

Features

- Functions as a diverter valve
- All valve materials comply with FDA, USDA, and 3-A requirements
- Tri-Clamp ends for hygienic connections
- TFM-1600 ball seats with virgin PTFE cavity fillers
- Triple PTFE/ Viton® high cycle live loaded stem seal packing
- Highly polished internals and end caps with 8-12 Ra finish
- Full Port direct mount ISO5211 valve
- Spring Return or Double Acting Actuators
- Actuators designed for minimum 1 million cycles
- Quarter turn rack and pinion design
- Highly visible valve position indicator
- Actuator factory lubricated for normal lifetime

Applications

Sanitary 3-way 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. Often used as a diverter, selector, or mixing valve with a variety of flow path options through the valve.

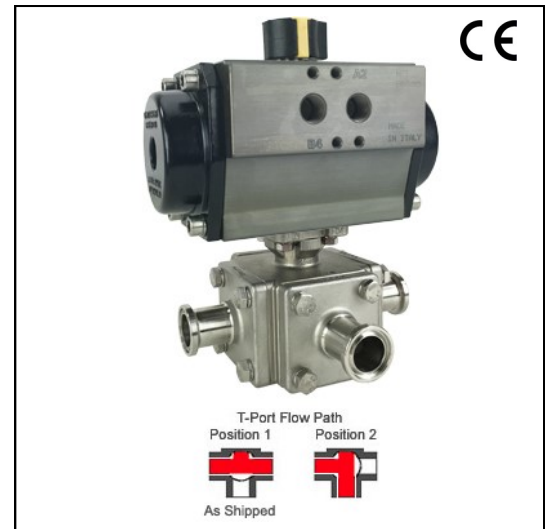
Operation

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	Anodized aluminium, epoxy-polyester coated end covers
Position Indicator	Glass filled Polyamide
Fasteners	ASTM 304 Stainless Steel



Description

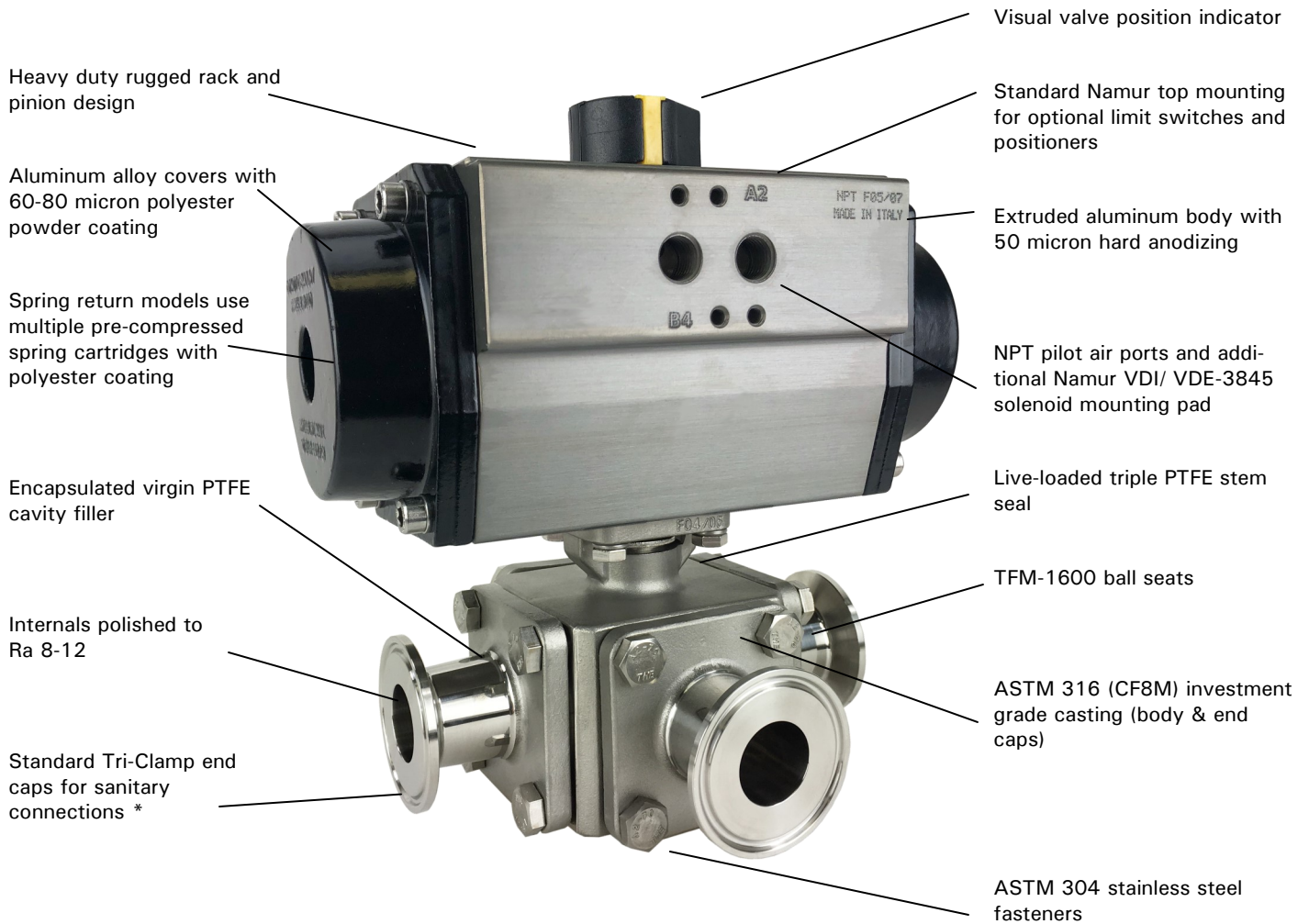
Heavy duty quarter turn rack & pinion actuators designed for long life and tested for a minimum 1 million operations. Investment cast 3-piece full port stainless steel body and end caps for unrestricted flow and minimum pressure loss. Valve seals are TFM 1600 and cavity filled virgin PTFE. Self adjusting 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
- 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
- HTB: High Temperature Bracket
 - increases media working temperature



