



RFD-Q-D



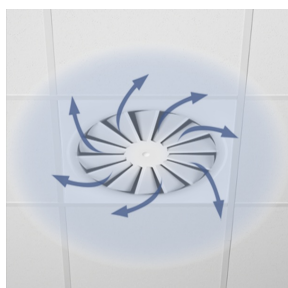
CIRCULAR DIFFUSER  
FACE



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