RuB, Inc.

MEETING STANDARDS IS OUR STANDARD





PRODUCTS CATALOG

BALL VALVES AND ACTUATORS







Murdock Industrial - Hose Division www.HoseWarehouse.com support@murdockindustrial.com PH: 330-535-7105 FX: 330-535-1125



PRODUCTS CATALOG







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

PPROVAL

Management System of:

erie Bonomi s.r.l. 9 - Frazione Ciliverghe Brescia) - Italia

r Quality Assurance to the following t System Standards:

01:2008

nt System is applicable to:

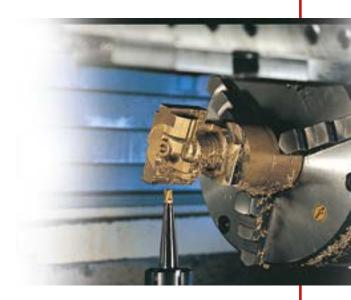
d distribution of low pressure devices, related components Il brass valves from 1/8" to 4" s and accessories, and product omer's specification.

Original Approval: 22" February 1995 Current Certificate: 3" November 2015 Certificate Expiry:

on behalf of Lloyd's Register Quality Assurance Limited

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.



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

- 100%
 MADE IN ITALY
- 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
- * 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 "Tille"





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!



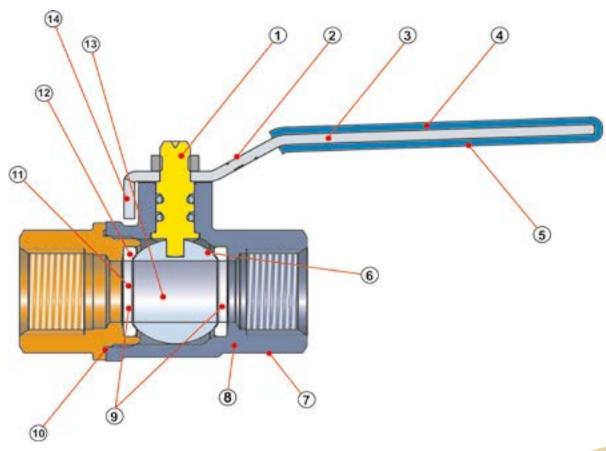




Inside the valve

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-lubricanting 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.

www.rubvalves.com

CERT. 01 - Rev. 00

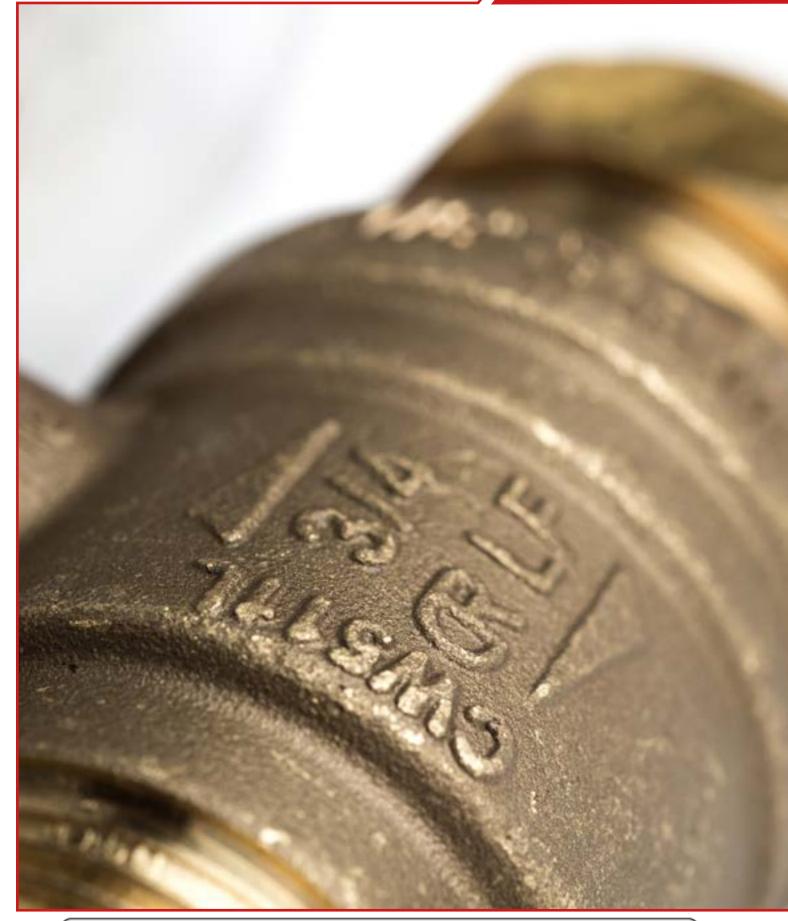
Prime Trial attendant account on on financia recent (1075 - Harrison account (1080-1004) 201 - 1024 September 1075 - United States (1074) September 1075 - United States (1074) September 1075 - United States (1074)











Index

	Gas	15	GAS
	Plumbing	39	PLUMBING
	Drinking Water	51	DRINKING
	Industry	63	INDUSTRY
	Pneumatic	87	PNEUMATIC
	Actuation	97	ACTUATION
1 3	Accessories	137	ACCESSORIES



GAS

s.95 NPT - Full Port 1/4"-4"	Page 16
s.95 NPT Nickel Plated - Full Port 1/4"-4"	Page 18
s.92 NPT - Full Port 1/4"-4"	Page 20
s.92 MIP x FIP NPT - Full Port 1/4"-4"	Page 22
s.82 NPT Side Drain - Full Port 1/2"-2"	Page 24
s.80 NPT Gas Cock - Female by Female - Full Port 3/4"-2"	Page 26
s.8042 NPT Gas Cock - Male by Female - Full Port 3/4"-2"	Page 28
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
s.195 NPT+Flare - Gas Cock - Standard Port 3/8"-1"	Page 34
s.19540 flare 37° + Solder end - Standard Port 1/2"	Page 36







s.95 NPT

full port 1/4"-4" 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
- · 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

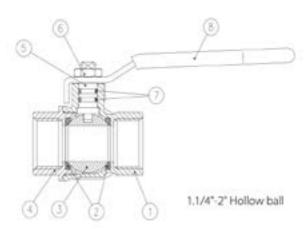
Options up to 2" size:

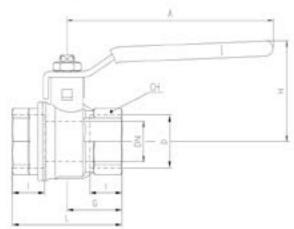
- Stem extension
- T-handle
- · AISI 430 stainless steel handle
- Oval lockable handle up to 2', round over 2'
- · Patented locking device for valves up to 4"

Upon Request:

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

- 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.

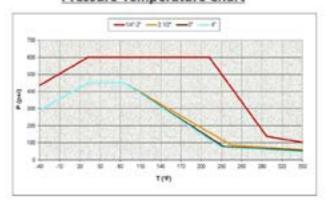
	ART DESCRIPTION	Q.TY	MATERIAL
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet® nut	1	CB4FF
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet* steel handle	1	DD11

Code	\$95841	\$95C41	S95D41	\$95E41	\$95F41	\$95G41	\$95H41	\$95#1	\$95L41	\$95M41	\$95141
D (inch)	1/4	38	1/2	3/4	1	11/4	11/2	2	21/2	3	4
DN (inch)	0.314	0.393	0.590	0.787	0.964	1.259	1.574	1.968	2.559	3.149	3.937
I (inch)	0.472	0.472	0.610	0.669	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	4763	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)	1.563	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	2.696	3.346	3.897	4,921

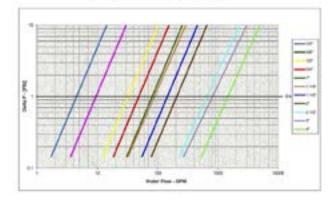
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4. Stem configuration of valves over 2° is slightly different.

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



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 an referring to the latest. edition. Auß and logo are registered trademarks of Auß Rubinetterie utensilerie Bonomi. Other logos and registered trademarks are property of respective owners XCES95 - Rev.: 3486







s.95 NPT nickel plated

Full Port 1/4"- 4" 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
- 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

Soals

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



Threads:

· NPT taper ANSI 8.1.20.1 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:

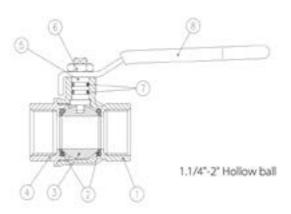
- AISI 316 stainless steel ball
- Glass filled PTFE seals
- Custom Design
- Special configuration for industrial oxygen application.



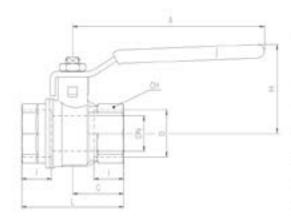
- · Canadian standards Association (United States, Canada)
- · Factory Mutual (United States)
- · GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)

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





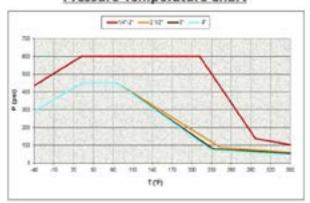
	PART DESCRIPTION	Q.TY	MATERIAL
1	Nickel plated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Nickel plated NPT end cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geomet* nut	1	CB4FF
7	O-Ring	2	FPM
8	Yellow PVC coated Geomet* steel handle	1	DD11



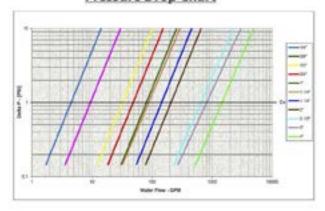
Code	\$95841N	\$95C41N	395D41N	395E41N	595F41N	395G41N	395H41N	\$95141N	\$95L41N	595M41N	5959411
D (inch)	1/4	38	1/2	3/4	.1	11/4	11/2	2	21/2	3	4
DN (inch)	0.315	0.394	0.590	0.787	0.984	1.260	1.575	1.968	2.559	3.150	3.937
1 (inch)	0.472	0.472	0.610	0.609	0.826	0.905	0.905	1.043	1,260	1.377	1,633
L (inch)	1.771	1,771	2.322	2519	3.168	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	3.907	4.724	4.724	6.220	6.220	6.229	10.039	10.039	10:039
H (inch)	1.496	1.496	1.693	1.968	2.125	2.874	3.110	3.386	5.197	5.512	6.063
OH (inch)	0.787	0.787	0.964	1220	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







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:

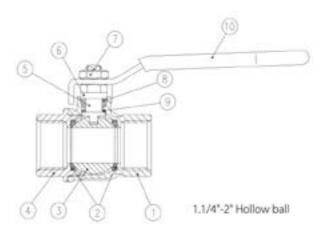
- · Stem extension
- Lead free for safe drinking water (0.25% or less Pb)
- T-handle
- · AISI 430 stainless steel handle
- · Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- · Male by female NPT threads up to 4"

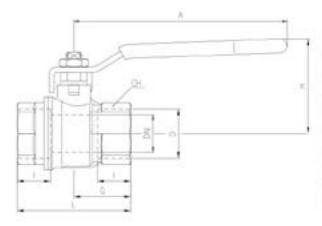
Upon Request:

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



- · 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





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.

Underwriters Laboratories (United States & Canada)

Meeting WW-V-35C Federal U.S. Specification

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

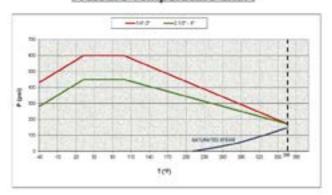
NOTE: Approvals apply to specific configurations/sizes only.

P	ART 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	15	PTFE carbon filled 25%
10	Yellow PVC coated Geomet* steel handle	1	DD11

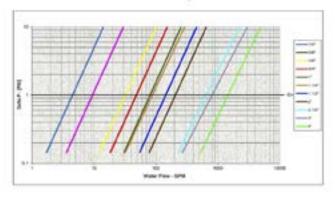
Code	392841	\$92C41	332041	\$92E41	\$92F41	S92G41	592941	392141	392L41	\$92M41	59274
D (inch	14	3/8	1/2	34	1	114	11/2	2	21/2	3	4
DN (inch	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968	2.559	3.149	3.937
1 (inch	0.472	0.472	0.610	0.669	0.826	0.905	0.905	1.043	1.260	1.377	1.633
L (inch	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.753	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	1.563	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	2.696	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



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. **8x8** and logo are registered trademarks of **8x8** Rubinetterie usersillerie Bonomi. Other logos and registered trademarks are property of respective owners. XCESS2 - Rev: 3580





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:

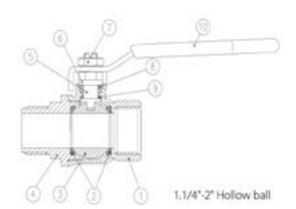
- Stem extension
- · T-handle
- · AISI 430 stainless steel handle
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- · Female by female NPT threads up to 4"

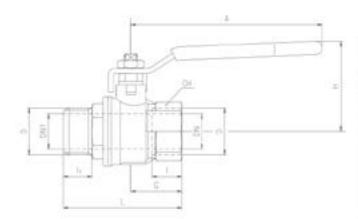
Upon Request:

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



- · 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





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.

 Underwriters 	Laboratories	(United State	s & Canada)

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

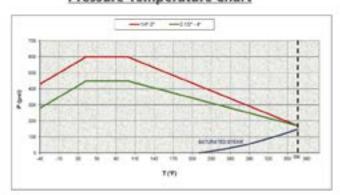
NOTE: Approvals apply to specific configurations/sizes only.

	PART DESCRIPTION	Q.TY	MATERIAL
1	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

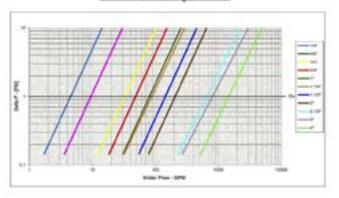
.0	ode	592842	892042	552042	\$92E42	592F42	992G42	S92H42	892142	\$821.42	592542	\$92N42
D	(inch)	1/4	38	1/2	34	1	11/4	112	2	210	3	4
DN	(inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968	2.559	3.149	3.937
DNI	(inch)	0.314	0.393	0.590	0.787	0.984	1,259	1,524	1,968	2.205	2.756	3,701
1	(inch)	0.472	0.472	0.613	0.669	0.826	0.905	0.905	1.043	1.260	1.377	1.633
11	(inch)	0.531	0.531	0.650	0.709	0.000	0.945	0.545	1.063	1.457	1.555	1,732
L	(inch)	2.224	2.224	2.755	2.992	3.642	4.173	4,449	5.256	7.106	8.051	9.373
G	(inch)	0.885	0.665	1.161	1,259	1.004	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	10.038	10.039
н	(inch)	1.563	1.563	1.895	1.988	2.153	2.988	3.236	3.500	5.196	5.511	6.062
СН	(inch)	0.767	0.787	0.964	1.220	1.574	1.929	2.125	2,656	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



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. **Auß** and logo are registered trademarks of **Bulb** Rubinetterie usersilerie Bonomi. Other logos and registered trademarks are property of respective owners. XCE592M - Rev. 3580





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:

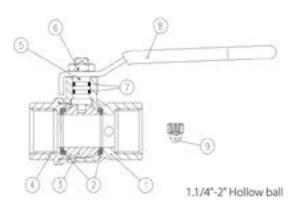
- · Stem extension
- · T-handle
- · Oval lockable handle
- · AISI 430 stainless steel handle
- · Patented locking device

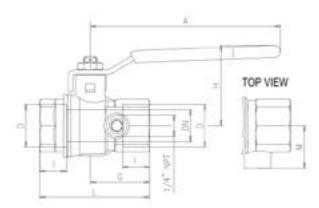
Upon Request:

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



- · 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)





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

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

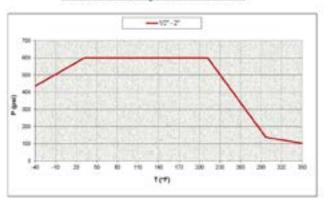
NOTE: Approvals apply to specific configurations/sizes only.

	Part Descritpion	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
A	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	210	DD11
9	Unplated plug	1	CW617N

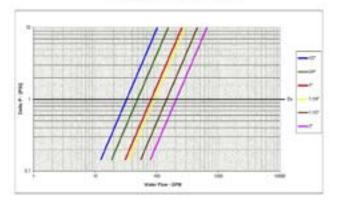
Code	S82D41	S82E41	S82F41	S82G41	S82H41	S82I41
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2
DN (inch)	0.590	0.787	0.984	1.259	1.574	1.968
I (inch)	0.610	0.669	0.826	0.905	0.905	1.043
L (inch)	2.559	2.736	3.405	3.878	4.232	4.960
G (inch)	1.397	1.476	1.811	2.047	2.224	2.578
A (inch)	3.937	4.724	4.724	6.220	6.220	6.220
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

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



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. **Rull** and logo are regimered trademarks of **Rull** Rubinetterie utervalerie Bonomi. Other logos and registered trademarks are property of respective owners.

3466





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

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

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



Threads:

NPT taper ANSI B.1.20.1 Female by Female threads

· 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

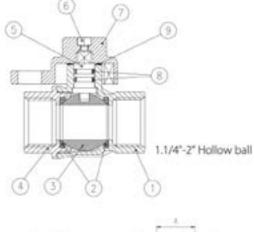
- Canadian standards Association (United States, Canada)
- · GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- · UkrSepro (Ukraine)
- · RoHS Compliant
- Underwriters Laboratories (United States & Canada)

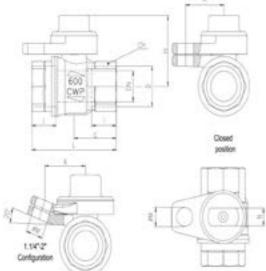
• EAC - Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.



Code	S80E41	S80F41	S80G41	S80H41	\$80141
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
L (inch)	2.519	3.188	3.661	4.015	4.763
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

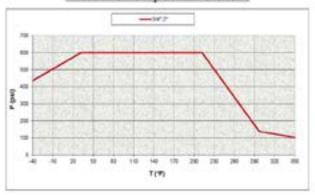




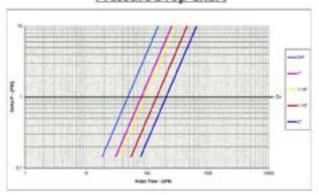
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

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



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. **Bull** and logo are registered trademarks of **Bull** flubinetterie utensilerie Bonomi. Other logos and registered trademarks are property of respective owners.

#ESSE - Birc 1486







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

Stom

- · 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:

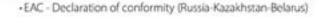
- · -40°F/+350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options

· Female by female NPT threads



- 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)

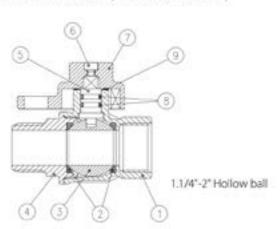


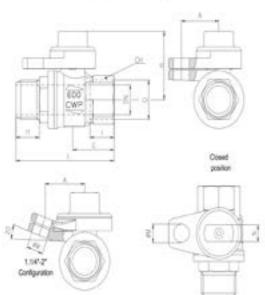
NOTE: Approvals apply to specific configurations/sizes only.

	PART DESCRIPTION	Q.TY	MATERIAL
3	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%

Code	S80E42	S80F42	S80G42	S80H42	\$80142
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

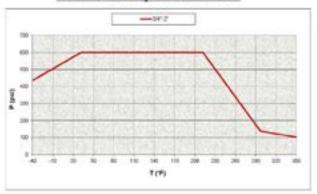
Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.



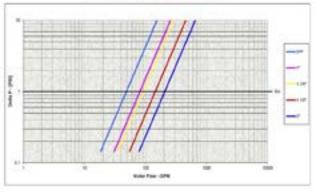


DN shows the nominal flow diameter, Actual flow diameter compiles with full port DIN 3357 part 4.

