

ADJUSTABLE CONE DIFFUSER



Serie EDRA / EDRA-PQ

High-induction circular diffuser with adjustable cones made up of concentric truncated cone profiles (available also for EDRA-PQ on squared panel, suitable for false ceiling 600x600 installation). Micrometric cone position adjusting allow to modify air throw direction according to thermal conditions and environment needs.

FEATURES

- Material: aluminium and steel
- Standard finishing: epoxy powder coating Ral9010 resistant to impact and abrasion
- Fixing: by means of screws positioned on the diffuser neck
- Installation High: from 2,7 to 6 m

POSSIBLE EXECUTIONS

- EDRA circular diffusers with adjustable cones
- EDRA-PQ circular diffusers with adjustable cones on square panel 595x595 mm

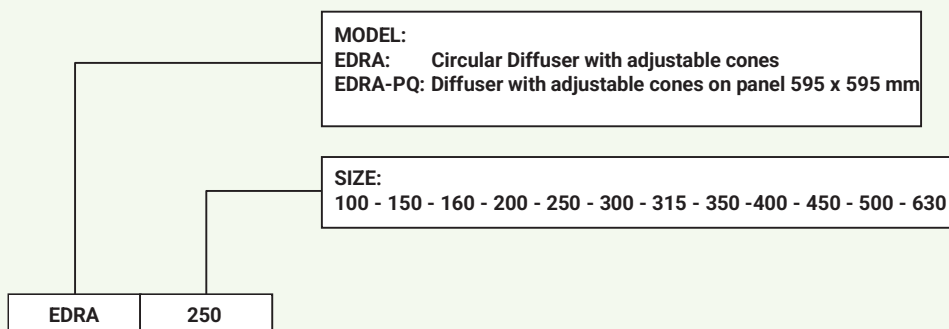
USE

For supply and return.

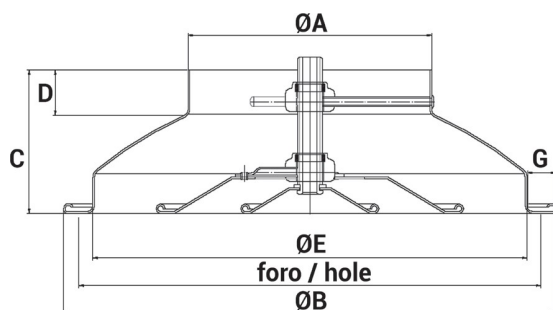
ACCESSORIES

- EPZ-DC galvanised plenum box;
- EPI-DC insulated plenum box;
- SD volume control damper;
- EQUA equalizer;
- Kit clips for fixing.

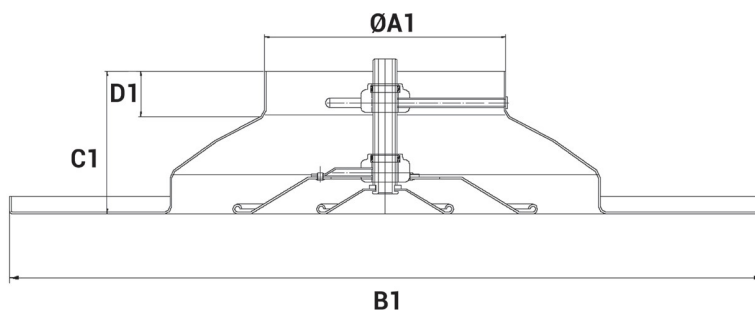
CONSTRUCTION



DIFFUSER EDRA



DIFFUSER EDRA-PQ:



DIMENSIONS:

model	EDRA							EDRA-PQ			
	Ø A	Ø B	Ø E	Ø hole	C	D	G	Ø A1	B1 x B1	C1	D1
100	96	250	195	225	85	33	25	96	595 x 595	85	33
150	146	330	280	308	90	25	23	148	595 x 595	90	23
160	156	330	280	308	90	27	23	156	595 x 595	90	28
200	196	445	370	410	115	37	35	196	595 x 595	115	37
250	246	535	460	500	135	37	35	246	595 x 595	135	37
300	296	655	560	610	170	45	45	296	595 x 595	115	45
315	311	655	560	610	170	48	45	311	595 x 595	115	44
350	346	763	650	709	195	60	54	-	-	-	-
400	396	793	680	740	195	60	52	-	-	-	-
450	444	843	730	790	195	60	52	-	-	-	-
500	496	893	782	842	195	60	52	-	-	-	-
630	624	1045	929	991	210	55	54	-	-	-	-

All dimensions are expressed in mm

PERFORMANCES:

