



Long throw nozzle grille with integrated round duct WGARR



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Long throw nozzle grille with integrated round duct WGARR

Description

In modern architecture, sheet metal and spiral ducts of air-conditioning systems are often incorporated in the design of the room. Emphasis is often placed deliberately on parts of the supply system. In this visible installation of the ventilation ducts, it is a good idea to integrate the air diffusers into the ducts. In order to be able to offer planners a technically advanced air diffuser, which can also be readily integrated into modern architectural concepts, we have developed our long throw nozzle grille with integrated round duct.

The long throw nozzle with integrated round duct type WGARR is suitable for installation in supply air systems. The diffuser type WGARR consists of a round duct with integrated, linear long range nozzles which can also be adjusted subsequently by hand. The pivot angle is 45°. During the installation, the long-throw nozzle grilles with integrated round duct must therefore be mounted in accordance with the desired air direction. The nozzles and the hit-and-miss damper are positioned on the round duct at 3 o'clock (-3U), 6 o'clock (-6U, standard), 9 o'clock (-9U) or 12 o'clock (0U).

A hit-and-miss damper, which ensures that the supply air is blown uniformly across the whole diffuser area, can be integrated into the diffuser. Therefore, the long throw nozzle grille with integrated round duct WGARR can be installed at any point along the duct system.

Accessories, such as dummy pipes, end covers and connection sleeves complete the range for this diffuser (only available for up to NW500; see documentation for round duct system RR-Complete or round duct systems accessories).

Layout

The long throw nozzle with integrated round duct type WGARR is configured as shown in the diagrams for the long throw grille type WGA.

Construction

Round duct

- Galvanised sheet steel (-SV-0000).
- Sheet steel painted to RAL colour 9010 (white, standard) (-SB-9010).
- Sheet steel painted to a freely selectable RAL colour (-SB-xxxx) (colour always with 4 digits).

nozzles

- similar to RAL colour 9006 (white aluminium) (-DA)
- similar to RAL colour 9007 (grey aluminium) (-DG)
- similar to RAL colour 9005 (black, standard) (-DS)
- similar to RAL colour 9010 (white) (-DW)

Model

- | | |
|-------------|--|
| WGARR-... | - with individually manually adjustable nozzles |
| WGARR-...-1 | - one row of nozzles |
| WGARR-...-2 | - two rows of nozzles (available from NW 400) |
| WGARR-3U | - horizontal throw right (3 o'clock) |
| WGARR-6U | - vertical throw downward (6 o'clock) (standard) |
| WGARR-9U | - horizontal throw left (9 o'clock) |
| WGARR-0U | - vertical throw upward (12 o'clock) |

Accessories

Hit-and-miss damper (-SN/ -SS)

- without hit-and-miss damper (-SN, standard)
- With integrated hit-and-miss damper (-SS) for simple air volume and ductwork regulation, made of the same material as the round duct.

Rubber lip seal (-GD0/ -GD1)

- without rubber lip seal (-GD0) (standard)
- with rubber lip seal (-GD1), on both sides, made of EPDM

For more accessories, please refer to the separate documentation "Round duct system accessories".

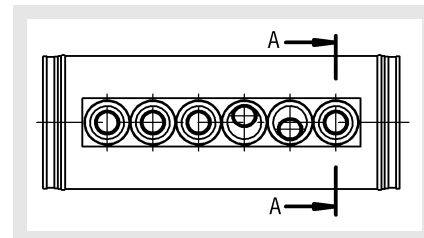
Fastening methods

Fastening hole (-B0 / -BB / -BM)

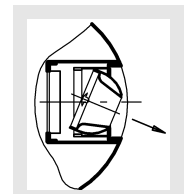
- without fastening hole (-B0)
- with fastening hole $\varnothing 11.5$ mm (-BB) (standard)
Prepared for suspended installation by using an M8 threaded rod and an M8 nut to be provided by the customer.
- with M8 riveting nut installed in factory and M8 threaded rod (-BM) provided on site

Mounting position (nozzle adjustment options)

WGARR-3U/9U

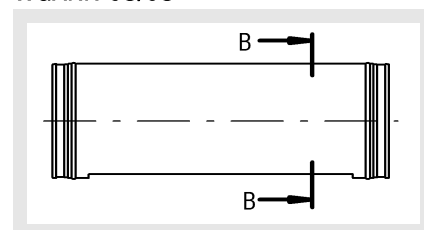


Section A-A

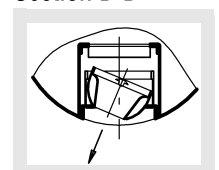


horizontal

WGARR-6U/0U



Section B-B



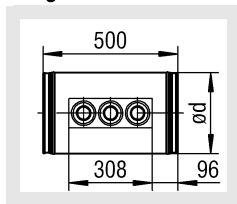
vertical

Long throw nozzle grille with integrated round duct WGARR

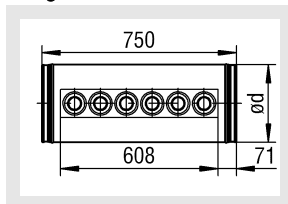
Division of length

1-part:

