VZ-OAR

Oval duct diffuser for supply- or extract air

QUICK FACTS

- Duct diffuser in an oval design
- Meets high decorative requirements for suspended installations
- Mounted horizontally as standard, but can also be mounted vertically
- High flexibility with the adjustable air deflectors
- Non-painted as standard
- Air deflectors in standard colour Jet Black RAL 9005

VZ-OAR					
Duct diffuser length L_R (mm)	Slot/ perforation length A (mm)	Dimensions WxH (mm)	Number of slots/ perforation rows	Recommended air flow V	
				l/s	m³/h
1490	1200	350x160 - 1800x500	1	31	112
		350x160 - 1800x500	2	62	224
		350x160 - 1800x500	3	93	336
		350x160 - 1800x500	4	124	448
		500x160 - 1800x500*	5	156	560
		500x160 - 1800x500*	6	187	672
		630x150 - 1800x500*	8	249	896

More sizes and information on the duct diffusers dimensions on page 6.
**Does not apply to the entire size range, more information on page 6.*

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Technical description

Design

The VZ-OAR oval duct diffuser is available in a supply- or extract air variant.

VZ-OAR for supply air consists of slots equipped with 75 mm air deflectors, featuring rectifier blades and double boomerang profiles, each individually adjustable.

In the extract air variant, the diffuser has perforations. The perforations are arranged transverse to the longitudinal axis, with dimensions determined according to the required extract air flow.

Individual duct sections can be connected using plain duct ends with duct joints and rubber seals.

The diffuser is intended for suspended installation and meets the highest architectural and ventilation performance requirements.

VZ-OAR

VZ-OAR-AL

Functionality

The duct diffuser is designed for horizontal installation as standard, but vertical installation is also possible.

The individually adjustable air deflectors allow all air discharge directions to be set within a 180° range.

Additional configuration options are available through different arrangements of the slot/perforated rows, which can be positioned in random or varied sectors of the duct diffuser's circumference. When multiple duct diffusers are connected in continuous lengths, internal air flow balancing is ensured by an integrated scoop switch.

Material and surface treatment

Duct diffuser

- Made of galvanised steel.
- Standard colour:
  - Non-painted
- Alternative standard colours:
  - RAL 9010, pure white, gloss 30
  - RAL 9003, signal white, gloss 70
  - RAL 9006, white aluminium, gloss 70
  - RAL 9007, grey aluminium, gloss 30
  - RAL 9005, jet black, gloss 70
  - RAL 7035, light grey, gloss 70

Slots

- Made of extruded aluminium profiles.
- Painted in the same colour as the duct diffuser.

Air deflectors

- Made of impact-resistant plastic.
- Standard colour (similar to):
  - RAL 9005, jet black
- Alternative standard colours (similar to):
  - RAL 9010, pure white
  - RAL 9003, signal white
  - RAL 9006, white aluminium
  - RAL 7035, light grey

