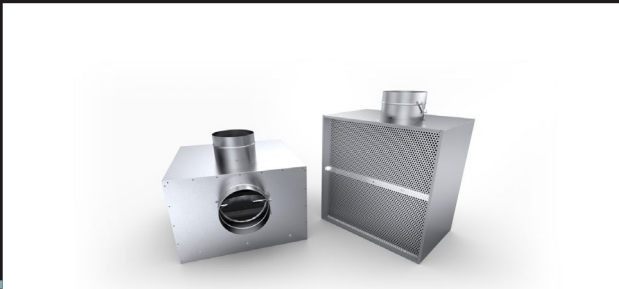


# SR PLENUM BOXES



## Description:

Rectangular or round plenum boxes for diffusers and ventilation grilles, which ensure uniform air discharge via the supply or exhaust element.

## Intended use

The SR plenum boxes are connected to supply and exhaust diffusers. They are designed for low- and medium-pressure ventilation systems.

## Design

The SR plenum boxes are made of galvanised metal sheet as standard. On request, they can be painted in any RAL colour or made of stainless steel. They can be equipped with either a top or side spigot connection pipe and can be equipped with a damper as an option. SR plenum boxes can be delivered insulated. On request, they can be equipped with a screen deflector.

As standard, the dimensions of connection pipes for rectangular boxes are selected according to the shorter side. For a 600x200 box the connection pipe dimension would be ø123.

Table 1. Standard SR plenum box dimensions.

C [mm]	D [mm]	øD [mm]	Ød [mm]	H <sub>1</sub> [mm]	H <sub>2</sub> [mm]
120-145	120-145	120-145	98	270	270
146-200	146-200	146-200	123	270	270
201-300	201-300	201-300	158	270	270
301-400	301-400	301-400	198	330	330
401-500	401-500	401-500	248	380	380
501-600	501-600	501-600	313	430	430

Table 2. Standard SRe cost-effective box dimensions.

C [mm]	Ød [mm]	H <sub>1</sub> [mm]	H <sub>2</sub> [mm]
Up to 250	123	290	200
250-325	158	290	200
326-389	198	330	200
390-510	198	330	300
511-635	248	380	300
Area 635	313	450	300

Boxes with different dimensions can be delivered on request.

Table 3. Connection pipe lengths.

Connection pipe diameter Ød [mm]	Galvanised steel		Stainless steel	
	Without a damper	With a damper	Without a damper	With a damper
80-99	75	140	75	140
100-299	75	100	75	140
300-450	75	140	75	140

## Dimensions

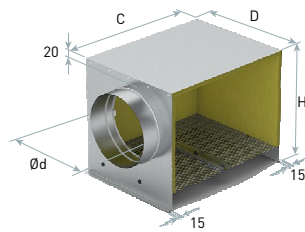


Figure 1. Dimensions of the rectangular box with a side connection pipe.

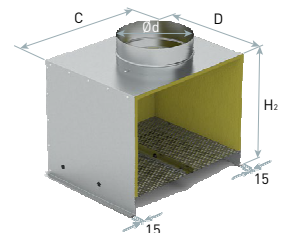


Figure 2. Dimensions of the rectangular box with a top connection pipe.

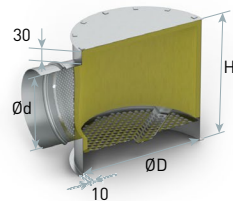


Figure 3. Dimensions of the round box with a side connection pipe.

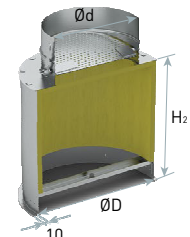


Figure 4. Dimensions of the round box with a top connection pipe.



For NWM, NWMH, NWMR, NWMS, NSDZ and NTZ diffusers, rectangular plenum boxes are used with a round branch duct under the diffuser front panel. For NS4, NS5, NS8 and NS9, square plenum boxes are used with a fold directed to the inside. For the grilles mounted with an assembling frame, square boxes are used with no folds.

Table 4. Using a mounting bracket for different installation methods.

