
TBB Series Pneumatic Actuators and Accessories

Features & Benefits

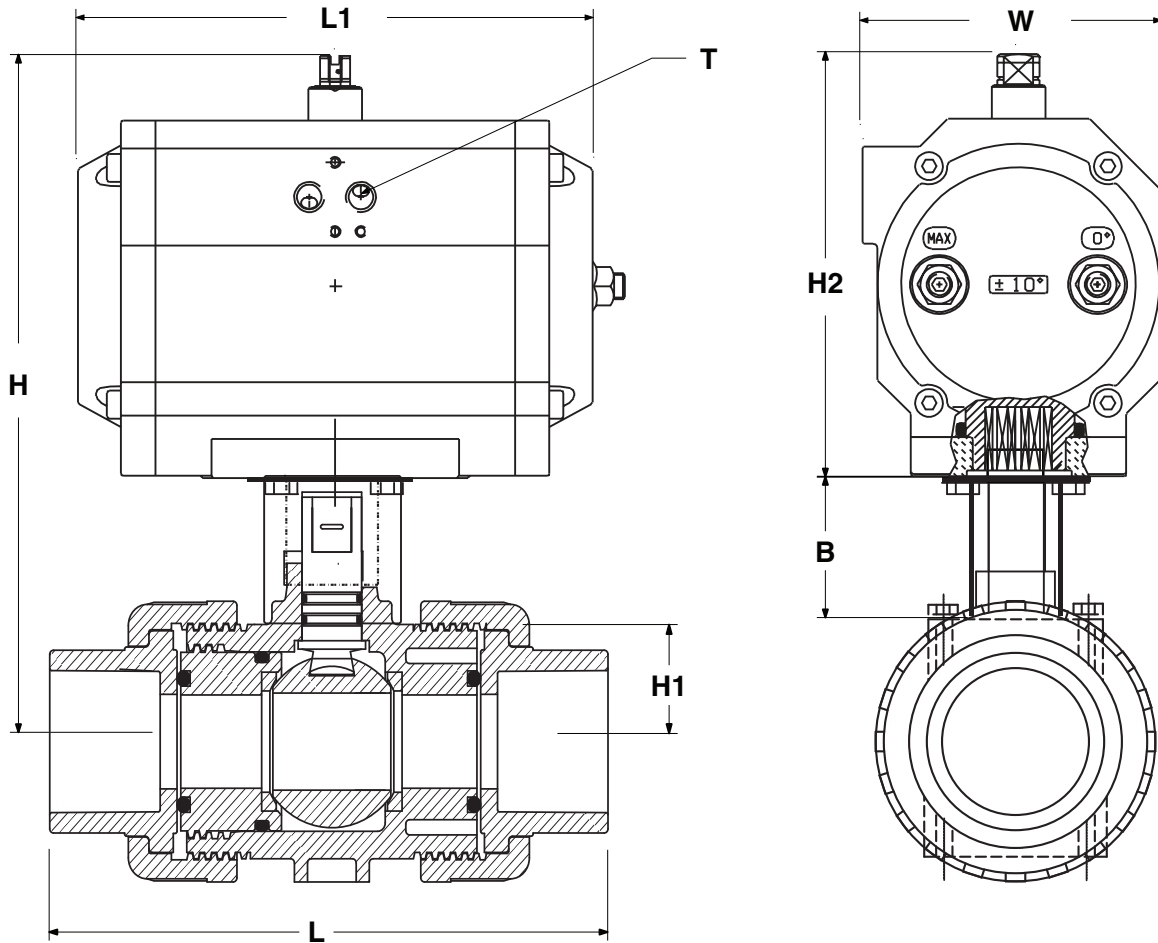
- The SIMTECH rack & pinion pneumatic actuator produces linear torque output in a compact design utilizing the same body and end caps for double acting and spring return units.
- NAMUR VDI/VDE 3845 and ISO 5211 dimension on all sizes. No special blocks are required to mount solenoid valves, limit switches 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.

TBB Series Pneumatic Actuators and Accessories

Dimensional Data



Spring Return									
Size	B	H	H1	H2	PVC & CPVC L	PP & PVDF L	L1	W	T
½"	1.10	0.83	0.83	3.58	4.49	4.27	4.69	2.64	¼" NPT
¾"	1.57	1.02	1.02	3.58	5.31	4.87	4.69	2.64	¼" NPT
1"	1.57	1.30	1.30	4.37	5.87	5.45	6.30	3.39	¼" NPT
1¼"	2.17	1.54	1.54	4.37	6.69	6.10	6.30	3.39	¼" NPT
1½"	2.17	1.61	1.61	4.37	6.93	6.10	6.30	3.39	¼" NPT
2"	2.17	2.05	2.05	4.76	8.15	7.20	6.89	3.35	¼" NPT
2½"	2.78	2.56	2.56	5.06	10.83	9.57	9.41	3.70	¼" NPT
3"	2.78	2.95	2.95	5.83	11.97	10.59	9.06	4.49	¼" NPT
4"	2.78	4.06	4.06	7.32	13.07	11.30	9.69	5.12	¼" NPT

Double Acting									
Size	B	H	H1	H2	PVC & CPVC L	PP & PVDF L	L1	W	T
½"	1.10	5.51	0.83	3.58	4.49	4.27	4.69	2.64	¼" NPT
¾"	1.57	6.18	1.02	3.58	5.31	4.87	4.69	2.64	¼" NPT
1"	1.57	6.46	1.30	3.58	5.87	5.45	4.69	2.64	¼" NPT
1¼"	2.17	7.28	1.54	3.58	6.69	6.10	4.69	2.64	¼" NPT
1½"	2.17	7.36	1.61	3.58	6.93	6.10	4.69	2.64	¼" NPT
2"	2.17	8.58	2.05	4.37	8.15	7.20	6.30	3.39	¼" NPT
2½"	2.78	9.70	2.56	4.37	10.83	9.57	6.30	3.39	¼" NPT
3"	2.78	10.49	2.95	4.76	11.97	10.59	6.89	3.35	¼" NPT
4"	2.78	11.59	4.06	4.76	13.07	11.30	6.89	3.35	¼" NPT