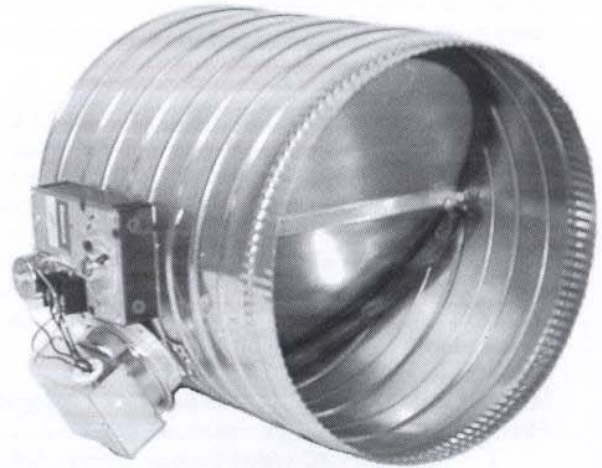


4092 Heavy Duty Bypass Damper

Young Regulator's reliable, and economical 4092 round bypass damper, including a solid-state static pressure control, protects the full range of commercial zone control systems. 4092, our heavy duty model, is available in 6 sizes which can handle systems up to 17.5 tons and pressures up to 3"

FEATURES

- *Approximately 1/2 the cost of conventional bypass systems.*
- Solves the noise and draft problems caused by increased air velocity inherent in systems using barometric type dampers.
- Elliptical blade for more linear control of air.
- New, low cost solid-state static pressure control design.
- Units are factory assembled and wired.
- Shells are fabricated from galvanized spiral steel with one straight and one crimped end, along with rolled-in stiffening beads for superior rigidity.
- Pre-wired with only 2 field connections.
- Sensing probe and tubing included.
- Motor change is quick and easy.
- Pressure set point range .17" to 2".
- Equipped with position indicators and low leakage blade seals.
- Built-in LED lights simplify field adjustment of pressure control.



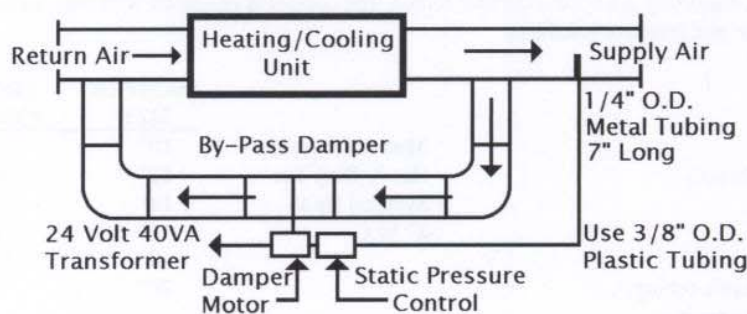
Easy to Install
Easy to Adjust

OPERATION

The 4092 is operated by a motor installed directly on the damper shaft with 2 screws. A static sensor diaphragm is mounted in a vertical position. The 4092 is controlled by our new, low cost solid-state pressure control with switching and time delay to enhance its operation and improve its reliability. Please see specification page for sequence of operation, electrical requirements, sizing, and installations.

AVAILABLE SIZES

10", 12", 14", 16", 18", 20". Damper length is equal to diameter.



NOTE: Bypass Damper must be installed so that the diaphragm of the static pressure control is always in the vertical position.

This drawing of the Bypass Damper static pressure control and related duct work is intended to serve only as a guide, your actual duct work layout may differ substantially.

YOUNG REGULATOR COMPANY
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(216) 663-5646 • Fax (216) 663-1830

GENERAL INSTRUCTIONS FOR RESIDENTIAL/LIGHT COMMERCIAL BAROMETRIC BYPASS DAMPER

HOW THE BYPASS DAMPER WORKS

As the individual zone dampers close, the system static pressure will tend to rise. In order to maintain constant airflow through the HVAC system, a barometric bypass damper will be required.

INSTALLING THE BYPASS DAMPER

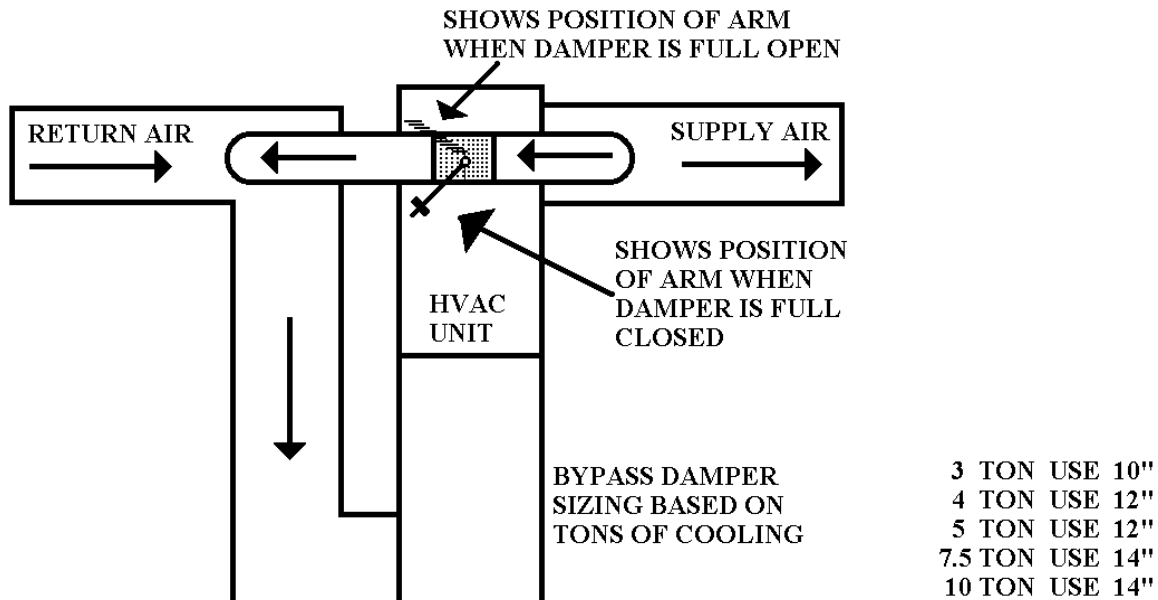
The bypass damper should be installed in such a way as to connect the supply air duct to the return air duct. The damper should be installed in the horizontal position. Tap into the return air duct at least two feet back from the return air plenum if possible.

ADJUSTING THE BYPASS DAMPER

With the HVAC unit running, adjust the weight located on the rod so that the bypass damper is fully closed when all zone dampers are in the full open position. To increase the system static pressure move the weight outward toward the end of the rod. To decrease the system pressure move the weight inward toward the damper shaft. To insure that all zone dampers are in the open position while adjusting the bypass damper, disconnect one of the two wires to each of the spring return open damper motors. Additional weights can be added to the bypass damper arm if necessary.

BAROMETRIC BYPASS DAMPER

FOR USE ON SYSTEMS WITH STATIC PRESSURE RATINGS UP TO 1" W.C.



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