

# PLENUM BOX FOR ROUND DIFFUSER

## INTRODUCTION

Plenum boxes are used for supply and exhaust of air through diffusers and grilles. The plenum box ensures a continuous flow to the diffuser, and plenum boxes equipped with dampers create the possibility of adjusting the diffuser on an individual level.

Furthermore, the plenum box is usually supplied with acoustic insulation. This contributes to the sound attenuation inside the box. This way the noise from the air flow inside the air duct system and the sound from room to room is reduced.



## **SERIES P31 ( SIDE ENTRY PLENUM BOX )**

## DESCRIPTION

The COSMOS plenum box is an accessory to the round diffuser. Its main use is to reduce noise and equalize the air flow. The standard plenum construction is built of galvanized steel sheet 24 gauge, and inlet volume control damper of 20 gauge.

COSMOS round diffuser plenum box series P31 can be use for supply or exhaust air, intended to achieve a stable airflow into diffusers and also to attenuate sound from the duct system.

**Series P31** = Plenum box has a side entry connection without volume control damper included.

**Series P31-D** = Plenum box has a side entry connection with volume control damper included.

COSMOS plenum box includes a unique damper which gives the opportunity to use the full operational area (0-100%). For controlling the air volume, inlet damper can be operated from face of the diffuser. Standard plenum inlet available from 100mm to 400mm in the increment of 50mm, thus suits most inlet connections.

To attenuate sound from the duct system and the sound from room to room, COSMOS plenum boxes are internally lined with acoustic media as 6mm thick closed cell black face foam with class "O" rating and 10mm thick open cell elastomeric nitrile foam rubber, fiber free, super silent and microban resistance. Acoustic media with different insulation thickness are also available on request.

COSMOS standard supply is plenum box with internally lined acoustic media. Plenum box without acoustic media can also be supply on customer requirement.

## FEATURES

- Heavy duty galvanized steel construction
- Can work with high pressure with low sound
- Large dynamic operational area (0-100%)
- Plenum inlet diameter available from 100mm to 400mm to suit most inlet connections
- Side or top entry plenum inlet with optional airflow control damper