



Krantz

Sidewall air outlets
Turbulent mixing air flow

Air Distribution Systems

Krantz

Traditionally committed to the future

Clean air is one of the elementary preconditions for quality of life and human health. That is why it is important that the air we breathe day after day is treated well. We take this task very seriously.

Our state-of-the-art technology enables us to fulfill the highest requirements for air distribution systems and the strictest air pollution control standards.

Krantz offers a broad assortment of very different products and services for one common theme – clean air.

2 Sidewall air outlets

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**Air Distribution
Systems**

Ceiling air outlets
Sidewall air outlets
Floor air outlets
Displacement air outlets for the commercial sector
Displacement air outlets for the industrial sector
Air outlets for assembly rooms

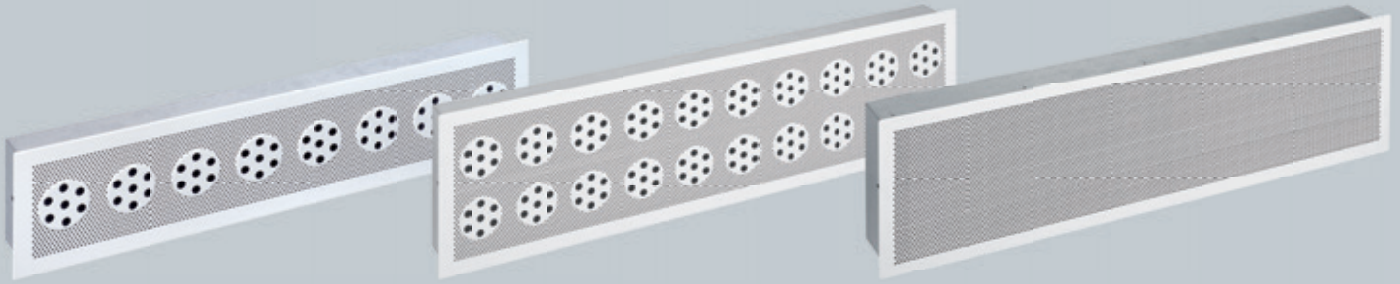
Clean Air Solutions

Air Technologies

**Filter & Damper
Systems**

**Research &
Development**

**Cooling & Heating
Systems**



Broad multiplex outlet BF-V

Features

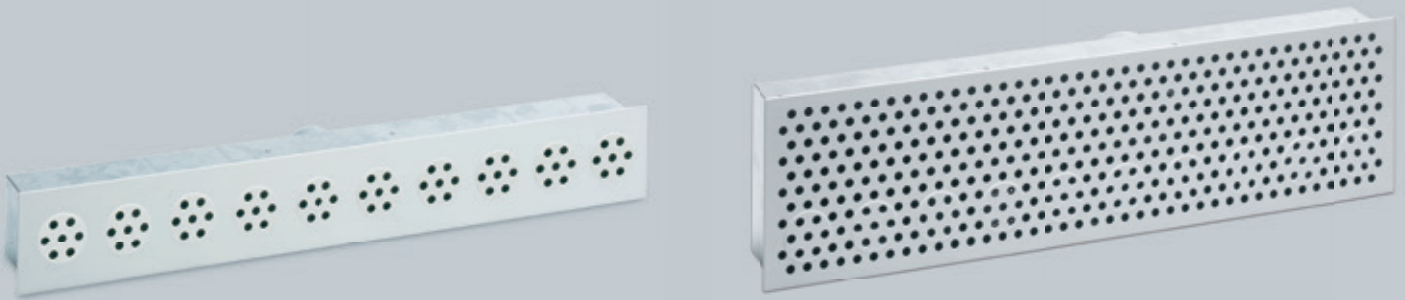
- Sidewall air outlet meeting the high thermal comfort criteria for commercial applications set out in EN ISO 7730
- Perforated front plate with built-in nozzle discs in 1-row or 2-row design
- Combined mixing/displacement ventilation system ensuring a high ventilation efficiency in the occupied zone
- The air jets can be spread out as broadly as desired by manually rotating individual nozzle discs up to 360°
- Symmetric or asymmetric arrangement of the broad multiplex outlet possible, depending on placement in middle or edge of room wall
- Maximum temperature difference between supply and indoor air ± 10 K
- Low sound power level and low pressure drop, thus well suited for connection to fan coils

