

1051M Series

Rotary Actuator

Sizes 30-60

The 1051M Series Diaphragm Rotary Actuator is a pneumatic spring-return actuator designed for use with rotary-shaft control valves. This is a direct-acting actuator, and an increase in the loading pressure extends the diaphragm rod out of the spring barrel. The 1051M Actuator is suitable for on-off service, or for throttling service when used with a valve positioner.

The stroking time is dependent on the actuator size, rotation, spring rate, initial spring compression and supply pressure. If the stroking time is critical for your application, consult Jordan Valve for proper settings.

The travel indicator is a combination graduated disk and pointer located on the actuator end of the valve shaft. Fixed travel stops are an available option.

Refer to the following table for additional specifications for the 1051M Actuator. Additional information specific to the actuator as shipped from the factory are stamped on the nameplate installed on the actuator.



Typical Dimension for Mark EWD Valve Bodies

SPECIFICATIONS

Operating Principle		Direct Acting
Actuator Sizes		30, 40, 60
Maximum Diaphragm Casing Pressure	Size 30	80 psig (5,5 bar)
	Size 40	65 psig (4,5 bar)
	Size 60	40 psig (2,8 bar)
Maximum Valve Shaft Rotation		90° with optional fixed stops
Acceptable Valve Shaft Diameters In. (mm)	Size 30	1/2" (12,7 mm), 5/8" (15,9 mm), 3/4" (19,1 mm)
	Size 40	1/2" (12,7 mm), 5/8" (15,9 mm), 3/4" (19,1 mm), 7/8" (22,2 mm), 1" (25,4 mm), 1-1/4" (31,8 mm)
	Size 60	3/4" (19,1 mm), 7/8" (22,2 mm), 1" (25,4 mm), 1-1/4" (31,8 mm), 1-1/2" (38,1 mm), 1-3/4" (44,5 mm) or 2" (50,8 mm)
Material Temperature Capabilities	Nitrile Diaphragm	-40° to 180°F (-40° to 82°C)
Pressure Connections		1/4" NPT Female

APPROX. ACTUATOR WEIGHT

Size	Cast Iron Construction		Aluminum Construction	
	Lb	Kg	Lb	Kg
30	65	29	55	25
40	94	43	86	39
60	197	89	175	79

1. Cast iron spring barrel and housing
2. Sizes 30, 40 and 60: aluminum spring barrel, and housing cover



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