* Refer to specifications table for Tri-Clamp size

* Note: Tri-Clamp size is **NOT** determined by the OD of the end cap

Pressure Rating*: 1000 PSI @ 120°F

Max Pressure Room Temp– 1000 PSI (72°F desired room temp)

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

*See P/T Chart

Actuator Temperature Rating: 0 to +180° F (-18 to 82° C)

Specifications (English units)

Stock Number	Pipe Size (inch)	Tri-Clamp Size (inch)	Cv Flow Factor	Pressure Max.(PSI)*	Cycle Time /90° (seconds)	Pilot Air Port (NPT)
VALVE WITH SPRING RETURN ACTUATOR						
572300	1/2	3/4	8	1000	1	1/4
572301	3/4	3/4	29	1000	1	1/4
572302	1	1-1/2	66	1000	1	1/4
572303	1-1/2	1-1/2	192	1000	1	1/4
572304	2	2	434	1000	1	1/4
572305	2-1/2	2-1/2	723	1000	1	1/4
VALVE WITH DOUBLE ACTING ACTUATOR						
572200	1/2	3/4	8	1000	1	1/4
572201	3/4	3/4	29	1000	1	1/4
572202	1	1-1/2	66	1000	1	1/4
572203	1-1/2	1-1/2	192	1000	1	1/4
572204	2	2	434	1000	1	1/4
572205	2-1/2	2-1/2	723	1000	1	1/4
572206	3	3	1124	1000	1	1/4