	BF-V
Volume flow rate range:	22 – 150 l/s [80 – 540 m ³ /h]
Nominal lengths:	600, 800 and 1 000 mm
Designs:	1-row and 2-row design
Mounting height:	2.2 – 4 m



Illustrative examples:

- 1 Office building DreiEins, Düsseldorf
- 2 MARITIM Hotel, Dresden
- 3 InterContinental, Cologne

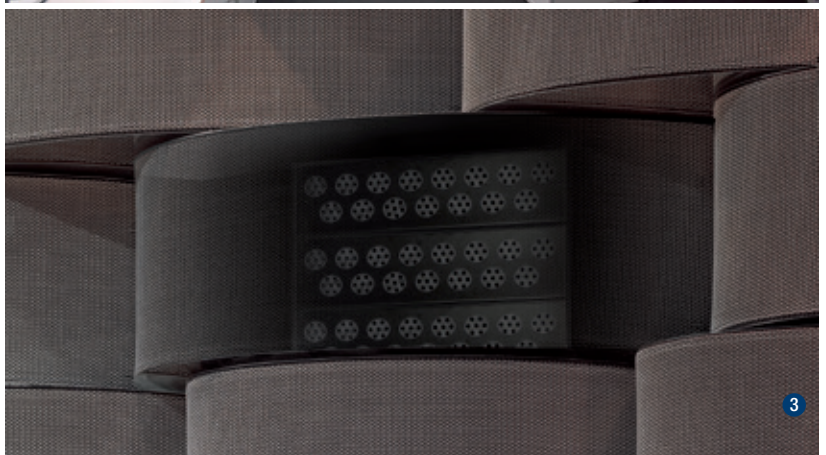


Multiplex outlet FA-VT Combined multiplex outlet FA-VT-K

Features

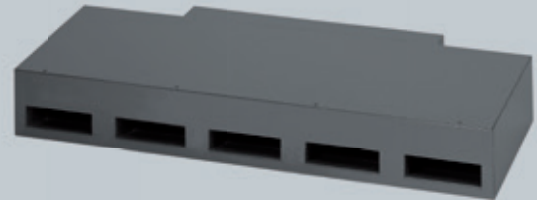
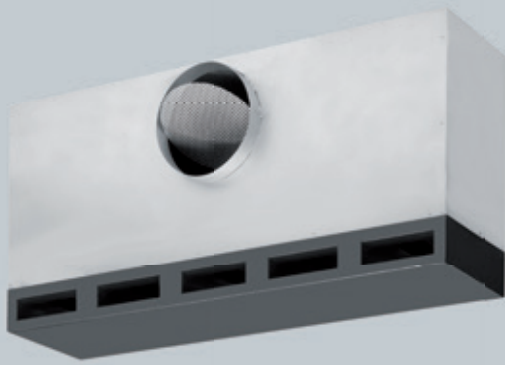
- Bundles of thin, complementary single jets
- Jet bundle elements manually rotatable through 360°
- Pronounced spread of supply air jets
- Rapid decrease in jet velocity and temperature difference
- Single-row or double-row arrangement of jet bundle elements (FA-VT)
- Jet bundle elements for supply air and return air arranged in one row (FA-VT-K)
- With connection box for flexible duct connection
- Also usable as return air inlet

FA-VT/FA-VT-K	
Volume flow rate range:	$\leq 40 \text{ l/(s}\cdot\text{m)}$ [$145 \text{ m}^3/(\text{h}\cdot\text{m})$] – 1-row design $\leq 50 \text{ l/(s}\cdot\text{m)}$ [$\leq 185 \text{ m}^3/(\text{h}\cdot\text{m})$] – 2-row design
Nominal length:	600, 800 and 1 000 mm
Height of air outlet:	140 mm (FA-VT) 260 mm (FA-VT-K)
Discharge height:	2.5 – 4 m



Illustrative examples:

- 1 Bain & Company, Munich
- 2 Kreissparkasse Cologne
- 3 Eurogress, Aachen



Linear whirl outlet WL

Features

- Linear free jet consisting of 5 to 7 single jets, depending on type
- Discharge direction nearly horizontal
- Low sound power level
- 3 sizes for different penetration depths
- Also available with low height for low ceiling plenums
- Connection box for flexible duct connection, or direct connection to main air duct

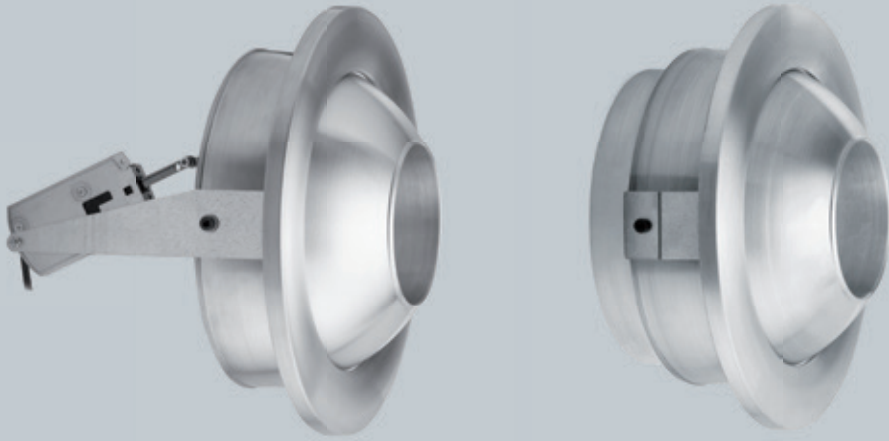
	WL
Volume flow rate range:	28 – 300 l/s [100 – 1 100 m ³ /h]
Nominal size (discharge chamber height):	30, 45 and 65 mm
Penetration depth:	4 – 16 m
Discharge height:	2.6 – 6 m
Standard lengths:	1 – 1.1 m



Illustrative examples:

- 1 Holmes Place Lifestyle Club, Cologne
- 2 Olympiastadion, Berlin
- 3 IBM Redesign Diana, Vienna

2 Sidewall air outlets



Swivel jet nozzle DW-V2

Features

- Circular free jet
- Discharge direction adjustable through $\pm 30^\circ$ around the swivel axis
- Adjustable manually, by electric actuator or without auxiliary energy through a maintenance-free thermostatic control unit
- The thermostatic control unit allows for resetting; the swivel range can be altered in increments of 5° , up to 20° in total
- Position of swivel axis also adjustable in the vertical plane, enabling the discharge direction to be turned sideways
- Low sound power level
- Low pressure drop
- Direct connection to supply air duct or pressurized chamber, or connection with push-in end for spiral seam duct and with slip-on end for shaped parts

DW-V2	
Volume flow rate range:	11 – 589 l/s [40 – 2 120 m ³ /h]
Nominal sizes:	DN 60 – DN 250
Throw:	3 – 50 m
Discharge height:	2.5 – 10 m

Illustrative examples:

- 1 Luxembourg Airport
- 2 Messe Erfurt
- 3 Radisson SAS Hotel, Cologne





Twist nozzle DW-V2-DR

Jet nozzle DW-N2

Features

- Circular free jet
- Discharge direction adjustable through $\pm 30^\circ$ around the swivel axis (DW-V2-DR)
- Fixed discharge direction (DW-N2)
- Low sound power level
- Low pressure drop

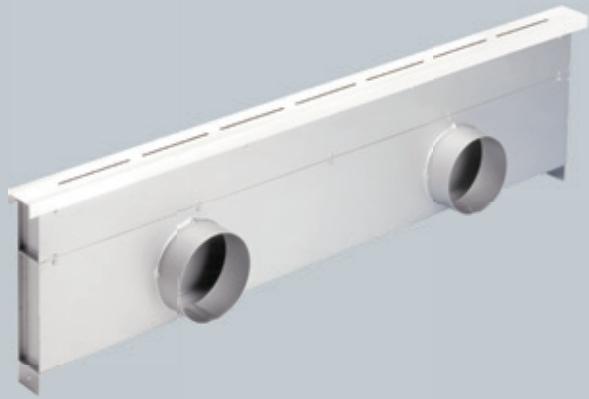
	DW-V2-DR	DW-N2
Volume flow rate range:	up to 395 l/s [1 420 m ³ /h]	11 – 589 l/s [40 – 2 120 m ³ /h]
Nominal sizes:	DN 80 up to DN 250	DN 60 up to DN 250
Throw:	1 – 17 m	3 – 50 m
Discharge height:	2.8 – 10 m	2.5 – 10 m



