



38 Series Stainless Steel, 3-piece, Full Port Ball Valves



Assured Automation's 38 Series ball valves are live loaded with self-adjusting packing and a design that is specifically manufactured for high cycle applications.

A variety of actuators are available along with a full range of accessory items including limit switches, solenoid valves, modulating positioners, and manual override devices. Complete assemblies are built from stock, and tested in our **ISO certified** shop prior to shipping.

END CONNECTIONS

NPT Threaded: 1/4" to 4"

Socket Weld: 1/4" to 4"

Tri-Clamp: 1/2" to 6"

Extended Tube Butt Weld: 1/2" to 6"

PRESSURE RATING

1000 PSIG

[see Pressure/Temperature Curve](#)

TEMPERATURE RANGE

-30°F to 380°F

[see Pressure/Temperature Curve](#)

MATERIALS

Body: Stainless Steel CF8M 316

Stem and Ball: 316SS

Seats: PTFE or RPTFE

Stem Packing: PTFE or RPTFE

Body Seals: PTFE or RPTFE

FEATURES

- Designed for high cycle automated applications
- All materials comply with FDA, USDA, & 3A requirements
- Investment cast body and end caps
- ASTM 316 stainless steel
- 100% tested and inspected prior to shipping
- Full traceability of all components

ACTUATORS

- Full range of actuators including manual, pneumatic, and electric

[see page 3 for actuator details](#)

ACCESSORIES

- **Limit switches**
- **Solenoid valves**
- **Positioners**

[see page 8 for accessory details](#)

TYPICAL APPLICATIONS

- Air drying equipment
- Sterilizers and autoclaves
- Pollution control equipment
- Process control applications
- Laundry equipment
- Textile dyeing and drying
- Bottling and dispensing
- Ink and paint dispensing
- Industrial compressors
- Chemical process industry
- Pharmaceutical chemical industry