Model	Effective section	Vk	2	3	4	5	6
	m²						
100	0,0059	m³/h	42	63	84	105	127
		Pa	7,6	17,2	30,6	47,7	68,7
		L(m)	0,4	0,6	0,8	1,0	1,2
150	0,0149	m³/h	107	161	216	268	322
		Pa	6,3	14,2	25,2	39,4	56,8
		L(m)	0,7	1,1	1,5	1,9	2,2
160	0,0167	m³/h	120	181	241	301	361
		Pa	6,1	13,8	24,5	38,3	55,1
		L(m)	0,8	1,2	1,7	2,1	2,5
200	0,0279	m³/h	201	301	402	502	602
		Pa	5,5	12,5	22,2	34,7	49,9
		L(m)	1,2	1,7	2,3	2,9	3,5
250	0,0448	m³/h	323	484	645	806	968
		Pa	5,0	11,3	20,1	31,5	45,3
		L(m)	1,5	2,4	3,2	4,1	4,9
300	0,0656	m³/h	473	709	945	1181	1418
		Pa	4,6	10,5	18,6	29,1	41,8
		L(m)	2,1	3,2	4,2	5,3	6,3
315	0,0726	m³/h	523	785	1046	1308	1569
		Pa	4,6	10,3	18,2	28,5	41,1
		L(m)	2,3	3,4	4,5	5,7	6,8
350	0,0904	m³/h	651	976	1302	1627	1953
		Pa	4,4	9,9	17,6	27,5	39,6
		L(m)	2,6	4,0	5,3	6,6	7,9
400	0,1175	m³/h	846	1269	1692	2116	2539
		Pa	4,1	9,3	16,5	25,8	37,2
		L(m)	3,2	4,7	6,3	7,9	9,5
450	0,1500	m³/h	1080	1620	2160	2700	3240
		Pa	4,0	8,9	15,8	24,7	35,8
		L(m)	3,7	5,6	7,4	9,3	11,1
500	0,1863	m³/h	1342	2013	2684	3355	4026
		Pa	3,8	8,5	15,0	23,5	33,8
		L(m)	4,3	6,4	8,6	10,7	12,9
630	0,2994	m³/h	2156	3233	4311	5389	6467
		Pa	3,2	7,1	12,7	19,9	28,6
		L(m)	6,4	9,6	12,8	16,0	19,2
indice di rumorosità		dB(A)	20	25	30	35	40

Vk [m/s] Effective Air Speed

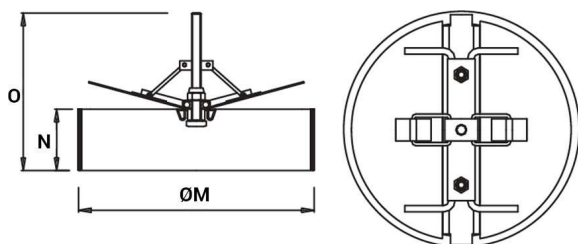
Q [m³/h]: airvolume

Pa: pressure drop in Pa

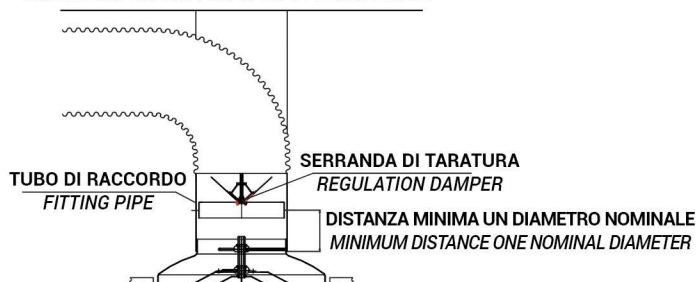
L(m): airflow distance with terminal air speed 0,25 m/s.

dB(A): weighted sound power level

BUTTERFLY DAMPER SD:



INSTALLAZIONE DEL DIFFUSORE CON TUBO FLESSIBILE INSTALLING THE DIFFUSER WITH FLEXIBLE DUCT

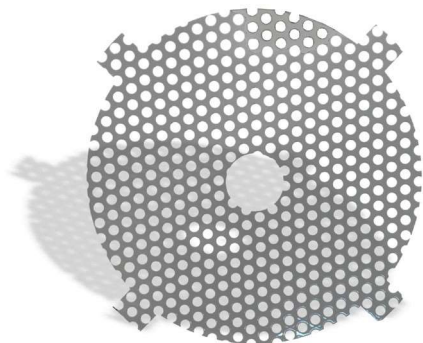


- Material: steel
- Finishing: galvanised
- Fixing: with screws on diffuser neck or to duct
- SD butterfly damper is suitable for mounting upstream of the circular diffusers, is made of galvanized steel and is complete with a robust opening/closing mechanism to avoid vibrations and noise when the air passes.
- Simple Installation, adjustments and maintenance.
- The damper located on the top of the diffuser is adjusted by acting on the adjustment screw, through the hole on the threaded rod of the diffuser.

Model	ØM	N	O
100	95	39	100
150	145	39	100
160	155	39	100
200	195	39	100
250	245	39	100
300	295	39	100
315	310	39	100
350	345	39	100
400	395	39	100
450	445	39	100
500	495	39	100
630	545	39	100

EQUALIZER EQUA

The equalizer is an accessory to fragment the air and distribute it equally at the exit from diffuser face.