Illustrative examples:

- 1 Hanns-Martin-Schleyer-Halle, Stuttgart
- 2 Kursaal, Oostende
- 3 Theater Tuschinski, Amsterdam

2 Sidewall air outlets



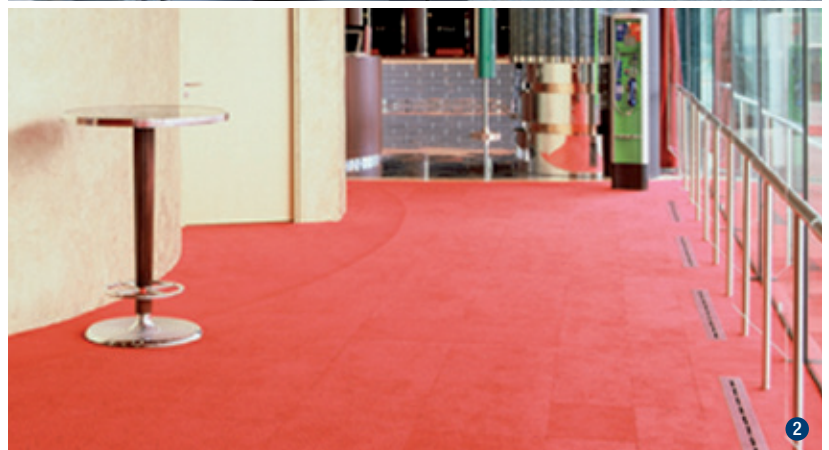
Window air curtain unit FSG

Features

- Linear air curtain
- Installation in floor or window sill, along the facade
- Max. distance to glass pane: 200 mm
- Low space requirement (width 55 mm, height 260 to 310 mm)
- With connection box for flexible duct connection

	FSG
Volume flow rate range:	8 – 25 l/(s·m) [30 – 90 m ³ /(h·m)] ¹⁾
Slot width:	3 – 10 mm
Standard lengths:	1; 1.2; 1.4 and 1.6 m
Penetration height:	2 – 10 m

¹⁾ higher volume flow rates on request



Illustrative examples:

- 1 Carpus+Partner AG, Aachen
- 2 Holland Casino, Utrecht
- 3 Barajas Airport, Madrid

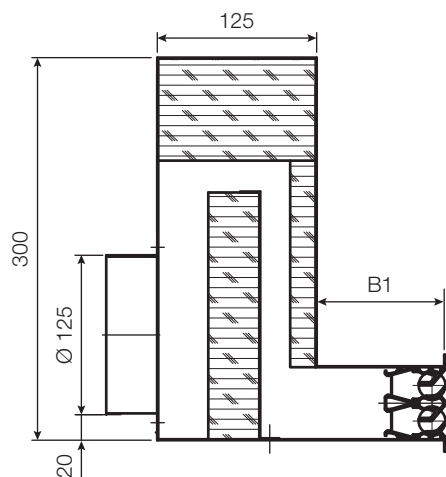


Wall slot diffuser WSD

Features

- With 1 or 2 rows for supply air or return air or both combined
- Slot element easy to remove thanks to push-in connection, making it cleanable as per VDI 6022
- Connection box to be installed inside or behind gypsum plasterboard walls; volume flow damper adjustable from room (optional)
- High level of thermal comfort: max. cooling capacity up to 120 W/m²
- High insertion loss with abrasion-resistant acoustic lining of class A2, as per DIN 4102-1 (optional)
- Also available with crosstalk attenuator