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:

- non-shock cold working pressure

Working Temperature:

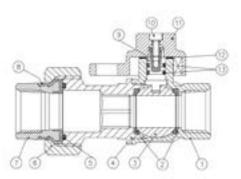
- · -40"F / +350"F
- · Warning: freezing of the fluid in the installation may severely. damage the valve

Upon Request:

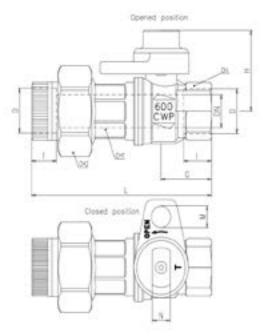
See s.80



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



1,1/4" hollow ball



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

RoHS Compliant

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

NOTE: Approvals apply to specific configurations/sizes only.

P	ART 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 tall piece	1	CW617N
8	Insulation	1	Polyamide
9	Unplated stem O-ring design	1	CW617N
10	Stainless steel screw	3	AI51304
11	Unplated lockwing	4:	CW617N
12	Washer	1	PTFE glass filled 25%
13	Stem O-ring	2	FPM

Code	S80E43	\$80F43	\$80G43
D (inch)	3/4	1	1.1/4
DN (inch)	0.748	0.945	1.181
I (inch)	0.669	0.826	0.905
L (inch)	4.507	5.157	5.236
G (inch)	1.260	1.594	1.831
A (inch)	1.141	1.141	1.209
H (inch)	1.831	1.988	2.559
M (inch)	0.492	0.492	0.472
N (inch)	0.449	0.449	0.563
CH (inch)	1.220	1.575	1.929
CH1 (inch)	1.220	1.575	1.929
CH2 (inch)	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

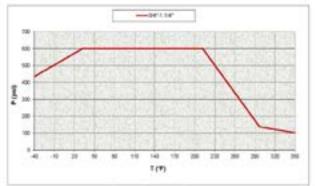
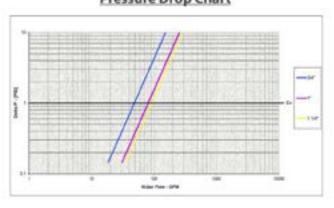


Chart applies to valve

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 istandard shall be interpreted as referring to the latest edition. Rull and lugo are registered trademarks of Rull flubrimiterie utensilerie Bonomi. Other logos and registered trademarks are property of respective owners.

IEEE/05/3 - Rev. 3486

Pressure Drop Chart







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:

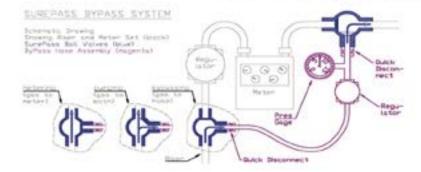
- 175 PSI
- · non-shock cold working pressure

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

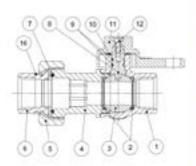


- · GOST-R (Russia)
- · Hygiene and epidemic center in Moscow city (Russia)
- · UkrSepro (Ukraine)
- · RoHS Compliant

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

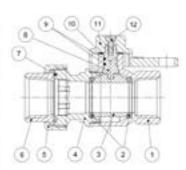
NOTE: Approvals apply to specific configurations/sizes only.

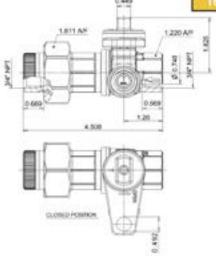
S80E43BS

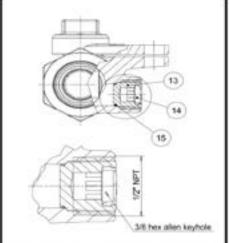


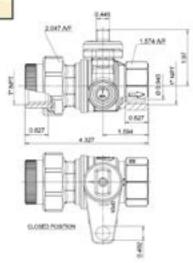
PA	ART DESCRIPTION	Q.TY	MATERIAL
1	Sand blasted body	1	CW617N
2	Seat	2	PTFE glass filled 5-15%
3	Chrome plated ball	1	CW617N
4	Sand blasted end cap	11	CW617N
5	Nut	1	CW617N
6	NPT female tail piece	1	CW617N
7	O-Ring	1	NBR
8	Stem O-Ring design	1	CW617N
9	O-Ring	2	FPM
10	Washer	1	PTFE glass filled 25%
11	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

580F43BL



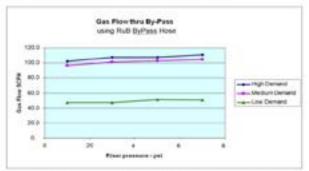






DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

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



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. **Rull** and logo are registered trademarks of **Rull** Hubinetterie utensierie Bonomi. Other logos and registered tredemarks are property of respective owners.





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



- · 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)



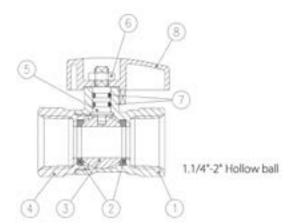
Code

D (inch)

195C41

3/8

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



	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

NOTE: Approvals apply to specific configurations/sizes only.

		Λ	Ť.
			1/
	J		4
	10	I	
_	10	-	
1			
	-	G	_
Č.	L		

- L. J.				-
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

195D41

1/2

195E41

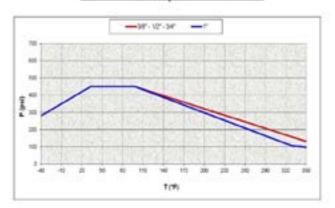
3/4

195F41

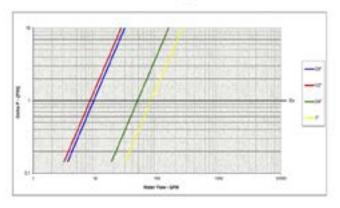
DN shows the nominal flow diameter.

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



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. **Rull** and logo are registered trademarks of **Rull** Rubbnetterie usersilerie isonomi. Other logos and registered trademarks are property of respective owners.

#EP195 - Rev. 3486





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:

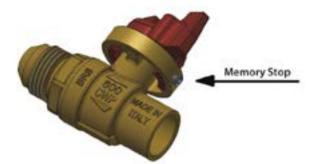
- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

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

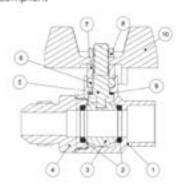
Options:

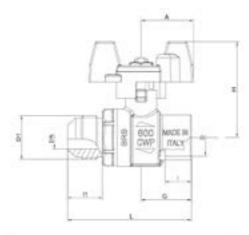
- AISI 430 stainless steel handle
- Geomet* carbon steel handle with thick PVC dip coating. Handle coating offers both thermal and electrical protection.

Upon Request:

· Memory stop

- · 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	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)	34-16 UNF 2A	1,1/16-12 UN 2A
DN(inch)	0.39	0.61
1 (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

				TABL	E 1													
			Pre	saure - Temp	erature Ra	ings												
Joining	meting	mnge	working to	emperature		Paci	sum workin	g gauge pre	ssure	i modulo combatano								
material	degrees		degrees		size	size 1/2*-1*		1/4"-2"	size 2.1/2"-4"									
merenes	4	10	- 4	*C	pel	kPa	pei	kPa.	pel	kPm								
50-50 tin-lead	361/421		"	0/+100	-18/+38	200	1400	175	1200	150	1050							
solder"		421 185/215	0/+150	-18/+66	150	1050	125	850	100	700								
ASTM B32 alloy			1890/19	1890/19	160/210	1609/210	1609/210	160/210	1609/210	1609/4/10	1609210	0/+200	-18/+93	100	700	90	500	75
grade 50A			0/+250	-18/+121	85	600	75	500	59	350								
55-5 tin-antimony	1		0/+100	-18/+38	500	3500	400	2800	300	2100								
solder		solder	older 0/+	0/+150	-18/+66	400	2800	350	2400	275	2000							
ASTM B32 alloy	450/464	230/240	0/+200	-16/+93	300	2100	250	1700	200	1400								
grade 95TA			0/+250	-18/+121	200	1400	175	1200	150	1050								

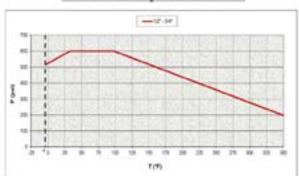
Above stated limits are not imposed by the valve, but by the strength of the soldering joint. according to ASME B16.22.

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

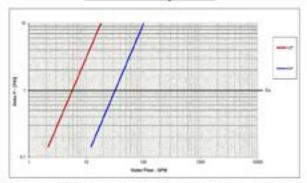
DN shows the nominal flow diameter.

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

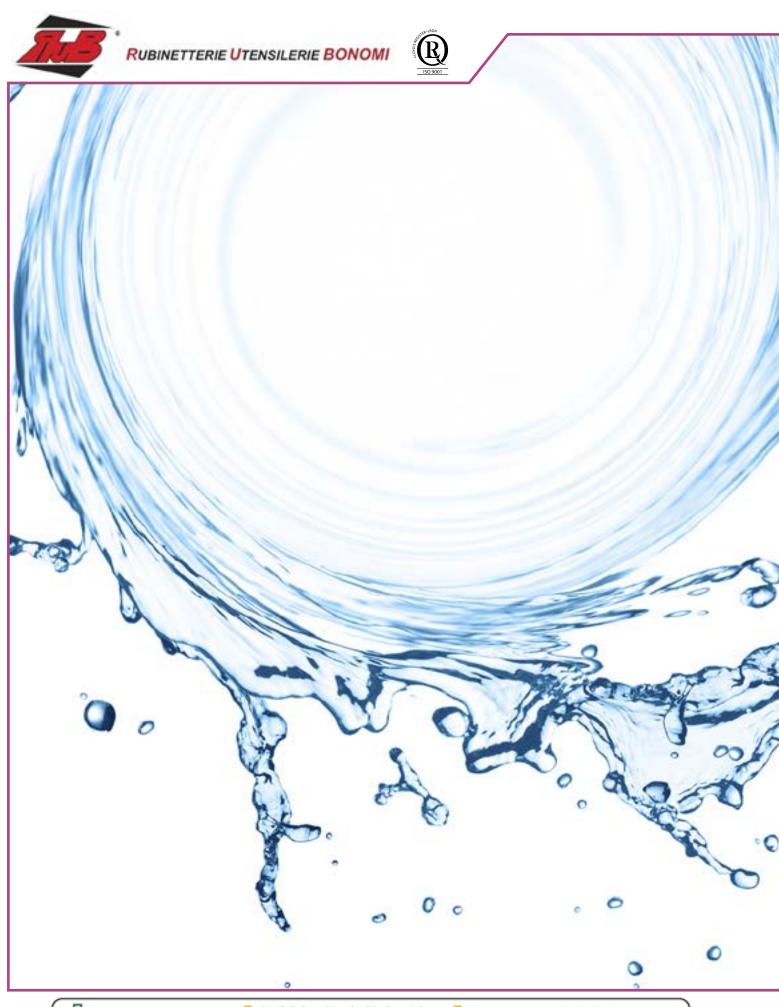
Pressure-Temperature Chart



Pressure Drop Chart



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. Rull and logo are registered trademarks of Rull Rubinetterie utensilerie Bonomi. Other logos and registered tredemarks are property of respective owners. XCE 19540 - Anv. 3486



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 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:

· 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

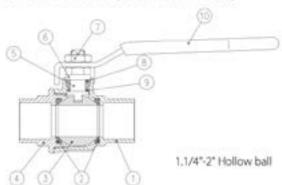
Options up to 2" size:

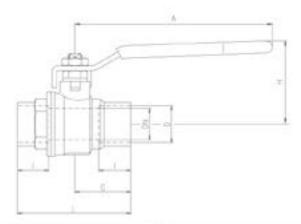
- · Stem extension (Assemble after soldering)
- Lead free for safe drinking water (0.25% or less Pb)
- · AISI 430 stainless steel handle
- 1/8"NPT side tap only for 1/2" and 3/4"
- . Oval lockable handle up to 2", round over 2"
- · Patented locking device for valves up to 3"

Upon Request:

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

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





				1400	£1								
			Fre	name. Temp	erinium Flor	trun	123.00						
Access to	motor	renex :	working to	mperature	1	mesic	not work?	summer in	mine :				
Janyong.	degrees		degrees		104	ASSETS OF		1415	988 3 N/C-81				
race as	.4	· K.	4	*	jei	100		1074					
eastern hard	381421			81-100	78526	200	5400	TTN:	1200	190	125		
ADDRES.		at 160216	165/216	165/216	180219	2015	-15-66	194	1000	128	860	100	100
ARTM BOX who						100419	100419	31-296	199-99	100	790	96	400
prade 95A			311230	-1894121	91	600	73	38	36	. 29			
of 4 to outside		1 1	3/-100	-181-04	506	3000	400	2800	300	210			
solder	-	Series I	\$110	-18140	404	2800	168	3400	.05	.290			
AUTH ROZ sky	430084	130/249	814066	-15/40	hos	2100	210	1700	300	140			
grade 951A			800558	-morre	104	5400	175	1996	156	100			

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

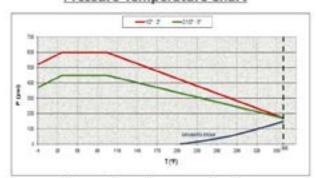


Chart applies to valve, not to solder joints

Meeting WW-V-35C Federal U.S. Specification

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

NOTE: Approvals apply to specific configurations/sizes only.

	Part Descritpion	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	17	PTFE
9	Washer	1	PTFE carbon filled 25%
10	Yellow PVC coated Geomet* steel handle	1	DD11

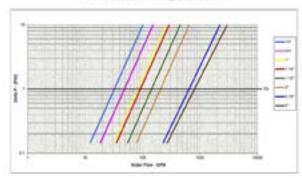
Code		\$42D00	\$42E00	\$42F00	\$42G00	\$42H00	\$42100	\$42L00	\$42000
D (inch)	Nominal	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
p (exch)	actual	0.6271	0.8771	1.1279	1.3779	1.6279	2.1279	2.628	3.128
DNG	nch)	0.590	0.787	0.984	1.259	1.574	1.968	2.559	3.149
I (in	ch)	0.492	0.748	0.905	0.964	1.102	1.338	1,476	1.673
L (ir	nch)	2.244	2.854	3.346	3.819	4.488	5.433	6,614	7.598
Go	nch()	1,181	1,476	1,673	1.909	2.244	2.715	3.307	3.799
A (in	nch)	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

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



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. Audi and logo are registered trademarks of Audi Nutrinetzelle usersillerse Sonomi. Other logos and registered trademarks are property of respective owners. XCES42 - Rev. 3590





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:

- Geornet® 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"
- 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 430 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

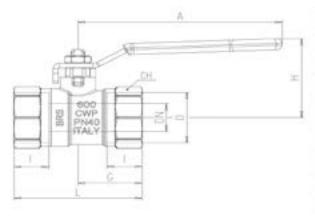


- · Canadian standards Association (United States, Canada)
- · RoHS Compliant

NOTE: Approvals apply to specific configurations/sizes only.

@ @ @	10
(8)	(Annual Control of the Control of th
0 0 0 0	1.1/2"-2.1/2" hollow ball

	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	্ৰ	PTFE carbon filled 25%
10	Black PVC coated Geomet* steel handle	1	DD11

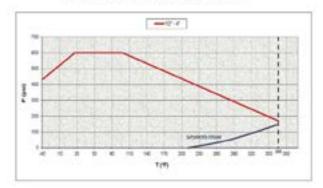


Code	S71D41	S71E41	S71F41	S71G41	S71H41	\$71141	S71L41	S71M41	\$71N41
D (inch)	1/2	3/4	1	1 1/4	11/2	2	21/2	3	4
DN (inch)	0.453	0.591	0.787	0.984	1.260	1.575	1.968	2.559	3.150
I (inch)	0.610	0.669	0.827	0.905	0.905	1.043	1.260	1.378	1.634
L (inch)	2.126	2.441	2.835	3.464	3.779	4.409	5.276	6.378	7.480
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

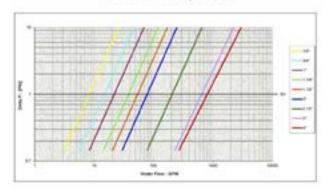
DN shows the nominal flow diameter. Stem configuration of valves over 2.1/2" is slightly different.

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



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. **Audi** and logo are registered trademarks of **Budi** Rubinetterie usersillerie Bonomi. Other logos and registered trademarks are property of respective owners.

XCES71 - Rev: 3486





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

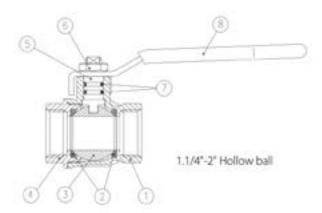
Working Temperature:

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

Options:

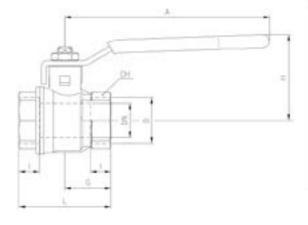
- Stem extension
- T-handle
- Oval lockable handle
- · AISI 430 stainless steel handle
- Patented locking device

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



	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

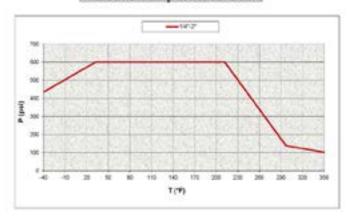
NOTE: Approvals apply to specific configurations/sizes only.



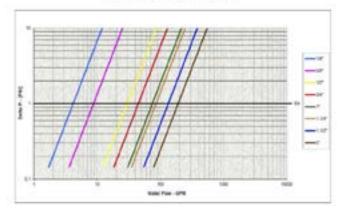
Code	590841	\$90C41	\$90D41	\$90E41	\$90F41	\$90G41	S90H41	\$9041
D (inch)	1/4	3/8	1/2	3/4	10	1 1/4	1 1/2	2
DN(inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968
I (inch)	0.354	0.354	0.433	0.472	0.551	0.590	0.669	0.748
L (inch)	1.535	1.535	1.968	2.125	2.637	3.031	3.543	4.173
G (inch)	0.767	0.767	0.984	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



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. **Au8** and logo are registered trademarks of **Au8** Rubinetterie utersilerie bonomi. Other logos and registered trademarks are property of respective owners.

#EESOW - Airc 1466







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

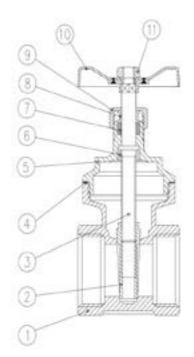
Working Pressure:

- 150 PSI
- · non-shock cold working pressure

Working Temperature:

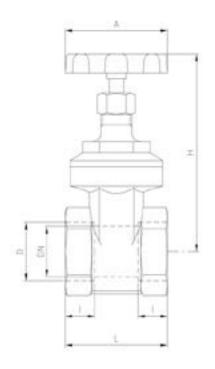
- · +40"F / +200"F
- Warning: freezing of the fluid in the installation may severely damage the valve





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	Guarnital 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	112100	112L00	112M00	112N00
D (inch)	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
DN (inch)	0.531	0.610	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.

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. **Rull** and logo are registered trademarks of **Rull** flubinetterie upenalized Bonomi. Other logos and registered trademarks are property of respective owners.

XCE112 - Rev: 3486







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:

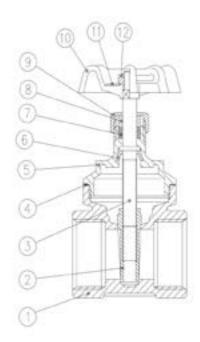
- 4°F / +350°F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

· 5.115 solder end connections

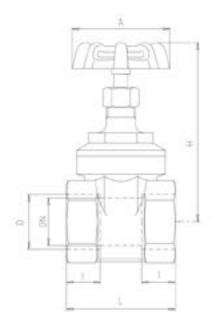


- · GOST-R (Russia)
- · Hygiene and epidemic center in Moscow city (Russia)
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus)



NOTE: Approvals apply to specific configurations/sizes only.

	Part Description	Q.ty	Material
1	Body	1.	CW617N
2	Gate	1	CW617N
3	Stem	3	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	114141	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.

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. Au8 and logo are registered trademarks of Au8 Rubinetterie usersilerie Bonomi. Other logos and registered tredemarks are property of respective owners.

