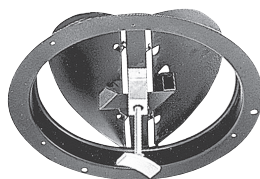


Ceiling Diffusers

Fixed circular diffusers



SC 831 series - Steel



Damper BY

Advantages

- Easy installation.

APPLICATION

- Horizontal air supply, fixed air diffusion pattern.
- Simple heating ($\Delta T_{\max} = + 30^{\circ} \text{C}$) and air-conditioning ($\Delta T_{\max} = - 14^{\circ} \text{C}$) installations.
- Ceiling mounted or on exposed ductwork.

DESCRIPTION

- Protruding pressed steel circular cones.
- Finish - white epoxy painted steel RAL 9010 tint.
- Visible fixing to ceiling, using screws in the external cone and FR mounting ring or BY damper.
- Connection to circular ducts.

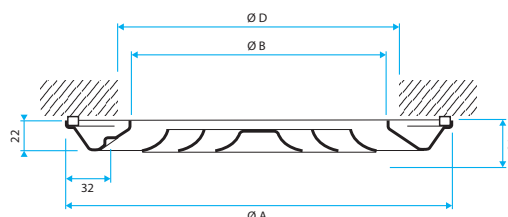
ACCESSORIES

- FR mounting ring in steel.
- BY damper in steel, also used as a mounting ring. Adjusted through the centre of the diffuser. Adjustment key supplied with the damper.
- LRE side connection plenum in galvanised steel – see page 248.

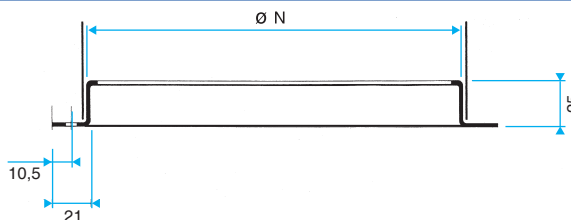
ADDITIONAL RANGE

- Paint finish in accordance with the RAL colour chart (please, consult us).

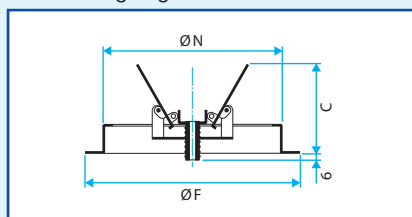
DIMENSIONS



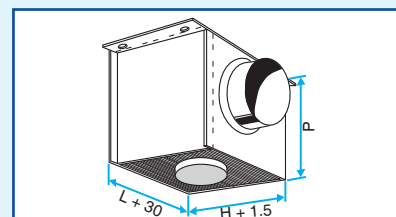
SC 831 diffuser



FR mounting ring



BY damper



LRE plenum

Accessories: Dimensions

$\varnothing N$ (mm)	$\varnothing A$ (mm)	C (mm)
160	190	110
200	240	110
250	290	140
315	340	165
355	390	180

Diffusers: Comfort airflow levels for $L_w < NR 35$ and dimensions

$\varnothing N$ (mm)	$\varnothing A$ (mm)	$\varnothing B$ (mm)	E (mm)	Airflow (m ³ /h)
160	230	134	24	250
200	282	186	30	450
250	334	238	35	600
315	386	290	40	900
355	440	340	45	1200

- See selection table on page 287.
- For plenum sizes, see page 248.

RANGE R10

Dimensions	Damper BY Code	Diffuser SC 831 Code	Mounting ring FR Code	Plenum LRE Side connector Code
$\varnothing 160$	11053180	11051020	11053440	11053311
$\varnothing 200$	11053181	11051021	11053441	11053312
$\varnothing 250$	11053182	11051022	11053442	11053313
$\varnothing 315$	11053183	11051023	11053443	11053314
$\varnothing 355$	11053184	11051024	11053444	11053315

Ceiling Diffusers

Adjustable circular diffusers



AF 842 series - Aluminium



BR damper

Advantages

- Available in two standard finishes.
- Wide airflow level range.
- Highly simplified adjustment (patented system).
- Easy ceiling fixing using the F16 lugs.

APPLICATION

- Adjustable horizontal or vertical air supply diffusion.
- Heating ($\Delta T_{\max} = + 30^{\circ} \text{C}$) and air-conditioning ($\Delta T_{\max} = - 16^{\circ} \text{C}$) installations.
- Ceiling mounted or on exposed ductwork.

DESCRIPTION

- External cone in aluminium and core in pressed steel.
- Adjustable air diffusion by a quick and easy worm screw system (patented).
- Painted in epoxy, white RAL 9010 or coloured alu. RAL 9006.
- Fixing to the concealed concrete tile using lugs mounted on the diffuser (F16 fixing).
- Direct connection on a circular duct or using the LRE plenum.