Adaptation

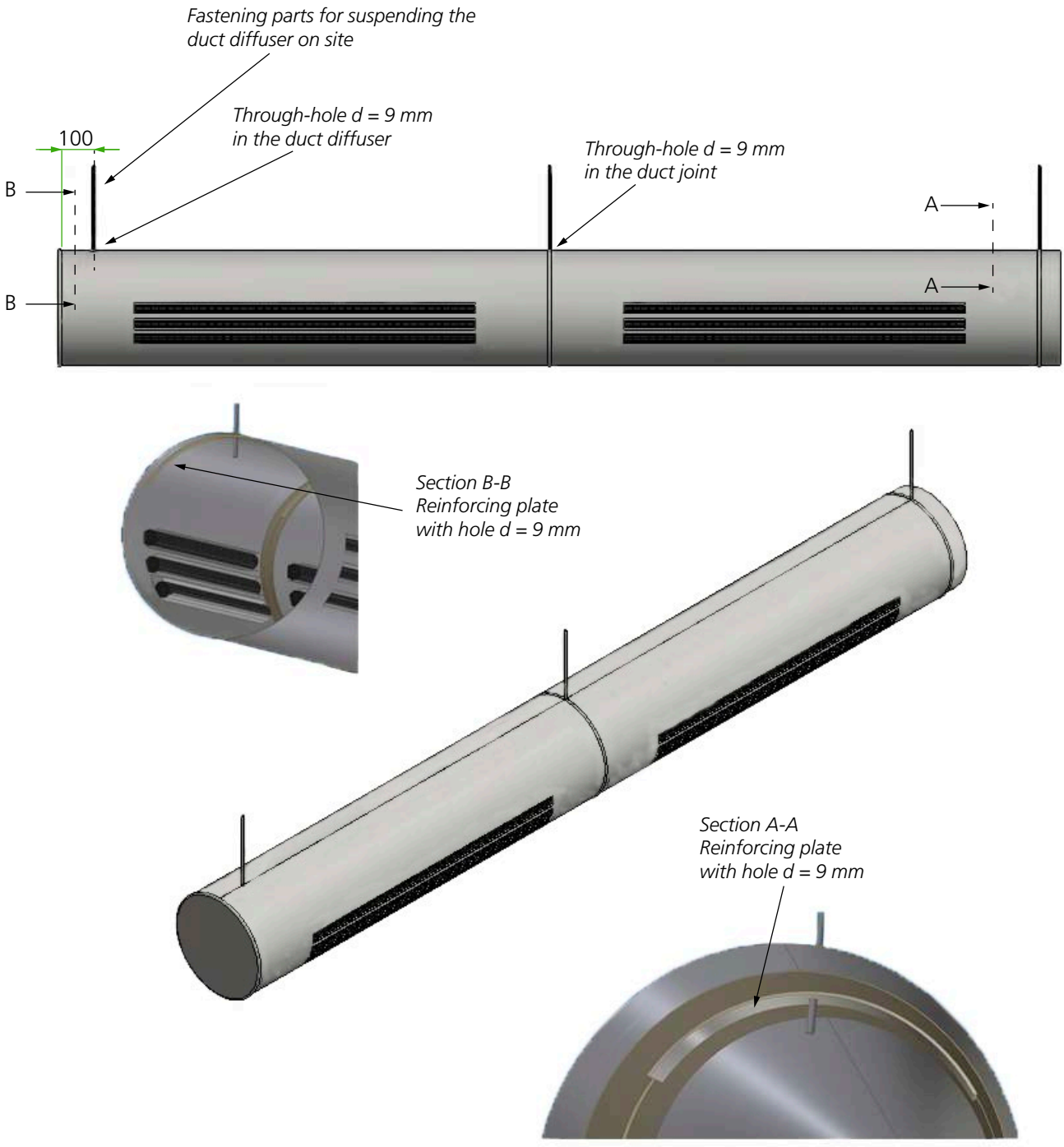
- Other colours available on request.
- Available in aluminium or stainless steel on request.

Accessories

- Plain duct section without slots or perforations.

Installation

Suspension of a duct diffuser length



We reserve the right to alter specifications.

