

Description

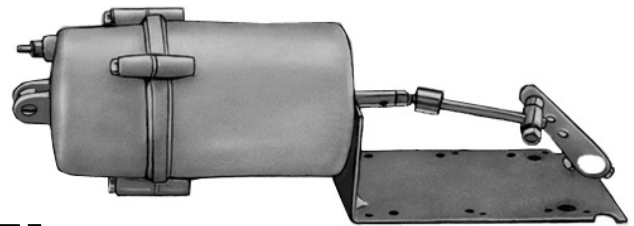
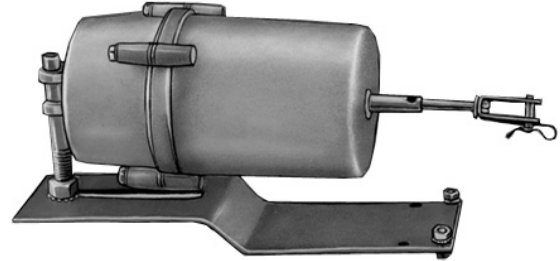
This series of actuators is designed for use in Smoke Control Systems. The actuators position automatic smoke dampers in ambient, or elevated temperatures up to 450°, for 30 minutes. The units may be used for gradual or two-position applications.

MCP-5145s are manufactured and tested to meet Underwriters Laboratories Standard UL555S for use on "Leakage Rated Dampers For Use In Smoke Control Systems".

Models are available with either post or right angle bracket mounting. Right angle models are shipped with crankarms for either 1/2" or 3/8" damper shafts. A variety of spring and bracket/linkage combinations are available to meet most requirements.

Features

- ◆ Meets Underwriters Laboratories Standard UL555S
- ◆ Gradual or two-position operation
- ◆ Post or right angle mounting
- ◆ Variety of springs and bracket/linkage choices



Models

Using the table below choose the model appropriate for your application. Choose one number for "X" and one for "YYY"

MCP-5145—X—YYY

"X" Spring Ranges & Retracted/Extended Torque (Based on 0 and 20 psi applied, at 90°)

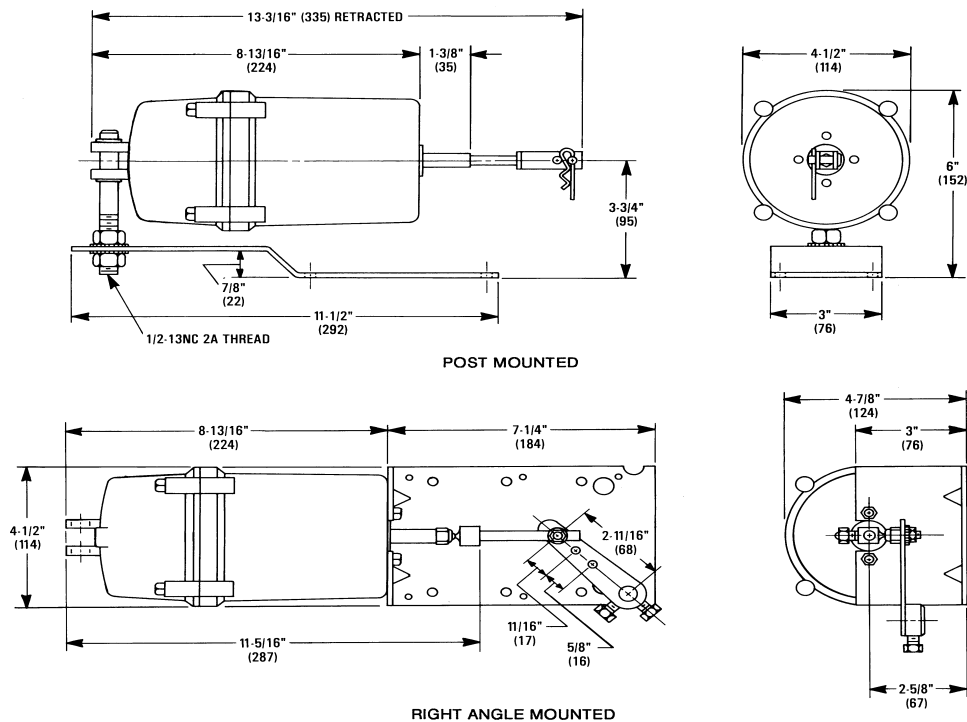
- 2: 3–12 psi; 66/176 in. lbs. (21-83 kPa; 7/20 N•m)
- 3: 5–10 psi; 110/220 in.lbs.(34–69 kPa; 12/25 N•m)
- 5: 8–13 psi; 176/154 in.lbs.(55–90 kPa; 20/17 N•m)
- 6: 10–15 psi; 220/110 in.lbs. (69–103 kPa; 25/12 N•m)
- 8: 4–8 psi; 88/264 in. lbs. (28–55 kPa; 10/19 N•m)

"YYY" Bracket/Linkage

- 520: post mounted with clevis
- 208: right angle mounted with balljoint
- 211: right angle mounted with 1/2" crankarm
- 212: right angle mounted with 3/8" crankarm

Details

All dimensions in inches (mm).



Damper Type	Up to 1000 FPM	1000 to 2500 FPM	2500 to 3000 FPM
Opposed blades without seals	3 in-lb / sq.-ft	4.5 in-lb / sq.-ft	6 in-lb / sq.-ft
Parallel blades without seals	4 in-lb / sq.-ft	6 in-lb / sq.-ft	8 in-lb / sq.-ft
Opposed blades with seals	5 in-lb / sq.-ft	7.5 in-lb / sq.-ft	10 in-lb / sq.-ft
Parallel blades with seals	7 in-lb / sq.-ft	10.5 in-lb / sq.-ft	14 in-lb / sq.-ft

Specifications

Effective Area 11 sq. inches (71 sq. cm)

Stroke 4" (102 mm)

Control Signal Pressure Input

0-20 psig (138 kPa) operating 30 psig (207 kPa) maximum *See note under Temperature Limits*

Supply Connection 1/8" (3 mm) FPT supplied with brass compression fitting for 1/4" (6 mm) OD tubing

Material

Body Die-cast aluminum
 Diaphragm Silicone
 Piston Glass-filled nylon
 Shaft CRS with nickel plating
 Bearings Glass-filled nylon

Weight 4.5 lbs. (2.04 kg)

Temperature Limits

NOTE: If application requires operation near maximum temperature AND maximum pressure, the actuator should be piped in hard copper.

Operating -20° to 250° F (-29° to 121° C)
 Shipping -40° to 250° F (-40° to 121° C)
 Elevated 450° F (232° C) for 30

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