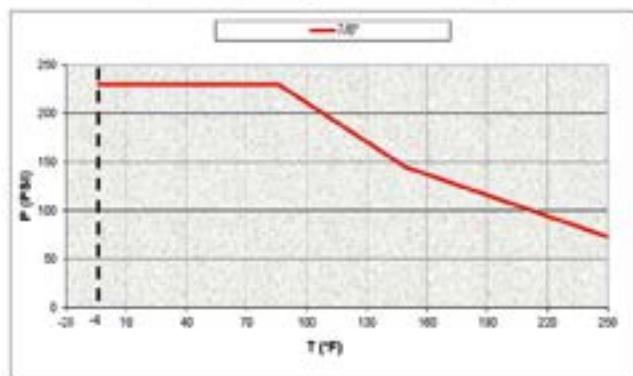
	Part Description	Qty	Material
1	Unplated body	1	CW511L
2	Seat	2	EPDM
3	Chrome plated ball	1	CW511L
4	Unplated end cap	1	CW511L
5	Unplated stem	1	CW511L
6	O-Ring	2	EPDM
7	Washer	1	PTFE carbon filled 25%
8	Olive	2	CW508L
9	Unplated nut	2	CW617N
10	Activative® actuator	1	



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

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



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ME9098 - Rev. 0



Puri T.242

full port 1/2"- 2"
hot forged lead free brass ball valves

All surfaces of this product in contact with drinking water contain less than 0.25% of lead in compliance with U.S. law



Quality:

- Certified by CSA International to comply with U.S. s3874, California A81953, and similar laws of other states for the safe handling of drinking water
- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem

Body:

- Hot forged sand blasted, unplated lead free brass body and cap sealed with Loctite® or equivalent thread sealant
- Chrome plated lead free brass ball for longer life

Stem:

- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Blowout-proof unplated lead free brass stem

Seals:

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



Threads:

- Solder end ANSI B16.18 Female by Female connections

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 600 PSI (for solder joints rating see table 1)
- non-shock cold working pressure

Working Temperature:

- For general use: -4°F / +350°F (for solder joints rating see table 1)
- NSF 61 limits (CSA approval); tested for use in continuous exposure to water of ambient temperature
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Oval lockable handle
- AISI 430 stainless steel handle
- Patented locking device
- Stem extension (Assemble after soldering)

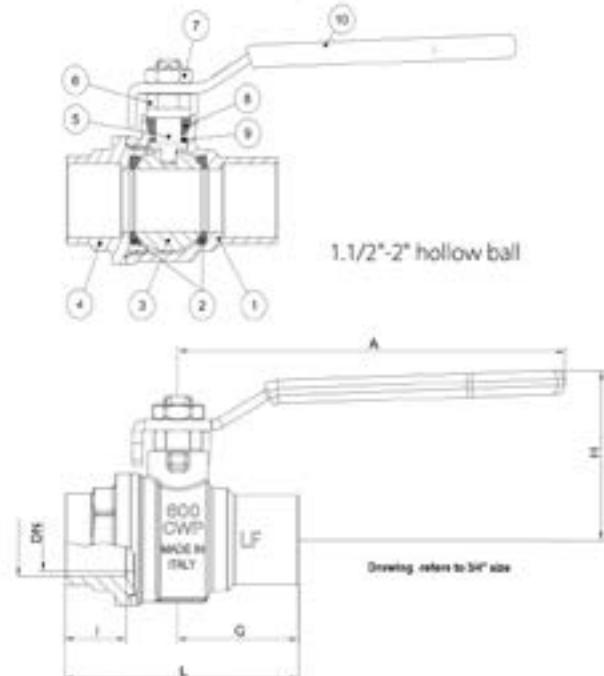
Upon Request:

- Glass filled PTFE seals
- Custom Design

Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- Certified by CSA International for Drinking Water in all U.S. states (NSF/ANSI 61 - NSF/ANSI 372)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Q.ty	Material
1	Unplated solder end body	1	CW510L
2	Seat	2	PTFE
3	Chrome plated ball	1	CW510L
4	Unplated solder end cap	1	CW510L
5	Unplated stem packing gland design	1	CW510L
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF
8	Packing gland seal	1	PTFE
9	Thrust washer	1	PTFE carbon filled 25%
10	Green PVC coated Geomet® steel handle	1	DD11

Code	T242D00	T242E00	T242F00	T242G00	T242H00	T242I00
D(inch)						
Nominal	1/2	3/4	1	1 1/4	1 1/2	2
actual	0.6271	0.8771	1.1279	1.3779	1.6279	2.1279
DN(inch)	0.580	0.787	0.984	1.259	1.574	1.968
I(inch)	0.492	0.748	0.905	0.964	1.102	1.338
L(inch)	2.244	2.854	3.346	3.819	4.488	5.433
G(inch)	1.181	1.476	1.673	1.909	2.244	2.716
A(inch)	3.937	4.724	4.724	6.220	6.220	6.220
H(inch)	1.695	1.988	2.153	2.988	3.236	3.500

Warning: This soldering alloy contains more than 0.2% lead and, according to certain specifications, cannot be used for potable water or other foods.

Joining material	melting range		working temperature		maximum working gauge pressure						
	degrees	°F	°C	°F	°C	size 1/2"-1"		size 1 1/4"-2"		size 2 1/2"-4"	
						psi	MPa	psi	MPa	psi	MPa
50-50 tin-lead solder ASTM B32 alloy grade 50A	360421	148215	B+100	-18+38	200	1400	175	1200	150	1050	
			B+150	-18+68	150	1050	125	850	100	750	
			B+200	-18+93	100	700	95	600	75	500	
			B+250	-18+121	85	600	75	500	50	350	
95-5 tin-antimony solder ASTM B32 alloy grade 95TA	450484	230240	B+100	-18+38	100	3500	400	2800	380	2100	
			B+150	-18+68	400	2800	350	3400	375	2000	
			B+200	-18+93	300	2100	250	1700	200	1400	
			B+250	-18+121	200	1400	175	1200	150	1050	

Limits are not imposed by the valve, but by the strength of the soldering joint according to ASME B16.22

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

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart

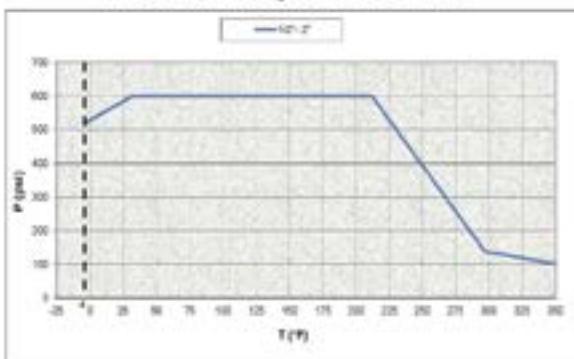
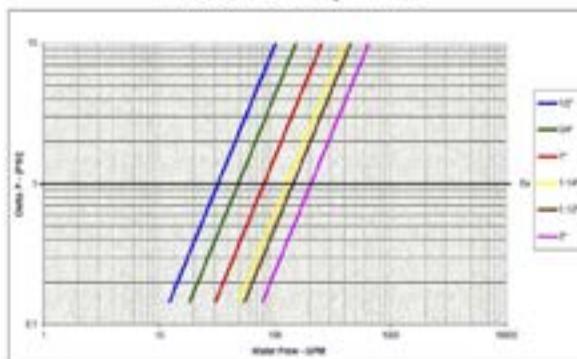


Chart applies to valve, not to solder joints for general use

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NET242 - Rev 3597

Pressure Drop Chart





Puri T.292

full port 1/4"- 2"
hot forged lead free brass ball valves

All surfaces of this product in contact with drinking water contain less than 0.25% of lead in compliance with U.S. law



Quality:

- Certified by CSA International to comply with U.S. 53874, California AB1953, and similar laws of other states for the safe handling of drinking water
- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Handle stops on body to avoid stresses at stem

Body:

- Hot forged sand blasted, unplated lead free brass body and cap sealed with Loctite® or equivalent thread sealant
- Chrome plated lead free brass ball for longer life

Stem:

- Pure PTFE adjustable packing gland and reinforced washer for lower torque and easy maintenance
- Blowout-proof unplated lead free brass stem

Seals:

- 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
- Handle removable with valve in service

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperatures:

- For general use: -40°F / +350°F
- NSF 61 limits (CSA approval): tested for use in continuous exposure to water of ambient temperature
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Stem extension
- T-handle
- Oval lockable handle
- AISI 430 stainless steel handle
- Patented locking device

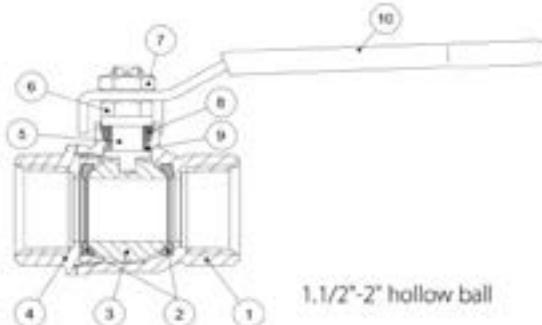
Upon Request:

- Custom Design
- Pure PTFE seals

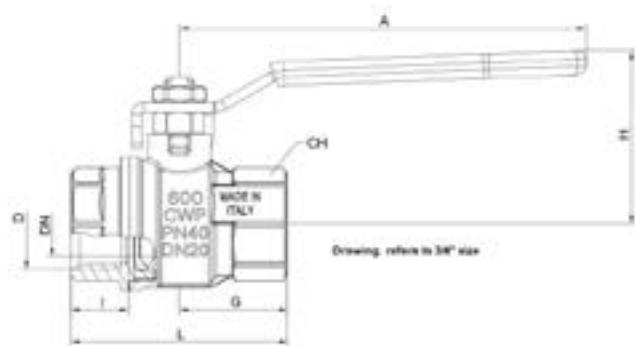
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- Certified by CSA International for Drinking Water in all U.S. states (NSF/ANSI 61 - NSF/ANSI 372)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



1.1/2"-2" hollow ball



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

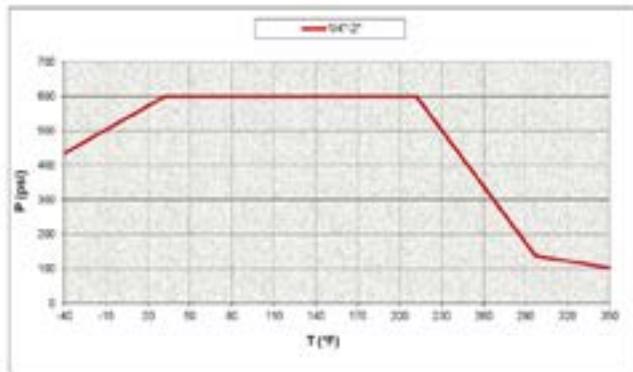
	Part Description	Q.ty	Material
1	Unplated NPT body	1	CW510L
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW510L
4	Unplated NPT end cap	1	CW510L
5	Unplated stem packing gland design	1	CW510L
6	Nickel plated gland nut	1	CW617N
7	Geomet® nut	1	CB4FF
8	Packing gland seal	1	PTFE
9	Thrust washer	1	PTFE carbon filled 25%
10	Green PVC coated Geomet® steel handle	1	DD11

Code	T292B41	T292C41	T292D41	T292E41	T292F41	T292G41	T292H41	T292I41
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN (inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968
I (inch)	0.472	0.472	0.610	0.669	0.826	0.905	0.905	1.043
L (inch)	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.763
G (inch)	0.885	0.885	1.161	1.259	1.594	1.830	2.007	2.381
A (inch)	3.228	3.228	3.937	4.724	4.724	6.220	6.220	6.220
H (inch)	1.563	1.563	1.695	1.988	2.153	2.988	3.236	3.500
CH (inch)	0.787	0.787	0.984	1.220	1.574	1.929	2.125	2.696

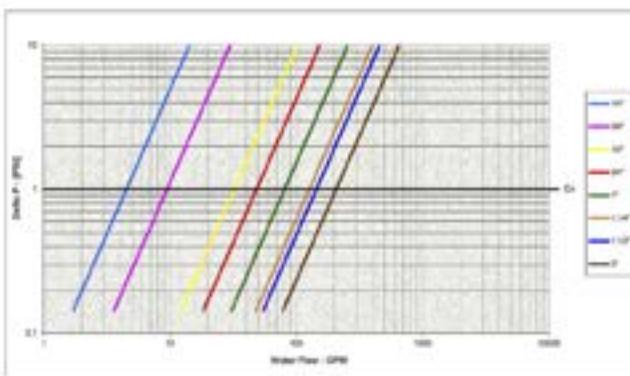
Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart

For general use



Pressure Drop Chart



The company reserves all rights for the information contained herein. Products may be changed at any time without notice. Any undated reference to a code or standard shall be interpreted as referring to the latest edition. **RuB** and logo are registered trademarks of **RuB-Rubinetterie utensile Bonomi**. Other logos and registered trademarks are property of respective owners.

XET292 - Rev. 1997



Puri T.264

full port 1/2"- 1.1/2"

hot forged lead free brass ball valves

All surfaces of this product in contact with drinking water contain less than 0.25% of lead in compliance with U.S. law



Quality:

- Certified by CSA International to comply with U.S. s3874, California AB1953; and similar laws of other states for the safe handling of drinking water
- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated lead free brass ball for longer life

Body:

- Hot forged sand blasted, unplated lead free brass body and cap sealed with Loctite® or equivalent thread sealant

Stem:

- Blowout-proof nickel plated lead free brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



FOR DRINKING WATER IN
ALL U.S. STATES



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of **RuB** electric and pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 600 PSI up to 3/4" size
- For 1" size up to 1.1/2" size:
 - Shell rating: 600 PSI
 - Seat rating: Delta P max permissible 230 PSI
- non-shock cold working pressure

Working Temperature:

- For general use: -4°F / +350°F
- NSF 61 limits (CSA approval): tested for use in continuous exposure to water of ambient temperature
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle

Upon Request:

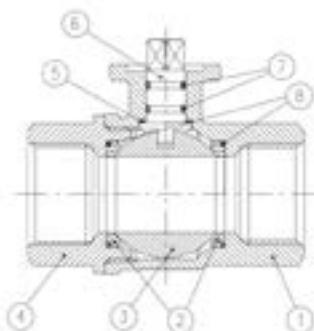
- Custom Design

Approved by or in compliance with:

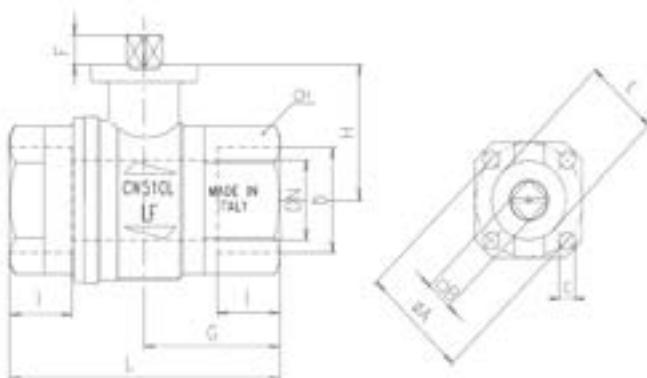
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- Certified by CSA International for Drinking Water in all U.S. states (NSF/ANSI 61 - NSF/ANSI 372)

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

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Q.ty	Material
1	Unplated NPT body	1	CW510L
2	Ball seat	2	PTFE graphite filled 15% up to 3/4" size, PTFE carbon graphite filled over 3/4" size
3	Chrome plated ball	1	CW510L
4	Unplated NPT end cap	1	CW510L
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CWS10L
7	O-Ring	2	FPM
8	O-Ring	2	FPM

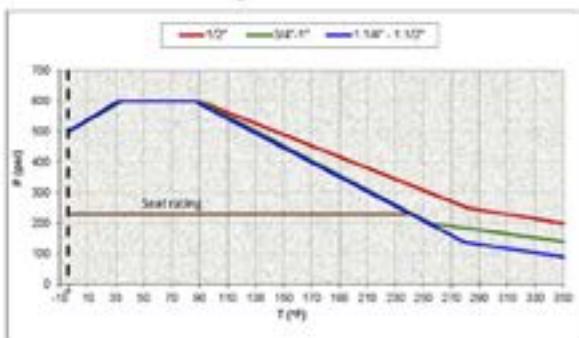
**Torque for Actuator Sizing in-lb:**

Delta P →	0 - 200 PSI		600 PSI	
	To open	To close	To open	To close
1/2"	23	13	23	13
3/4"	33	20	33	20

Delta P →	0 = 90 PSI		>90 = 230 PSI	
	To open	To close	To open	To close
1"	19	19	31	31
1.1/4"	22	22	35	35
1.1/2"	31	31	84	84

Pressure-Temperature Chart

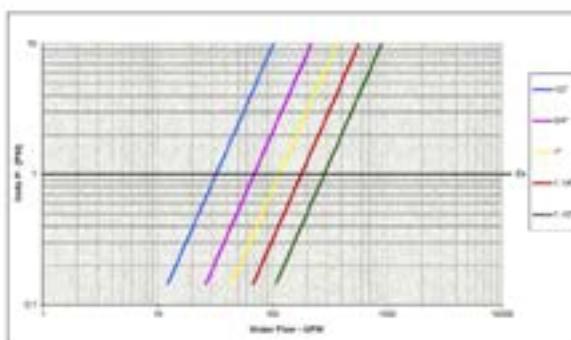
For general use

**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, superheated steam	1.5
Slurries or liquids bearing abrasive particles	1.5-2.5

For other conditions please inquire of your **RUB** representative or distributor

Pressure Drop Chart



RUBINETTERIE UTENSILERIE BONOMI



INDUSTRY

s.95 NPT Spring Return - Full Port 1/4"-2"	Page 64
s.130 NPT 1000 PSI Stainless Steel - Full Port 1/4"-4"	Page 66
s.131 NPT 1000 PSI Stainless Steel - Reduced Port 1/4"-2"	Page 68
s.132 NPT 2000/1500 PSI Stainless Steel - Full Port 1/4"-2"	Page 70
s.84 BSPT - Full Port 1/4"-4"	Page 72
k.84 - Full Port 1/4"-2"	Page 74
s.7241L NPT 3 Way with handle - Full Port 1/2"-1"	Page 76
s.7341L NPT 3 Way with handle - Full Port 1/2"-1"	Page 78
s.7441L NPT 3 Way with handle - Standard Port 1/2"-1"	Page 80
SNI7352 Needle Valve - 1/4"	Page 82
s.172 Improved DrainLock™	Page 84





s.95 NPT spring return

full port 1/4"-2"

hot forged brass ball valves

Access to fluid systems in public places could potentially convert into costs and safety problems.

In order to avoid unattended valves being left open with negative economic or environmental consequences, RuB developed the automatic self-closing valve.

The valve can be opened normally by rotating the handle 90° and when the user releases the handle, the valve shuts off automatically.

Best solution for service stations, trucks, public areas, gardens. The same features are also useful in industrial applications, where a valve must not be left open unattended.



Quality:

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

Body:

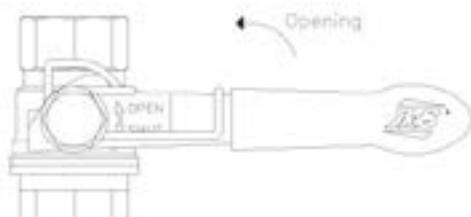
- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Ball valve is normally closed

Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

- Robust spring ensures auto shutt-off with max pressure in valve
- Geomet® carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperature:

- -40°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- AISI 430 stainless steel handle

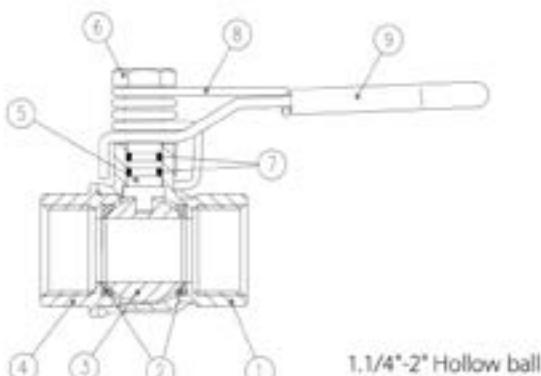
Upon Request:

- AISI 316 stainless steel ball
- Custom Design

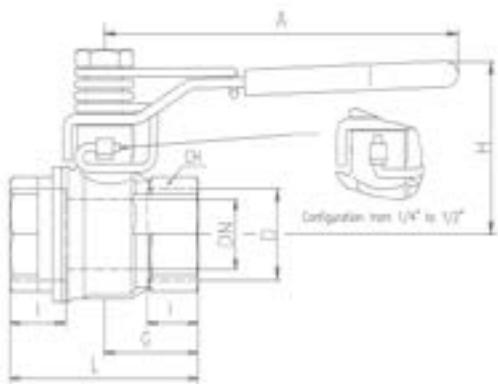
Approved by or in compliance with:

- Canadian standards Association (United States, Canada)
- Factory Mutual (United States)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- Underwriters Laboratories (United States & Canada)
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end-cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Unplated spring nut	1	CW617N
7	O-Ring	2	FPM
8	Spring return	1	AISI 302
9	Yellow PVC coated Geomet® steel handle	1	DD11

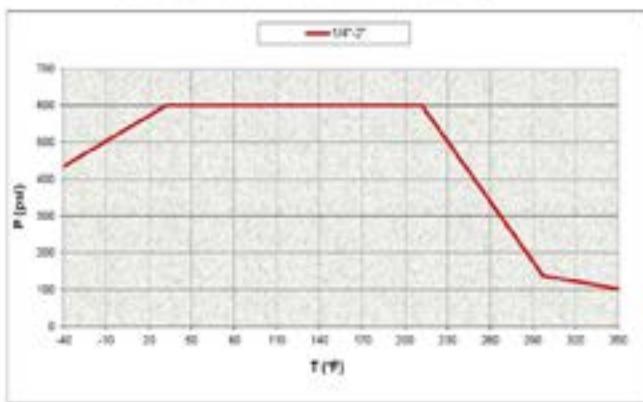


Code	S95B41MR	S95C41MR	S95D41MR	S95E41MR	S95F41MR	S95G41MR	S95H41MR	S95I41MR
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN (inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968
I (inch)	0.472	0.472	0.610	0.669	0.826	0.905	0.905	1.043
L (inch)	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.763
G (inch)	0.885	0.885	1.161	1.259	1.594	1.830	2.007	2.381
A (inch)	3.937	3.937	3.937	4.724	4.724	6.220	6.220	6.220
H (inch)	1.504	1.504	1.679	1.956	2.114	2.858	3.094	3.370
CH (inch)	0.787	0.787	0.984	1.220	1.574	1.929	2.125	2.696

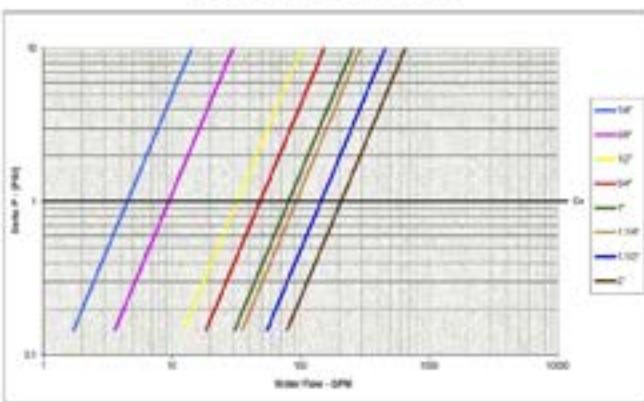
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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JDE395MR - Rev. 3486



s.130 Stainless Steel

Full Port

1/4"-4" NPT ball valves

*150 psig non-shock working steam pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- Dual sealing system allows valve to be operated in either direction making installation easier
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Test standard API 598
- NACE compliance MR-01-75
- Handle stops on body to avoid stresses at stem

Body:

- CF8M Stainless steel body and cap

Stem:

- Blowout-proof stainless steel stem

Seals:

- Glass filled PTFE seats

Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- Plastic coated stainless steel lockable handle. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 1000 PSI
- non-shock cold working pressure
- 150 PSI WSP steam rating
- 2×10^{-3} Torr Vacuum rating

Working Temperature:

- 50°F / +450°F
- Warning: freezing of the fluid in the installation may severely damage the valve

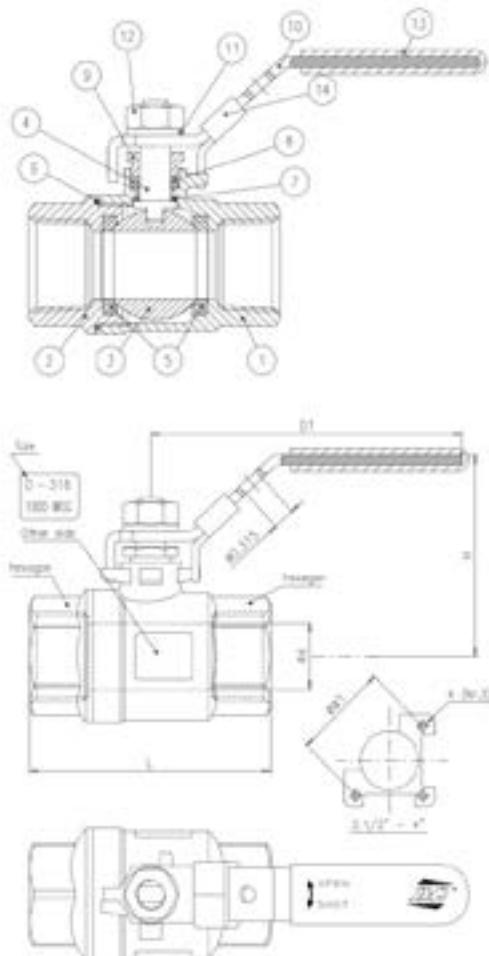
Upon Request:

- Oval lockable handle up to 2"

Approved by or in compliance with:

- GOST-R (Russia)
 - Hygiene and epidemic center in Moscow city (Russia)
 - EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Q.TY	Material
1	Body	1	A351-CF8M
2	Cap	1	A351-CF8M
3	Ball	1	A351-CF8M
4	Stem	1	A276 Gr. 316
5	Seat	2	PTFE+15% G/F
6	Gasket	1	PTFE
7	Thrust washer	1	PTFE
8	Packing	1	PTFE
9	Gland	1	A194 Gr.8
10	Lockable handle	1	A240 SS304
11	Lock washer	1	A493 SS304
12	Handle nut	1	A194 Gr.8
13	Handle sleeve	1	Vinyl grip
14	Locking plate	1	A240 SS304

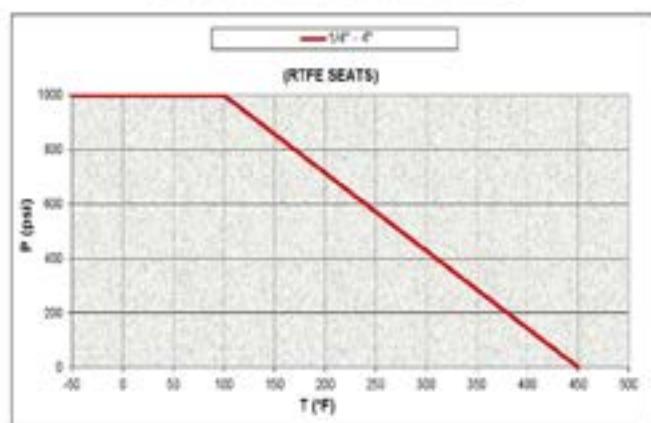
Code	130E41	130C41	130D41	130E41	130F41	130G41	130H41	130I41	130L41	130M41	130N41
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
d (inch)	0.433	0.492	0.591	0.787	0.984	1.26	1.495	1.969	2.559	3.15	3.937
L (inch)	2.276	2.276	2.429	2.76	3.201	3.78	4.429	4.961	6.634	7.535	8.524
H (inch)	2.252	2.252	2.327	2.463	2.783	3	3.508	3.864	4.354	4.882	6.732
D1 (inch)	4.055	4.055	4.055	4.055	5	5	6.024	7.598	7.598	10.985	13.189
W1 (inch)	N/A	2.756	4.016	4.016							
h	N/A	M8x1.25	M10x1.5	M10x1.5							

Water Flow Ratings

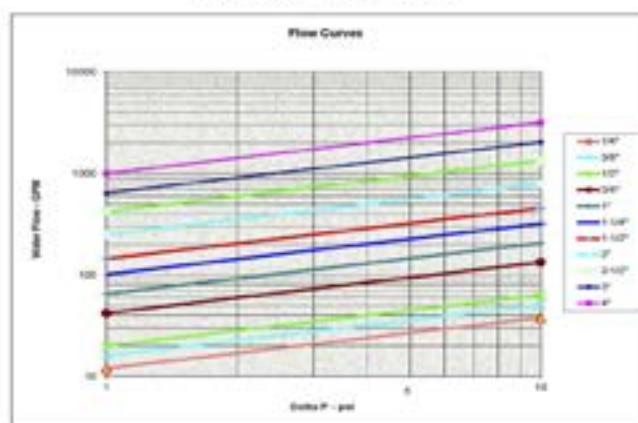
Size	14"	18"	22"	24"	T	118"	132"	T	232"	T	4
ST	12	18	25	40	桶	135	134	28	40	桶	100

Ask for additional information on the whole range of *RuB* valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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AET30 Rev. 3-68



s.131 Stainless steel

Reduced port

1/4"-2" NPT ball valves

*150 psig non-shock working steam pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- Dual sealing system allows valve to be operated in either direction making installation easier
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Test standard API 598
- NACE compliance MR-01-75
- Handle stops on body to avoid stresses at stem

Body:

- CF8M Stainless Steel body

Stem:

- Blowout-proof stainless steel stem

Seals:

- PTFE seats

Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Handle:

- Plastic coated stainless steel lockable handle. Handle coating offers both thermal and electrical protection

Working Pressure:

- 1000 PSI
- non-shock cold working pressure
- 150 PSI WSP steam rating
- 2×10^{-2} Torr Vacuum rating

