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## 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. The round duct nozzle jet diffuser type DSARR is suitable for installation in supply air systems. The integrated nozzles of the DSARR-F version are not adjustable, those of the DSARR-V version are adjustable manually and individually.

During the installation, the round duct nozzle jet diffuser must be mounted in accordance with the desired air flow 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. Because of the uniform admission, the round duct nozzle jet diffuser type DSARR can be integrated 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 round duct nozzle jet diffuser type DSARR is designed on the basis of the diagrams of the nozzle jet diffuser type DSA.

## 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 (-SBxxxx) (colour always with 4 digits).

nozzles

- plastic
  - similar to RAL colour 9010 (white) (-DW).
  - similar to RAL colour 9005 (black, standard) (-DS).

## Model

DSARR-F	-	with fixed nozzles (standard).
DSARR-V	-	with individually and manually adjustable nozzles.
DSARR3U	-	horizontal throw to the right (3 o'clock).
DSARR6U	-	vertical throw downward (6 o'clock) (standard).
DSARR9U	-	horizontal throw to the left (9 o'clock).
DSARR0U	-	vertical throw upward (12 o'clock).
DSARR1	-	One row of nozzles (standard).
DSARR2	-	Two rows of nozzles.
DSARR4	-	Four rows of nozzles (available from NW400).

## Accessories

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".

## **Fastening methods**

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

- without fastening hole (-B0).
- with fastening hole ø11.5 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 threaded rod (-BM) provided on site

## Mounting position

6 o'clock (-6U, standard)

12 o'clock (-0U)



3 o'clock (-3U)

9 o'clock (-9U)



Ex works, the nozzles are set to the 6 o'clock position. On request the position "3 o'clock", "9 o'clock" or "12 o'clock", each in the air flow direction, is also available.

Please note that for the vertical throw a distance of at least 100 mm is necessary between the weld seam and the diffuser. This means that the weld seam must be offset accordingly.





# Models and dimensions

Dimensions

DSA-RR-F-6U-...



Available sizes

NW	øD	Nozzle rows			Lei	ngth L	Number of
		1	2	4		•	nozzles / rows
200	198	Х	Х	-	۲	500	6
224	222	Х	Х	-	-part	750	12
250	248	Х	Х	-	÷	1000	16
280	278	Х	Х	-		1500	2x12
315	313	Х	Х	-			1x12
355	353	Х	Х	-	2-part	1750	+
400	398	Х	Х	Х	∾_		1x16
450	448	Х	Х	Х		2000	2x16
500	498	Х	Х	Х	х	= ava	ilable
560	558	Х	Х	Х	-	= not	available
630	628	Х	Х	Х			

All combined lengths and nominal widths available! Accessories only available for up to NW500 (see documents for round duct system RR-COMPLETE or accessories for round duct systems).

1.) Position of hole  $\emptyset$ 11.5 mm (-BB, standard) or M8 riveting nut (-BM)







Division of length <u>1-part</u>: Length 500



### Length 750



### Length 1000



## <u>2-part</u>:

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 DSARR.

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 / -BM)

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

#### Suspension on site



Prepared for suspended installation by using an M8 threaded rod and an M8 nut to be provided by the customer. **Riveting nut (-BM)** 

# M8 threaded rod (on site) M8 riveting nut (installed in factory)



# Order code DSARR

01	02	03	04	05	06
Туре	Model	Nominal width	Length	Material	Paint
Example					
DSARR	-F	200	-1000	-SB	-9010

07	08	09	10	11	12
Nozzle colour	Nozzle row	Mounting position	Hit-and-miss damper	Rubber lip seal	Fastening methods
-DS	-1	-6U	-SN	-GD0	-BB

## Sample

#### DSARR-F-200-1000-SB-9010-DS-1-6U-SN-GD0-BB

Round duct nozzle jet diffuser type DSARR | With fixed nozzles | 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 | Mounting position 6 o'clock | Without hit-and-miss damper | Without rubber lip seal | With fastening hole

06 - Paint

### Order details

01 -	Туре
------	------

UT - Type	00 - Fallit				
DSARR = Round Duct Nozzle Jet Diffuser DSARR	0000 = without paint.				
02 - Model	9010 = painted to RAL colour 9010 (white, standard). xxxx = painted to a freely selectable RAL colour (always with				
F = with fixed nozzles (standard).					
V = with individually and manually adjustable nozzles.	4 digits).				
	07 - Nozzle colour				
03 - Nominal width	DS = Plastic similar to RAL colour 9005 (black, standard).				
200 = 200 mm	DW = Plastic similar to RAL colour 9010 (white).				
224 = 224 mm					
250 = 250 mm	08 - Nozzle row				
280 = 280 mm	1 = One row of nozzles (standard).				
315 = 315 mm	2 = Two rows of nozzles.				
355 = 355 mm	4 = Four rows of nozzles (available from NW400).				
400 = 400 mm	00 Nounting position				
450 = 450 mm	09 - Mounting position				
500 = 500 mm	3U = 3 o'clock.				
560 = 560 mm	6U = 6  o'clock (standard).				
630 = 630 mm	9U = 9 o'clock.				
04 - Length	0U = 12  o'clock.				
0500 = 500  mm (1-part).	10 - Hit-and-miss damper				
0750 = 750  mm (1  part).	SN = without hit-and-miss damper (standard).				
1000 = 1000  mm (1  part).	SS =  with hit-and-miss damper.				
1500 = 1500  mm (2  part).	·				
1750 = 1750  mm (2  part).	11 - Rubber lip seal				
2000 = 2000  mm (2  part).	GD0 = without rubber lip seal (standard).				
	GD1 = with rubber lip seal.				
05 - Material	10 Fastaning methods				
SB = Sheet steel (standard with paint).	12 - Fastening methods				
SV = Galvanised sheet steel	B0 = without fastening hole.				
	BB = with fastening hole $\emptyset$ 11.5 mm (standard).				
	BM = with M8 riveting nut installed in factory and threaded				
	rod provided on site				

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## Specification texts

Round duct nozzle jet diffuser for supply air, suitable for connection to DIN ducts.

- With fixed nozzles Product: SCHAKO type DSARR-F-...
- With individually manually adjustable nozzles. Product: SCHAKO **type DSARR-V-...**
- 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 9005 (black, standard) (-DS).
  - Plastic similar to RAL colour 9010 (white).
- Nozzle rows:
  - 1 (-1, standard).
  - 2(-2).
  - 4 (-4) (from NW 400).
- Mounting position:
  - 3 o'clock (-3U).
  - 6 o'clock (-6U, standard).
  - 9 o'clock (-9U).
  - 12 o'clock (-0U).

- Fastening methods:
  - Fastening hole (-B0 / -BB / -BM)
    - without fastening hole (-B0).
    - with fastening hole ø11.5 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 threaded rod (-BM) provided on site

#### 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".