

Features

- All valve materials comply with FDA and USDA requirements
- Tri-Clamp ends for hygienic connections
- Dyneon® TF-1641 (PTFE) FDA approved ball seats and cavity fillers
- Triple PTFE/Viton® high cycle live loaded stem seal packing
- Highly polished internals and end caps with 8-12 Ra finish
- Quarter turn rack and pinion design
- Actuator exterior surfaces electro-polished
- 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

Applications

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

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.

Construction

Valve Body	ASTM 316 Stainless Steel
Ball/Stem	ASTM 316 stainless steel
Ball Seats/ Cavity Filler	Dyneon® 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. Ball seats are cavity filled Dyneon® 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.

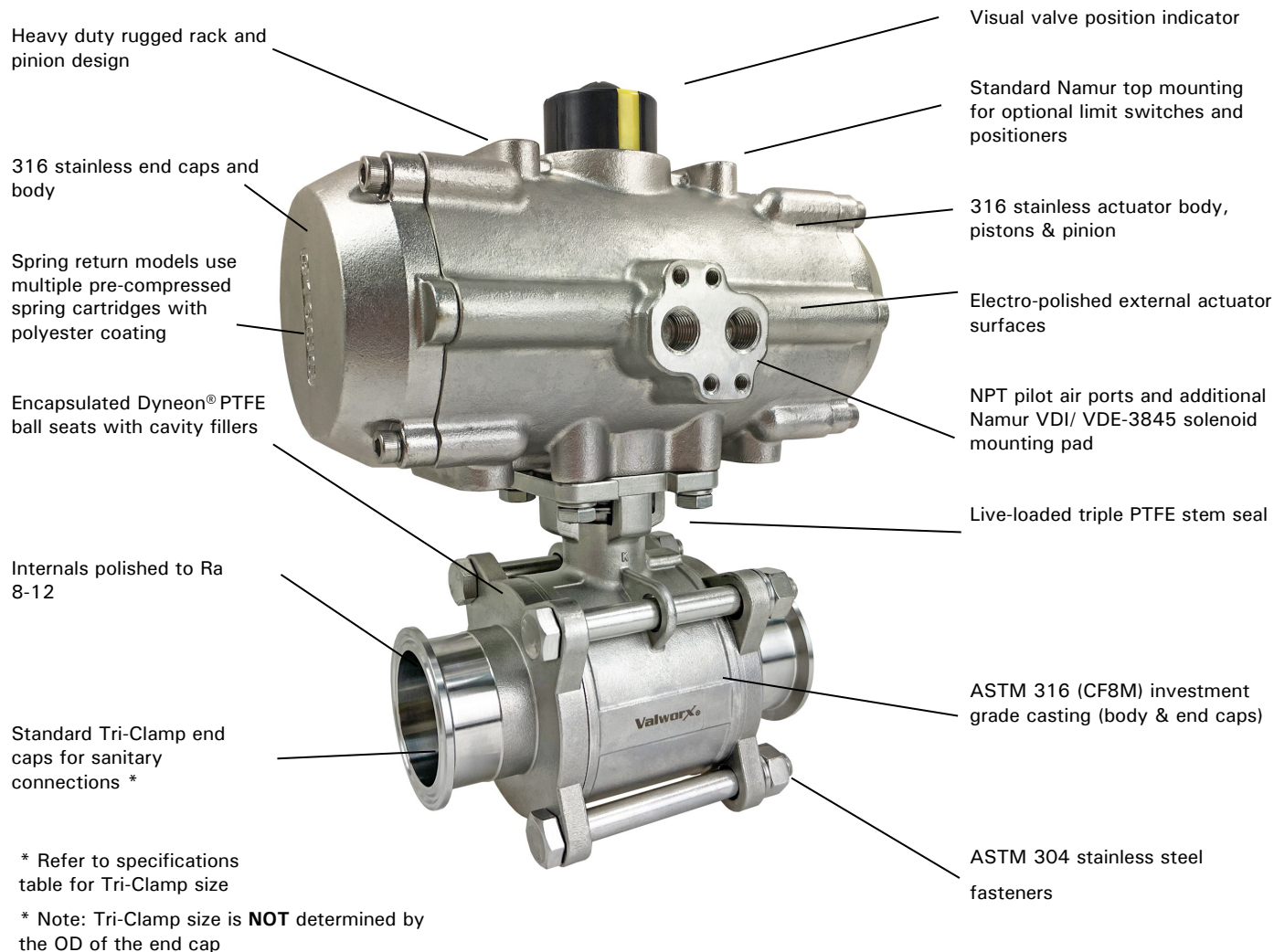
Approvals– Actuators

- ISO5211/ DIN333 valve mounting
- Namur VDI/VDE 3845 accessory mounting
- CE: EN ISO 12100:2010
- CE: EN Iso 4414:2010

