

Backward curved impeller



Single inlet direct-drive centrifugal fans, manufactured from anti-corrosion steel sheet with polyester paint, centrifugal backward curved impeller dynamically balanced, three-phase motor, IP55, Class F. CBTRL models: Fan manufactured from galvanized sheet steel (Scroll and motor support). Available up to 501 model.

Motors

2 pole, IE 2 high efficiency. All motors are IP55, class F. Supply voltage: Three-phase 230/400V-50Hz, up to 3 kW. 400V-50Hz for more power.

Additional information

Standard orientation: LG270. Designed to continuously circulate air up to 120°C.

On request

Manufactured from different materials. RD versions. Versions with no stand (MB – Motor Flange). 60 Hz versions. 4 pole motors. 2-speed motors. High-temperature versions (up to 250°C, except for L version: max. 200°C) (R versions: with cooling impeller). Inspection door, draining, weather seal on scroll and shaft access.

ATEX versions CBTR / CBTRL

On request, explosion proof versions in accordance with ATEX Directive for three-phase models:

- ATEX Flameproof - Gas
 - ⊕ II 2G Ex d IIB T4
 - ⊕ II 2G Ex d IIB(H2) T4 (with Ex d IIC T4 motor)
- ATEX Increased safety - Gas
 - ⊕ II 2G Ex e II T3
- ATEX - Dust
 - Suspended flammable particles and non-conductive dust:
 - ⊕ II 3D Ex tc IIIB T125°C
 - Conductive dust:
 - ⊕ II 3D Ex tc IIIC T125°C (with IP65 motor)

To select CBTR, CBTRL ATEX refer to performance curves, or Easyvent. Note electrical data may vary for ATEX motors.

You may consult the availability of other ATEX motor versions.

Specific applications



Continuous



Versions

TECHNICAL CHARACTERISTICS

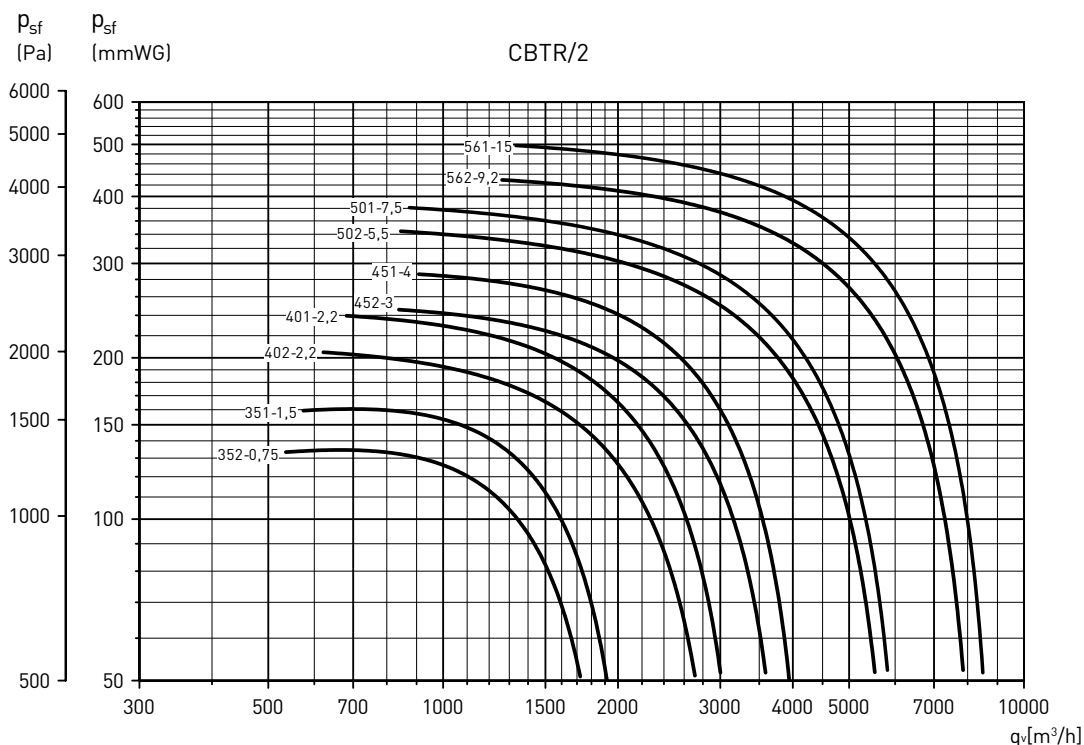
Before installation check that product electrical characteristics listed on the data plate label (voltage, power, frequency, etc.) match those of the intended electrical supply. Explosion proof of types only work at an ambient temperature between -30°C and +40°C.

