

Features

- Fire safe approved (API 607)
- Fugitive Emission approved (API 641)
- Pipeline use approved (API 608)
- Fugitive Emission Stem Seal approved (API 622)
- RTFE (reinforced Teflon) ball seats
- Braided graphite stem seals
- 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
- Valve tested per API598

Applications

Stainless steel ball valves with braided graphite seals are typically used for on-off control of water, air, oil, vacuum and other media compatible with the materials of construction. Also for use in pipeline, firesafe and low-emission applications. Cycle times approx. 1 to 1.5 seconds per 90° rotation. Steam service up to 25 PSI with optional high temperature mounting bracket. Suitable for vacuum service to 29"Hg.

*Not suitable for potable water, oxygen or high purity fluid applications.

Operation

Double acting actuators use air pressure to open and air pressure to close the ball valve (4-way pilot). Spring return 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	316SS ASTM A351, CF8M
Ball/Stem	316SS CF8M
Ball Seats	RTFE (reinforced Teflon)
Stem Seals	Braided Graphite (Slade 3300i), Viton
Actuator Seals	NBR (Buna-N)
Actuator Body	Anodized aluminium, epoxy-polyester coated end covers
Position Indicator	Glass filled Polyamide
Fasteners	Stainless Steel



Description

Dual certified (low emission/fire safe) investment cast 2-piece full port stainless steel body/ball for unrestricted flow and minimum pressure loss. Heavy duty quarter turn rack & pinion actuators designed for long life and tested for a minimum 1 million operations. Adjustable live loaded stem seal packing helps compensate for wear, pressure or temperature fluctuations, extending the cycle life of the valve. Blow-out proof stem. Standard Namur mounting pads for optional accessory confirmation switches and pilot valves.

Approvals– Actuators

- CE Declaration of conformity: MD 2006/42/CE
- ISO5211/ DIN3337 valve mounting
- Namur VDI/VDE 3845 accessory mounting

Standards– Valves

- Fire Safe: API 607(VI)/ISO10497(III)
- Fugitive Emission: API 641 (I)
- Pipeline Use: API 608
- Stem Packing: API 622
- Construction: ASME B16:34
- End Connection: ANSI Class 150 Flange RF
- Face to Face: ANSI B16.10 Class 150
- Flange Dimensions: ANSI B16.5 Class 150
- Pressure Testing: API 598, EN12266
- Direct Mounting Pad: ISO5211, square stem
- CE Declaration of conformity: PED 2014/68/UE

Construction Features

Heavy duty rugged rack and pinion design

Aluminum alloy covers with 60-80 micron polyester powder coating

Spring return models use multiple pre-compressed spring cartridges with polyester coating

Braided graphite stem packing (API 622 approved)

150# RF flange dimensions per ANSI B16.5 and face-to-face dimensions per B16.10

Visual valve position indicator

Standard Namur top mounting for optional switches and positioners

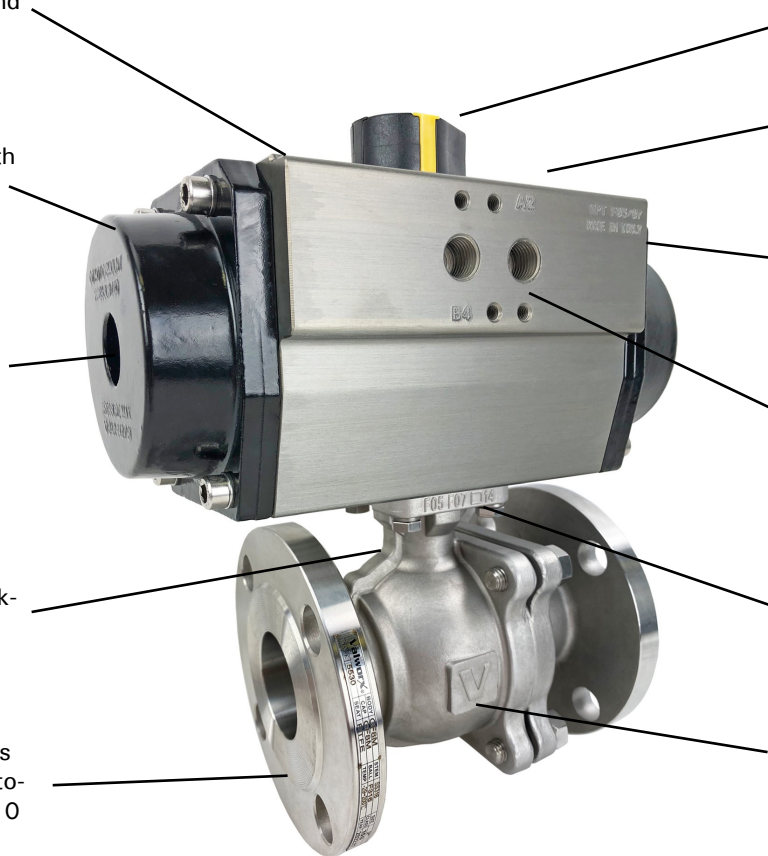
Extruded aluminum body with 50 micron hard anodizing