Standards-Valves

- Construction:
 - ANSI B16/B2/B18
 - FDA 21 CFR 177.1550
 - ANSI B16.34
 - CE: PED 2014/68//UE
- Pressure Testing:
 - API 598
- Marking
 - MSS-SP-25

Features



Pressure Rating

Max Shell Pressure Rating*: 1000 PSI @ 120°F (1/2" to 2"),
800 PSI (2 1/2" to 4")

*See P/T Chart

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

Temperature Rating: -4° to 356° F (-20 to 180°C)

*See P/T Chart

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

*See P/T chart



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

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							
571900A	1/2	3/4	13.0	1000	1	1/4	12.2
579101A	3/4	3/4	18.0	1000	1	1/4	12.2
571902A	1	1-1/2	48.0	1000	1	1/4	12.2
571903A	1-1/2	1-1/2	165.0	1000	1	1/4	24.4
571904A	2	2	207.0	1000	3	1/4	54.9
571905A	2-1/2	2-1/2	450.0	800	3	1/4	54.9
571906A	3	3	780.0	800	3	1/4	54.9
571907A	4	4	1050.0	800	3	1/4	97.6
VALVE WITH DOUBLE ACTING ACTUATOR							
570900A	1/2	3/4	13.0	1000	1	1/4	12.2
570901A	3/4	3/4	18.0	1000	1	1/4	12.2
570902A	1	1-1/2	48.0	1000	1	1/4	12.2
570903A	1-1/2	1-1/2	165.0	1000	1	1/4	12.2
570904A	2	2	207.0	1000	1	1/4	24.4
570905A	2-1/2	2-1/2	450.0	800	3	1/4	54.9
570906A	3	3	780.0	800	3	1/4	54.9
570907A	4	4	1050.0	800	3	1/4	54.9

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

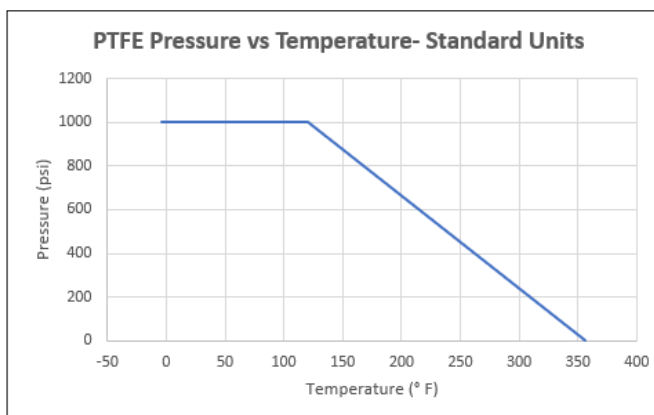
*Maximum Shell Pressure @ -4° to 356° F (reduced pressure at higher temperatures—see P/T chart)

• Torque at 1000 PSI and 72°F

Pressure/Temperature Chart (PSI/°F)

Standard Units

Temp °F	-4	120	356
Pressure	1000	1000	0



Specifications (Metric units)