Model	Speed (rpm)	Motor power (kW)	Maximum absorbed current 400V (A)	Maximum airflow (m ³ /h)	Sound pressure level* (dB(A))	Weight (kg)
2 POLE						
CBTR/2-351-1,5	2845	1,5	3,01	2.170	69	38
CBTR/2-352-0,75	2770	0,75	1,56	1.970	65	33
CBTR/2-401-2,2	2855	2,2	4,42	3.350	72	41
CBTR/2-402-2,2	2855	2,2	4,42	3.080	71	41
CBTR/2-451-4	2890	4	7,49	4.300	76	76
CBTR/2-452-3	2890	3	5,64	3.990	74	72
CBTR/2-501-7,5	2920	7,5	13,07	6.280	80	106
CBTR/2-502-5,5	2930	5,5	10,20	6.000	78	100
CBTR/2-561-15	2945	15	27,60	8.640	84	152
CBTR/2-562-9,2	2930	9,2	16,80	8.100	81	107

* Break-out sound pressure level measured in free field conditions, at a distance of 1,5m, inlet and outlet ducted.

PERFORMANCE CURVES

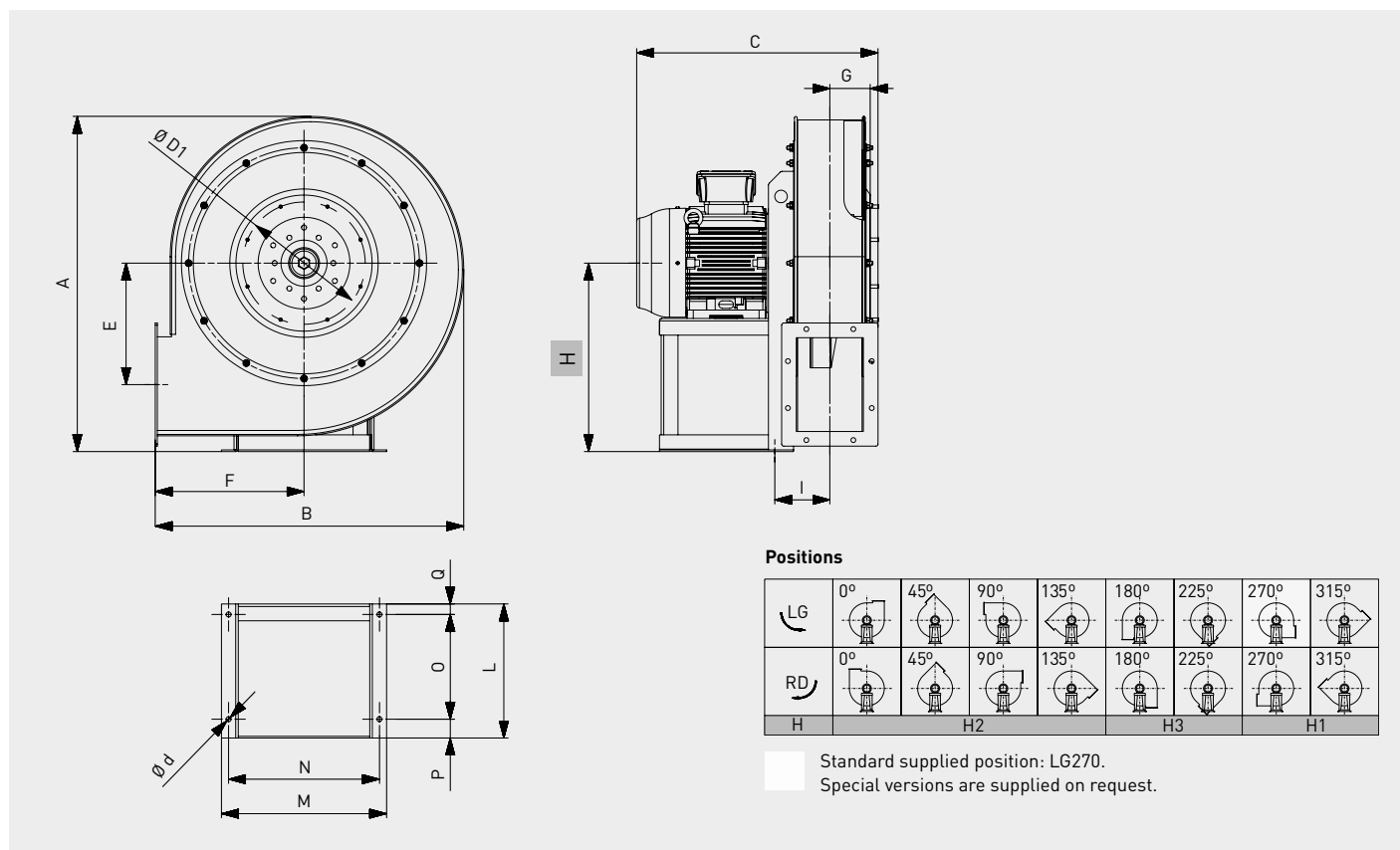
- Fan ducted on both inlet and outlet sides.
- q_v : Airflow in m³/h.
- p_{sf} : Static pressure in mmWG and Pa.