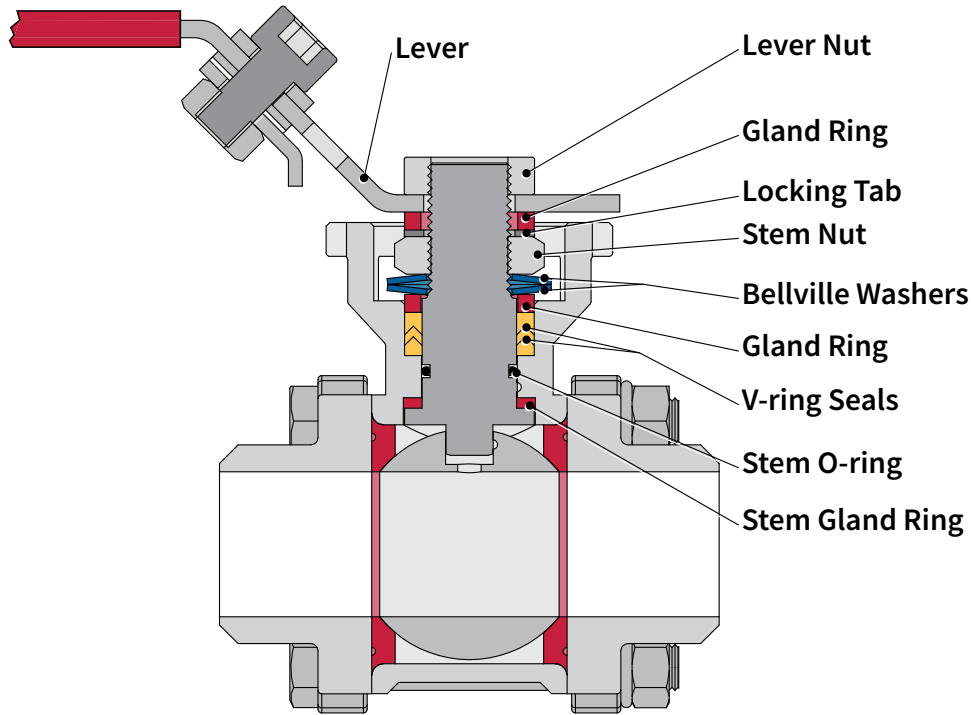


38 Series

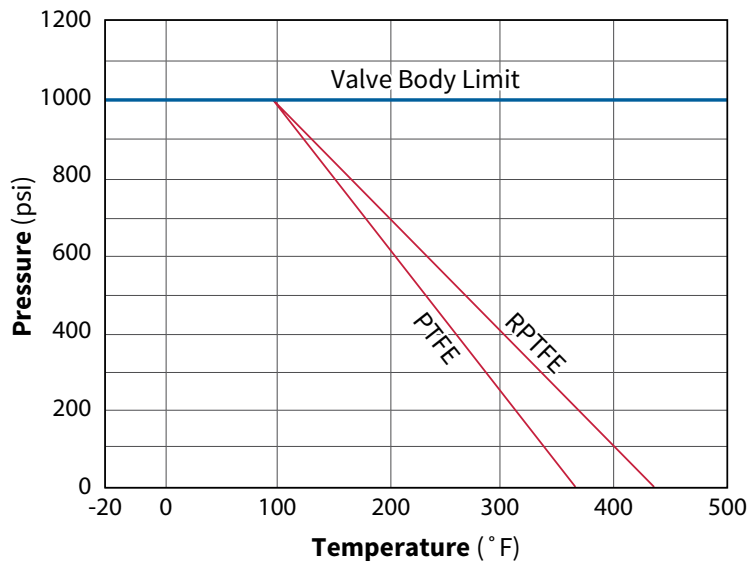


Stainless Steel, 3-piece, Full Port Ball Valves

HIGH CYCLE STEM DESIGN



PRESSURE / TEMPERATURE CURVE



FLOW CAPACITIES (C_v Values in GPM)

Size	NPT, Socket Weld	Tri-Clamp & Butt Weld
1/4	??	??
3/8	??	??
1/2	23	13
3/4	55	23
1	95	88
1 1/4	155	n/a
1 1/2	260	168
2	440	290
2 1/2	710	675
3	1050	900
4	2040	1765
6	n/a	4200

C_v is the flow of water in GPM that can pass through the valve with a 1 PSI pressure drop.



38 Series



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ACTUATORS AVAILABLE

A full range of actuators are available to choose from. All sizing is done by Assured Automation to make selecting your assembly easy. Any accessories ordered with the actuator will be installed and tested by our ISO certified facility.

Pneumatic

C Series

Dual Rack and Pinion



Spring Return
fail to Open or Closed

Double Acting
fail in place

[\(see C series web page\)](#)

P Series

Dual Scotch Yoke



Spring Return
fail to Open or Closed

Double Acting
fail in place

[\(see P series web page\)](#)

F Series

Dual Rack and Pinion



Spring Return
fail to Open or Closed

Double Acting
fail in place

[\(see F series web page\)](#)

Accessories

- NAMUR direct mount solenoid valves
- Variety of limit switches
- Modulating positioners
- 1/4" NPT x 1/4" tube push fittings
- 1/4" NPT x 1/4" compression fittings
- SS and poly tubing

[see page 8 for accessory details](#)

Electric

Weatherproof (NEMA 4/4X)

V4 Series

Low Cost



[\(see V4 series web page\)](#)

R4 Series

General Duty



[\(see R4 series web page\)](#)

S4 Series

Universal Voltage



[\(see S4 series web page\)](#)

K4 Series

Worm Gear



[\(see K4 series web page\)](#)

Explosion Proof (NEMA 7)



[\(see B7 series web page\)](#)

