

Features

- All valve materials comply with FDA, USDA, and 3-A requirements
- Full Port direct mount ISO5211 valve
- TFM-1600 ball seats with virgin PTFE cavity fillers
- Triple PTFE/ Viton® high cycle live loaded stem seal packing
- Tri-Clamp ends for hygienic connections
- Highly polished internals and end caps with 8-12 Ra finish
- Quarter turn rack and pinion design
- Electro-polished exterior surfaces
- Spring Return or Double Acting Actuators
- Corrosion resistant 316 stainless steel body, pistons & rack
- NEMA 4/4X (IP66) enclosure for washdown applications
- Coated springs for additional corrosion resistance (for spring return models)
- Externally adjustable stroke
- Pre-lubricated and tested to minimum 1 million operations
- Highly visible valve position indicator
- Valve tested per API598

Applications

Sanitary ball valves are typically used for food, beverage, pharmaceutical, personal care, and pet care applications where 3-A sanitary construction is required, as well as for utility, process, and corrosive environment applications where quick clamp connections are beneficial.

Operation

Double acting rack & pinion actuators use air pressure to open and air pressure to close the ball valve (4-way pilot). Spring return rack & pinion actuators use air pressure to open and springs to close the ball valve (3-way pilot). Actuator will work with filtered dry or lubricated compressed air. Air supply pilot pressure should be between 80 and 120 PSI. Easy to read visual valve position indicator located on top of actuator.

Note: 3A standard 68-00 requires a minimum 1" clearance between valve and actuator. Valworx High Temp kits can be used to satisfy this requirement.

Construction

Valve Body	ASTM 316 Stainless Steel
Ball/Stem	ASTM 316 stainless steel
Ball Seats/ Cavity Filler	TFM-1600 Virgin PTFE
Stem Seals	PTFE/Viton®
Actuator Seals	NBR (Buna-N)
Actuator Body	ASTM 316 Stainless Steel
Position Indicator	Plastic
Fasteners	ASTM 304 Stainless Steel



Description

Heavy duty stainless steel quarter turn rack & pinion actuators designed for long life and tested for a minimum 1 million operations. Investment cast 3-piece full port stainless steel body and end caps for unrestricted flow and minimum pressure loss. Valve seals are cavity filled PTFE. Self adjusting live loaded stem seal packing helps compensate for wear, pressure or temperature fluctuations, extending the cycle life of the valve. Blow-out proof stem. Cavity fillers avoid media entrapment and quick clamp end connections allow for easy cleaning. Standard Namur mounting pads for optional accessory confirmation switches, pilot valves and valve positioners.

Standards

- Construction:
 - 3A 68-00
 - ANSI B16/B2/B18
 - NSF 61
 - FDA 21 CFR 177.1550
 - ISO5211/ DIN 3337