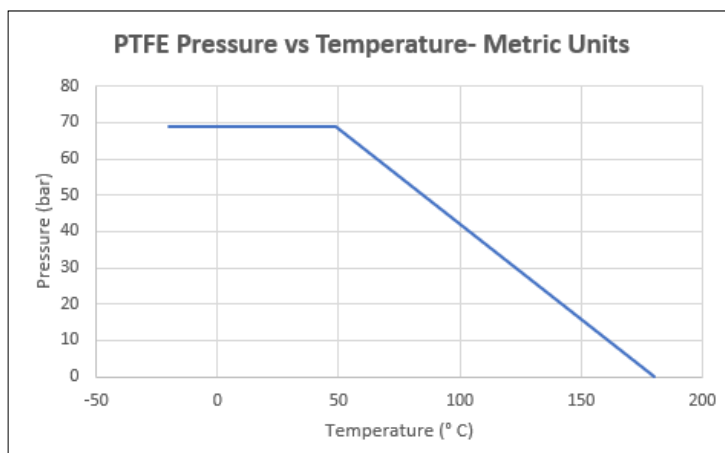
Stock Number	Pipe Size (mm)	Tri-Clamp Size (inch)	Kv Flow Factor	Max Shell Pressure (Bar)*	Cycle Time/90° (seconds)	Pilot Air Port (NPT)	Air Volume/ 90° (liters)
VALVE WITH SPRING RETURN ACTUATOR							
571900A	12.7	3/4	11.2	69	1	1/4	0.2
571901A	19.1	3/4	15.6	69	1	1/4	0.2
571902A	25.4	1-1/2	41.5	69	1	1/4	0.2
571903A	38.1	1-1/2	142.7	69	1	1/4	0.4
571904A	50.8	2	179.1	69	3	1/4	0.9
571905A	63.5	2-1/2	389.3	55	3	1/4	0.9
571906A	76.2	3	674.7	55	3	1/4	0.9
571907A	101.6	4	908.3	55	3	1/4	1.6
VALVE WITH DOUBLE ACTING ACTUATOR							
570900A	12.7	3/4	11.2	69	1	1/4	0.2
570901A	19.1	3/4	15.6	69	1	1/4	0.2
570902A	25.4	1-1/2	41.5	69	1	1/4	0.2
570903A	38.1	1-1/2	142.7	69	1	1/4	0.2
570904A	50.8	2	179.1	69	1	1/4	0.4
570905A	63.5	2-1/2	389.3	55	3	1/4	0.9
570906A	76.2	3	674.7	55	3	1/4	0.9
570907A	101.6	4	908.3	55	3	1/4	0.9

* Maximum Shell Pressure range @ -20° to 180° C (reduced pressure for higher temperatures—see P/T chart)

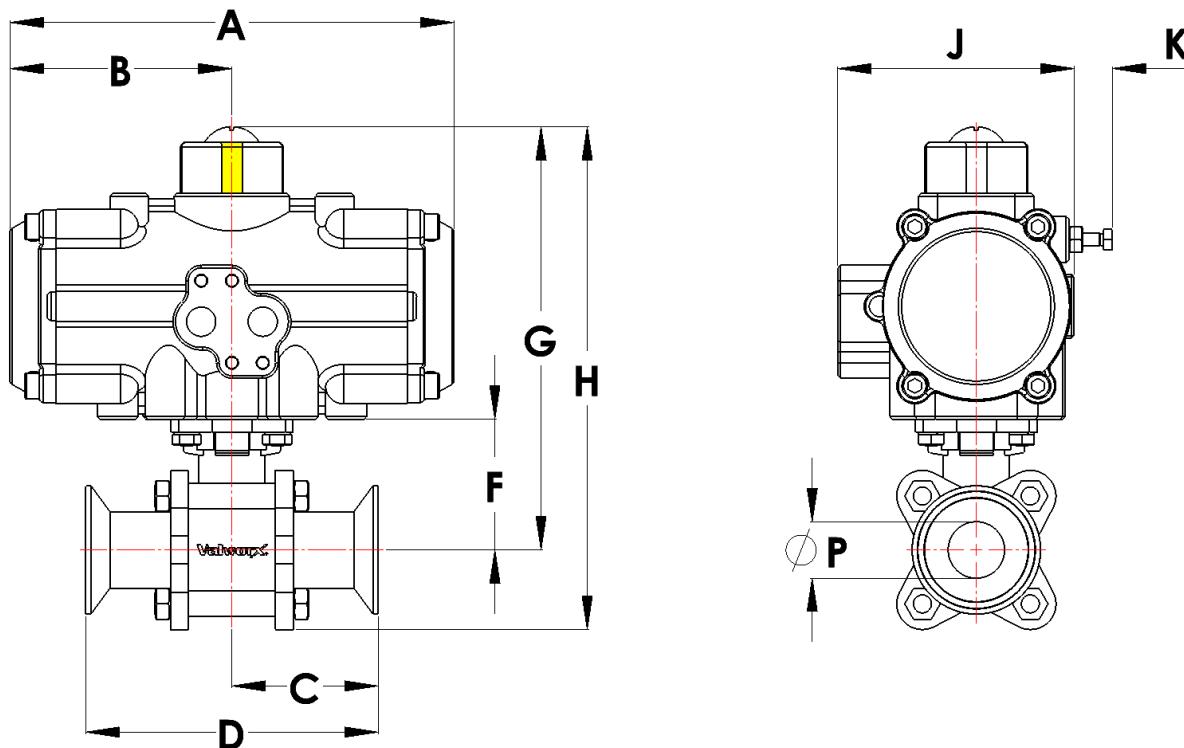
Pressure/Temperature Chart (Bar/°C)