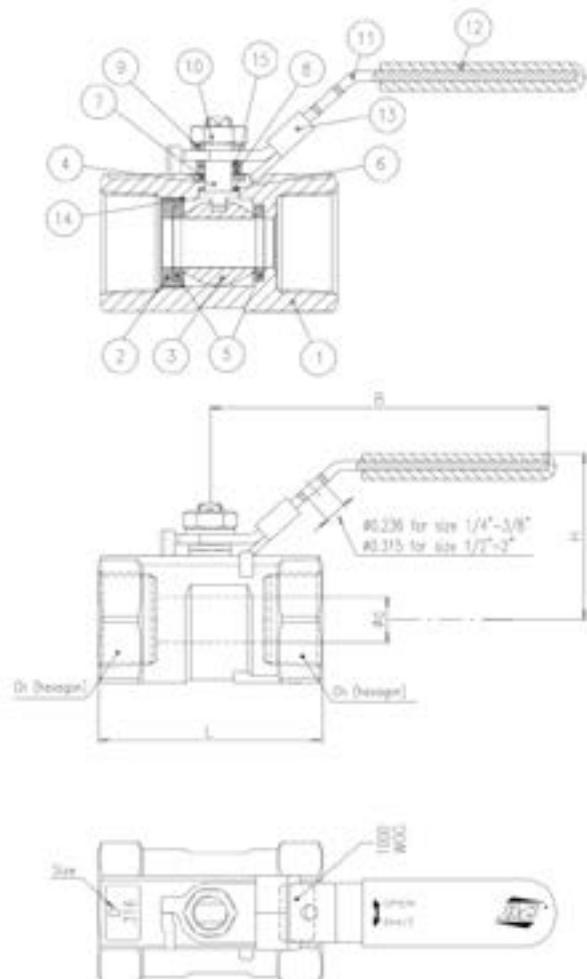
Working Temperature:

- 50°F / +400°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



PART DESCRIPTION		Q.TY	MATERIAL
1	Body	1	A351-CF8M
2	Insert	1	AlSi316
3	Ball	1	AlSi 316 or A351-CF8M
4	Stem	1	A276 Gr. 316
5	Seat	2	PTFE
6	Thrust washer	1	PTFE
7	Packing	1	PTFE
8	Washer	1	A240 SS304
9	Lock washer	1	A493 SS304
10	Stem nut	1	A194 Gr.8
11	Lockable handle	1	A240 SS304
12	Handle sleeve	1	Vinyl grip
13	Locking plate	1	A240 SS304
14	Gasket	1	PTFE - Only 1.1/4"-2"
15	Concave washer	1	SS301

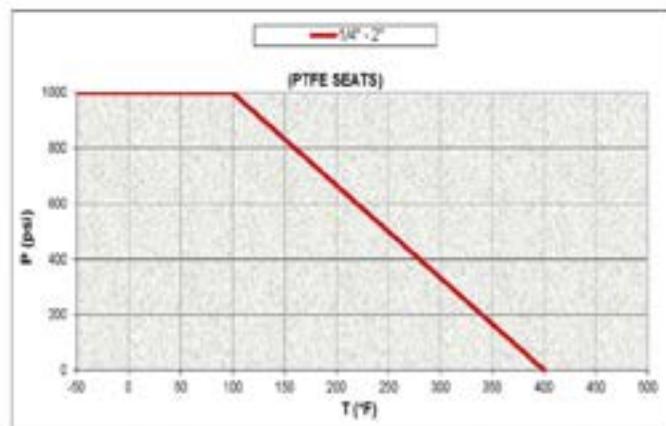
Code	131B41	131C41	131D41	131E41	131F41	131G41	131H41	131I41
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
d (inch)	0.197	0.276	0.362	0.492	0.591	0.787	0.965	1.260
L (inch)	1.535	1.732	2.205	2.323	2.795	3.110	3.268	3.937
H (inch)	1.370	1.390	1.807	1.846	1.862	2.189	2.280	2.547
B (inch)	2.756	3.110	3.661	3.622	4.409	4.409	5.315	5.315
Ch (inch)	0.669	0.827	0.984	1.260	1.496	1.929	2.087	2.559

Water Flow Ratings

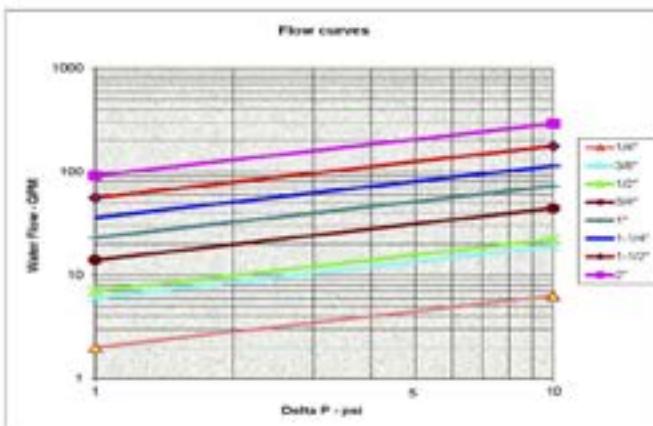
Size	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
CV	2	6	7	14	23	36	56	92

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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RZET31 - Rev.3486



s.132 Stainless steel

full port

1/4"-2" NPT ball valves

**150 psig non-shock working steam pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- Dual sealing system allows valve to be operated in either direction making installation easier
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Test standard API 598
- NACE compliance MR-01-75
- Handle stops on body to avoid stresses at stem

Body:

- CF8M Stainless steel body and cap
- Design specification ANSI B16.34 CLASS 900

Stem:

- Blowout-proof stainless steel stem

Seals:

- Molecularly enhanced PTFE seats (*)

Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- Plastic coated stainless steel lockable handle. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 1/4" to 1" 2000 PSI 1,1/4" to 2" 1500 PSI
- non-shock cold working pressure
- 150 PSI WSP steam rating
- 2x10⁻² Torr Vacuum rating

Working Temperature:

- 50°F / +475°F
- Warning: freezing of the fluid in the installation may severely damage the valve

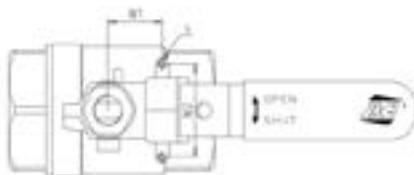
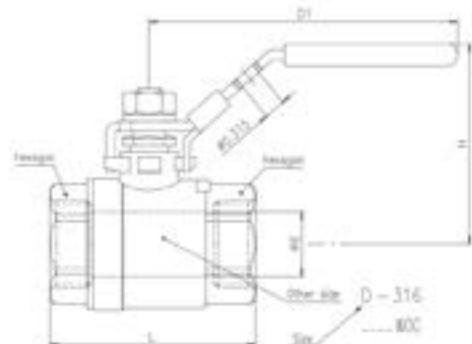
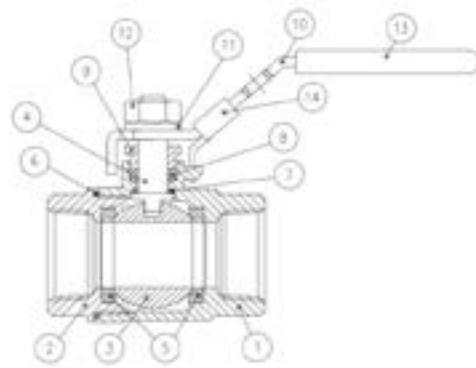
(*) Molecular Enhanced-PTFE (ME-PTFE) is virgin PTFE (no glass or carbon fillers are used) which, due to its improved molecular structure, surpasses the mechanical properties of conventional filled PTFE materials.

Used in fluid sealing applications it provides superior performance in terms of high temperature strength, reduced creep distortion, and resistance to chemical attack.

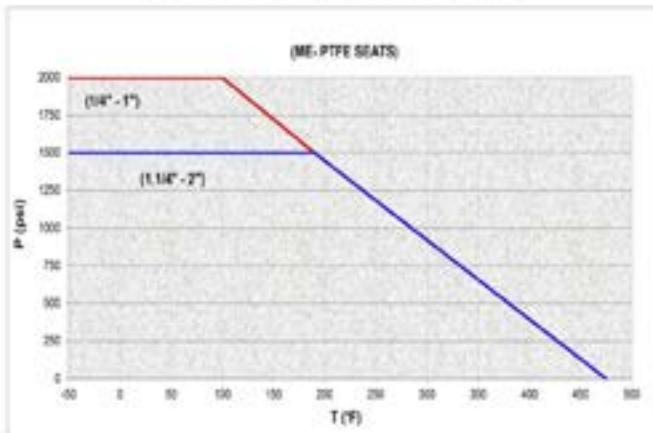
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.

**Water Flow Ratings**

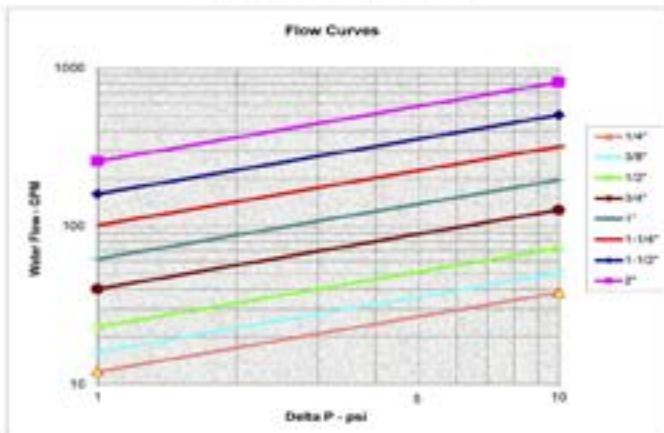
Size	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
CV	12	16	23	40	62	101	160	258

Pressure-Temperature Chart

PART DESCRIPTION		Q.TY	MATERIAL
1	Body	1	A351-CF8M
2	Cap	1	A351-CF8M
3	Ball	1	A351-CF8M
4	Stem	1	A276 Gr. 316
5	Seat	2	ME-PTFE*
6	Gasket	1	ME-PTFE*
7	Thrust washer	1	ME-PTFE*
8	Packing	1	ME-PTFE*
9	Gland	1	A194 Gr.8
10	Lockable handle	1	A240 SS304
11	Lock washer	1	A493 SS304
12	Handle nut	1	A194 Gr.8
13	Handle sleeve	1	Vinyl grip
14	Locking plate	1	A240 SS304

*ME-PTFE is Molecularly Enhanced PTFE

Code	132B41	132C41	132D41	132E41	132F41	132G41	132H41	132I41
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
d (inch)	0.433	0.492	0.591	0.787	0.984	1.26	1.575	2
L (inch)	2.343	2.343	2.539	3.031	3.563	3.917	4.646	5.374
H (inch)	2.244	2.244	2.268	2.697	2.862	3.453	3.661	4.106
D1 (inch)	4.055	4.055	4.055	5	5	6.124	6.124	7.598
W1 (inch)	0.5	0.5	0.5	0.882	0.882	1	1	1
W2 (inch)	1.122	1.122	1.122	1.378	1.378	1.5	1.5	1.5
h	M5x0.8	M5x0.8	M5x0.8	M6x1	M6x1	M6x1	M6x1	M6x1
—WOG	2000	2000	2000	2000	2000	1500	1500	1500

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.**Pressure Drop Chart**

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JCE132 - Rev. 3486



s.84 BSPT

full port 1/4"- 4"

hot forged brass ball valves

**bsi.****FM APPROVED****PC****RoHS****SST****WRAS APPROVED PRODUCT CERTIFICATION MARK****Quality:**

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

Body:

- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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

PED Directives:

- Assessment according to Pressure Equipment Directive 97/23 CE module B+D by Pascal (1115)

**Threads:**

- ISO 7/1, BS 21 BSPT Taper Female by Female threads

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

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

Working Pressure and Working Temperature:

- 40 Bar (600 PSI) up to 2", 30 Bar (450 PSI) over 2"
- non-shock cold working pressure
- -40°C (-40°F) / +170°C (+350°F)
- For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 bar
- AS4617 Limitation for GAS: 2100 Kpa up to 2" and 1500 Kpa from 2, 1/2" to 4" rated working pressure and 0°C / +60°C temperature
- Warning: freezing of the fluid in the installation may severely damage the valve

Options up to 2" size:

- Stem extension
- T-handle
- AISI 430 stainless steel handle
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- Male by Female threads

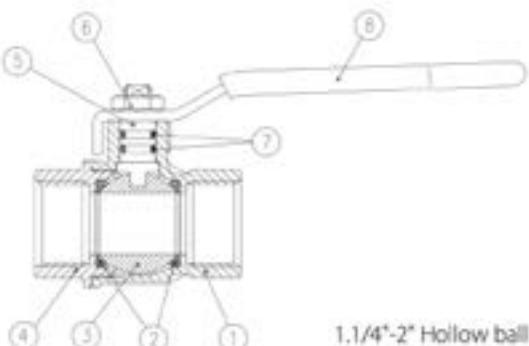
Upon Request:

- AISI 316 stainless steel ball
- Glass filled PTFE seals
- Custom Design

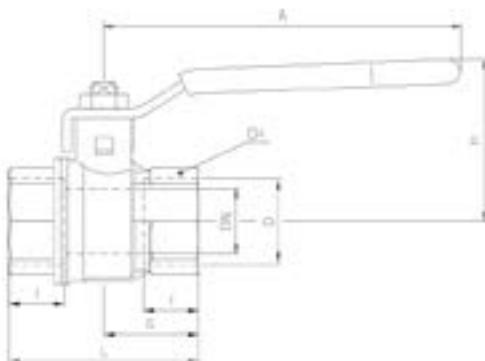
Approved by or in compliance with:

- The Australian Gas Association (Australia)
- Factory Mutual (United States)
- Water Regulations Advisory Scheme (United Kingdom)
- Suruhanjaya Tenaga (Malaysia)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- BSI Group
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



PART DESCRIPTION		Q.TY	MATERIAL
1	Nickel plated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated end cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	CB4FF
7	O-Ring	2	FPM
8	Yellow PVC coated geomet® steel handle	1	DD11



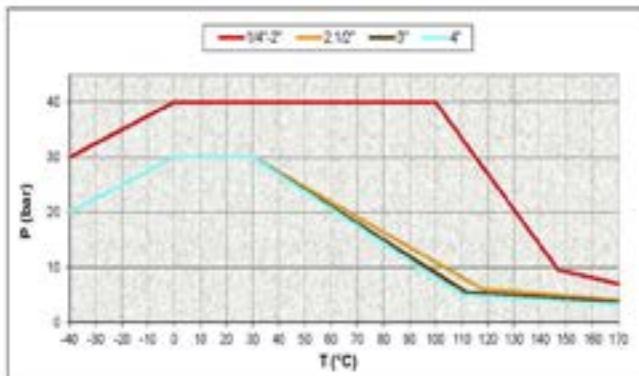
Code	SS4850/SS4C50/SS4D50/SS4E50/SS4F50/SS4G50/SS4H50	SS4I50	SS4L50/SS4M50/SS4N50
D (inch)	1/4 3/8 1/2 3/4 1 1 1/4 1 1/2 2 2 1/2 3 4		
DN (mm)	8 10 15 20 25 32 40 50 65 80 100		
I (mm)	12 12 15.5 17 21 23 23 28.5 32 35 41.5		
L (mm)	45 45 59 64 81 93 102 121 156 177 216		
G (mm)	22.5 22.5 29.5 32 40.5 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)	20 20 25 31 40 49 54 68.5 85 99 125		

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.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

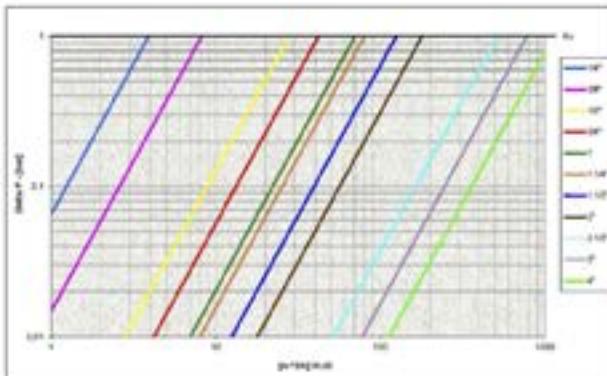
Ball valves are marked CE on handle from 1.1/4" to 2", on body over 2" as follow: CE 1115 cat IIIB+D PS: 5 GAS TS1-20°C TS2: +60°C

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

Pressure Drop Chart



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XZ584U - Rev.0



k.84

full port 1/4"-2"
hot forged brass ball valves**Quality:**

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

Body:

- Valve length according to DIN 3202 M3 specification
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI S705-65) specifications
- Hot forged sand blasted external nickel plated brass body and cap sealed with Loctite® or equivalent threads sealant

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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

PED Directives:

- Assessment according to Pressure Equipment Directive 97/23 CE module B+D by Pascal (1115)

**Threads:**

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

Flow:

- Full port to DIN 3357 for maximum flow

Handle:

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

Working Pressure and Working Temperature:

- 40 Bar (600 PSI)
- non-shock cold working pressure
- -40°C (-40°F) / +170°C (+350°F)
- For use with dangerous fluids temperature rating is -20°C +60°C and pressure rating is 5 Bar
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Stem extension
- T-handle
- Oval lockable handle
- AISI 430 stainless steel handle
- Patented locking device

Upon Request:

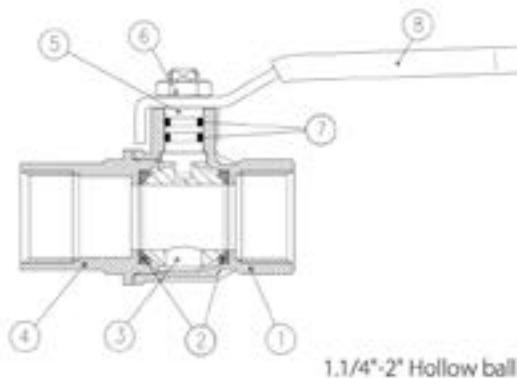
- AISI 316 stainless steel ball
- Glass filled PTFE seals
- Custom Design

Approved by or in compliance with:

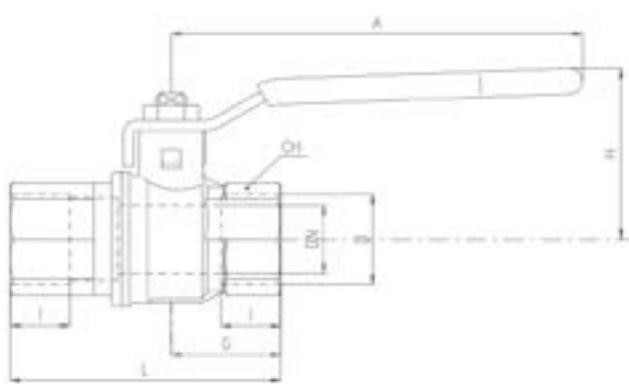
- Danmarks Gasmateriel Prøvning (Denmark)
- SVGW (Swiss)
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- BSI Group

- RoHS Compliant
- DIN-DVGW (Deutschland)
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



PART DESCRIPTION		Q.TY	MATERIAL
1	Nickel plated body (external treatment)	1	CW617N
2	Ball seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	CB4FF
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet® steel handle	1	DD11

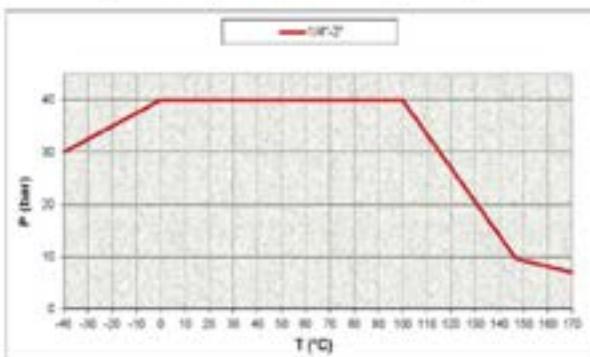


Code	S84B05	S84C05	S84D05	S84E05	S84F05	S84G05	S84H05	S84I05
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN (mm.)	8	10	15	20	25	32	40	50
I (mm.)	12	12	15.5	17	21	23	23	26.5
L (mm.)	50	60	75	80	90	110	120	140
G (mm.)	22.5	22.5	29.5	32	40.5	46.5	51	60.5
A (mm.)	82	82	100	120	120	158	158	158
H (mm.)	38	38	43	50	54	73	79	86
CH (mm.)	20	20	25	31	40	49	54	68.5

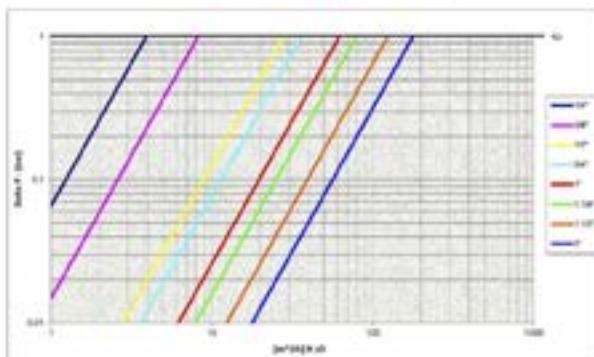
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.
Ball valves are marked CE on handle from 1.1/4" to 2" as follow: CE 1115 cat IIIB+D PS: 5 GAS TS1: -20°C TS2: +60°C

Pressure-Temperature Chart



Pressure Drop Chart



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s.7241L NPT 3-Way with handle

full port 1/2"-1"

hot forged brass ball valves

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

It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement.

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

Quality:

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

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- 3-way L Port design for flow diversion

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of **RuB** pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 300 PSI
- non-shock cold working pressure

Working Temperature:

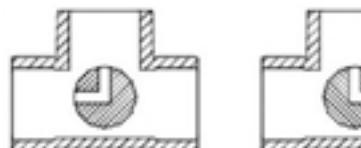
- -4°F / +302°F
- Warning: freezing fluid in the valve may cause severe damage to the valve

Options:

- Rack and Pinion pneumatic actuator (Spring return or double acting)
- s.7241 without handle actuator ready
- Adapter flange kit with screws

Upon Request:

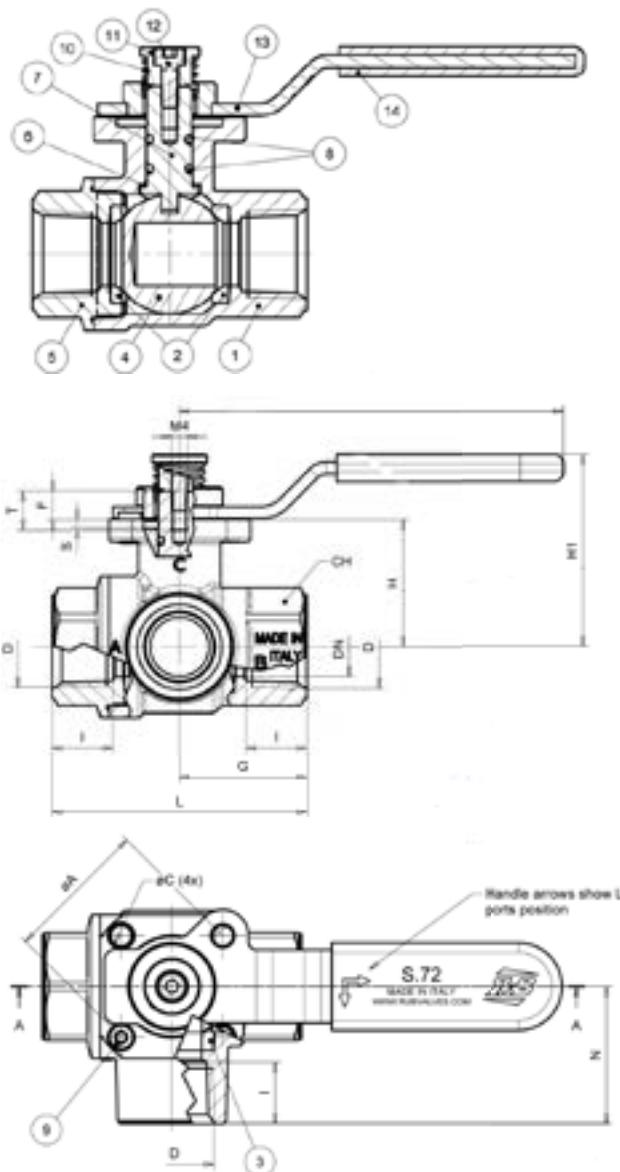
- Custom Design
s72 3-Way "L" port mounting plan



Approved by or in compliance with:

- RoHS Compliant

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Qty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Sand blasted unplated end cap	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw Handle Stop	1	CW617N
10	Spring	1	AISI 302
11	Unplated spring bushing	1	CW617N
12	Stainless steel screw	1	AISI 304
13	Geomet® plated steel handle	1	DD11
14	Black dipped coating (RAL 9005)	1	PVC

Valve code	S72D41L	S72E41L	S72F41L
Size (inch)	1/2 NPT	3/4 NPT	1" NPT
DN(inch)	0.591	0.787	0.984
I (inch)	0.610	0.709	0.827
L (inch)	2.559	3.110	3.642
G (inch)	1.280	1.555	1.831
H (inch)	1.820	1.555	1.673
N (inch)	1.358	1.654	1.949
øA (inch)	1.417	1.417	1.417
øC (inch)	ø0.205 (M6)	ø0.205 (M6)	ø0.205 (M6)
P (inch)	3.937	3.937	3.937
H1 (inch)	1.929	2.210	2.328
S (inch)	0.087	0.087	0.087
T (inch)	0.394	0.394	0.394
F (inch)	0.287	0.327	0.327
CH (inch)	1.063	1.260	1.614

Torque for Actuator Sizing in-lb:

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

Torque correction factors:

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

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



s.7341L NPT 3-Way with handle

full port 1/2"-1" hot forged brass ball valves

In many situations a single multi-port valve can replace several 2-way valves to reduce cost, simplify automation and conserve space. The s.7341L series have a ball seal at every port, and offer a wide variety of possible flow configurations. Positive shutoff can be achieved at any of the exiting ports. By specifying the appropriate ball port configuration, the T Port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications.

Our s73 multi-port valves can reduce the number of valves required in piping systems and can significantly lower overall costs by allowing the replacement of two or three conventional straight-line valves, eliminating excess fittings and simplifying automation.

Quality:

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

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- 3-way T Port design for flow mixing

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of **RuB** pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 300 PSI
- non-shock cold working pressure

Working Temperature:

- -4°F / +302°F
- Warning: freezing fluid in the valve may cause severe damage to the valve

Options:

- Rack and Pinion pneumatic actuator (Spring return or double acting)
- s.7341 without handle actuator ready
- Adapter flange kit with screws

Upon Request:

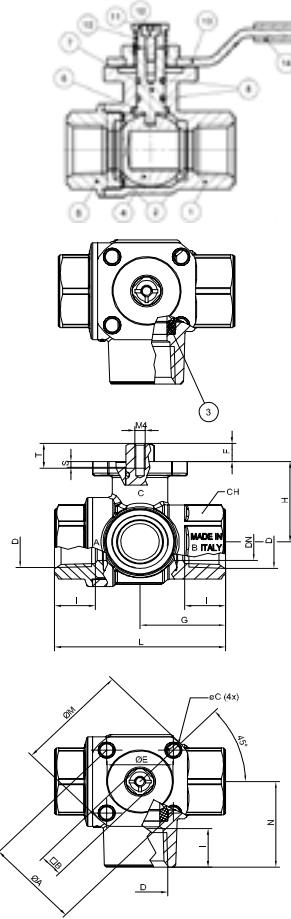
- Custom Design



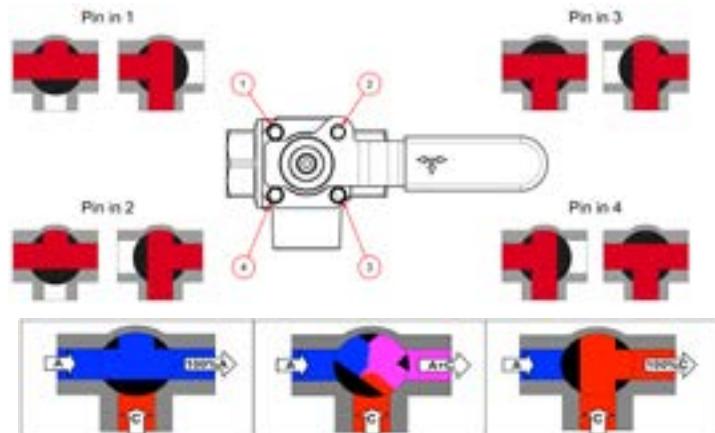
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



With the T Port configuration, a stop pin can be screwed in any of the 4 positions shown in the flange (1, 2, 3 or 4) and the lever will be restricted to 90° of operation. The flow directions are indicated in the diagram below. The lever can be removed and installed to reach any of the four possible positions. The valve also allows a lockable option by placing a lock through the handle ear and through the valve flange.



The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit mixed through A+C.

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	Part Description	Qty	Material
1	Sand blasted unplated body	1	CW617N
2	Seat	2	PTFE
3	Seat	2	PTFE
4	Chrome plated ball	1	CW617N
5	Sand blasted unplated end cap	1	CW617N
6	Washer	1	PTFE carbon filled 25%
7	Nickel plated stem O-ring design	1	CW617N
8	O-Ring	2	FPM
9	Screw Handle Stop	1	CW617N
10	Spring	1	AISI 302
11	Unplated spring bushing	1	CW617N
12	Stainless steel screw	1	AISI 304
13	Geomet® plated steel handle	1	DD11
14	Black dipped coating (RAL 9005)	1	PVC

Code	S73D41L	S73E41L	S73F41L
Size (inch)	1/2	3/4	1
DN (inch)	0.591	0.787	0.964
I (inch)	0.610	0.709	0.827
L (inch)	2.559	3.110	3.642
G (inch)	1.280	1.555	1.831
H (inch)	1.280	1.555	1.673
N (inch)	1.358	1.654	1.949
eA (inch)	1.417	1.417	1.417
eC (inch)	ø0.205 (M6)	ø0.205 (M6)	ø0.205 (M6)
eE (inch)	0.984	0.984	0.984
Square B (inch)	0.354	0.354	0.354
eM (inch)	1.709	1.709	1.709
S (inch)	0.087	0.087	0.087
T (inch)	0.394	0.394	0.394
F (inch)	0.287	0.327	0.327
CH (inch)	1.063	1.260	1.614

Torque for Actuator Sizing in-lb:

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

Torque correction factors:

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

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

For other conditions please inquire of your **RUB** representative or distributor



s.7441L NPT 3-Way with handle

standard port 1/2"-1"

hot forged brass ball valves

The RuB s.7441L is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn of the handle, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation.

