Ball Valves

2-Way QS Series

Pressures to 15,000 psi (1034 bar)

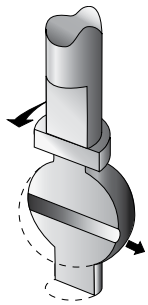
Parker Autoclave Engineers high-pressure ball valves have been designed to provide superior quality for maximum performance within a variety of valve styles, sizes, and process connections. Some of the more unique design innovations include an integral one-piece trunnion mounted style ball and stem that eliminates the shear failure common in two piece designs, re-torqueable seat glands that result in longer seat life, and a low friction stem seal that reduces actuation torque and enhances cycle life.

These ball valves can also be modified to incorporate the use of special materials, seals for high temperature applications, subsea models, and valve actuators.

When it comes to high-pressure applications, these ball valves with the associated high-pressure components, provide the critical performance demanded by the high pressure market.



Flow Configuration



Two-Way
Shut-Off

AE Ball Valve Features:

- One-piece, trunnion mounted style, stem design eliminates shear failure and reduces the effects of side loading found in two piece designs.
- Re-torqueable seat glands for longer seat life.
- PEEK seats offer excellent resistance to chemicals, heat, and wear/abrasion.
- Full-port flow path minimizes pressure drop.
- 316 cold worked stainless steel valve construction.
- Low friction pressure assisted graphite filled PTFE stem seal increases cycle life and reduces operating torque.
- Quarter turn from open to close with positive stop.
- Viton o-rings for operation from 0°F (-17.8°C) to 400°F (204°C).
- Optional o-rings available for high-temperature applications.
- Electric and pneumatic actuator options.

Applications:

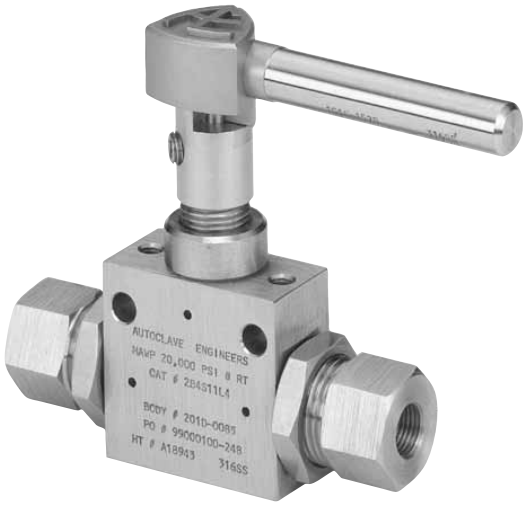
- Laboratories
- Test Stands
- Control Panels
- Chemical Research
- Pilot Plants
- Water Blast Pumping Units
- High volume chemical injection skids.

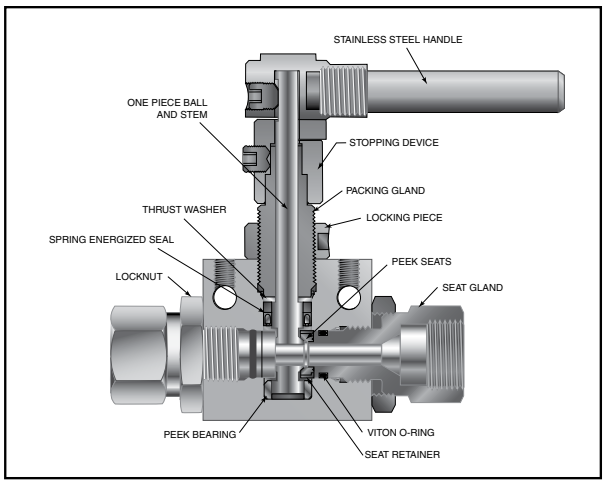
Ball Valves - 1/4" 2-Way QS Series

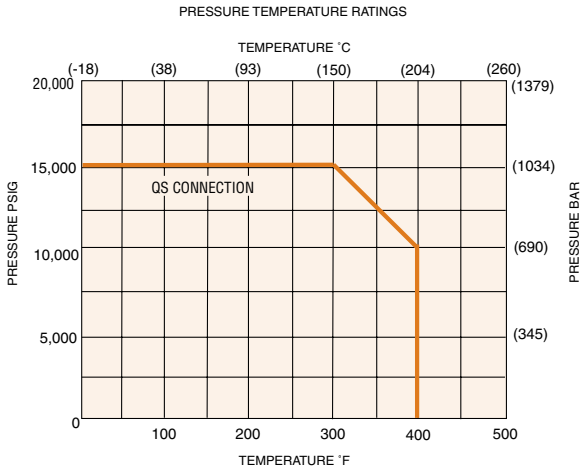
Pressures to 15,000 psi (1034 bar) .250" (6.35mm) Orifice

Connection	MAWP @ Room Temperature	Minimum Orifice inches(mm)
QS250	15,000 psi (1034 bar)	.157 (3.99)
QS375	15,000 psi (1034 bar)	.250 (6.35)
	Valve C_V=1.51	

MAWP: Maximum Allowable Working Pressure
C_V listed is for maximum orifice size of .250 inches only.
Consult factory for C_V of valves with reduced orifice sizes.







NOTE: Ball valves are not recommended for critical gas applications such as Hydrogen, Helium or other small molecular gases.

Ordering Procedure

For complete information on available end connections see complete catalog.