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

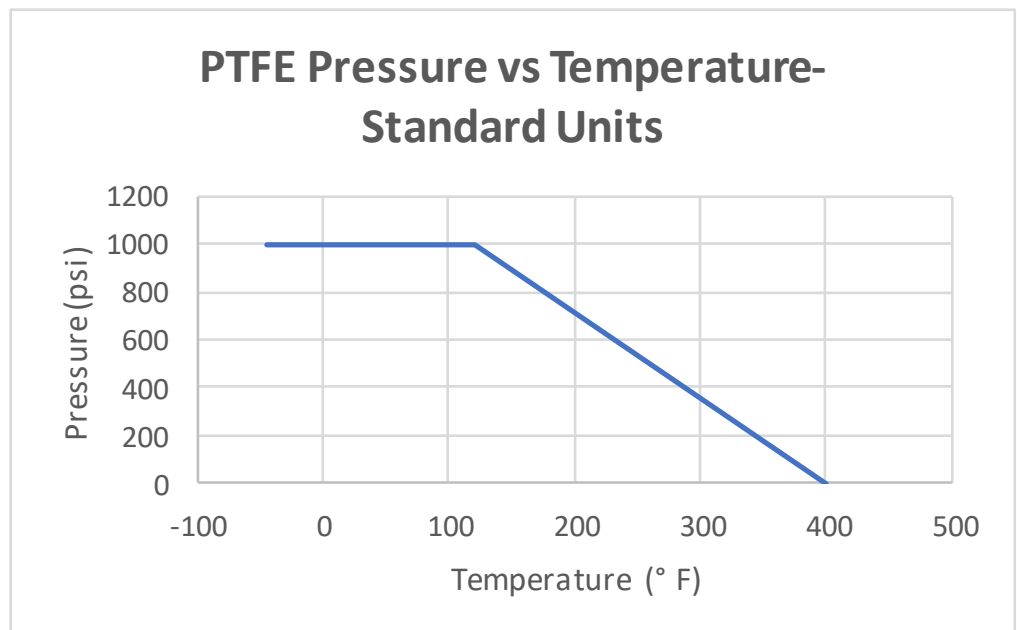
* Pressure @ -50° to 400° F (reduced pressure at higher temperatures—see P/T chart)

• 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)

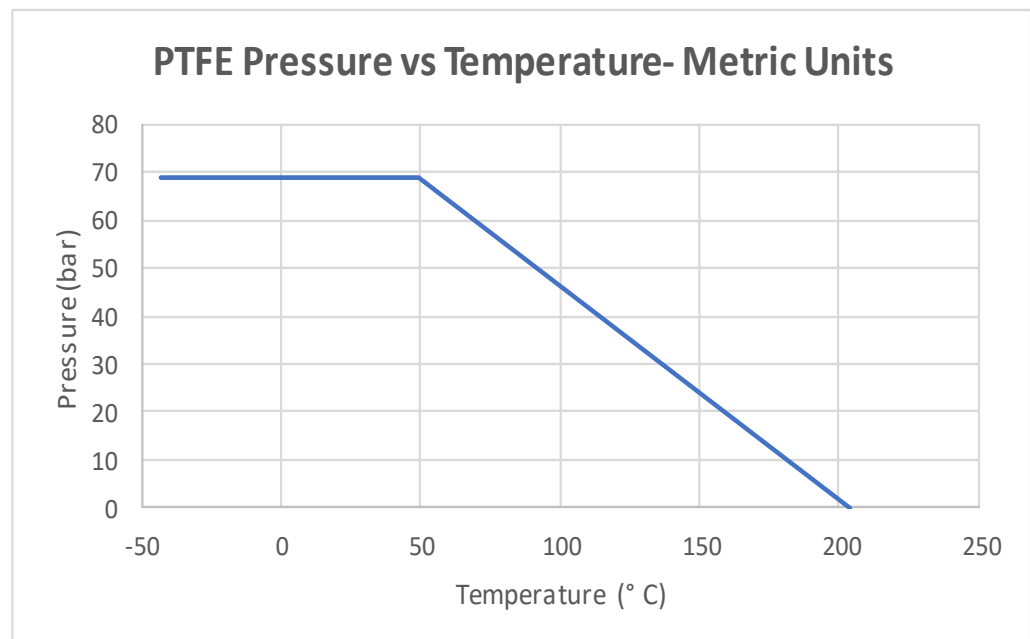
Stock Number	Pipe Size (mm)	Tri-Clamp Size (inch)	Kv Flow Factor	Pressure Max.(Bar)*	Cycle Time/90° (seconds)	Pilot Air Port (NPT)
VALVE WITH SPRING RETURN ACTUATOR						
572300	12.7	3/4	7	69	1	1/4
572301	19.1	3/4	25	69	1	1/4
572302	25.4	1-1/2	57	69	1	1/4
572303	38.1	1-1/2	107	69	1	1/4
572304	50.8	2	165	69	1	1/4
572305	63.5	2-1/2	374	69	1	1/4
VALVE WITH DOUBLE ACTING ACTUATOR						
572200	12.7	3/4	7	69	1	1/4
572201	19.1	3/4	25	69	1	1/4
572202	25.4	1-1/2	57	69	1	1/4
572203	38.1	1-1/2	107	69	1	1/4
572204	50.8	2	165	69	1	1/4
572205	63.5	2-1/2	374	69	1	1/4
572206	76.2	3	623	69	1	1/4

