

SmartX MS41-7183

160 lb-in (18 Nm) Direct-coupled Damper Actuator
Spring Return



Product Description

The SmartX MS41-7183 spring return, 160 lb-in (18 Nm) electronic damper actuator provides modulating control of building HVAC dampers. It comes with a 3' plenum cable to aid in installation.

The actuator is suited for fail-safe application in constant or variable air volume installations for the control of supply/return air, mixed air, exhaust, rooftop units, and bypass dampers.

Specifications

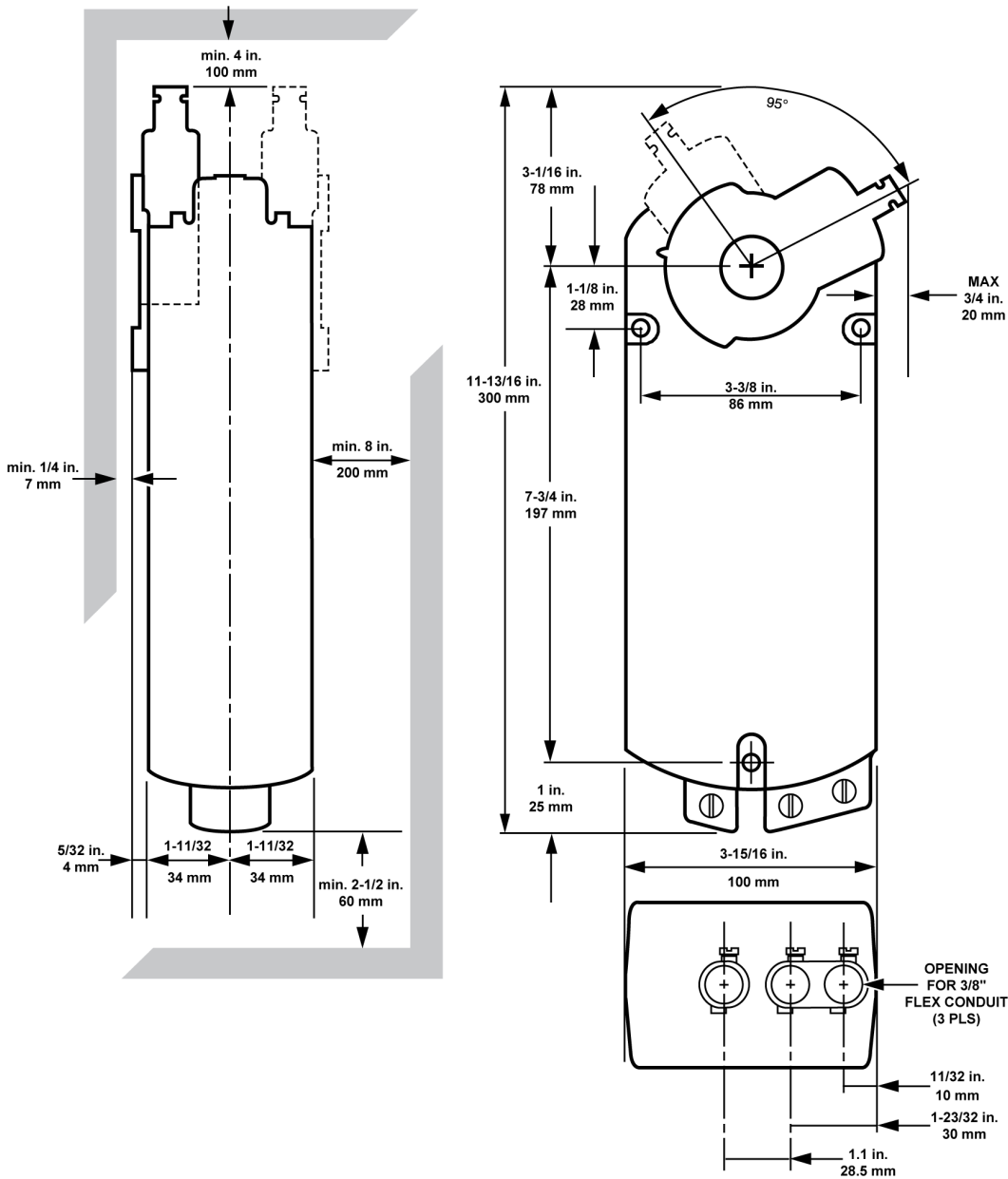
Torque	160 lb-in (18 Nm) running and spring return <360 lb-in (40 Nm) maximum At -25°F, spring return is 142 lb-in (16 Nm)
Runtime for 90°	90 sec. operating, 15 sec. typical (30 sec. max.) closing on power loss
Frequency	50/60 Hz
Power consumption	
Running	7 VA/5W (24 Vac/dc)
Holding	5 VA/3W (24 Vac/dc)
Equipment rating (24V)	Class 2 per UL/CSA
Noise level	<45 dBA (running)
Angle of rotation	90° nominal, 95° max.
Shaft dimensions:	3/8-in to 1-in (8 to 25.6 mm) dia.
1/4-in to 3/4-in (6 to 18 mm) sq.	
3/4-in (20 mm) min. length	
Operating temperature	-25...130 °F (-32...55 °C)
Storage temperature	-40...158 °F (-40...70 °C)
Ambient humidity	95% rh (non-condensing)
Pre-cabled connection	18 AWG, 3 ft (0.9 m) long
Enclosure	NEMA 2, IP54 per EN 60529
Material	Die cast aluminum alloy
Agency listings	CE, UL873, cUL C22.2 No. 24-93
Gear Lubrication	Silicone-free
Weight	4.85 lb (2.2 kg)
Dimensions	11-13/16" (300 mm) H 4 3/4" (120 mm) W 2-7/8 in (72 mm) D

Features

- Brushless DC motor technology with stall protection
- Bi-directional fail-safe spring return
- Patented self-centering shaft coupling
- Modulating control
- Built-in position feedback
- All metal housing
- Manual override
- 5° preload as shipped from factory
- Mechanical range adjustment capability by moving shaft coupling to desired position
- Easily visible position indicator
- Precabled

Dimensions

Figure 1. Dimensions of SmartX MS41-7183 Damper Actuator (Millimeters)



Wiring Diagrams

Figure 2. Modulating Control, 0...10 Vdc

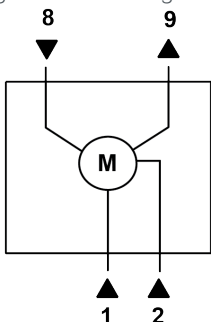


Table 1. Wire Designations

Symbol	Function	Terminal Connection	Color	
			Standard	Plenum
1	Supply (SP)	G	Red	Red
2	Neutral (SN)	G0	Black	Black
8	Input Signal 0...10 Vdc	Y	Gray	Gray
9	Position Output 0...10 Vdc	U	Pink	Pink