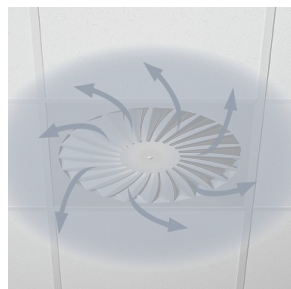




Circular diffuser faces with circular plenum box



Square diffuser face with square plenum box



Twist-shaped, horizontal Air duct



Round diffuser face

## TDF-SILENTAIR



**WITH VERY LOW SOUND POWER LEVEL FOR COMFORT ZONES, WITH FIXED AIR CONTROL BLADES**

Circular and square ceiling swirl diffusers

- Nominal sizes 300, 400, 500, 600, 625
- Volume flow rate range 10 – 265 l/s or 36 – 954 m<sup>3</sup>/h

- Diffuser face made of galvanised sheet steel, powder-coated
- For supply and extract air
- For variable and constant volume flows
- For all types of ceiling systems, and with an extended border also suitable for freely suspended installation
- High induction results in a rapid reduction of the temperature difference and airflow velocity
- Ideal for comfort zones

#### Optional equipment and accessories

- Exposed diffuser face available in RAL Classic colours
- Horizontal or vertical duct connection
- Plenum box with cord-operated damper blade and pressure tap

## General information

---



#### Application

- Ceiling swirl diffusers are used as supply air or extract air diffusers for comfort zones
- Attractive design element for building owners and architects with demanding aesthetic requirements
- Horizontal swirling supply air discharge for mixed flow ventilation
- The efficient swirl creates high induction levels, thereby rapidly reducing the temperature difference and airflow velocity (supply air variant)
- For variable and constant volume flows
- For supply air to room air temperature differences from -12 – +10 K
- For room heights up to 4 m (lower edge of suspended ceiling)
- For all types of ceiling systems
- With an extended border also suitable for freely suspended installation (supply air variant)

#### Special features

- High induction results in a rapid reduction of the supply air to room air temperature difference and airflow velocity
- For all types of ceiling systems, and with an extended border also suitable for freely suspended installation
- Horizontal or vertical duct connection
- Very high room air change rate possible thanks to row arrangement with a minimum pitch distance of 0.9 m

#### Nominal sizes

- 300, 400, 500, 600, 625

#### Variants

- TDF-SA-Q: Square diffuser face
- TDF-SA-R: Circular diffuser face
- TDF-SA-\*-Z: Supply air
- TDF-SA-\*-A: Extract air

#### Connection

- Q-\*-H: Square plenum box with horizontal duct connection
- R-\*-H: Circular plenum box with horizontal duct connection
- V: Vertical duct connection

#### Accessories

##### Lip seal

- For circular plenum boxes with horizontal connection spigot, the lip seal is only available in combination with the flow adjustment damper. Otherwise, it can always be selected optionally.

#### Attachments

- M: Damper element for volume flow rate balancing
- MN: Pressure tap and cord-operated damper unit for volume flow rate balancing with the diffuser face in place (only possible with square plenum box)

#### Construction features

- Spigot suitable for circular ducts to EN 1506 or EN 13180
- Spigot with groove for lip seal (only applies to galvanised spigots and lip seal accessories)

#### Materials and surfaces

- Grille face made of galvanised sheet steel
- Q; R: Plenum box made of galvanised sheet steel including galvanised sheet steel cross bar to support the diffuser face
- Plenum boxes with vertical connection and square plenum boxes with horizontal connection: for supply air always with galvanised perforated plate for air distribution
- Circular plenum boxes with horizontal spigot: Equipped as a plenum box for supply air with an equalising element made of polyester
- Square plenum boxes and plenum boxes with vertical spigot: Spigot made of galvanised sheet steel
- Circular plenum boxes with horizontal spigot: Spigot made of black ABS, according to UL94, V0 flame retardant
- Lip seal made of Evoprene
- Diffuser face powder-coated, RAL 9010, pure white

- P1: Powder-coated, RAL Classic colour

#### Standards and guidelines

- Sound power level of the air-regenerated noise measured according to EN ISO 5135

#### Maintenance

- Low maintenance as construction and materials are not subject to wear
- Inspection and cleaning to VDI 6022