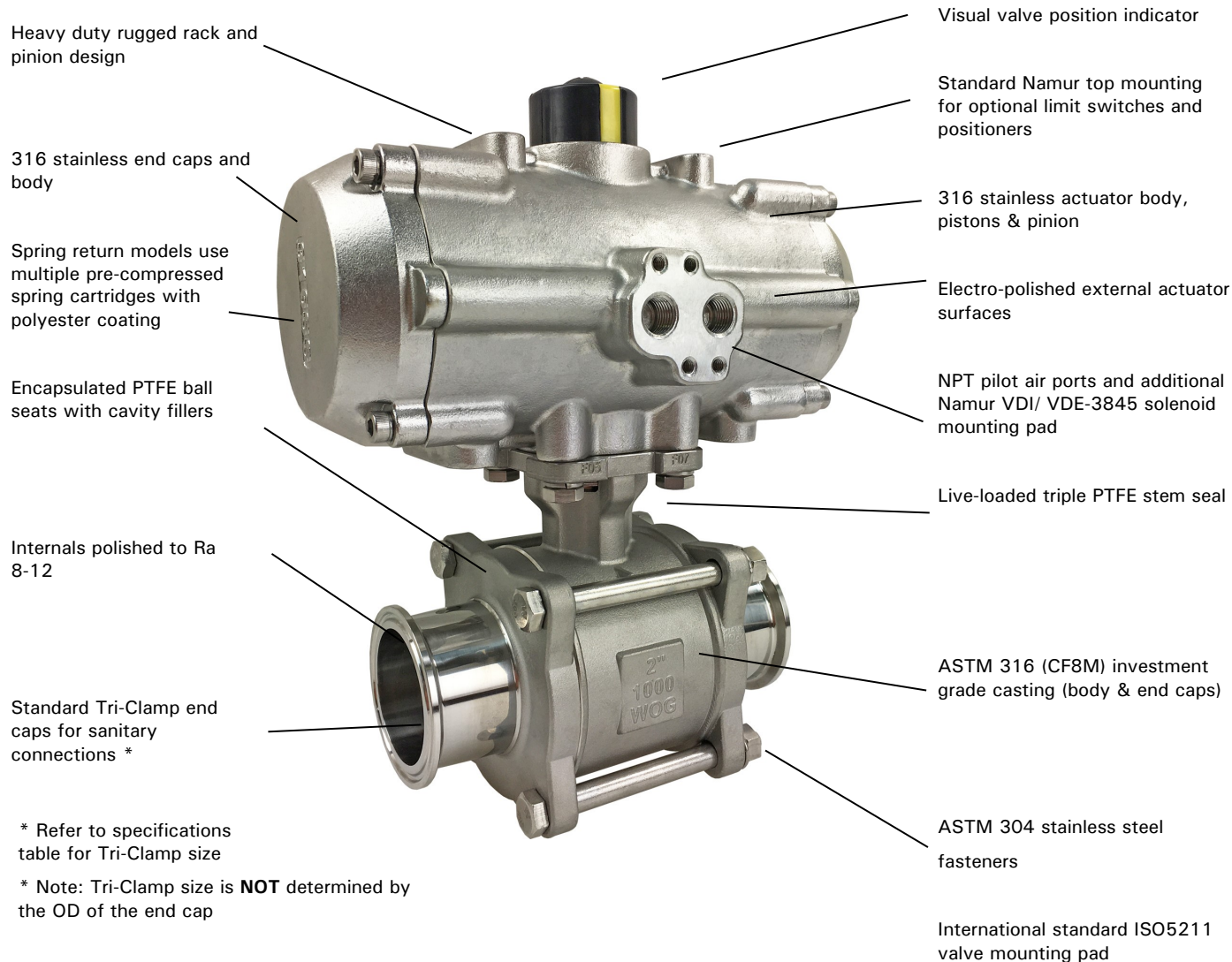
- Pressure Testing:

- MSS-SP82

Optional Accessories

- DMS: Direct Mount Solenoid
- pilot to electrically operate the ball valve
- VPS: Valve Position Switches
- limit switches to confirm valve position
- PVP: Pneumatic Valve Positioner
- position the ball with 4-20mA or 0-10v
- HTB: High Temperature Bracket
- increases media working temperature

Features



Pressure Rating*: 1000 PSI @ 120°F (69 Bar*) (Max Shell Pressure)

Air Pilot Pressure Required: 80-120 PSI (5.5-8.3 Bar)

Temperature Rating: -50° to 400° F (-45 to 200°C)

*See P/T Chart

Actuator Temperature Rating: -4 to 176° F (-20 to 80° C)

*See P/T chart

Specifications (English units)

