

Pneumatic Actuators

Specifications

Series 79 P: Type – Double Piston, Double Rack and Pinion

Bodies – Aluminum, Glass-filled Polyamide, and 316 ss

Torque – 46 to 26,696 in-lbs

Models – Air-to-Air

Spring Return (Fail Open)

Spring Return (Fail Closed)

Air Supply – 60 psi – 120 psi

Air Connections – 1/4" NPT

Mounting Dim. – ISO and NAMUR



Series 79P (Aluminum)
with solenoid valve



Series 79P (Glass-filled Polyamide)
with solenoid valve



Series 79P (316 Stainless Steel)

Standard Features

- Standard actuator bodies glass-filled polyamide (highly corrosion resistant)
- Double piston, double rack and pinion design (polyamide)
- ISO mounting pattern with female square outdrive (for ease of valve mounting)
- NAMUR mounting pattern (for accessory mounting solenoids, limit switches, positioners, etc.)
- Recommended air supply 80 psi (normal) to 120 psi (maximum) filtered air
- Concentric spring sets (spring return models only) for consistent output torque
- Available in air-to-air (double acting) and air-to-spring (spring return failsafe) models
- Position Indication through visible indicator knob and actuator shaft flats
- Actuator shaft in glass filled polyamide with SS insert (Model AP79P), 303 SS (Models B thru D79P) and steel covered by cataphoresis (Model E thru G79P)

Standard Features

- Manual override
For A-A – Insert wrench onto flats of stem and rotate
For A-S – Declutchable gear-operator is required

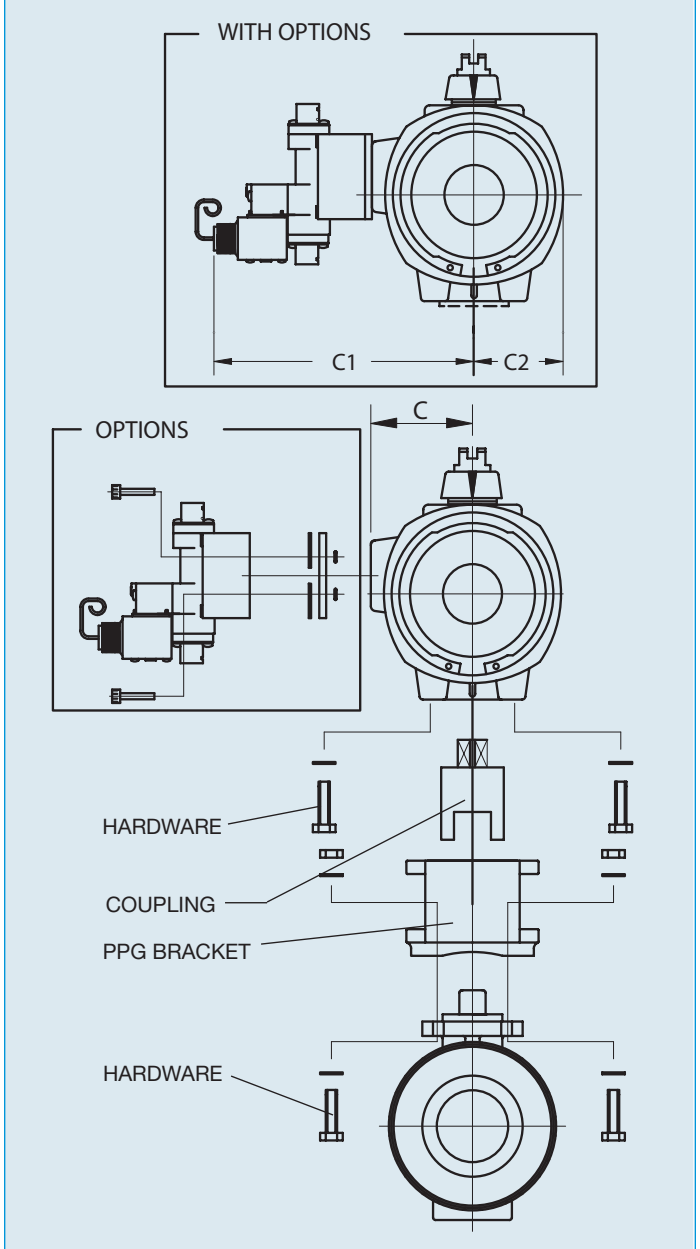
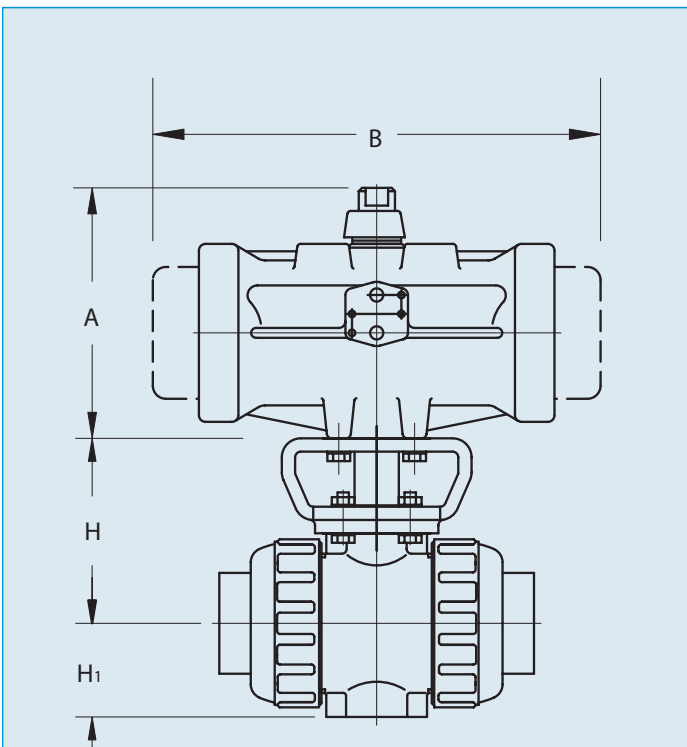
Options