XCE114 - Res: 3650





DRINKING WATER

Activalve 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







Features:

- Automatic shut off: Activolve 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: Activolve uses a unique gearing system which enables easy operation, a child could turn off the mains water in seconds.
- Easy to identify: Activolve is instantly identifiable as your mains water control.
- Visual ON OFF Indicator: Activolve has a status indicator window which shows if it is on or off at a glance.
- Powerless operation: Activolve operates without the need for power or battery back up., ever!
- 5 years warranty*



"Easy to install - Easy to operate"



RUB s468 Bracket





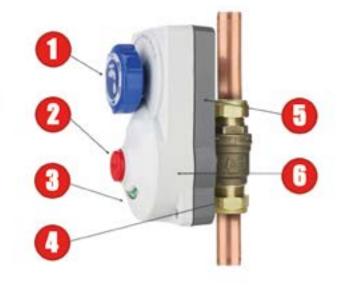


- Replace existing water main valve with the **Activolve** ball valve. Test for water tightness.
- 2 Fit the mounting plate to the ball valve using the four screws provided.
- 3 Fit the Activolve unit to the mounting plate by hooking the top over the plate and securing at the bottom using the two screws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

^{*}See RuB terms & conditions

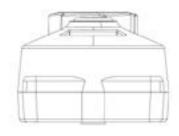
Technical Specifications:

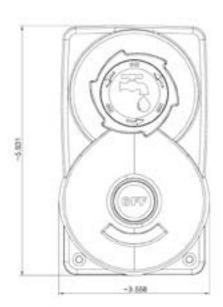
- 1.Valve Wheel: Rotate counter clockwise to open valve.
- 2.OFF Button: Simply push button to turn water off.
- 3.ON OFF indicator: Indicator window shows if water is ON or OFF at a glance.
- 4.Valve: s468 full port shut off ball valve. Drinking Water Approvals Pending!
- 5.Temperature Sensor: Manufactured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

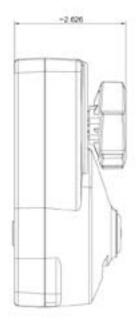


Actuator dimensions:

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

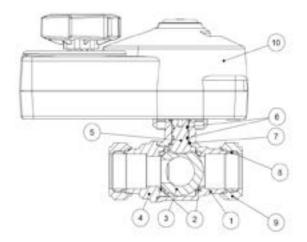
Options:

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

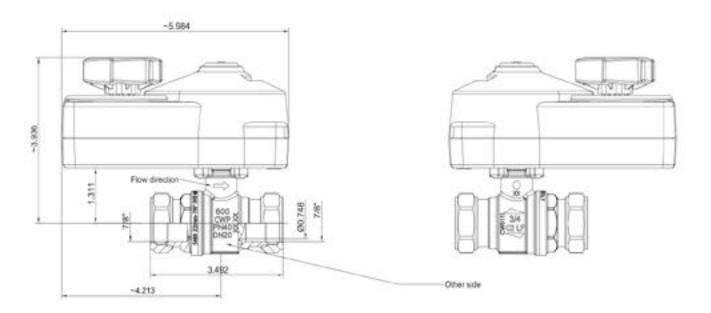
Upon Request:

Custom Design





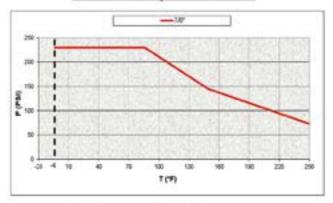
	Part Description	Qty	Material
1	Unplated body	1	CW511L
2	Seat	2	EPDM
3	Chrome plated ball	1	CW511L
4	Unplated end cap	1	CWS11L
5	Unplated stem	1	CW511L
6	O-Ring	2	EPDM
7	Washer	1	PTFE carbon filled 25%
8	Olive	2	CW508L
9	Unplated nut	2	CW617N
10	Activalve* actuator		



DN shows the nominal flow diameter. Actual flow diameter compiles 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



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. **Rull** and logo are registered trademarks of **Rull** Rubinetterie unresilierie Sonomi. Other logos and registered trademarks are property of respective owners.

MESCHE-Rev. II





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





- 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



FOR DRINKING WATER IN ALL U.S. STATES











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:

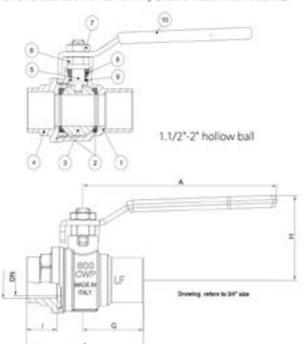
- · Oval lockable handle
- AISI 430 stainless steel handle
- · Patented locking device
- · Stem extension (Assemble after soldering)

Upon Request:

- · Glass filled PTFE seals
- Custom Design



- · 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	13	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	T242100
D (inch)	Nominal	1/2	3/4	.1	1 1/4	1 1/2	2
Dimen	actual	0.6271	0.8771	1.1279	1.3779	1.6279	2.1279
DN(inch)		0.590	0.787	0.984	1.259	1.574	1.968
1 (in	ich)	0.492	0.748	0.905	0.964	1.102	1.338
L (in	nch)	2.244	2.854	3.346	3.819	4.488	5.433
G(t	nch)	1.181	1.476	1.673	1.909	2.244	2.716
A(ir	nch)	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

	Joining material	7
Watning-This soldering alloy contains more then 0.2% lead and, according to certain specifications, cannot be used for potable water or other foods.	50-50 to lead solder ASTM 832 alloy grade 50A	3614
	955 tin-antimony solder	4504

Joining material	meting	range	working temperature		maximum working gauge pressure					
	degrees		degrees		size 5(2-17)		size 1.1452*		size 2,10°-4°	
	Ŧ	·c	'F	40	psi	iPs :	14	kPa	pe	IP9
50-50 to lead			8/+100	48438	200	1400	175	1200	150	1050
soider	361421	61421 185215	0/+150	-15:46	150	1050	125	850	100	790
ASTM B32 alloy			6/+200	-16143	100	700	90	600	75	500
grade SGA			6/+250	-18/+121	85	600	75	500	50	350
95.5 In-antimony		1 1	8/4100	-18+38	500	3500	400	2800	360	2100
soder	*******	*****	5/+150	-181466	400	2800	350	3400	275	2000
ASTM 832 alloy grade 95TA	450/464	450/464 230/240	0/+200	-18+93	300	2100	250	1700	200	1400
			6/+250	-181+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 815.22

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

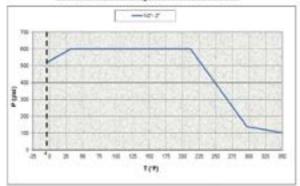
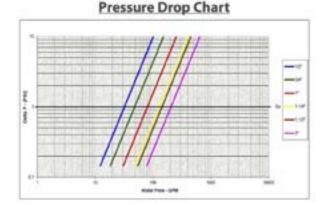


Chart applies to valve, not to solder joints for general use



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. **Rud** and logo are registered trademarks of **Rud**-Auditentions utervalence utervalence becomes and registered trademarks are property of respective coveres.





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. s3874, California AB1953, and similar laws of other states for the safe handling of drinking water
- 24h 100% seal test guaranteed
- Dual sealing system allows valve to be operated in either direction making installation easier
- · No metal-to-metal moving parts
- · Handle clearly shows ball position
- · Silicone-free lubricant on all seals
- · Handle stops on body to avoid 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:

· NFT 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 PS
- · non-shock cold working pressure

Working Temperature:

- 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:

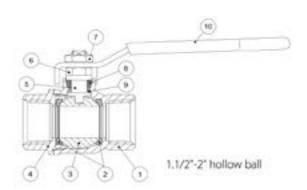
- Stem extension
- · T-handle
- Oval lockable handle
- AISI 430 stainless steel handle
- Patented locking device

Upon Request:

- Custom Design
- · Pure PTFE seals

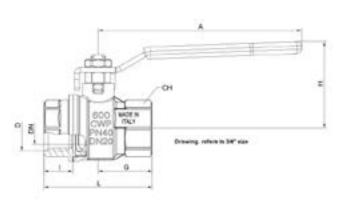


- · GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- Certified by CSA International for Drinking Water in all U.S. states (NSF/ANSI 61 - NSF/ANSI 372)
- · RoHS Compliant
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus)



	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	C84FF
8	Packing gland seal	-1	PTFE
9	Thrust washer	1	PTFE carbon filled 25%
10	Green PVC coated Geomet* steel handle	1	DD11

NOTE: Approvals apply to specific configurations/sizes only.

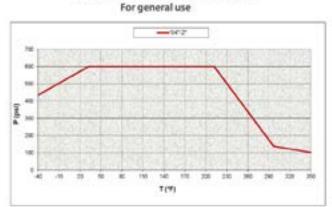


Code	T292841	T292C41	T292D41	T292E41	T292F41	T292G41	T292H41	T292141
D (inch)	1/4	3/8	1/2	3/4	1	1 1/4	† 1/2	2
DN (inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968
1 (inch)	0.472	0.472	0.610	0.669	0.826	0.905	0.905	1.043
L (inch)	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.763
G (inch)	0.885	0.885	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

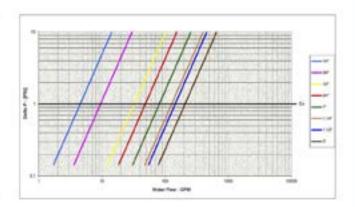
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4.

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



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. **Red** and logo are registered trademarks of **Red**-flubinetterie stensiesie Bonomi. Other logos and registered tredemarks are property of respective owners. X077292 - Rev: 3597





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



Threads:

· NPT taper ANSI 8.1.20.1 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:

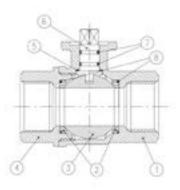
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- · Compact power electric actuator for some sizes
- Manual lockable handle

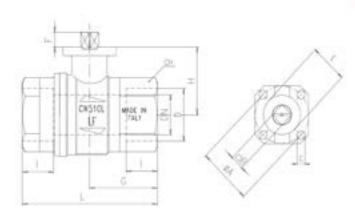
Upon Request:

Custom Design



- · 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)



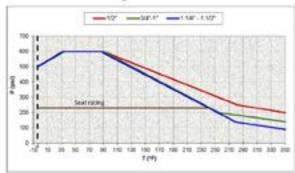


Torque for Actuator Sizing in-lb:

Dobu P - + 6 - 200 PSF 600 PSF

	7		0.0		
False size	fo-	fi-	fo spon	To	
12"	7.5	1.5	29	13	
N#"	33		33	.70	
Delta P.→	0 + 9	PSI	>90 = .	130 PSI	
Father size	For open	Zo ohme	fla- ignin	To close	
1"	19	19	31	31	
1.1/4"	22	22	35	35	
1.1/2"	-51	.51	84	84	

Pressure-Temperature Chart For general use



· 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 seut	2	PTFE graphite filled 15% up to 3/4" slar, PTFE carbographite filled over 3/4" slar.
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	4	CWS10L
7	O-Ring	2	FPM
8	O-Ring	2	FPM

Code	T264D41	T264E41	T264F41A	T264G41A	T264H41A
D (inch)	1/2	3/4	1	1 1/4	11/2
DN(inch)	0.590	0.787	0.984	1.259	1.575
1 (inch)	0.610	0.708	0.826	0.905	0.964
L (inch)	2.598	2.933	3.562	4.094	4.606
G (inch)	1.201	1.456	1.791	2.047	2.322
H (inch)	1.220	1.515	1.673	1.941	2.441
CH(inch)	1.063	1.259	1.614	1.968	2.165
ØA(inch)	1.417	1.417	1.417	1.417	1.968
B(inch)	0.354	0.354	0.354	0.354	0.551
C (inch)	0.220	0.220	0.220	0.220	0.259
E(inch)	0.984	0.984	0.984	0.984	1.378
F(inch)	0.295	0.334	0.334	0.334	0.570
Flange connection oin ISO 5211 DIN 2307	F03	F03	F03	F03	F05

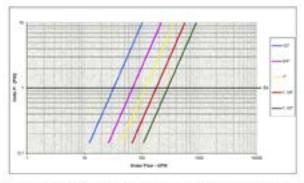
Torque correction factors

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



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. Rull and logo are registered trademarks of Rull Automatics of Rull Automati





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 unaffended.



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:

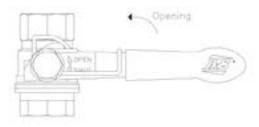
- Hot forged sand blasted, unplated brass body and cap sealed with Loctite* or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications

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



211

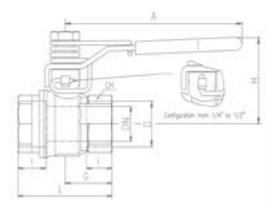
- · Canadian standards Association (United States, Canada)
- · Factory Mutual (United States)
- · GOST-R (Russia)
- · Hygiene and epidemic center in Moscow city (Russia)
- UkrSepro (Ukraine)
- · RoHS Compliant

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



0 0 0	1.1/4*-2* Hollow ball	

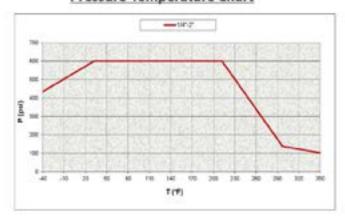
	Part Description	Q.ty	Material
1	Unplated NPT body	1	CW617N
2	Seat	2	PTFE
3	Chrome plated ball	1	CW617N
4	Unplated NPT end cap	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Unplated spring nut	1	CW617N
7	O-Ring	2	FPM
8	Spring return	1	AISI 302
9	Yellow PVC coated Geomet* steel handle	1	DD11



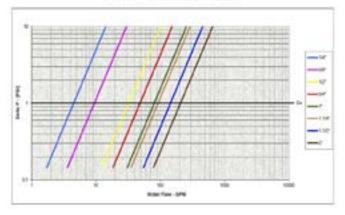
0	ode	\$95841MR	S95C41MR	\$95041MR	S95E41MR	\$95F41MR	\$96G41MR	\$95H41MR	\$95141MR
D	(inch)	1/4	3/8	1/2	3/4	1	1 1/4	11/2	2
DN	(inch)	0.314	0.393	0.590	0.787	0.984	1.259	1.574	1.968
1	(inch)	0.472	0.472	0.610	0.669	0.826	0.905	0.905	1.043
ι	(inch)	1.771	1.771	2.322	2.519	3.188	3.661	4.015	4.763
G	(inch)	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
Н	(inch)	1,504	1.504	1.679	1.956	2.114	2.858	3.094	3.370
СН	(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



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. Rull and logo are registered trademarks of Rull Publishetterie usersilerie Bonomi. Other logos and registered tredemarks are property of respective owners.

XCESSSMR - 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 8.1.20.1 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
- 2x10⁻² Torr Vacuum rating

Working Temperature:

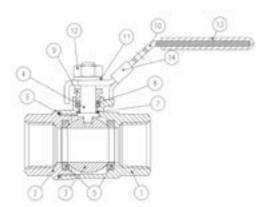
- -50°F/+450°F
- Warning: freezing of the fluid in the installation may severely damage the valve

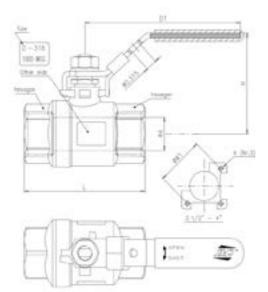
Upon Request:

Oval lockable handle up to 2"



- · 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.

PA	RT DESCRIPTION	Q.TY	MATERIAL
1	Body	.1	A351-CF8M
2	Сар	1	A351-CF8M
3	Ball	- 3	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 Gt.8
13	Handle sleeve	1	Vinyl grip
14	Locking plate	1	A240 55304

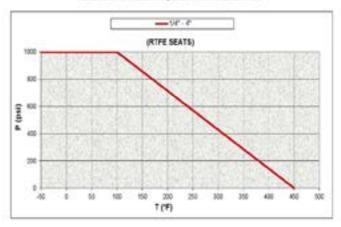
Code	130841	130C41	130041	130E41	130F41	130G41	130H41	13041	1308.41	130M41	130941
D (Size)	1/4"	3/8*	1/2"	3/4"	1*	1.14	110	2"	21/2"	3*	4"
d (inch)	0.433	0.492	0.591	0.787	0.984	1.26	1,496	1.969	2.559	3.15	3.937
L (inch)	2.276	2.276	2.429	2.76	3.201	3.78	4.429	4.961	6.634	7.535	8.524
H (inch)	2.252	2.252	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	NA	NA	N/A	NA	N/A	NA	NA	2.756	4.016	4.016
h	N/A	N/A	N/A	N/A	NA	N/A	N/A	NA	M8x1.25	M10x1.5	M10x1.5

Water Flow Ratings

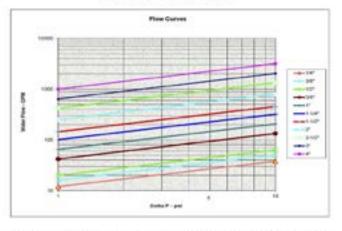
	Ster	W	3F	12"	30	T.	Tit	137	7	232	T)	
I	OV	4	-18	20	Q	- 65	127	144	20	42	60	1000

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



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. Rull and logo are registered trademarks of Rull inetterie stemsferie Sonomi. Other logos and registered trademarks are property of respective owners.

#EF130 - Rev: 1485







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.





- 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:

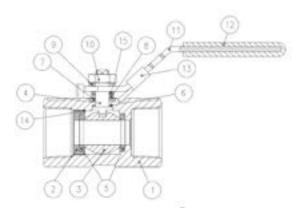
- 1000 PS
- · non-shock cold working pressure
- 150 PSI WSP steam rating
- 2x10⁻² Torr Vacuum rating

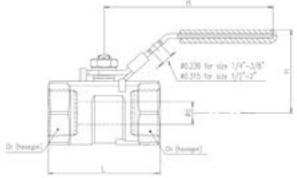
Working Temperature:

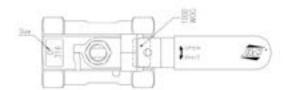
- · -50°F / +400°F
- Warning: freezing of the fluid in the installation may severely damage the valve



- · 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.

PA	RT DESCRIPTION	Q.TY	MATERIAL
1	Body	1	A351-CF8M
2	Insert	1	AISI316
3	Ball	1	AISI 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

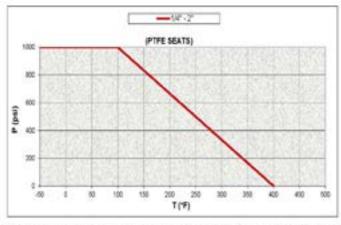
Code	131B41	131C41	131D41	131E41	131F41	131G41	131H41	131141
D (Size)	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
f (inch)	0.197	0.276	0.362	0.492	0.591	0.787	0.965	1.260
L (inch)	1.535	1.732	2.205	2.323	2.795	3.110	3.268	3.937
H (inch)	1.370	1.390	1.807	1.846	1.862	2.189	2.280	2.547
B (inch)	2.756	3.110	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

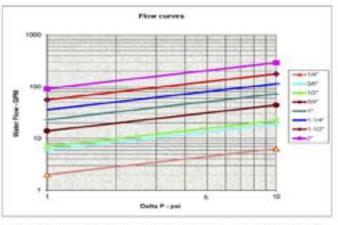
Size	1/4"	3/8"	1/2*	3/4"	1"	1.1/4*	1.1/2"	2"
CV	2	6	7	14	23	36	56	92

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



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** Rubsretterie usersaliere bonomi. Other logos and registered trademarks are property of respective owners.







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:

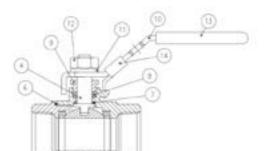
- -50°F / +475°F
- Warning: freezing of the fluid in the installation may severely damage the valve

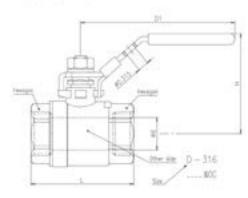
(*) Molecular Enhanced-PTFE (ME-PTFE) is virgin PTFE (no glass or carbon filters are used) which, due to its improved molecular structure, surpasses the mechanical properties of conventional filted PTFE materials.

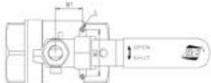
Used in fluid sealing applications it provides superior performance in terms of high temperature strength, reduced creep distortion, and resistance to chemical attack.



