

Round Take-Off Damper

With MDM Power Open / Power Close Motor

Model: RTM

The RTM series are galvanized steel, single blade dampers compete with a 24Volt 3-wire motor actuator. This Round Take-Off Damper combines both a take-off collar and motorized damper into one unit and is shipped complete and ready for installation. The RTM can be installed in any position on any properly sized duct. All RTP dampers are rated for duct systems less than 2.0" W.C.

Dampers are available in 6", 8", 10", 12", 14" and 16" diameters. Dampers are ordered as RTMdd, using 2 digits for each dimension.

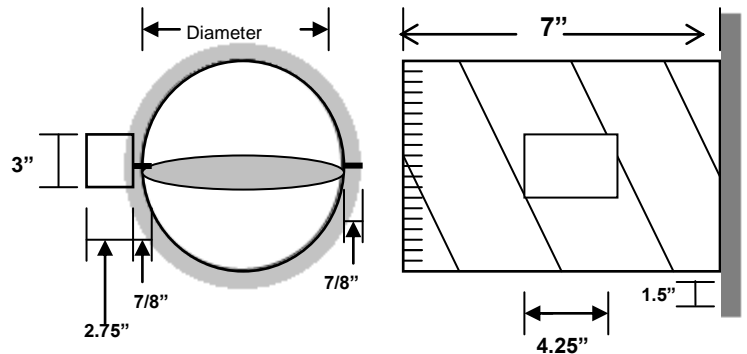
The simple 3 wire motor has two light emitting diodes (LED's) to indicate the damper position. The **RED** LED is lit when the damper is **closed** and the **Green** is lit when the damper is **open**. The MDM also has adjustable minimum position stop under the motor cover. This motor's energy saving design uses end switches to break power to the motor once the motor reaches the end travel position. This lengthens the motor life and conserves energy. The MDM has been factory tested to over 250,000 cycles.



Motor Actuator



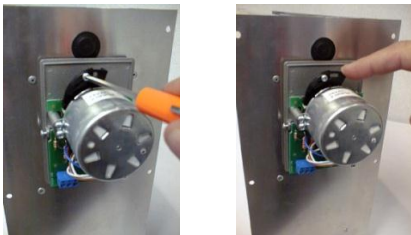
Dimensional Drawing



All dimensions are nominal.

The MDM Actuator delivers up to 250 in/oz. (15.62 in/lbs.) of torque that powers the RTM open and closed. This powerful motor allows the damper to handle higher static pressures and can be modulated using the SPS or SPC Static Pressure Switch or similar type control.

The MDM is a reversible motor that powers the damper both open and closed. It also has an adjustable stop for a minimum damper position setting.



Damper Specifications

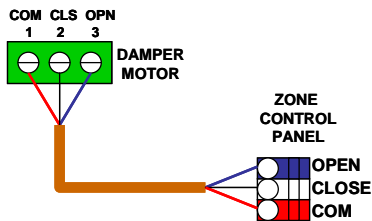
- Construction – 26 Ga. Galvanized Steel
- Linkage – Direct Drive
- Sizes – 6", 8", 10", 12", 14", 16"
- Motor Voltage – 24 Volts AC, 50/60 Hz, 4VA, .17A
- Torque – 250 in/oz. (15.62 in/lbs.)
- Temperature Rating – 0°F to 150°F Operating, -20°F to 175°F Storage
- Humidity – 5% to 95% Non-Condensing
- Damper Timing – Nominal 9 Sec. Powered
- Connection: Screw Terminals
- Duct Pressure – Maximum 2.0" W.C.

Installation

When you haven't got room to run a second trunk duct, or already have an existing system with a single trunk, the RT series of dampers allows you to easily zone any system.

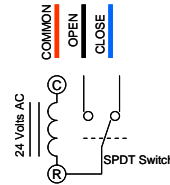
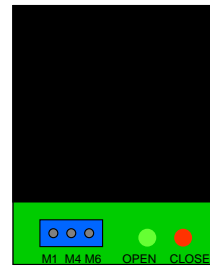
1. Ensure the RTM is correctly sized to the branch run and opening in the square air duct.
2. Remove the old leaky spin-in or tab collar take off. If attaching new branch run, cut out desired hole size on squared air duct supply.
3. Remove adhesive cover on back of new Take-Off Damper.
4. Adhere RTM Damper to the side of the duct directly over the hole.
5. Apply four (4) screws to metal duct to ensure seal.
6. Re-connect the branch duct.
7. Hook up damper motor to control panel.

WIRING DIAGRAM



CHECKOUT

To checkout the operation of the dampers, place 24V across terminals M1 and M4. The damper will open and the Green LED will light at the end of the cycle. Place 24V to terminals M1 and M6 and the damper will close and the Red LED will light at the end of the cycle. All dampers are 100% factory tested.



TROUBLESHOOTING

After performing the checkout of the damper, check the motor terminals for 24V across terminals M1 and M4 if the damper should be open, and M1 and M6 if the damper should be closed. If power is not at the proper terminals, check the wiring and control panel for power.