Stock Number	Pipe Size (inch)	Tri-Clamp Size (inch)	Cv Flow Factor	Max Shell Pressure (PSI)*	Cycle Time /90° (seconds)	Pilot Air Port (NPT)	Air Volume/ 90° (cubic inches)
Valve with Spring Return Actuator							
571900	1/2	3/4	8	1000	1	1/4	12.2
579101	3/4	3/4	29	1000	1	1/4	12.2
571902	1	1-1/2	66	1000	1	1/4	12.2
571903	1-1/2	1-1/2	192	1000	1	1/4	24.4
571904	2	2	434	1000	1	1/4	24.4
571905	2-1/2	2-1/2	723	1000	3	1/4	54.9
571906	3	3	1124	1000	3	1/4	54.9
571907	4	4	2100	1000	3	1/4	97.6
Valve with Double Acting Actuator							
570900	1/2	3/4	8	1000	1	1/4	12.2
570901	3/4	3/4	29	1000	1	1/4	12.2
570902	1	1-1/2	66	1000	1	1/4	12.2
570903	1-1/2	1-1/2	192	1000	1	1/4	12.2
570904	2	2	434	1000	1	1/4	24.4
570905	2-1/2	2-1/2	723	1000	3	1/4	24.4
570906	3	3	1124	1000	3	1/4	54.9
570907	4	4	2100	1000	3	1/4	54.8

Cv = The GPM of water at 60° F that will pass through the valve with 1 PSI pressure drop

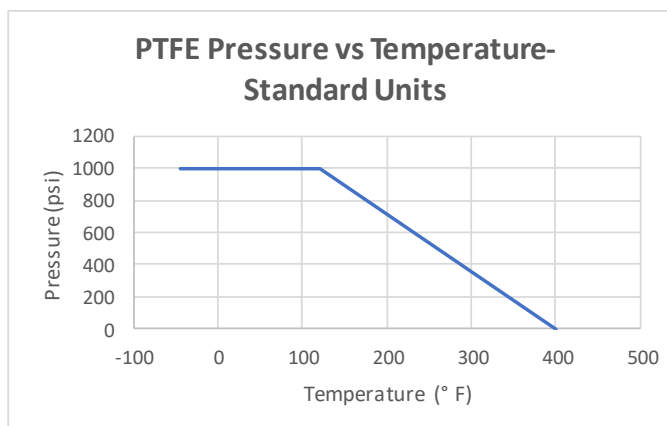
*Maximum Shell Pressure @ -50° to 400° F (reduced pressure at higher temperatures—see P/T chart)

• Torque at 1000 PSI and 72°F

Pressure/Temperature Chart (PSI/°F)

Standard Units

Temp °F	-45	120	400
Pressure	1000	1000	0



Specifications (Metric units)

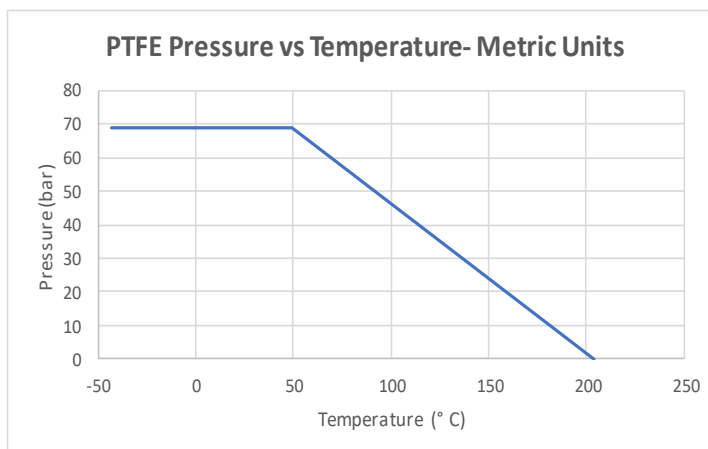
Stock Number	Pipe Size (mm)	Tri-Clamp Size (inch)	Kv Flow Factor	Max Shell Pressure (Bar)*	Cycle Time/90° (seconds)	Pilot Air Port (NPT)	Air Volume/90° (liters)
VALVE WITH SPRING RETURN ACTUATOR							
571900	12.7	3/4	7	69	1	1/4	0.2
571901	19.1	3/4	25	69	1	1/4	0.2
571902	25.4	1-1/2	57	69	1	1/4	0.2
571903	38.1	1-1/2	107	69	1	1/4	0.4
571904	50.8	2	165	69	1	1/4	0.4
571905	63.5	2-1/2	374	69	3	1/4	0.9
571906	76.2	3	623	69	3	1/4	0.9
571907	101.6	4	1810	69	3	1/4	1.6
VALVE WITH DOUBLE ACTING ACTUATOR							
570900	12.7	3/4	7	69	1	1/4	0.2
570901	19.1	3/4	25	69	1	1/4	0.2
570902	25.4	1-1/2	57	69	1	1/4	0.2
570903	38.1	1-1/2	107	69	1	1/4	0.2
570904	50.8	2	165	69	1	1/4	0.4
570905	63.5	2-1/2	374	69	3	1/4	0.4
570906	76.2	3	623	69	3	1/4	0.9
570907	101.6	4	1810	69	3	1/4	0.9