- · GO5T-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.

PA	RT DESCRIPTION	Q.TY	MATERIAL		
1	Body	1	A351-CF8M		
2	Сар	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

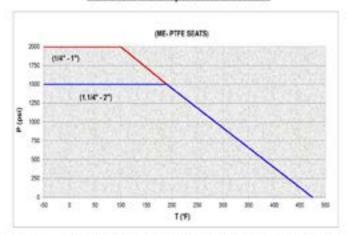
Code	132B41	132C41	132041	132E41	132F41	132G41	132H41	132541
D (Size)	1/4"	3/8*	1/2"	3/4*	1*	1 1/4"	11/2"	2*
d (inch)	0.433	0.492	0.591	0.787	0.984	1.26	1.575	2
L (inch)	2.343	2.343	2.539	3.031	3.563	3.917	4.646	5.374
H (inch)	2.244	2.244	2.268	2.697	2.862	3.453	3.661	4.106
D1 (inch)	4.055	4.055	4.055	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

Water Flow Ratings

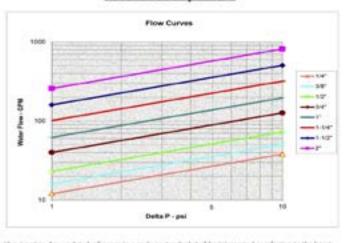
Size	1/4"	3/8"	1/2"	3/4"	1"	1.1/4"	1.1/2*	2"
CV	12	16	23	40	62	101	160	258

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



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 existin. Rule and logo are registered trademarks of Rule Rubinetterie utensilene Bonomi. Other logos and registered trademarks are property of respective owners.

XE132 - Rev. 3486





s.84 BSPT

full port 1/4"- 4" 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.
- 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 BSFT 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:

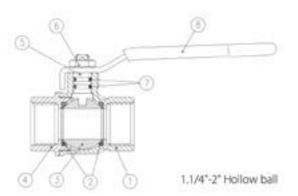
- Stem extension.
- T-handle
- AISI 430 stainless steel handle
- Oval lockable handle up to 2", round over 2"
- Patented locking device for valves up to 4"
- Male by Female threads

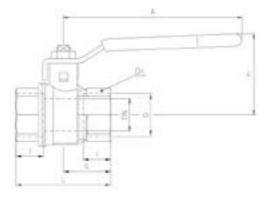
Upon Request:

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



- 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.

Р	ART 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	11	CB4FF
7	O-Ring	2	FPM
8	Yellow PVC coated geomet* steel handle	1	DD11

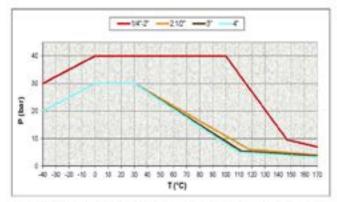
Code	\$84850	S84C50	S84D50	S84E10	S84F50	\$84G50	S84H50	\$84150	\$841.50	S84M50	SBANSO
D (inch)	1/4	3/8	1/2	3/4	1	11/4	11/2	2	21/2	3	4
DN (mm)	8	10	15	20	25	32	40	50	65	80	100
1 (mm)	12	12	15.5	17	21	23	23	26.5	32	35	41.5
L (mm)	45	45	59	64	81	93	102	121	156	177	216
G (mm)	22.5	22.5	29.5	32	40.5	46.5	51	60.5	78	88.5	108
A (mm)	82	82	100	120	120	158	158	158	255	255	255
H (mm)	38	38	43	50	54	73	79	86	132	140	154
CH (mm)	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.

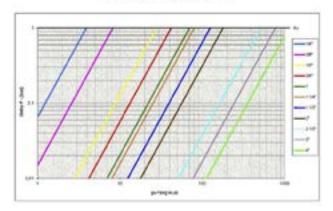
Ball valves are marked CE on handle from 1.1/4" to 2", on body over 2" as follow: CE 1115 cat IIIB+D PS: 5 GAS TS1: -20"C TS2: +60"C

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



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. **Rull** and logo are registered trademarks of **Rull** interpreted uservalente isonomi. Other logos and registered trademarks are property of respective owners. **XCESME-Rec.** 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 5705-65) 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 (500 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:

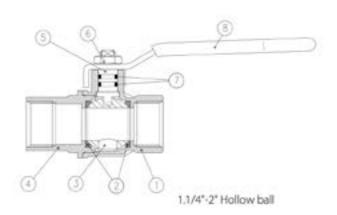
- Stem extension
- T-handle
- · Oval lockable handle
- · AISI 430 stainless steel handle
- Patented locking device

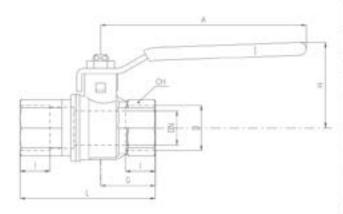
Upon Request:

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



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





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

+RoHS Compliant

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

NOTE: Approvals apply to specific configurations/sizes only.

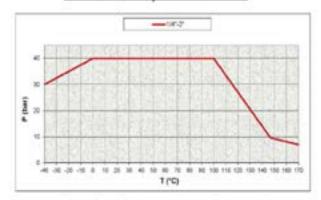
F	PART DESCRIPTION	Q.TY	MATERIAL
1	Nickel plated body (external treatment)	1	CW617N
2	Ball seat	2	PTFE
3	Chrome plated ball with rinse hole (read rinse hole on sizes from 3/4" up to 2")	1	CW617N
4	Nickel plated end cap (external treatment)	1	CW617N
5	Nickel plated stem O-ring design	1	CW617N
6	Geornet* 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	\$84105
D (inch)	1/4	3/8	1/2	3/4	1	11/4	11/2	2
DN (mm.)	8	10	15	20	25	32	40	50
1 (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

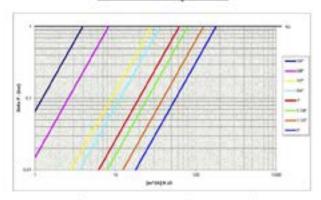
Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.

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



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. **Rull** and logo are regimered trademarks of **Rull** Rubinetterie usersilerie Bonomi. Other logos and registered trademarks are property of respective owners.

ACCESSED - Rev. 3657







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:

- \bullet 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 PS
- · non-shock cold working pressure

Working Temperature:

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

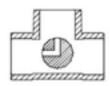
Options:

- 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

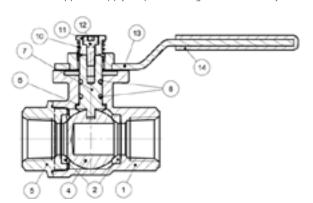


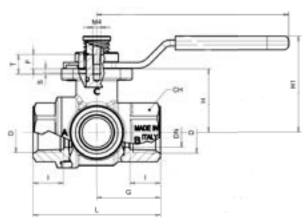


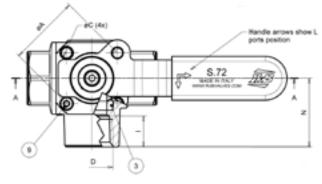


• RoHS Compliant

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

14-1	0700441	0705441	0705441
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	ø0.205	ø0.205
bc (inch)	(M6)	(M6)	(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 liquids0.8Dry gases, natural gas, superheated steam1.5Slurries or liquids bearing abrasive particles1.5÷2.5

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 utensilerie Bonomi. Other logos and registered trademarks are property of respective owners.

XCES7241L - Rev: 0







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 PS
- · 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:

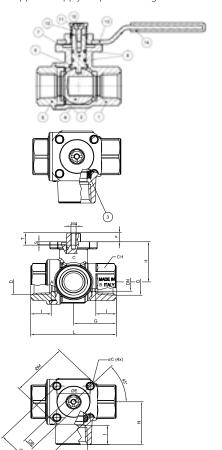
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- s.7341 without handle actuator ready
- Adapter flange kit with screws

Upon Request:

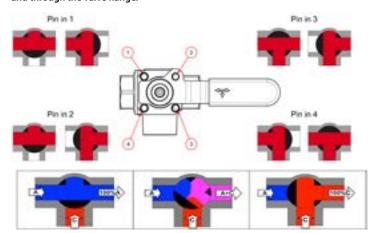
Custom Design

- 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.

	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	\$73E41L	S73F41L
Size (inch)	1/2	3/4	1
DN (inch)	0.591	0.787	0.984
l (inch)	0.610	0.709	0.827
L (inch)	2.559	3.110	3.642
G (inch)	1.280	1.555	1.831
H (inch)	1.280	1.555	1.673
N (inch)	1.358	1.654	1.949
øA (inch)	1.417	1.417	1.417
eC (inch)	e0.205 (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

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 utensilerie Bonomi. Other logos and registered trademarks are property of respective owners.

X(ES7341L - Rev: 0







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:

 $\bullet\,$ 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 PS
- non-shock cold working pressure

Working Temperature:

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

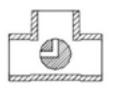
Options:

- 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

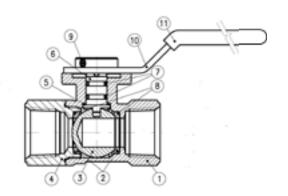
S.74 3-way "L" port mounting plan

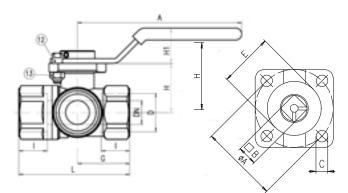






- GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus) **NOTE:** Approvals apply to specific configurations/sizes only.





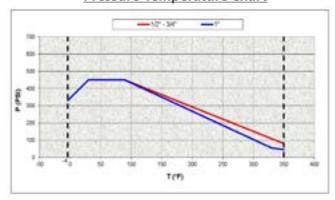
	Part Description	Qty	Material
1	Sand blasted unplated body	1	CW617N
2	Ball seat	2	PTFE graphite filled 15%
3	Chrome plated ball	1	CW617N
4	Sand blasted unplated end cap	1	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	Stem O-Ring	2	FPM
8	Seat O-Ring	2	FPM
9	Handle 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	\$74D41L	\$74E41L	\$74F41L
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
H1(inch)	0.876	0.876	0.876
A(inch)	4.055	4.055	4.055
Plange connection device con device con	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



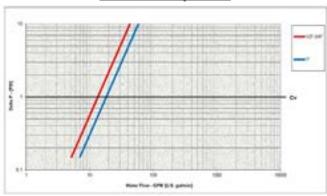
Torque correction factors

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.

8.0 Lubricating oils or liquids 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



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 utensilerie Bonomi. Other logos and registered trademarks are property of respective owners. 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
- · Fip x Fip 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 Fip NFT threads SNI7352M

Upon Request:

1/8"NPT threads



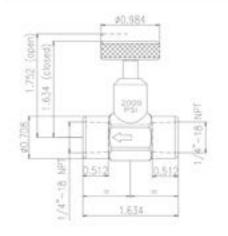
Applications include shut off and throttling for pressure gauges and instruments

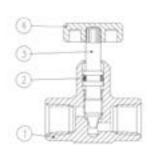


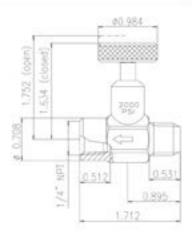
Underwriters Laboratories (United States & Canada)

NOTE: Approvals apply to specific configurations/sizes only.

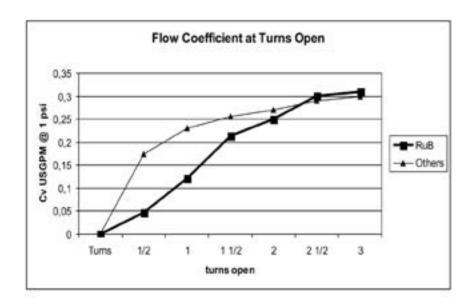
Technical Specifications:







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



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

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. **Rull** and logo are registered trademarks of **Rull** flubinetterie usersilerie Bonomi. Other logos and registered trademarks are property of respective owners. X77152 - Rev. 3486







s.172 improved DrainLock ™

Motor drain compact ball valve

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

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

PATENT PENDING











MADE TO ORDER

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:

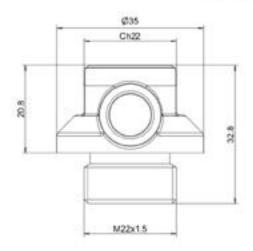
- AISI 316 stainless steel ball
- Custom Design
- · Aluminum body

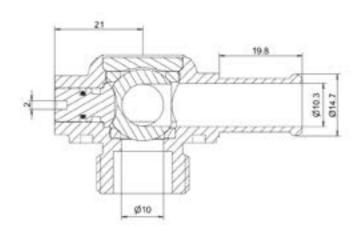
- · GOST-R (Russia)
- · Hygiene and epidemic center in Moscow city (Russia)
- · UkrSepro (Ukraine)
- · RoHS Compliant
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus)

NOTE: Approvals apply to specific configurations/sizes only.

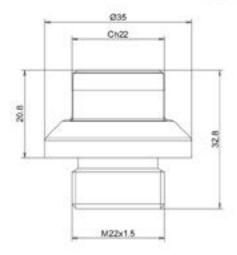
EXAMPLES OF VALVE DIMENSIONS AND CONFIGURATIONS

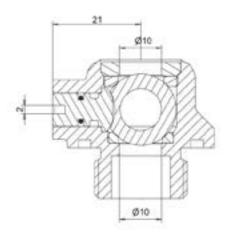
ELBOW CONFIGURATION





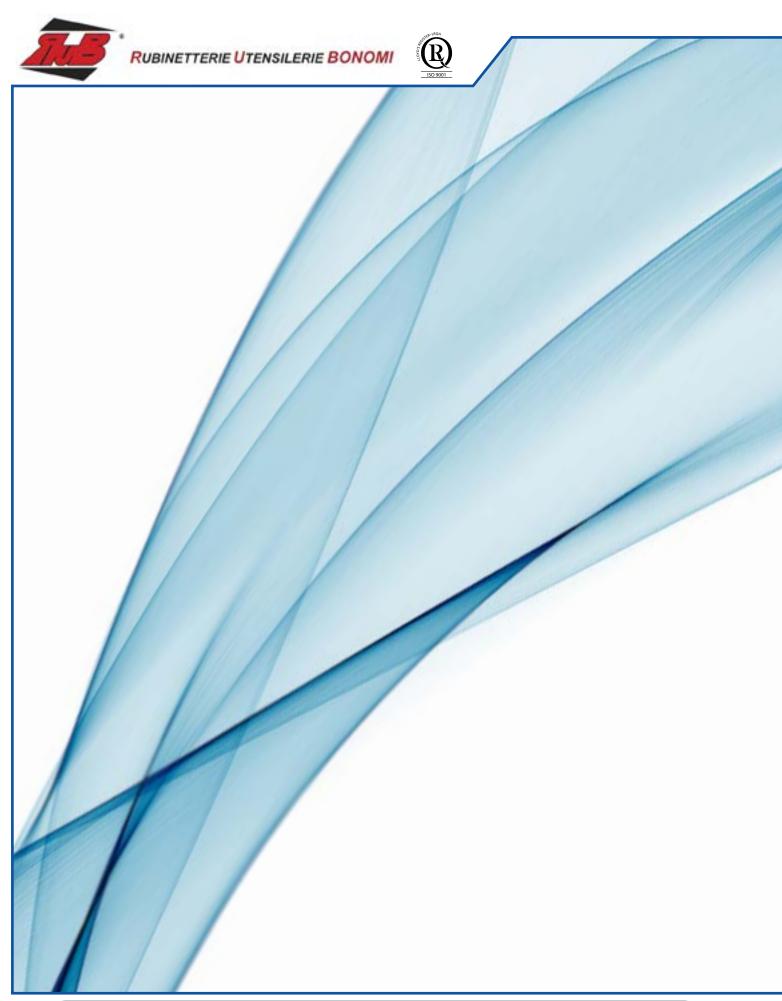
STRAIGHT CONFIGURATION





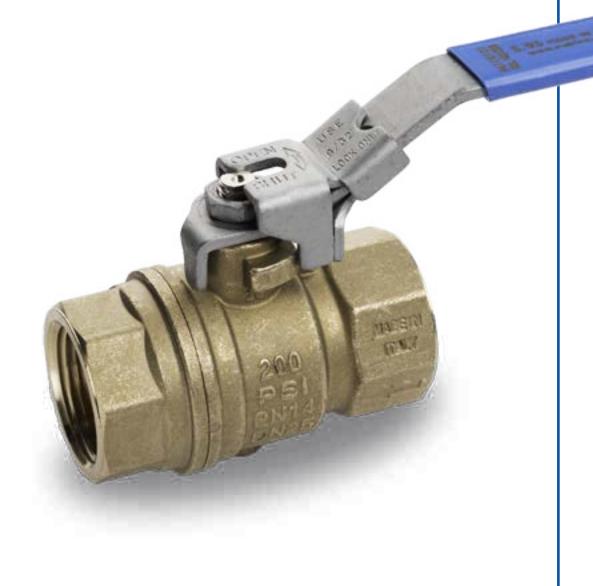
Ask for additional information on the whole range of **RuB** valves and consult with your supplier for special applications.





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



- 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:

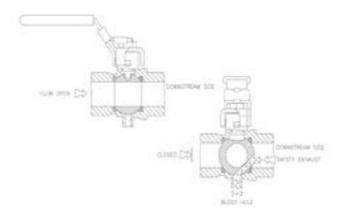
- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent threads sealant
- The valve body includes a tapped downstream depressurization. venting outlet to direct exhaust air and assemble mufflers for noise control
- Finest brass according to EN 1216S and EN 12164 (formerly 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

· 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:

- · non-shock cold working pressure

Working Temperature:

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

Options:

- AI5I 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

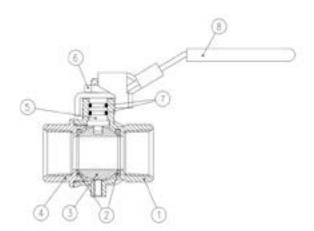
Upon Request:

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



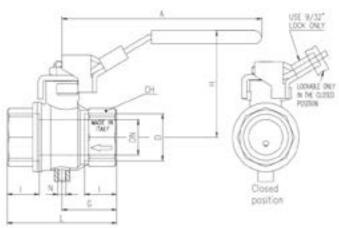


- +GOST-R (Russia)
- · Hygiene and epidemic center in Moscow city (Russia)
- RoHS Compliant
- Osha Compliant
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus)



rt Description	Ott	Material
NOTE: Approvais apply	to specine conti	gurations/sizes only.

	Part Description	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	PTH 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

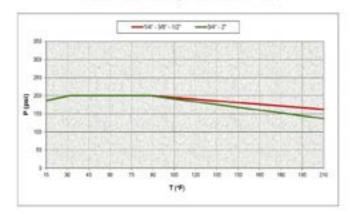


Code	\$90841	\$93041	\$93D41	-\$93E41	593F41	593G41	\$93H41	59341
D (inch)	14	3/8	1/2	34	1	11/4	+1/2	2
DN(inch)	0.314	0.393	0.590	0.787	0.984	1.260	1.575	1,969
I (nch)	0.472	0.472	0.610	0.669	0.826	0.906	0.906	1.043
L (noh)	1.771	1.771	2.322	2.519	3.188	3.661	4.016	4.764
G (inch)	0.885	0.005	1,161	1,259	1.584	1.801	2.006	2.382
A (nch)	3.759	3.759	3,759	4.574	4.574	6.161	0.161	6.161
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	1.220	1.574	1.929	2.126	2.697
N		10-32 UNF					14" NPT	

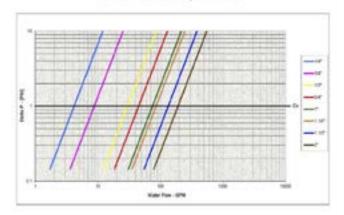
DN shows the nominal flow diameter. Actual flow diameter complies with full port DIN 3357 part 4,

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



The company reserves all rights for the information contained herein. Products may be changed at any time without notice. Any unclated reference to a code or standard shall be interpreted as referring to the latest edition. Rull and logo are registered trademarks of Rull Rubinetteria uterisleria section. Other logos and registered trademarks are property of respective owners. XCES93N - 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. 7011-8/89

Stem:

Biowout-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

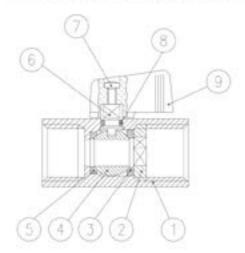
Options:

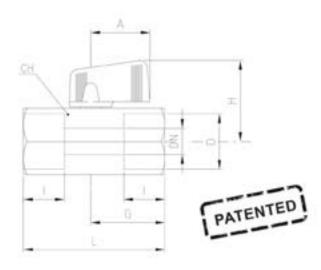
- · Male by Female threads
- Screw driver or wrench operated
- Nylon wedge handle yellow, red or green
- Metal wedge handle available in colours red, black, yellow, green, light blue, chrome plated
- Grey wedge handle in Grivory* high performing polymer
- NPT taper ANSI 8.1.20.1 threads
- Additional connection options on demand

Upon Request:

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

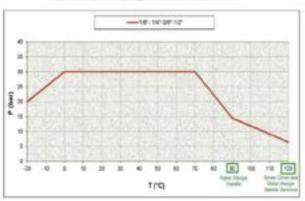
- · GOST-R (Russia)
- · Hygiene and epidemic center in Moscow city (Russia)
- · UkrSepro (Ukraine)
- RoHS Compliant
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus)





DN shows the nominal flow diameter.