NPT pilot air ports and additional Namur VDI/VDE-3845 solenoid mounting pad

Direct mount ISO5211 flange, no brackets required

316SS ball with RTFE ball seats

Low Emission & Fire Safe Approved valve



Pressure-Temperature

Pressure Rating: 275 PSI (19 Bar), 25 PSI saturated steam with high temp kit, Vacuum to 29inHg

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

Ball Valve Temperature Rating: -4 to 392° F (-20 to 200°C)

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)

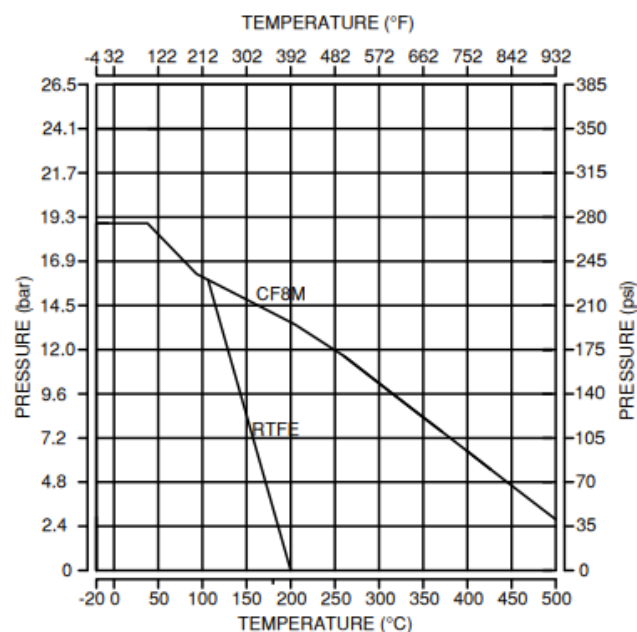
Stock Number	Pipe Size	Orifice Size	Cv Flow Factor	Pressure	Air Volume/90°	Cycle Time /90°	Pilot Air Port
STAINLESS FLANGE VALVE WITH SPRING RETURN ACTUATOR							
525208A	1	1.0	60	275	79.3	1	1/4
525212A	1-1/2	1.5	125	275	164.8	1	1/4
525216A	2	2.0	240	275	164.8	1	1/4
525224A	3	3.2	580	275	634.6	1.5	1/4
525232A	4	4.0	1020	275	836.0	1.5	1/4
STAINLESS FLANGE VALVE WITH DOUBLE ACTING ACTUATOR							
525236A	1	1.0	60	275	195.3	1	1/8
525238A	1-1/2	1.5	125	275	262.4	1	1/4
525239A	2	2.0	240	275	262.4	1	1/4
525241A	3	3.2	580	275	768.9	1.5	1/4
525242A	4	4.0	1020	275	1196.1	1.5	1/4

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

* Pressure @ 100° F (see P/T chart)

