

APPLICATION

The M693 Series Piston Damper Actuators with 8 in.² (51.6 cm²) effective area are all metal actuators designed to position dampers primarily in HVAC terminal air unit applications upon receipt of an air pressure signal from a control device. These actuators can be used for either gradual or positive action applications.

These actuators are equipped with a right angle mounting bracket and linkage for 1/2" diameter damper shaft. The air connection is in the center of the cap, thus allowing easy connection.

SPECIFICATIONS

Construction:

Actuator & Bracket, CRS/zinc dichromate plating.

Shaft, Aluminum.

Diaphragm, Neoprene.

Stroke: 2" (50.8 mm).

Spring: Retract actuator shaft on loss of air pressure.

Torque: 23 lb.-in. (2.6 N-m) Maximum.

Nominal Damper Area: 6 ft.² (0.5 m²).

Environment:

Ambient Temperature Limits, -20 to 180°F (-29 to 82°C).

Supply Air Pressure: Clean, dry, oil free air required (ref. EN-123).

Maximum, 30 psig (207 kPa).

Connections: Fitting for 1/4" O.D. plastic tubing.

Adjustments: None.

Mounting: These actuators are provided with all hardware required to operate a 1/2" O.D. extended shaft thru 90° rotation (See Figure 1 for assembly details).

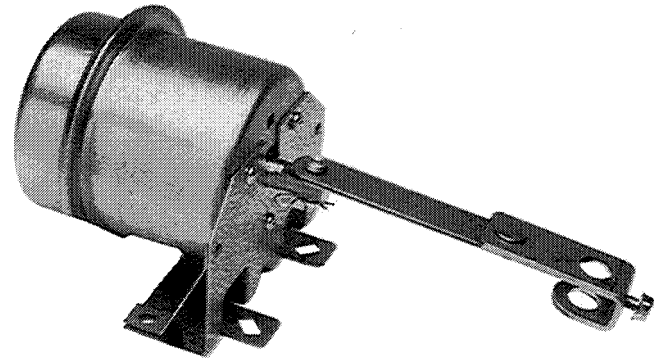
Dimensions: See Figure 1.

ACCESSORIES

AM-132	Ball joint
N800-1414	3/8" crank arm
N800-1415	1/2" crank arm
N800-1612	6" eyerod

Table-1 Specifications.

Model Number	Spring Range	Mounting
M693-8095-P	4 - 8	Right Angle (Linkage INcluded)
M693-3095-P	5 - 10	
M693-5095-P	8 - 13	



**Typical Actuator
(Shown with Linkage Assembled)**

PRE-INSTALLATION

Inspection

Visually inspect the carton for damage. If damaged, notify the appropriate carrier immediately. Visually inspect the device for obvious damage due to shipping. Return damaged parts.

Required Installation Items

- Piping diagrams
- Tools (not provided)
Appropriate screwdriver(s) for mounting screws
- Mounting screws (not provided)
- Appropriate accessories

INSTALLATION

Caution:

1. Installer must be a qualified, experienced technician.
2. Make all connections in accordance with the piping diagram.
3. Do not locate the device in areas subjected to excessive vibration or corrosive atmospheres.
4. Do not exceed ratings of the device.

Clean, Dry Oil Free Air Supplies for Pneumatic Systems

Caution: A refrigerated air dryer, particulate filter and a coalescing filter will provide clean, dry, oil free air required (reference EN-123).

Compressor oil must be non-paraffin mineral base or naphtha base. Synthetic or paraffin base oils will destroy pneumatic controls and void the warranty.

MOUNTING INSTRUCTIONS

These actuators are provided with all hardware required to operate a 1/2" extended shaft thru 90° rotation. The linkage consists of a 1/8" thick galvanized link and u-shaped crankarm, joined by a shoulder-riquet. The crankarm has a single screw to clamp the crankarm to a 1/2" O.D. extended damper shaft.

To obtain higher operating torques, replace N800-1651 linkage (factory assembled to actuator) with the N800-1612 eye rod, AM-132 ball joint and the N800-1414 or N800-1415 crank arm. Nominal damper area can be 8 ft.²(0.7 m²) with the above linkage.

