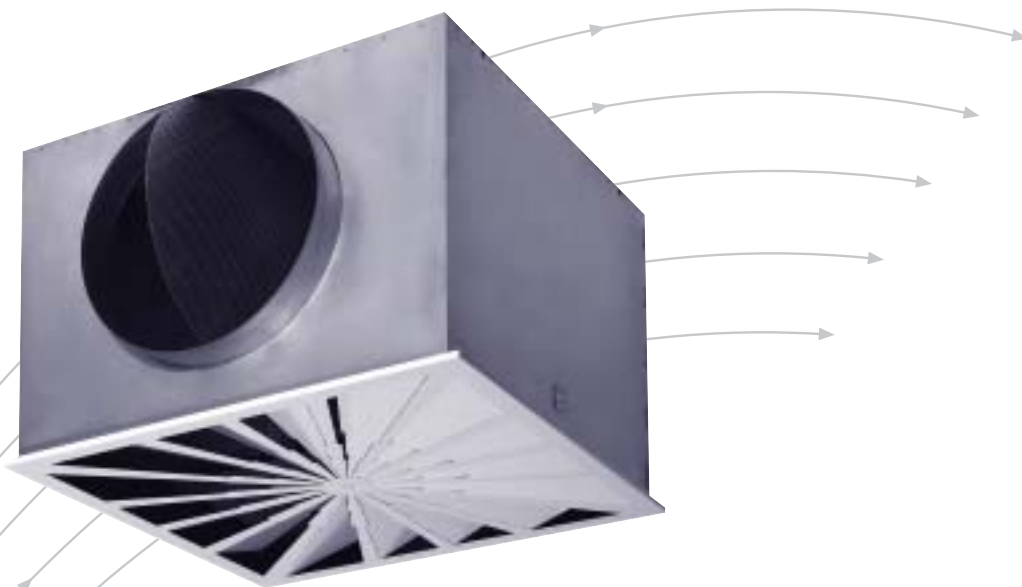


Swirl Diffusers

- Type FDE
- with fixed air control blades for high volume flow rates



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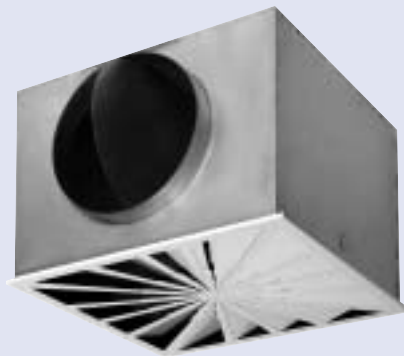
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Type FDE



Type FDE-...-H (with plenum box)



Description

Type FDE swirl diffusers as supply or extract air units are particularly suitable for comfort areas like office and department stores.

The horizontal swirl type discharge of supply air ensures high induction and hence rapid reduction in jet velocity and temperature differential.

The air diffusers are suitable for supply air temperature differentials in the range of +10K to -10K and room heights from 2.80 m.

Swirl diffusers type FDE consist of the square face plate with continuous rear perimeter seal, fixed radially arranged air control blades and the rear frame. The supply air construction also contains a perforated plate mounted on the rear frame to optimise the air distribution. To obtain low sound power levels especially at high volume flow rates, the triangular shaped, angled air control blades extend into the corners of the square diffuser.

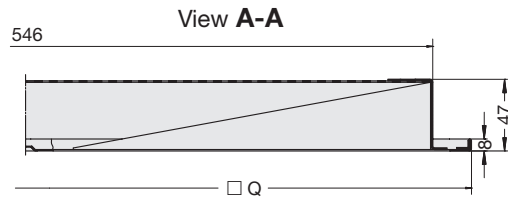
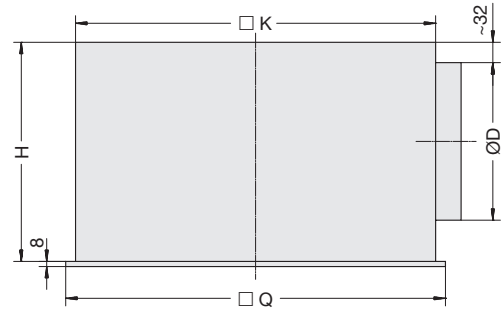
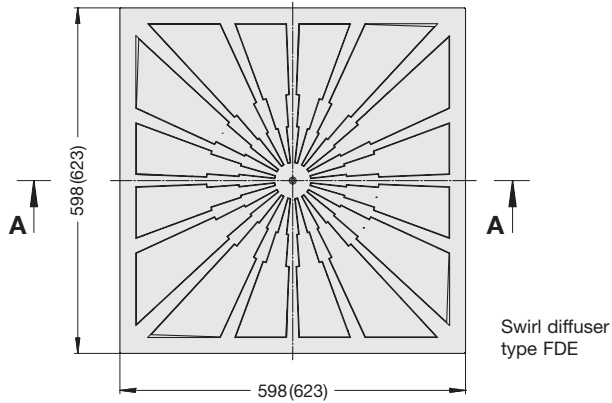
The plenum box is supplied with side entry spigot. Volume control damper and/or lip seal are available on request.

Materials

Swirl diffuser and rear frame with perforated plate are made of galvanised sheet steel. The standard finish of the swirl diffuser is powder-coated white (RAL 9010, gloss level 50 %), any other RAL colour on request (gloss level 70 %) (RAL 9006, gloss level 30 %). Rear frame and perforated plate are powder-coated black (RAL 9005). The plenum box is made of galvanised sheet steel, the lip seal is of rubber.

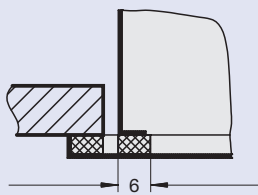
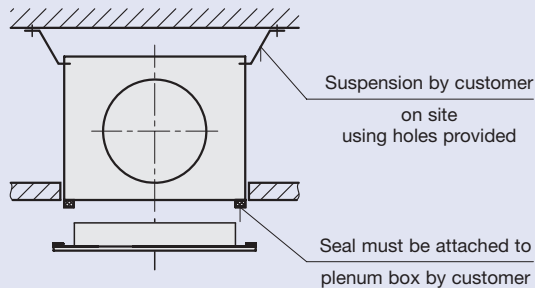
Construction · Dimensions · Installation

Constructions · Dimensions					
Size	Plenum box	ØD	H	□K	□Q
600/625	AK004	248	345	567	Size
600/625	AK011	313	410	567	-2 mm



Installation

Surface mounting on ceiling

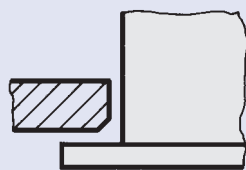


Fixing the diffuser face using centre screw

Installation flush to ceiling



Installation with cut out in ceiling



Type FDE swirl diffusers are suitable for flush installation in the ceiling. The plenum box is suspended by wires or slotted strips using the drilled holes provided in the plenum. A self adhesive seal, supplied loose, must be fitted to the plenum box by the client. The diffuser face is fitted to the plenum box by means of a centre fixing screw located in a cross channel in the plenum box. The head of the fixing screw is covered by a decorative cap.

Measuring the Reference Pressures

For simple adjustment of the volume flow, on request the plenum box can be provided with a test connection for measurement of a reference pressure and a volume control damper operated by sheathed cables. The characteristic curve of pressure reading versus volume flow rate for each size of plenum box is supplied.