Typical catalog number: **2B 4 S 15 Q4 — XXX**

2B
Valve Series
2B: 2-way

4
Ball Orifice Diameter
4-1/4" (6.35 mm)

S
Material
S -316SS

15
Pressure (X 1000 psi)

Q4
End Connection
Q4 - QS 250
(See Chart on next page)

XXX
Options
HT - High Temperature
(Ball Valve Actuators, see next page)

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End Connection Options

Catalog Number	End Connection Number	Connection	MAWP @ Room Temperature	Seat Gland Hex Inches(mm)
2B4S15Q4	Q4	QS250	15,000 psi (1034 bar)	1 (25.40)
2B4S15Q6	Q6	QS375	15,000 psi (1034 bar)	1 (25.40)

MAWP: Maximum Allowable Working Pressure

Ball Valve Options

Pneumatic Actuator

AO - Air-to-open/spring to close
AC - Air-to-close/spring to open
AOC - Air-to-open-and-close (double action)

Electric Actuator

EO1 - 120 volt AC 50/60 Hz
EO2 - 220 volt AC 50/60 Hz
EO3 - 24 VDC

Actuator Operating Temperature:

Pneumatic: -20˚F to 175˚F (-29˚C to 79˚C)
Electric: -20˚F to 160˚F (-29˚C to 71˚C)

High Temperature Option:

HT - for media temperature up to 500˚F (260˚C)

See ball valve actuator section for full description, additional infomation, and options.

Valve Maintenance

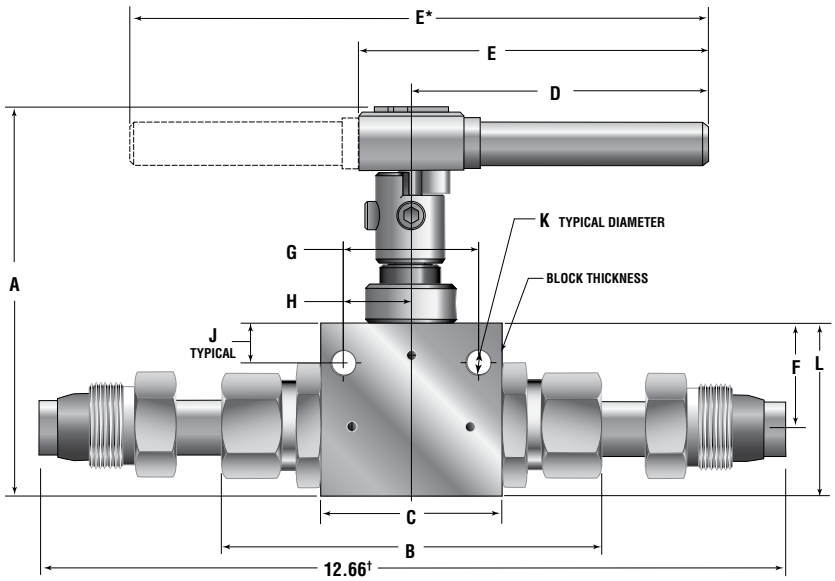
Repair Kits: add "**R**" to the front of valve catalog first 4 numbers for proper repair kit. (Example: **R2B4S**)

Consult your Parker Autoclave Engineers representative for pricing on repair kits. Refer to the Operation and Maintenance manual for proper maintenance procedures.

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Ball Valve Dimensions - inches (mm)

	VALVE MODELS		
	2B4S	2B6S	2B8S
A	4.33 (109.99)	4.97 (126.30)	5.97 (151.64)
B	4.19 (106.49)	5.53 (140.41)	6.85 (173.99)
C	2.00 (50.80)	3.00 (76.20)	4.13 (104.78)
D	3.37 (85.55)	4.99 (126.82)	5.12 (130.04)
E	3.90 (99.02)	*10.25 (260.35)	
F	1.13 (28.58)	1.38 (34.92)	1.76 (44.70)
G	1.50 (38.10)	2.00 (50.80)	3.00 (76.20)
H	0.75 (19.05)	1.00 (25.40)	1.50 (38.10)
J	0.43 (10.92)	0.41 (10.31)	0.50 (12.70)
K	0.28 (7.11)	0.28 (7.11)	0.28 (7.11)
L	1.91 (48.41)	2.50 (63.50)	3.09 (78.58)
Block Thickness	1.00 (25.40)	1.38 (34.92)	1.75 (44.45)

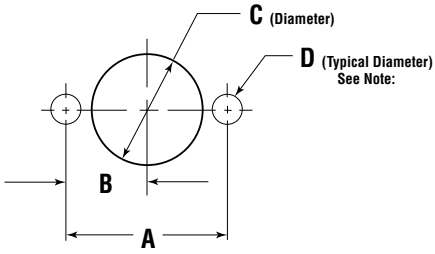


†2B8S15MAQ12 Valve Only

Ball Valve Panel Mounting Dimensions - inches (mm)

	VALVE MODELS		
	2B4S	2B6S	2B8S
A	1.500 (38.10)	2.000 (50.80)	3.000 (76.20)
B	0.750 (19.05)	1.000 (25.40)	1.500 (38.10)
C	1.06 (26.92)	1.50 (38.10)	1.88 (47.63)
D	0.28 (7.11)	0.28 (7.11)	0.28 (7.11)

Note: Body mounting 1/4" - 20 thread



All dimensions are for reference only
and are subject to change without notice.

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