



TSR

Circular ceiling diffuser with adjustable front plate for apparent installations

Systemair TSR ceiling diffuser complete with plenum box for visible installation. The plenum box is fitted with a removable damper, test points and fibre-free sound insulation.

Function

The TSR is a complete circular supply diffuser, with an adjustable and sound-insulated diffuser unit combined with a plenum box. The plenum box has a damper and test points, and is internally lined with fibre-free sound-insulation material. The TSR is suitable for cooled air with a maximum ΔT of 12 K.

Design

The TSR is manufactured from galvanized sheet metal with a white powder-coated finish (RAL 9010-80) and is available in the following diameters: $\varnothing 100$, $\varnothing 125$, $\varnothing 160$, $\varnothing 200$ and $\varnothing 250$.

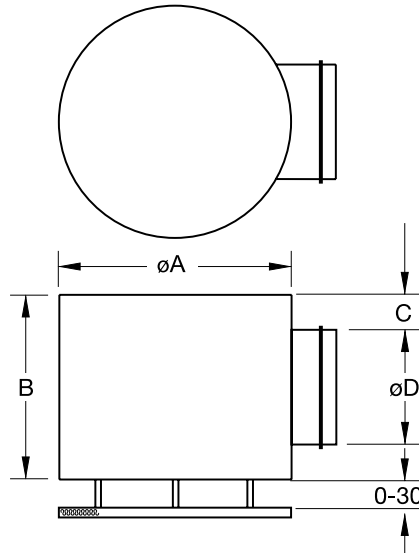
How to use for exhaust air

This device can be used for exhaust air.

Mounting

The diffuser is fixed securely by screwing up into the ceiling from the inside of the unit. The front plate can be removed by pulling it straight out. The sound-absorbing material is cut out of the diffuser's centre to make room for the screws.

Dimensions



	$\varnothing A$	B	C	$\varnothing D$
TSR 100	250	170	35	99
TSR 125	250	200	37	124
TSR 160	315	250	45	159
TSR 200	400	285	43	199
TSR 250	400	330	40	249

Sound attenuation, ΔL (dB)

	Mid-frequency band, Hz							
	63	125	250	500	1k	2k	4k	8k
TSR 100	23	17	13	16	7	6	8	10
TSR 125	21	16	9	15	10	6	8	11
TSR 160	21	15	10	15	9	6	7	10
TSR 200	17	12	13	15	8	6	8	10
TSR 250	16	12	11	14	10	7	7	9

Sound power level, L_w

$L_w(\text{dB}) = L_pA + K_{ok}$ (L_pA = diagram K_{ok} = table) correction factor K_{ok}

	Mid-frequency band, Hz							
	63	125	250	500	1k	2k	4k	8k
TSR 100	14	1	6	-2	-3	-3	-14	-21
TSR 125	15	1	6	-3	-3	-3	-13	-19
TSR 160	16	4	6	-1	-2	-5	-15	-24
TSR 200	15	7	4	-1	-1	-5	-18	-24
TSR 250	17	8	7	0	-2	-5	-16	-24
Tolerance	± 6	± 3	± 2	± 2	± 2	± 3	± 3	± 4

TSR											
Size	Art No	Air flow range (m^3/h , l/s) and throw $l_{0,2}$ (m)							ΔP_t - Pressure drop (Pa)		
100	6100	1	1	2					11	38	63
125	6101		1	2	2				12	28	51
160	6102			1	2	3			13	29	44
200	6103				2	2	3		13	25	43
250	6104					2	3	4	11	26	49
	m^3/h	80	120	160	220	280	380	530	20-25	30	35-40
	l/s	22	33	44	61	78	106	147	dB (A)		