* Pressure range @ -45° to 200° C (reduced pressure for higher temperatures—see P/T chart)

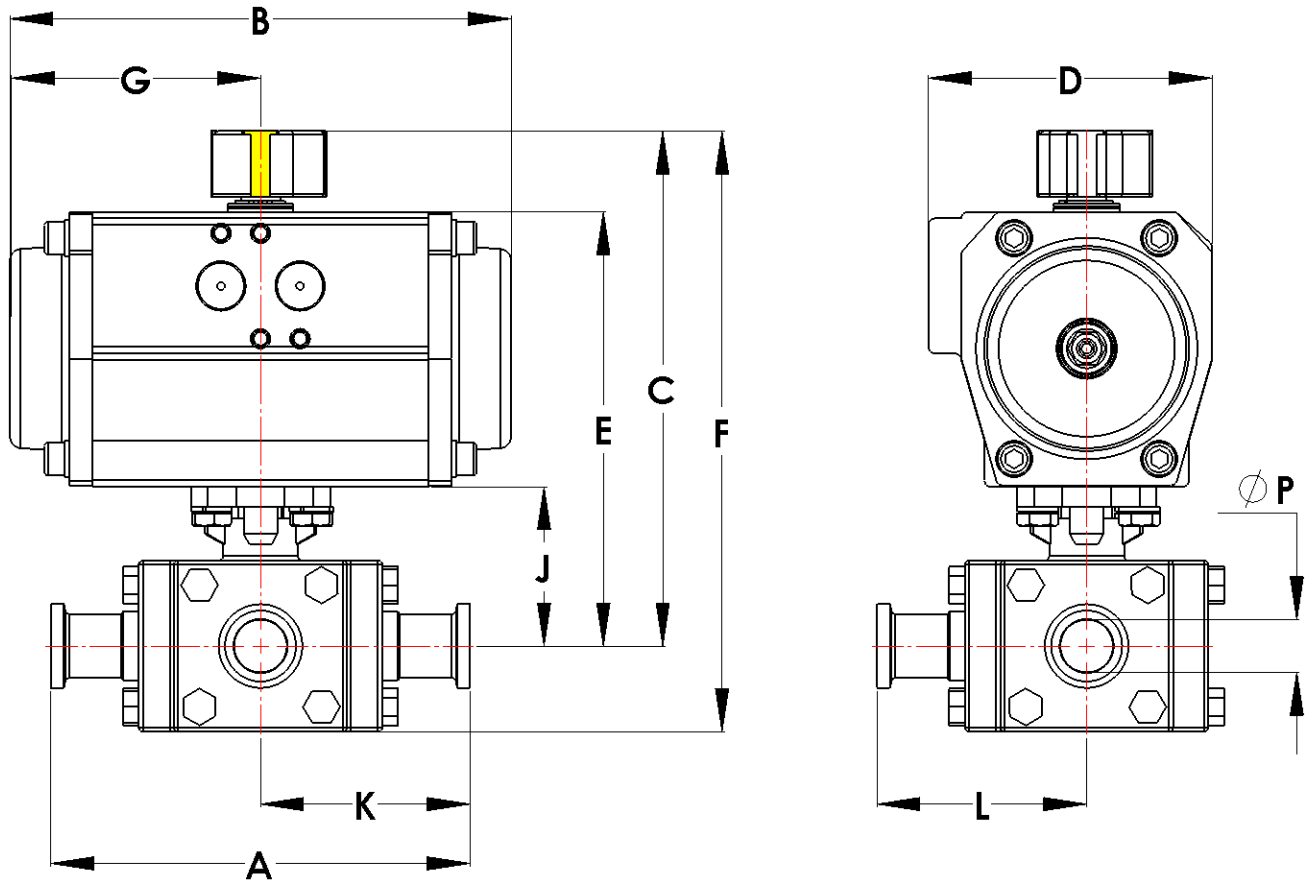
Pressure/Temperature Chart (Bar/°C)