CENTRIFUGAL BACKWARD CURVED IMPELLER CBTR / CBTRL Series

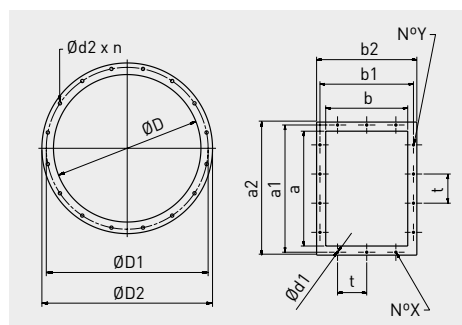


DIMENSIONS (mm) (Models from 351 to 562)



Model	Fan										Feet							Size*		
	A	B	C	E	F	G	H			I	L	M	N	O	P	Q	Ød	C	Q	L
							H1	H2	H3											
CBTR/2-351 1,5	583	518	434	200	250	70	335	335	250	122	215	270	245	137	60	18	10	478	63	260
CBTR/2-352 0,75	583	518	388	200	250	70	335	335	250	112	190	235	215	125	50	15	10	428	55	230
CBTR/2-401 2,2	654	584	446	230	280	76,5	375	375	280	128,5	215	270	245	137	60	18	10	492	63	260
CBTR/2-402 2,2	654	584	446	230	280	76,5	375	375	280	128,5	215	270	245	137	60	18	10	492	63	260
CBTR/2-451 4	715	655	514	255	315	86	400	400	315	111	260	335	300	200	35	25	12	559	70	305
CBTR/2-452 3	715	655	497	255	315	86	400	400	315	111	260	335	300	200	35	25	12	542	70	305
CBTR/2-501 7,5	800	736	612	290	355	96,5	450	450	355	131,5	320	392	360	250	45	25	12	662	75	370
CBTR/2-502 5,5	800	736	612	290	355	96,5	450	450	355	131,5	320	392	360	250	45	25	12	662	75	370
CBTR/2-561 15	884	804	710	340	375	108,5	500	500	375	151,5	425	437	400	340	55	30	14	770	90	485
CBTR/2-562 9,2	884	804	632	340	375	108,5	500	500	375	141,5	320	392	360	250	45	25	12	682	75	370

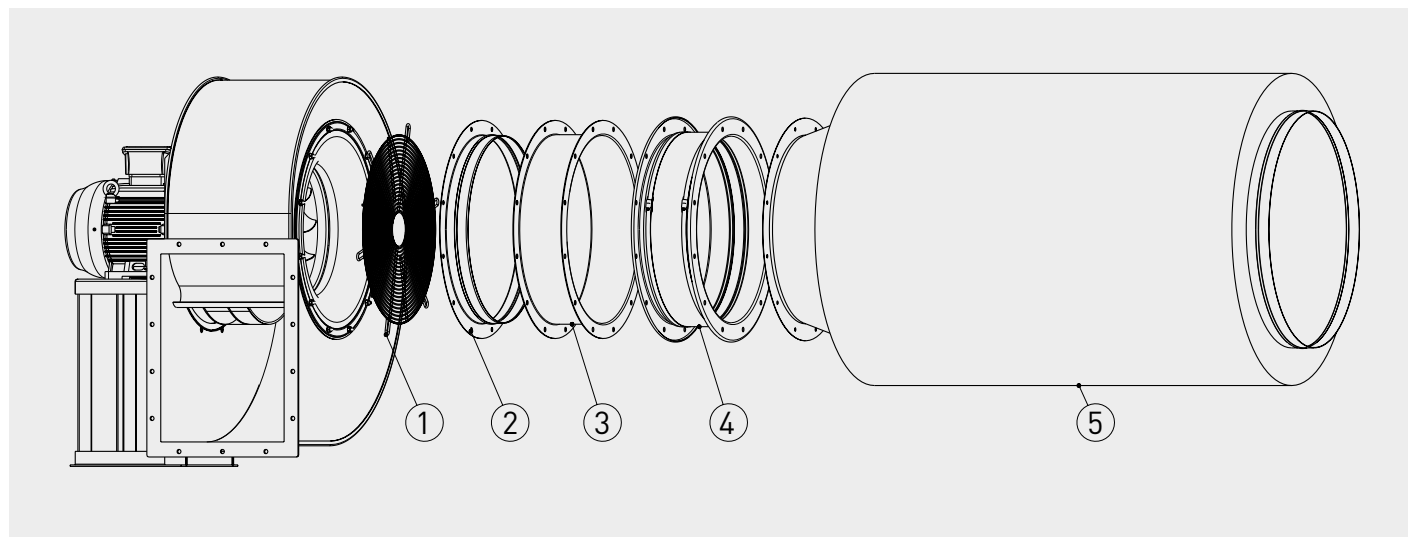
* With cooling impeller (for R versions).