Pressure/Temperature Chart

P/T Chart (PSI/°F)					
PSI	275	275	210	125	0
°F	-4	100	248	302	392



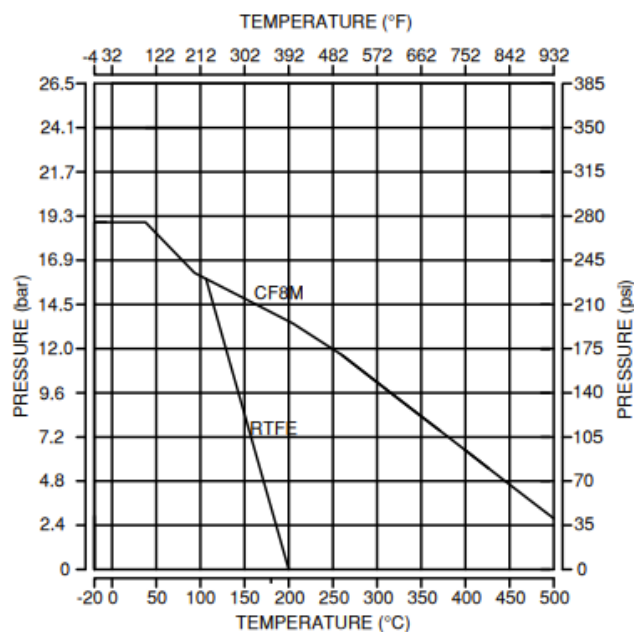
Specifications (Metric units)

Stock Number	Pipe Size	Orifice Size (mm)	Kv Flow Factor	Pressure Max.(Bar)*	Air Volume/90° (standard liters)	Cycle Time/90° (seconds)	Pilot Air Port (NPT)
STAINLESS FLANGE VALVE WITH SPRING RETURN ACTUATOR							
525208A	1	25	52	19	1.3	1	1/4
525212A	1-1/2	38	108	19	1.7	1	1/4
525216A	2	50	207	19	1.7	1	1/4
525224A	3	80	501	19	10.4	1.5	1/4
525232A	4	98	882	19	13.7	1.5	1/4
STAINLESS FLANGE VALVE WITH DOUBLE ACTING ACTUATOR							
525236A	1	25	52	19	3.2	1	1/8
525238A	1-1/2	38	108	19	4.3	1	1/4
525239A	2	50	207	19	4.3	1	1/4
525241A	3	80	501	19	12.6	1.5	1/4
525242A	4	98	882	19	19.6	1.5	1/4

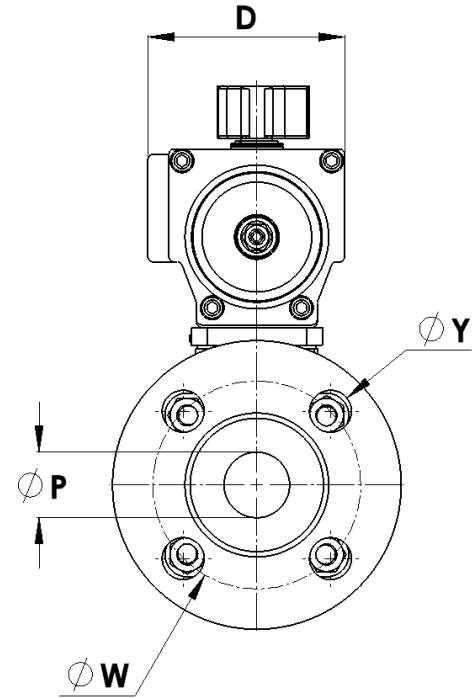
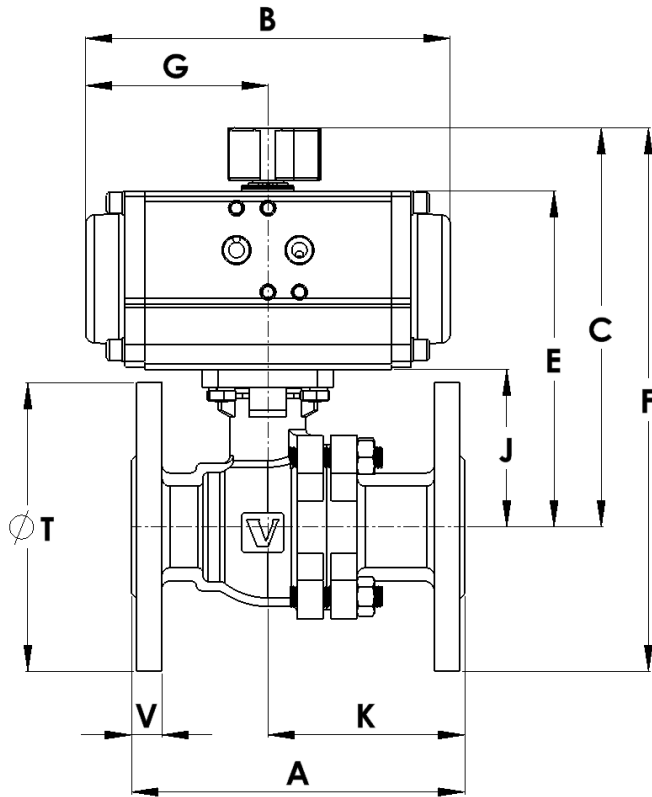
* Pressure @ -18 to 38° C (see P/T chart)

