# **INSTALLATION INSTRUCTIONS**





## TR Round Low Pressure Damper

## **DESCRIPTION**

The **TR** is a 24vac power closed, spring open, low pressure round damper. The TR series dampers are designed for supply applications.

The 24vac actuator is a synchronous 24v AC 60Hz 12VA motor and terminal board. The motor is designed for continuous full stall operation.

The TR dampers are available from 4" - 16" in diameter, with a maximum pressure differential rating of 0.5" W.C. The 4" - 9" damper shells are fabricated from 24-gauge steel; the 10" - 16" shells from 20-22 gauge steel. Each shell features two rolled beads, which provide maximum structural integrity. The discharge end is crimped for ease of installation. Positive air seal is accomplished through use of an elliptical damper blade bolted to the hexagonal damper shaft.

## **INSTALLATION INSTRUCTIONS**

### **Supply Application**

- 1. Damper should be installed 3' from supply register or diffuser. Flex duct should be used from the outlet of the damper to register or diffuser for sound attenuation.
- 2. When damper is installed in non-conditioned air space, the entire damper must be insulated with min 1" wrap insulation. Insulation should be trimmed around actuator motor.
- 3. Minimum wire size to actuator is 18 AWG wire. See Installation manual for the system being used.
- 4. Multiple dampers can be slaved. See wiring diagram in installation manual.
- 5. Minimum open and close positioning is field adjustable on the damper. The damper is shipped from the factory to close 100% on 6"-9" dampers and 15% open on 10"-16" dampers.

#### Adjustable Range Stops:

The adjustable range stops are needed when there is a requirement to keep the damper from closing 100%. To adjust the damper for minimum range stop positions, perform the following steps below on the hat section: See diagram A

- 1. <u>Remove</u> the screw on the hat section with a #2 Phillips screwdriver.
- 2. Place the screw to the desired range stop based on the call out sticker on the damper hat section.
- 3. Remove the screw from the damper if you want the Damper to close 100%.
- 4. Test operation.

## TECHNICAL DATA

*Electrical:* Supply Voltage: 24vac Power consumption: 12 VA maximum Input: 24vac

Environmental:

**Operating temperature:** -10 to 150° F (-23 to 66° C) **Operating humidity:** 10-95% non-condensing **Storage temperature:** -10 to 150° F (-23 to 66° C)

### General:

Shell: 22-24 gauge cold rolled galvanized steel Shaft: ½" aluminum, round Bushings: Celcon Actuator: Synchron Stroke: 90° Pressure drop: < .09" W.C. @ rated CFM

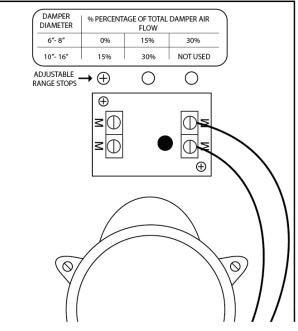


Diagram A

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