Metric Units

Temp °C	-20	49	180
Pressure	69	69	0

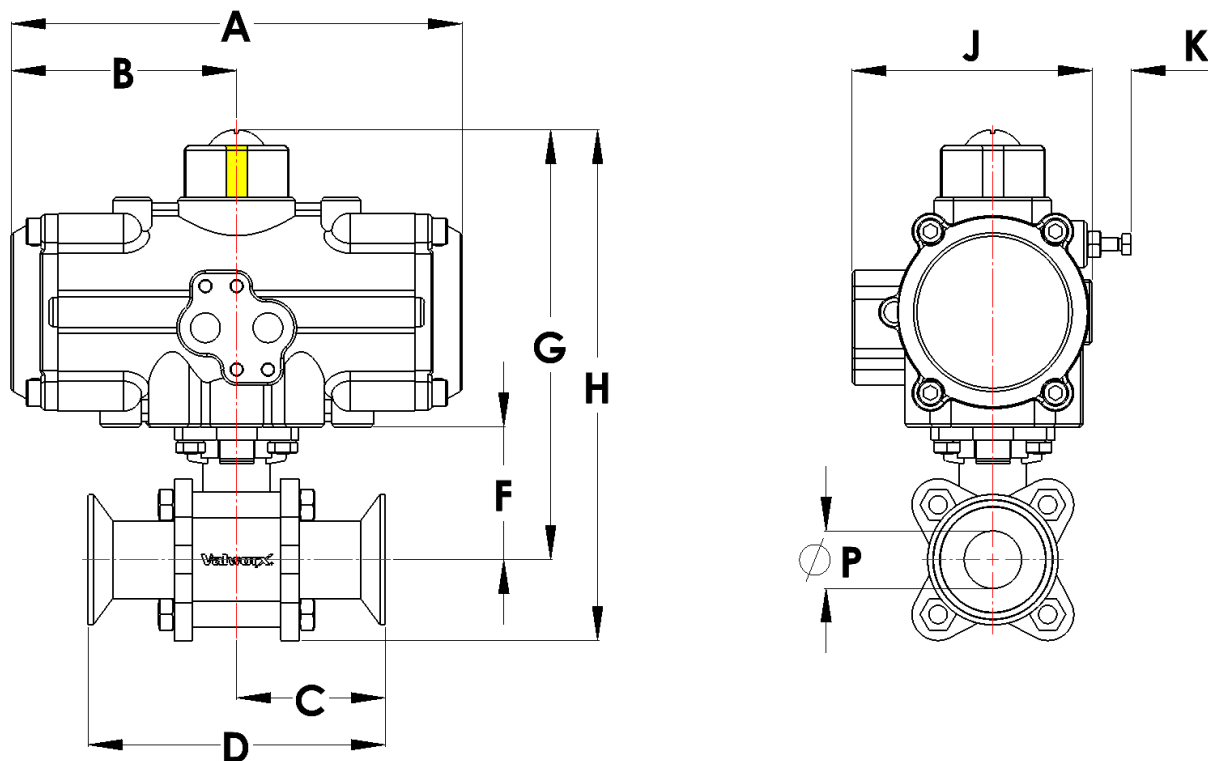


Dimensions: Spring Return



Stock Number	Pipe Size		A	B	C	D	F	G	H	J	K	P	A & B Ports (NPT)	Weight
571901A	1/2	inch	5.7	2.9	1.8	3.5	1.5	5.8	6.7	3.0	0.6	0.4	1/4	6.7 lb
		mm	146.0	73.7	44.5	88.9	37.0	147.3	170.2	77.0	16.0	10.2	-	3.0 kg
571901A	3/4	inch	6.8	3.4	2.0	4.0	1.8	6.8	7.8	3.5	0.7	0.6	1/4	10.3 lb
		mm	173.0	86.5	50.5	101.6	45.0	172.7	198.1	90.0	17.1	15.2	-	4.7 kg
571902A	1	inch	6.8	3.4	2.2	4.5	2.1	7.1	8.2	3.5	0.7	0.9	1/4	11.0 lb
		mm	173.0	86.5	57.0	114.3	53.5	180.3	208.3	90.0	17.1	22.9	-	5.0 kg
571903A	1-1/2	inch	8.0	4.0	2.8	5.5	2.9	8.7	10.2	4.5	0.7	1.4	1/4	19.4 lb
		mm	204.0	102.0	70.0	139.7	74.8	221.0	259.1	113.5	17.1	35.6	-	8.8 kg
571904A	2	inch	10.6	5.3	3.1	6.2	3.3	10.1	11.9	5.0	0.7	1.9	1/4	31.3 lb
		mm	269.2	134.6	78.0	157.5	83.5	256.5	302.3	127.0	17.1	48.3	-	14.2 kg
571905A	2-1/2	inch	10.6	5.3	3.9	7.0	4.3	11.0	13.2	5.0	0.8	2.4	1/4	41.1 lb
		mm	269.2	134.6	98.5	177.8	108.8	279.4	335.3	127.0	20.6	61.0	-	18.6 kg
571906A	3	inch	10.6	5.3	4.5	9.0	4.7	11.4	14.0	5.0	0.8	2.9	1/4	49.4 lb
		mm	269.2	134.6	114.5	228.6	118.3	289.6	355.6	127.0	20.6	73.7	-	22.4 kg
571907A	4	inch	11.9	6.0	4.8	9.5	6.1	13.7	17.6	5.0	0.8	3.8	1/4	82.9 lb