Manual Lockable Lever





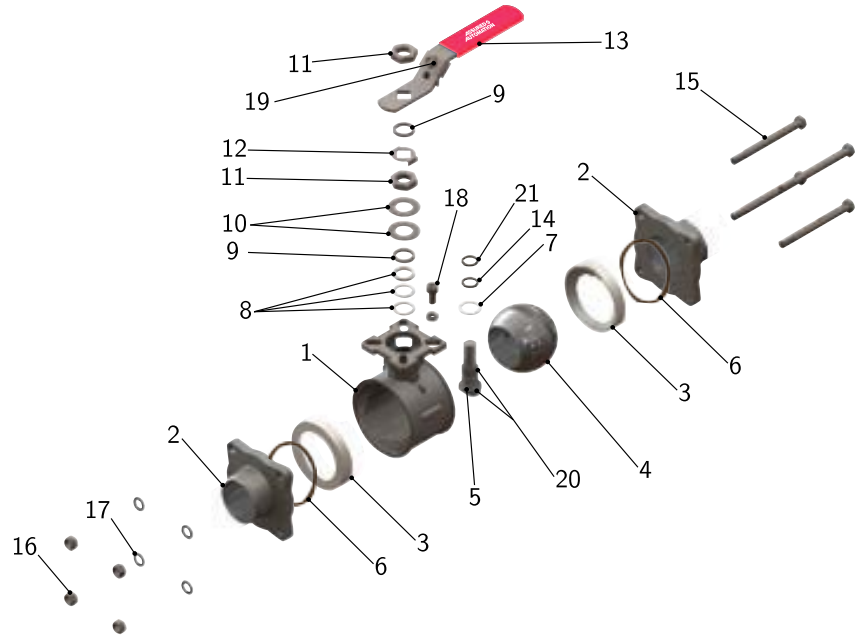
38 Series



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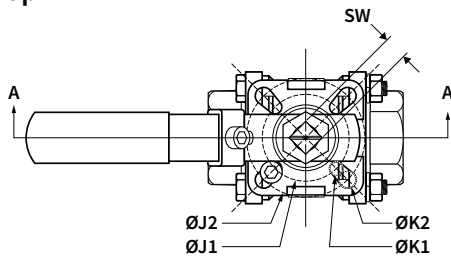
MATERIALS OF CONSTRUCTION - NPT Threaded & Socket Weld Connections

Item	Part	
1	Valve Body	CF8M/316
2	End Caps	CF8M/316
3	Seats	RPTFE
4	Ball	SUS 316
5	Stem	SUS 316
6	Body Seal	RPTFE
7	Gasket	RPTFE
8	Seal	RPTFE
9	Gland Ring	SUS 304
10	Belville Washer	SUS 301
11	Lever Nut	SUS 304
12	Locking Tab	SUS 304
13	Handle	SUS 304
14	O-ring	FKM
15	Bolts (4)	SUS 304
16	Nuts (4)	SUS 304
17	Lock Washers (4)	SUS 304
18	Stop Screw	SUS 304
19	Locking Device	SUS 304
20	Anti-Static Device (2)	SUS 316
21	O-ring (2)	FKM

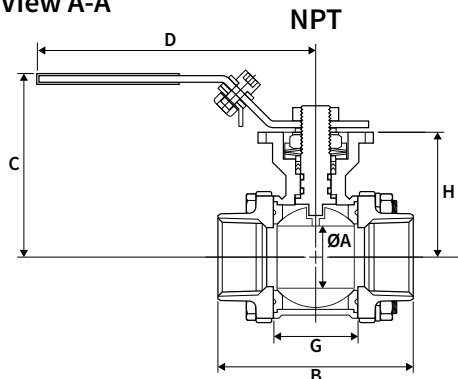


DIMENSIONS - NPT Threaded & Socket Weld Connections

Top

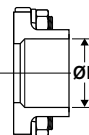


View A-A



Size	ØA	B	C	D	G	H	ØF	ØK	ISO 5211	J1	K1	J2	K2	SW
1/2	0.63	2.95	2.79	4.33	0.99	1.67	0.86	0.88	F03/F04	1.42	0.24	1.65	0.24	0.35
3/4	0.79	3.15	2.89	4.33	1.09	1.76	1.07	1.11	F03/F04	1.42	0.24	1.65	0.24	0.35
1	0.96	3.54	3.31	5.31	1.30	2.13	1.34	1.33	F04/F05	1.65	0.24	1.97	0.28	0.43
1 1/4	1.26	4.33	3.52	5.31	1.62	2.33	1.68	1.73	F04/F05	1.65	0.24	1.97	0.28	0.43
1 1/2	1.50	4.72	4.31	6.50	1.94	2.89	1.92	2.00	F05/F07	1.97	0.28	2.76	0.35	0.55
2	1.97	5.51	4.68	6.50	2.50	3.26	2.41	2.46	F05/F07	1.97	0.28	2.76	0.35	0.55
2 1/2	2.50	7.48	6.10	11.81	3.23	4.21	3.03	3.00	F07/F10	2.76	0.35	4.02	0.43	0.67
3	3.00	8.66	6.50	13.19	3.77	4.62	3.54	3.50	F07/F10	2.76	0.35	4.02	0.43	0.67
4	4.00	10.63	7.00	13.19	4.64	5.21	4.55	4.50	F07/F10	2.76	0.35	4.02	0.43	0.67

