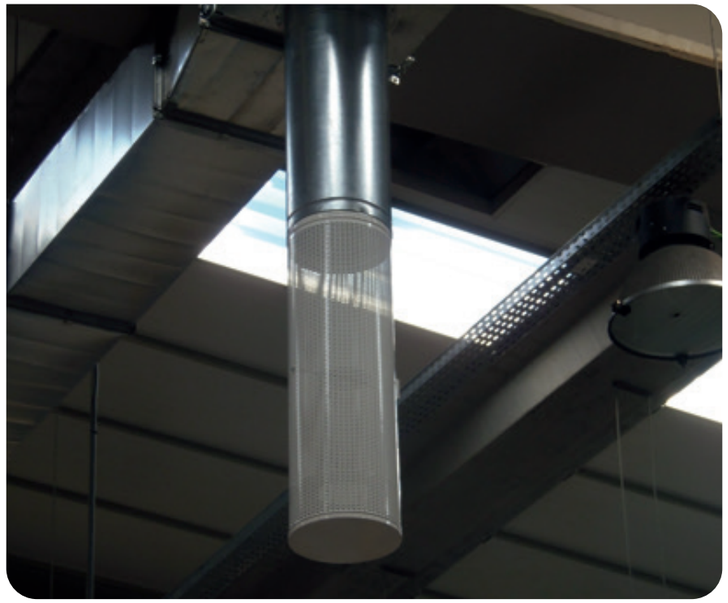
S-90-GV

Catalogue Series S-90-GV



Variable geometry unit

Product description

The **S-90-GV** diffusers are variable geometry units for installation at considerable heights.
They are used in industrial environments, in both heating and cooling systems
They consist of a perforated cylinder, inner discs, and a damper to change the discharge air flow.
The air flows into the cylinder guide through the orifice plate, when contacting the damper changes the discharge air stream.
In cooling mode the air is discharged horizontally and spreads in a radial pattern.
In heating the damper is closed and the air is discharged downwards.
The damper can be adjusted manually, by motor-driven means or by a temperature-adjustable item.

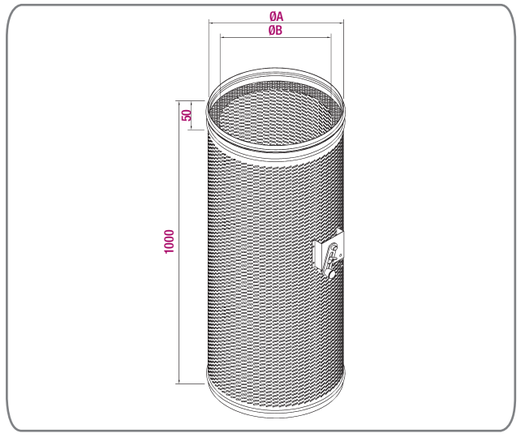
The unit is connected by means of a circular spigot in the upper cover.
The diffusers may be suspended or fixed to columns or walls, on a duct bend or take-off below the main duct.

The recommended minimum installation height is 2,4 m, until maximum installation heights of 5 m.
The S-90-GV-44 version has a larger free air outlet área tan the standard S-90 diffuser to provide an outlet velocity reduction of 35%.

Finished

They are made of galvanised steel sheet with built-in equalizing air discs and damper.
The standard finish is RAL 9010 white paint, although any RAL colour is available upon request.
Stainless steel and lateral connection are available as an option.

General dimensions



Nominal	Ø A	Ø B
250	248	194
315	313	259
355	353	299
400	398	344
450	449	394
500	498	444
560	558	504
630	628	574

Unit in mm

Selection table (Vertical discharge)

Size	Q (m^3/h)	L_{wA} [dB(A)]	ΔP_t (Pa)	Y (m)
250	615	35	16	2,6
	715	40	22	3,1
	835	45	30	3,6
315	915	35	13	3,1
	1070	40	17	3,6
	1250	45	23	4,3
355	1120	35	11	3,4
	1315	40	15	4,0
	1535	45	20	4,6
400	1475	35	10	3,9
	1720	40	14	4,6
	2010	45	19	5,4
450	1805	35	29	4,3
	2010	40	37	4,8
	2460	45	55	5,9
500	2165	35	28	4,6
	2530	40	38	5,4
	2950	45	51	6,3
560	2500	35	23	4,8
	2900	40	31	5,5
	3375	45	42	6,4
630	3030	35	21	5,1
	3540	40	28	6,0
	4135	45	39	7,0

Selection table (Horizontal discharge)

Size	Q (m^3/h)	L_{wA} [dB(A)]	ΔP_t (Pa)	X (m)
250	615	35	16	1,2
	750	40	24	1,5
	900	45	35	1,8
315	980	35	14	1,6
	1200	40	22	1,9
	1425	45	30	2,3
355	1250	35	13	1,5
	1500	40	19	1,8
	1800	45	27	2,2
400	1650	35	13	1,8
	2000	40	19	2,2
	2400	45	28	2,6
450	2050	35	38	2,0
	2400	40	52	2,3
	2875	45	75	2,8
500	2400	35	38	2,1
	2900	40	49	2,6
	3500	45	71	3,1
560	3000	35	33	2,3
	3500	40	45	2,7
	4250	45	66	3,3
630	3250	35	24	2,2
	3950	40	35	2,7
	4700	45	50	3,2

LEGEND

Q (m^3/h): Air flow.
L_{wA} [dB(A)]: Puissance acoustique.
ΔP_t (Pa): Total pressure loss.
Y (m): Maximum penetrarion of the air stream of with $\Delta T = +10º$ C
Throw for a maximum velocity of 0,20 m/s at the occupied zone, with $\Delta T = -6º$ C.