* Maximum Shell Pressure range @ -20° to 150° C (reduced pressure for higher temperatures—see P/T chart)

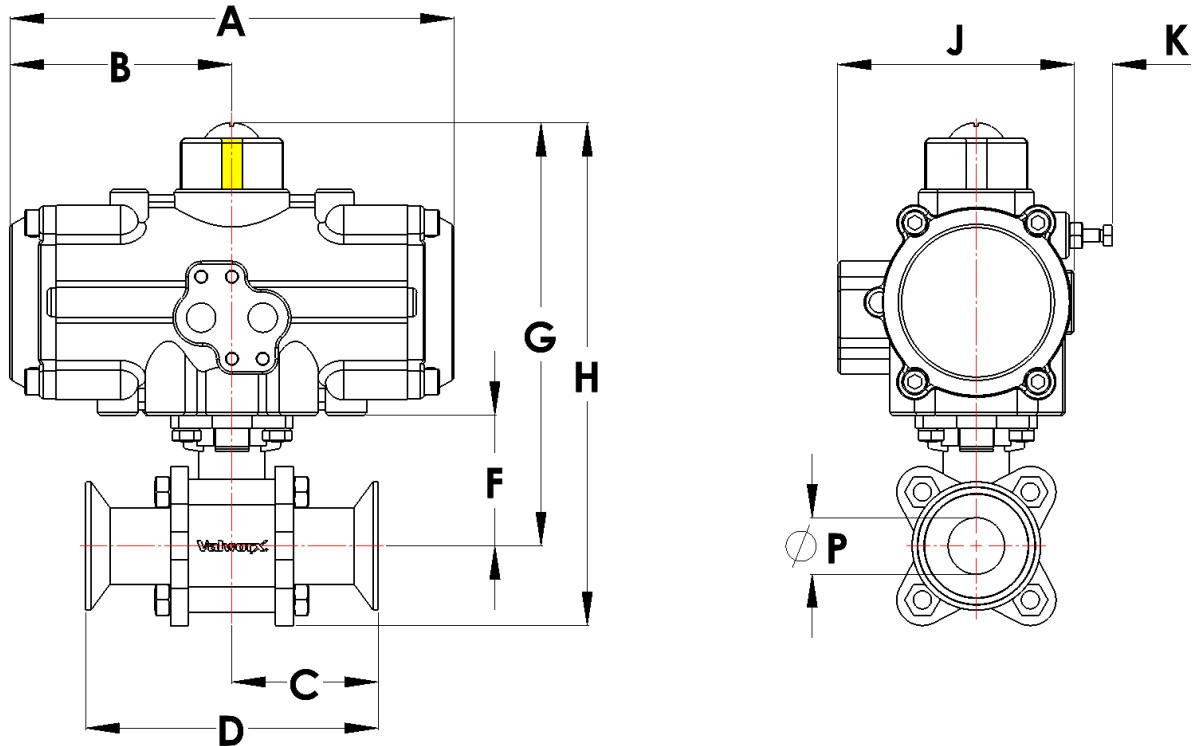
Pressure/Temperature Chart (Bar/°C)