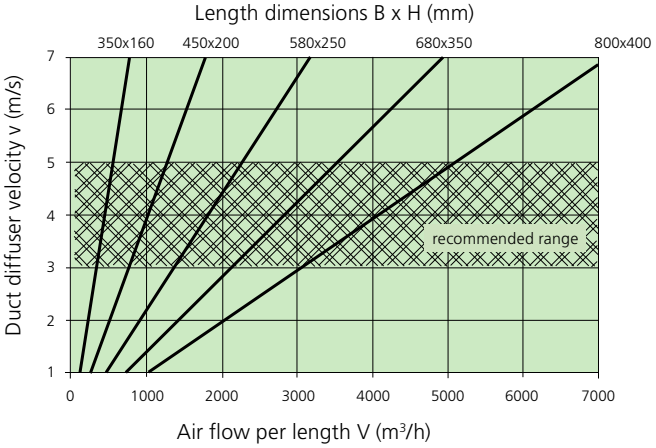
Technical data

Quick selection

Length L_R (mm)	Slot/perforation length A (mm)	Number of slots/perforated rows	Recommended air flow V (m³/h) duct diffuser dimensions B (mm) and H (mm)							
		B	350	400	500	400	450	630	520	580
		H	160	160	160	200	200	150	200	250
990	750	1	70	70	70	70	70	70	70	70
		2	140	140	140	140	140	140	140	140
		3	210	210	210	210	210	210	210	210
		4	280	280	280	280	280	280	280	280
		5	-	-	350	-	-	350	350	350
		6	-	-	420	-	-	420	420	420
		8	-	-	-	-	-	420	-	-
1490	1200	1	112	112	112	112	112	112	112	112
		2	224	224	224	224	224	224	224	224
		3	336	336	336	336	336	336	336	336
		4	448	448	448	-	448	448	448	448
		5	-	-	560	-	-	560	560	560
		6	-	-	672	-	-	672	672	672
		8	-	-	-	-	-	896	-	-

Length L_R (mm)	Slot/perforation length A (mm)	Number of slots/perforated rows	Recommended air flow V (m³/h) duct diffuser dimensions B (mm) and H (mm)								
		B	630	680	730	800	780	910	1160	1450	1800
		H	300	350	400	400	450	500	500	500	500
990	750	1	70	70	70	70	70	70	70	70	70
		2	140	140	140	140	140	140	140	140	140
		3	210	210	210	210	210	210	210	210	210
		4	280	280	280	280	280	280	280	280	280
		5	350	350	350	-	350	350	350	350	350
		6	420	420	420	-	420	420	420	420	420
		8	-	-	-	-	-	560	560	560	560
1490	1200	1	112	112	112	112	112	112	112	112	112
		2	224	224	224	224	224	224	224	224	224
		3	336	336	336	336	336	336	336	336	336
		4	448	448	448	448	448	448	448	448	448
		5	560	560	560	-	560	560	560	560	560
		6	672	672	672	-	672	672	672	672	672
		8	-	-	-	-	-	896	896	896	896

Engineering graphs



Dimensions

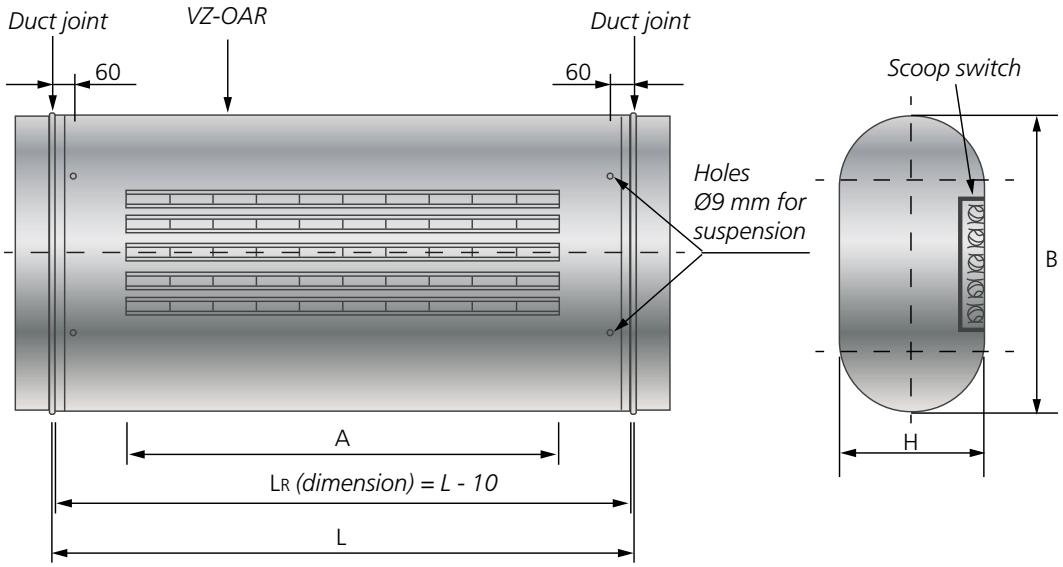
VZ-OAR

H (mm)	L_{max} (mm)	$L_{R\ max}$ (mm)	A (mm)
150 - 200	1500	1490 (L-10)	1200
250 - 500	2000	1990 (L-10)	1575