Box type	Diffuser type	Screen deflector s	Installation method	Mounting bracket Km
SR rectangular	NS4, NS5, NS8, NS9, NZD	s	K1 / K4 / K8	Km
		-	K1	Km
	ALDA, SDA, SDB, SDA-E, NWC	-	K1/K4/Z/Schrauben	-
	NWI, SDBP	s	Schrauben	-
		-	Schrauben	-
	NWM, NWMS, NWMH, NWMR	s	Zentralschraube	Km
	-	Zentralschraube	Km	
	NSDZ, NTZ	-	Schrauben	-
SRR round	NS4, NS5, NS8, NS9, SDR, NZD	s	R1	-
		-	R1	Km
	SDRW, NT, NTQ	-	Schrauben	-
SRe rectangular cost-effective	NS4, NS8, NS9	s	K1 / K4 / K8	Km
		-	K1	Km
		-	K4 / K8	-

SO

SN

SM



## Manufacturing versions



Figure 5. Box with no damper and no deflector.



Figure 6. The box with no damper and with a deflector.



Figure 7. The box with a damper and with no deflector.

## Accessories



Figure 8. Damper adjusted from the outside.

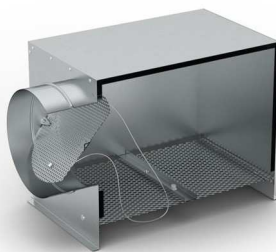


Figure 9. Damper adjusted from the inside with a cable.



Figure 10. Damper adjusted from the inside with a lever.

## Cost-effective version

There are two significant differences between the cost-effective and standard versions. The first is the change in the side wall mounting method to the box (fig. 11). The second is use of a different method for damper adjustment (fig. 12). The cost-effective plenum boxes, similar to the standard ones, are made in versions with a deflector and damper and without them. Please note that when the cost-effective version with a damper is used, the structural resistance to multiple damper readjustments is lower. The damper is adjusted with a lever shown in fig. 13.



Figure 11. The SRe cost-effective box.



Figure 12. Damper adjustment from inside the box.

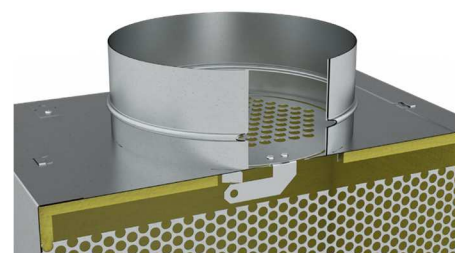


Figure 13. Pe damper adjustment lever.

# SR – Plenum boxes

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

<TYP> <I> <W> - <C>x<D> - <oD> - <H> - <K> - <d><R> - <M> - <P>

Where:

<b>TYPE</b>	Plenum box type
	SR – Rectangular plenum box SRe – Rectangular box, cost-effective version ** SRR – Round plenum box
<b>I</b>	Insulation*
	<b>None</b> – No insulation t – Insulated
<b>W</b>	Screen deflector*
	<b>None</b> – No deflector (default for exhaust) s – With a deflector (default for supply)
<b>C</b>	Box clearance width in mm (for SR and SRe rectangular boxes only)
<b>D</b>	Box clearance height in mm (for SR and SRe rectangular boxes only)
<b>ØD</b>	Box clearance diameter in mm (for SRR round boxes only)
<b>H</b>	Plenum box height in mm*
<b>K</b>	Connection pipe position *
	<b>b</b> – Side g – Top
<b>d</b>	Connection pipe diameter in mm*
<b>R</b>	Damper in a connection pipe*
	<b>None</b> – No damper P – Damper adjusted from outside the box (for SR and SRR only) Pc – Damper adjusted from inside the box with a cord (for SR and SRR only) Pd – Damper adjusted from inside the box with a lever (for SR and SRR with no deflector only, <W> = none) Pe – Damper adjusted from inside the box with a lever (for SRe with no deflector only, <W> = none)
<b>M</b>	Installation method (for mounting brackets, see Table 4.)*
	<b>None</b> – No mounting bracket Km – With a mounting bracket
<b>P</b>	Design*
	<b>S0</b> – Galvanised steel SN – Stainless steel, grade 1.4301 (304 according to AISI, 0H18N9 according to PN) (for SR only) SM – Stainless steel, grade 1.4404 (316L according to AISI, 0H17N14M2 according to PN) (for SR only)

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

\*\* Cost-effective version is only available in the square version C = D

Sample order: **SRts-310x310-330-g198P**



- Blocks for REVIT software,
  - selection range and
  - certificates
- are available at [www.smay.pl](http://www.smay.pl).