

DSA-Series

Single-Acting Spring Diaphragm

DSA-Series actuators are designed for rugged, long-life performance. The large diaphragm area allows operation with low pneumatic pressures with an opposing spring providing either Fail-Closed (standard) or Fail-Open (optional) action. A variety of positioners and other instruments can be mounted directly to the actuator.



Features:

- **Reliability** – Rugged construction with minimal moving parts ensures long life with low maintenance requirements.
- **Interchangeability** – Actuator yokes incorporate standard industry mounting bosses for universal interchangeability.
- **Protective Coatings** – External surfaces are powder coated for maximum protection against harsh environments; special coatings (including offshore epoxy) are also available.
- **Instrument Mounting** – kits are available with mounting for most commercial positioners for field standardization.

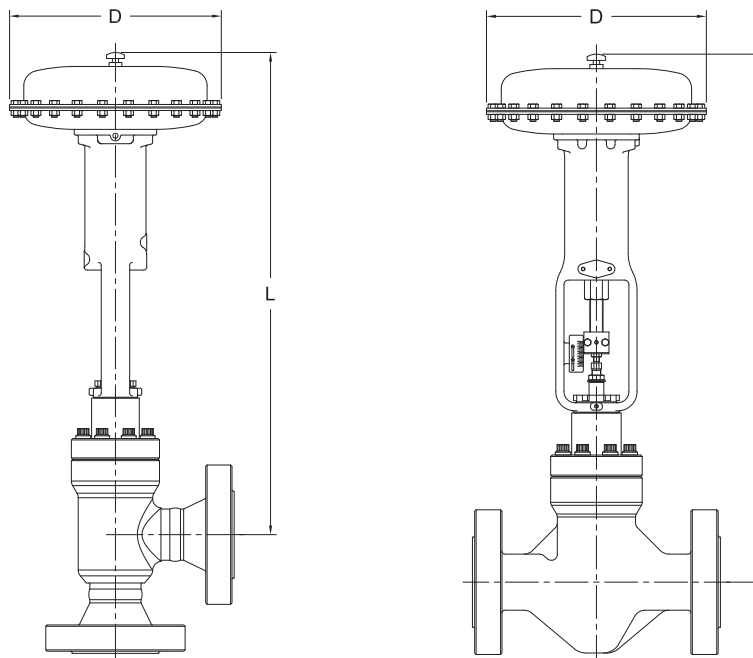
SPECIFICATIONS	
Action	Model DSA: Air to Open, Fail Closed (ATO-FC) Model DSA-FO: Air to Close, Fail Open (ATC-FO)
Diaphragm Area	DSA069: 69 in. ² (445 cm ²) DSA105: 105 in. ² (677 cm ²) DSA156: 156 in. ² (1006 cm ²) DSA220 & DSA2204: 220 in. ² (1419 cm ²)
Operating Medium	Instrument air; sweet instrument gas also available
Operating Pressure	3–15 psig (0.2–1.0 barg) or 6–30 psig (0.4–2.0 barg)
Maximum Supply Pressure	DSA069: 70 psig (4.8 barg) DSA105: 65 psig (4.5 barg) DSA156: 55 psig (3.8 barg) DSA220 & DSA2204: 50 psig (3.4 barg)
Operating Temperature	–40°F to +180°F (–40°C to +82°C)
Control Signal*	3–15 psig (0.2–1.0 barg), 6–30 psig (0.4–2.0 barg), 4–20 mA, HART, Fieldbus, or Profibus
Hazardous Area Certification*	CSA/FM/UL: Explosion Proof or Intrinsically Safe ATEX: Intrinsically Safe or Flameproof

*dependent on positioner

DSA-Series

Single-Acting Spring Diaphragm

DSA-Series actuators are available in 4 diaphragm sizes with a variety of springs to meet the thrust requirements. Additional options such as manual handwheel overrides, adjustable travel stops, and special materials are also available. Positioners can be selected to meet various hazardous-area certification requirements.



	DSA069		DSA105		DSA156		DSA220		DSA2204	
Weight =	50 lbs. (23 kg)		90 lbs. (41 kg)		121 lbs. (55 kg)		254 lbs. (115 kg)		274 lbs. (124 kg)	
D =	13.12 in. (333 mm)		16.00 in. (406 mm)		18.62 in. (473 mm)		21.12 in. (536 mm)		21.12 in. (536 mm)	
Valve Model	L		L		L		L		L	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
P1E	30.06	764	36.94	938	36.94	938	-	-	-	-
C1E	31.38	797	38.25	972	38.25	972	-	-	-	-
P2E	31.50	800	38.38	975	38.38	975	43.12	1095	-	-
C2E	33.25	845	40.12	1019	40.12	1019	44.88	1140	-	-
P25E	-	-	38.50	978	38.50	978	43.19	1097	-	-
C25E	-	-	40.25	1022	40.25	1022	44.94	1141	-	-
P3E	-	-	42.38	1076	42.38	1076	48.00	1219	-	-
C3E	-	-	44.81	1138	44.81	1138	50.38	1280	-	-
P35E	-	-	-	-	-	-	53.50	1359	58.88	1495
P4E	-	-	-	-	-	-	53.50	1359	58.88	1495
C4E	-	-	-	-	-	-	57.25	1454	62.62	1591