The diffuser lengths consist of several diffusers connected to each other directly or via plain duct diffusers. The size and total duct diffuser length depend on the air flow.

For acoustic reasons in particular, the flow velocity in the duct diffuser should be in a range of 3 m/s to 5 m/s.

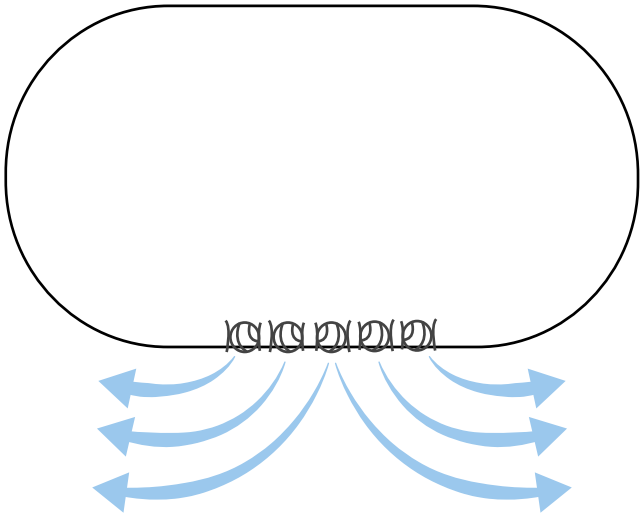
In the case of longer lengths, the individual duct diffusers can also be tiered for pressure equalisation and connected to each other via fittings. The diffuser is therefore also manufactured in almost all intermediate dimensions if required.



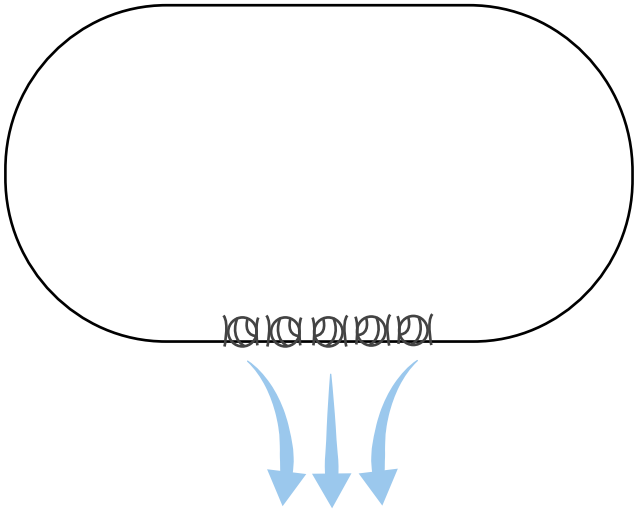
We reserve the right to alter specifications.

Air discharge directions

For classic cooling mode
Position 1 left / right



For classic heating mode
Position 5



Specification

For ordering, contact your local Swegon sales office.

Specification text

Oval duct diffuser VZ-OAR for supply- or extract air, with the following features:

- Duct diffuser made of galvanised steel, non-painted.
- VZ-OAR for supply air consists of slots with 75 mm individually adjustable air deflectors, featuring rectifier blades and double boomerang profiles.
  - Slots made of extruded aluminium, painted in the same colour as the duct diffuser.
  - Air deflectors made of plastic, standard colour black.
- VZ-OAR-AL for extract air has perforations arranged transverse to the longitudinal axis.

We reserve the right to alter specifications.