



RFD-Q-D



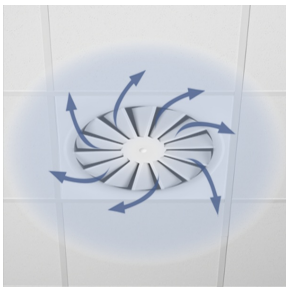
CIRCULAR DIFFUSER
FACE



WITH DISCHARGE
NOZZLE



WITHOUT DISCHARGE
NOZZLE



HORIZONTAL SWIRLING
AIR DISCHARGE

RFD

WITH LOW SOUND POWER LEVEL FOR COMFORT AND

INDUSTRIAL ZONES, WITH FIXED AIR CONTROL BLADES

Circular and square ceiling swirl diffusers

- Nominal sizes 5, 6, 8, 10, 12, 16 in
- Volume flow rate range 8.2 - 770 cfm
- Diffuser face made of galvanised sheet steel, powder-coated, or of aluminium (depending on variant)
- For supply and extract air
- For variable and constant volume flows
- For all types of ceiling systems
- With discharge nozzle ideal for cooling in case of freely suspended installation
- High induction results in a rapid reduction of the temperature difference and airflow velocity
- Air change rates of up to 35 per hour can be achieved by arranging several diffusers in a row with a minimum pitch of 3 ft (center line to center line)
- Ideal for comfort zones

Optional equipment and accessories

- Exposed diffuser face available in RAL CLASSIC colors
- Horizontal or vertical duct connection
- Plenum box with cord-operated damper blade and pressure tap
- Shallow plenum box

Application



Application

- Type RFD 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 -21.6 to 18°F
- For room heights up to 13 ft (lower edge of suspended ceiling)
- For all types of ceiling systems
- With an extended border and discharge nozzle also suitable for freely suspended installation (supply air variant)

Special characteristics

- Low sound power level, ideal for comfort zones
- Fixed blades
- For all types of ceiling systems
- Horizontal or vertical duct connection
- Air change rates of up to 35 per hour can be achieved by arranging several diffusers in a row with a minimum pitch of 0.9 m (center line to center line)

Nominal sizes

- 5, 6, 8, 10, 12, 16

Description



Variants

- RFD-Q: Square diffuser face
- RFD-R: Circular diffuser face
- RFD-*-D: Diffuser face with discharge nozzle

Connection

- K: Vertical duct connection, with duct collar
- US: Vertical duct connection, with transition piece
- A: Horizontal duct connection, with plenum box

Only RFD-R

- UO: Vertical duct connection, with transition piece and cross bar

Only RFD-R-D

- UD: Vertical duct connection, with transition piece, cross bar and discharge nozzle
- N: Horizontal duct connection, with shallow plenum box to be installed above open cell ceilings

Parts and characteristics

- Circular or square diffuser face
- Diffuser face with radially arranged fixed air control blades

Attachments

- M: Damper blade for volume flow rate balancing
- MN: Pressure tap and cord-operated damper blade for volume flow rate balancing with the diffuser face in place

Accessories

- Lip seal

Construction features

- Inlet suitable for circular ducts to EN 1506 or EN 13180
- Inlet with groove for lip seal (if accessory lip seal has been ordered)

Materials and surfaces

- Q: Diffuser face made of aluminum
- R: Diffuser face made of galvanized sheet steel
- Plenum box, duct collar and cross bar made of galvanized sheet steel
- Transition piece made of aluminum
- Lip seal made of rubber
- Diffuser face powder-coated RAL 9010, pure white
- P1: Powder-coated, RAL CLASSIC color

Standards and guidelines

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

Maintenance

- Maintenance-free as construction and materials are not subject to wear
- Inspection and cleaning to VDI 6022