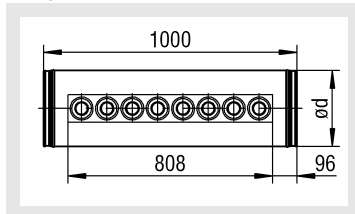
Length 500



Length 750

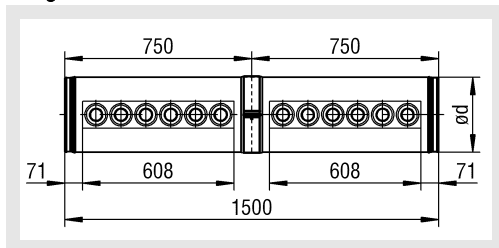


Length 1000

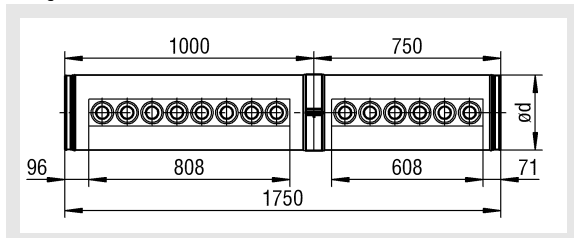


2-part:

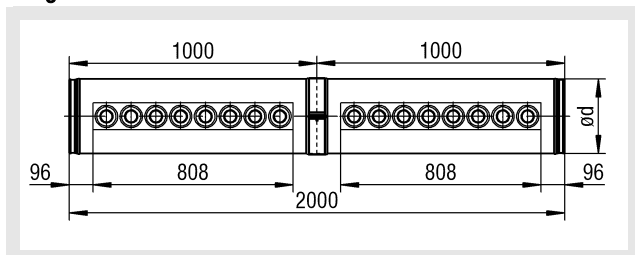
Length 1500



Length 1750



Length 2000



Round duct diffusers with a length of > 1000 mm are produced in two parts and joined in-factory with a connection sleeve. The dimensions of the dummy pipe fit the dimensions of the round duct grille type WGARR.

A different division of length is possible on special request.

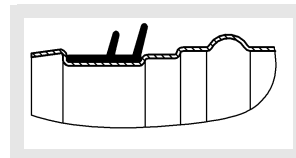
However, the maximum length for a middle or end piece is 1000 mm.

Accessories

Rubber lip seal (-GD0/ -GD1)

- without rubber lip seal (-GD0) (standard)
- with rubber lip seal (-GD1), on both sides, made of EPDM

Detail X



Fastening methods

Fastening hole (-B0 / -BB)

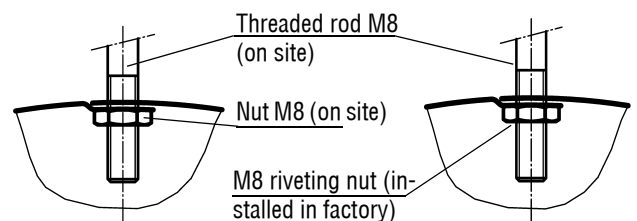
- without fastening hole (-B0)
- with fastening hole ø11.5 mm (-BB, standard)
- with M8 riveting nut installed in factory and M8 threaded rod (-BM) provided on site

Suspension on site

Detail Y

Fastening hole (-BB)

Riveting nut (-BM)



Prepared for suspended installation by using an M8 threaded rod and an M8 nut to be provided on site (for -BB only).

