



THS

- Complete unit
- Plug and play
- Sizes Ø100-Ø630
- Power supply 230 V
- Working range 0-2500 Pa

APPLICATION

THS is a pressure control damper which aims at measuring the static pressure in one point in the duct network. When a change in duct pressure occurs, for example by opening or closing other dampers in the branch, the pressure controller will immediately compensate for this by adjusting the damper position until the desired pressure in the duct is reached. The THS unit is designed to provide comfort ventilation at temperature conditions of between 0°C and 50°C and a relative humidity between 10% and 95% without condensation. The damper position of the THS damper can be read. It uses a 0-10 V signal on the terminal block which is in the transformer box.

DESCRIPTION

THS is a prefabricated unit where actuator, pressure controller, transformer and adjusting damper are assembled into one unit. Tubes and nipple are supplied separately for mounting on site. The THS product is location-friendly in terms of the required straight line, and can be placed in most parts of the duct system. It complies with leakage class 4 for damper blades in the closed position, and class C for leakage to the surroundings.

Class IP54 for regulator part.

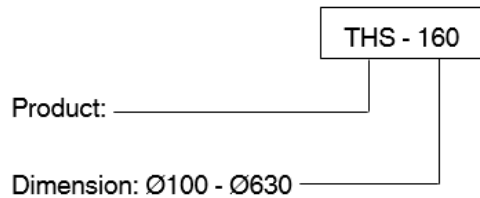
- For dim Ø100 – Ø315, Belimo LM24A-SR-F is used.
- For dim Ø400-Ø630, Belimo SM-24A-SR is used.
- Complete technical documentation can be downloaded from www.belimo.eu

INSTALLATION

For noise reasons, there should be at least ØD x 2 straight duct in front of the THS, shown in Figure 3 in the technical leaflet. It is recommended to install THS with location and service distance as shown in Figure 2. The pressure gauge nipple and tube are placed at a distance from THS dampers which provide stable measurements, shown in Figure 3. Are there problems with measuring stable static pressure directly in the duct network? This can be solved by inserting a plug in the duct where the measuring nipple and tube are installed, see figure 4. Only a small hole in the duct is needed where the plug is placed, max Ø50 mm.

TECHNICAL INFORMATION

Order code, THS



Example:

THS-160

Explanation:

THS dimension Ø160.

The THS damper always adjusts itself so that the pressure in the duct is maintained and corresponds to the set point in the pressure controller. The THS unit consists of a regulating damper and a controller for measuring pressure. The static pressure is measured in the ductwork, and the pressure controller will regulate the damper position to maintain the desired duct pressure setpoint. THS has a control range from 0-2500 Pa. The desired pressure is set by entering the pressure regulator menu and entering the desired pressure range and pressure set point (see page 6 and table under section "Commissioning"). The product is ready for use by connecting the supplied 2 m 230 VAC power cable.

Measurement accuracy: 0.5 % MV \pm 2,5 Pa The measurement nipple and tubes must be placed at a point in the duct and at a distance from the damper blade itself, which results in stable pressure measurements (see page 6 and figures 3 and 4).