It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement.

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

Quality:

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- 3-way L port design for flow diversion

Stem:

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

Seals:

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

Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads



Flow:

- Full port 1/2" size, standard port others

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of **RuB** electric and pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 450 PSI
- non-shock cold working pressure

Working Temperature:

- -4°F / +350°F
- Warning: freezing fluid in the valve may cause severe damage to the valve

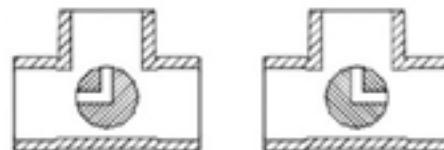
Options:

- Stainless steel trim
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact Power electric actuator
- s.7441 without handle actuator ready
- Direct actuator mounting ISO 5211
- Adapter flange kit with screws

Upon Request:

- Custom Design

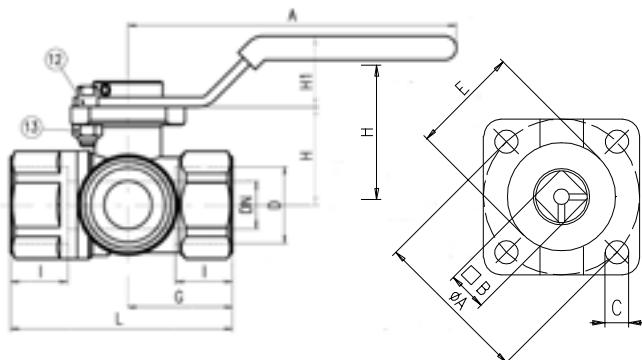
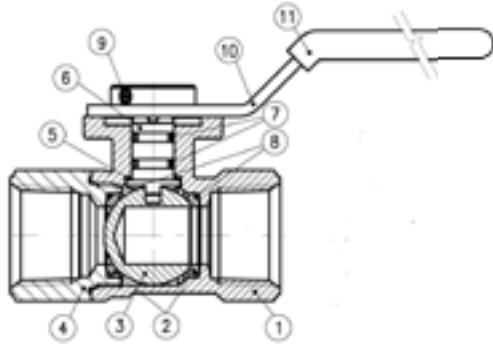
S.74 3-way "L" port mounting plan



Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



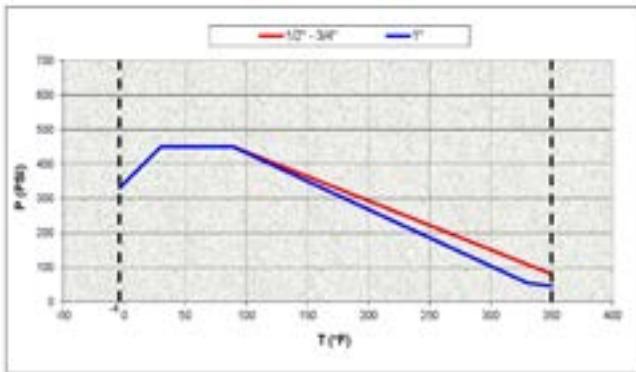
	Part Description	Qty	Material
1	Sand blasted unplated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	Stem O-Ring	2	FPM
8	Seat O-Ring	2	FPM
9	Handle screw	1	Steel 4.8
10	Geomet® plated steel handle	1	DD11
11	Black dipped coating (RAL 9005)	1	PVC
12	Unplated stop	1	CW617N
13	Zinc plated nut	1	Steel 8S

Valve code	ST4D41L	ST4E41L	ST4F41L
D (inch)	1/2	3/4	1
DN(inch)	0.590	0.590	0.787
I (inch)	0.610	0.709	0.826
L (inch)	2.638	2.736	3.228
G (inch)	1.299	1.299	1.614
H (inch)	1.220	1.220	1.516
CH (inch)	1.220	1.220	1.496
DN(inch)	1.417	1.417	1.417
B(inch)	0.354	0.354	0.354
C (inch)	0.220	0.220	0.220
#E(inch)	0.984	0.984	0.984
H1(inch)	0.876	0.876	0.876
A(inch)	4.055	4.055	4.055
Range selection SH-1011 SH-1017	F03	F03	F03

Torque for Actuator Sizing in-lb

Delta P	0 ÷ 450 PSI	
Valve Size	to open	to close
1/2"	27	16
3/4"	27	16
1"	36	20

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.

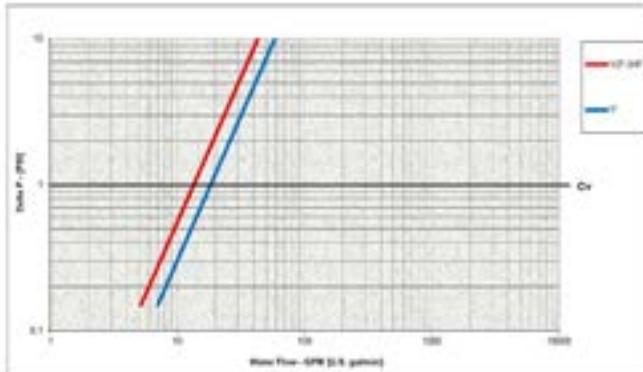
Lubricating oils or liquids 0.8

Dry gases, natural gas, superheated steam 1.5

Slurries or liquids bearing abrasive particles 1.5÷2.5

For other conditions please contact your **RuB** representative or distributor.

Pressure Drop Chart



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XCES7441L - Rev: 0



SNI7352

1/4" Needle Valve

The new **RuB** needle valve proves the state of the art of **RuB** innovation capabilities.

This inexpensive valve is designed to ease flow regulation in all applications where drops are counted like gold!

The flow chart on reverse compares the **RuB** linear curve performance with competition and it is obvious how by counting the number of turns, the operator can easily adjust flow.

All details of the **RuB** needle valve have been optimized to provide utmost performance, reliability and no maintenance.

Another "Install and Forget" **RuB** product.



Features and Specifications:

- Innovative design
- Tamper proof
- Maintenance-free
- Performance guaranteed
- Travel stop on stem prevents stem blow-out
- Easy flow regulation
- One piece body construction
- Hot forged brass body
- FPM stem seal design
- Flp x Flp NPT threads
- 2000 PSI non shock cold working pressure
- Temp range -40°F to +350°F (Warning: freezing of the fluid in the installation may severely damage the valve)

Options:

- Mip x Flp NPT threads SNI7352M

Upon Request:

- 1/8" NPT threads

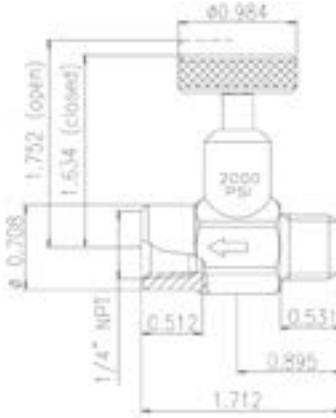
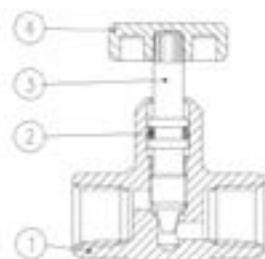
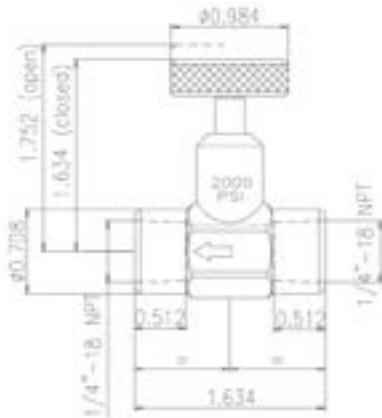


Applications include shut off and throttling for pressure gauges and instruments.

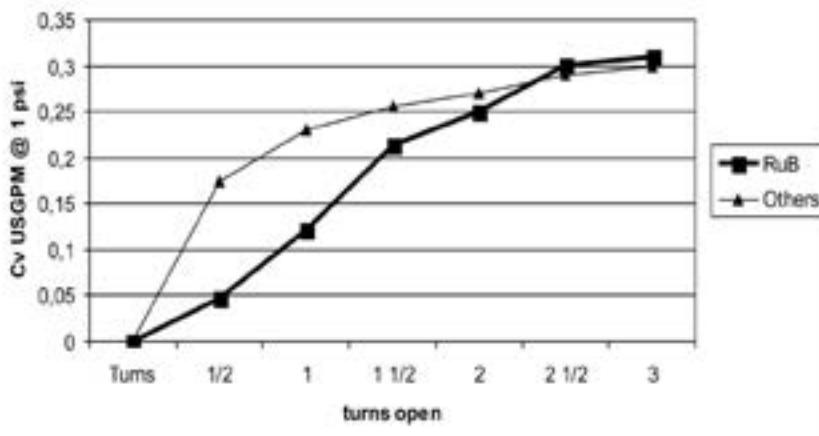
Approved by or in compliance with:

- Underwriters Laboratories (United States & Canada)

NOTE: Approvals apply to specific configurations/sizes only.

Technical Specifications:

PART DESCRIPTION		Q.TY	MATERIAL
1	Unplated valve body	1	CW617N
2	O-Ring	1	FPM
3	Retainer	1	CW617N
4	Handwheel	1	CW617N

Flow Coefficient at Turns Open

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.



s.172 improved DrainLock™

Motor drain compact ball valve

PATENT PENDING



MADE TO ORDER

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

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

Quality:

- 24h 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Screwdriver slot, the slot orientation shows the ball position

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with metacrylate sealant
- Compact design and solid structure
- Finest brass according to EN 12165 and EN 12164 to prevent corrosion

Stem:

- Blowout-proof AISI 316 stainless steel stem
- FPM O-Ring at the stem for maximum safety

Seals:

- Pure PTFE self-lubricating seats

PED Directives:

- The product meets the requirements of PED Directive 97/23 and according to art.3 par.3, it does not require CE marking



Threads:

- M22x1.5 thread with seat for O-ring seal

Handle:

- 90° open / close

Working Pressure:

- 20 Bar (300 PSI)
- non-shock cold working pressure

Working Temperature:

- -20°C (-4°F) / +130°C (+266°F)
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Elbow version with hose connection
- Allen stem

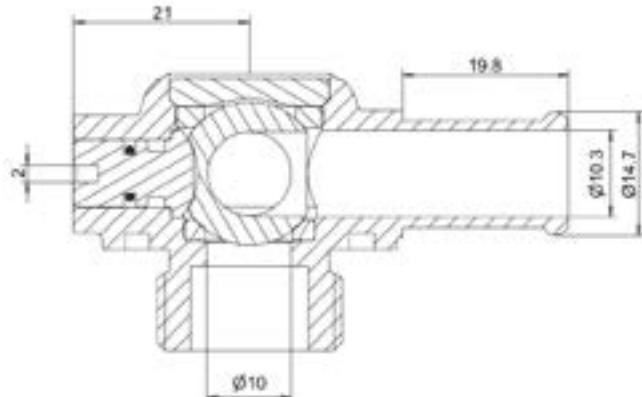
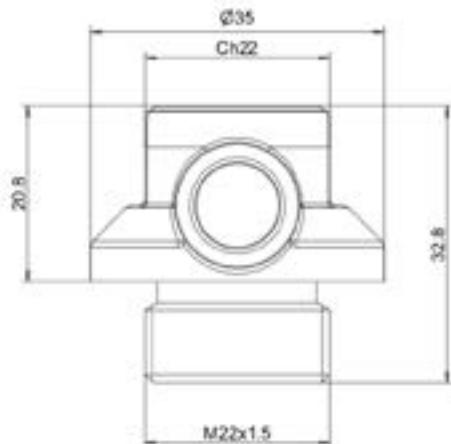
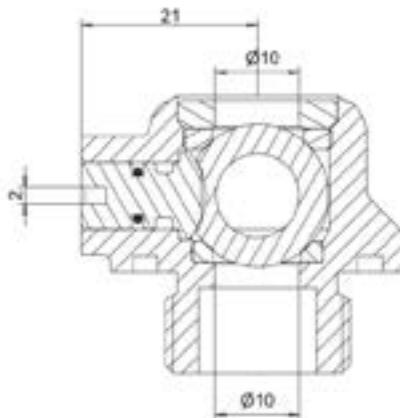
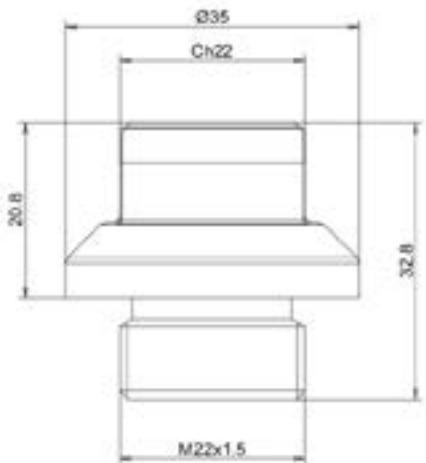
Upon Request:

- AISI 316 stainless steel ball
- Custom Design
- Aluminum body

Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

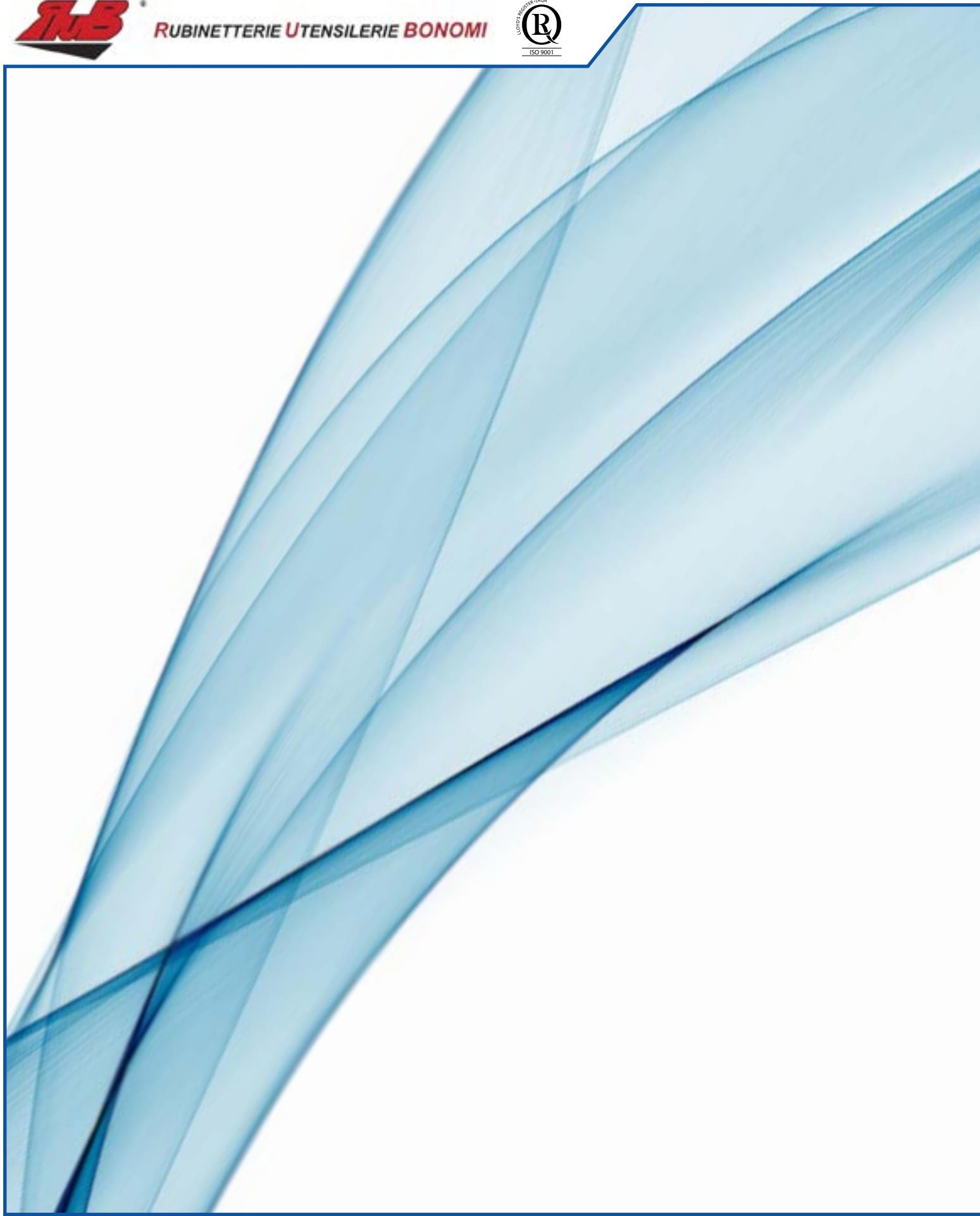
NOTE: Approvals apply to specific configurations/sizes only.

EXAMPLES OF VALVE DIMENSIONS AND CONFIGURATIONS**ELBOW CONFIGURATION****STRAIGHT CONFIGURATION**

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.



RUBINETTERIE UTENSILERIE BONOMI



PNEUMATIC

s.93 NPT Downstream Exhaust - Full Port 1/4"-2"	Page 88
s.35 Mini Valve High Pressure - 1/8"-1/2"	Page 90
s.34 NPT Mini Valve -1/8"-1/2"	Page 92
PR Compact Pneumatic Actuator	Page 94





s.93 NPT downstream exhaust

full port 1/4"-2"

hot forged brass ball valves

Featuring patented tamper-proof lockable handle that has no equal in the market.

Rub s.93 exhausts automatically and continuously downstream air pressure as soon as turned in the closed position.

Valve is lockable in the closed position only, according to Part. 1910.147 safety OSHA (USA) requirements allowing safe maintenance of the air-supplied equipment; when valve is open, one simple 90° turn of the handle shuts flow immediately.

We care for those you care for.



Quality:

- No metal-to-metal moving parts
- Handle clearly shows ball position
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Travel stops on body to avoid stresses at stem

Body:

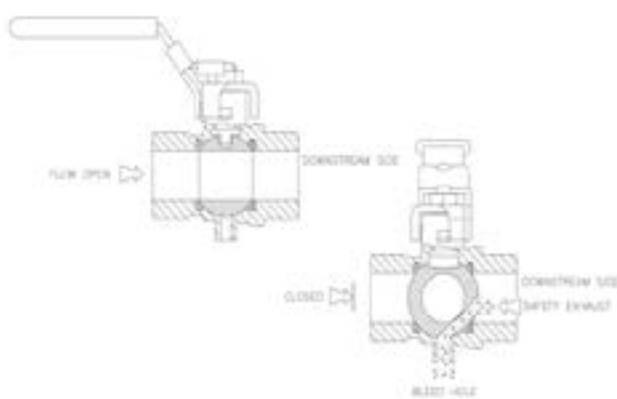
- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent threads sealant
- The valve body includes a tapped downstream depressurization venting outlet to direct exhaust air and assemble mufflers for noise control
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

- Molybdenum filled 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 lockable handle patent n. 7074-B/90 with thick PVC dip coating. Handle coating offers both thermal and electrical protection
- Handle removable with valve in service

Working Pressure:

- 200 PSI
- non-shock cold working pressure

Working Temperature:

- +15°F / +210°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- AISI 430 stainless steel handle
- Non-locking Geomet® carbon steel lever handle
- ISO 7/1 BSPT Taper threads
- EN 10226-1, ISO 228 Parallel Threads
- Safety pin
- Muffler, hose

Upon Request:

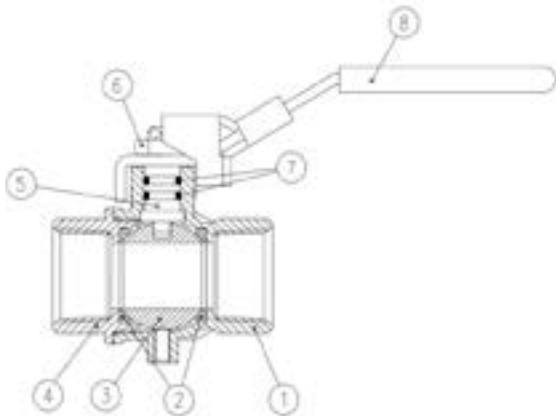
- AISI 316 stainless steel ball
- Custom Design
- T-handle



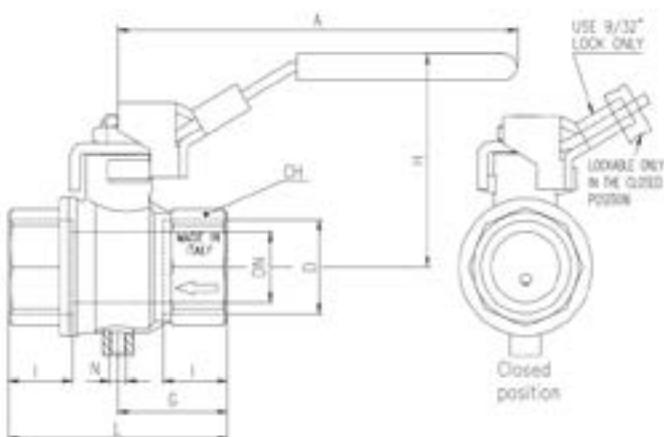
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- Osha Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE molybdenum filled
3	Chrome plated ball	1	CW617N
4	Unplated end cap	1	CW617N
5	Nickel plated stem O-Ring design	1	CW617N
6	Geomet® nut	1	CB4FF
7	O-Ring	2	FPM
8	Light blue PVC coated Geomet® steel lockable handle	1	DD11

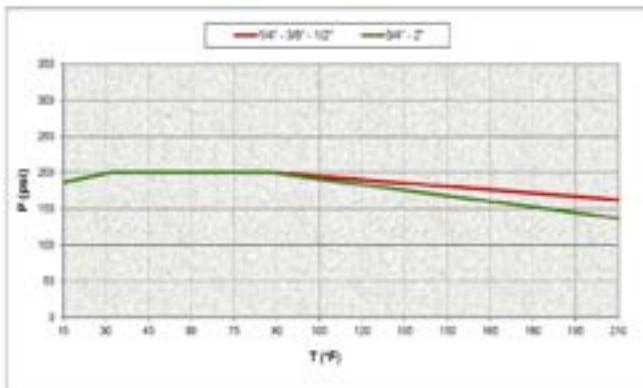


Code	S93B41	S93C41	S93D41	S93E41	S93F41	S93G41	S93H41	S93I41
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
DN(inch)	0.314	0.393	0.590	0.787	0.984	1.280	1.575	1.969
I (inch)	0.472	0.472	0.610	0.669	0.828	0.906	0.906	1.043
L (inch)	1.771	1.771	2.322	2.519	3.188	3.681	4.016	4.764
G (inch)	0.885	0.885	1.161	1.259	1.584	1.831	2.008	2.382
A (inch)	3.759	3.759	3.758	4.574	4.574	6.181	6.181	6.181
H (inch)	1.811	1.811	2.008	2.323	2.480	3.031	3.268	3.543
CH(inch)	0.787	0.787	0.984	1.226	1.574	1.929	2.126	2.697
N	10-32 UNF					1/4" NPT		

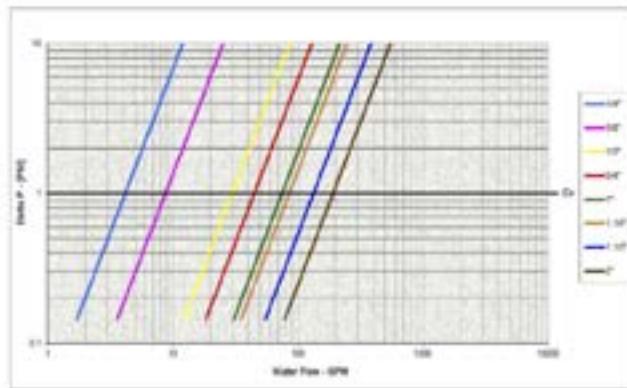
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

Ask for additional information on the whole range of RuB valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



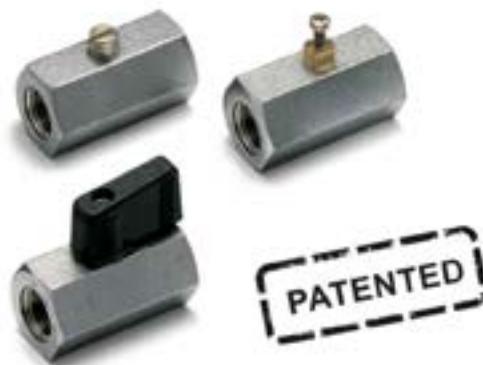
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J225RIN - Rev. 3580



s.35 high pressure

Mini 1/8"-1/2"
drawn brass ball valves



Quality:

- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life
- Each valve is seal tested for maximum safety
- Handle/stem clearly shows ball position

Body:

- One piece drawn sand blasted brass body with extremely compact design
- Finest brass according to EN 12164 specification
- Patent n. 7011-B/89

Stem:

- Blowout-proof brass stem with FPM O-ring

Seals:

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

PED Directives:

- The product meets the requirements of PED Directive 97/23 and according to art.3 par.3, it does not require CE marking



Threads:

- ISO 228 parallel female by female threads

Handle:

- Reinforced nylon black wedge handle removable with valve in service

Working Pressure:

- 30 Bar (450 PSI)
- non-shock cold working pressure

Working Temperature:

- 20°C (-4°F) / +90°C (+200°F)
- +120°C (+250°F) screw driver version and metal wedge handle
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Male by Female threads
- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- Metal wedge handle available in colours red, black, yellow, green, light blue, chrome plated
- Grey wedge handle in Grivory® - high performing polymer
- NPT taper ANSI B.1.20.1 threads
- Additional connection options on demand

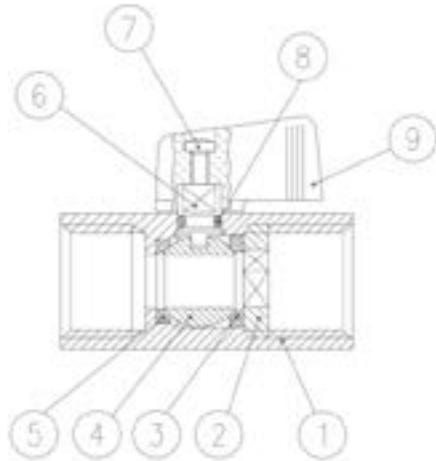
Upon Request:

- Aluminum body
- ISO 7/1 BSPT Taper threads
- Dezinification Resistant brass CW602N

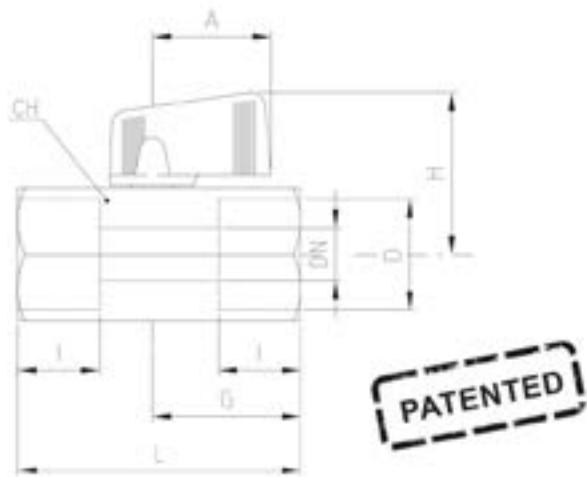
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



Part Description		Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Zinc plated screw	1	CB4FF
8	O-Ring	1	FPM
9	Black handle	1	Nylon glass filled 30%

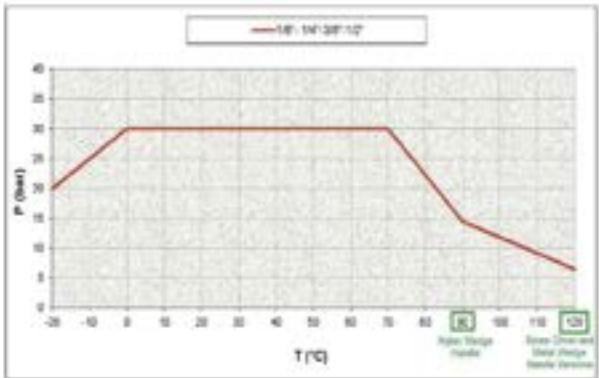


DN shows the nominal flow diameter.