Metric Units

Temp °C	-43	49	204
Pressure	69	69	0

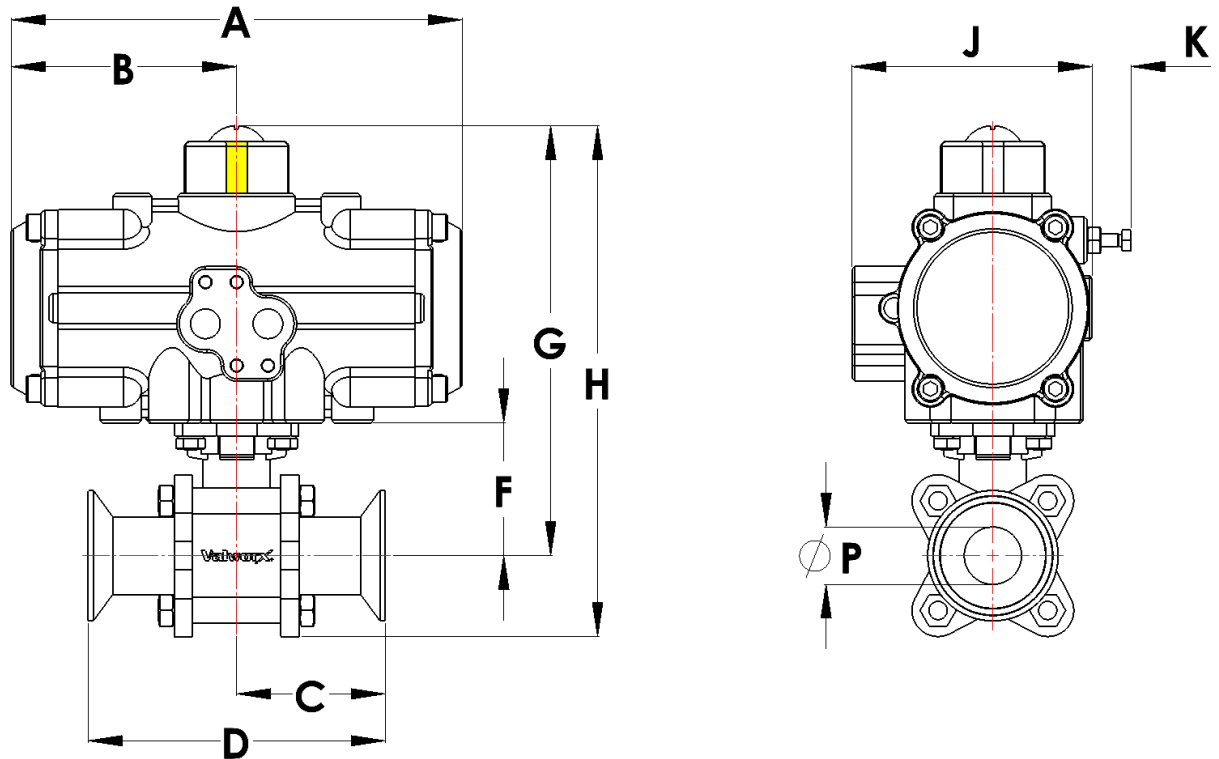


Dimensions: Spring Return



Stock Number	Pipe Size		A	B	C	D	F	G	H	J	K	P	A & B Ports (NPT)	Weight
571901	1/2	inch	6.8	3.4	1.6	3.5	1.6	5.4	6.2	3.5	3.6	0.4	1/4	6.6 lb
		mm	173.0	86.5	40.6	88.9	41.1	137.1	157.8	90.0	91.5	10.2	-	2.9 kg
571901	3/4	inch	6.8	3.4	2.0	4.0	1.6	5.6	6.5	3.5	3.6	0.6	1/4	7.0 lb
		mm	173.0	86.5	50.8	101.6	41.1	140.9	166.2	90.0	91.5	15.2	-	3.2 kg
571902	1	inch	6.8	3.4	2.3	4.5	2.1	6.6	7.8	3.5	4.2	0.9	1/4	11.3 lb
		mm	173.0	86.5	58.4	114.3	54.4	168.3	196.8	90.0	106.7	22.9	-	5.1 kg
571903	1-1/2	inch	8.0	4.0	2.8	5.5	2.9	8.2	9.7	4.5	5.1	1.4	1/4	20.9 lb
		mm	204.0	102.0	71.1	139.7	73.8	207.8	246.6	113.5	130.5	35.6	-	9.5 kg
571904	2	inch	8.0	4.0	3.1	6.2	2.9	8.6	10.4	4.5	5.1	1.9	1/4	23.5 lb
		mm	204.0	102.0	78.7	157.5	73.8	217.5	263.3	113.5	130.5	48.3	-	10.7 kg
571905	2-1/2	inch	10.6	5.3	3.5	7.0	4.2	10.4	13.3	5.0	5.8	2.4	1/4	45.2 lb
		mm	269.2	134.6	88.9	177.8	107.1	263.9	336.8	127.0	147.4	60.9	-	20.5 kg
571906	3	inch	10.6	5.3	4.5	9.0	4.2	10.8	14.3	5.0	5.8	2.9	1/4	55.4 lb
		mm	269.2	134.6	114.3	228.6	107.1	274.4	361.9	127.0	147.4	73.7	-	25.1 kg
571905	4	inch	11.9	5.9	4.8	9.5	5.2	12.3	16.3	5.7	6.8	3.8	1/4	82.9 lb