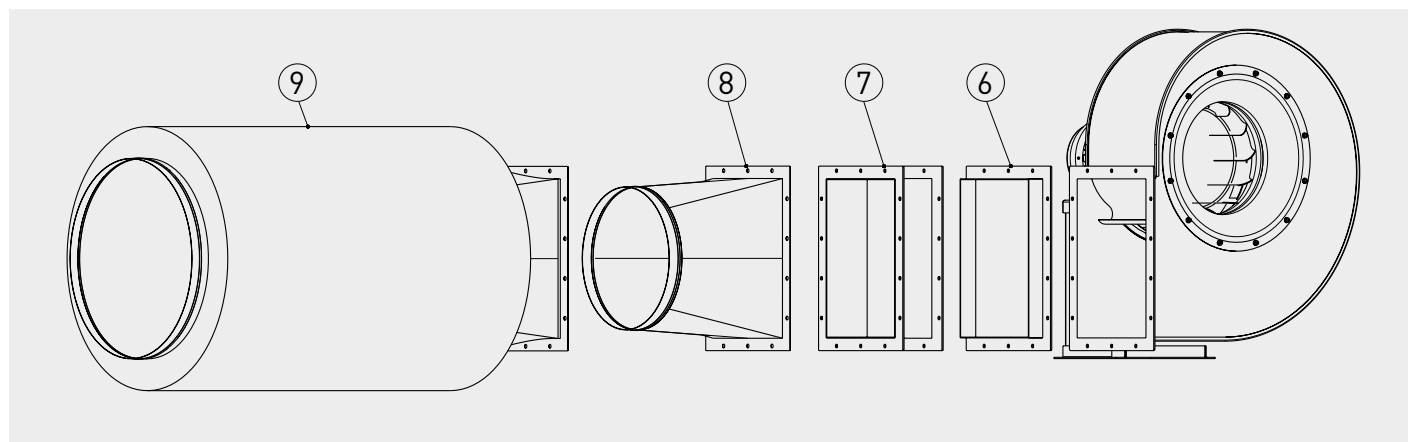
Model	Inlet flange						Discharge flange										
	ØD	ØD1	ØD2	Ød2	n	N°Y	a	a'	a''	N°X	b	b'	b''	t*	Ød1		
CBTR-351	185	219	255	11	8	2	160	200	230	1	112	153	182	112	11,5		
CBTR-352	185	219	255	11	8	2	160	200	230	1	112	153	182	112	11,5		
CBTR-401	205	241	275	11	8	2	180	219	250	1	125	167	195	112	11,5		
CBTR-402	205	241	275	11	8	2	180	219	250	1	125	167	195	112	11,5		
CBTR-451	229	265	299	11	8	2	200	241	270	2	140	182	210	112	11,5		
CBTR-452	229	265	299	11	8	2	200	241	270	2	140	182	210	112	11,5		
CBTR-501	255	292	325	11	8	2	224	265	294	2	160	200	230	112	11,5		
CBTR-502	255	292	325	11	8	2	224	265	294	2	160	200	230	112	11,5		
CBTR-561	286	332	366	11	8	3	250	292	320	2	180	219	250	112	11,5		
CBTR-562	286	332	366	11	8	3	250	292	320	2	180	219	250	112	11,5		

* If N°X or N°Y = 1, only one hole in the center.