- 316 SS bodies (Models BS79P thru DS79P)
- Aluminum bodies with Rilsan and cataphoresis coating (Models A79P thru D79P)
- Flush mount NAMUR style solenoids in various NEMA ratings and voltages with mufflers, speed controls, and push button override standard.
- NAMUR double limit switches in a variety of NEMA ratings (NEMA IV and VII standard) and sensor options (2-mechanical SPDT switches standard)
- Positioners in either 3-15 psi or 4-20mA for modulating service requiring no solenoid (optional limit switch packages and 4-20mA output signal available)
- Bus systems

Pneumatically Actuated Ball Valves



Type 79 P on Type 21 Ball Valve



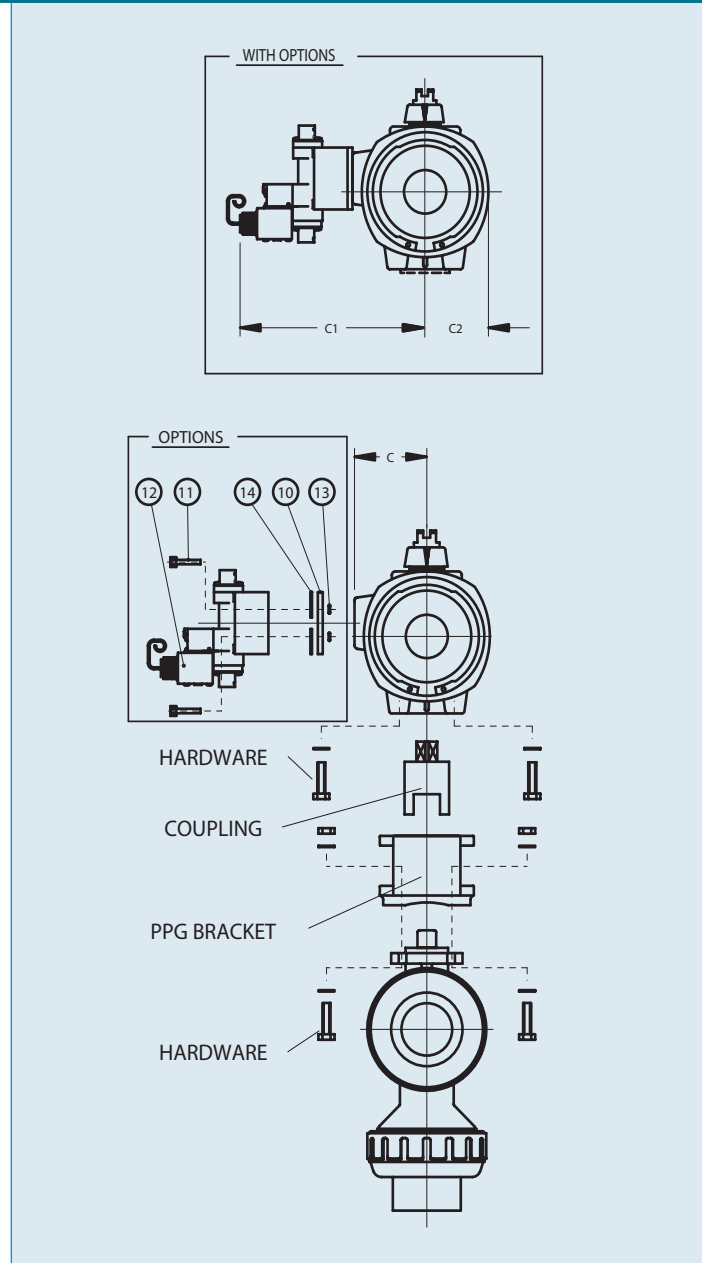
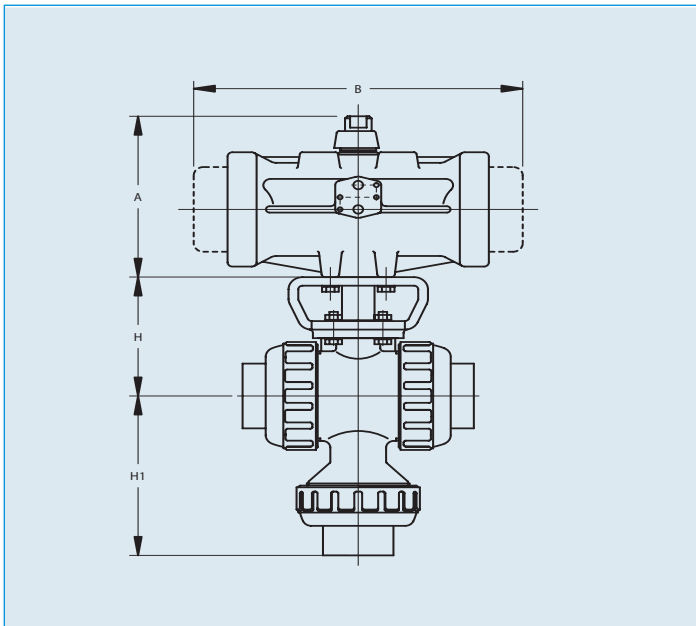
Dimensions (Sizes 1/2" - 4")

NOMINAL SIZE		Model No. Air-Air	Model No. Air-Spring	H	H ₁	A		B		C		C ₁		C ₂	