Pressure-Temperature Chart



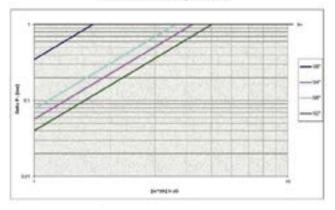
NOTE: Approvals apply to specific configurations/sizes only.

	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	15	FPM
9	Black handle	1	Nylon glass filled 30%

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 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. **Rull** and logo are registered trademarks are property of respective owners.

MTS35 - Rev: 3580





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 mylon black lever or T-handle removable with valve in service

Working Pressure:

- · 200 PSI
- · non-shock cold working pressure

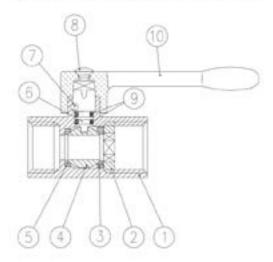
Working Temperature:

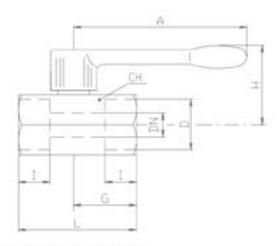
- · -4"F / +200"F
- Warning: freezing of the fluid in the installation may severely damage the valve

Options:

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

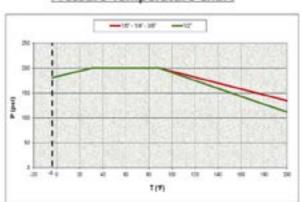
- · GOST-R (Russia)
- · Hygiene and epidemic center in Moscow city (Russia)
- · UkrSepro (Ukraine)
- RoHS Compliant
- EAC Declaration of conformity (Russia-Kazakhstan-Belarus)





DN shows the nominal flow diameter.

Pressure-Temperature Chart



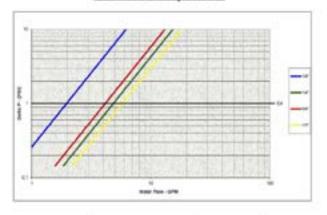
NOTE: Approvals apply to specific configurations/sizes only.

	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	AISI304
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

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

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. Rull and logo are regimered trademarks of Rull Indianation of Rull Rulinetterie uservillerie Bonomi. Other logos and registered trademarks are property of respective owners.







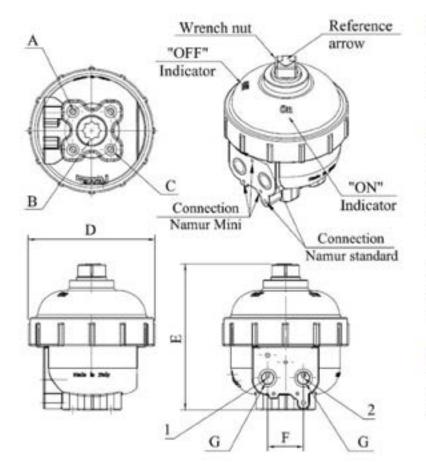
PR

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

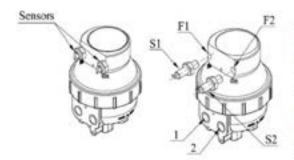
Working temperature: min -4"F- max +266"F

Type: Double Acting

Rotation angle: 90°

Material of the actuator: Polymer

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



			DIM	ENSION IM	PERIAL (In	0			The state of the state of
CODE	A			. 0			- 6		Weight [Kg
P84-1	FOS	0.35	MS	¢3.35	3.90	0.94	1/BNFT	0.19-0.27	0.95
P9.4-2	F05	0.43	ME	ø3.35	4.02	0.94	1/8 NFT	0.19-0.27	1.07
PR4-X3	FQ5 FQ7	0.55	M6 M8	φ4.41	4.68	0.94	1/8 NPT	0.19-0.31	1.72

CODE	Torque Actuator - Imperial							
COUL	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.
- 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)

- 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

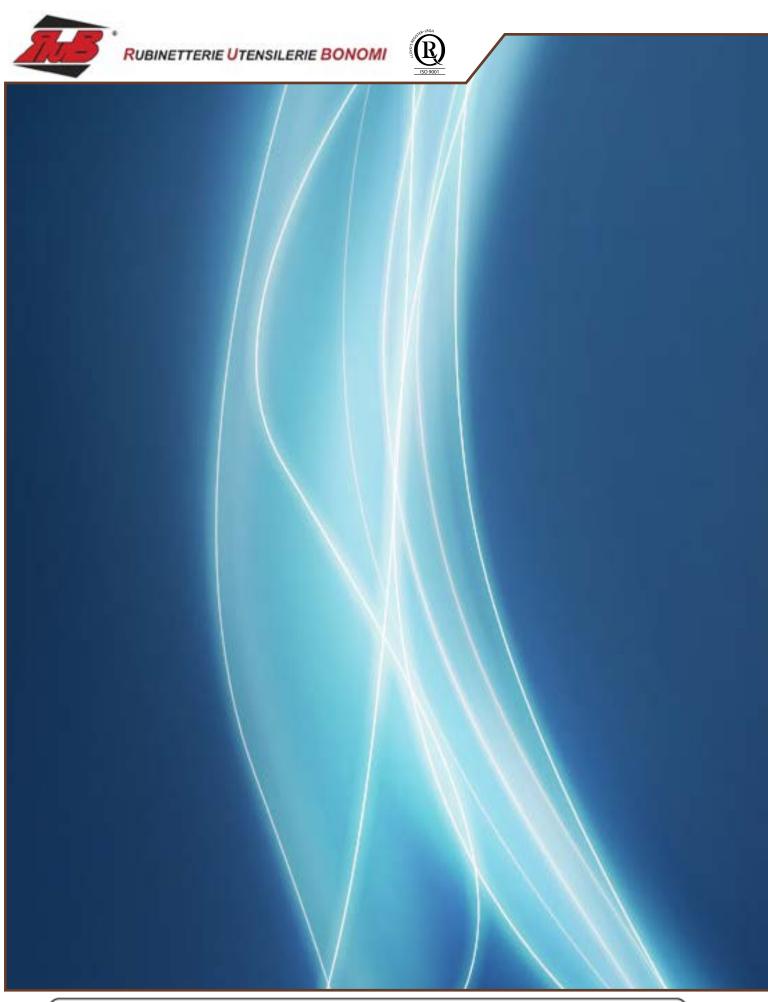
Sensors:

- 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

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 ecition. Audit and logo are registered trademarks of Audit Audit reteries as referring to the latest ecition.

XTSPNU-Rev: 3486





ACTUATION

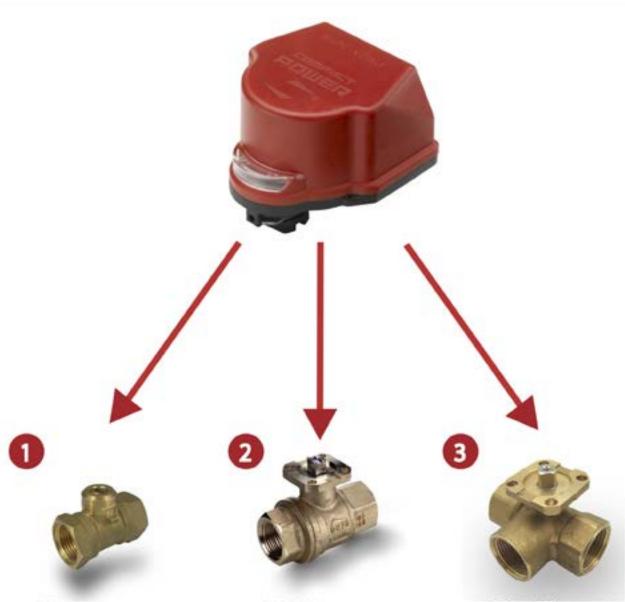
Compact Power Electric Actuator - Configurations	Page 98
Compact Power Electric Actuator - Assembly Instructions	Page 99
Compact Power Electric Actuator	Page 100
Compact Power Electric Actuator & s.31 Mini Valve	Page 102
Compact Power Electric Actuator & s.6439LT - Full Port	Page 104
Compact Power Electric Actuator & s.7441 3 Way - Standard Port	Page 106
E-Tork Electric Actuator	Page 108
EA Pneumatic Actuator	Page 110
AD-1 Solenoid Valve	Page 118
Limit Switch Box	Page 120
s.6439 NPT SS Trim - Full Port 1/2"-2"	Page 122
s.6439 LT Actuator Mounting - Full Port 1"-2"	Page 124
s.6441 NPT Brass Trim - Full Port 1/2"-4"	Page 126
s.7241 NPT 3 Way - Full Port 1/2"-1"	Page 128
s.7341 NPT 3 Way - Full Port 1/2"-1"	Page 130
s.7441 NPT 3 Way - Standard Port 1/2"-1"	Page 132
s.134 Actuatable 1000 PSI Stainless Steel- Full Port 1/2"-2"	Page 134







Configurations:



5.31

- · Flow: Mini
- 2 Way
- Direct Mount

s.6439 LT

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

s.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"

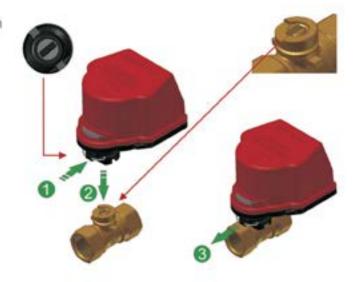




Assembly instructions:

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







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

Options:

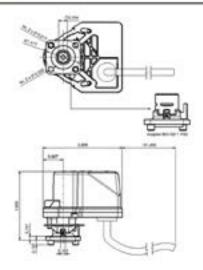
- Power supply 230V AC 50Hz
- Power supply 24V AC 50-60Hz
- Adaptor F03 square 0,315 inch

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

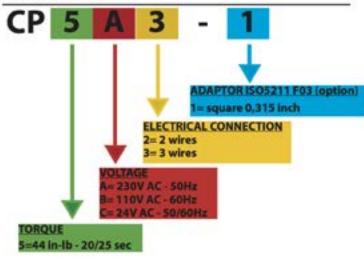
CP583-1 is an CP actuator, 44 in-lb, 110V AC, 3-WIRES with connection screw driver male and adaptor ISO 5211 F03 square 0,315 inch

Dimension inch:



- · 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%

How to order:



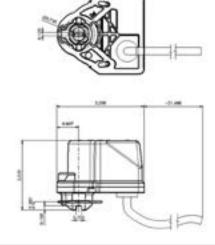
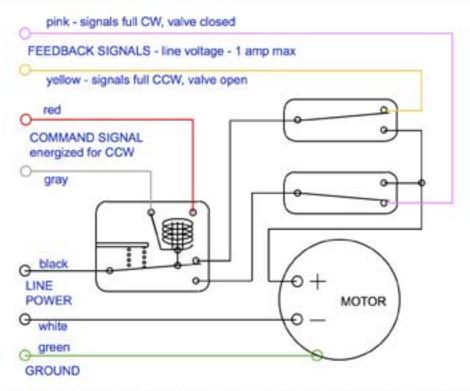
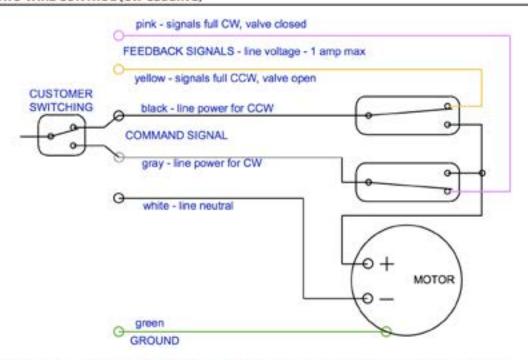


DIAGRAM FOR 2-WIRE CONTROL (CW CLOSING)



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.







& 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 according to EN12266-1 RATE A in either direction

- · NPT taper ANSI 8.1.20.1 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)







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 for Actuator Sizing

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

Torque correction factors

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

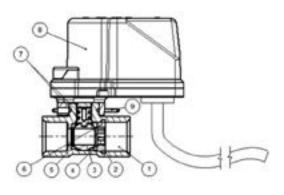
If media has more or less friction than water, multiply torque by the following factors:

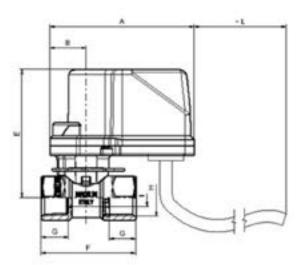
Lubricating oils or liquids 0.8

Dry gases, natural gas, superheated steam 1.5

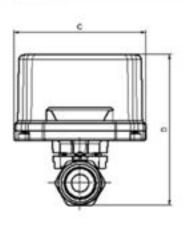
Slurries or liquids bearing abrasive particles 1.5+2.5

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



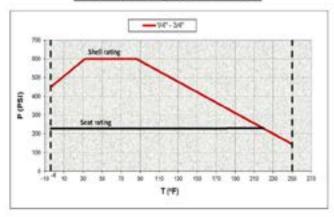


PART DESCRIPTION		TION Q.ty Mater	
1	Unplated body	1	CW617N
2	Unplated stem O-Ring design	1.	CW617N
3	Chrome plated ball	1	CW617N
4	Retainer seat	1	PTFE
5	Body seat	1	PTFE
6	Unplated retainer nut	1.	CW617N
7	O-Ring	2	FPM
8	Compact power electric actuator	1	
9	Spring clip	1	AISI304

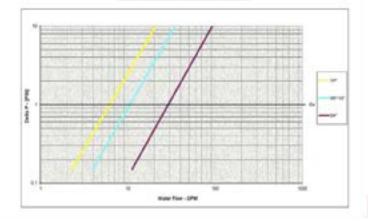


Size	1/4	3/8	1/2	3/4
A[inch]	3,209	3,209	3,209	3,209
B[inch]	0,807	0,807	0,807	0,807
C[inch]	2,929	2,929	2,929	2,929
D(inch)	3,346	3,346	3,346	3,583
E[inch]	2,854	2,854	2,854	2,972
F[inch]	1,799	1,799	2,106	2,417
G[inch]	0,472	0,472	0,610	0,669
н	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT
([inch]	0,315	0,394	0,394	0,500
L[inch]	31,496	31,496	31,496	31,496
Threads standard	ANSI 81.20.1			

Pressure-Temperature Chart



Pressure Drop Chart







& 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 Loctice* 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 according 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:



- s.6441 configuration featuring NPT taper ANSI 8.1.20.1 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



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





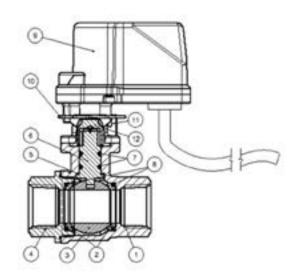






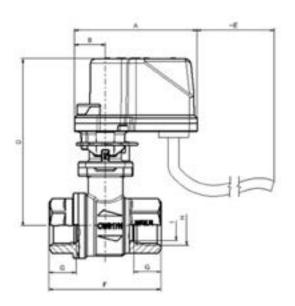


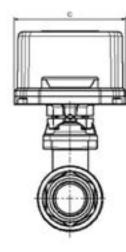




	Part description	Q.ty	Material
1	Unplated body	1	CW617N
2	Seat	2	Ptfe graphite* filled 15%
3	Stainless steel ball	1	AISI316
4	Unplated end cap	1	CW617N
5	Washer	1	Ptfe carbon filled 25%
6	Stainless steel stem O-Ring design	1	AIS(316
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Compact power electric actuator	1	55
10	Spring clip	. 1	AISI 304
11	Adaptor ISO 5211 F03	1	Polycarbonate
12	Transmission motion	11	CW617N

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

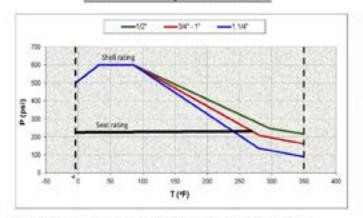




Valve Size	1/2"	3/4*	1*	1.1/4"
A (inch)	3.209	3,209	3,209	3.209
B (inch)	0.807	0.807	0.807	0.807
C (inch)	2.914	2.914	2.914	2.914
D (inch)	4.055	4,370	4,527	4.803
E (inch)	31.496	31.496	31.496	31,496
F (inch)	2,598	2.933	3,562	4,094
G (inch)	0.610	0.708	0.826	0.905
Н	1/2" NPT	3/4" NPT	1° NPT	1.1/4" NPT
I (inch)	0.590	0.787	0.984	1.259

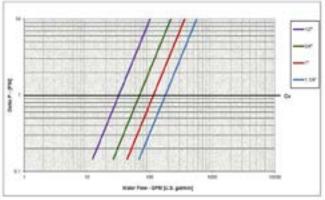
Ask for additional information on the whole range of RuB valves and consult with your supplier for special applications.

Pressure-Temperature Chart



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

Pressure Drop Chart







& s.7441 3 Way

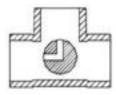
RuB s.7441 range is the right choice for fluid diversion. It is designed with robust maintenance-free components ensuring ease of operation and safety.