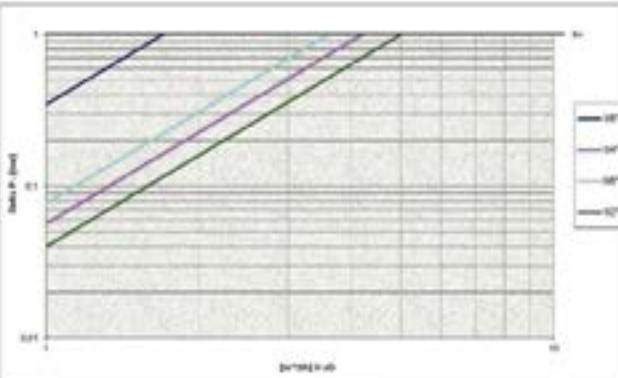
Code	S35AF0	S35BF0	S35CF0	S35DF0
D (inch)	1/8	1/4	3/8	1/2
DN(mm)	6	8	8	10
I (mm)	10	11	11	13
L (mm)	41.5	41.5	41.5	49
G (mm)	22	22	22	26
A (mm)	22.5	22.5	22.5	22.5
H (mm)	31	31	31	33
CH(mm)	21	21	21	25

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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IE35S - Rev. 2580



s.34 NPT

1/8"-1/2"

drawn brass ball valves



Quality:

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

Body:

- One piece drawn sand blasted brass body incorporating stem neck which provides excellent guidance of the stem
- Finest brass according to EN 12164 specification

Stem:

- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Handle:

- Lever and T-handle clearly show ball position
- Reinforced nylon black lever or T-handle removable with valve in service

Working Pressure:

- 200 PSI
- non-shock cold working pressure

Working Temperature:

- -4°F / +200°F
- Warning: freezing of the fluid in the installation may severely damage the valve

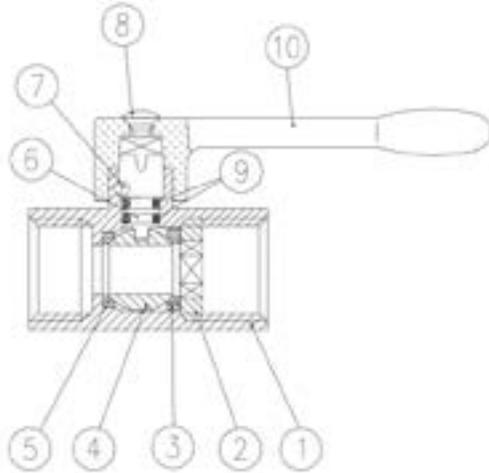
Options:

- Male by Female threads
- Screw driver or wrench operated
- Yellow lever or T-handle
- ISO 228 parallel threads

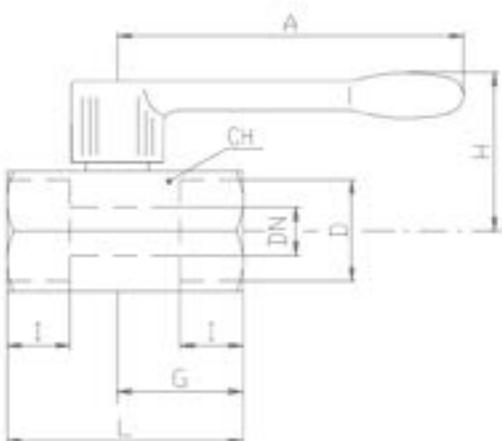
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



	Part Description	Q.ty	Material
1	Chrome plated body	1	CW617N
2	Retainer nut	1	CW617N
3	Retainer seat	1	PTFE
4	Chrome plated ball	1	CW617N
5	Body seat	1	PTFE
6	Unplated stem	1	CW617N
7	Pin	1	AlSi304
8	Chrome plated screw	1	CW617N
9	O-Ring	2	FPM
10	Black handle	1	Nylon glass filled 30%

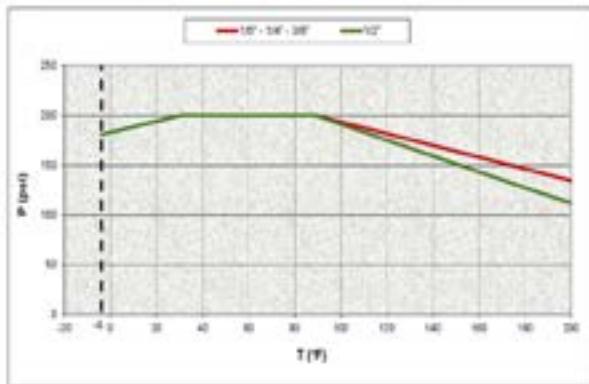


Code	S34AX0	S34BX0	S34CX0	S34DX0
D (inch)	1/8	1/4	3/8	1/2
DN(inch)	0.236	0.314	0.314	0.393
I (inch)	0.354	0.472	0.472	0.610
L (inch)	1.712	1.712	1.712	2.106
G (inch)	0.905	0.905	0.905	1.102
A (inch)	2.834	2.834	2.834	2.834
H (inch)	1.200	1.200	1.200	1.279
CH(inch)	0.826	0.826	0.826	0.984

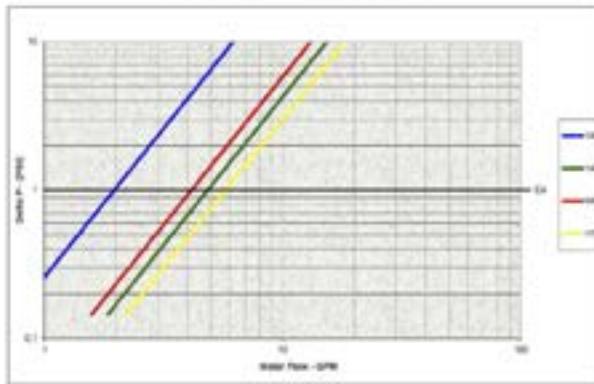
DN shows the nominal flow diameter.

Ask for additional information on the whole range of **Rub** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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ICE34N - Rev. 3580



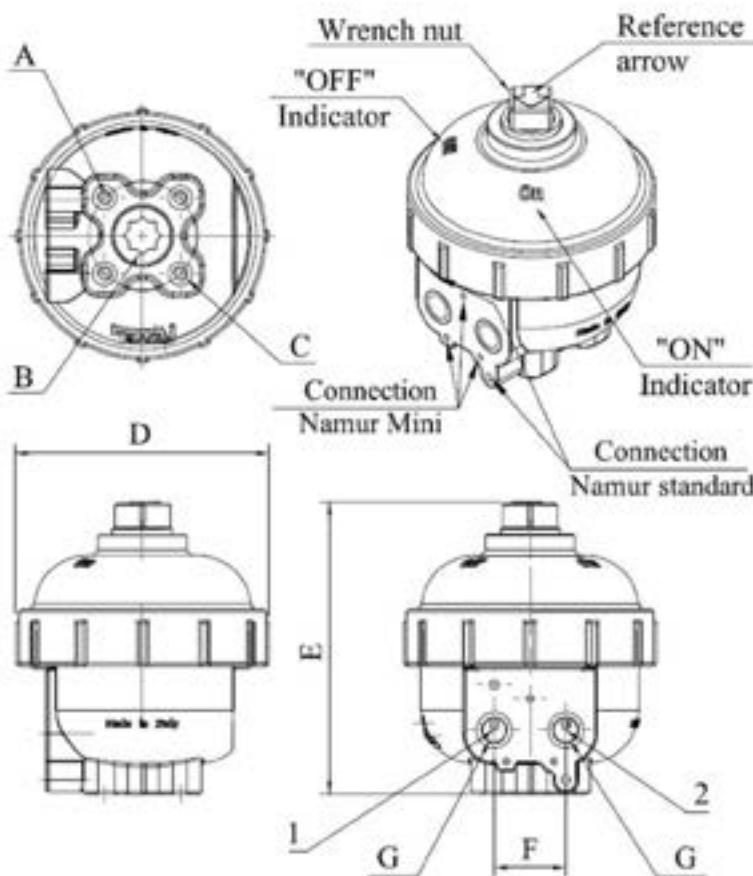
PR

Compact Pneumatic Actuator



Applications

PR is a 90° alternating clockwise actuator and is installed upon devices with ISO 5211 top connection. It is equipped with a square socket key (0.55 inch), engraved with an arrow showing the ON-OFF position and enabling manual operations.



Operation:

PR is disable which means that, in case of pressure lack, the actuator remain in its position.

Pneumatic:

Feed with neutral, non-aggressive gases, preferably slightly oiled compressed air through the inlet marked as Nr 1 in the drawing, the shaft will 90° rotate and the arrow will be positioned on "OFF".

By inverting the feeding procedure through the inlet marked as Nr 2 in the drawing, the shaft will rotate 90° in the opposite direction and the arrow will be positioned on "ON".

Manual:

With a 0.55 inch wrench you can manually turn the shaft on "OFF" or "ON" position

Technical Details:

Operating pressure: min 40 PSI- max 120 PSI

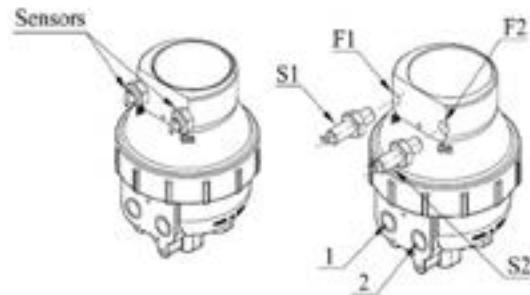
Working temperature: min -4°F- max +266°F

Type: Double Acting

Rotation angle: 90°

Material of the actuator: Polymer

Material of sensors-holder: Aluminum alloy with anodic oxidation protection



CODE	DIMENSION IMPERIAL (in)								Weight [Kg]
	A	B	C	D	E	F	G	L	
PR4-1	F03	0.35	M5	ø3.35	3.90	0.94	1/8 NPT	0.19-0.27	0.95
PR4-2	F05	0.43	M6	ø3.35	4.02	0.94	1/8 NPT	0.19-0.27	1.07
PR4-X3	F05	0.55	M6	ø4.41	4.68	0.94	1/8 NPT	0.19-0.31	1.72
			M8					0.31-0.43	

CODE	Torque Actuator - Imperial						
	Pressure (PSI)	40	60	70	90	100	120
PR4-1/PR4-2	Torque (lb-in)	85.9	125.7	165.5	205.3	245.2	285
PR4-X3	Torque (lb-in)	242.5	338.1	434.6	531	624	720.5

Installation:

- 1) Put the actuator in "ON" position.
- 2) Place it on the ISO top connection of the valve and screw it (please check "C" column of the Dimensions Table for the pertinent length of the screw)
- Attention!** Please check carefully "L" column of the Dimensions Table for the maximum screwing lenght (in inch)
- 3) Screw the correct fittings (check "L" column of the Dimensions Table) into the inlets and connect the pipe of the compressed air; if threaded seals are installed, we recommend to add liquid sealing material, or install fittings equipped with seals, in order to avoid undue torque movement (do not exceed 70.8 in-lb)
- 4) Threaded inlets are not suitable for any alternative purpose
- 5) Namur solenoid valve: connect the Namur solenoid valve to the actuator with self-tapping screws

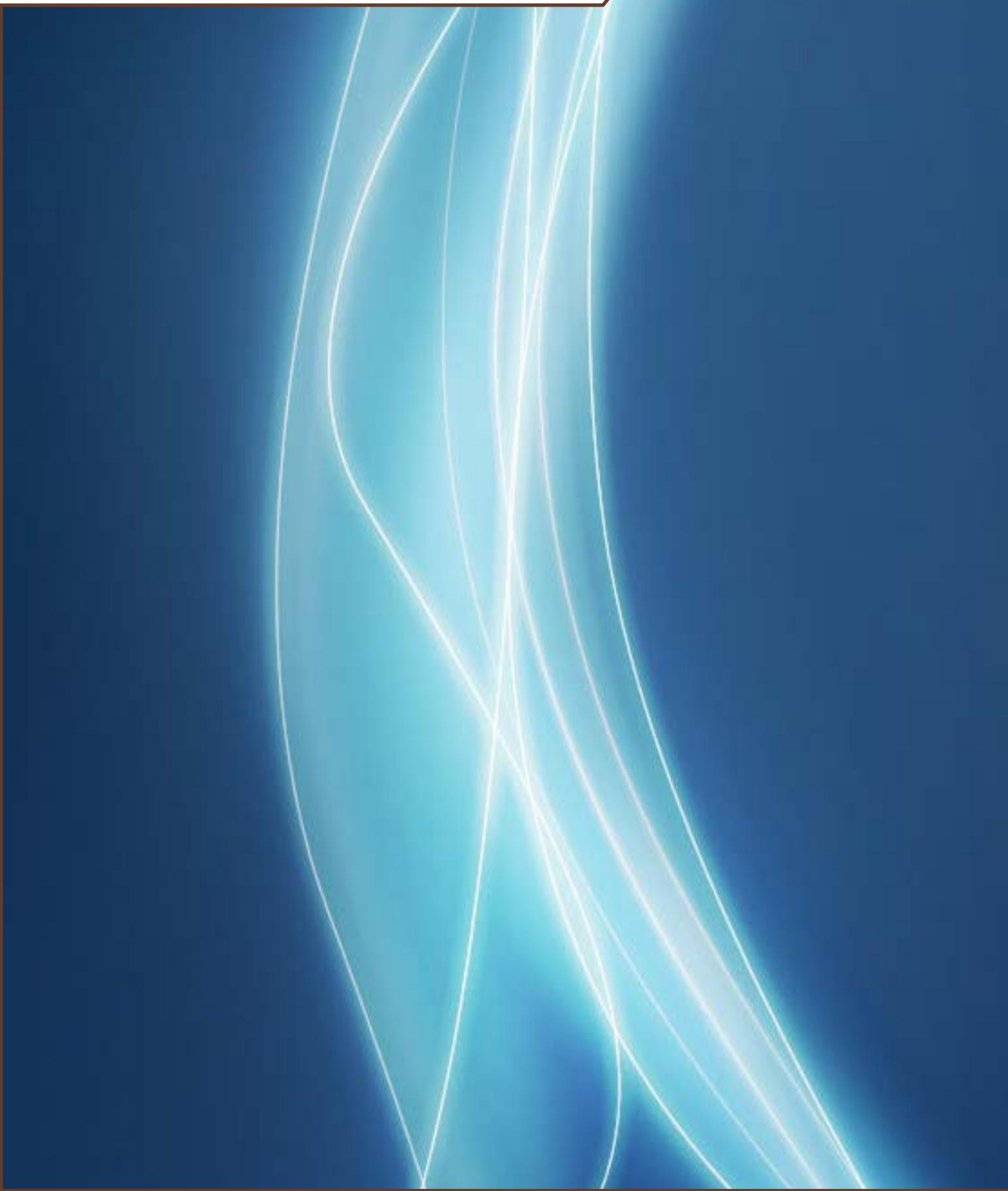
Sensors:

- Feed the actuator with compressed air through the inlet nr°1, screw the sensor "S2" to the limit into "F2" hole and partially unscrew it (1/2 turn). Fix the sensor with a nut
- Switch the compressed air supply from inlet nr°1 to inlet nr°2, screw the sensor "S1" to the limit into "F1" hole and partially unscrew it (1/2 turn). Fix the sensor with a nut
- Connect the wires according to the enclosed instruction sheet

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RUBINETTERIE UTENSILERIE BONOMI



ACTUATION

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s.6441 NPT Brass Trim - Full Port 1/2"-4"	Page 126
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s.7341 NPT 3 Way - Full Port 1/2"-1"	Page 130
s.7441 NPT 3 Way - Standard Port 1/2"-1"	Page 132
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COMPACT POWER

Configurations:

**1**s.31

- Flow: Mini
- 2 Way
- Direct Mount

2s.6439 LT

- Flow: Full
- 2 Way
- ISO 5211 F03 Flange

3s.7441 3-Way

- Flow: Standard
- 3 Way
- ISO 5211 F03 Flange

Mini up to 3/4"

Full up to 1.1/4"

Standard up to 1"

COMPACT POWER

Assembly instructions:

Quick Direct Assembly on RuB s.31 mini valve:

1. Push the spring clip in order to set the actuator in open position

2. Assemble the actuator on top of valve

3. Pull spring clip to lock actuator on valve



Assembly on RuB s.64 and s.74 valves:

1. Position the ball of the valve to match the position (open / closed) of the actuator

2. Mount stem adaptor (B) and F03 adaptor (A) on top of valve flange and fix it with two screws and nuts (C)

3. Push the spring clip in order to set the actuator in open position

4. Assemble the actuator on top of adaptor

5. Pull spring clip to lock actuator on valve





COMPACT POWER

Electric Actuator

Technical Features:

- Suitable for **RuB** actuatable valves up to 1.1/4" size (only for s.64 LT)
- Compact package to fit in restricted spaces
- Power supply 110V AC 60Hz
- Motor power consumption 10W
- Torque output up to 44 in-lb
- Operation time 20 to 25 sec
- Working temperature -4°F +180°F
- Protection class IP65 comparable to NEMA 4X
- Micro-switches for open-close signals
- Micro-switches can pass up to 1A
- Reversing motor
- Direct mount on valve for perfect shaft alignment
- Positive orientation between ball valve and actuator
- Actuator easily removable for manual operating
- Visual position indicator
- Corrosion resistant plastic housing
- Actuator has successfully passed 100,000 cycle life tests
- Duty cycle 60%

Options:

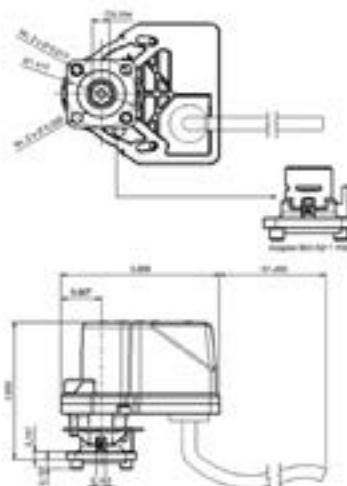
- Power supply 230V AC 50Hz
- Power supply 24V AC, 50-60Hz
- Adaptor F03 square 0,315 inch

Example:

CPSB3 is an CP actuator, 44 in-lb, 110V AC, 3 WIRES with connection screw driver male and adaptor ISO 5211 F03 square 0,354 inch

CPSB3-1 is an CP actuator, 44 in-lb, 110V AC, 3 WIRES with connection screw driver male and adaptor ISO 5211 F03 square 0,315 inch

Dimension inch:



How to order:

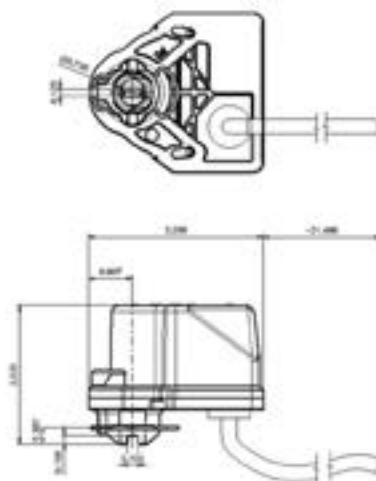
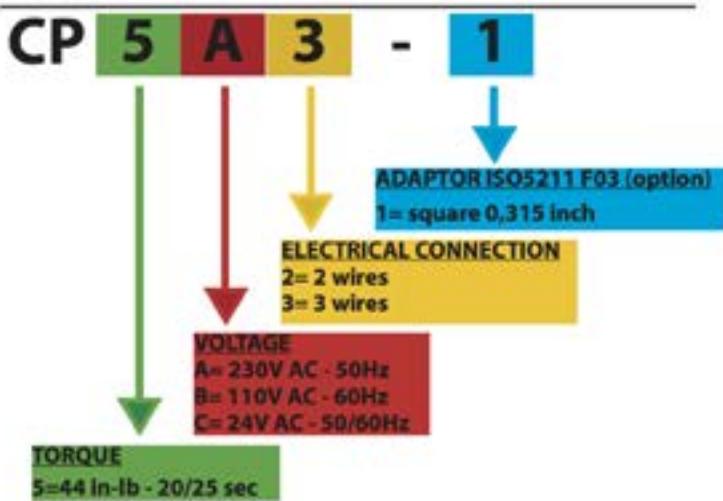
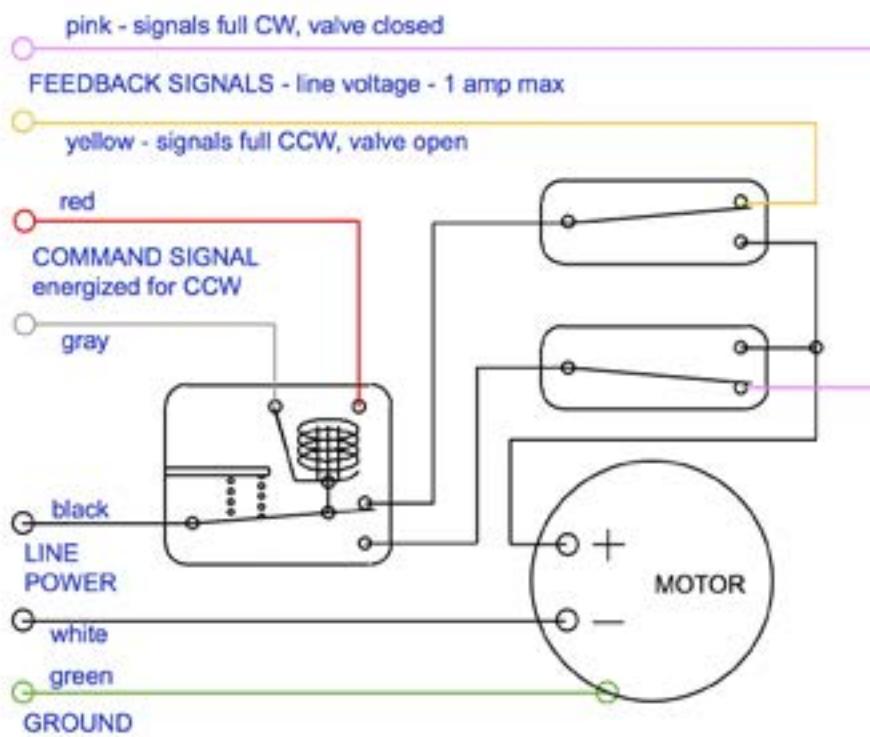
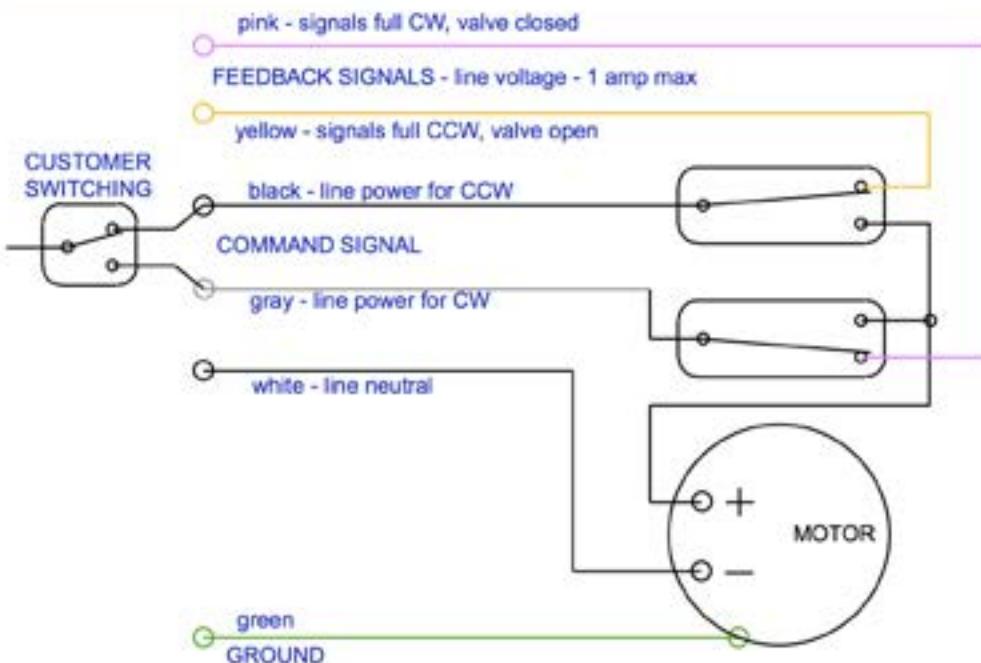


DIAGRAM FOR 2-WIRE CONTROL (CW CLOSING)

2 point command : the command is made by a simple switch or button (manually or automatically operated e.g. Traditional thermostat). Closing the control switch will cause the actuator to travel to the full CCW position. Opening the control switch will cause the actuator to travel to the full CW position. If the actuator is mounted on a ball valve, closing the control switch will open the ball valve, and vice versa. Upon request, the command voltage may differ from the motor power voltage.

DIAGRAM FOR 3-WIRE CONTROL (CW CLOSING)

Note: If the limit switch signals are not to be used the yellow and pink wires must be capped to prevent accidental short circuits

3 point command: the command is made by a switch (manually or automatically operated e.g. 3 points thermostat), which diverts the voltage to the opening wire or to the closing wire reaching the actuator; the switch may be on open or on closed position; using a specific control, engine can stop in any intermediate position.



COMPACT POWER

& s.31 Mini Valve

This newly engineered valve features all the good characteristics of the s35 **RuB** mini valve, in particular:

Technical Features:

- Strong one piece body construction
- Finest brass according to EN 12165 and EN 12164 specifications
- Chrome plated ball for longer life
- Dual sealing system allows valve to be operated in either direction making installation easier
- Blowout-proof brass stem
- Pure PTFE self-lubricating seats
- Two FPM O-rings at the stem for maximum safety
- Compatible with most industrial fluids including those too viscous for pilot operated valves
- 100% seal test guaranteed in accordance to EN12266-1 RATE A in either direction
- NPT taper ANSI B.1.20.1 threads
- Silicone-free lubricant
- No metal-to-metal moving parts
- No maintenance ever required
- Shell rating: 600 PSI non-shock cold working pressure
- Seat rating: Delta P max permissible 230 PSI
- Can operate also in vacuum line
- Range: -4°F +250°F temperature (Warning: freezing of the fluid in the installation may severely damage the valve)



Torque for Actuator Sizing

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

Options:

- ISO 7/1, BS 21 BSPT Taper threads
- EN 10226-1, ISO 228 parallel female by female threads

Approved by or in compliance with:

- UkrSepro (Ukraine)
- RoHS compliant
- Water Regulations Advisory Scheme (United Kingdom)



Torque correction factors

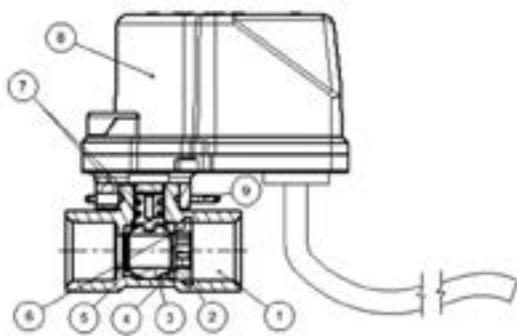
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

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

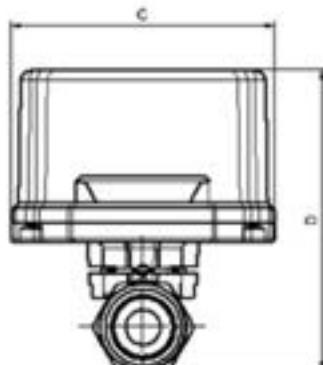
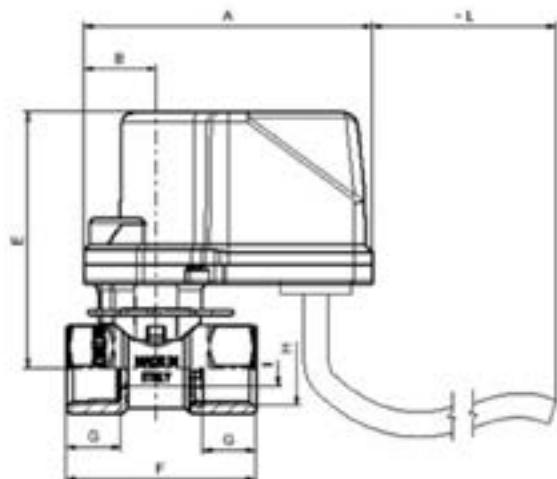
Lubricating oils or liquids	0.8
Dry gases, natural gas, superheated steam	1.5
Slurries or liquids bearing abrasive particles	1.5-2.5

For other conditions please inquire of your **RuB** representative or distributor.

NOTE: Approvals apply to specific configurations/sizes only.

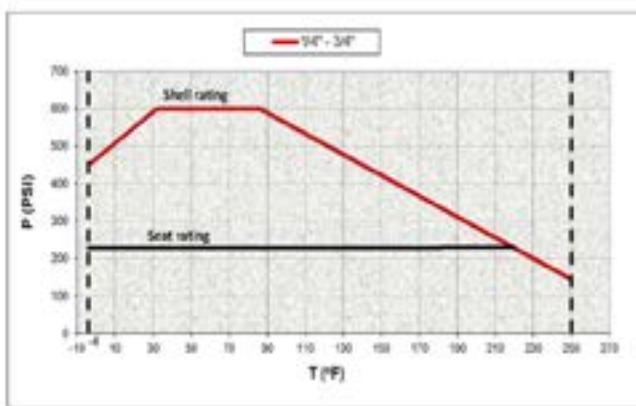


PART DESCRIPTION	Q.ty	Material
1 Unplated body	1	CW617N
2 Unplated stem O-Ring design	1	CW617N
3 Chrome plated ball	1	CW617N
4 Retainer seat	1	PTFE
5 Body seat	1	PTFE
6 Unplated retainer nut	1	CW617N
7 O-Ring	2	FPM
8 Compact power electric actuator	1	---
9 Spring clip	1	AISI304

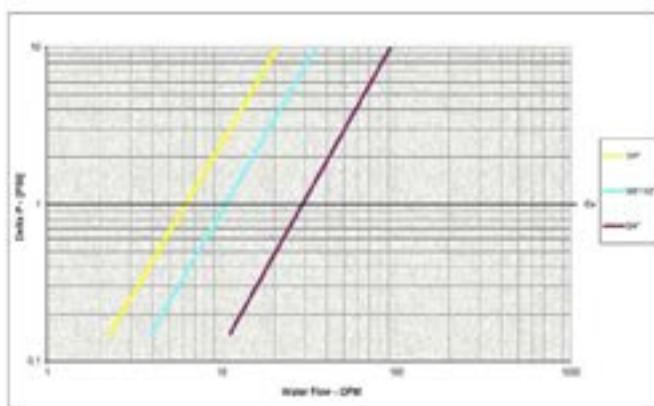


Size	1/4	3/8	1/2	3/4
A[inch]	3,209	3,209	3,209	3,209
B[inch]	0,807	0,807	0,807	0,807
C[inch]	2,929	2,929	2,929	2,929
D[inch]	3,346	3,346	3,346	3,583
E[inch]	2,854	2,854	2,854	2,972
F[inch]	1,799	1,799	2,106	2,417
G[inch]	0,472	0,472	0,610	0,669
H	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT
I[inch]	0,315	0,394	0,394	0,500
L[inch]	31,496	31,496	31,496	31,496
Threads standard	ANSI B1.20.1			

Pressure-Temperature Chart



Pressure Drop Chart





COMPACT POWER

& s.6439LT Full Port

This **RuB** ball valve is specifically designed for heavy duty actuation and offers upmost reliability and performance, in particular:

Technical Features:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- 100% full port for maximum flow
- 100% seal test guaranteed in accordance to EN12266-1 RATE A
- Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design
- Dual sealing system allows valve to be operated in either direction making installation easier
- Stainless steel ball for longer life
- No metal-to-metal moving parts
- Blowout-proof stainless steel stem
- Two FPM O-rings at the stem for maximum safety
- No maintenance ever required
- NPT taper ANSI B.1.20.1 female by female threads
- Silicone-free lubricant on all seals
- Shell rating: 600 PSI non-shock cold working pressure
- Seat rating: Delta P max permissible 230 PSI only for 1" and 1.1/4" sizes
- Range: -4°F +350°F temperature (Warning: freezing of the fluid in the installation may severely damage the valve)

Options:

- Special valve configurations available upon request
- s.6441 configuration featuring NPT taper ANSI B.1.20.1 female by female threads, unplated body, reinforced seats, brass ball and stem
- Rack and pinion pneumatic actuator (spring return or double acting)
- Compact Power electric actuator

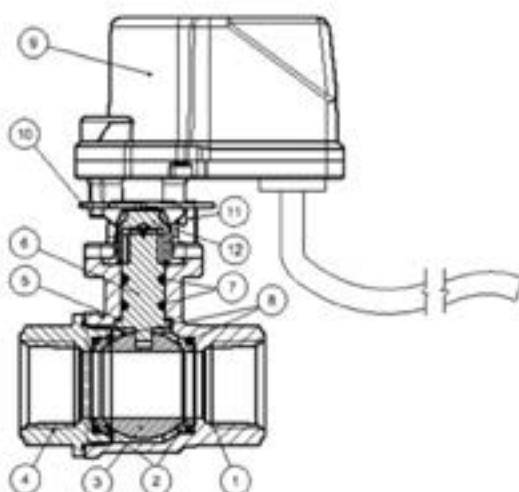


Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

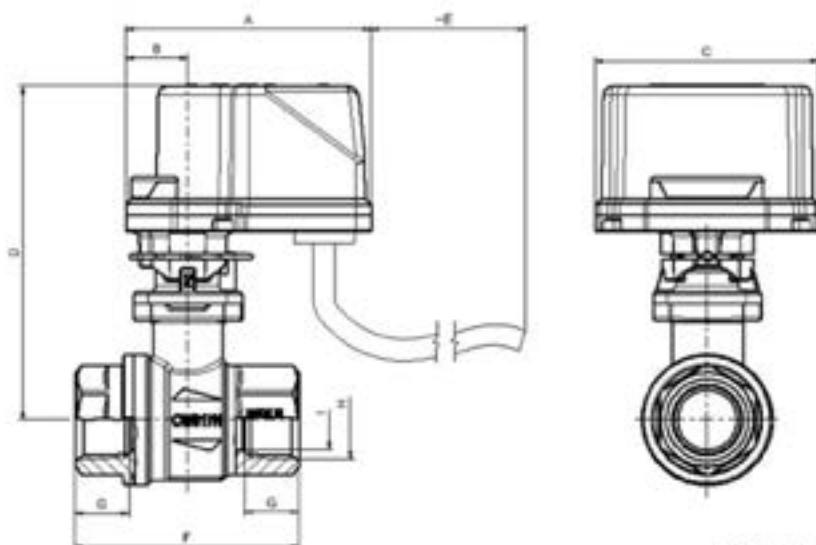


NOTE: Approvals apply to specific configurations/sizes only.



