

ISO 5211-Compliant Pneumatic Actuators



Swagelok ISO 5211-compliant rack and pinion pneumatic actuators are suitable for general applications. They are available in spring-return and double-acting modes. On-off (2-way) valves require 90° actuation; switching (3-way) valves require 180° actuation.

Valve-actuator assemblies on this page are based on:

- maximum valve pressure
- ambient temperature (50 to 100°F [10 to 37°C])

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

For additional information on selecting and sizing ISO 5211-compliant actuators, see the *Actuated Ball Valve Selection Guide—ISO 5211-Compliant Actuator Mounting Bracket Kits*, MS-02-136.

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

Pressure-Temperature Ratings

Maximum actuator pressure is 116 psig (8.0 bar). See **Minimum Actuator Pressure** table below for minimum actuator pressures.

Actuator Service	Actuator Service Designator	Temperature Range °F (°C)
Standard	—	-40 to 176 (-40 to 80)
High temperature	HT	5 to 302 (-15 to 150)

83 Series Minimum Actuator Pressure

Valve Series	Actuator Model	Spring Return Model Designators		Double Acting Model Designator	Actuation Mode	
		Normally Closed	Normally Open		Spring Return	Double Acting
					Minimum Actuator Pressure, psig (bar)	
83 2-way	A10 (90°)	—	—	-A10D	—	36 (2.5)
	A15 (90°)	-A15C3	-A15O3	-A15D	43 (3.0)	36 (2.5)
83 3-way	A15 (180°)	—	—	-A15XD	—	36 (2.5)

H83 Series Minimum Actuator Pressure

Valve Series	Actuator Model	Spring Return Model Designators		Double Acting Model Designator	Actuation Mode	
		Normally Closed	Normally Open		Spring Return	Double Acting
					Minimum Actuator Pressure, psig (bar)	
H83 2-way	A10 (90°)	—	—	-A10D	—	43 (3.0)
	A15 (90°)	-A15C3	-A15O3	-A15D	43 (3.0)	36 (2.5)
H83 3-way	A15 (180°)	—	—	-A15XD	—	36 (2.5)

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Ordering Information

Factory-Assembled Valves with Actuators

Typical Ordering Number

A B C
SS-83KF2 -A15D HT

A Valve Ordering Number

B Actuator Model

Based on valve series, flow pattern, and actuation mode, select an actuator designator. See **Minimum Actuator Pressure** tables, page 13.

C Actuator Service

HT = High temperature
None = Standard

Kits for Field Assembly

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

Actuator Kit Typical Ordering Number

A B C D
MS - A15 - 3 - DIN -HT

A Actuator Model

Based on valve series, flow pattern, and actuation mode, select an actuator. See **Minimum Actuator Pressure** tables, page 13.

A10 = A10
A15 = A15

B Actuation Mode

DA = Double acting (2-way valves)
XDA = Double acting (3-way valves)
3 = Spring return

C Coupling Drive Type

DIN

D Actuator Service

-HT = High temperature
None = Standard

Mounting Bracket Kits

Swagelok ISO 5211 mounting bracket kits contain:

- 316 stainless steel mounting bracket
- four A4 stainless steel socket head cap screws (A4 is approximately equivalent to AISI 316.)
- 316 stainless steel coupling
- A4 stainless steel set screw
- instructions.

Kit ordering number: **SS-MB-83-F04-11DIN-M**