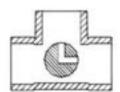
Technical Features:

- 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)





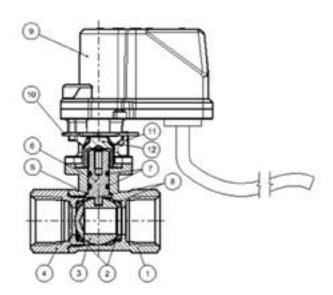




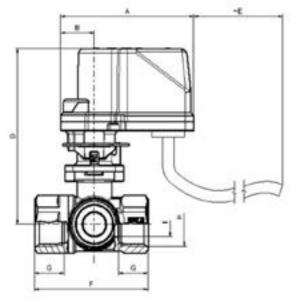


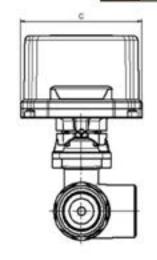






	Part description		Part description Q.ty		Material	
1	Unplated body	1	CW617N			
2	Seat	2	Ptfe graphite filled 15%			
3	Chrome plated ball	1	CW617N			
4	Unplated end cap	1	CW617N			
5	Washer	13	Ptfe carbon filled 25%			
6	Nickel plated stem O-filng design	1	CW617N			
7	O-Ring	2	FPM			
8	O-Ring	2	FPM			
9	Compact power electric actuator	1	120			
10	Spring clip	10	A/SI 304			
11	Adaptor ISO 5211 F03	1::	Polycarbonate			
12	Transmission motion	1	CW617N			

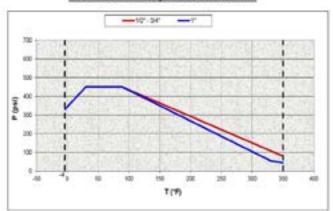




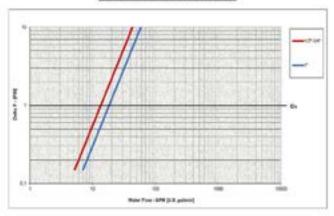
Valve Size	1/2"	3/4"	1*
A (inch)	3,209	3,209	3,209
B (inch)	0.807	0.807	0.807
C (inch)	2.914	2.914	2.914
D (inch)	4.055	4.055	4.370
E (inch)	31.496	31.496	31,496
F (inch)	2.638	2.736	3,228
G (inch)	0.610	0.709	0.826
н	1/2" NPT	3/4" NPT	1" NPT
I (inch)	0.590	0.590	0.787

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



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. **Rull** and logo are registered trademarks of **Rull** Rubinetterie usersillerie Bonomi. Other logos and registered trademarks are property of respective owners. XCISCPU - Rev: 3580





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

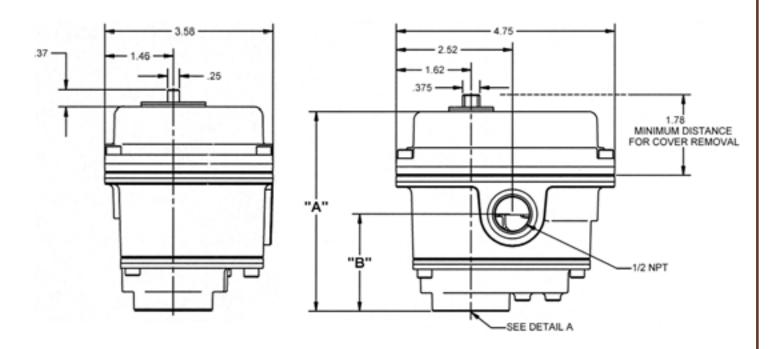
Service limits

lm	perial 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	В	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

XCEE-Tork - Rev:0



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, fall open or fall closed
- Minimum ambient temperature while actuator is at rest: -35°C (-31°F)

Service limits

Impe	rial System		Metr	ic 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
- Linkkit
- Springs



Limit Switch Box



Solenoid Valve

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

Consult with your supplier for special applications.



Visual position indicator

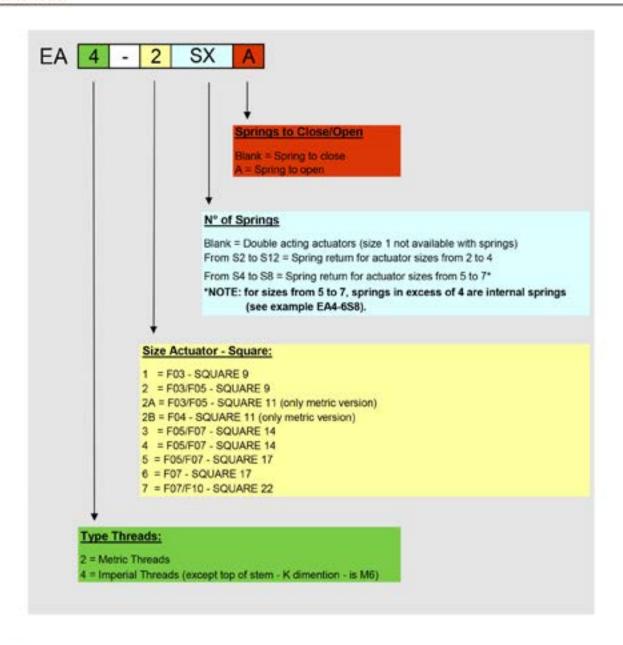




Link Ki



eMail: Sales@MurdockIndustrial.com Website: www.HoseWarehouse.com



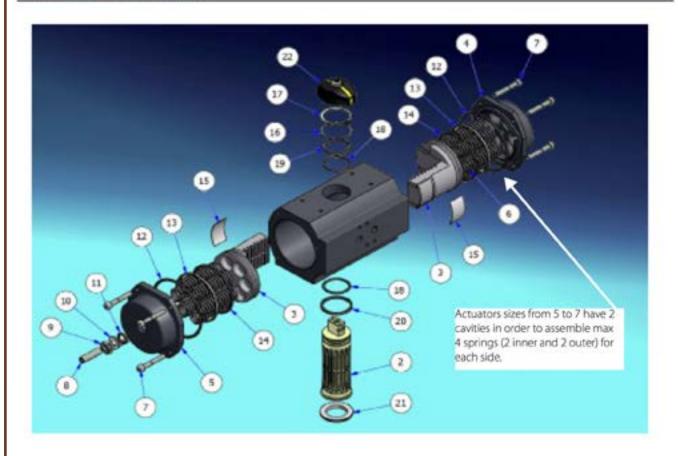
Example

EA4-658 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

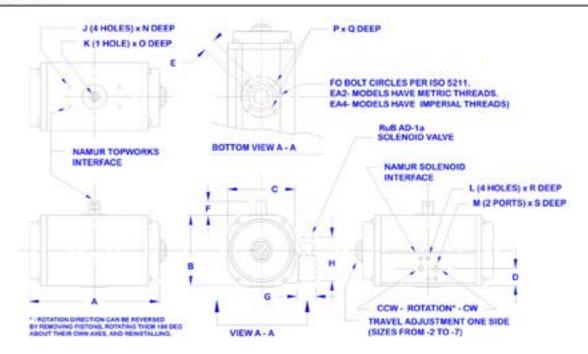
EA-4 is shown. Smaller sizes have similar construction except EA-1 has Nylon endcaps and pistons

ITEM	DESCRIPTION	QTY	MATERIAL
1	Body	1	Anod. Aluminium
2	Shaft	1	Steel - Zinc Plates
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

^{**} Polyaxymethylene commonly "Delrin"



Dimensions:



Size								M	etric :	Systen	n - mn	1							
	FO	A.	В	С	D	E	F	G	Н	J	К	L	М	N	0	P	Q	R	5
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	MS	M6	MS	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	MS	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	MS	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	256	166,5	156	30	22	20	26	67	MS	MG	MS	G1/4	5	12	M8/M10	13/16	8	12

Size									Impe	erial Sy	sten	ı - inch							
	FD	A	8	C	D	. E	F	G	н	J	×	L	.M	N	0	P	Q	R	5
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/	0,31	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/	0,31	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

	300		ouble ac	ting - tor	que in N	.m			
				Air pr	essure s	upply (b	ar)		
EA2-	Springs	3	4	5	6	7	8	9	10
1	0	4,4	5,8	7,3	8,7	10,2	11,6	13,1	14,5
2-2A	0	11,8	15,8	19,7	23.7	27,6	31,6	35,5	39,5
3	0	25,4	33,8	42,3	50.7	59,2	67.6	76,1	84,5
4	0	50,7	67,6	84,5	101,5	118,4	135,3	152,2	169,1
5	0	61,3	81,7	102,1	122,5	142,9	163,3	183,8	204,2
6	0	101,0	134,6	168,3	201,9	235,6	269,2	302,9	336,5
7	0	187,1	249.5	311.8	374,2	436.5	498,9	561,3	623,6

									Sprii	ng return	- torque	n N.m.									
									air strok	e+start							- 0	ir stroke -	end		
	Springs	Se	rings	spring	stroke			A	pressure	supply (bar	1						Air pe	essure su	oply (her)		
12-		outer	inner	start	end	3	4	5	. 6	1			10	1	4	5	4	7	1		10
	2	-		2.62	1.34	10.5	14.4	18.4	22.3	26.3	30.2	34.2	38,1	9.2	13.2	17,1	21.1	25.0	28.9	32.9	36.8
	3			3.93	2.01	9.8	13.8	17.7	21.7	25.6	29.6	33.5	37,4	7.9	11.9	15.8	19.7	23.7	27,6	31.6	36.5
	4			5.24	2.68	9.2	13.1	17.0	21.0	24.9	28.9	32.8	36.8	6.6	10.5	14.5	18.4	22.4	26.3	30.3	34.2
	5			6.95	3.35	8.5	12.4	16.4	20.3	24.3	28.2	32.2	36,1	5.3	9.2	13.2	17.1	21.1	25.0	29.0	32.1
	6			7.86	4.02	7.8	11.8	15.7	19.7	23.6	27.5	31.5	35.4	4.0	7.9	11.9	15.8	19.8	23.7	27.6	31.6
24	7			9.17	4.09		11.1	15.0	19.0	22.9	26.9	30.8	34.8		6.6	10.6	14.5	15.4	22.4	26.3	30.3
-	8			10.48	5.36		10.4	14.4	18.3	22.3	26.2	30.1	34.1		5.3	9.2	13.2	17.1	21.1	25.0	29.1
	9			11.79	6.03		140.	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	32.6			6.6	10.6	14.5	18.5	22.4	26.4
	11			14,41	7,37			-	16.3	20.2	24.2	28.1	32.1				9.3	13.2	17,2	21.1	25.0
	12			15.72	8.04				15.0	19.6	23.5	27.5	31.4				8.0	11.9	25.8	19.8	23.7
_	- 2			5.44	- 3	72.4	30.8	39.1	47.7	56.2	64.0	73.1	81.5	19.9	29.4	36.8	45.3	50.7	62.2	70.7	7E.1
	3			8.16	4.5	30,9	29.3	37.8	46.2	54.7	63.1	71.6	80.0	172	25.7	34.1	42.6	51,0	59.5	67.9	76.4
	4			10.88	.0	19.4	27,8	36.3	44.7	53.2	61.6	70.1	78.5	14.5	22,9	31.4	39.8	41.3	56.8	65.2	73,7
	8			12.6	7.5	17.9	26.3	34.8	43.2	51.7	60.1	68.6	77.0	11.8	20.2	28.7	37.5	45.6	54.0	62.5	70.5
	6			16.32	9	15.4	24.8	33.3	41.7	50.2	58.6	67.1	75.5	9.0	17.5	25.0	34.4	42.9	51.3	59.8	68.2
3	7			19.04	10.5	140,4	23.3	31.8	40.2	48.7	57.1	65.6	74.0		14.8	23.2	31.7	40.1	48.6	57.1	65.5
-	8			21,76	12		21.8	30.3	38.7	47.2	55.6	64.1	72.5		12.1	20.5	29.0	37.4	45.9	54.3	62.8
	9			24.48	13.5		610	28.8	37.2	45.7	54.1	62.6	71.0		186.7	17.8	26.2	34.7	43.2	51.6	60.7
	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			47.0	34.2	42.7	51.1	59.6	68.0			56.5	20.8	29.3	37,7	46.2	50
	12			32.64	18				32.7	41.2	49.6	58.1	66.5				18.1	26.5	35.0	43.5	51.5
_	_	_	_	10.24	6.68	44.0	61,0	77.9	94.5	111.7	128.6	145.5	162.4	40.5	57.4	74.3	91.2	108.1	125.0	141.9	156.
	3			15.36	10.02	40.7	57.6	74.5	91.4	106.3	125.3	142.2	150.1	35.4	52.3	69.2	86.1	103.0	119.9	136.8	153.
	4			20,48	13.36	37.4	54.3	71.2	88.1	105.0	121.9	136.8	155.7	30.2	47.2	64.1	81.0	97.9	114.8	131.7	148
	5			25.6	16.7	34.0	50.9	67.8	84.8	101.7	118.6	135.5	192.4	25.1	42.0	58.9	75.9	92.8	109.7	125.6	143
	6			30.72	20.04	30.7	47.6	64.5	81.4	98.3	115.2	132,1	149,1	20.0	36.9	53.8	70.7	87.6	104.6	121,5	138
4				35,84	23.30	A1,7	44.3	61.2	78.1	95.0	111,9	120.0	145.7	May .	31.8	48.7	65.6	82.5	99.4	116.3	133.
•	100			40,96	26.72		40.9	57.8	74.7	91.6	108,6	125.5	142.4	-	28.7	43.6	60.5	77,A	94.3	111.2	128
	1 6			46,08	20,05		44.9	54.5	71.4	86.3	105.2	122.1	139.0		40,7	30.5	55.4	77.3	89.2	106.1	123
	10			51.2	33.4			51.1	68.1	85.0	101.9	118.8	135.7			30.3	50.3	67.2	84.1	101.0	117
	11			56.32	36.74			\$1,1	64.7	81.6	98.5	115.4	132.4	-		31,3	45.1	62.0	79.0	95.9	112
	12			61,44	40.08				61.4	78.3	95.2	112.1	129.0				40.0	56.9	73.8	90.7	107
_	_	-	- 0	52.4	_	32.5	52.5	73.3	93.7	114.1	134.5	195.0	175.4		- 00.5	49.9		_			_
	4	4	0	And the second	28.8	34.5		69.7			130.9	151,4	171.8	1.3	25,3	40,7	70,1	90,5	110,0	131,4	151,
5	5	-		58,95 65,5	36		49,3	66.1	90,1	110,5	127.3	147.8	168.2		22,7 16.2	43,1 36.6	63,6 57,0	84,0 77,4	97.8	118.3	145,
2	7	- 1	2		39.6		40,7			100.9	121,3	1000000	164.6		16,2	100				0.755	100
	1		3	72,05	100000000000000000000000000000000000000			53.9	82.9			144,2	161.0			30,0	90,5	70,9	91,3	111,7	132,
_	_	4		78,6	43.2	65.5	66.6	_	79.3	99.7	120,1	140.6		147	47.5	23.5	43,9	64.3	84.7	105,2	125.
	4	*	0	86,8	47.7	53,3	96.9	120,6	154.2	187,9	221.5	255.2	288.8	14.2	47,8	81,5	115.1	148.8	182,4	216,1	249
	2	4	1	97,65	53,675		80.9	114,6	983	181,9	215.6	349.2	262,9		37,0	70,6	101.3	137,9	171,6	205,2	238,
6	- 5	4	- 4	108,5	59,65		75,0	108,6	142.3	175,9	209,6	243,2	276.9		26,1	59,1	90,4	127,1	160,7	194,4	228
	7	4	3	110,35	65,625			102,6	136.3	170,0	200,6	237,3	270,5			48.9	82,6	116.2	149,9	183,5	217,
_	. 0	4	4	130,2	71,6		****	96,7	130.3	164.0	197,6	231,3	264.9	44.4		38.1	71,7	105,4	139,0	172,7	206
	4	4	0	160,8	88.4	98,7	161,1	223,4	285,8	348.1	410,5	472,9	535.2	26,3	88,7	151,0	213,4	275.7	338,1	400,5	462
	5	4	1	180,9	99,45		150.0	212,4	274.7	337,1	390,5	461,8	534,2	-	65,6	130,9	193,3	255,6	318,0	380,4	442
7	6	4	2	201	110,5		139.0	201,3	263.7	326,6	388,4	450,8	513,1		48,5	110,8	173.2	235,5	297,9	360,3	422,
	7	4	3	221,1	121,55			190,3	252.6	315,0	377,4	439,7	502,1			90,7	153,1	215,4	277,8	340,2	402
	. 6	- 4	- 4	241,2	132,6			179,2	241.6	300,9	396.3	428,7	491,0		17	72,6	133,0	195,3	257,7	329,1	382

Torque Rating Charts for EA4 actuators - IMPERIAL Threads

			Dout	ele acting	- torque	In-lb				
				A	ir pressi	ire supp	ly (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	95	120	144	168	193	217	241	265	289
3	0	206	258	309	361	413	464	516	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

									- 1	59	ring tetur	n - forqu	et in in-	ъ.					1000	and the same			
		-		200	dian-					Orake - sta	1									troke - end			
Ac.	Springs	-	rings		atroke and	40	56	80		NET RIDOR	100	108	110	126	40	- 50	- 60	76		er moply (P	100	710	120
*	1004	ooter	inner	start		Booke Science			107	36		annieri i dense	amainti an		Anniel III		mandar Lifetim	manufacture of the last of the	80	90		manufacture become	-
	- 5			- 23	4	- 84	100	413		181	200	229	203	277	73	87	tin.	165	160	198	218	342	266
	- 2			-35	10.	.76	100	127	191	175	199	220	247	271	62	- 66	115	134	158.	162	206	230	254
	4			46	24	.73	97	121	145	709	195	217	241	265	50	14	. 16	102	146	170	194	218	242
	2			.58	30	67	91	715	139	163	187	211	236	259	30	62	96	911	135	139	183	207	231
	- 6			-70	36		85	129	135	157	181	205	229	253		.51	. 75	.99	123	147	171	196	219
2	7			81	41		79	100	127	181	175	199	223	347		. 39	-63	67	111	136	160	194	204
				90	47			17	121	.145	100	190	257	341			12	76	190	134	140	172	106
	2			104	53				115	130	163	167	211	236				64		. 112	106	160	185
	10			.116	59				109	133	197	181	205	230				53	77	101	126	149	173
	111			127	45					107	191	175	200	224					45	86	.110	137	161
	12			130	71						145	170	198	218						78	102	106	160
	2.			48	27	180	731	283	334	386	438	481	541	992	158	210	361	313	364	410	409	019	501
	3			72	40	-196	218	270	321	373	434	471	528	579	134	130	257	200	340	392	444	495	547
	4			96	53	753	205	296	308	360	411	463	514	566	110	162	213	265	216	368	419	471	523
	1			120	66	140	192	203	296	546	330	440	501	563	- 66	136	189	241	202	366	365	447	400
	1			184	80	- 170	178	230	281	333	385	436	450	536	-77	113	165	217	268	330	371	423	475
3	1			168	93		166	217	200	320	371	423	471	526	_	- 85	141	190	244	296	347	200	450
	1			193	106		190	203	295	336	398	410	401	543		- 00	117	160	200	272	323	375	426
				217	119			200	242	290	345	306	445	400	-		110	144	196	248	200	261	403
	10			341	133				229	290	321	362	435	486	-			100	172	224	275	327	279
	11					-			200	267				473	-			100	148				
				265	140	_				267	318	379	421		-				148	190	251	300	364
	12		_	260	159	-	-	-	_		326	356	405	460	-	_	-	-	_	135	207	279	300
	- 7			10	59	394	457	900	968	700	800	872	1076	1179	302	435	525	631	176	138	947	1044	1507
	3			136	- 66	324	401	510	630	737	840	943	1046	1149	277	360	483	586	689	792	804	100	1902
	4			181	110	294	396	501	604	707	810	913	1016	1120	231	335	458	541	644	747	850	953	1057
	5			227	148	265	368	471	574	677	781	864	967	1090	196	289	302	496	599	702	805	908	1011
	- 6			272	177	20000	336	442	545	548	758	854	967	1001	2.7	244	347	400	553	857	750	363	966
	7			317	207		309	412	.515	818	732	825	928	1000		159	302	406	516	811	3114	818	821
				362	206			342	456	589	662	796	898	1001			367	300	463	596	669	772	875
	- 1			406	268				490	550	962	766	.800	972				314	418	521	824	727	800
	10			453	296				427	530	610	736	839	942				200	372	475	579	662	713
	11			496	325					500	603	706	.810	913					307	430	533	636	742
	12			544	368						574	877	780	883						386	459.	591	894
	4	- 4	- 0	44	255		368	413	617	142	506	991	1715	1340		156	284	408	503	657	792	907	1031
		4	1	522	287		-	411	585	710	804	968	1003	1208			226	390	65	500	724	649	973
5			2	580	219			429	550	678	903	107	1082	1176			168	292	417	541	000	791	915
9	1		- 1	637	390			-	101	646	771	895	1030	2366			100	234	209	606	908	233	867
		-	- 4	695	362				- 700	634	739	963	966	1112				-	301	436	550	675	799
-	1	1	- 1	_		_	894	811	1000	5239				_	_	Ser	407	400	674		1286		
		-		766	422		904	810	5015		1406	9601	1836	2042	-	259	464	600		1000		5400	1896
1	- 2			964	475			TEF	962	1166	1373	1579	1793	1909			361	573	.776	504	1109	1394	1800
٠	- 2			960	526			794	909	1115	1029	1525	1731	1906			272	477	662	900	1003	1296	1504
	1		- 3	1050	581				800	1062	1067	1472	1678	1963	-			381	MI	792	907	1302	1408
		4	- 4	1152	634	_			804	1009	1214	1420	1625	1600	_			285	400	106	901	1106	1312
		. 4	. 0	1423	792		1120	1900	1881	2061	2642	3022	3403	3780		679	MC	1240	1621	2001	2362	2762	310
	. 5	4		1901	880		1022	1400	1763	2164	2544	2904	3005	3685		302	582	1063	1443	9523	2294	2584	2965
7	- 6	1.	- 2	1776	979			1305	1685	2006	2446	2807	3207	3588			504	985	1265	1948	2006	2406	2797
	.7		. 1	1956	1075			1207	.1088	568	2349	2129	3109	3490			326	707	1007	1468	1948	2329	2609
			. 4	2134	11/3				1400	9179	2281	2621	3012	3362				129	909	1290	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/fubricated 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 piease contact RuB at the following email address: sales@rubvalves.com or your RuB distributor