Socket Weld





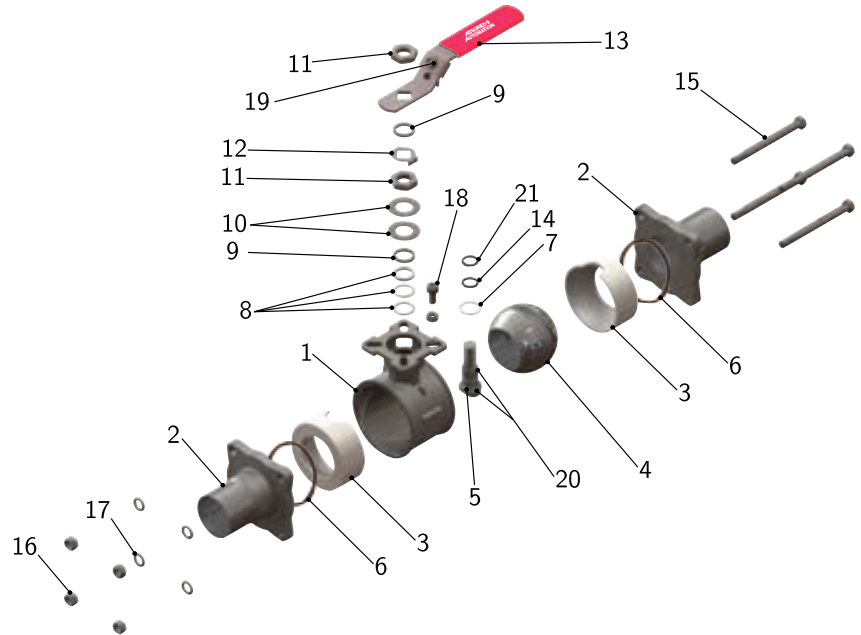
38 Series



Stainless Steel, 3-piece, Full Port Ball Valves

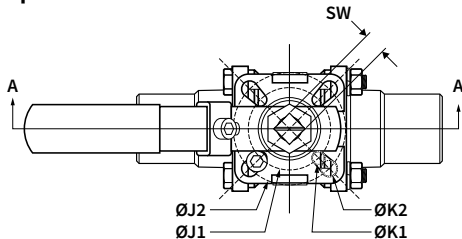
MATERIALS OF CONSTRUCTION - Extended Tube Butt Weld Connections

Item	Part	
1	Valve Body	CF8M/316
2	End Caps	CF8M/316
3	Seats	PTFE
4	Ball	SUS 316
5	Stem	SUS 316
6	Body Seal	PTFE
7	Gasket	PTFE
8	Seal	PTFE
9	Gland Ring	SUS 304
10	Belville Washer	SUS 301
11	Lever Nut	SUS 304
12	Locking Tab	SUS 304
13	Handle	SUS 304
14	O-ring	FKM
15	Bolts (4)	SUS 304
16	Nuts (4)	SUS 304
17	Lock Washers (4)	SUS 304
18	Stop Screw	SUS 304
19	Locking Device	SUS 304
20	Anti-Static Device (2)	SUS 316
21	O-ring (2)	FKM