Part description	Q.ty	Material
1 Unplated body	1	CW617N
2 Seat	2	Ptfe graphite* filled 15%
3 Stainless steel ball	1	AISI316
4 Unplated end cap	1	CW617N
5 Washer	1	Ptfe carbon filled 25%
6 Stainless steel stem O-Ring design	1	AISI316
7 O-Ring	2	FPM
8 O-Ring	2	FPM
9 Compact power electric actuator	1	-
10 Spring clip	1	AISI 304
11 Adaptor ISO 5211 F03	1	Polycarbonate
12 Transmission motion	1	CW617N

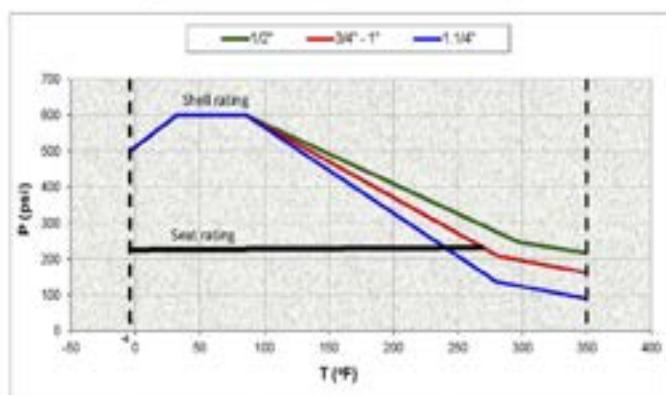
*For 1" and 1.1/4" sizes material seats is carbographite



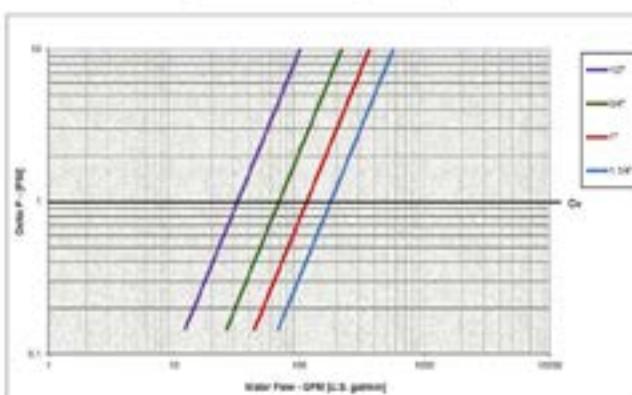
Valve Size	1/2"	3/4"	1"	1.1/4"
A (inch)	3.209	3.209	3.209	3.209
B (inch)	0.807	0.807	0.807	0.807
C (inch)	2.914	2.914	2.914	2.914
D (inch)	4.055	4.370	4.527	4.803
E (inch)	31.496	31.496	31.496	31.496
F (inch)	2.598	2.933	3.562	4.094
G (inch)	0.610	0.708	0.826	0.905
H	1/2" NPT	3/4" NPT	1" NPT	1.1/4" NPT
I (inch)	0.590	0.787	0.984	1.259

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



Seat rating: Delta P max permissible 230 PSI only for 1" and 1.1/4" sizes



COMPACT POWER

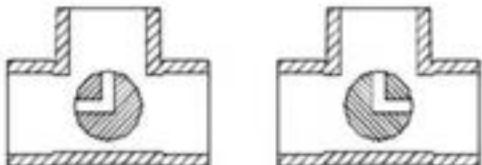
& s.7441 3 Way

RuB s.7441 range is the right choice for fluid diversion. It is designed with robust maintenance-free components ensuring ease of operation and safety.

Technical Features:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- 3-way L design for flow diversion
- NPT taper ANSI B.1.20.1 female by female threads
- Full port 1/2" size, standard port others
- 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
- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety
- Reinforced PTFE self-lubricating seats with flexible-lip and wear compensation design
- Range: -4°F/+350°F temperature (Warning: freezing of the fluid in the installation may severely damage the valve)
- 450 PSI non-shock cold working pressure

S.74 3-way "L" port mounting plan



Options:

- Stainless trim
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact power electric actuator
- Lockable handle
- Direct actuator mounting ISO 5211
- Adapter flange kit with screws
- Special valve configurations available upon request

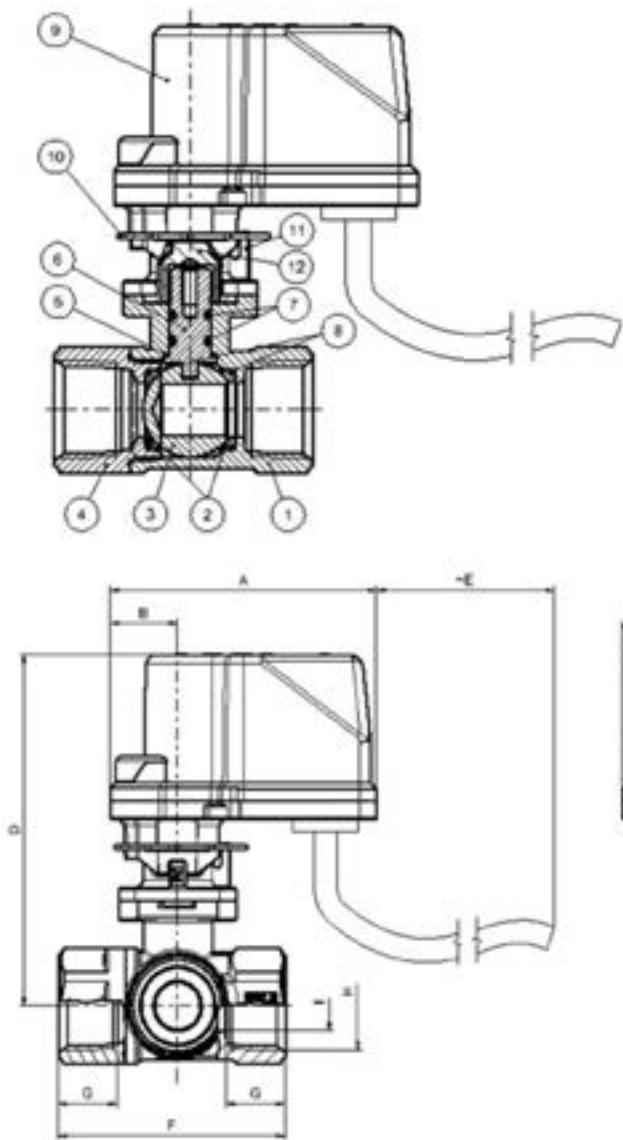
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)



NOTE: Approvals apply to specific configurations/sizes only.

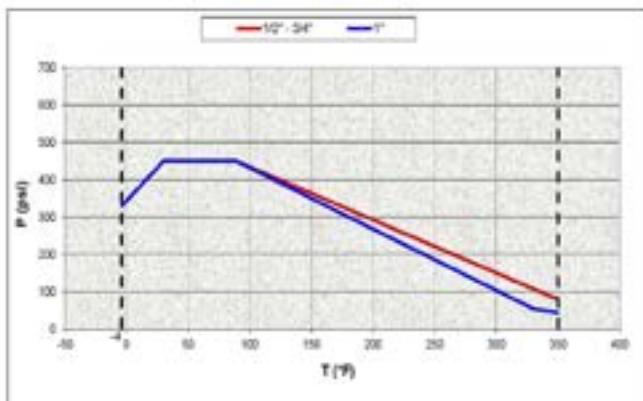
Part description	Q.ty	Material
1 Unplated body	1	CW617N
2 Seat	2	Ptfe graphite filled 15%
3 Chrome plated ball	1	CW617N
4 Unplated end cap	1	CW617N
5 Washer	1	Ptfe carbon filled 25%
6 Nickel plated stem O-ring design	1	CW617N
7 O-Ring	2	FPM
8 O-Ring	2	FPM
9 Compact power electric actuator	1	-
10 Spring clip	1	AlSi 304
11 Adaptor ISO 5211 F03	1	Polycarbonate
12 Transmission motion	1	CW617N



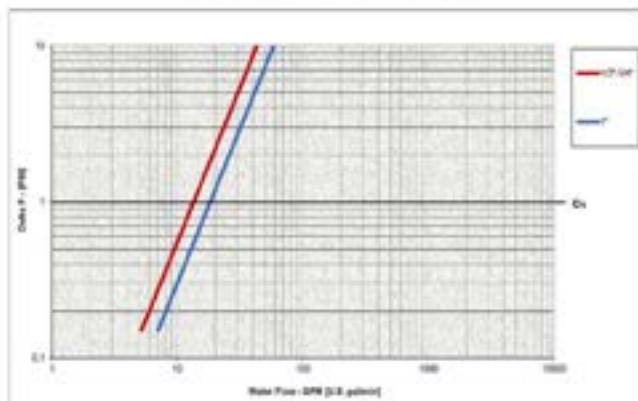
Valve Size	1/2"	3/4"	1"
A (inch)	3.209	3.209	3.209
B (inch)	0.807	0.807	0.807
C (inch)	2.914	2.914	2.914
D (inch)	4.055	4.055	4.370
E (inch)	31.496	31.496	31.496
F (inch)	2.638	2.736	3.228
G (inch)	0.610	0.709	0.826
H (inch)	1/2" NPT	3/4" NPT	1" NPT
I (inch)	0.590	0.590	0.787

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

Pressure-Temperature Chart



Pressure Drop Chart



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X75CPG - Rev. 2580



E-Tork

150 And 300 In-Lb
Heavy Duty Electric Actuators
For 1/2" - 2" Ball Valves



Technical Features

- Direct mount on **RuB** ball valves, for a compact package and perfect shaft alignment
- 50% rated duty cycle reversing motor with thermal overload protection
- Rugged corrosion resistant construction with aluminum housing, durable epoxy/polyurethane
- Coating, and 316 stainless shaft and fasteners
- Manual override shaft - stainless steel type 316
- Can be wired in parallel with other
- E-Torks – separate circuits not required
- ISO 5211 mounting
- Fast, simple travel adjustments
- 2 limit switches for travel indication
- Heat treated steel gearing, lubricated for life
- 180° travel capability
- NEMA 4 and 4X enclosure

Options:

- Up to 2 additional limit switches

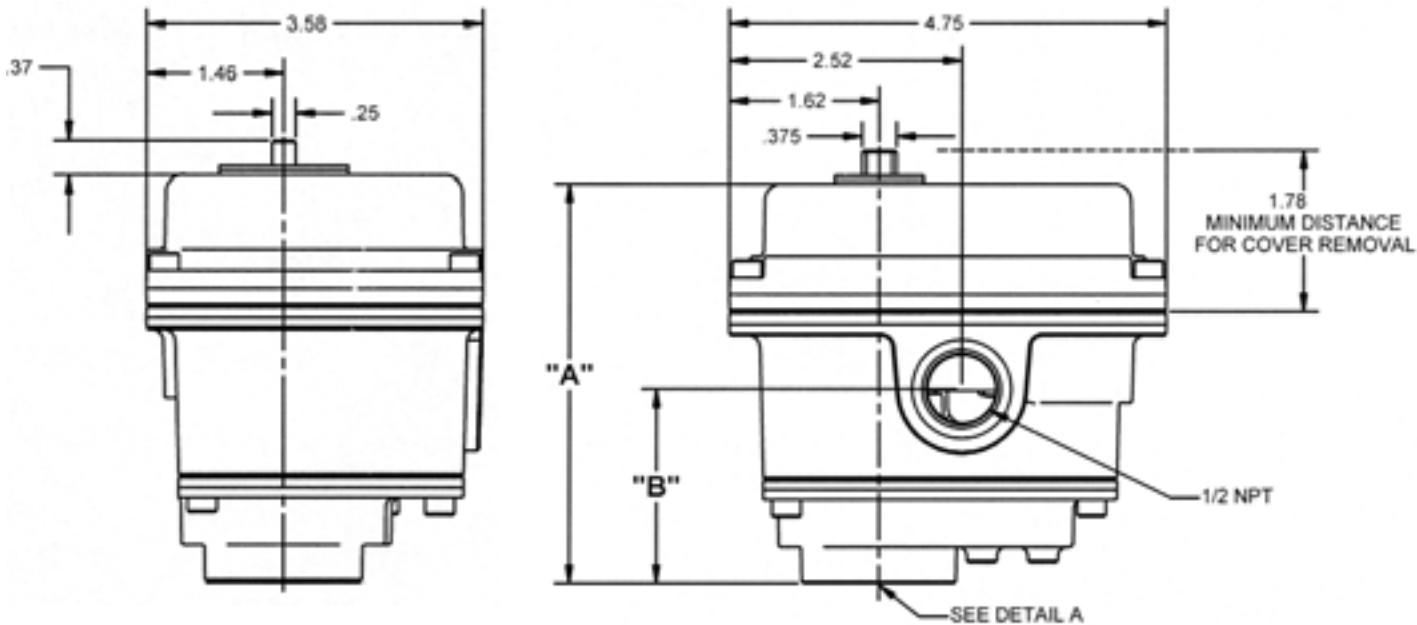
Service limits

Imperial System	
Voltage	115 VAC 60 Hz
Temperature (°F)	-40°F +150°F

Torque and Speed

Model	Torque in-lb	Seconds 90°
ET-1	150	2.5
ET-2	300	6

Dimension inch



MODEL	A	B	C	D	E	F	LOCKED ROTOR	ISO FLANGE	WEIGHT LBS
ET-1	4.35	2.11	.354	.53	1.417	M5 x .44	.5A	F03	4
ET-2	5.00	2.76	.551	.69	1.969	M6 x .46	.5A	F05	4



ET Actuator with s.134 SS Ball Valve



EA

Pneumatic Actuators for 1/2" - 4" quarter turn valves



Technical Features

- ISO 5211 direct mount on valve
- NAMUR pads for direct mount of solenoid and limit switch
- Pilot ring for perfect alignment of shaft and stem
- Extruded aluminum body: hard anodized cylinder bore rock hard and glass smooth
- Nickel plated steel shaft
- Stainless steel fasteners
- High tensile long life return springs
- Visual position indicator
- Indoor or outdoor installation
- Single massive travel stop on one end eliminates need of balancing stop on both ends (EA sizes 2-7)
- Fast field conversion between double acting and spring return, fail open or fail closed
- Minimum ambient temperature while actuator is at rest: -35°C (-31°F)

Service limits

Imperial System			Metric System		
	Min	Max		Min	Max
Pressure (PSI)	40	150	Pressure (Bar)	3	10
Temperature (°F)	0	175	Temperature (°C)	-20	80

Accessories

- Limit Switch Box
- Solenoid Valves
- Visual position indicator
- Link kit
- Springs



Limit Switch Box



Solenoid Valve



Visual position indicator



Link Kit

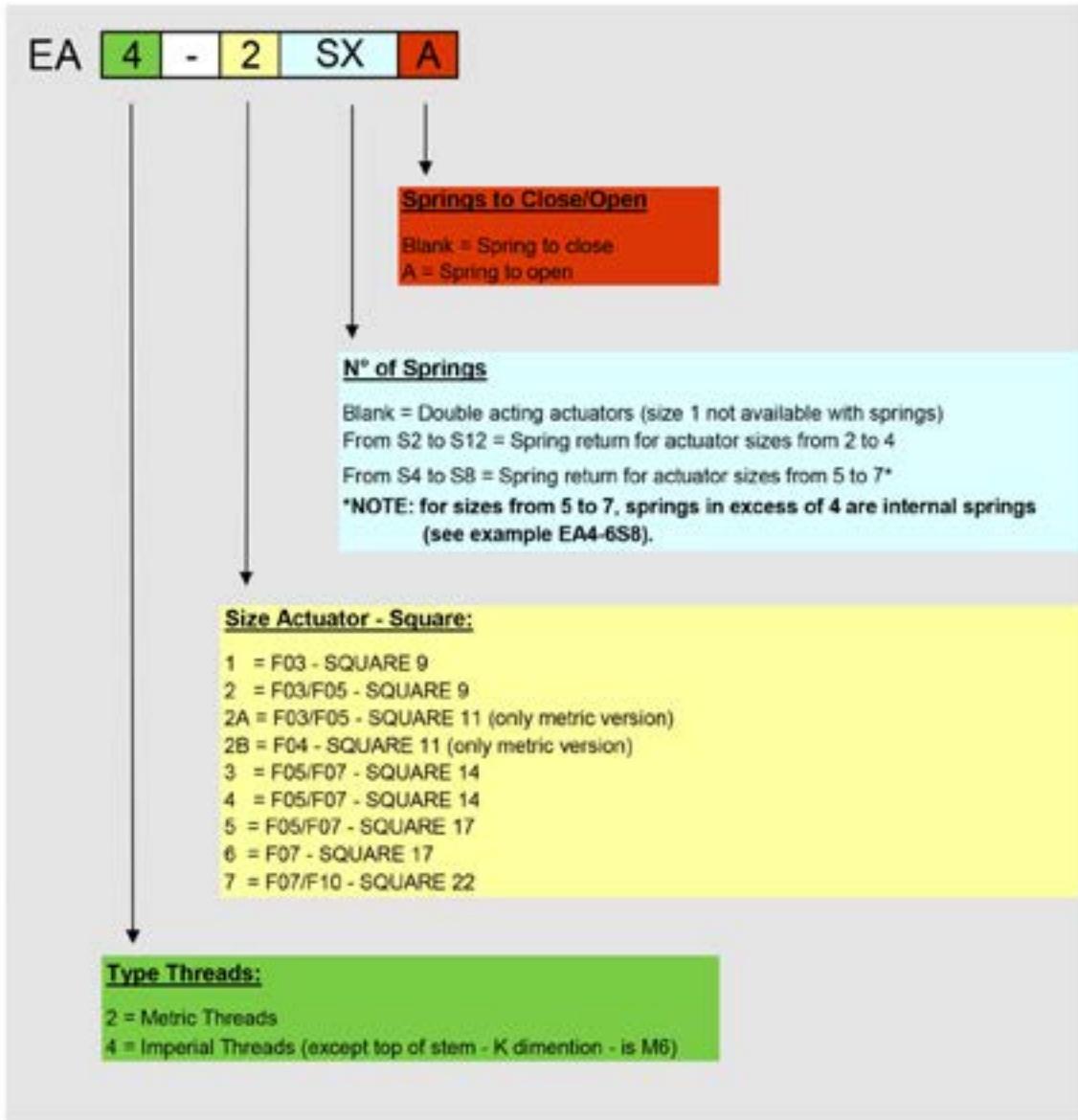


Springs

Ask for additional information on the whole range of RUB valves and accessories.

Consult with your supplier for special applications.

How to order

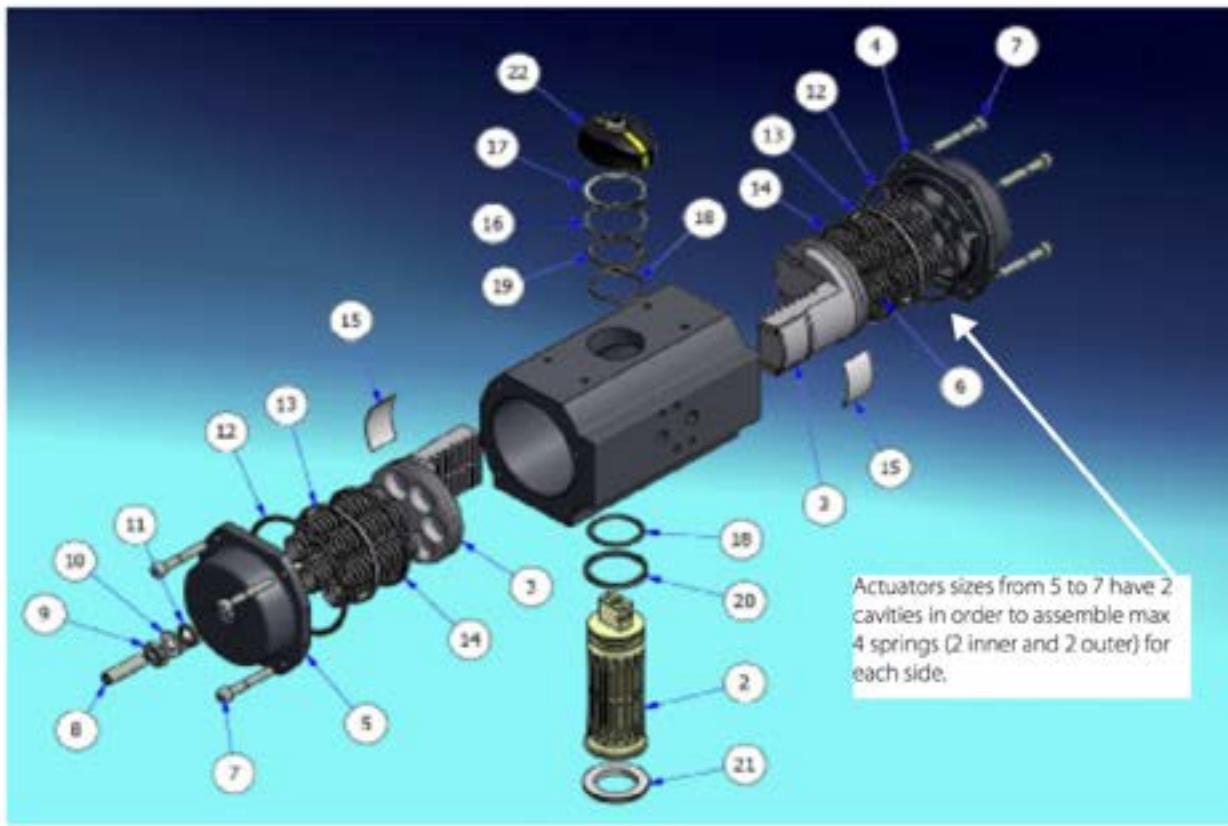


Example

EA4-6S8 is an EA actuator, imperial threads, size 6 with 8 springs to close (4 external springs and 4 internal springs)

EA2-4 is an EA actuator, metric threads, size 4, with no springs

Construction and Materials:

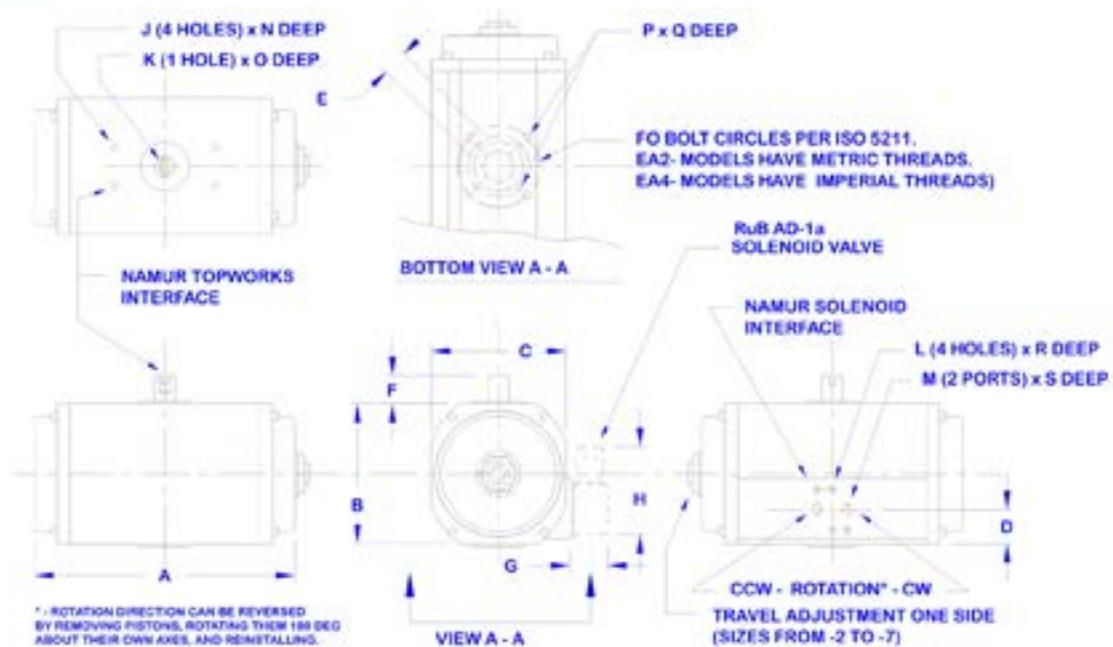


Bill of Materials

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

ITEM	DESCRIPTION	QTY	MATERIAL
1	Body	1	Anod. Aluminium
2	Shaft	1	Steel - Zinc Plated
3	Piston	2	Aluminum
4	End Cap	1	Anod. Aluminium
5	End Cap (Stop Bolt)	1	Anod. Aluminium
6	Spring	12 Max	Cr-Si Steel
7	Cap Bolt	8	St. Steel
8	Stop Bolt	1	Hi Tensile Steel
9	Stop Bolt Nut	1	Hi Tensile Steel
10	Washer	1	Polyethylene
11	O-Ring (End Stop)	1	NBR
12	O-Ring (End Cover)	2	NBR
13	Piston Ring	2	POM**
14	Piston Ring	2	NBR
15	Wear Pad	2	POM**
16	Shaft Washer	1	Polyethylene
17	Snap Ring	1	Steel
18	O-Ring (Drive Shaft)	2	NBR
19	Shaft Bearing Upper	1	POM**
20	Shaft Bearing Lower	1	POM**
21	Alignment Ring	1	POM**
22	Indicator	1	Nylon

** Polyoxymethylene commonly 'Delrin'

Dimensions:

Size	Metric System - mm																		
	F0	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S
1	F03	103	45	51	22,5	9	20	26	67	M5	M6	M5	G1/8	5	12	M5	8	8	7
2	F03/05	150	70	70	23	9	20	26	67	M5	M6	M5	G1/8	8	12	M5 / M6	8 / 10	8	10
2A	F03/05	150	70	70	23	11	20	26	67	M5	M6	M5	G1/8	8	12	M5 / M6	8 / 10	8	10
2B	F04	150	70	70	23	11	20	26	67	M5	M6	M5	G1/8	8	12	M5 / M6	8 / 10	8	10
3	F05/07	187	87	91	34,5	14	20	26	67	M5	M6	M5	G1/8	8	12	M6 / M8	10 / 13	8	10
4	F05/07	206	118	113	29,5	14	20	26	67	M5	M6	M5	G1/8	8	12	M6 / M8	10 / 13	8	10
5	F05/07	194	118,5	121	29,5	17	20	26	67	M5	M6	M5	G1/4	5	12	M6 / M8	10 / 10	8	12
6	F07/10	218	140,5	136,5	29,5	17	20	26	67	M5	M6	M5	G1/4	5	12	M8 / M10	10 / 16	8	12
7	F07/10	266	166,5	156	30	22	20	26	67	M5	M6	M5	G1/4	5	12	M8 / M10	13 / 16	8	12

Size	Imperial System - inch																		
	F0	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S
1	F03	4,06	1,77	2,01	0,89	0,35	0,79	1,02	2,64	10-32	M6	10-32	1/8 NPT	0,20	0,47	10-32	0,31	0,31	0,28
2	F03/05	5,91	2,76	2,76	0,91	0,35	0,79	1,02	2,64	10-32	M6	10-32	1/8 NPT	0,31	0,47	10-32 / 1/4"-20	0,31 / 0,39	0,31	0,39
3	F05/07	7,36	3,43	3,58	1,36	0,55	0,79	1,02	2,64	10-32	M6	10-32	1/8 NPT	0,31	0,47	1/4"-20 / 5/16"-18	0,39 / 0,51	0,31	0,39
4	F05/07	8,11	4,65	4,45	1,16	0,55	0,79	1,02	2,64	10-32	M6	10-32	1/8 NPT	0,31	0,47	1/4"-20 / 5/16"-18	0,39 / 0,51	0,31	0,39
5	F05/07	7,64	4,67	4,76	1,16	0,67	0,79	1,02	2,64	10-32	M6	10-32	1/4 NPT	0,20	0,47	1/4"-20 / 5/16"-18	0,47 / 0,47	0,31	0,50
6	F07/10	8,58	5,53	5,37	1,16	0,67	0,79	1,02	2,64	10-32	M6	10-32	1/4 NPT	0,20	0,47	5/16"-18 / 3/8"-16	0,51 / 0,63	0,31	0,50
7	F07/10	10,47	6,56	6,14	1,18	0,87	0,79	1,02	2,64	10-32	M6	10-32	1/4 NPT	0,20	0,47	5/16"-18 / 3/8"-16	0,51 / 0,63	0,31	0,50