Pressure/Temperature Chart

P/T Chart (BAR/°C)					
Bar	19	19	14.5	8.4	0
°C	-20	38	120	150	200

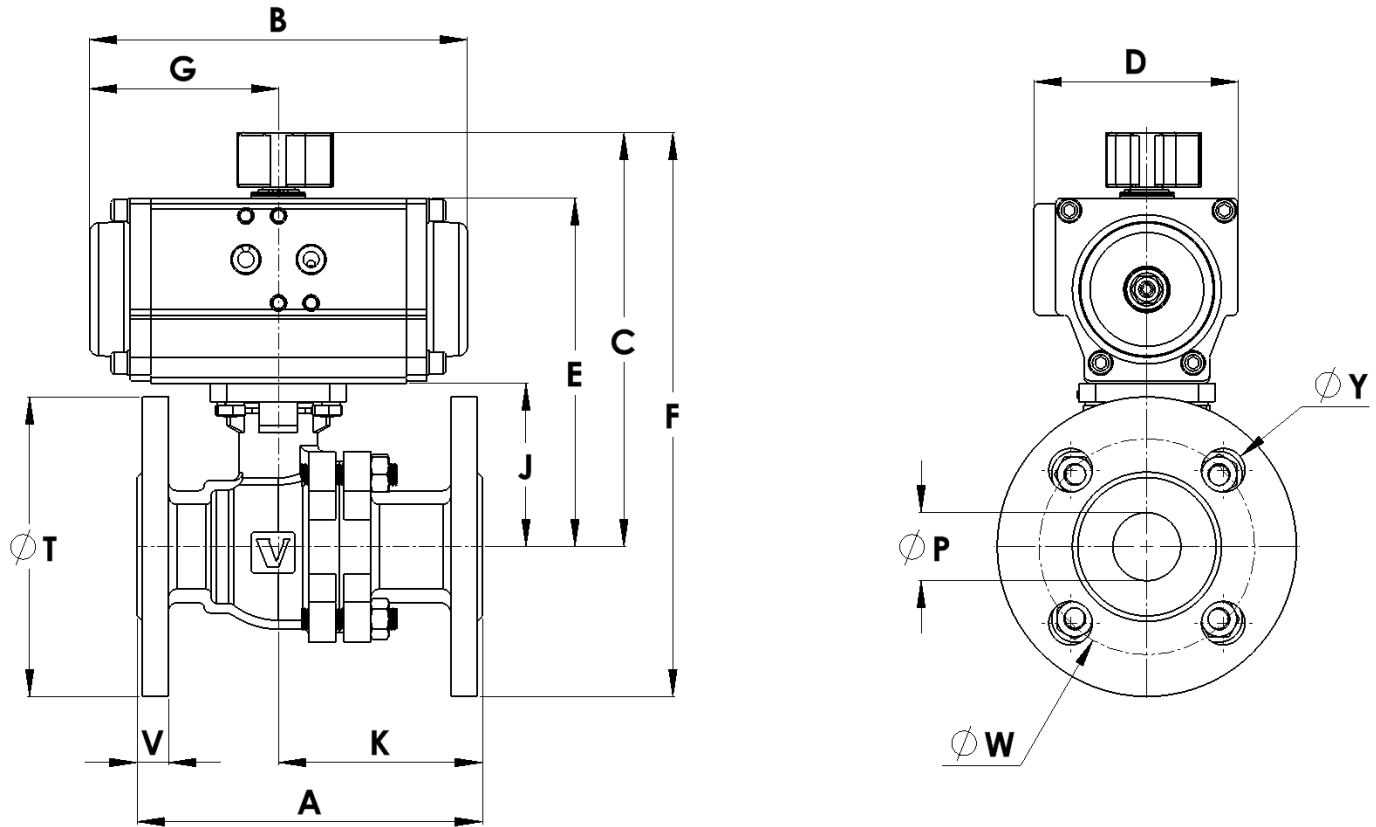


Dimensions: Spring Return (inches (mm))