INCHES	mm					A-A	A-S	A-A	A-S	A-A	A-S	A-A	A-S	A-A	A-S
1/2	15	AP79PN	AP79PSN	2.76	1.14	3.34	3.34	4.22	5.55	1.47	1.47	5.41	5.41	1.21	1.21
3/4	20	AP79PN	AP79PSN	3.01	1.38	3.34	3.34	4.22	5.55	1.47	1.47	5.41	5.41	1.21	1.21
1	25	AP79PN	AP79PSN	3.29	1.54	3.34	3.34	4.22	5.55	1.47	1.47	5.41	5.41	1.21	1.21
1 1/4	32	AP79PN	AP79PSN	3.64	1.85	3.34	3.34	4.22	5.55	1.47	1.47	5.41	5.41	1.21	1.21
1 1/2	40	AP79PN	BP79PSN	3.98	2.17	3.34	4.40	4.22	5.86	1.47	1.73	5.41	5.41	1.21	1.41
2	50	AP79PN	CP79PSN	4.43	2.60	3.34	5.00	4.22	7.64	1.47	1.97	5.41	5.41	1.21	1.85
2 1/2	65	CP79PN	CP79PSN	5.12	2.83	5.00	5.00	7.00	8.74	1.97	1.97	5.89	5.89	1.85	1.85
3	80	CP79PN	DP79PSN	5.47	3.35	5.00	6.49	7.00	11.49	1.97	2.56	5.89	5.89	1.85	2.36
4	100	DP79PN	DP79PSN	6.97	4.33	6.49	6.49	9.21	11.49	2.56	2.56	6.48	6.48	2.36	2.36