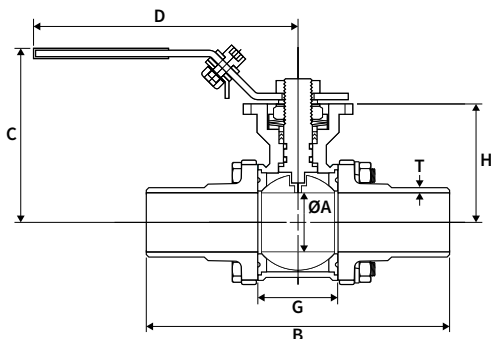


DIMENSIONS - Extended Butt Weld Connections

Top



View A-A



Size	ØA	B	C	D	G	H	ISO 5211	J1	K1	J2	K2	T	SW
1/2	0.37	4.50	2.79	4.33	0.99	1.67	F03/F04	1.42	0.24	1.65	0.24	0.07	0.35
3/4	0.63	5.50	2.89	4.33	1.09	1.76	F03/F04	1.42	0.24	1.65	0.24	0.07	0.35
1	0.87	6.25	3.31	5.32	1.30	2.13	F04/F05	1.65	0.24	1.97	0.28	0.07	0.43
1 1/2	1.37	9.00	4.31	6.50	1.94	2.89	F05/F07	1.97	0.28	2.76	0.35	0.07	0.55
2	1.87	9.50	4.68	6.50	2.50	3.26	F05/F07	1.97	0.28	2.76	0.35	0.07	0.55
2 1/2	2.37	6.52	5.25	9.06	2.76	4.21	F07/F10	2.76	0.35	4.02	0.43	0.07	0.67
3	2.88	8.98	5.91	11.81	4.02	4.62	F07/F10	2.76	0.35	4.02	0.43	0.07	0.67
4	3.84	8.87	6.90	11.81	4.02	5.21	F07/F10	2.76	0.35	4.02	0.43	0.08	0.67



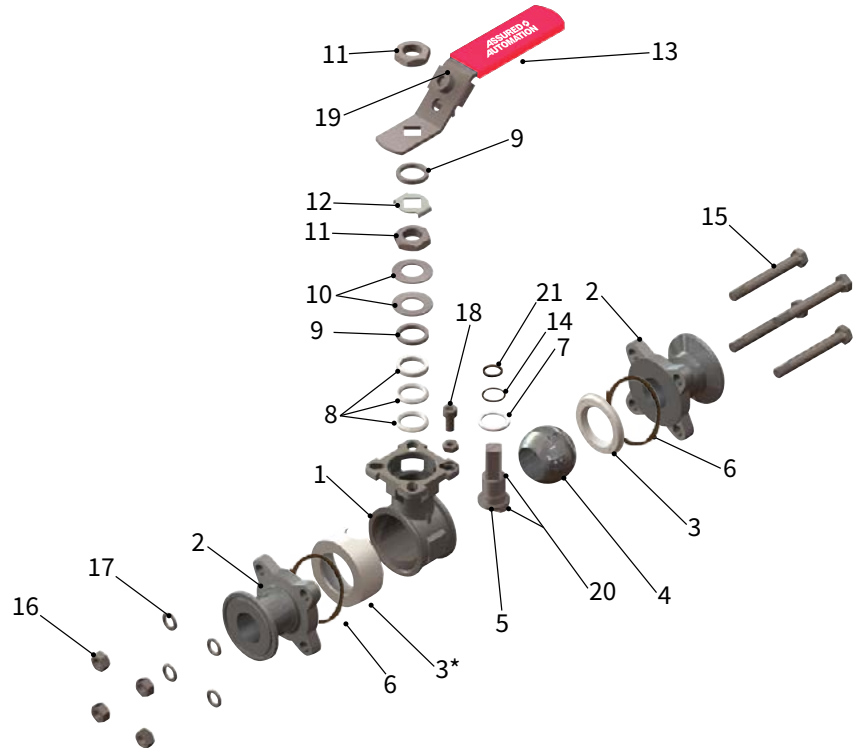
38 Series



Stainless Steel, 3-piece, Full Port Ball Valves

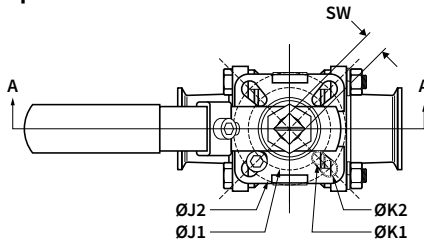
MATERIALS OF CONSTRUCTION - Tri-Clamp Connections

Item	Part	
1	Valve Body	CF8M/316
2	End Caps	CF8M/316
3	Seats	PTFE
4	Ball	SUS 316
5	Stem	SUS 316
6	Body Seal	PTFE
7	Gasket	PTFE
8	Seal	PTFE
9	Gland Ring	SUS 304
10	Belville Washer	SUS 301
11	Lever Nut	SUS 304
12	Locking Tab	SUS 304
13	Handle	SUS 304
14	O-ring	FKM
15	Bolts (4)	SUS 304
16	Nuts (4)	SUS 304
17	Lock Washers (4)	SUS 304
18	Stop Screw	SUS 304
19	Locking Device	SUS 304
20	Anti-Static Device (2)	SUS 316
21	O-ring (2)	FKM