Metric Units

Temp °C	-43	49	204
Pressure	69	69	0

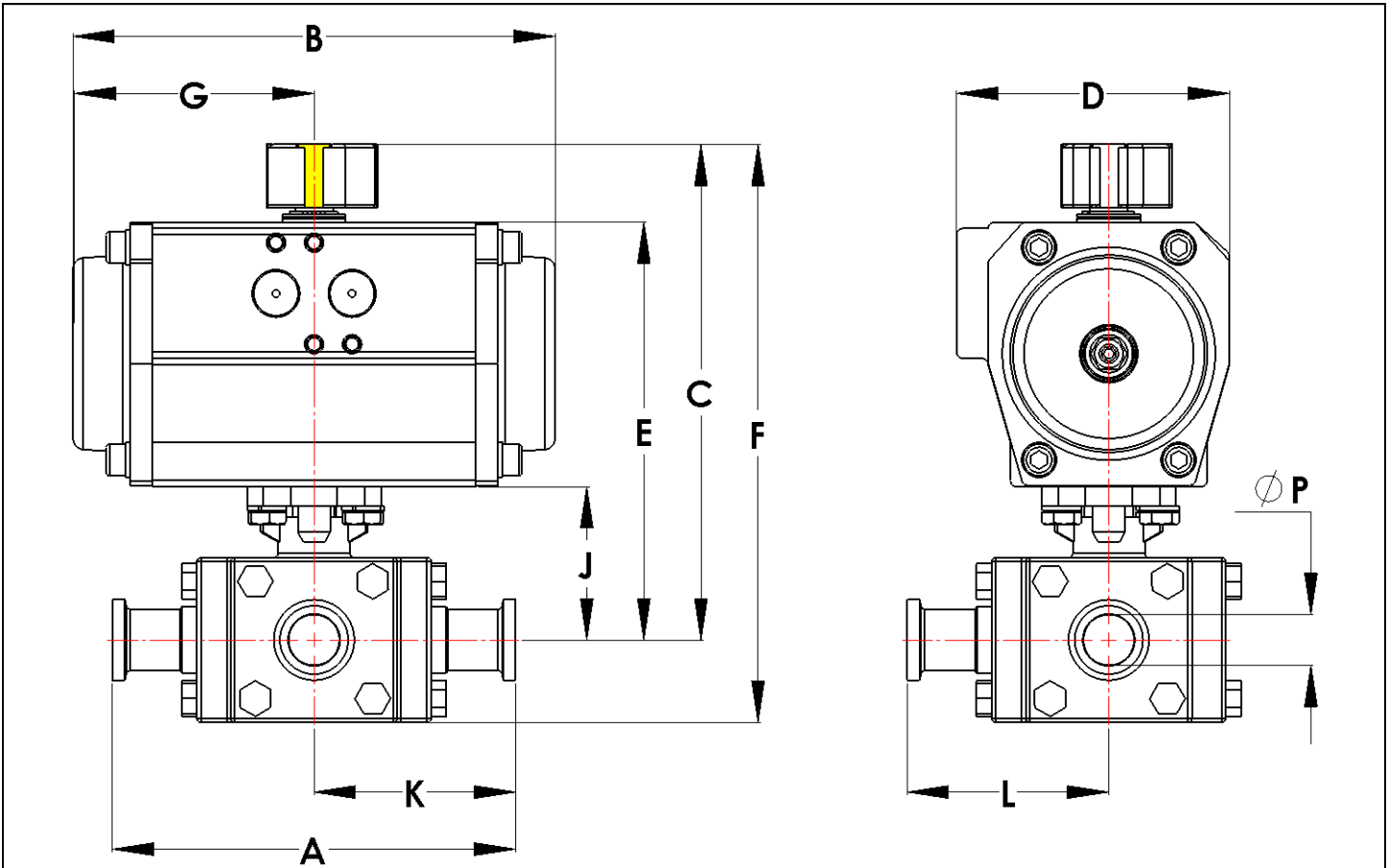


Dimensions: Spring Return



Stock Number	Pipe Size		A	B	C	D	E	F	G	J	K	L	P	Ports (NPT)	Weight
572300	1/2	inch	4.3	6.1	6.0	3.4	5.0	6.9	3.1	1.8	2.3	2.2	0.4	1/4	8.2 lb
		mm	109.2	155.0	152.7	86.4	128.2	176.0	78.7	44.7	58.9	55.9	10.2	-	3.7 kg
572301	3/4	inch	5.0	6.1	6.2	3.4	5.2	7.2	3.1	1.9	2.5	2.3	0.6	1/4	9.2 lb
		mm	127.0	155.0	156.3	86.4	132.0	182.2	78.7	48.3	63.5	58.4	15.2	-	4.2 kg
572302	1	inch	6.0	9.1	7.6	4.1	6.6	8.8	4.6	2.2	3.0	3.0	0.9	1/4	17.4 lb
		mm	152.4	231.1	192.0	104.1	167.0	223.1	116.8	57.0	76.4	76.2	22.9	-	8.0 kg
572303	1-1/2	inch	7.5	11.0	8.9	4.7	7.9	10.6	5.5	3.0	3.7	3.8	1.4	1/4	31.7 lb
		mm	190.5	279.4	226.5	119.4	200.9	269.0	139.7	75.9	95.2	96.5	35.6	-	14.4 kg
572304	2	inch	8.5	12.2	10.2	5.3	9.0	12.2	6.1	3.4	4.3	4.3	1.9	1/4	49.3 lb
		mm	215.9	309.9	258.1	134.6	228.0	310.1	154.9	86.0	108.5	109.2	48.3	-	22.3 kg
572305	2-1/2	inch	9.0	12.2	10.8	5.3	9.6	13.2	6.1	4.0	4.6	6.5	2.4	1/4	92.3 lb
		mm	228.6	309.9	275.0	134.6	244.5	335.8	154.9	102.5	116.4	165.1	61.0	-	41.9 kg

Dimensions: Double Acting