Torque Rating Charts for EA2 actuators - METRIC Threads

Double acting - torque in N.m

EA2-	Springs	Air pressure supply (bar)								
		3	4	5	6	7	8	9	10	
1	0	4,4	5,8	7,3	8,7	10,2	11,6	13,1	14,5	
2-2A	0	11,8	15,8	19,7	23,7	27,6	31,6	35,5	39,5	
3	0	25,4	33,8	42,3	50,7	59,2	67,6	76,1	84,5	
4	0	50,7	67,6	84,5	101,5	118,4	135,3	152,2	169,1	
5	0	61,3	81,7	102,1	122,5	142,9	163,3	183,8	204,2	
6	0	101,0	134,6	168,3	201,9	235,6	269,2	302,9	336,5	
7	0	187,1	249,5	311,8	374,2	436,5	498,9	561,3	623,6	

Spring return - torque in N.m

EA3-	total	outer	inner	air stroke - start									air stroke - end								
				Air pressure supply (bar)									Air pressure supply (bar)								
				start	end	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
2-2A	2	2,62	1,34	10,5	14,4	18,4	22,3	26,3	30,2	34,2	38,1	42,1	46,1	9,2	13,2	17,1	21,1	25,0	28,9	32,9	36,8
	3	3,93	2,01	9,8	13,8	17,7	21,7	25,6	29,6	33,5	37,4	41,3	45,2	7,8	11,9	15,8	19,7	23,7	27,6	31,6	35,5
	4	5,24	2,68	9,2	13,1	17,0	21,0	24,9	28,9	32,8	36,8	40,7	44,6	6,8	10,5	14,5	18,4	22,4	26,3	30,3	34,2
	5	6,55	3,35	8,5	12,4	16,4	20,3	24,3	28,2	32,2	36,1	40,1	44,1	5,3	9,2	13,2	17,1	21,1	25,0	29,0	32,9
	6	7,86	4,02	7,8	11,8	15,7	19,7	23,6	27,5	31,5	35,4	40,4	44,4	4,8	7,9	11,9	15,8	19,8	23,7	27,6	31,6
	7	9,17	4,69		11,1	15,0	19,0	22,9	26,9	30,8	34,8	38,7	42,7	6,6	10,5	14,5	18,4	22,4	26,3	30,3	
	8	10,48	5,36		10,4	14,4	18,3	22,3	26,2	30,1	34,1	38,1	42,1	5,3	9,2	13,2	17,1	21,1	25,0	29,0	
	9	11,79	6,03			13,7	17,6	21,6	25,5	29,5	33,4				7,9	11,9	15,8	19,8	23,7	27,7	
	10	13,1	6,7			13,0	17,0	20,9	24,9	28,8	32,8				6,6	10,5	14,5	18,5	22,4	26,4	
	11	14,41	7,37			16,3	20,2	24,2	28,1	32,1	36,1				9,3	13,2	17,2	21,1	25,0		
	12	15,72	8,04			15,8	19,8	23,5	27,5	31,4					8,0	11,9	15,8	19,8	23,7		
3	2	5,44	3	22,4	30,8	39,3	47,7	56,2	64,6	73,1	81,5	90,9	109,3	19,9	26,4	33,8	40,3	50,7	62,2	76,7	76,1
	3	8,16	4,5	20,9	29,3	37,8	46,2	54,7	63,1	71,6	80,0	89,5	107,9	17,2	25,7	34,1	42,6	51,0	59,5	67,9	76,4
	4	10,88	6	19,4	27,8	36,3	44,7	53,2	61,6	70,1	78,5	87,5	105,9	22,9	31,4	39,8	48,3	56,8	65,2	73,7	
	5	12,8	7,5	17,9	26,3	34,8	43,2	51,7	60,1	68,6	77,0	85,5	103,9	20,2	28,7	37,5	45,8	54,0	62,5	70,9	
	6	16,32	9	16,4	24,8	33,3	41,7	50,2	58,6	67,1	75,5	84,9	103,3	17,5	26,0	34,4	42,9	51,3	59,8	68,2	
	7	19,04	10,5		23,3	31,8	40,2	48,7	57,1	65,6	74,0	82,5	100,9	14,8	23,2	31,7	40,1	48,6	57,1	65,5	
	8	21,76	12		21,8	30,3	38,7	47,2	55,6	64,1	72,5	81,0	99,4	12,1	20,8	29,0	37,4	45,9	54,3	62,8	
	9	24,48	13,5			28,8	37,2	45,7	54,1	62,6	71,0			17,8	26,2	34,7	43,2	51,6	60,1		
	10	27,2	15			27,3	35,7	44,2	52,6	61,1	69,5			15,1	23,5	32,0	40,4	48,9	57,3		
	11	29,92	16,5			34,2	42,7	51,1	59,6	68,0				20,8	29,3	37,7	46,2	54,6			
	12	32,64	18			32,7	41,2	49,6	58,1	66,5				18,1	26,5	35,0	43,5	51,9			
4	2	10,24	8,68	44,0	61,0	77,9	94,8	111,7	128,6	145,5	162,4	180,4	20,5	57,4	74,3	91,2	108,1	125,0	141,9	158,9	
	3	15,36	10,02	40,7	57,6	74,5	91,4	108,3	125,3	142,2	159,1	176,0	193,9	35,4	52,3	69,2	86,1	103,0	119,9	136,8	153,7
	4	20,48	13,38	37,4	54,3	71,2	88,1	105,0	121,9	138,8	155,7	172,6	190,5	30,2	47,2	64,1	81,0	97,9	114,8	131,7	148,6
	5	25,6	16,7	34,0	50,9	67,8	84,8	101,7	118,6	135,5	152,4	170,3	188,2	25,1	42,0	58,9	75,9	92,8	109,7	126,6	143,5
	6	30,72	20,04	30,7	47,6	64,5	81,4	98,3	115,2	132,1	149,1	166,0	183,9	36,9	53,8	70,7	87,6	104,6	121,5	138,4	
	7	35,84	23,38		44,3	61,2	78,1	95,0	111,9	128,8	145,7			31,8	48,7	65,6	82,5	99,4	116,3	133,3	
	8	40,96	26,72		40,9	57,8	74,7	91,6	108,6	125,5	142,4			28,7	43,8	60,5	77,4	94,3	111,2	128,1	
	9	46,08	30,06			54,5	71,4	88,3	105,2	122,1	139,0			38,1	55,4	72,3	89,2	106,1	123,0		
	10	51,2	33,4			51,1	68,1	85,0	101,9	118,8	135,7			33,3	50,3	67,2	84,1	101,0	117,9		
	11	56,32	36,74			64,7	81,6	98,5	115,4	132,4				45,1	62,0	79,0	95,9	112,8			
	12	61,44	40,08			61,4	78,3	95,2	112,1	129,0				40,0	56,9	73,8	90,7	107,7			
5	4	4	0	52,4	28,8	32,5	52,9	73,3	93,7	114,1	134,5	155,0	175,4	8,8	26,3	40,7	70,1	90,5	110,9	131,4	151,8
	5	4	1	58,95	32,4	49,3	69,7	90,1	110,5	130,9	151,4	171,8	192,2	22,7	43,1	63,8	84,0	104,4	124,8	145,2	
	6	4	2	65,5	36	45,7	66,1	86,5	106,9	127,3	147,8	168,2	188,6	16,2	36,6	57,0	77,4	97,8	118,3	138,7	
	7	4	3	72,05	39,6	62,5	82,9	103,3	123,7	144,2	164,6	185,0	205,4	30,0	50,5	70,9	91,3	111,7	132,1		
	8	4	4	78,6	43,2	58,9	79,3	99,7	120,1	140,6	161,0			23,5	43,9	64,3	84,7	105,2			
	4	4	0	86,8	47,7	53,3	86,9	102,6	124,2	147,9	171,5	195,2	218,8	14,2	42,8	61,5	115,1	148,8	182,4	216,1	249,7
	5	4	1	97,65	53,675	80,9	114,6	148,3	181,9	215,6	249,2	282,9		37,0	70,6	104,3	137,9	171,6	205,2	238,9	
	6	4	2	108,5	59,65	75,8	108,6	142,3	175,9	209,6	243,2	276,9		26,1	58,8	83,4	127,1	160,7	194,4	228,0	
	7	4	3	119,35	65,625	102,6	136,3	170,0	203,6	237,3	270,9			48,9	62,6	116,2	149,9	183,5	217,2		
7	4	4	4	130,2	71,6	96,7	130,3	164,0	197,8	231,3	264,9			38,1	71,7	105,4	139,0	172,7	206,3		
	4	4	0	160,8	88,4	98,7	161,1	223,4	285,8	348,1	410,5	472,9	535,2	26,3	66,7	151,0	213,4	275,7	336,1	400,5	462,8
	5	4	1	180,9	99,45	150,0	212,4	274,7	337,1	399,5	461,8	534,2		68,6	130,9	193,3	255,6	318,0	386,4	442,7	
	6	4	2	201	110,5	139,0	201,3	263,7	326,0	388,4	450,8	513,1		48,5	110,8	173,2	235,5	297,9	366,3	422,6	
	7	4	3	221,1	121,05	190,3	252,6	315,0	377,4	439,7	502,1			90,7	153,1	215,4	277,8	346,2	402,5		
	8	4	4	241,2	132,6	179,2	241,6	303,9	366,3	428,7	490,0			70,6	133,0	195,3	257,7	320,1	382,4		

Torque Rating Charts for EA4 actuators - IMPERIAL Threads

Double acting - torque in-lb											
		Air pressure supply (PSI)									
EA4-	Springs	40	50	60	70	80	90	100	110	120	
1	0	35	44	53	62	71	80	89	98	106	
2	0	96	120	144	168	193	217	241	265	289	
3	0	206	258	309	361	413	464	515	567	619	
4	0	413	516	619	722	825	928	1032	1135	1238	
5	0	498	623	747	872	996	1121	1246	1370	1495	
6	0	821	1027	1232	1437	1642	1848	2053	2258	2464	
7	0	1522	1902	2283	2663	3044	3424	3804	4185	4565	

EA4	Springs	Springs outer inner	Spring stroke start end	Spring return - torque in-lb																	
				air stroke - start								air stroke - end									
				Air pressure supply (PSI)				Air pressure supply (PSI)				Air pressure supply (PSI)									
2	2	23	34	108	133	157	181	205	229	253	277	73	97	121	145	169	193	218	242	266	
	3	35	48	102	127	151	175	199	223	247	271	82	98	112	134	158	182	208	230	254	
	4	46	59	73	97	121	145	169	193	217	241	90	74	96	122	146	170	194	218	242	
	5	58	76	91	113	138	162	187	211	235	259	38	92	98	111	130	158	183	207	231	
	6	70	88	85	109	133	157	181	205	229	253	51	75	99	123	147	171	195	219		
	7	81	91	79	103	127	151	175	199	223	247	39	63	87	111	135	160	184	208		
	8	93	107	97	121	145	169	193	217	241	265	82	76	98	124	148	172	196			
	9	104	113	115	139	163	187	211	235	259	283	94	88	102	128	152	176	190	214		
	10	116	126	109	133	157	181	195	209	223	247	63	77	101	125	149	173	197			
	11	127	135	127	151	175	199	205	229	247	271	85	89	103	127	151	175	199			
	12	139	146	111	135	159	183	197	211	235	259	26	50	74	98	122	146	170			
3	2	48	57	110	231	263	334	366	436	489	541	302	216	261	313	364	416	468	519	571	
	3	72	46	198	218	270	321	373	424	476	528	579	134	188	237	289	340	392	446	495	
	4	96	52	753	205	256	308	360	411	463	514	566	110	162	212	265	318	370	419	471	
	5	120	66	140	156	243	295	346	398	449	501	553	96	138	189	241	292	344	395	447	
	6	144	81	178	230	281	333	385	436	488	539	581	113	165	217	268	320	371	423	473	
	7	168	93	165	217	268	320	371	423	474	526	578	89	141	180	244	296	340	398	450	
	8	180	108	203	256	306	358	410	461	513	565	617	169	220	272	323	375	426			
	9	217	119	242	280	345	396	448	499	550	602	654	144	196	248	298	351	403			
	10	241	133	228	280	331	383	435	486	538	590	642	126	172	224	276	327	379			
	11	265	148	267	318	370	421	473	525	576	628	680	148	199	251	303	354				
	12	289	159	266	319	370	426	478	530	582	634	686	125	172	224	276	327				
4	2	91	54	354	457	560	666	766	866	972	1076	1174	322	425	528	631	735	838	941	1044	
	3	136	88	334	427	530	633	737	840	943	1046	1149	277	386	483	586	689	792	896	1002	
	4	181	118	294	388	501	604	707	810	913	1016	1120	231	338	438	541	644	747	850	953	
	5	227	148	265	368	471	574	677	781	884	987	1090	196	298	392	496	598	702	805	911	
	6	272	177	338	426	545	648	751	854	957	1060	1163	244	347	450	553	657	760	863	968	
	7	317	202	356	412	515	618	722	825	928	1031	1134	198	303	406	508	611	714	818	921	
	8	362	238	382	466	589	692	794	896	1001	1104	1207	257	360	463	566	669	772	875		
	9	406	268	406	496	599	692	794	896	1001	1104	1207	314	418	521	624	727	830			
	10	430	296	427	530	633	736	839	942	1045	1148	1251	299	392	495	597	692	795			
	11	466	325	500	603	706	810	913	1016	1119	1222	1325	327	430	533	636	739				
	12	544	391	574	677	780	883	986	1089	1192	1295	1398	385	488	591	694					
5	4	4	0	464	59	368	489	617	742	866	991	1119	1240	158	264	408	553	657	762	867	1021
	5	4	1	522	297	411	585	710	834	958	1082	1206	228	320	425	529	634	734	849	973	
	6	4	2	580	219	429	553	678	803	927	1052	1176	198	292	417	541	668	791	915		
	7	4	3	617	398	521	646	771	896	1020	1144	1268	214	314	434	559	684	808	933	1057	
	8	4	4	695	382	614	739	863	988	1112	1236	1360	301	426	555	675	799				
	4	4	0	766	422	884	810	915	928	948	1051	1036	2042	259	464	609	874	1000	1226	1496	
	5	4	1	864	471	757	967	1188	1373	1573	1569	1565	368	573	778	886	1189	1394	1600		
	6	4	2	960	528	794	909	915	1020	1125	1171	1166	272	477	662	858	1083	1296	1504		
6	7	4	3	1096	581	896	1062	1267	1472	1628	1863	1863	381	588	792	967	1232	1408			
	8	4	4	1152	634	824	1008	1214	1420	1625	1830	1830	285	490	696	901	1198	1322			
	4	4	0	1423	782	1129	1500	1681	2061	2642	3022	3403	3793	479	860	1240	1621	2001	2382	2762	
	5	4	1	1601	886	1022	1403	1783	2184	2624	3005	3385	302	852	1063	1443	1523	2204	2584		
	6	4	2	1779	979	1305	1685	2068	2448	2827	3217	3588	304	885	1285	1648	2026	2367			
7	7	4	3	1958	1075	1267	1688	1968	2349	2728	3109	3466	328	707	1087	1468	1848	2226	2609		
	8	4	4	2134	1173	1480	1879	2081	2621	3012	3360	3729	3989	320	989	1200	1670	2061	2421		

Quick Pick Chart for EA2 (Metric threads) Pneumatic Actuators assembled on s64, s74, s72 and s73 RuB ball valves

For service with pipeline ΔP lower than the maximum limits shown below, and for media having friction characteristics similar to clean water or moist/lubricated gases the following actuator selections can be used.

For higher pipeline pressures or more difficult media the selection must be made using the Valve Torque charts found on each valve data sheet, and the Actuator torque Rating Chart found on the following page.

For assistance in actuator selection please contact **RuB** at the following email address: sales@rubvalves.com or your **RuB** distributor.

Linkage kit selection table

VALVE s64LT	ΔP Media (Bar)	Air pressure supply (bar)										Spring-to-Open Actuators EA2 -				
		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9
1"	1	1	1	1	1	1	1	1	1	260	260	260	260	260	260	260
1.14"	6	-	-	-	-	-	-	-	-	260	260	260	260	260	260	260
1.14"	6	-	-	-	-	-	-	-	-	260	260	260	260	260	260	260
1.17"	6	-	-	-	-	-	-	-	-	260	260	260	260	260	260	260
2"	6	-	-	-	-	-	-	-	-	260	260	260	260	260	260	260
10 Min.	1	1	1	1	1	1	1	1	1	264	264	264	264	264	264	264
10 Min.	1	1	1	1	1	1	1	1	1	264	264	264	264	264	264	264
1.14"	15	26	26	26	26	26	26	26	26	264	264	264	264	264	264	264
1.14"	15	26	26	26	26	26	26	26	26	264	264	264	264	264	264	264
1.17"	15	26	26	26	26	26	26	26	26	264	264	264	264	264	264	264
2"	15	26	26	26	26	26	26	26	26	264	264	264	264	264	264	264

VALVE s64, s74	ΔP* Media (Bar)	Air pressure supply (bar)										Spring-to-Open Actuators EA2 -				
		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9
1/2"	15	1	1	1	1	1	1	1	1	262	262	262	262	262	262	262
3/4"	15	1	1	1	1	1	1	1	1	263	263	263	263	263	263	263
1"	15	2	1	1	1	1	1	1	1	264	264	264	264	264	264	264
1.14"	15	26	26	26	26	26	26	26	26	264	264	264	264	264	264	264
1.14"	15	26	26	26	26	26	26	26	26	264	264	264	264	264	264	264
1.17"	15	26	26	26	26	26	26	26	26	264	264	264	264	264	264	264
2"	15	4	3	3	3	3	3	3	3	265	265	265	265	265	265	265
2.1/2"	15	5	5	5	5	5	5	5	5	266	266	266	266	266	266	266
3"	15	7	6	5	5	5	5	5	5	267	267	267	267	267	267	267
4"	15	7	7	6	6	6	6	6	6	267	267	267	267	267	267	267

* Selections apply for valves used with ΔP up to 15 Bar Max. For ΔP over 15 Bar and up to 40 Bar (30 Bar for s74 and for sizes over 2") please consult hub for sizing recommendations.
Note: s74 available up to 1" size.

VALVE s72, s73	ΔP* Media (Bar)	Air pressure supply (bar)										Spring-to-Open Actuators EA2 -				
		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9
1/2"	16	2	2	2	2	2	1	1	1	267	267	267	267	267	267	267
3/4"	16	3	2	2	2	2	2	1	1	268	268	268	268	268	268	268
1"	16	4	3	3	3	3	2	2	2	269	269	269	269	269	269	269

VALVE s72, s73	ΔP* Media (Bar)	Air pressure supply (bar)										Spring-to-Open Actuators EA2 -				
		3	4	5	6	7	8	9	10	3	4	5	6	7	8	9
1/2"	16	2	2	2	2	2	1	1	1	267	267	267	267	267	267	267
3/4"	16	3	2	2	2	2	2	1	1	268	268	268	268	268	268	268
1"	16	4	3	3	3	3	2	2	2	269	269	269	269	269	269	269

Red font = selection driven by valve stem size.

Quick Pick Chart for EA4 (Imperial threads) Pneumatic Actuators assembled on s64,s74,s134,s72 and s73 RuB ball valves

For service with pipeline ΔP lower than the maximum limit shown below, and for media having friction characteristics similar to clean water or moist/lubricated gases the following software selection can be used.

For higher pipeline pressures or more difficult media the selection must be made using the Valve Torque charts found on each valve data sheet, and the Actuator Torque Barion Chart found on the following page.

For assistance in actuator selection please contact RuB at the following email address: sales@rubvalves.com or your RuB distributor.

Linkage kit selection table

An Interview with Patti

VALV

All structures (except PDS)											
Double Acting Actuators, R&L						Spring-Open Actuators, R&L					
50	60	70	80	90	100	50	60	70	80	90	100
125	135	145	155	165	175	125	135	145	155	165	175
2	1	1	1	1	1	204	204	204	204	204	204
2	2	2	2	2	2	205	205	205	205	205	205
3	2	3	2	3	2	206	206	206	206	206	206
3	3	3	3	3	3	207	207	207	207	207	207
3	2	3	2	3	2	208	208	208	208	208	208
4	3	3	3	3	3	209	209	209	209	209	209
4	2	3	2	3	2	210	210	210	210	210	210
4	3	3	3	3	3	211	211	211	211	211	211
5	4	4	4	4	4	212	212	212	212	212	212
5	3	3	3	3	3	213	213	213	213	213	213
6	4	4	4	4	4	214	214	214	214	214	214
6	3	3	3	3	3	215	215	215	215	215	215
7	5	5	5	5	5	216	216	216	216	216	216
7	4	4	4	4	4	217	217	217	217	217	217
8	6	6	6	6	6	218	218	218	218	218	218
8	5	5	5	5	5	219	219	219	219	219	219
9	7	7	7	7	7	220	220	220	220	220	220
9	6	6	6	6	6	221	221	221	221	221	221
10	8	8	8	8	8	222	222	222	222	222	222
10	7	7	7	7	7	223	223	223	223	223	223
11	9	9	9	9	9	224	224	224	224	224	224
11	8	8	8	8	8	225	225	225	225	225	225
12	10	10	10	10	10	226	226	226	226	226	226
12	9	9	9	9	9	227	227	227	227	227	227
13	11	11	11	11	11	228	228	228	228	228	228
13	10	10	10	10	10	229	229	229	229	229	229
14	12	12	12	12	12	230	230	230	230	230	230
14	11	11	11	11	11	231	231	231	231	231	231
15	13	13	13	13	13	232	232	232	232	232	232
15	12	12	12	12	12	233	233	233	233	233	233
16	14	14	14	14	14	234	234	234	234	234	234
16	13	13	13	13	13	235	235	235	235	235	235
17	15	15	15	15	15	236	236	236	236	236	236
17	14	14	14	14	14	237	237	237	237	237	237
18	16	16	16	16	16	238	238	238	238	238	238
18	15	15	15	15	15	239	239	239	239	239	239
19	17	17	17	17	17	240	240	240	240	240	240
19	16	16	16	16	16	241	241	241	241	241	241
20	18	18	18	18	18	242	242	242	242	242	242
20	17	17	17	17	17	243	243	243	243	243	243
21	19	19	19	19	19	244	244	244	244	244	244
21	18	18	18	18	18	245	245	245	245	245	245
22	20	20	20	20	20	246	246	246	246	246	246
22	19	19	19	19	19	247	247	247	247	247	247
23	21	21	21	21	21	248	248	248	248	248	248
23	20	20	20	20	20	249	249	249	249	249	249
24	22	22	22	22	22	250	250	250	250	250	250
24	21	21	21	21	21	251	251	251	251	251	251
25	23	23	23	23	23	252	252	252	252	252	252
25	22	22	22	22	22	253	253	253	253	253	253
26	24	24	24	24	24	254	254	254	254	254	254
26	23	23	23	23	23	255	255	255	255	255	255
27	25	25	25	25	25	256	256	256	256	256	256
27	24	24	24	24	24	257	257	257	257	257	257
28	26	26	26	26	26	258	258	258	258	258	258
28	25	25	25	25	25	259	259	259	259	259	259
29	27	27	27	27	27	260	260	260	260	260	260
29	26	26	26	26	26	261	261	261	261	261	261
30	28	28	28	28	28	262	262	262	262	262	262
30	27	27	27	27	27	263	263	263	263	263	263
31	29	29	29	29	29	264	264	264	264	264	264
31	28	28	28	28	28	265	265	265	265	265	265
32	30	30	30	30	30	266	266	266	266	266	266
32	29	29	29	29	29	267	267	267	267	267	267
33	31	31	31	31	31	268	268	268	268	268	268
33	30	30	30	30	30	269	269	269	269	269	269
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36	34	34	34	34	34	274	274	274	274	274	274
36	33	33	33	33	33	275	275	275	275	275	275
37	35	35	35	35	35	276	276	276	276	276	276
37	34	34	34	34	34	277	277	277	277	277	277
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38	35	35	35	35	35	279	279	279	279	279	279
39	37	37	37	37	37	280	280	280	280	280	280
39	36	36	36	36	36	281	281	281	281	281	281
40	38	38	38	38	38	282	282	282	282	282	282
40	37	37	37	37	37	283	283	283	283	283	283
41	39	39	39	39	39	284	284	284	284	284	284
41	38	38	38	38	38	285	285	285	285	285	285
42	40	40	40	40	40	286	286	286	286	286	286
42	39	39	39	39	39	287	287	287	287	287	287
43	41	41	41	41	41	288	288	288	288	288	288
43	40	40	40	40	40	289	289	289	289	289	289
44	42	42	42	42	42	290	290	290	290	290	290
44	41	41	41	41	41	291	291	291	291	291	291
45	43	43	43	43	43	292	292	292	292	292	292
45	42	42	42	42	42	293	293	293	293	293	293
46	44	44	44	44	44	294	294	294	294	294	294
46	43	43	43	43	43	295	295	295	295	295	295
47	45	45	45	45	45	296	296	296	296	296	296
47	44	44	44	44	44	297	297	297	297	297	297
48	46	46	46	46	46	298	298	298	298	298	298
48	45	45	45	45	45	299	299	299	299	299	299
49	47	47	47	47	47	300	300	300	300	300	300
49	46	46	46	46	46	301	301	301	301	301	301
50	48	48	48	48	48	302	302	302	302	302	302
50	47	47	47	47	47	303	303	303	303	303	303
51	49	49	49	49	49	304	304	304	304	304	304
51	48	48	48	48	48	305	305	305	305	305	305
52	50	50	50	50	50	306	306	306	306	306	306
52	49	49	49	49	49	307	307	307	307	307	307
53	51	51	51	51	51	308	308	308	308	308	308
53	50	50	50	50	50	309	309	309	309	309	309
54	52	52	52	52	52	310	310	310	310	310	310
54	51	51	51	51	51	311	311	311	311	311	311
55	53	53	53	53	53	312	312	312	312	312	312
55	52	52	52	52	52	313	313	313	313	313	313
56	54	54	54	54	54	314	314	314	314	314	314
56	53	53	53	53	53	315	315	315	315	315	315
57	55	55	55	55	55	316	316	316	316	316	316
57	54	54	54	54	54	317	317	317	317	317	317
58	56	56	56	56	56	318	318	318	318	318	318
58	55	55	55	55	55	319	319	319	319	319	319
59	57	57	57	57	57	320	320	320	320	320	320
59	56	56	56	56	56	321	321	321	321	321	321
60	58	58	58	58	58	322	322	322	322	322	322
60	57	57	57	57	57	323	323	323	323	323	323
61	59	59	59	59	59	324	324	324	324	324	324
61	58	58	58	58	58	325	325	325	325	325	325
62	60	60	60	60	60	326	326	326	326	326	326
62	59	59	59	59	59	327	327	327	327	327	327
63	61	61	61	61	6						

VAL. NO.	VAL. NO.	ΔE^{\star} (eV)	ΔE^{\star} (eV) Kondo (eV)
1	1	200	2
2	2	200	2
3	3	200	3
4	4	200	4

Valve size	EA4	-1	-2	-3	-
$1\frac{1}{2}'' \sim 2\frac{1}{4}''$	UKE	E	E	E	E
$3'' \sim 1\frac{1}{2}''$	UKE			E	E
$2''$	UKE			E	E

VALVE	ΔP Media (PSI)	40 50 60 70 80 90 100 110 120		40 50 60 70 80 90 100 110 120		40 50 60 70 80 90 100 110 120	
		Double	Acting	Actuators	EA-	Double	Acting
872, 873	1/2"	200	2	2	2	1	1
	3/4"	200	3	2	2	2	2
	1"	200	4	3	3	3	2

* Dimensions apply for valves which will API up to 250 PSI Max. For API over 250 PSI please consult fluid for sizing recommendations.

Red font = selection driven by value stem size



Air Director AD-1

Electrical System Direct Mount Solenoid Valve



Product Description

The **RuB** AD-1 Air Director Solenoid Valve is a 5 port 2 position ("5/2") spool valve designed specifically to control the flow of compressed air to a pneumatic valve actuator like the **RuB** Series EA. On the bottom of the spool valve body are (3) 1/4" female NPT ports. The center of these, marked "P" is the inlet port for compressed air. The right port is marked EB (Exhaust B) and the left one is marked EA (Exhaust A). The other two ports are located on the back face of the spool valve, conforming to the NAMUR VDI/VDE 3845 interface pattern. Viewed from the back of the spool valve these ports are marked A (on the left) and B (on the right).

The spool is spring loaded to the de-energized position. When the winding is energized the spool is moved to the opposite position by an internal pneumatic pilot valve and piston. Below 36 psi air supply the piston may not be able to move the spool against the return spring.

Technical Features

- **Pressure:** 20 ~ 120 psi
- **Temperature:** 0 ~ 130 °F
- **Cv flow rating:** 1.68
- **Pressure Ports:**
 - 3 External: Air supply port plus separate exhaust ports for valve open and valve close
 - 2 Internal: Transfer ports A and B connect solenoid to actuator

- **Override:** Screwdriver slot for local operation to replace or override the electric signal
- **Power:** 110 VAC, 2.5 W, 62 mA inrush (optional 12 or 24 DC, 24 or 230 AC)
- **NEMA rating:** 4 and 7 (explosion proof optional)
- **Duty Cycle:** Continuous
- **Cable Connection:** Conduit or DIN

Mounting Options:

- Electric package can be mounted in any of four positions for convenient installation.