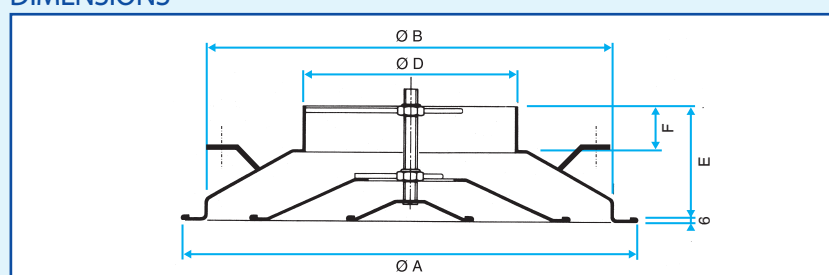
ACCESSORIES

- BR damper: butterfly type with either 2 or 4 V-shaped blades (depending on diameter). Manufactured in steel. Adjusted through the diffuser by direct movement of the blades.
- BY damper: butterfly type with either 2 or 4 V-shaped blades (depending on diameter). Manufactured in steel. Adjusted through the diffuser by direct movement of the blade.
- LRE side connection plenum in galvanised steel.

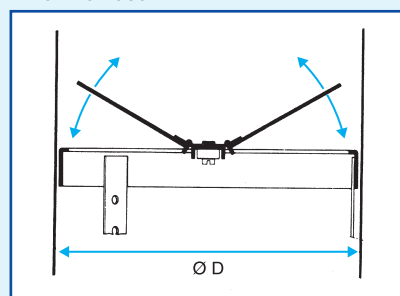
ADDITIONAL RANGE

- Paint finish in accordance with the RAL colour chart (please, consult us).
- LRE insulated connection plenums or with different connection diameters (please, consult us).

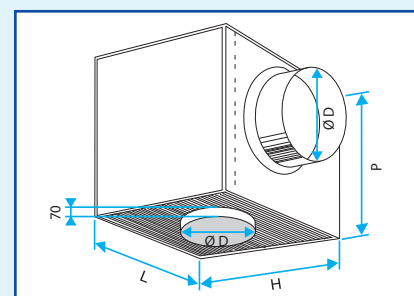
DIMENSIONS



AF 842 diffuser



BR damper



LRE plenum

Comfort airflow levels for $Lw < NR 35$ and dimensions							
Ø D (mm)	Ø A (mm)	Ø B (mm)	E (mm)	F (mm)	P (mm)	L x H (mm)	Airflow (m ³ /h)
160	354	295	110	55	210	220 x 220	250
200	428	370	120	50	250	265 x 265	400
250	532	465	135	50	300	315 x 315	650
315	623	555	150	50	365	375 x 375	850
355	730	645	187	75	405	420 x 420	1100
400	776	690	185	78	450	460 x 460	1300
500	909	807	195	79	550	560 x 560	1800
630	1045	950	184	75	680	690 x 690	2500

• See selection table page 286.

RANGE

Dimensions	Damper BR Code	Diffuser AF 842 F16 RAL9006 Code	Diffuser AF 842 F16 RAL9010 Code	Plenum LRE Side connector Code
Ø 160	11053220	11051521	11051060	11053311
Ø 200	11053221	11051522	11051061	11053312
Ø 250	11053222	11051523	11051062	
Ø 315	11053223	11051524	11051063	
Ø 355	11053224	11051525	11051064	11053315
Ø 400	11053225	11051526	11051065	
Ø 500	11053227	11051528	11051067	
Ø 630	11053228	11051529	11051068	

Selection Tables



SC 831 - SC 832 TP Series

Air supply with ceiling effect

Ak (m ²)	Ø N (mm)	qv (m ³ /hr)																				Lw Vk	Lt Pa
		150		200		300		400		500		600		800		1000		1200		1400			
0.011	160	—	1.8	27	2.3	41	3.4																
		3.9	1	5.0	22	7.5	50																
0.020	200	—	1.3	—	1.8	23	2.6	33	3.4	41	4.3												
		2.1	6.0	2.8	7.8	4.1	15	5.7	28	7.0	45												
		—	1.4	—	2.1	20	2.7	27	3.5	34	4.1	45	5.5										
0.031	250			1.9	—	2.7	7.2	3.6	12	4.5	18	5.5	26	7.5	50								
0.046	300							1.9	—	2.5	5.5	3.1	8.0	3.7	14	5.0	22	6.2	35	7.5	50		
0.047	355	Lw	Lt					7	1.9	10	2	20	2.8	30	3.5	37	4.5	40	5.4	50	7.1	57	7.8
		Vk	Pa					28	3.2	2.8	4.8	3.5	7	4.8	12	6	20	7	28	10.2	39.2	11.6	50.3

The values Lw (NR) do not take the attenuation in the premises into account.

Speed = 0.37 m/s.

Corrections for other terminal velocities

Vt (m/s)	0.25	0.37	0.5
Lt	x 1.5	x 1	x 0.75