Pneumatically Actuated Type 23



Series 79P on Multiport Valve

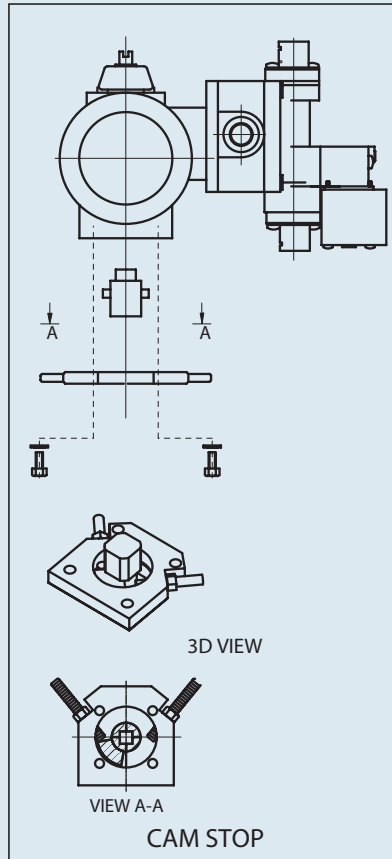
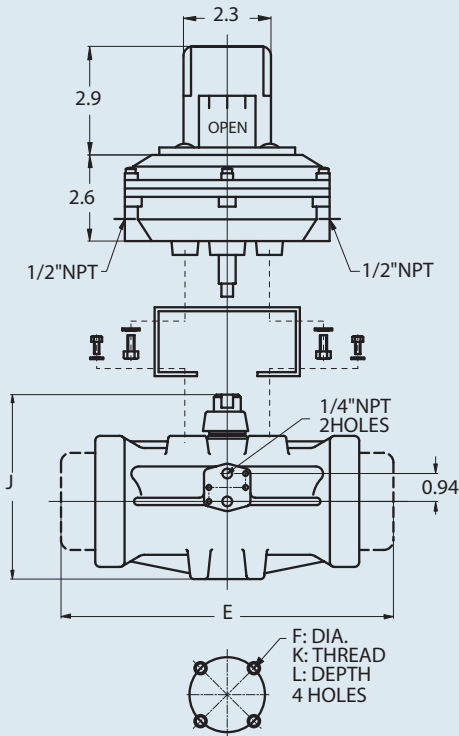


Dimensions (Sizes 1/2" - 4")