Linkage kit selection table

supply (bar)

dP Meda (Bar)

1115

	\$64 LT					
Valve size		A	thut	or sk		
	EA2	-	**	3	7	7
250	ž	-	-	٠	63	02
2-21-	Š			4	w	9

RAM SERK

A A A A A

1000			
200			
ALC: N			
A 10.00 A 10.00			
200			
1			

WALVE 3 4 5 6 7 8 9 10 3 4 MALATA April 10 Doubline Acting Actualisms EA2 Multiply-to-Close Actualisms EA1 Sep 80 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 8 3 4 3 4 3 4 3 <th>W.VE</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>4</th> <th></th> <th></th> <th></th> <th>*</th> <th></th> <th>ŀ</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>ľ</th> <th>l</th> <th>ľ</th> <th>ŀ</th> <th></th> <th>1</th>	W.VE							4				*		ŀ						ľ	l	ľ	ŀ		1
14 Let Media (Dar) Douttee Actualism EA2 - Birming-to-Close Actualism EA1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		the same of the same					1			0	*			-	*	-		•	-						2
15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	64, 574	Opr Meda (Bar)	0	outro	Act	A DO	ctual	Des .	A22-		=	è		리	21	93	ı	_	П	죕	Z.	-	-91	25	
15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15	15	-	2		-	-	+		4	П	m	ю	100	100	ю	搬	11.7	1	10	153		150	150	20
15 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		15	+	-	*	-		+		R		-					700	-		93					Ä
TS 24 CA 25 26 26 26 26 26 26 26 26 26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27		22	Pe	~	-	=	-	+	-	4	-						233	22		Æ					Z
THE RESERVE THE PARTY OF THE PA	104.	15	2	1	2	N	96	25	1	100	9 300	386	2Ast	뚔	22	껿	S	22		66	57	2.4	574	-22	2765
2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	-271	22	0			2	88	34	SA AN	4	4 40	368	349					485	485	383					36
15 4 3 3 3 3 3 3 3 4 45 46 56 56 11 12 12 1 12 1 12 1 1 10 1		15	+	-	-	-		47	5	4			70	83		83	03	_	And	3					H
20000000000000000000000000000000000000	17.	15	10	100	40	10	0	9	10	5								_	3	38	780	100	*	H	35
784 667 667 667 667 667		22	-		10	10	10	9	30		P			70	60		6		7	7					3
25 25 25 25 25		15	-	-	-		. 9	8	9	-			750								Tel				75

A 55 CM		1	964	964, 574				
Valve Size				Acti	aster	Size		
	£42	7	7	-24	2	I	٠	۴
12-1	-97	-	-	-	-	-	-	-
2014 - All-	-30			4	40		2	-
	-90				+	4	14	50
115 - A	Ġ		L				27	15

													Ar p	essure	dens	y Dar										
VALVE		3	7	8	0	1	**	on-	10	**	*	10	9	1	**		10	~	*	10	9	1	60		10	
\$72, \$73	ΔP* Media (Bar)		Post	日日日	cting	Actu	ators	EA	-	W.	Sprin	10-00-0	Close	Actua	tores	EAZ-	4	TE .	Spi	ring-to	-Open	1 Acts	antons	EA2		
1/2	91	2	2	2	2	2	-	1	1	15	38.	38.7	130		387	1000	1000	494	387	387	367	367	387	387	387	
3/4"	94	0	24	N	2	2	2	-		*	85	8	28	8	389	389	380	_	3	98	38	369	380	28	28	
	98	*	0	69	673		2	r4	2	10		488			449			i i		449	489	15	489	489	489	
* Selectors	s apply for valves used	4	Ap us	000	8 Bar	Max	For A	900	168	ar and	don	20 Bar	. Diese	e cons	A Rue	for so	and rec	omme	ndabon	10						

Valve size	1000	-	Ictual	or size		
	EA2	÷	-5	. ZA	•	M
1/2" ~ 1"	3	-	-		9	

Red font = selection driven by valve stem size

15 Max 35 Max

Į.

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 limits shown below, and for media having friction characteristics similar to clean water or moist/Jubricated gases the following actuator selections can be used

or 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.

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

Linkage kit selection table

EA4			564 LT			
22 22 22	Valve size	1	Ac	ctuator si	ze	
33		EA4	1	-3	.3	7
3	1"~1-1/4"	-XI	89	8	6	0
7	1.1/2"~2"	IK.			10	10

REEE

Air pressure supply

8

128

110 100

8

8888

Valve size		Ac	ctuator siz	90	
	EA4	1.	-3		7
\$~1·1/6	-X	89	8	6	.01
-1/2"~2"	IK.			10	101

230 Max	-	-				-		-	-	-	100		100	_	m	122	100	294	Z		K	N	123	133	100	100	1200	38
230 Max		-				-		-	-	-	Z	A	A	N	Z	70	A	Z	Z	Ä	Ä	Ä	Ä	Ä	A	A	×	Ä
230 Max				-			-	75	-	'n				7	1			A	英	-	H	H						
230 May		-	-	-	1		-	0	-	-	57	5		100	980	Ä	7	340	H	9	346	A	H	8	3	7	H	H

			1	AGIA			1/2 ~ 1	4 4 444	× +/7-7	3-1/2"	
1	2		200	N	A	Ä	88	DAG	3	3	7
ŀ	2	EAR	8	Ä	36	Ŗ	34.00	38.12	3	8	7
	2	8	200	ä	à	2	3810	245	THE .	8	2
	R	į	25	N	R	H	2810	28	3	3	75
	8	200	8	ă	H	8	24	490	3	3	7
	2	8	8	Ä	700	8	24.55	ş	New York	The	
	8	100	2	75	30	R	3	400	3	2	
	R	100	2	Ä	100	2	Ę	7	ă		
	100 +0		2	Ä	38	R	3	3	Š.		
		-	393	8	ā	3	A	1961	3	è	75
	110	224	2	8	Ä	8	2	100	30	100	2
	188	i	R	R	Ä	H	3	7	3	3	200
	R	thing.	2	2	Ä	ä	2	Ä	3	3	147
	8	40.00	2	8	Ä	A	2	3	3	9	747
	2	Š	æ	20	ā	Ä	8	3	3	2	
	8	70	2	280	ā	×	4	3		7	
	8	Seed	250	200	Ä	N	7	ß	a		
	9	i	8	R	A	3	4	4	2		
	120		-		*	P	**	ń	40	0	*
	100 110	24.4	-	+	5	-	7	-	*		-
		See See	-	-	-	-	77	0	20	0	0
	R	The same	-			-	-	n	*	-	0
	8	No. of	-		*	-	*	-	*		-
	2	Acet	-	-	PA.	-	*	15	301	6	*
	3	office	-		-	-	*		0	0	-
	8	d	-	-	M	-	**	*	NA.		-
	¥	0	-	N	81	-	-	4	45	*	
		172		J		U					
		Media	8	200	38	8	8	8	8	8	907
		2									

		\$6	\$64, 574	4				
Valve Size		П	े	Actuator size	or siz			П
	EAA	7	-7		7	÷	ģ	Ľ
1/5. ~ 1.	ķ	60	60	O.	OH.			
1-1/4" ~ 2"	÷			10	10	16	17	100
2-1/2" 4"	÷					18	18	.,
F-1/2 - 4	ż					18	_	100

M . M .

.

23

9 99

100	ш	9	=	22	_
Actuator	•	0	п	10	s72, s73
	7	10			872,
	-1 -5	*0			1
	EA4	-90	-Xn	-XI	П
Valve size		1/2" ~ 3/4"	1,-1-1/5,	7.	
rg-to-Open Activistors, 8.54 -	E SE	23 23 23 23 23	446 446 3411 3411 3411 3411	day day day	5 40 50 60 70 80 90 100 110 120 Sering-te-Cenn Actuators EA4-
	2. 其 语 语 语 语 语 语 语 语 语 语 语 语 语 语 语 语 语 语	21	1	come. The fire same recommendations	60 70 80 80 100 110 120

#

100

Valve size	872,	172, s73 Ac	3 Actuator	r size	
	EA4	-1	-2	ņ	4
1/2" ~ 1"	ĽĶ.	60	40	6	6

283

793

200

RE 38

13

138

MeSa 283

ij	8	
Ħ	2	
	5	
8	000	
1	in the	
1	Ę	
1	×	
9	2	
٩	5	
ų	B 70	
i	8	
	1	25
9	5	-
	3	- 5
9		170
9	2	3
ä	8	. 13
	25	1
ď	9	1
ì	5	1
1	6	车
1	8	· c
ı	3	- 8
Š	1	2
	2	0
1	£ .	1
1	8	H
1	\$	ō
	New Year	Po
-		000

HISTA Rv. 1486





Air Director AD-1

Electrical System Direct Mount Solenoid Valve



Product Description

The R**uB** 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) ¼" 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: $20 \sim 120 \text{ psi}$ • Temperature: $0 \sim 130 \text{ °F}$

• Cv flow rating: 1.68

• Pressure Ports:

- <u>3 External:</u> Air supply port plus separate exhaust ports for valve

open and valve close

- $\underline{\text{2 Internal:}}\,$ Transfer ports A and B connect solenoid to actuator

• **Override:** Screwdriver slot for local operation to replace or over-

ride 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.

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°.

Service limits

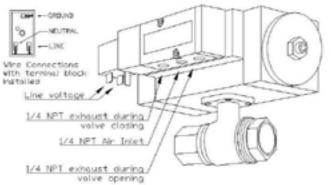
Imperial System				
Voltage 110 VAC, 2.5 W, 62 mA inrush				
Temperature (°F) 0°F +130°F				



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



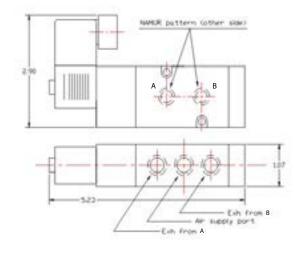
Line Voltage to solenoid will open ball valve. No voltage will close If opposite function is required the

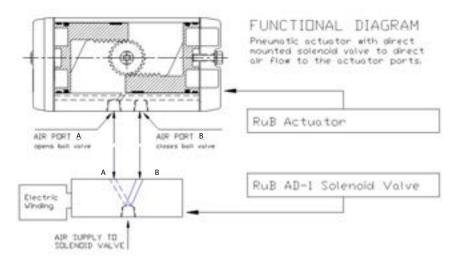
two solenoid nounting screws can be removed and the solenoid reinstalled upside down.



AD-1 Solenoid Valve + Pneumatic Actuator

Dimension inch





XCEAD1 - Rev:0



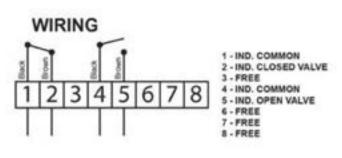
Limit Switch Box

EA2-LS



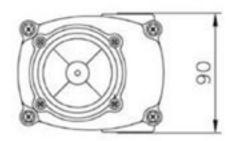
Features and Specifications:

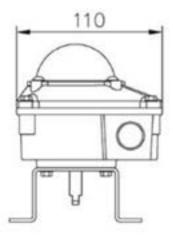
- Enclosure: Weatherproof IP67, O-ring sealed
- Material: Aluminum, Polyester coated
- Ambient temperature: -20°C ~ +80°C
- Switch cams: Adjustable, preset for 90°
- Cable entries: 2xM20x1.5
- Terminal Block: 8 pos of terminal strips
 (6 for switches, 2 for solenoid valve power)
- Position indicator: 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

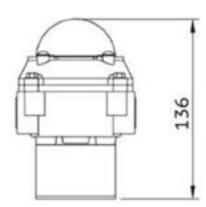




DIMENSIONS (mm)







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. Rull and logo are registered trademarks are property of respective owners.

JCESLSF-Rev: 35300





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.
- Finest brass according to EN 12165 and EN 12164 (formerly DIN. 17660 and UNI 5705-65) specifications

Stem:

- Two FPM O-rings at the stern 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:

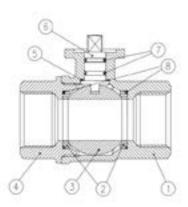
- k.64 configuration featuring EN 10226-1, ISO 228 parallel Female by Female threads, plated body, valve length according to DIN 3357 specification, pure PTFE seats
- Rack and Pinion pneumatic actuator (Spring return or double
- Compact power electric actuator for some sizes
- · Manual lockable handle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

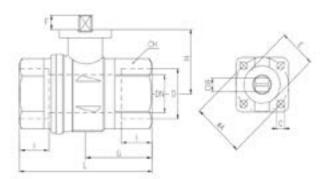
Upon Request:

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)

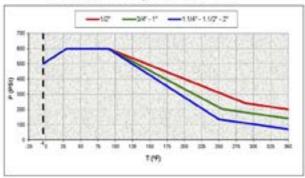




Torque for Actuator Sizing in-lb

Delta P →	0+20	00 PSI	600 PSI	
Valve size	То орея	To close	To open	To
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



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	Stainless steel ball	1	AISI316
4	Unplated end cap	. 61	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	\$64139
D (inch)	1/2	3/4	. 1	1 1/4	11/2	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	4.606	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
ØA(inch)	1.417	1.417	1.417	1.968	1.968	1.968
B(inch)	0.354	0.354	0.354	0.551	0.551	0.551
C (inch)	0.220	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
DN SON NO	F03	F03	F03	F05	F05	F05

Torque correction factors

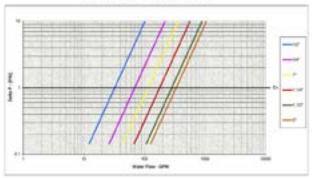
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

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



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 ecition. Rull and logo are registered trademarks of Rull flubinetterie usersilene Bosomi. Other logos and registered trademarks are property of respective owners.

#256439 - Rec. 1590





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 according 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
- 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

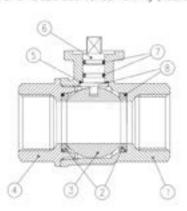
Upon Request:

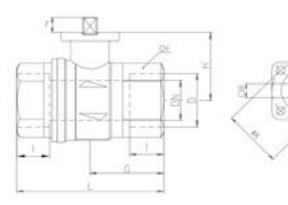
Custom Design



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)





CW617N 1 Unplated body PTFE carbo-2 Ball seat graphite filled 3 Stainless steel ball 1 AISI316 4 Unplated end cap 1 CW617N PTFE carbon 5 Washer 1 filled 25% Stainless steel stem O-ring design 6 1 AISI316 7 O-Ring 2 EPM. O-Ring **FPM**

Part Description

NOTE: Approvals apply to specific configurations/sizes only.

Q.ty

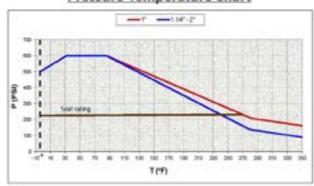
Material

Code	S64F39A	S64G39A	S64H39A	S64I39A
D (inch)	1	1 1/4	11/2	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	4.606	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	2.758
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
CIN SO 5711 Dev 505	F03	F03	F06	F05

Torque for Actuator Sizing in-lb

Delta P →	0 + 90 PSI		>90 ÷ 230 PS		
Valve size	To open	To close	To open	To close	
I"	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

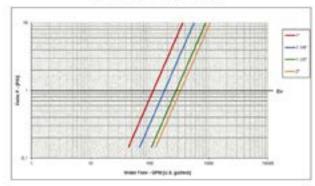
Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

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



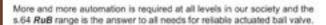
The company reserves all rights for the information contained herein. Products may be changed at any time without notice. Any undated reference to a code or standard shall be interpreted as referring to the latest edition Rull and logo are registered trademarks of Rulls Rulsinetterie usersilerie Bonomi. Other logos and registered trademarks are property of respective owners. X256439LT - Rev: 3590





s.6441 NPT brass trim

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



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



- · 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:

- 5.64 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

เม

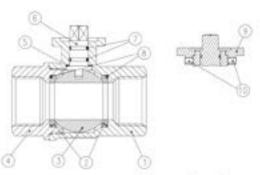
50

Approved by or in compliance with:

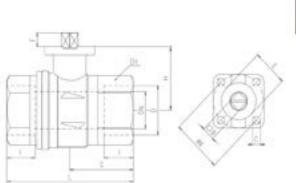
- · GOST-R (Russia)
- Hygiene and epidemic center in Moscow city (Russia)
- · UkrSepro (Ukraine)

- · 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.

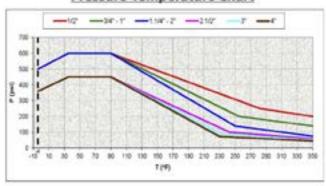
	Part Description	Q.ty	Material
1	Unplated body	1	CW617N
2	Ball seat	2	PTFE graphite filed 15%
3	Chrome plated ball	1	CW617N
4	Unplated end cap	- 81	CW617N
5	Washer	1	PTFE carbon filled 25%
6	Nickel plated stem O-ring design	1	CW617N
7	O-Ring	2	FPM
8	O-Ring	2	FPM
9	Black anodized flange (only from 2.1/2"to 4")	1	Aluminum
10	Grub Screw (only from 2.1/2" to 4")	2	CB4FF

Code	S64D41	S64E41	984F41	884041	S64H41	584141	S95L41AM	\$95M41AM	\$95N41AM
D (inch)	1/2	3/4	-1	1 1/4	152	2	21/2	3	4
DN(nch)	0.590	0.787	0.984	1,259	1.575	1.968	2.559	3,150	3.937
I (inch)	0.610	0.708	0.826	0.905	0.964	1.043	1.260	1.376	1.634
L (Inch)	2.106	2.933	3.562	4.094	4.606	5.314	6.142	6.969	8.504
G (inch)	1,201	1,456	1.791	2.047	2.322	2.667	3.071	3.484	4.252
H (mch)	1.220	1.515	1.673	2.185	2.441	2.716	3.502	3.779	4.366
CH(inch)	1.063	1.259	1.614	1.968	2.165	2.756	3.346	3.898	4.921
(A)(nch)	1,417	1.417	1.417	1,908	1.966	1.966	2.756	2.706	2.700
B(noh)	0.354	0.354	0.354	0.551	0.551	0.551	0.069	0.669	0.669
C (inch)	0.220	0.220	0.220	0.259	0.259	0.259	0.335	0.335	0.335
E(inch)	0.984	0.984	0.984	1.376	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
Parish Del Street	F03	F03	F03	F05	F05	F05	FOT	F07	F07

Torque for Actuator Sizing in-Ib:

Delta P →	0+20	00 PSI	600 PSI (450 PSI over 2"	
Valve size	To open	To clour	Zo open	To
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	7.80	273	7.80
2*	262	222	327	222
2.1/2"	372	372	929	929
3"	902	962	1962	1062
1.	1646	1646	1991	1991

Pressure-Temperature Chart



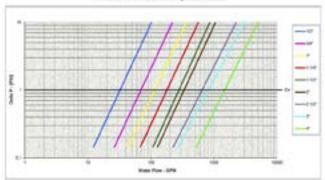
Torque correction factors

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 15 Slurries or liquids bearing abrasive particles 1.5+2.5

For other conditions please inquire of your RUB representative or distributor

Pressure Drop Chart



The company reserves all rights for the information contained herein. Products may be changed as any time without notice. Any undated reference to a code or standard shall be interpreted as referring to the latest. edition. Rull and logo are registered trademarks of Rull Rubinetterie utensilerie Sonomi. Other logos and registered tredemarks are property of respective owners. JEESSAFT - 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 PS
- · non-shock cold working pressure

Working Temperature:

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

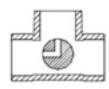
Options:

- 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



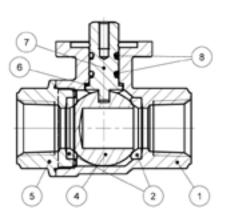




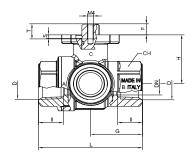
Approved by or in compliance with:

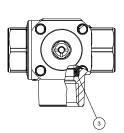
• RoHS Compliant

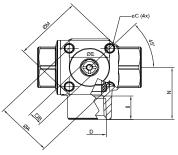
NOTE: Approvals apply to specific configurations/sizes only.