Stock Number	Pipe Size		A	B	C	D	E	F	G	J	K	L	P	Ports (NPT)	Weight
572200	1/2	inch	4.3	6.1	6.0	3.4	5.0	6.9	3.1	1.8	2.3	2.2	0.4	1/4	7.6 lb
		mm	109.2	154.9	152.7	86.4	128.2	176.0	78.7	44.7	58.9	55.9	10.2	-	3.4 kg
572201	3/4	inch	5.0	6.1	6.2	3.4	5.2	7.2	3.1	1.9	2.5	2.3	0.6	1/4	8.6 lb
		mm	127.0	154.9	156.3	86.4	132.0	182.0	78.7	48.3	63.5	58.4	15.2	-	3.9 kg
572202	1	inch	6.0	8.3	7.2	3.7	6.2	8.4	4.2	2.2	3.0	3.0	0.9	1/4	13.4 lb
		mm	152.4	210.8	182.0	94.0	157.0	213.0	106.7	57.0	76.4	76.2	22.9	-	6.1 kg
572203	1-1/2	inch	7.5	9.1	8.3	4.1	7.3	10.0	4.6	3.0	3.7	3.8	1.4	1/4	26.3 lb
		mm	190.5	231.1	211.1	104.1	185.9	253.0	116.8	75.9	95.2	96.5	35.6	-	11.9 kg
572204	2	inch	8.5	9.1	8.7	4.1	7.7	10.7	4.6	3.4	4.3	4.3	1.9	1/4	36.3 lb
		mm	215.9	231.1	220.8	104.1	195.7	273.0	116.8	85.7	108.5	109.2	48.3	-	16.4 kg
572205	2-1/2	inch	9.0	11.0	10.0	4.7	8.9	12.4	5.5	4.0	4.6	6.5	2.4	1/4	82.8 lb
		mm	228.6	279.4	253.1	119.4	226.9	314.0	139.7	102.5	116.4	165.1	61.0	-	37.6 kg
572206	3	inch	12.0	12.2	11.5	5.3	10.3	14.4	6.1	4.7	6.1	6.0	2.9	1/4	95.3 lb
		mm	304.9	309.9	292.4	134.6	262.0	367.0	139.7	120.0	154.0	152.4	73.7	-	43.2 kg