

Descriptions







This series of actuators is designed for use in Smoke Control Systems. At elevated temperatures up to 450° F, the actuators position automatic smoke dampers for up to 30 minutes (or indefinitely within normal operating temperatures). They are manufactured and tested to meet Underwriters Laboratories Standard UL555S for use on "Leakage Rated Dampers For Use In Smoke Control Systems."

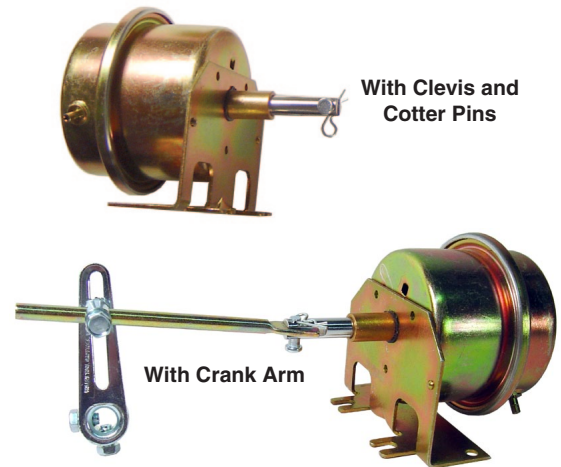
The actuators may be used for gradual or two-position applications. Models come with right-angle bracket mounting. A variety of spring and linkage combinations are available.

Features

- ◆ Operate for up to 30 minutes at elevated temperatures of up to 450°
- ◆ Gradual or two-position operation
- ◆ Variety of springs and linkage choices
- ◆ Meets Underwriters Laboratories Standard UL555S

Accessories

HPO-0004	Retainer, bracket	
HPO-0005	Clevis pin	
HPO-0006	Cotter pin	
VTD-1611	Push rod	
VTD-1403	Short crank arm for 3/8" shafts	
VTD-1404	Short crank arm for 1/2" shafts	



Models

Using the table below choose the model appropriate for your application. Choose one number for "X" spring range and one for "YYY" linkage (e.g., MCP-80352101).

MCP-8035-X-YYY

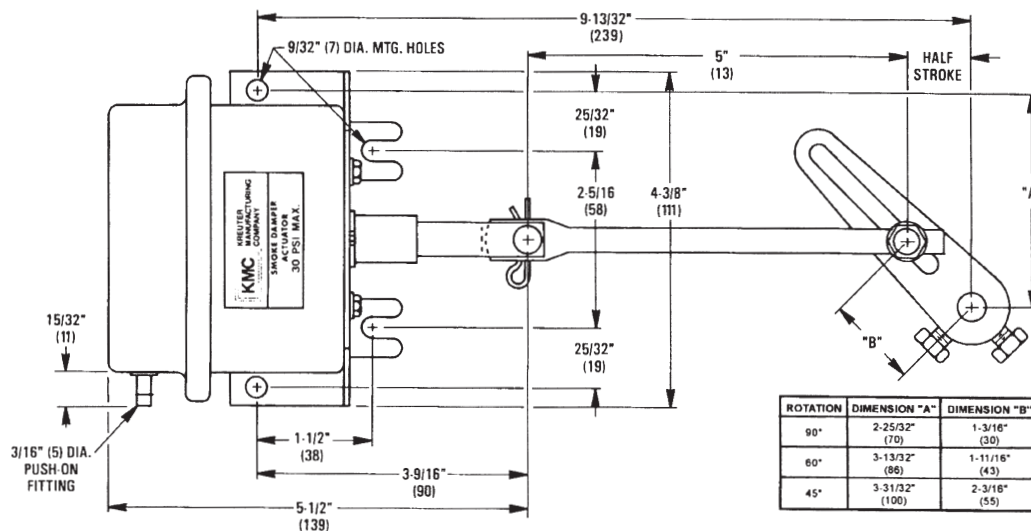
"X" Spring Ranges and Retracted/Extended Torque
(Based on 0 and 20 psi applied, at 90°)

- 2: 3 to 12 psi, 20/54 in.-lbs. (21–83 kPa, 2/6 N•m)
- 3: 5 to 10 psi, 34/67 in.-lbs. (34–69 kPa, 4/8 N•m)
- 5: 8 to 13 psi, 54/47 in.-lbs. (55–90 kPa, 6/5 N•m)
- 8: 4 to 8 psi, 27/81 in.-lbs. (28–55 kPa, 3/9 N•m)

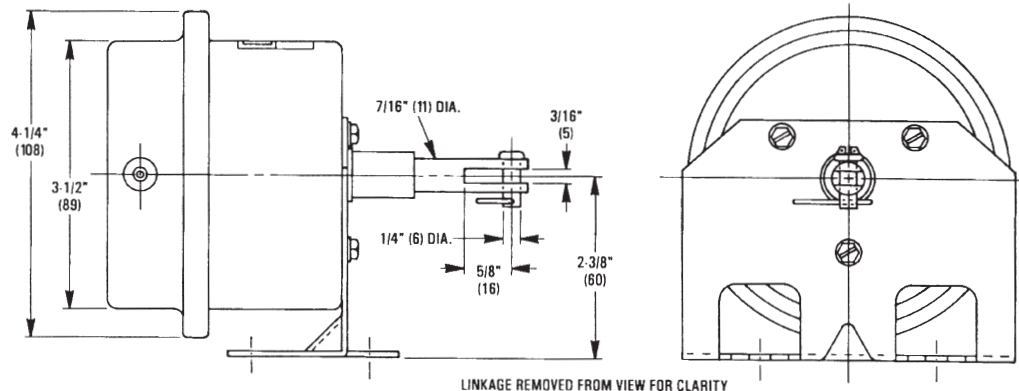
"YYY" Linkage

- 101: with clevis pin and cotter pin (only)
- 111: with crank arm for 1/2" diameter shafts
- 112: with crank arm for 3/8" diameter shafts

DAMPER TYPE	Up to 1000 FPM	1000 to 2500 FPM	2500 to 3000 FPM
Opposed Blade without seals	3 in.-lb. / sq.-ft	4.5 in.-lb. / sq.-ft	6 in.-lb. / sq.-ft
Parallel Blade without seals	4 in.-lb. / sq.-ft	6.0 in.-lb. / sq.-ft	8 in.-lb. / sq.-ft
Opposed Blade with seals	5 in.-lb. / sq.-ft	7.5 in.-lb. / sq.-ft	10 in.-lb. / sq.-ft
Parallel Blade with seals	7 in.-lb. / sq.-ft	10.5 in.-lb. / sq.-ft	14 in.-lb. / sq.-ft



All dimensions in inches (mm).



CAUTION

Pneumatic devices must be supplied with clean, dry control air. Any other medium (e.g., oil or moisture contamination) will cause the device to fail.

Specifications

Effective Area	8 sq. inches (52 sq. cm)
Stroke	1-11/16" (43 mm)
Supply Connection	3/16" (5 mm) OD metal fittings
Supply Pressure	0 to 20 psi (138 kPa) operating, 30 psi (207 kPa) maximum

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

Temperature Limits

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

Weight	2.0 lbs. (0.9 kg) or 2.3 lbs. (1.04 kg) with crank arm
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Approvals	UL Recognized for UL555S
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Material

Body	CRS with zinc and dichromate
Diaphragm	Silicone
Piston	Glass-filled nylon
Shaft	CRS with nickel plating
Bearings	Bronze

Spring Ranges and Retracted/Extended Torque

(Based on 0 and 20 psi applied at 90°)

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