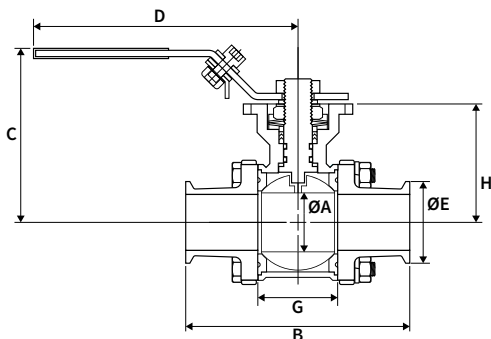


DIMENSIONS - Tri-Clamp Connections

Top



View A-A



Size	ØA	B	C	D	ØE	G	H	ISO 5211	J1	K1	J2	K2	SW
1/2	0.37	3.50	2.79	4.33	1.00	0.99	1.67	F03/F04	1.42	0.24	1.65	0.24	0.35
3/4	0.63	4.00	2.89	4.33	1.00	1.09	1.76	F03/F04	1.42	0.24	1.65	0.24	0.35
1	0.87	4.50	3.31	5.32	1.98	1.30	2.13	F04/F05	1.65	0.24	1.97	0.28	0.43
1 1/2	1.37	5.50	4.31	6.50	1.98	1.94	2.89	F05/F07	1.97	0.28	2.76	0.35	0.55
2	1.87	6.25	4.68	6.50	2.52	2.50	3.26	F05/F07	1.97	0.28	2.76	0.35	0.55
2 1/2	2.37	7.00	5.25	9.06	3.05	2.76	4.21	F07/F10	2.76	0.35	4.02	0.43	0.67
3	2.88	9.00	6.30	11.81	3.58	4.02	4.62	F07/F10	2.76	0.35	4.02	0.43	0.67
4	3.84	9.50	6.90	11.81	8.90	4.02	5.21	F07/F10	2.76	0.35	4.02	0.43	0.67
6	5.78	15.50	8.51	19.68	6.57	7.42	8.50	F10/F12	4.02	0.47	4.92	0.55	1.06

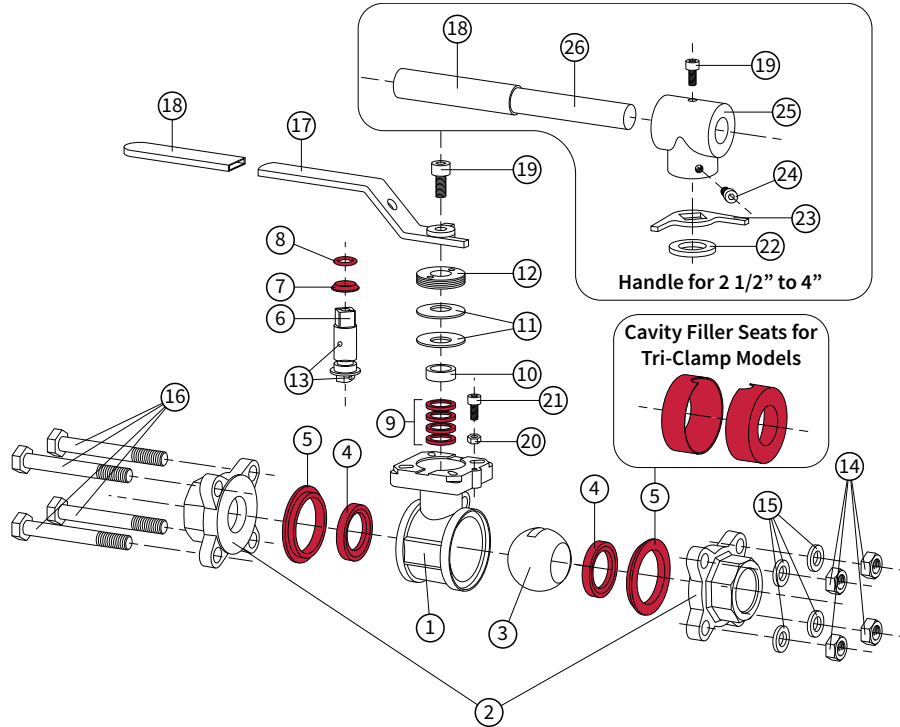


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REPAIR KITS - Items Shown in Red are Included



