

SDRW

ROUND DIFFUSER WITH MOVABLE VANES



Description:

A round diffuser made of aluminium with movable vanes that are set manually.

Intended use

SDRW ceiling diffusers are designed for use in low- and medium-pressure ventilation systems in public and industrial premises. Adjustable vanes, which make it possible to shape the supply airflow individually, are the distinctive feature of these devices.

Design

SDRW diffusers have round movable vanes that are set by means of a manual mechanism. The body and vanes of the diffuser are made of aluminium and are powder-coated with the colour RAL9010. They can also be coated on request in another RAL colour.

Vane adjustment

The diffuser vanes may be pushed in and pulled out of the body by turning them around the threaded axle on which they are mounted. Each vane is adjusted individually. Pushing the vanes into the body increases the vertical range of the airflow while pulling the vanes out of the body increases the horizontal range.

Dimensions

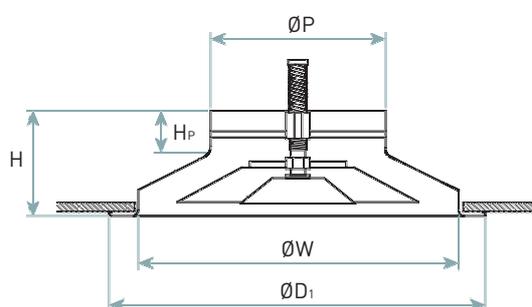


Figure 3. SDRW diffuser dimensions.

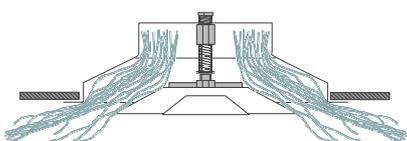


Figure 1. Air supply and cooling.

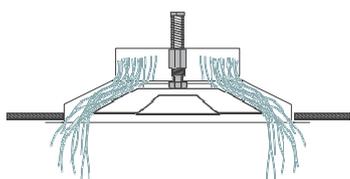


Figure 2. Air supply and heating.

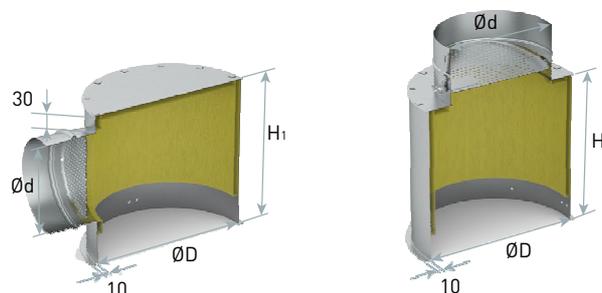


Figure 4. Dimensions of SRR round plenum boxes for SDRW panels.

Table 1. SDRW diffuser dimensions.

Size	ØD ₁	ØW	ØP	H	H _p	Ød	ØD	H ₁	H ₂
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
100	230	195	98	75	30	-	-	-	-
160	335	280	158	105	45	98	160	200	200
200	423	360	198	118	48	123	200	270	200
250	517	445	248	130	48	158	250	270	200
315	640	560	313	146	48	198	315	280	300
355	730	640	353	185	65	248	355	350	300
400	776	680	398	185	65	248	400	350	300
450	825	735	448	185	65	313	450	420	300
500	917	805	498	185	65	313	500	420	300
630	1045	943	628	185	65	353	630	500	400



Technical data of the diffusers, including pressure drop, noise level and stream ranges, is available at smay.eu, in the "Flow Characteristics for Grilles and Diffusers" document.

AL

RAL



Installation

The diffusers are mounted to plenum boxes or to ventilation ducts by means of screws placed around the diffuser connection pipe. If the diffuser is mounted directly to the ventilation duct (without a plenum box), a straight ventilation duct segment of minimum length equal to $1.5 \cdot \varnothing P$ should be placed upstream of the diffuser.

SDRW – Round diffuser with movable vanes

When ordering, please provide information in accordance with the following pattern:

SDRW - <W> - AL <RAL> / <ADD>

Where:

W	Diffuser size: 160, 200, 250, 315, 355, 400, 450, 500, 630
AL	Finish: painted aluminium
RAL	colour according to RAL colour chart*
ADD	Specify additional accessories here, as below**

* Optional values – if not specified, default values will be used

** For more information on accessories see the accessories sheet

Example product labelling:

SDRW-315-AL9010/SRRt-280-b198P



Blocks for REVIT software, the selection range and certificates are available at www.smay.pl.

Plenum box as per the configuration below:

SRR <I> - <H> - <K> <D> <R>

Where:

I	Insulation*
	None – No insulation
	t – Insulated
H	Plenum box height in mm*
K	Connection pipe position *
	b – Side
	g – Top
D	– Connection pipe diameter in mm*
R	Damper in a connection pipe*
	None – No damper
	P – Damper adjusted from outside the box
	Pc – Damper adjusted from inside the box with a cord
	Pd – Damper adjusted from inside the box with a lever (for the boxes with no deflector only)