

Type VDW



WITH LOW SOUND POWER LEVEL FOR COMFORT ZONES, WITH INDIVIDUALLY MANUALLY ADJUSTABLE AIR CONTROL BLADES

Circular and square ceiling swirl diffusers for high room air change rates

- Nominal sizes 12, 16, 20, 24, 25, 33 in.
- Volume flow rate range 14 - 998 cfm
- 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
- 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, air control blades in black or white
- Horizontal or vertical duct connection
- Plenum box with cord-operated damper blade and pressure tap



Application

- Type VDW 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)
- Individually adjustable air control blades to meet individual requirements
- For variable and constant volume flows
- For supply air to room air temperature differences from -22 to 19°F
- For room heights up to 13 ft (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 characteristics

- Air control blades can be adjusted individually manually for adjusting the air pattern
- For all types of ceiling systems, and with an extended border also suitable for freely suspended installation
- Black or white air control blades
- 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

- 12 × 8, 16 × 16, 20 × 24, 24 × 24, 24 × 48, 25 × 24, 25 × 54, 33 × 72 (in)

Variants

- VDW-Q: Square diffuser face
- VDW-R: Circular diffuser face
- VDW-* -Z: Supply air
- VDW-* -A: Extract air

Connection

- H: Horizontal duct connection
- V: Vertical duct connection

Parts and characteristics

- Circular or square diffuser face
- Diffuser face with individually manually adjustable air control blades
- Simple installation of the diffuser face due to central fixing screw with decorative cap
- Damper blade for volume flow rate balancing (optional)

Attachments

- M: Damper blade for volume flow rate balancing (H, V only)
- MN: Pressure tap and cord-operated damper blade for volume flow rate balancing with the diffuser face in place (H, V only)

Accessories

- Lip seal

Construction features

- Inlet suitable for circular ducts to ANSI/SMACNA 006-2006 and EN 1506 or EN 13180
- Inlet with groove for lip seal (if accessory lip seal has been ordered)

Materials and surfaces

- Diffuser face made of galvanised sheet steel
- H, V, U: Plenum box and cross bar made of galvaneal steel
- Air control blades made of plastic, UL 94, V-0, flame retardant
- Lip seal made of rubber
- Exposed diffuser face powder-coated RAL 9010, pure white
- P1: Powder-coated, RAL CLASSIC color
- Air control blades for supply air similar to RAL 9005, black; extract air variant without air control blades
- Q11: Air control blades for extract air similar to RAL 9005, black
- Q21: Air control blades for supply air and extract air similar to RAL 9010, white

Standards and guidelines

- Inlet suitable for circular ducts to ANSI/SMACNA 006-2006 and EN 1506 or EN 13180

Maintenance

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

TECHNICAL INFORMATION

FUNCTION, TECHNICAL DATA, QUICK SIZING, SPECIFICATION TEXT, ORDER CODE [^](#)

Variants, Dimensions and weight, Product details [v](#)

Installation examples, Installation details, Commissioning, Basic information and nomenclature [v](#)

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