NPT Threaded and Socket Weld Connections

Size	Repair Kit PN
1/4	A38N/S-RK
3/8	B38N/S-RK
1/2	C38N/S-RK
3/4	D38N/S-RK
1	E38N/S-RK
1 1/4	F38N/S-RK
1 1/2	G38N/S-RK
2	H38N/S-RK
3	J38N/S-RK

Tri-Clamp and Extended Tube Butt Weld Connections with Cavity Fillers

Size	Repair Kit PN
1/2	C38C/E-RK
3/4	D38C/E-RK
1	E38NC/E-RK
1 1/2	G38NC/E-RK
2	H38NC/E-RK
3	J38C/E-RK
4	K38C/E-RK



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ORDERING INFORMATION



VALVE

Size: _____

- C** = 1/2" **H** = 2"
- D** = 3/4" **I** = 2 1/2"
- E** = 1" **J** = 3"
- F** = 1 1/4" **K** = 4"
- G** = 1 1/2" **L** = 6"

Connection Type: _____

- N** = NPT Threaded (female)
 - S** = Socket Weld
 - E** = Extended Tube Butt Weld
 - C** = Tri-Clamp
- } choose **RPTFE** seat and seal & **None** for cavity filler
- } choose **PTFE** seat and seal

Seat and Seal Material: _____

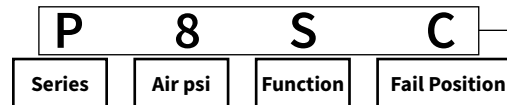
- P** = PTFE **R** = RPTFE

Cavity Filler: _____

- X** = None **F** = Virgin PTFE **R** = RPTFE

ACTUATOR

Pneumatic Actuators



Series: _____

- C** = C series Dual Rack & Pinion
- P** = P series Dual Scotch Yoke
- F** = F series Dual Rack & Pinion

Supply Air Pressure: _____

- 6** = 60psi **8** = 80psi

Function: _____

- S** = spring return **D** = double acting

Fail Safe Position: _____

- C** = fail to CLOSED **O** = fail to OPEN
- omit for direct acting*

Electric Actuators

Series: _____

- V4** = weatherproof; low-cost industrial
- R4** = weatherproof; fgeneral duty industrial
- S4UV** = weatherproof; universal voltage
- K4** = weatherproof; worm gear
- B7** = explosion proof; heravy duty industrial

Voltage: _____

- A** = 120VAC **B** = 24VDC **F** = 12VDC (*omit for S4UV*)

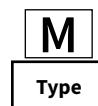
Manual Operators

Type: _____

- M** = basic lever with locking device

Note: only one actuator may be chosen

Code continues to specify additional accessories and options



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 Try Our Online Configurator at:
assuredautomation.com
 With Instant Pricing and you can Buy Now



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ACCESSORIES [Visit our web site](#) or call for details

Solenoid Valves

NAMUR solenoid valves for direct mount to the actuator. Various coil and connector options are available including weatherproof, explosion proof, corded, NPT conduit, and cable gland.

3-way

for spring return models



3/4-way for

for double acting models



[Solenoid valve web page](#)

Limit Switches (valve position indicators)

Used to communicate the position of the valve to a PLC, HMI, or simple remote indicator lamp. Various switch technologies are available. All include a local visual indicator as well.

UA/UB Series

Solid state proximity switches; 1 for Open, 1 for Closed



YF Series

SPDT mechanical switches; 1 for Open, 1 for Closed



YE, YH, YO Series

SPDT mechanical switches; 1 for Open, 1 for Closed



Other limit switches are available [Limit switch web page](#)

Modulating Positioners

Add modulating control to either of our pneumatic actuator series. These positioners mount to the top of the actuator using the NAMUR standard mounting hole and stem pattern.

Pneumatic

0-15 psi control signal



Electro-pneumatic

4-20mA or 0-10VDC control signal



With feedback unit

4-20mA or 0-10VDC feedback signal



[Positioner web page](#)