Service limits

Imperial System		
Voltage	110 VAC, 2.5 W, 62 mA inrush	
Temperature (°F)	0°F	+130°F

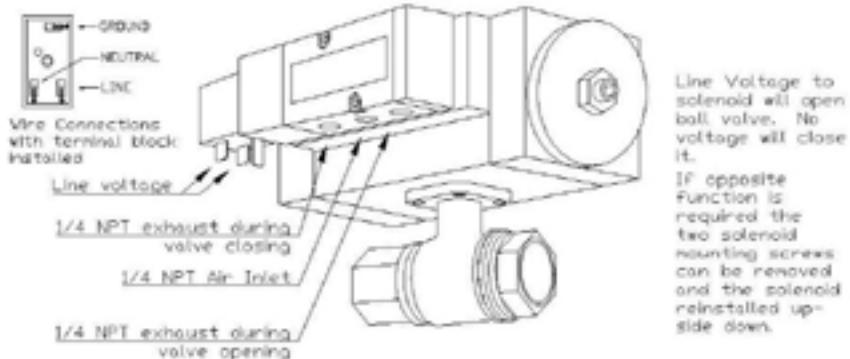
Manual Override

The solenoid valve can be operated manually in order to override the existing electrical signal, or to operate the ball valve in the absence of electric power. Pressing the blue plastic button will move the spool to the energized position. If the button is released the spool will return to the unenergized position. To lock the button down, press and rotate it 90°.

Mounting solenoid valve on RuB series EA actuator

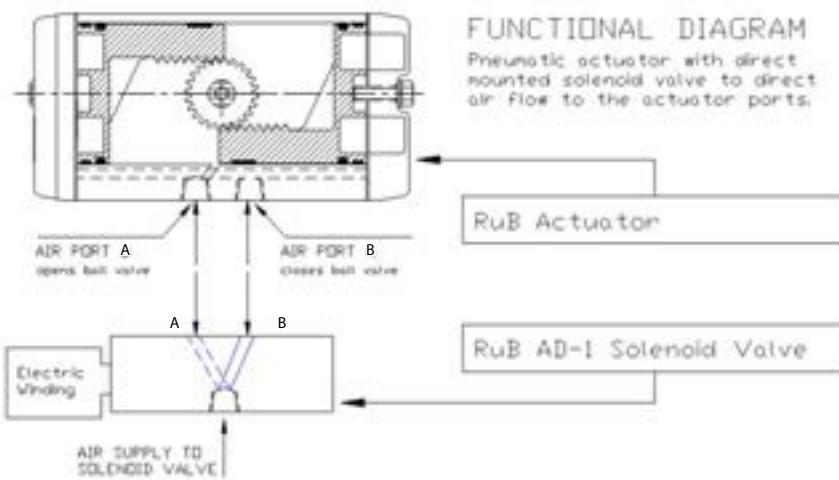
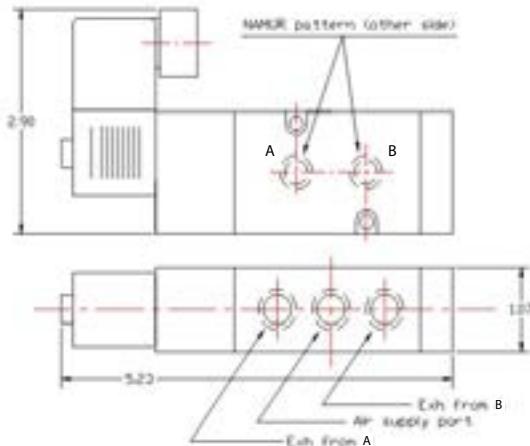
The AD-1 is normally mounted as shown below. The mounting is the same whether the actuator is a spring return or a double acting type. Notice that the winding and terminal block can be rotated to a convenient position for wiring.

RuB AD-1 Solenoid valve
Mounted on Series EA Actuator
and s64 Ball Valve



AD-1 Solenoid Valve + Pneumatic Actuator

Dimension inch

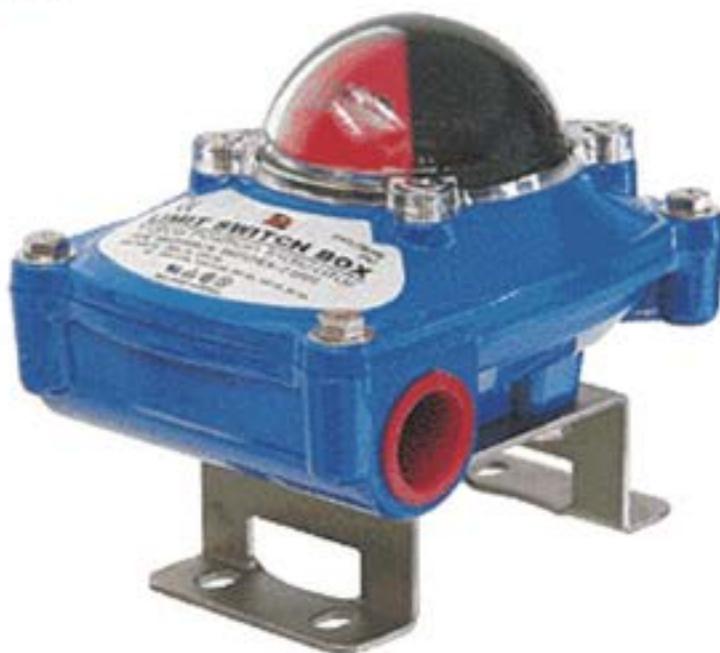


XCEAD1 - Rev:0



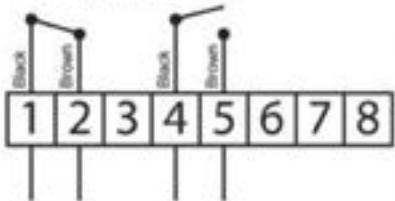
Limit Switch Box

EA2-LS

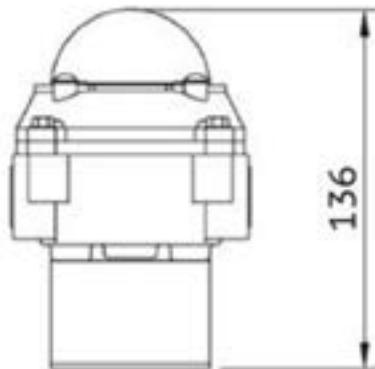
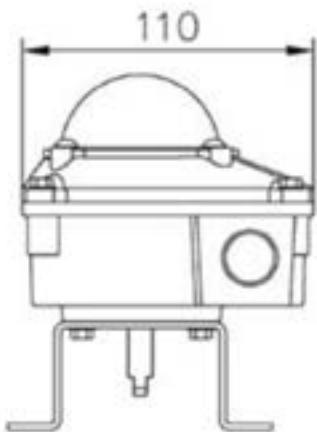
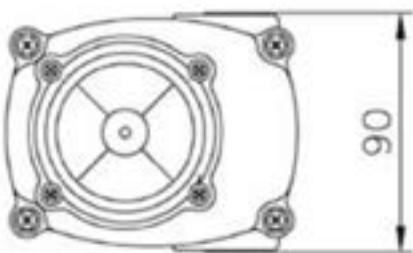


Features and Specifications:

- Enclosure: Weatherproof IP67, O-ring sealed
- Material: Aluminum, Polyester coated
- Ambient temperature: -20°C ~ +80°C
- Switch cams: Adjustable, preset for 90°
- Cable entries: 2xM20x1.5
- Terminal Block: 8 pos of terminal strips
(6 for switches, 2 for solenoid valve power)
- Position indicator: Dome type 0°C ~ 90°C
- Mounting bracket: Stainless steel acc. to
VDI/VDE3845, NAMUR
- Mechanical switches: 2 pcs. Max 250V AC 16A, 125 V DC 0.6A

WIRING

- 1 - IND. COMMON
- 2 - IND. CLOSED VALVE
- 3 - FREE
- 4 - IND. COMMON
- 5 - IND. OPEN VALVE
- 6 - FREE
- 7 - FREE
- 8 - FREE

**DIMENSIONS (mm)**



s.6439 NPT SS trim

Actuator mounting

1/2"-2" full port

hot forged brass ball valves

More and more automation is required at all levels in our society and the s.64 RUB range is the answer to all needs for reliable actuated ball valve.

It features special seat design to automatically compensate for wear and it has successfully passed 100.000 cycle life tests.

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



Quality:

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

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Two FPM O-rings at the stem for maximum safety
- Blowout-proof stainless steel stem

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Working Pressure:

- 600 PSI
- non-shock cold working pressure

Working Temperature:

- -4°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- k.64 configuration featuring EN 10226-1, ISO 228 parallel Female by Female threads, plated body, valve length according to DIN 3357 specification, pure PTFE seats
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle
- Brass trim (s.6441)

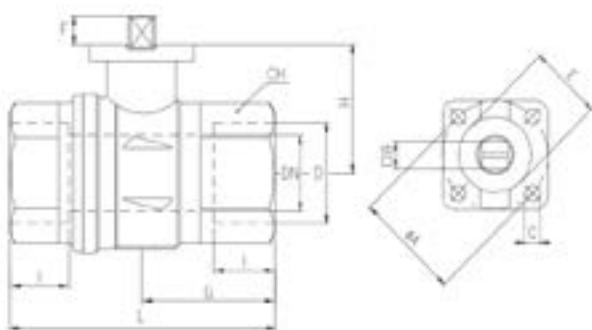
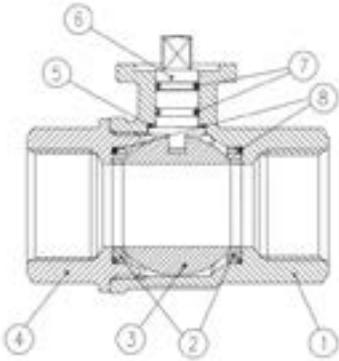
Upon Request:

- Custom Design

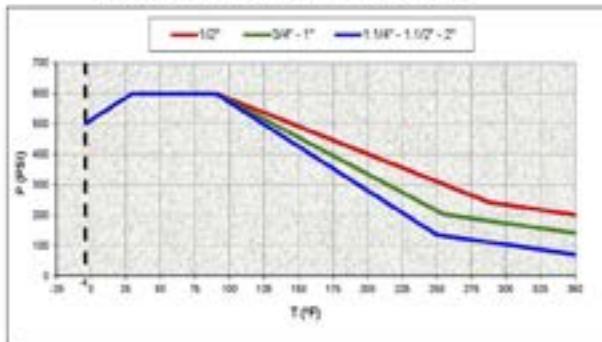
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.

**Torque for Actuator Sizing in-lb**

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

Pressure-Temperature Chart

The company reserves all rights for the information contained herein. Products may be changed at any time without notice. Any undated reference to a code or standard shall be interpreted as referring to the latest edition. RUB and logo are registered trademarks of RUB Rubinetterie utensiliere Bonomi. Other logos and registered trademarks are property of respective owners.

Part Description		Q.ty	Material
1	Unplated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Stainless steel ball	1	AISI316
4	Unplated end cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Stainless steel stem O-ring design	1	AISI316
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	S64D39	S64E39	S64F39	S64G39	S64H39	S64I39
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2
DN (inch)	0.590	0.787	0.984	1.259	1.575	1.968
I (inch)	0.610	0.708	0.826	0.906	0.964	1.043
L (inch)	2.598	2.933	3.562	4.094	4.806	5.314
G (inch)	1.201	1.456	1.791	2.047	2.322	2.657
H (inch)	1.220	1.515	1.673	2.185	2.441	2.716
CH (inch)	1.063	1.259	1.614	1.968	2.165	2.756
DA (inch)	1.417	1.417	1.417	1.968	1.968	1.968
B (inch)	0.354	0.354	0.354	0.551	0.551	0.551
C (inch)	0.220	0.220	0.220	0.259	0.259	0.259
E (inch)	0.984	0.984	0.984	1.378	1.378	1.378
F (inch)	0.295	0.334	0.334	0.570	0.570	0.570
Force Torque DIN 2007-H DIN 3231	F03	F03	F03	F05	F05	F05

Torque correction factors

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

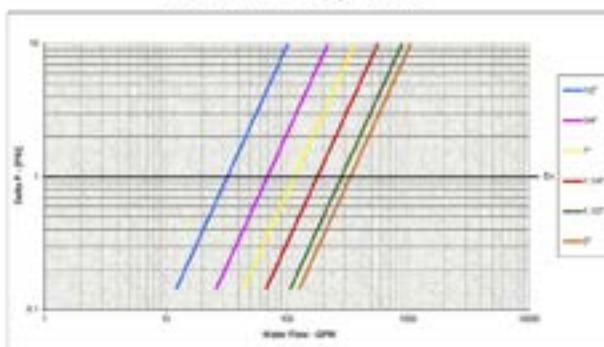
If media has more or less friction than water, multiply torque by the following factors.

Lubricating oils or liquids 0.8

Dry gases, natural gas, superheated steam 1.5

Slurries or liquids bearing abrasive particles 1.5-2.5

For other conditions please inquire of your RUB representative or distributor

Pressure Drop Chart



s.6439 LT NPT

Actuator Mounting full port 1"- 2" hot forged brass ball valves

More and more automation is required at all levels in our society and the s.64 RuB range is the answer to all needs for reliable actuated ball valve.

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

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



Quality:

- Dual sealing system allows valve to be operated in either direction making installation easier
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Stainless steel ball for longer life
- 100% seal test guaranteed in accordance to EN 12266-1 RATE A

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Two FPM O-rings at the stem for maximum safety
- Blowout-proof stainless steel stem

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Working Pressure:

- Shell rating: 600 PSI
- Seat rating: Delta P max permissible 230 PSI
- non-shock cold working pressure

Working Temperature:

- 4°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- Brass trim
- k64 configuration featuring EN 10226-1, ISO 228 parallel Female by Female threads, plated body, valve length according to DIN 3337 specification, pure PTFE seats
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact power electric actuator for some sizes

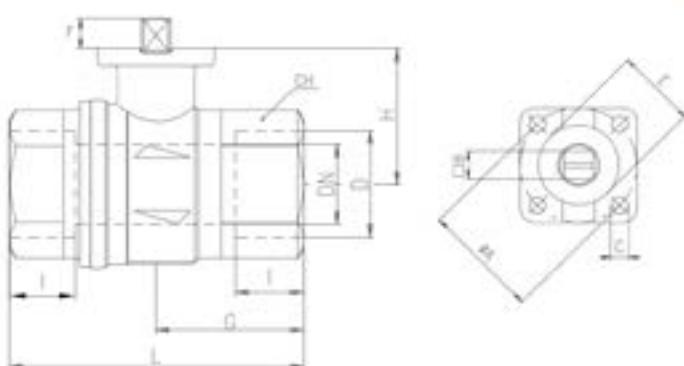
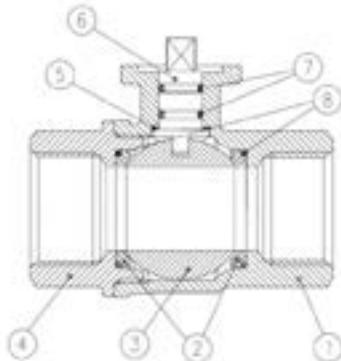
Upon Request:

- Custom Design

Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSopro (Ukraine)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



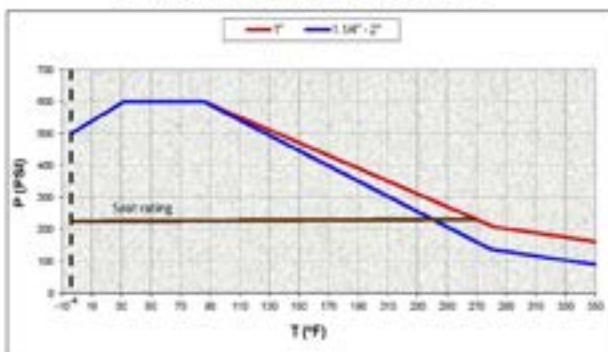
Part Description		Q.ty	Material
1	Unplated body	1	CW617N
2	Ball seat	2	PTFE carbon-graphite filled
3	Stainless steel ball	1	AISI316
4	Unplated end cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Stainless steel stem O-ring design	1	AISI316
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	S64F39A	S64G39A	S64H39A	S64I39A
D (inch)	1	1 1/4	1 1/2	2
DN(inch)	0.984	1.259	1.575	1.968
I (inch)	0.826	0.905	0.964	1.043
L (inch)	3.562	4.094	4.806	5.314
G (inch)	1.791	2.047	2.322	2.657
H (inch)	1.673	1.949	2.441	2.716
CH(inch)	1.614	1.968	2.165	2.756
ØA(inch)	1.417	1.417	1.968	1.968
B(inch)	0.354	0.354	0.551	0.551
C (inch)	0.220	0.220	0.259	0.259
E(inch)	0.984	0.984	1.378	1.378
F(inch)	0.334	0.334	0.570	0.570
Flange connection DIN 150 1511 DIN 320	F03	F03	F06	F06

Torque for Actuator Sizing in-lb

Delta P →	0 + 90 PSI		>90 + 230 PSI	
Valve size	To open	To close	To open	To close
1"	19	19	31	31
1.1/4"	22	22	35	35
1.1/2"	51	51	84	84
2"	70	70	115	115

Pressure-Temperature Chart



Torque correction factors

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

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

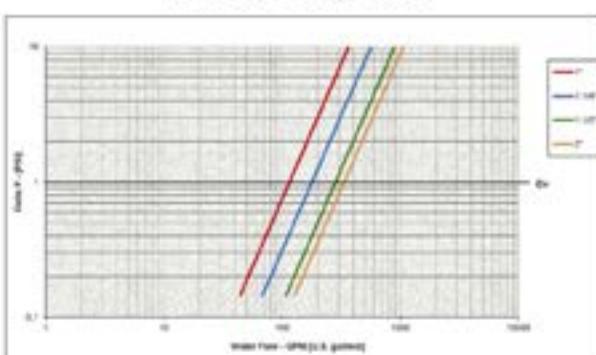
Lubricating oils or liquids 0.8

Dry gases, natural gas, superheated steam 1.5

Slurries or liquids bearing abrasive particles 1.5÷2.5

For other conditions please inquire of your **RUB** representative or distributor

Pressure Drop Chart





s.6441 NPT brass trim

full port 1/2"-4"

hot forged brass ball valves

More and more automation is required at all levels in our society and the s.64 RUB range is the answer to all needs for reliable actuated ball valve.

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

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

* All sizes up to 2" included



Quality:

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

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of RUB electric and pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 600 PSI up to 2", 450 PSI over 2"
- non-shock cold working pressure

Working Temperature:

- -4°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

- S.64 configuration featuring EN 10226-1, ISO 228 parallel Female by Female threads, plated body and brass trim
- Stainless steel trim (s.6439)
- Configuration for use with slurries or liquid bearing abrasive particles
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact power electric actuator for some sizes
- Manual lockable handle

Upon Request:

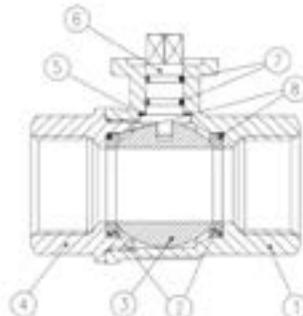
- Custom Design

Approved by or in compliance with:

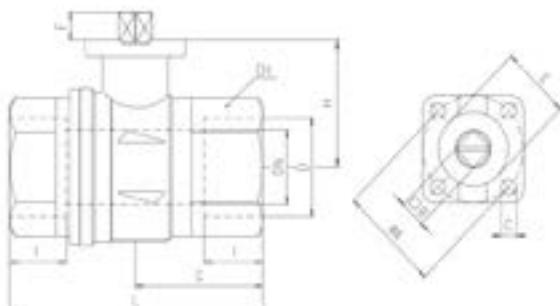
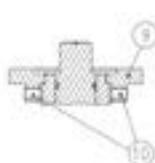
- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)

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

NOTE: Approvals apply to specific configurations/sizes only.



Valves configuration up to 2"



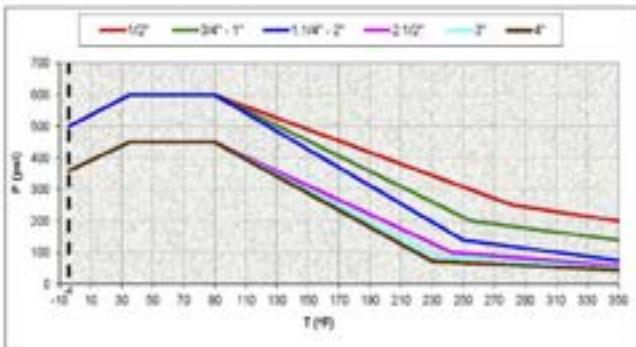
Valve ball seats and stem configuration of valves over 2" is different.

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

Code	S64D41	S64E41	S64F41	S64G41	S64H41	S64I41	S95L41AM	S95M41AM	S95N41AM
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
Dn(inch)	0.590	0.787	0.984	1.259	1.575	1.968	2.559	3.160	3.937
I (inch)	0.810	0.708	0.626	0.805	0.984	1.043	1.280	1.378	1.634
L (inch)	2.598	2.933	3.562	4.094	4.606	5.314	6.142	8.969	8.504
G (inch)	1.201	1.456	1.791	2.047	2.322	2.667	3.071	3.484	4.262
H (inch)	1.226	1.515	1.873	2.188	2.441	2.716	3.562	3.779	4.366
DN(inch)	1.063	1.259	1.614	1.968	2.165	2.756	3.346	3.898	4.921
Da(inch)	1.417	1.417	1.417	1.866	1.968	2.756	2.756	2.756	2.756
B (inch)	0.354	0.354	0.354	0.551	0.551	0.551	0.669	0.669	0.669
C (inch)	0.226	0.220	0.220	0.259	0.259	0.259	0.335	0.335	0.335
E (inch)	0.984	0.984	0.984	1.378	1.378	1.378	2.165	2.165	2.165
F (inch)	0.295	0.334	0.334	0.570	0.570	0.570	0.709	0.709	0.709
Flow correction factor DN 100 mm DN 200	F03	F03	F03	F05	F05	F05	F07	F07	F07

Torque for Actuator Sizing in-lb:

Delta P →	0 + 200 PSI		600 PSI (450 PSI over 2")	
	To open	To close	To open	To close
1/2"	25	15	25	15
3/4"	33	20	33	20
1"	67	37	62	37
1 1/4"	104	111	121	111
1 1/2"	220	180	273	180
2"	262	222	327	222
2 1/2"	372	372	929	929
3"	902	902	1062	1062
4"	1646	1646	1991	1991

Pressure-Temperature Chart**Torque correction factors**

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

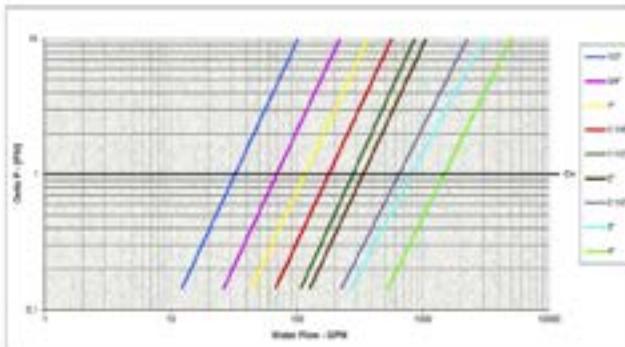
If media has more or less friction than water, multiply torque by the following factors.

Lubricating oils or liquids 0.8

Dry gases, natural gas, superheated steam 1.5

Slurries or liquids bearing abrasive particles 1.5-2.5

For other conditions please inquire of your **RUB** representative or distributor

Pressure Drop Chart

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ME564F1 · Rev.3590



s.7241 NPT 3-Way

full port 1/2"-1" hot forged brass ball valves

The RuB s7241 is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn of the handle, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation.

It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement.

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

Quality:

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

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- 3-way L Port design for flow diversion

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of **RuB** pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 300 PSI
- non-shock cold working pressure

Working Temperature:

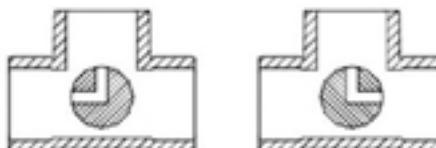
- -4°F / +302°F
- Warning: freezing fluid in the valve may cause severe damage to the valve

Options:

- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Lockable handle
- Adapter flange kit with screws

Upon Request:

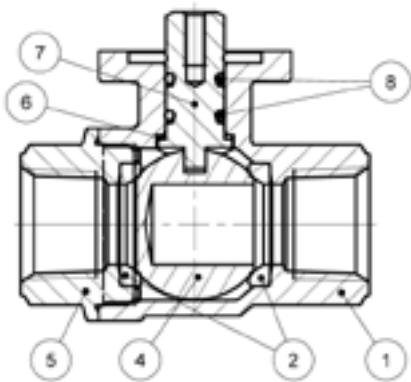
- Custom Design
s72 3-Way "L" port mounting plan



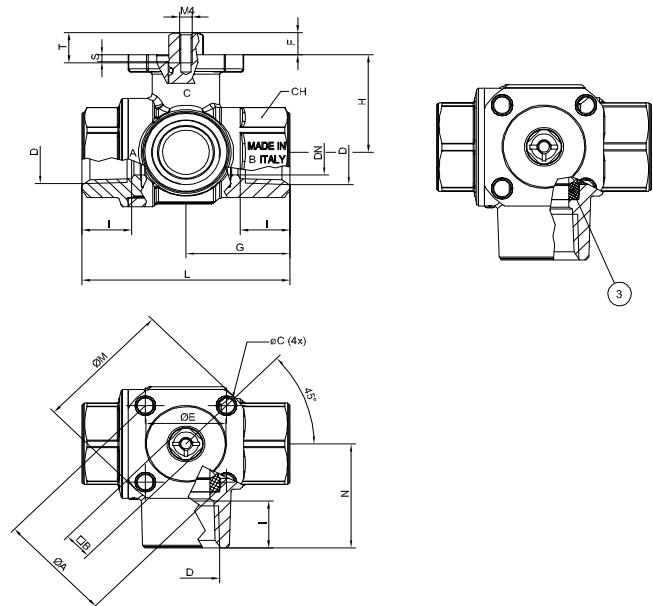
Approved by or in compliance with:

- RoHS Compliant

NOTE: Approvals apply to specific configurations/sizes only.



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



Valve code	S72D41	S72E41	S72F41
Size (inch)	1/2 NPT	3/4 NPT	1" NPT
DN(inch)	0.591	0.787	0.984
I (inch)	0.610	0.709	0.827
L (inch)	2.559	3.110	3.642
G (inch)	1.280	1.555	1.831
H (inch)	1.820	1.555	1.673
N (inch)	1.358	1.654	1.949
øA (inch)	1.417	1.417	1.417
øC (inch)	ø0.205 (M6)	ø0.205 (M6)	ø0.205 (M6)
øE (inch)	0.984	0.984	0.984
Square B (inch)	0.354	0.354	0.354
øM (inch)	1.709	1.709	1.709
S (inch)	0.087	0.087	0.087
T (inch)	0.394	0.394	0.394
F (inch)	0.287	0.327	0.327
CH (inch)	1.063	1.260	1.614

Torque for Actuator Sizing in-lb:

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

Torque correction factors:

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

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



s.7341 NPT 3 Way

full port 1/2"-1" hot forged brass ball valves

In many situations a single multi-port valve can replace several 2-way valves to reduce cost, simplify automation and conserve space. The s.7341 series have a ball seal at every port, and offer a wide variety of possible flow configurations. Positive shutoff can be achieved at any of the exiting ports. By specifying the appropriate ball port configuration, the T Port design allows flow direction to be adjusted for virtually any situation and is ideal for mixing applications.

Our s73 multi-port valves can reduce the number of valves required in piping systems and that can significantly lower overall costs by allowing the replacement of two or three conventional straight-line valves, eliminating excess fittings and simplifying automation.

Quality:

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

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

Stem:

- Blowout-proof nickel plated brass stem
- Two FPM O-rings at the stem for maximum safety

Seals:

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



Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of **RuB** pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 300 PSI
- non-shock cold working pressure

Working Temperature:

- -4°F / +302°F
- Warning: freezing fluid in the valve may cause severe damage to the valve.

Options:

- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Lockable handle
- Adapter flange kit with screws

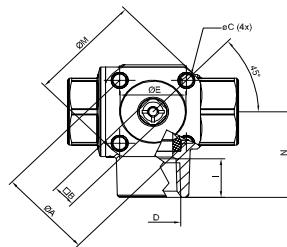
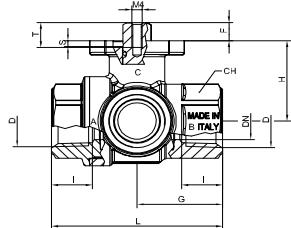
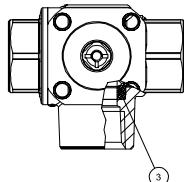
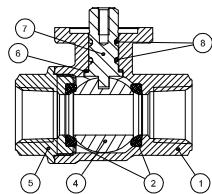
Upon Request:

- Custom Design

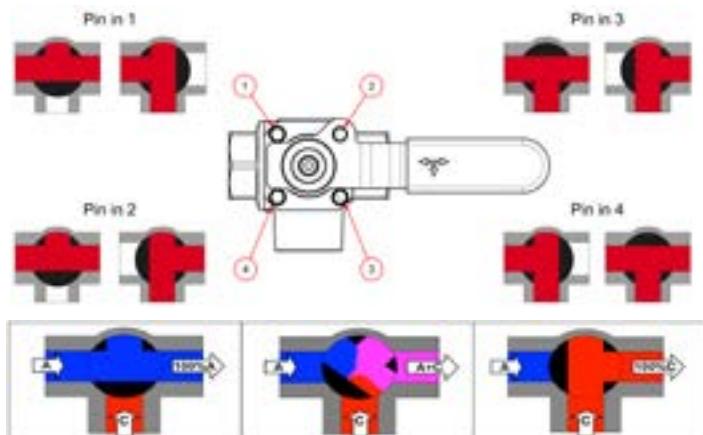
Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



With the T Port configuration, a stop pin can be screwed in any of the 4 positions shown in the flange (1, 2, 3 or 4) and the lever will be restricted to 90° of operation. The flow directions are indicated in the diagram below. The lever can be removed and installed to reach any of the four possible positions. The valve also allows a lockable option by placing a lock through the handle ear and through the valve flange.



The mixing configuration is achieved by placing the pin in position 2. The flows to be mixed enter through A and C and exit mixed through A+C.