	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	e0.205	e0.205
ec (inch)	(M6)	(M6)	(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 8.0 Dry gases, natural gas, superheated steam 1.5 Slurries or liquids bearing abrasive particles 1.5÷2.5

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 utensilerie Bonomi. Other logos and registered trademarks are property of respective owners. XCES7241 - Rev: 0







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 PS
- · 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:

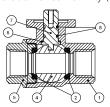
- Rack and Pinion pneumatic actuator (Spring return or double acting)
- Lockable handle
- · Adapter flange kit with screws

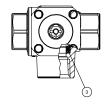
Upon Request:

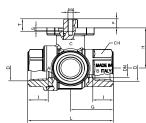
Custom Design

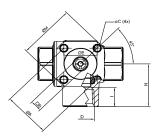
Approved by or in compliance with:

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

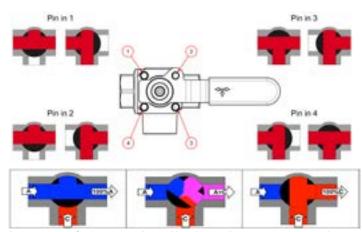








With the T Port configuration, a stop pin can be screwed in any of the 4 positions shown in the flange (1, 2, 3 or 4) and the lever will be restricted to 90° of operation. The flow directions are indicated in the diagram below. The lever can be removed and installed to reach any of the four possible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

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

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

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 utensilerie Bonomi. Other logos and registered trademarks are property of respective owners.

XCEST341 - Rev: 0





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:

 $\bullet\,$ 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



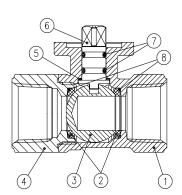




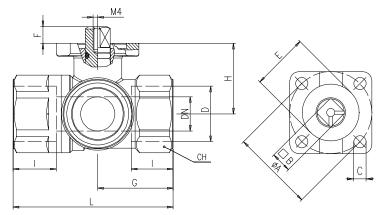
Approved by or in compliance with:

- 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	

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.

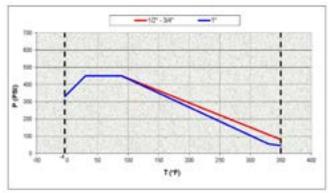
Lubricating oils or liquids 8.0

Dry gases, natural gas, superheated steam 1.5

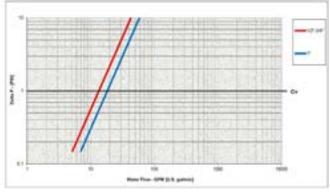
Slurries or liquids bearing abrasive particles 1.5÷2.5

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

Pressure-Temperature Chart



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 utensilerie Bonomi. Other logos and registered trademarks are property of respective owners. 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

\$134 TORKS FOR SIZING ACTUATORS - in-lb. Media lubricity clean water or similar fluids △P 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" 250 144 317 211

Threads:

· NPT taper ANSI 8.1.20.1 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
- 2x10⁻² Torr Vacuum rating

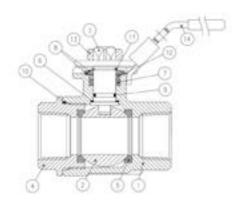
Working Temperature:

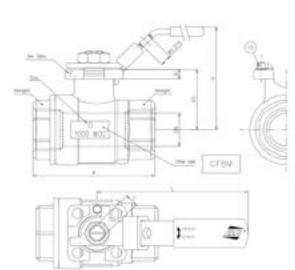
- · -50"F / +450"F
- Warning: freezing of the fluid in the installation may severely damage the valve



Approved by or in compliance with:

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

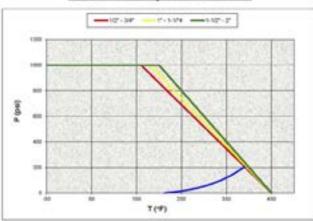




Water Flow Ratings

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

Pressure-Temperature Chart



NOTE: Approvals apply to specific configurations/sizes only.

PA	RT DESCRIPTION	Q.TY	MATERIAL
1	Body	1	A351-CF8M
2	Ball	1	A351-CF8M
3	Stern	1	AlSI316
4	Cap	1	A351-CF8M
5	Seat	2	RFTE
6	Seat	1	RFTE
7	Packing	set	TFE
8	Bellville	2	SKS
9	O-Ring	- 1	FPM
10	Gasket	1	RTFE
11	Snapring	1	AISI 304
12	Follower	1	AISI316
13	Nut	1	AISI 304
14	Lockable handle	1	A240 SS304
15	Stop pin	- 1	AISI 304

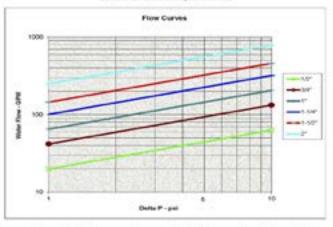
Code	134041	134E41	134F41	134041	134941	13441
D (Size)	1/2"	34"	1*	1114"	2 1/2"	2"
DN (inch)	0.56	0.81	1	1.25	1.5	1.97
H1 (inch)	1.40	1.56	1,84	2	2.3	2.8
A (inch)	2.60	2.99	3.54	3.94	4.41	. 5
B (inch)	0.26	0.28	0.319	0.319	0.319	0.382
S (inch)	0.35	0.35	0,43	0.43	0.43	0.55
F., (150 5211)	F03	F03	F04/F05	F04F05	F04/F05	F05

Code	134041,1	13464%	1345411,1	134G41L*	1349410.1	13641L*
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



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. Rull and logo are registered trademarks of Rull Rubinetterie utensilerie Bonomi. Other logos and registered trademarks are property of respective owners.

XCE134 - Rev: 3590









ACCESSORIES

Lockable Handle	Page 138
Oval/Round Lockable handle	Page 139
Stem Extension	Page 140
Levers	Page 143
Left Levers	Page 143
Reverse Levers	Page 144
T-Handles	Page 144
Stubby Handles	Page 145
Memory Stop	Page 145
s.35 Metal Wedge Handles	Page 145





Lockable Handle

for most RuB ball valves 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.

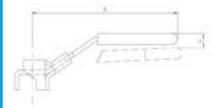
Easy to install on valves in the field, the RuB lockable handle will lock s.93 RuB valve the closed position only in compliance with OSHA (USA) safety requirements, while other RuB valves can be locked in both the open and closed positions.



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	EREALS	PERMIT	TEATY	FF3420
A (ren)	16	117	156.5	250
h (mn)	85	9.5	4	- 8
FILL PORTING)	1/4-1/8-1/2	3/4-1	100-100-2	292-3-4
PEDUDO FORDAD	1/2-5/4	1-159	1/12 -1-1/0	3-1

Code	PREATS	PERM	HEBATE	FFBA20
A (inch)	3.779	4,600	6.161	1.542
in (man)	0.354	0.374	6.157	0.315
FULL FORE[MIN]	/4-3/6-1/2	2/4-1	[04,[07,]	PVF-1-4
PERIOD FORDING	1/2-3/4	1-1/74	(41-1-10)	3-4

Dimension A shows handle lenght 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 wish 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



3

Box		14 to 2				
MT (Hutt)	0.797	0.708	0.866	0.590	0.120 2 ¹⁰ to 4	
AT (moh)	2.283		2.7(6		6.102	
See	1/4 - 3/6			110.10.2	210-3-4	
H1 peri	30	19.5	22	15	3.2	
A1-(mes)	56	58	70	79	155	
See	14 - 38	16	391.1	514,519.2	271314	

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.

edition. Rull and logo are registered trademarks of Rull Rubinetteria utensileria Bonomi. Other logos and registered trademarks are property of respective owners.



Stem Extension

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

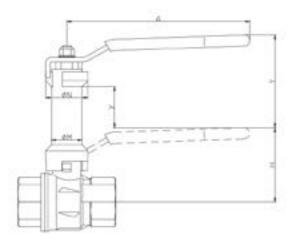


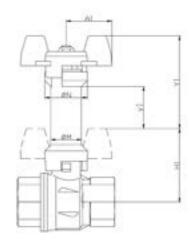
Today's world is conscious of the energy savings required to maintain resources for the future. To avoid heat loss from insulated pipes RuB offers stem extensions which provide easy actuation with minimum disturbance of the insulated.

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.





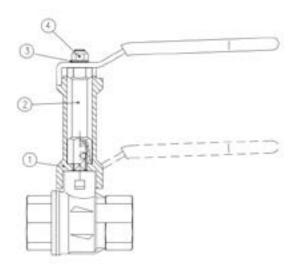


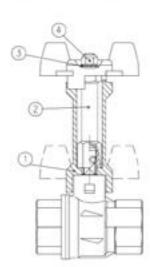


Dimensions Y, y, Y1 and y1 are additional to dimension H on the relevant valve drawing

Valve size full port	1/4 - 3/8	1/2	34-1	154 - 152 - 2
Valve size reduced port		12 - 34	1-114	112 . 2 - 210
M (mm)	17	17	20	26
N (mm)	25	25	26	38
A (mm)	82	100	120	158
Y (mm)	56.5	56.5	62.5	67.5
y (mm)	26.5	26.5	27.5	20.5
At (mn)	25	25	30	
Y1 (mm)	56.5	56.5	62.5	
yt (mm)	25.5	26	30.5	-

Valve size full port	1/4-3/0	1/2	34-1	114,112.2
Valve size reduced port		12-34	1-154	112-2-212
M (inch)	0.669	0.669	0.787	1.023
N (inch)	0.964	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	1.082	0.807
A1 (inch)	0.964	0.984	1.181	
Y1 (inch)	2:224	2.224	2.460	-
y1 (inch)	1.003	1.023	1.200	-





Ξ.	PART DESCRIPTION	Qh	Material
1	Body	1	CW517N
2	Connection	- 1	CW517N
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.





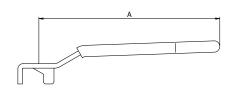




Levers

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

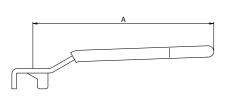




Full Port		1/4"÷3/8"	1/2"	3/4÷1"	1.1/4"÷2"	2.1/2÷4"
Standard Port		1/4"÷3/8"	1/2"÷3/4"	1"÷1.1/4"	1.1/2"÷2.1/2"	3"÷4"
A (inch)		3.228	3.937	4.724	6.220	10.039
Red	Code	PLFR11	PLFR13	PLFR16	PLFR19	PMFR20
Yellow	Code	PLFG11	PLFG13	PLFG16	PLFG19	PMFG20
Black	Code	PLFN11	PLFN13	PLFN16	PLFN19	PMFN20
White	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"



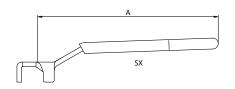


Full Port		1/4"÷3/8"	1/2"	3/4÷1"	1.1/4"÷2"
Standard Port		1/4"÷3/8"	1/2"÷3/4"	1"÷1.1/4"	1.1/2"÷2.1/2"
A (inch)		3.228	3.937	4.724	6.220
Red	Code		PLAR13	PLAR16	PLAR19
Yellow	Code	PLAG11	PLAG13	PLAG16	PLAG19

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.

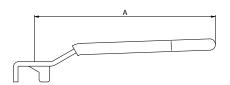




Reverse Levers

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

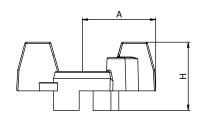
We have also reversed handle: in this version the handle is parallel to the pipe when the valve is closed and perpendicular when the valve is open. This option is available only in the small size for valves up to 1/2" (or 3/4" for reduced bore)

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	PFFR09
Yellow	Code	PFAG03	PFAG03	PFAG06	PFFG09
Light Blue	Code	PFAB03	PFAB03	PFAB06	PFFA09
Brass unplated	Code	PFOG03	PFOG03	PFOG06	-
Brass nickel palted	Code	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.

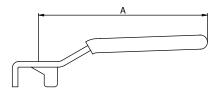
Most people understand that brass components performance are quite high, while the problem with a ball valve may arise from a component you would have never thought about: the Aluminium T-handle.

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

Stubby Handles

For most RUB Ball Valves up to 2"





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

Full Po	rt Valve	1/4"÷3/8"	1/2"	3/4÷1"	1.1/4"÷2"
Standa	rd Port Valve	1/4"÷3/8"	1/2"÷3/4"	1"÷1.1/4"	1.1/2"÷2.1/2"
A (inch)	l	1.771	1.771	3.543	3.937
Yellow	Code	PLTG13	PLTG13	PLTG16	PLTG19

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

XCEHNDU - Rev: 0





Master Index

GAS	Page 15
s.95 NPT - Full Port 1/4"-4"	Page 16
s.95 NPT Nickel Plated - Full Port 1/4"-4"	Page 18
s.92 NPT - Full Port 1/4"-4"	Page 20
s.92 MIP x FIP NPT - Full Port 1/4"-4"	Page 22
s.82 NPT Side Drain - Full Port 1/2"-2"	Page 24
s.80 NPT Gas Cock - Female by Female - Full Port 3/4"-2"	Page 26
s.8042 NPT Gas Cock - Male by Female - Full Port 3/4"-2"	Page 28
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
s.195 NPT+Flare - Gas Cock - Standard Port 3/8"-1"	Page 34
s.19540 flare 37° + Solder end - Standard Port 1/2"	Page 36
PLUMBING	Page 39
s.42 Solder Ends - Full Port 1/2"-3"	Page 40
s.71 NPT - Standard Port 1/2"-4"	Page 42
s.90 NPT Economy - Full Port 1/4"-2"	Page 44
s.112 NPT - Gate Valve 1/2"-2"	Page 46
s.114 NPT - Gate Valve Heavy Pattern 1/2"-4"	Page 48
DRINKING WATER	Page 51
Activalve 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
INDUSTRY	Page 63
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



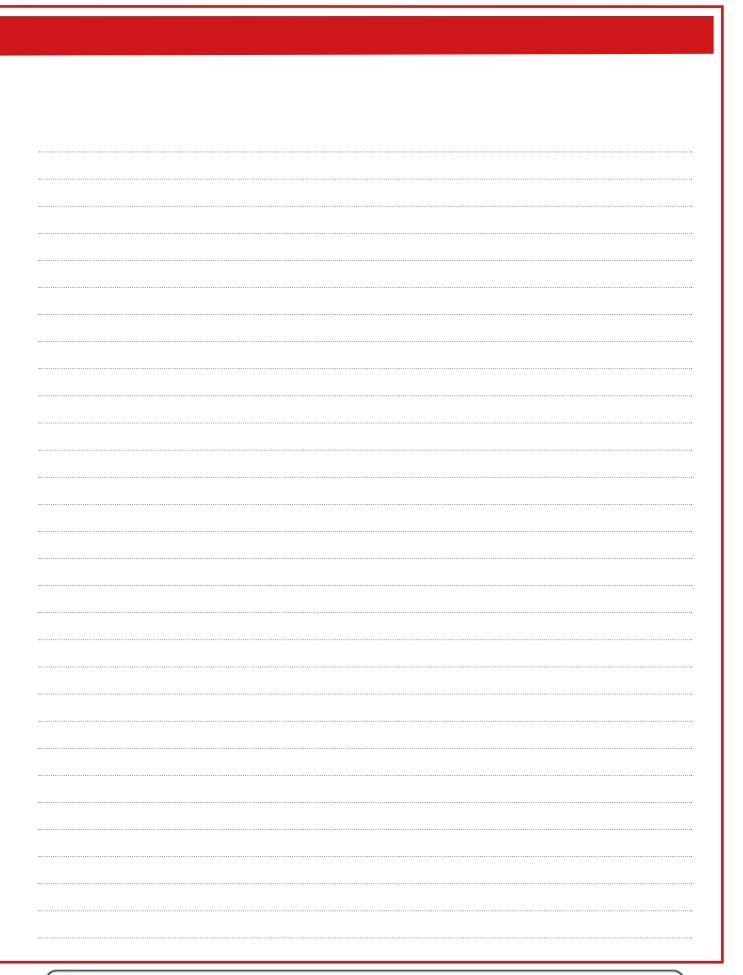
PNEUMATIC		Page 87
s.93 NPT Downstream Exhaust - Full Port 1/4"-2"	100000	Page 88
s.35 Mini Valve High Pressure - 1/8"-1/2"		Page 90
s.34 NPT Mini Valve -1/8"-1/2"		Page 92
PR Compact Pneumatic Actuator		Page 94
ACTUATION		Page 97
Compact Power Electric Actuator - Configurations		Page 98
Compact Power Electric Actuator - Assembly Instructions		Page 99
Compact Power Electric Actuator		Page 100
Compact Power Electric Actuator & s.31 Mini Valve		Page 102
Compact Power Electric Actuator & s.6439LT - Full Port		Page 104
Compact Power Electric Actuator & s.7441 3 Way - Standard Port		Page 106
E-Tork Electric Actuator		Page 108
EA Pneumatic Actuator		Page 110
AD-1 Solenoid Valve		Page 118
Limit Switch Box		Page 120
s.6439 NPT SS Trim - Full Port 1/2"-2"	2,00	Page 122
s.6439 LT Actuator Mounting - Full Port 1"-2"		Page 124
s.6441 NPT Brass Trim - Full Port 1/2"-4"		Page 126
s.7241 NPT 3 Way - Full Port 1/2"-1"		Page 128
s.7341 NPT 3 Way - Full Port 1/2"-1"		Page 130
s.7441 NPT 3 Way - Standard Port 1/2"-1"		Page 132
s.134 Actuatable 1000 PSI Stainless Steel- Full Port 1/2"-2"		Page 134
ACCESSORIES		Page 137
Lockable Handle		Page 138
Oval/Round Lockable handle		Page 139
Stem Extension		Page 140
Levers		Page 143
Left Levers		Page 143
Reverse Levers		Page 144
T-Handles	16-A (2/2/2/2	Page 144
Stubby Handles	\$ 5 m	Page 145
Memory Stop		Page 145
s.35 Metal Wedge Handles		Page 145







NOTES:







 	 	······································
	 	······································



WARNING:

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 utensilerie Bonomi*. Others logos are property of respective owners.

COPYRIGHT© 2016 RuB - ALL RIGHTS RESERVED







RUB Inc.

4401 Dean Lakes Blvd. - Shakopee, MN 55379-2715 (USA) Phone: +1 (952) 857 1114 - Fax: +1 (952) 857 1118 sales@rubinc.com - www.rubinc.com



RUBINETTERIE UTENSILERIE BONOMI

Via Padana Superiore, 27/29 25080 Mazzano (BS) - Italy Telefono: (+39) 030 212441 - Fax:(+39) 030 2629498 sales@rubvalves.com - www.rubvalves.com - www.rubpeoplethinklean.com



NK Uchi-Kanda Building, 3rd Floor - 1-14-5 Uchi-Kanda, Chiyoda-ku 101-0047 Tokyo Japan Phone: +81 (80) 96401122 - Fax: +81 422 36 3639 sales@rubkk.jp - www.rubkk.jp











RUB Inc.

4401 Dean Lakes Blvd. - Shakopee, MN 55379-2715 (USA) Phone: +1 (952) 857 1114 - Fax: +1 (952) 857 1118 sales@rubinc.com - www.rubinc.com



RUBINETTERIE UTENSILERIE BONOMI

Via Padana Superiore, 27/29 25080 Mazzano (BS) - Italy Telefono: (+39) 030 212441 - Fax:(+39) 030 2629498 sales@rubvalves.com - www.rubvalves.com - www.rubpeoplethinklean.com



RUB kk

NK Uchi-Kanda Building, 3rd Floor - 1-14-5 Uchi-Kanda, Chiyoda-ku 101-0047 Tokyo Japan Phone: +81 (80) 96401122 - Fax: +81 422 36 3639 sales@rubkk.jp - www.rubkk.jp