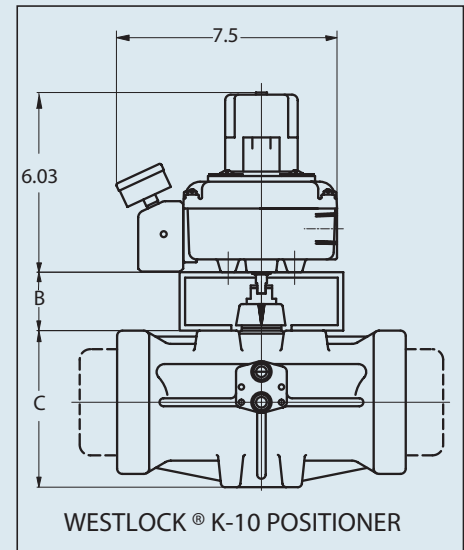
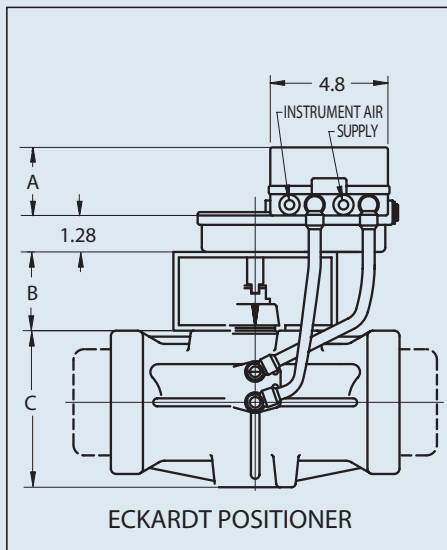
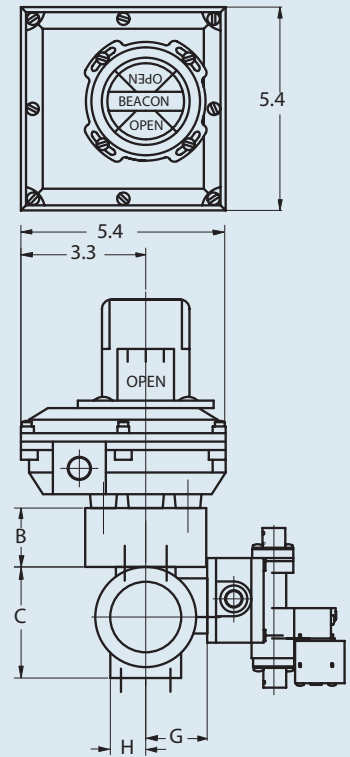
NOMINAL SIZE		Model No. Air-Air	Model No. Air-Spring	H	H ₁	A		B		C		C ₁		C ₂	
INCHES	mm					A-A	A-S	A-A	A-S	A-A	A-S	A-A	A-S	A-A	A-S
1/2	15	AP79PN	AP79PSN	2.76	3.08	3.34	3.34	4.22	5.55	1.47	1.47	5.41	5.41	1.21	1.21
3/4	20	AP79PN	AP79PSN	3.01	3.56	3.34	3.34	4.22	5.55	1.47	1.47	5.41	5.41	1.21	1.21
1	25	AP79PN	AP79PSN	3.29	4.32	3.34	3.34	4.22	5.55	1.47	1.47	5.41	5.41	1.21	1.21
1 1/2	40	AP79PN	BP79PSN	3.98	5.71	3.34	4.40	4.22	5.86	1.47	1.73	5.41	5.66	1.21	1.41
2	50	AP79PN	CP79PSN	4.43	6.66	3.34	5.00	4.22	7.64	1.47	1.97	5.41	5.89	1.21	1.85
3	80	CP79PN	DP79PSN	5.47	9.59	5.00	6.49	7.00	11.49	1.97	2.56	5.89	6.48	1.85	2.36
4	100	DP79PN	DP79PSN	6.97	11.58	6.49	6.49	9.21	11.49	2.56	2.56	6.48	6.48	2.36	2.36

Pneumatic Actuator and Options

SWITCH ASSEMBLY



SWITCH ASSEMBLY WITH SOLENOID



Dimensions (INCHES)
ACTUATOR WITH LIMIT SWITCH

ACTUATOR SIZE	B	C	E		F	H	G	J	K	L
			A-A	A-S						
AP79P	1.75	2.56	4.22	5.55	1.65	1.21	1.48	3.34	6mm	.16
BP79P	2.16	3.14	4.92	5.86	1.97	1.41	1.73	4.40	6mm	.50
CP79P	2.16	3.81	7.00	8.74	2.76	1.85	1.96	5.00	8mm	.62
DP79P	2.16	5.15	9.21	11.49	2.76	2.36	2.55	6.49	8mm	.75

Dimensions (INCHES)
ACTUATOR WITH POSITIONER

ACTUATOR SIZE	B	C	E		A	
			A-A	A-S	3-15 psi	4-20 mA
AP79P	1.75	2.56	4.22	5.55	2.28	4.15
BP79P	2.16	3.14	4.92	5.86	2.28	4.15
CP79P	2.16	3.81	7.00	8.74	2.28	4.15
DP79P	2.16	5.15	9.21	11.49	2.28	4.15

Air
CONSUMPTION

MODEL NO.	Cubic Inches
AP79P	6.0
BP79P	9.0
CP79P	19.5
DP79P	52.0