

Swagelok Pneumatic Actuators



The Swagelok rack and pinion pneumatic actuator is compact, lightweight, easily mountable, and can be operated with standard shop air. The actuators are available in spring-return and double-acting modes.

For technical data, including materials of construction, air displacement, and weight, see the *Swagelok Ball Valve Actuation Options* catalog, MS-02-343.

⚠ Actuated assemblies must be properly aligned and supported. Improper alignment or inadequate support of the actuated assembly may result in shorter valve life.

Ordering Information

Factory-Assembled Actuators

Typical Ordering Number

SS - AFSS6 - 33 D HT

Valve Ordering Number

Actuator Model

Actuation Mode

- D** = Double acting
- C** = Normally closed spring return
- O** = Normally open spring return

Actuator Service

- None** = Standard
- HT** = High temperature
- LT** = Low temperature^①

^① Maximum working pressure for valves mounted to low-temperature service actuators is 4500 psig (310 bar).

For dual-mounted assemblies (two valves mounted to one actuator), add **DM** to the ordering number. Example: SS-AFSS6-33DHTDM

Actuator Service Ratings

Actuator Service	Temperature °F (°C)	Maximum Actuator Pressure, psig (bar)	
		At 100°F (37°C)	At Maximum Temperature
Standard	-20 to 200 (-28 to 93)	200 (13.7)	165 (11.3)
High temperature	0 to 400 (-17 to 204)		100 (6.8)
Low temperature ^①	-40 to 200 (-40 to 93)		165 (11.3)

^① Maximum working pressure for valves mounted to low-temperature service actuators is 4500 psig (310 bar).

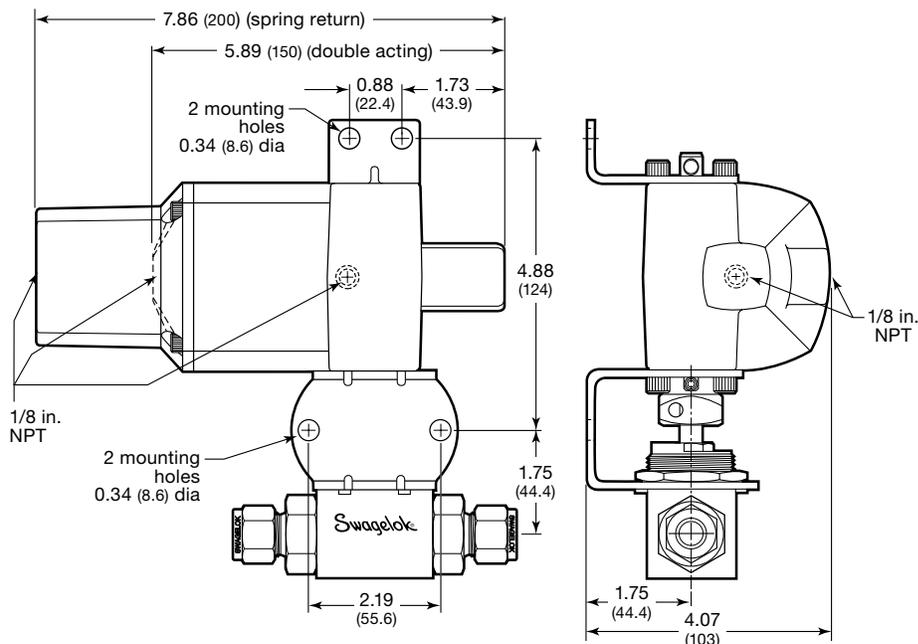
Actuator Pressure at Maximum System Pressure

Required pressures based on valve performance using pressurized air or nitrogen.

Actuator Model	Actuation Modes			
	Spring Return		Double Acting	
	Single	Dual	Single	Dual
	Minimum Actuator Pressure, psig (bar) at 100°F (37°C)			
133	80 (5.6)	—	40 (2.8)	80 (5.6)

Dimensions

Dimensions, in inches (millimeters), are for reference only and are subject to change.



Actuators for Field Assembly

Order one actuator kit and one mounting bracket kit for each valve.

Mounting bracket kit ordering number: **MS-MB-AFS-133**

Actuator Mode	Actuator Service	Kit Ordering Number
Spring return	Standard	MS-133-SR
	High temperature	MS-133-SR-HT
	Low temperature ^①	MS-133-SR-LT
Double acting	Standard	MS-133-DA
	High temperature	MS-133-DA-HT
	Low temperature ^①	MS-133-DA-LT

^① Maximum working pressure for valves mounted to low-temperature service actuators is 4500 psig (310 bar).