
VB Series Pneumatic Actuators and Accessories

Features & Benefits

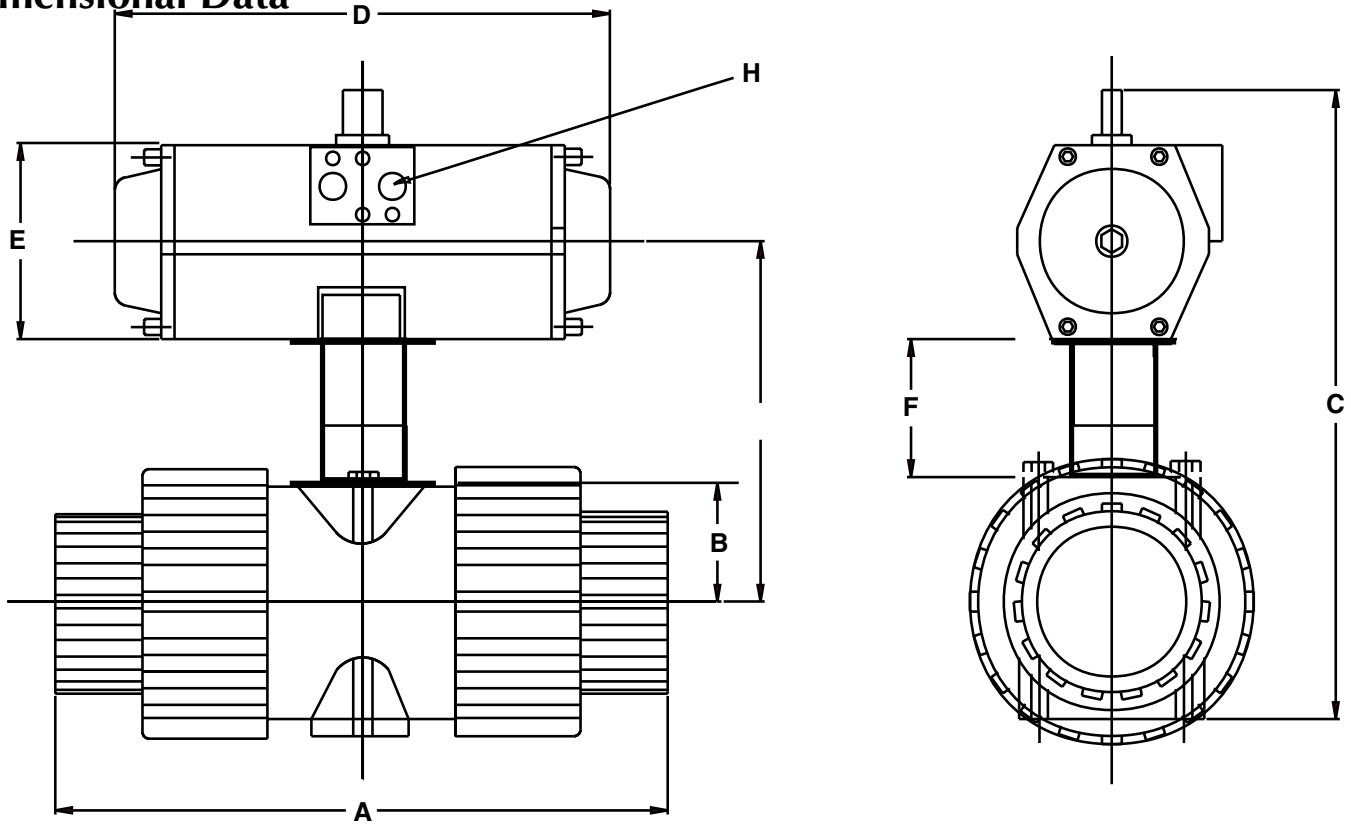
- The SIMTECH rack & pinion pneumatic actuator produces linear torque output in a compact design utilizing the same body and end caps for double acting and spring return units.
- NAMUR VDI/VDE 3845 and ISO 5211 dimension on all sizes. No special blocks are required to mount solenoid valves, limit switches or positioners.
- The standard angle of rotation is 90°. Additional travel rotations of 120°, 135°, 150° and 180° are available. Actuators feature a travel stop with $\pm 10^\circ$ adjustment in both open and close directions.
- The bottom plate design secures a captive pinion (anti-blowout system) and permits flexibility in mounting by retaining AISI 304 nuts (standard) or AISI 304 bolts (optional) in either dual ISO patterns.
- All pinions are supplied with anti-blowout retention in both directions.
- The female pinion drive is standard with a double square output drive.
- Shaft bearings isolate the pinion gear from the housing and support the shaft for high cycle applications.
- The pinion teeth are engaged for the full length and stroke of the piston. The pinion height allows manual override without disturbing the position indication.
- Extruded aluminum body is internally machined and lapped to exact specifications. All internal and external surfaces are anodized for corrosion resistance.
- External open/closed indicator is standard, available for all rotations.
- Pistons incorporate double wear pads to separate the rack from the actuator wall and serve as both guide and wear bearings.
- Epoxy coated special steel springs are pre-loaded with nonmetallic materials. The stainless steel end cap fasteners are extra long to allow for spring relaxation. All parts are corrosion resistant.
- Air pressure operation from 40 to 150 PSI. Water, nitrogen and compatible hydraulic fluids may also be used to power the actuator.
- All external fasteners are corrosion resistant stainless steel.
- All units are permanently lubricated at the factory with non-silicone grease.
- All units are factory pressure and leak tested, and externally stamped with a progressive traceable serial number.

Accessories & Options

- Electroless Nickel Plating available for improved exterior corrosion resistance.
- Limit Switches with corrosion resistant technopolymer enclosure available in NEMA 4 (Standard) & NEMA 7.
- Solenoid valves with standard NAMUR mount available in 110 VAC (standard), 12 VDC, 24VDC, 24 VAC, 48 VAC, & 220 VAC.
- Positioners for modulating service controlled with a 3-15psi signal or 4-20mA signal.

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Dimensional Data



Double Acting Actuator							
Dia. Inches	A	B	C	D	E	F	H
1/2	5.20	1.08	7.35	4.69	3.58	1.60	1/4 NPT
3/4	5.20	1.08	7.35	4.69	3.58	1.60	1/4 NPT
1	5.67	1.30	7.78	4.69	3.58	1.60	1/4 NPT
1 1/4	6.50	1.61	8.97	4.69	3.58	2.16	1/4 NPT
1 1/2	6.73	1.93	9.60	4.69	3.58	2.16	1/4 NPT
2	7.87	2.36	11.25	6.30	4.37	2.16	1/4 NPT
2 1/2	10.75	6.69	13.83	6.30	4.37	2.78	1/4 NPT
3	11.93	7.28	15.27	6.50	5.22	2.78	1/4 NPT
4	12.83	10.35	18.34	6.50	5.22	2.78	1/4 NPT

Spring Return Actuator							
Dia. Inches	A	B	C	D	E	F	H
1/2	5.20	1.08	7.35	4.69	3.58	1.60	1/4 NPT
3/4	5.20	1.08	7.35	4.69	3.58	1.60	1/4 NPT
1	5.67	1.30	7.78	4.69	3.58	1.60	1/4 NPT
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