Long throw nozzle grille with integrated round duct WGARR

Order code WGARR

01	02	03	04	05	06
Type	Nominal width	Length	Material	Paint	Nozzle colour
Example					
WGARR	-200	-1000	-SB	-9010	-DS

07	08	09	10	11
Nozzle row	Mounting position	Hit-and-miss damper	Rubber lip seal	Fastening methods
-1	-6U	-SN	-GD0	-BB

Sample

WGARR-200-1000-SB-9010-DS-1-6U-SN-GD0-BB

Long throw nozzle grille with integrated round duct WGARR | Nominal width 200 mm | Length 1000 mm | Sheet steel | Painted to RAL colour 9010 | Plastic nozzles painted in black similar to RAL 9005 | One row | 6 o'clock | Without hit-and-miss damper | Without rubber lip seal | With fastening hole ø11.5 mm

Order details

01 - Type

WGARR = Long throw nozzle grille with integrated round duct
WGARR

xxxx = Painted to a freely selectable RAL colour (always with 4 digits)

02 - Nominal width

200 = 200 mm
224 = 224 mm
250 = 250 mm
280 = 280 mm
315 = 315 mm
355 = 355 mm
400 = 400 mm
450 = 450 mm
500 = 500 mm
560 = 560 mm
630 = 630 mm

03 - Length

0500 = 500 mm (1-part)
0750 = 750 mm (1-part)
1000 = 1000 mm (1-part)
1500 = 1500 mm (2-part)
1750 = 1750 mm (2-part)
2000 = 2000 mm (2-part)

04 - Material

SB = Sheet steel (standard with paint)
SV = galvanised sheet steel

05 - Paint

0000 = Without paint
9010 = painted to RAL colour 9010 (white, standard)

06 - Nozzle colour

DA = Plastic similar to RAL colour 9006 (white aluminium)
DG = Plastic similar to RAL colour 9007 (grey aluminium)
DS = Plastic similar to RAL colour 9005 (black, standard)
DW = Plastic similar to RAL colour 9010 (white)

07 - Nozzle row

1 = one row of nozzles
2 = two rows of nozzles (available from NW 400)

08 - Mounting position

3U = 3 o'clock
6U = 6 o'clock (standard)
9U = 9 o'clock
0U = 12 o'clock

09 - Hit-and-miss damper

SN = Without hit-and-miss damper (standard)
SS = With hit-and-miss damper

10 - Rubber lip seal

GD0 = without rubber lip seal (standard)
GD1 = with rubber lip seal

11 - Fastening methods

B0 = without fastening hole
BB = with fastening hole ø11.5 mm (standard)
BM = with M8 riveting nut installed in factory and M8 threaded rod provided on site

Long throw nozzle grille with integrated round duct WGARR

Specification texts

Round duct long range grille suitable for supply air, matching connection to DIN-ducts. With integrated, individually and manually adjustable nozzles, pivoting range 45°.

Product: SCHAKO type **WGARR**

- Fastening methods:
 - fastening hole
 - without fastening hole (-B0)
 - with fastening hole $\varnothing 11.5$ mm (-BB, standard)(Prepared for suspended installation by using an M8 threaded rod and an M8 nut to be provided on site.)
 - with M8 riveting nut installed in factory and M8 threaded rod (-BM) provided on site
- Nominal width:
 - 200 mm (-200)
 - 224 mm (-224)
 - 250 mm (-250)
 - 280 mm (-280)
 - 315 mm (-315)
 - 355 mm (-355)
 - 400 mm (-400)
 - 450 mm (-450)
 - 500 mm (-500)
 - 560 mm (-560)
 - 630 mm (-630)
- Length
 - 1-part: 500 / 750 / 1000 (-0500/-0750/-1000)
 - 2-part: 1500 / 1750 / 2000 (-1500/-1750/-2000)
- Material and paint (round duct):
 - Galvanised sheet steel (-SV-0000).
 - Sheet steel painted to RAL 9010 (white) (standard, -SB-9010).
 - Sheet steel painted to a freely selectable RAL colour (-SB-xxxx) (colour always with 4 digits).
- Nozzle colour:
 - Plastic similar to RAL colour 9006 (white aluminium) (-DA).
 - Plastic similar to RAL colour 9007 (grey aluminium) (-DG).
 - Plastic similar to RAL colour 9005 (black, standard) (-DS).
 - Plastic similar to RAL colour 9010 (white) (-DW).
- Nozzle rows
 - one row of nozzles (-1)
 - two rows of nozzles (-2) (available from NW 400)
- Mounting position
 - 3 o'clock (-3U)
 - 6 o'clock (-6U, standard)
 - 9 o'clock (-9U)
 - 12 o'clock (-0U)
- Accessories (at an extra charge):
 - Hit-and-miss damper:
 - Without hit-and-miss damper (-SN, standard).
 - With integrated hit-and-miss damper (-SS) for simple air volume and ductwork regulation, made of the same material as the round duct.
 - Rubber lip seal:
 - without rubber lip seal (-GD0, standard).
 - with rubber lip seal (-GD1), on both sides, made of EPDM.

For more accessories, please refer to the separate documentation "Round duct system accessories".[^]