FIXING CLIPS

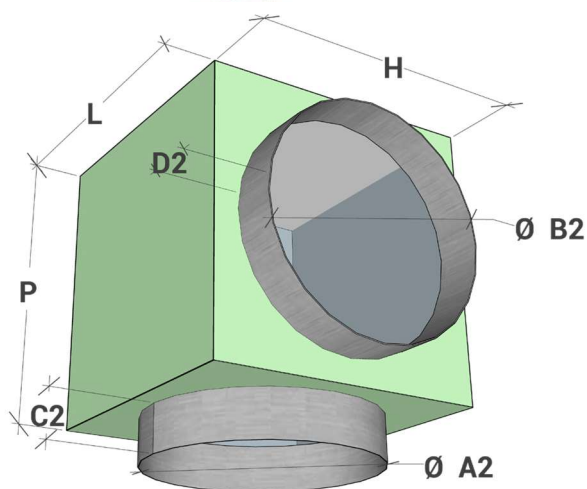
Fixing clips for installation on plasterboard false ceilings or rigid false ceilings (3 pieces per pack).



PLENUM BOX EPZ-DC EPI-DC



- Material: steel
- Finishing: galvanised
- Fixing: with screws on diffuser neck or to duct
- Plenum box for EDRA is suitable for mounting on adjustable circular cone diffusers. It is made of galvanized steel and can be covered with insulating material. It can be equipped with equalizer and volume damper with opening and closing lever.
- The damper located into plenum box is adjusted through a lever.



model	L	H	P	ØA2 Diffuser	ØB2 Flex./Rigid Duct	C2	D2
100	200	200	200	102	95	70	100
150	250	250	250	152	145	70	100
160	250	250	250	162	155	70	100
200	300	300	300	202	195	70	100
250	350	350	350	252	245	70	100
300	400	400	400	302	295	70	100
315	400	400	400	317	310	70	100
350	450	450	450	352	345	70	100
400	500	500	500	402	395	70	100
450	550	550	550	453	445	70	100
500	600	600	600	503	495	70	100
630	730	730	730	632	600	70	100

TENDER SPECIFICATION

EDRA are high induction circular diffuser with adjustable cones made up of concentric truncated cone profiles (EDRA-PQ version on a square panel is also available, suitable for installation on false ceilings with 595x595 panels). The micrometric adjustment of the position of the central cones using a screw allows to modify the direction of the airflow according to the required thermal conditions.

INSTALLATION HEIGHT: from 2.7 to 6 m.

MOUNTING INSTRUCTION:

Installation, adjustments and maintenance are simple to perform. The intermediate cones are easily extractable by rotating the hollow threaded central pin. The adjustment of on-demand damper located on the top of the diffuser occurs by acting on the adjustment screw, through the hole on the threaded rod of the diffuser. Ceiling fixing is carried out using screws from the neck of the diffuser.

Central cone adjustment in wide open position: optimal position in cooling conditions to have the greatest horizontal diffusion radius without creating discomfort in the occupied area in rooms with an ideal height between 3 and 4 m. With this configuration you have the best conditions for pressure drop, speed and sound level. The maximum temperature difference (DT) between the ambient air and the air coming out of the diffuser to obtain optimal induction conditions is 12°C.

Central cone in compact position: optimal position for particularly high rooms, up to 6 m and in heating conditions as a vertical launch is obtained which opposes the convective motion of the air in the room.

MONTAGGIO CON CANOTTO DI RACCORDO E SERRANDA A FARFALLA

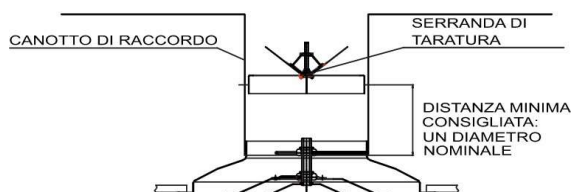


FIG. 1

Picture 1 Installation with butterfly damper

- mount the damper on the connecting duct maintaining, if possible, a distance from the diffuser equal to a nominal diameter and in any case not less than 5 cm;
- unscrew the central cones from the diffuser and fix the external cone on the fitting;
- adjust the internal cones according to the desired diffusion parameters;
- adjust the damper using the central hole on the threaded rod of the diffuser.

MONTAGGIO CON TUBO FLESSIBILE E SERRANDA A FARFALLA

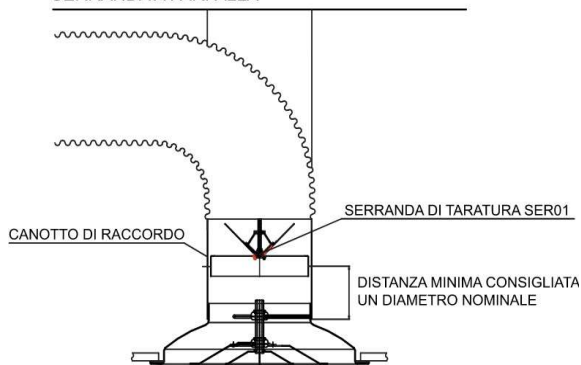


FIG. 2

Picture 2 Fig. Mounting on flexible duct with butterfly damper

- hang the diffuser from the ceiling or fix it on the false ceiling;
- fix the damper on the connecting tube;
- apply the connecting tube inside the diffuser;
- insert the flexible duct onto the connection sleeve and secure it with a clamp.