Pipe Size		A	B	C	D	E	F	G	J	K	P	T	V	W	Y	Ports (NPT)	Weight
1	inch	5.0	6.1	6.6	3.4	5.7	8.8	3.1	2.4	2.3	1.0	4.3	0.4	0.3	4) 0.6	1/4	10.4 lbs
	mm	127.0	156.0	168.0	86.0	143.5	223.0	78.0	60.0	58.4	25.0	110.0	9.6	7.0	4) 16.0	-	4.7 kg
1-1/2	inch	6.5	9.1	8.4	4.1	7.4	10.9	4.5	3.1	2.8	1.5	4.9	0.5	0.4	4) 0.6	1/4	22.9 lbs
	mm	165.0	230.0	213.1	104.0	188.0	275.6	115.0	78.0	71.1	38.0	125.0	12.7	9.0	4) 16.0	-	10.4 kg
2	inch	7.0	9.1	8.7	4.1	7.8	11.7	4.5	3.4	3.1	2.0	5.9	0.6	0.4	4) 0.6	1/4	29.3 lbs
	mm	178.0	230.0	222.1	104.0	197.0	297.1	115.0	87.0	78.7	50.0	150.0	14.3	10.0	4) 16.0	-	13.3 kg
3	inch	8.0	14.3	11.7	5.6	10.6	15.5	7.1	4.6	4.5	3.0	7.5	0.7	0.5	4) 0.8	1/4	68.5 lbs
	mm	203.0	362.0	297.1	141.0	269.8	392.7	181.0	116.0	114.3	76.0	190.0	17.5	12.0	4) 19.0	-	31.1 kg
4	inch	9.0	15.4	13.6	6.4	12.4	18.1	7.7	5.5	4.8	3.9	9.1	0.9	0.5	8) 0.8	1/4	104.8 lbs
	mm	229.0	390.0	345.2	163.0	315.0	460.2	195.0	140.0	124.5	100.0	230.0	22.3	12.0	8) 19.0	-	47.5 kg

Dimensions: Double Acting (inches (mm))



Pipe Size		A	B	C	D	E	F	G	J	K	P	T	V	W	Y	Ports (NPT)	Weight
1	inch	5.0	6.1	6.0	3.0	5.0	8.2	3.1	2.4	2.3	1.0	4.3	0.4	0.3	4) 0.6	1/8	10.2 lbs
	mm	127.0	156.0	152.1	75.0	128.0	207.1	78.0	60.0	58.4	25.0	110.0	9.6	7.0	4) 16.0	-	4.6 kg
1-1/2	inch	6.5	8.3	8.0	3.7	7.0	10.4	4.1	3.1	2.8	1.5	4.9	0.5	0.4	4) 0.6	1/4	19.3 lbs
	mm	165.0	210.0	202.0	94.0	178.0	264.5	105.0	78.0	71.1	38.0	125.0	12.7	9.0	4) 16.0	-	8.8 kg
2	inch	7.0	8.3	8.7	3.7	7.8	11.7	4.1	3.4	3.1	2.0	5.9	0.6	0.4	4) 0.6	1/4	25.8 lbs
	mm	178.0	210.0	222.1	94.0	197.0	297.0	105.0	87.0	78.7	50.0	150.0	14.3	10.0	4) 16.0	-	11.7 kg
3	inch	8.0	11.0	10.4	4.7	9.5	14.1	5.5	4.6	4.5	3.0	7.5	0.7	0.5	4) 0.8	1/4	51.4 lbs
	mm	203.0	280.0	263.7	120.0	241.0	359.2	140.0	116.0	114.3	76.0	190.0	17.5	12.0	4) 19.0	-	23.3 kg
4	inch	9.0	12.2	11.1	5.3	12.3	16.8	6.1	5.5	4.8	3.9	9.1	0.9	0.5	8) 0.8	1/4	83.0 lbs
	mm	229.0	310.0	312.4	134.0	282.0	427.4	155.0	140.0	124.5	100.0	230.0	22.3	12.0	8) 19.0	-	42.2 kg