		mm	302.1	149.1	122.0	241.3	131.9	311.8	413.5	143.0	172.2	96.5	-	37.6 kg

Dimensions: Double Acting



Stock Number	Pipe Size		A	B	C	D	F	G	H	J	K	P	A & B Ports (NPT)	Weight
570900	1/2	inch	6.8	3.4	1.6	3.5	1.6	5.4	6.2	3.5	3.6	0.4	1/4	6.4 lb
		mm	173.0	86.5	40.6	88.9	41.1	137.1	157.8	90.0	91.5	10.2	-	2.9 kg
570901	3/4	inch	6.8	3.4	2.0	4.0	1.6	5.6	6.5	3.5	3.6	0.6	1/4	6.8 lb
		mm	173.0	86.5	50.8	101.6	41.1	140.1	166.2	90.0	91.5	15.2	-	3.1 kg
570902	1	inch	6.8	3.4	2.3	4.5	2.1	5.92	7.0	3.5	3.6	0.9	1/4	7.8 lb
		mm	173.0	86.5	58.4	114.3	54.4	150.3	178.8	90.0	91.5	22.9	-	3.5 kg
570903	1-1/2	inch	6.8	3.4	2.8	5.5	2.9	7.4	8.9	3.5	4.2	1.4	1/4	14.4 lb
		mm	173.0	86.5	71.1	139.7	73.8	187.8	226.6	90.0	106.7	35.6	-	6.5 kg
570904	2	inch	8.0	4.0	3.1	6.2	2.9	8.6	10.4	4.5	5.1	1.9	1/4	22.9 lb
		mm	204.0	102.0	78.7	157.5	73.8	217.5	263.9	113.5	130.6	48.3	-	10.4 kg
570905	2-1/2	inch	8.0	4.0	3.5	7.0	4.2	9.5	12.4	4.5	5.1	2.4	1/4	33.7 lb
		mm	204.0	102.0	88.9	177.8	107.1	241.0	313.9	113.5	130.6	60.9	-	15.3 kg
570906	3	inch	10.6	5.3	4.5	9.0	4.2	10.8	14.2	5.0	5.8	2.9	1/4	54.0 lb
		mm	269.2	134.6	114.3	228.6	107.1	274.4	361.5	127.0	147.4	73.7	-	24.5 kg
570907	4	inch	10.6	5.3	4.8	9.5	5.2	11.4	15.4	5.0	5.8	3.8	1/4	69.6 lb
		mm	269.2	134.6	124.5	241.3	131.9	287.8	390.4	127.0	147.4	96.5	-	31.6 kg