		mm	302.3	151.1	121.5	241.3	153.8	348.0	447.0	127.0	20.6	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
570900A	1/2	inch	5.7	2.9	1.8	3.5	1.5	5.8	6.7	3.0	0.6	0.4	1/4	6.7 lb
		mm	146.0	73.7	44.5	88.9	37.0	147.3	170.2	77.0	16.0	10.2	-	3.0 kg
570901A	3/4	inch	5.7	2.9	2.0	4.0	1.8	6.1	7.1	3.0	0.6	0.6	1/4	7.1 lb
		mm	146.0	73.7	50.5	101.6	45.0	154.9	180.3	77.0	17.1	15.2	-	3.2 kg
570902A	1	inch	5.7	2.9	2.2	4.5	2.1	6.4	7.5	3.0	0.6	0.9	1/4	7.6 lb
		mm	146.0	73.7	57.0	114.3	53.5	162.6	190.5	77.0	17.1	22.9	-	3.4 kg
570903A	1-1/2	inch	6.8	3.4	2.8	5.5	2.9	7.9	9.4	3.5	0.7	1.4	1/4	13.5 lb
		mm	173.0	86.5	70.0	139.7	74.8	200.7	238.8	90.0	17.1	35.6	-	6.1 kg
570904A	2	inch	8.0	4.0	3.1	6.2	3.3	9.	10.9	4.5	0.7	1.9	1/4	22.0 lb
		mm	204.0	102.0	78.0	157.5	83.5	231.1	276.9	113.5	17.1	48.3	-	10.0 kg
570905A	2-1/2	inch	10.6	5.3	3.9	7.0	4.3	11.0	13.2	5.0	0.8	2.4	1/4	39.2 lb
		mm	269.2	134.6	98.5	177.8	108.8	279.4	335.3	127.0	20.6	61.0	-	17.8 kg
570906A	3	inch	10.6	5.3	4.5	9.0	4.7	11.4	14.0	5.0	0.8	2.9	1/4	47.6 lb
		mm	269.2	134.6	114.5	228.6	118.3	289.6	355.6	127.0	20.6	73.7	-	21.6 kg
570907A	4	inch	10.6	5.3	4.8	9.5	6.1	12.8	16.7	5.0	0.8	3.8	1/4	70.3 lb
		mm	269.2	134.6	121.5	241.3	153.8	325.1	424.2	127.0	20.6	96.5	-	31.9 kg