

Retro-Round™ Damper With MP12 Plug-In Motor

Model: RRP

The NEW Retro-Round™ Insertable Damper with the MP12 Plug -In Zone Damper Motor now simplifies those hard to zone retrofit installations. The RRP is a low cost single blade damper that inserts into any branch take-off duct. It is available in 4", 5", 6", 7" and 8" diameters. All RRP dampers are rated for duct systems less than 2.0" W.C. Dampers are ordered as RRPdd, using 2 digits for the dimension.

A 12 Volt DC damper motor, Model MP12, powers the RRP. The motor powers the damper closed and open. The MP12 motor wires by simply plugging the motor in using the modular cord, supplied with each damper. The modular cord is a 25' length of standard four (4) conductor telephone wire with RJ11 jacks on each end. The motor is complete with 2 jacks allowing you to daisy chain up to 10 dampers per zone.

The MP12 motor has been tested to over 1,000,000 cycles to provide long life. Even replacing the motor is a simple less than one (1) minute change by loosening the setscrew holding the motor onto the damper, slide the motor off the damper shaft, place a new one on and secure with the screw.

The RRP motor also has a two-color Light Emitting Diode (LED) to indicate the damper position. When the LED is **GREEN** the damper is **Open**. When the LED is **RED** the damper is **Closed**. When the LED is not lit the motor is typically moving between open and closed. The motor cycles between open and closed in less than 5 seconds



Actuator & 25' of modular cord included with each damper



Damper Specifications

Construction – Aluminum End Plate and shaft with Glavanized Blade DIran bushings

Dimensions - 8"x 2"x 2.5" Outside the Duct excluding blade

Linkage - Direct Drive

Sizes - 4", 5", 6", 7", 8

Motor Voltage – 12VDC, 0.07A

Torque - 4.69 in./lbs , 75.04 in./oz. , 0.53NM

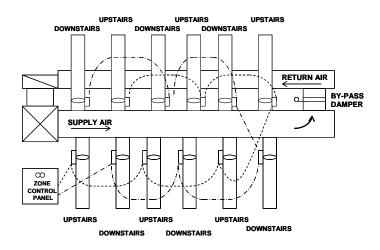
Temperature Rating - 0°F to 150°F Operating, -20°F to 175°F Storage

Humidity – 5% to 95% Non-Condensing

 ${\bf Damper\ Timing\ -Nominal\ 5\ Sec.\ Powered\ Open-Closed}$

Connection: RJ11 Modular Connector Duct Pressure – Maximum 2.0" W.C.

Typical Application of the RRP installed in the branch ducts to control the upstairs and downstairs zones.

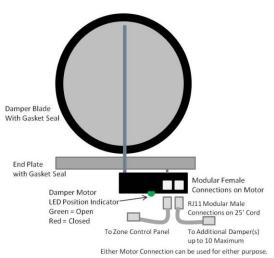


INSTALLATION

To install, use the template provided with damper.

- 1. Peel off the back of the installation template provided and align along the centerline of the duct. Insure the template is straight before adhering to the duct.
- Drill a ¾ diameter hole at each end of the cut area.
- Using a pair of snips or shears, cut along the top and bottom of the cut out area to make the opening for the damper.
- Insert the damper into the duct. It is recommended to plug-in each damper motor before securing the damper to the duct and cycle the damper. This wukk avoid possibly pulling the damper out of the duct later to check for proper alignment that may cause the damper to jam.
- While keeping the damper in-line with the duct, secure using the screws provided. Tighten until the damper end plate meets the duct. DO NOT OVER TIGHTEN AS THIS MAY CAUSE THE DAMPER TO JAM.

WIRING

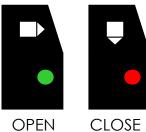


CHECKOUT

To checkout the operation of the dampers the control panel needs to be operating. It is recommended that each damper be checked before installing into the duct.

To check the damper, plug the damper into a zone on the control panel. Each zone of the panel has an LED that will be **Green** when the damper is to be **open**. When the panel LED is off, the damper will close and the damper LED will turn RED.

All dampers are 100% factory tested with the cord provided with each damper.



The damper shaft is square however the motor has a small triangular shape that also indicates the position of the damper. If the LED does not light, this will indicate the damper is either opening or closing. The damper may be closed and the LED not lit Red as the damper may have stopped short of full closed due to roundness of the damper.

TROUBLESHOOTING

If the damper LED does not light and the motor is not moving when plugged into the control panel, unplug and retry plugging in again. Until the motor moves and the LED lights. Make sure the cord is not pinched or broken. The motor is powered by 12VDC from the panel. Check the connector on the panel for 12VDC as shown below.

The power to the dampers can be with voltmeter measuring 12VDC. Check the connector on the panel and any wire the same way checking the inside negative pair of wires the outside positive pair of wires.