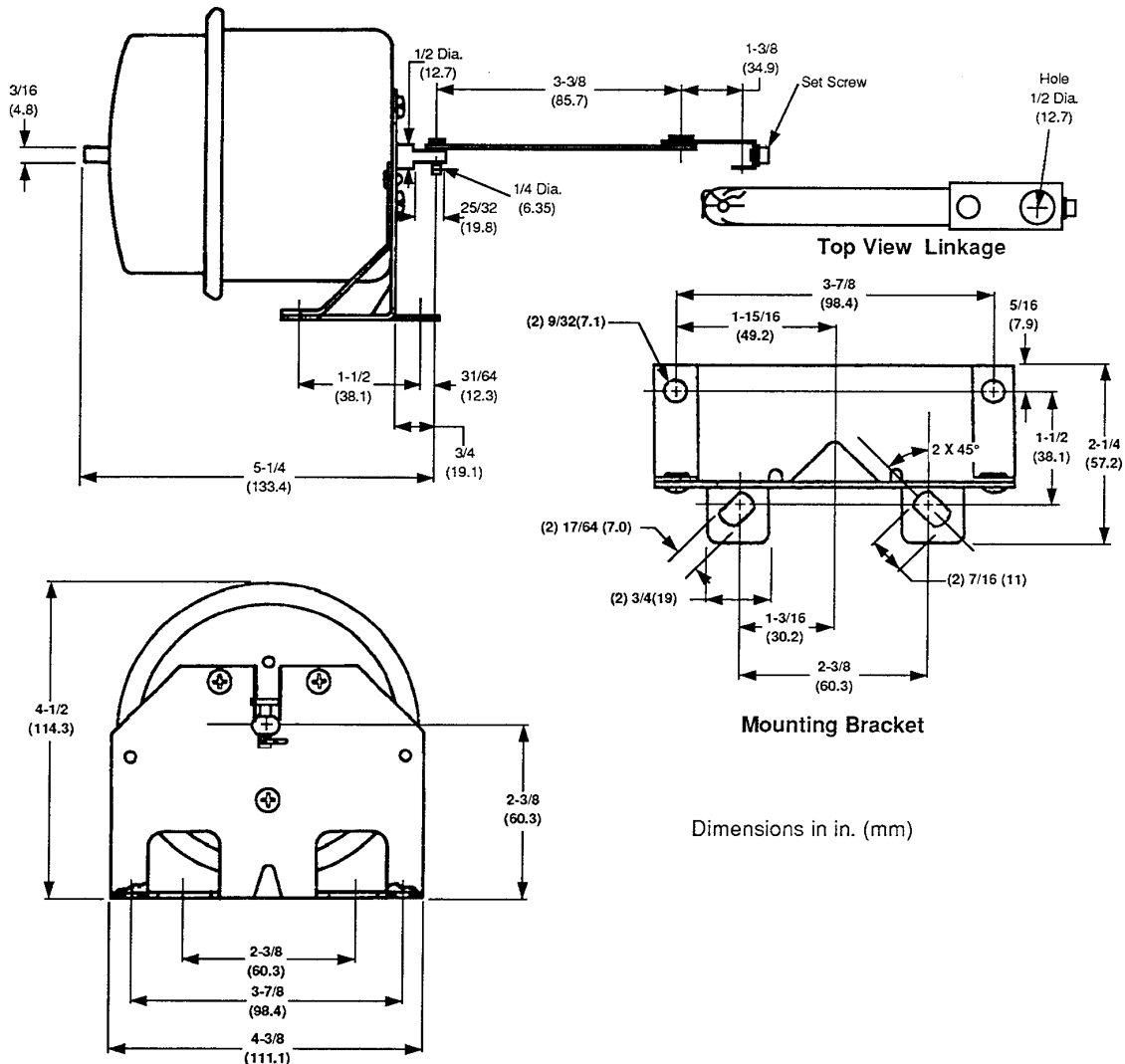
Caution: Shaft is held in position by diaphragm; do not attempt to rotate shaft with respect to actuator housing.

MAINTENANCE

Regular maintenance of the total system is recommended to assure sustained optimum performance.

REPAIR

None - replace the entire device.



On October 1st, 2009, TAC became the Buildings business of its parent company Schneider Electric. This document reflects the visual identity of Schneider Electric, however there remains references to TAC as a corporate brand in the body copy. As each document is updated, the body copy will be changed to reflect appropriate corporate brand changes.

Copyright 2010, Schneider Electric
All brand names, trademarks and registered trademarks are the property of their respective owners. Information contained within this document is subject to change without notice.

Schneider Electric
1354 Clifford Avenue
P.O. Box 2940
Loves Park, IL 61132-2940

www.schneider-electric.com/buildings

Schneider
Electric