WSD	
Volume flow rate range:	up to 66.5 l/s [240 m ³ /h] per meter of diffuser length
Nominal length:	525, 1 050 and 1 125 mm
Discharge height:	2.4 – 3.5 m



Illustrative examples:

- 1 Office building Mercer, Cologne
- 2 Kranhaus Eins, Cologne
- 3 Mercer Oliver Wyman, Frankfurt



2 Sidewall air outlets



Air transfer element OG-S, OG-T, OG-U and A-SAVE with integrated crosstalk attenuator

Features

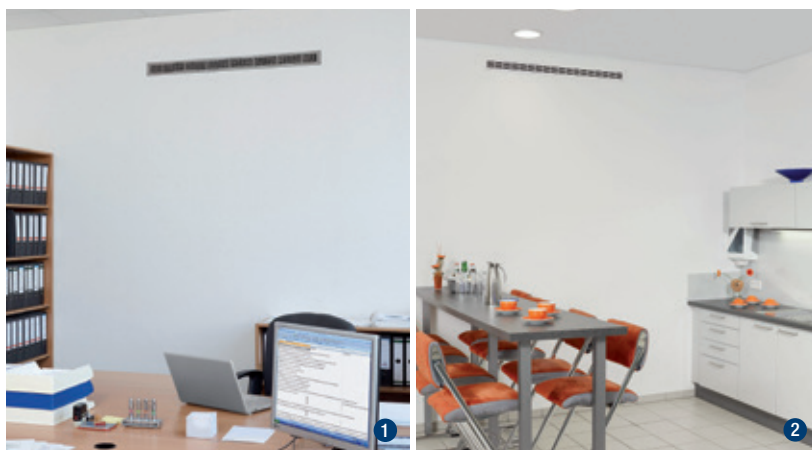
- Built-in crosstalk attenuator for reducing room-to-room sound transmission
- High level of sound absorption at low pressure drop
- High-quality design
- Acoustic lining, absorption material Basotect (Melamine foam) of building material class B-s1-d0 (B1, fire resistant) according to DIN EN 13501, optional in building material class A2-s2, d0 (A2, non-flammable)
- Easy to install

Air transfer element

	OG-S, OG-T	OG-U
Volume flow rate range:	S-shape: approx. 53 l/(s·m) [190 m³/(h·m)] T-shape: approx. 47 l/(s·m) [170 m³/(h·m)] at a pressure drop of 15 Pa	25 l/s [90 m³/h] at a pressure drop of 6 Pa 35 l/s [125 m³/h] at a pressure drop of 10 Pa
Nominal length:	500 and 1000	800 and 1000
Height:	400 mm	45 mm
Wall thickness:	S-shape: 100 mm S-shape: 125 mm	Installation under the ceiling

Active air transfer element

	A-SAVE
Volume flow rate range:	17 l/s [60 m³/h]
Nominal length:	872 mm
Height:	400 mm
Wall thickness:	130, 195 and 260 mm
Low power consumption at 17 l/s [60 m³/h]:	$P = 3.3 \text{ W}$
Sound power level:	27 dB(A) ref. 10^{-12} W
Evaluated standard sound difference:	$D_{n,e,w} = 29 \text{ dB}$



Illustrative examples:

- 1+2 Air transfer element OG with integrated crosstalk attenuator
- 3 Apartment cross section with A-SAVE. Quiet and energy-efficient ventilation of living spaces and offices.



Krantz has a wide range of know-how in the following areas:



Automotive industry



Banks



Office buildings



Printing plants



Shopping malls



Airports



Aircraft paint hangers



Laboratories



Hotels



Isolation wards



Nuclear facilities



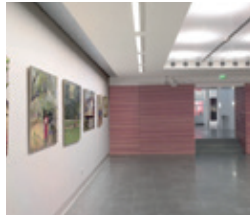
Cinemas



Hospitals



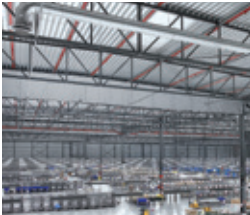
Convention centers



Museums



Pharma/Chem labs



Production facilities



Restaurants



Pools



Sports halls/Arenas



Studios



Theatres



Assembly rooms



Insurance companies





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