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XCES7341 - Rev.0

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

Code	S73D41	S73E41	S73F41
Size (inch)	1/2	3/4	1
DN (inch)	0.591	0.787	0.984
I (inch)	0.610	0.709	0.827
L (inch)	2.559	3.110	3.642
G (inch)	1.280	1.555	1.831
H (inch)	1.280	1.555	1.673
N (inch)	1.358	1.654	1.949
ØA (inch)	1.417	1.417	1.417
ØC (inch)	Ø0.205 (M6)	Ø0.205 (M6)	Ø0.205 (M6)
ØE (inch)	0.984	0.984	0.984
Square B (inch)	0.354	0.354	0.354
ØM (inch)	1.709	1.709	1.709
S (inch)	0.087	0.087	0.087
T (inch)	0.394	0.394	0.394
F (inch)	0.287	0.327	0.327
CH (inch)	1.063	1.260	1.614

Torque for Actuator Sizing in-lb:

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

Torque correction factors:

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

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

For other conditions please inquire of your **RUB** representative or distributor



s.7441 NPT 3-Way Diverting

standard port 1/2"-1"

hot forged brass ball valves

The RuB s.7441 is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn of the handle, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation.

It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement.

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

Quality:

- Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- No maintenance ever required
- Silicone-free lubricant on all seals
- Chrome plated brass ball for longer life

Body:

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- ISO 5211 and DIN 3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- 3-way L port design for flow diversion

Stem:

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

Seals:

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

Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads



Flow:

- Full port 1/2" size, standard port others

Handle:

- ISO 5211 actuator mounting pad allow direct mounting of **RuB** electric and pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 450 PSI
- non-shock cold working pressure

Working Temperature:

- -4°F / +350°F
- Warning: freezing fluid in the valve may cause severe damage to the valve

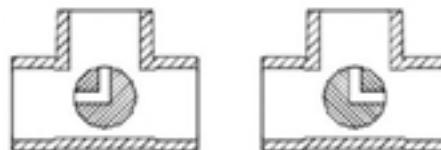
Options:

- Stainless steel trim
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Compact Power electric actuator
- Lockable handle
- Direct actuator mounting ISO 5211
- Adapter flange kit with screws

Upon Request:

- Custom Design

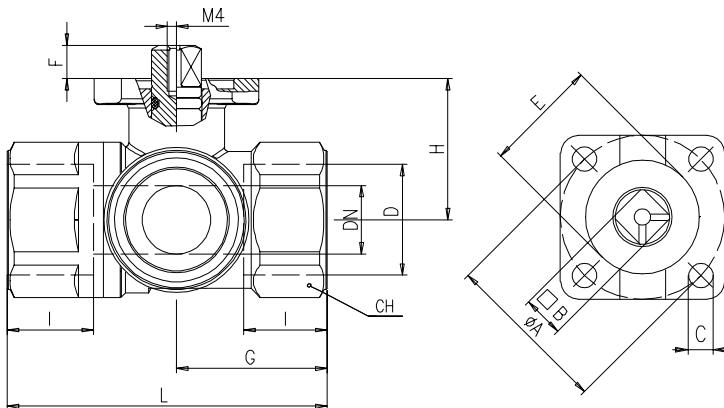
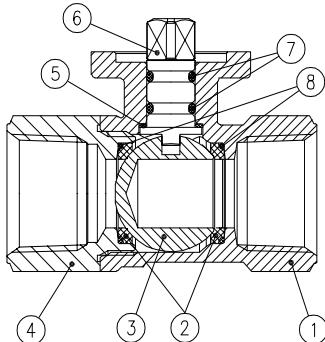
S.74 3-way "L" port mounting plan



Approved by or in compliance with:

- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



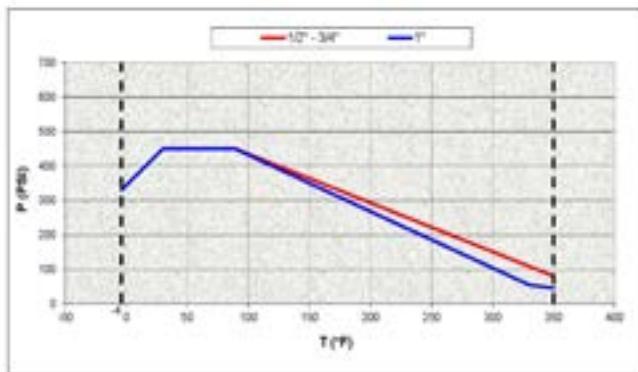
Part Description		Q.ty	Material
1	Unplated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Unplated end cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Valve code	S74D41	S74E41	S74F41
D (Inch)	1/2	3/4	1
DN(inch)	0.590	0.590	0.787
I (inch)	0.610	0.709	0.826
L (inch)	2.638	2.736	3.228
G (inch)	1.299	1.299	1.614
H (inch)	1.220	1.220	1.516
CH (inch)	1.220	1.220	1.496
ØA(inch)	1.417	1.417	1.417
□ B(inch)	0.354	0.354	0.354
C (inch)	0.220	0.220	0.220
ØE(inch)	0.984	0.984	0.984
F(inch)	0.295	0.295	0.335
Flange connection DIN ISO 5211 DIN 3337	F03	F03	F03

Torque for Actuator Sizing in-lb

Delta P	0 ÷ 450 PSI	
Valve Size	to open	to close
1/2"	27	16
3/4"	27	16
1"	36	20

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.

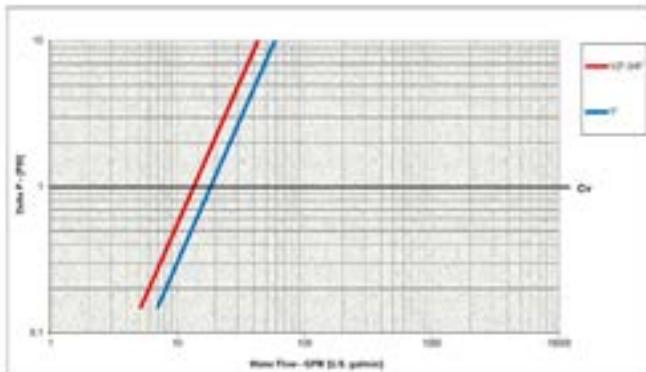
Lubricating oils or liquids 0.8

Dry gases, natural gas, superheated steam 1.5

Slurries or liquids bearing abrasive particles 1.5÷2.5

For other conditions please contact your **RuB** representative or distributor.

Pressure Drop Chart



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XCES7441 - Rev: 0



s.134 Actuatable

1000 psi Stainless Steel Full Port

1/2"-2" NPT ball valves

*150 psig non-shock working steam pressure.
Not suitable for throttling steam.
Ask our service center for specific suitability.



Quality:

- Dual sealing system allows valve to be operated in either direction making installation easier
- Silicone-free lubricant on all seals
- NACE compliance MR-01-75

Body:

- Designed and tested for ANSI B16.34
- CF8M Stainless steel housing

Stem:

- Blowout-proof stem

Seals:

- Reinforced PTFE seats

Options:

- Stainless steel lockable handle

S134 TORQS FOR SIZING ACTUATORS - in-lb.

Media lubricity clean water or similar fluids

	ΔP 0-200 psi	
	to open	to close
1/2"	49	41
3/4"	78	59
1"	123	66
1 1/4"	156	109
1 1/2"	250	144
2"	317	211

Threads:

- NPT taper ANSI B.1.20.1 Female by Female threads

Flow:

- 100% Full port for maximum flow

Handle:

- AISI 316 Stainless trim
- Convertible for manual or actuated operation
- ISO 5211 actuator mounting pad allow direct mounting of **Rub** electric and pneumatic actuators, with no bracket or coupling required

Working Pressure:

- 1000 PSI
- Cold working pressure
- 150 PSI WSP steam rating
- 2×10^{-3} Torr Vacuum rating

Working Temperature:

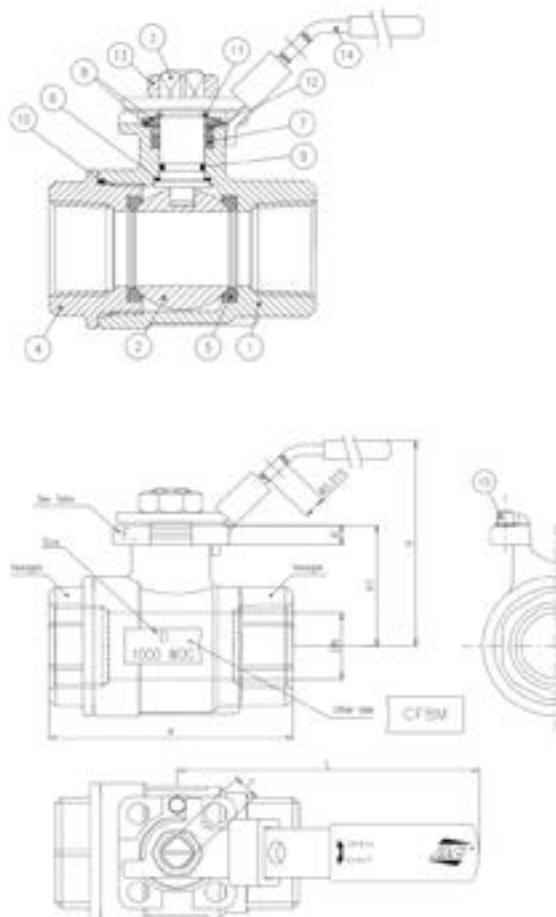
- 50°F / +450°F
- Warning: freezing of the fluid in the installation may severely damage the valve



Approved by or in compliance with:

- GOST-R (Russia)
 - Hygiene and epidemic center in Moscow city (Russia)
 - EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

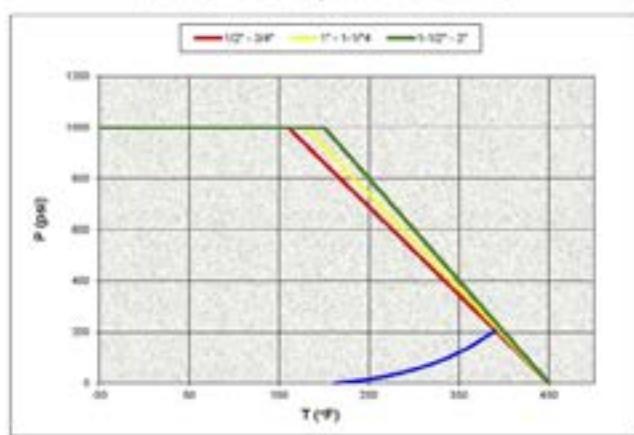
NOTE: Approvals apply to specific configurations/sizes only.



Water Flow Ratings

Size	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"
CV	20	42	65	101	145	250

Pressure-Temperature Chart



Part Description		Q.TY	MATERIAL
1	Body	1	A351-CF8M
2	Ball	1	A351-CF8M
3	Stern	1	AISI316
4	Cap	1	A351-CF8M
5	Seat	2	RTFE
6	Seat	1	RTFE
7	Packing	set	TFE
8	Bellville	2	SKS
9	O-Ring	1	FPM
10	Gasket	1	RTFE
11	Snapping	1	AISI 304
12	Follower	1	AISI316
13	Nut	1	AISI 304
14	Lockable handle	1	A240 SS304
15	Stop pin	1	AISI 304

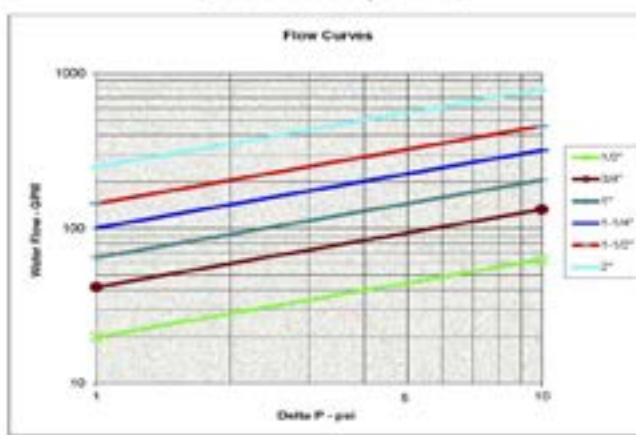
Code	134D41	134E41	134F41	134G41	134H41	134I41
D (Size)	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
DN (inch)	0.56	0.81	1	1.25	1.5	1.97
H1 (inch)	1.40	1.56	1.84	2	2.3	2.8
A (inch)	2.60	2.99	3.54	3.94	4.41	5
B (inch)	0.28	0.28	0.319	0.319	0.319	0.382
S (inch)	0.35	0.35	0.43	0.43	0.43	0.55
E (ISO 5211)	E03	E03	E04/E05	E04/E05	E04/E05	E05

Code	134041,*	134E41,*	134F41,*	134G41,*	134H41,*	134I41,*
L (inch)	4.40	4.40	5.87	5.87	5.87	7.5
H (inch)	2.50	2.66	3.14	3.3	3.6	4.5

*Ball valves fitted with stainless steel lock lever handle

Ask for additional information on the whole range of *RuB* valves and consult with your supplier for special applications.

Pressure Drop Chart



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RUBINETTERIE UTENSILERIE BONOMI



ACCESSORIES

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Lockable Handle

for most RuB ball valves
in sizes 1/4"-4"



In Sizes 1/4"-4"

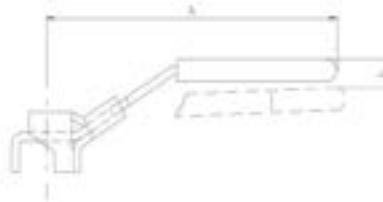
The RuB lockable handle is made of strong Geomet® carbon steel and designed to discourage tampering. The RuB locking device covers the top nut of the valve making removal impossible without a key. Easy to install on valves in the field, the RuB lockable handle will lock s.93 RuB valve the closed position only in compliance with OSHA (USA) safety requirements, while other RuB valves can be locked in both the open and closed positions.



Lockable only in closed position when assembled on s.93 1/4"-2" RuB range



Lockable in both open and closed positions when assemble on any other 1/4"- 4" RUB range



Code	PR9A13	PR9A16	PR9A19	PR9A20
A (mm)	98	117	156.5	250
H (mm)	8.5	13	4	8
FULL PORT(dia)	1/4-3/8-1/2	3/4-1	1/4-1/2-2	2/3-3-4
REDUCED PORT(dia)	1/2-3/4	1-1/4	1/2-2-3/4	3-4

Code	PR9A13	PR9A16	PR9A19	PR9A20
A (inch)	3.779	4.566	6.161	9.842
H (inch)	0.334	0.374	0.157	0.315
FULL PORT(dia)	1/4-3/8-1/2	3/4-1	1/4-1/2-2	2/3-3-4
REDUCED PORT(dia)	1/2-3/4	1-1/4	1/2-2-3/4	3-4

Dimension A shows handle length from center of stem; dimension H shows height of handle compared to standard handle assemble on valves.
Two bottom lines show size of valve to fit with each size of lockable handle. Use 9/32" size shackle padlock up to 2", and 5/16" over.

Oval lockable handle

To RuB forged valves*



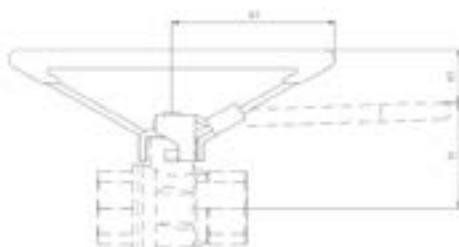
The **RuB** oval/round lockable handle is for service where there isn't enough space for levers or T-handles, or where lever handles might be moved unintentionally.

It is made of steady carbon steel and it features the patented **RuB** lockable device.

The **RuB** oval lockable handle is available for all sizes of forged **RuB** valves up to 2" and in round shape for sizes 2 1/2" thru 4"; it is easy to install on valves in the field or you can simply order your **RuB** valves with this option.



*please apply to our office for details



Size	1/4 - 3/8	1/2	3/4 - 1	1 1/4 - 1 1/2 - 2	2 1/2 - 3 - 4
A1 (inch)	.56	.56	.70	.79	.95
H1 (inch)	.20	.18.5	.22	.15	.32
Size	1/4 - 3/8	1/2	3/4 - 1	1 1/4 - 1 1/2 - 2	2 1/2 - 3 - 4
A1 (inch)	2.283	2.283	2.798	2.798	6.102
H1 (inch)	0.787	0.768	0.868	0.590	0.126
Size	1/4 to 2		2 1/2 to 4		
Lock Nut Width	9/32"		5/16"		

Dimension A1 shows handle dimension from centre of stem. Dimension H1 shows height of handle compared to standard handle assembled on valves.

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.



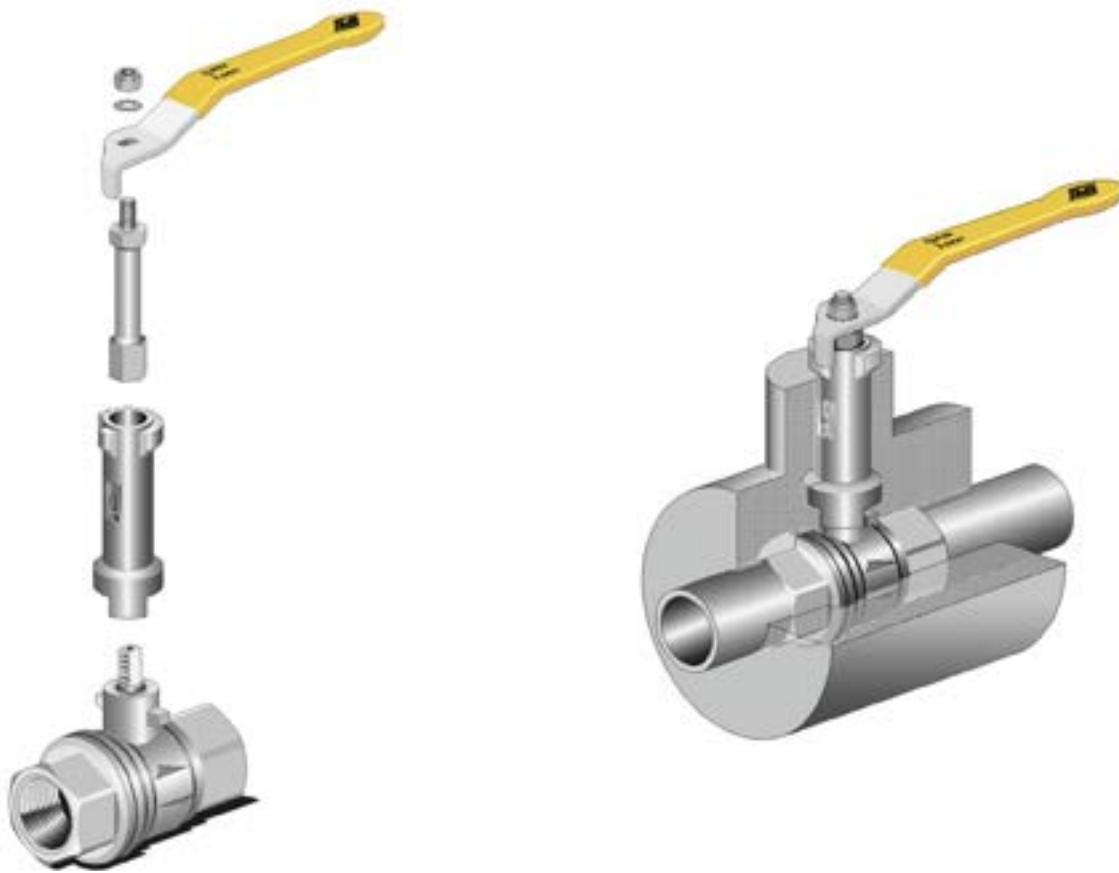
Stem Extension

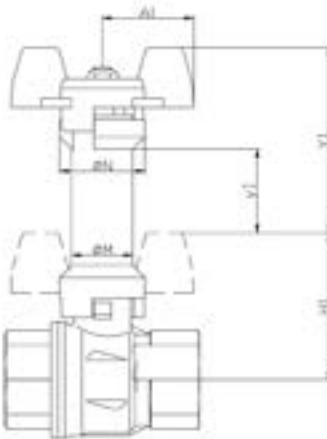
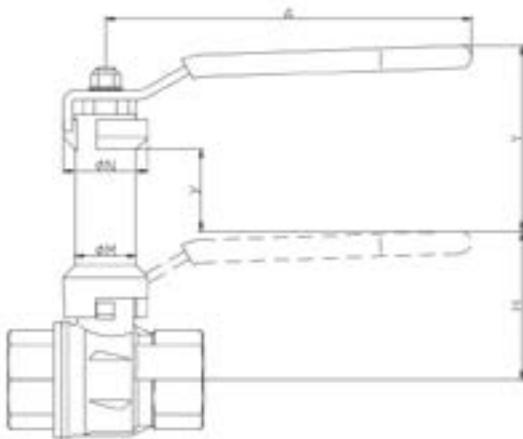
for most RuB ball valves
in sizes 1/4"-2"



Today's world is conscious of the energy savings required to maintain resources for the future. To avoid heat loss from insulated pipes **RuB** offers stem extensions which provide easy actuation with minimum disturbance of the insulated.

RuB stem extensions are made of strong hot forged brass and are designed for low heat losses from the pipe to the ambient environment. They are easy to install on **RuB** valves even while valves are in service.

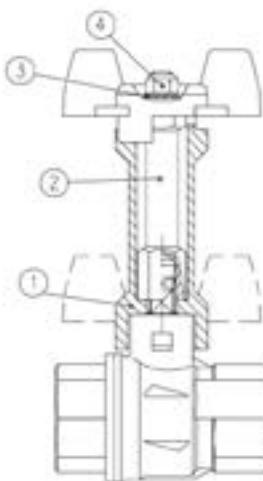
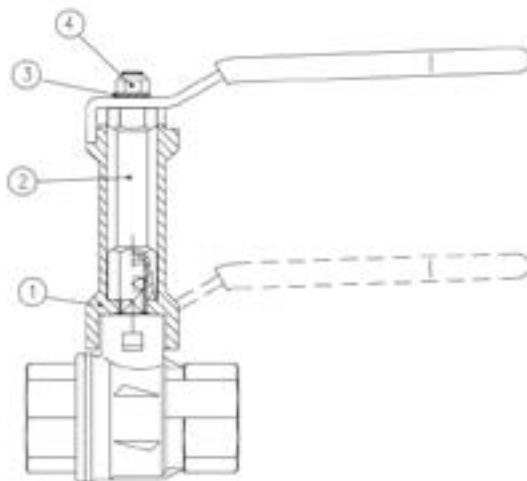




Dimensions Y, y, Y1 and y1 are additional to dimension H on the relevant valve drawing

Valve size full port	1/4 - 3/8	1/2	3/4 - 1	1 1/4 - 1 1/2 - 2
Valve size reduced port		1/2 - 3/4	1 - 1 1/4	1 1/2 - 2 - 2 1/2
M (mm)	17	17	20	26
N (mm)	25	25	26	36
A (mm)	82	100	120	158
Y (mm)	56.5	56.5	62.5	67.5
y (mm)	26.5	26.5	27.5	30.5
A1 (mm)	25	25	30	
Y1 (mm)	66.5	56.5	62.5	
y1 (mm)	25.5	26	30.5	

Valve size full port	1/4 - 3/8	1/2	3/4 - 1	1 1/4 - 1 1/2 - 2
Valve size reduced port		1/2 - 3/4	1 - 1 1/4	1 1/2 - 2 - 2 1/2
M (inch)	0.669	0.669	0.787	1.023
N (inch)	0.984	0.984	1.102	1.417
A (inch)	3.228	3.937	4.724	6.220
Y (inch)	2.224	2.224	2.460	2.657
y (inch)	1.043	1.043	1.062	0.807
A1 (inch)	0.984	0.984	1.181	
Y1 (inch)	2.224	2.224	2.460	
y1 (inch)	1.063	1.023	1.200	



PART DESCRIPTION	Q'ty	Material
1 Body	1	CWS17N
2 Connection	1	CWS17N
3 Tab washer	1	Steel
4 Self-Locking nut	1	Steel

Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

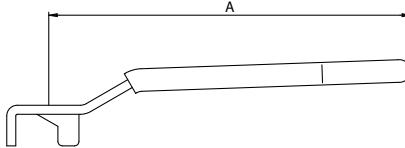


RUBINETTERIE UTENSILERIE BONOMI



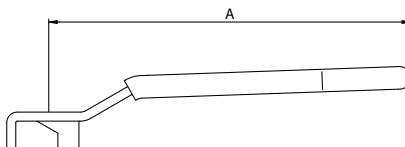
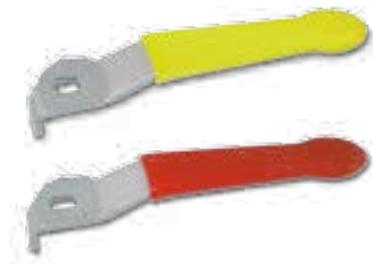
Levers

Geomet® carbon steel handle with thick PVC dip coating for most *RuB* Ball Valves up to 4"



	Full Port	1/4"÷3/8"	1/2"	3/4÷1"	1.1/4"÷2"	2.1/2"÷2"
Standard Port		1/4"÷3/8"	1/2"÷3/4"	1"÷1.1/4"	1.1/2"÷2.1/2"	3"÷4"
A (inch)		3.228	3.937	4.724	6.220	10.039
Red	Code	PLFR11	PLFR13	PLFR16	PLFR19	PMFR20
Yellow	Code	PLFG11	PLFG13	PLFG16	PLFG19	PMFG20
Black	Code	PLFN11	PLFN13	PLFN16	PLFN19	PMFN20
White	Code	PLFW13	PLFW16	PLFW19		
Light Blue	Code	PLFA11	PLFA13	PLFA16	PLFA19	PMFA20
Green	Code	PLFV13	PLFV16	PLFV19		

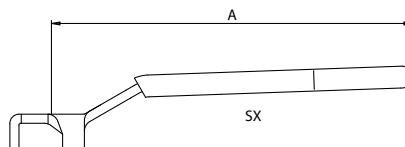
AISI 430 handle for most *RuB* ball valves up to 2"



	Full Port	1/4"÷3/8"	1/2"	3/4÷1"	1.1/4"÷2"
Standard Port		1/4"÷3/8"	1/2"÷3/4"	1"÷1.1/4"	1.1/2"÷2.1/2"
A (inch)		3.228	3.937	4.724	6.220
Red	Code		PLAR13	PLAR16	PLAR19
Yellow	Code	PLAG11	PLAG13	PLAG16	PLAG19

Left Levers

Geomet® carbon steel LEFT lever



	Full Port	1/4"÷3/8"	1/2"
Standard Port		1/4"÷3/8"	1/2"÷3/4"
A (inch)		3.937	3.937
Black	Code	PLFN10	PLFN10

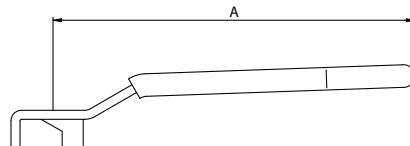


The left handles are the solution where the valves are installed on a parallel piping system.



Reverse Levers

Geomet® carbon steel 90° REVERSE lever



Full Port	1/2"
Standard Port	1/2"-3/4"
A (inch)	3.937
Yellow	Code PLIG03
Light Blue	Code PLIA03
Light Blue SX	Code PLIA00

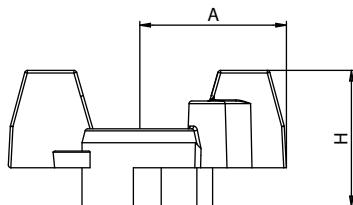


We have also reversed handle: in this version the handle is parallel to the pipe when the valve is closed and perpendicular when the valve is open. This option is available only in the small size for valves up to 1/2" (or 3/4" for reduced bore)

Stem flats show actual ball position

T-Handles

Aluminum - Brass - Geomet® carbon steel T-HANDLE



Full Port	1/4"-3/8"	1/2"	3/4-1"	1 1/4"-2"
Standard Port	1/4"-3/8"	1/2"-3/4"	1"-1 1/4"	1 1/2"-2 1/2"
A (inch)	0.984	0.984	1.181	2.244
H (inch)	0.964	0.964	1.102	1.575
Red	Code PFAR03	PFAR03	PFAR06	PFRR09
Yellow	Code PFAG03	PFAG03	PFAG06	PFFG09
Light Blue	Code PFAB03	PFAB03	PFAB06	PFFA09
Brass unplated	PFOG03	PFOG03	PFOG06	—
Brass nickel plated	PFON03	PFON03	PFON06	—



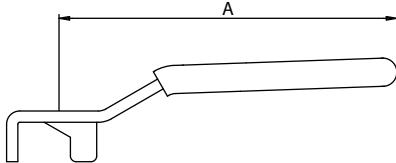
Corrosion is a big problem that many have to face when using valves in underground or outdoor installations, especially near sea, or when valves are used in swimming pools (chlorine), trucks or fire-fighting equipment.

Most people understand that brass components performance are quite high, while the problem with a ball valve may arise from a component you would have never thought about: the Aluminium T-handle.

To benefit of brass resistance to corrosion, **RuB** has developed brass T-Handles.

Stubby Handles

For most **RuB** Ball Valves up to 2"



Full Port Valve	1/4"-3/8"	1/2"	3/4-1"	1.1/4"-2"
Standard Port Valve	1/4"-3/8"	1/2"-3/4"	1"-1.1/4"	1.1/2"-2.1/2"
A (inch)		1.771	1.771	3.543
Yellow	Code	PLTG13	PLTG13	PLTG16

RuB levers are not only strong, but also long for easy maneuver. To solve space constraints issues, install our stubbies.

Memory Stop

For most **RuB** Handles up to 2"



Memory Stop allows to control flow passing through the valve by curbing ball movement from fully closed to a preset position. Installing a memory stop on a standard **RuB** valve is very easy and can be done even while valve is being used.

Full Port Valve	1/4"-3/8"	1/2"	3/4-1"	1.1/4"-2"
Standard Port Valve	1/4"-3/8"	1/2"-3/4"	1"-1.1/4"	1.1/2"-2.1/2"
Code	PPMA03	PPMA03	PPMA06	PPMA09

s.35 Metal Wedge Handles

For **RuB** s.35 Series



Thanks to the metal wedge handles mounted on s35 series, it's now possible to reach working temperatures up to 250°F (120°C).

The metal wedge handles are available in red, black, yellow, green, light blue and chrome plated.

Colours	Yellow	Blue	Black	Red	Green	Chrome P
Code	PLZ35G	PLZ35B	PLZ35N	PLZ35R	PLZ35V	PLZ35C



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NOTES:



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