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# VP Series Pneumatic Actuators and Accessories

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## 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.

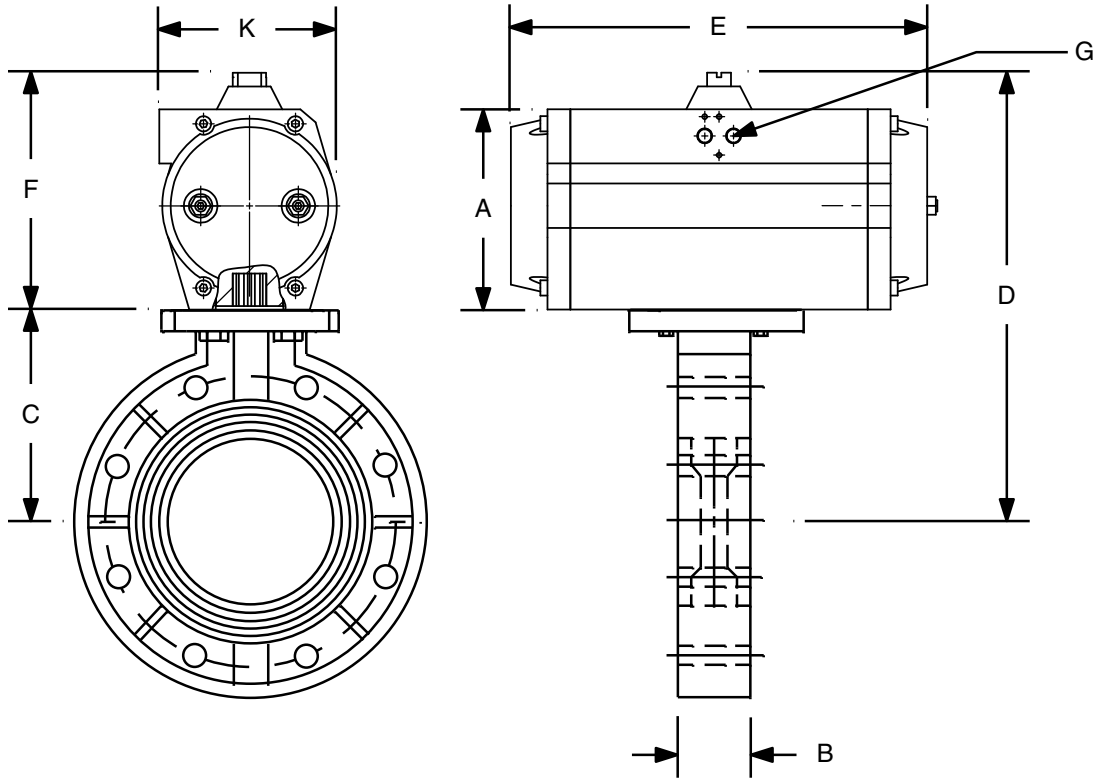
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## Accessories & Options

- 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.

# VP Series Pneumatic Actuators and Accessories

## Dimensional Data



Spring Return									
Size	A	B	C	D	E	F	G	K	Actuator
2"	4.39	1.67	4.17	9.74	6.89	5.57	¼" NPT	3.98	UT-19-SR3
2.5"	3.86	1.85	4.53	9.57	9.41	5.04	¼" NPT	3.78	MT-26-SR4
3"	4.61	1.85	4.61	10.40	9.06	5.79	¼" NPT	4.49	MT-31-SR3
4"	6.06	2.24	5.43	12.67	9.69	7.24	¼" NPT	5.10	MT-36-SR4
6"	6.63	2.76	7.05	14.86	13.82	7.81	¼" NPT	5.71	MT-46-SR3
8"	7.95	3.35	8.25	17.38	14.21	9.13	¼" NPT	7.13	MT-51-SR3
10"	7.95	4.29	9.43	18.56	16.46	9.13	¼" NPT	7.13	MT-56-SR5
12"	10.12	5.18	11.73	23.03	17.48	11.30	¼" NPT	9.13	MT-61-SR4
14"	13.07	5.00	11.81	26.06	23.11	14.25	¼" NPT	13.07	UT-71-SR4
16"	13.07	6.54	13.58	27.83	23.11	14.25	¼" NPT	13.07	UT-71-SR5
18"	13.07	7.05	14.57	28.82	23.11	14.25	¼" NPT	13.07	UT-71-SR5
20"	13.07	7.44	16.14	30.39	23.11	14.25	¼" NPT	13.07	UT-71-SR6
24"	13.07	8.23	18.90	33.15	26.65	14.25	¼" NPT	13.07	UT-76-SR6

Double Acting									
Size	A	B	C	D	E	F	G	K	Actuator
2"	3.54	1.67	4.17	8.90	6.30	4.72	¼" NPT	3.39	UT-14
2½"	3.54	1.85	4.53	9.25	6.30	4.72	¼" NPT	3.39	UT-14
3"	3.54	1.85	4.61	9.33	6.30	4.72	¼" NPT	3.39	UT-14
4"	4.39	2.24	5.43	11.00	6.89	5.57	¼" NPT	3.98	UT-19
6"	3.86	2.76	7.05	12.09	9.41	5.04	¼" NPT	3.78	MT-26
8"	6.06	3.35	8.25	15.49	9.69	7.24	¼" NPT	5.10	MT-36
10"	6.63	4.29	9.43	17.24	13.82	7.81	¼" NPT	5.71	MT-46
12"	6.63	5.18	11.73	19.54	13.82	7.81	¼" NPT	5.71	MT-46
14"	7.95	5.00	11.81	20.94	16.46	9.13	¼" NPT	7.13	MT-56
16"	10.12	6.54	13.58	24.88	17.48	11.30	¼" NPT	9.13	MT-61
18"	10.12	7.05	14.57	25.87	17.48	11.30	¼" NPT	9.13	MT-61
20"	10.12	7.44	16.14	27.44	17.48	11.30	¼" NPT	9.13	MT-61
24"	10.12	8.23	18.90	30.20	19.76	11.30	¼" NPT	9.13	MT-66