MOUNTING ACCESSORIES

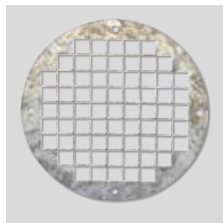


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|--------------------------------------|---|
| 1. Inlet guard | 6. Outlet flange |
| 2. Inlet flange | 7. Outlet rectangular flexible connector |
| 3. Double connection flange | 8. Rectangular/circular connection flange |
| 4. Inlet circular flexible connector | 9. Outlet sound attenuator |
| 5. Inlet sound attenuator | |

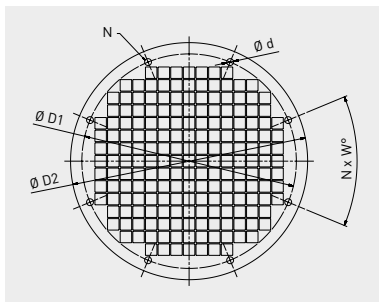


Model	ACCESSORIES	
	Inlet	Outlet
	KRBA / KRBD / KRDA / KREA / KRTA = Ø	KRBI / KRBR / KRED / KRTI = mm
CBTR-351	Ø 180	160 x 112
CBTR-401	Ø 200	180 x 125
CBTR-451	Ø 225	200 x 140
CBTR-501	Ø 250	224 x 160
CBTR-561	Ø 280	250 x 180

MOUNTING ACCESSORIES



KRDA

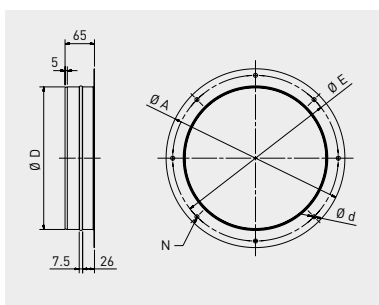


Model	Ø D1	Ø D2	Ø d	N	W°
KRDA-100	139	165	9	4	90
KRDA-125	165	190	9	4	90
KRDA-140	182	215	11	4	90
KRDA-160	200	230	11	8	45
KRDA-180	219	240	11	8	45
KRDA-200	241	265	9	8	45
KRDA-225 ESP.	260	290	9	8	45
KRDA-225	265	290	9	8	45
KRDA-250	292	320	9	8	45
KRDA-280	332	360	9	8	45



**KRBA
Inlet flange**

Flange to facilitate the connection of the circular duct at the fan inlet.

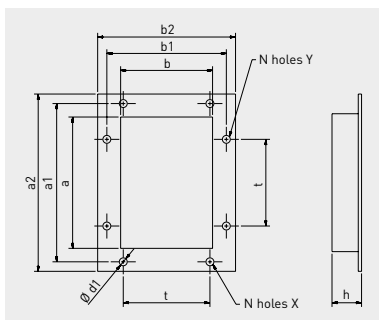


Model	Ø D1	Ø D2	Ø d	N	W°
KRBA-125	130	165	189	4	11
KRBA-140	145	182	215	8	11
KRBA-160	160	200	235	8	11
KRBA-180	180	219	240	8	11
KRBA-200	200	241	265	8	9
KRBA-225	225	265	290	8	9
KRBA-250	250	292	320	8	9
KRBA-280	280	332	360	8	9
KRBA-315	315	366	395	8	11



**KRBR
Outlet flange**

Flange to facilitate the connection of the rectangular duct at the fan outlet.

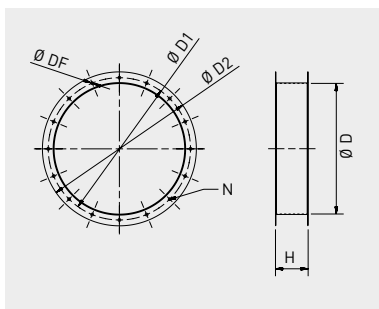


Model	N°Y	a	a1	a2	N°X	b	b1	b2	t	Ø d1	H
KRBR-80x56	2	80	---	130	---	56	80	106	100	9,5	50
KRBR-90x63	2	90	---	150	---	63	90	123	112	9,5	50
KRBR-100x71	2	100	---	160	---	71	100	131	125	9,5	50
KRBR-112x80	2	112	---	172	---	80	112	140	140	9,5	50
KRBR-125x90	2	125	165	185	1	90	130	150	100	9,5	50
KRBR-140x100	2	140	182	210	1	100	141	170	112	11,5	50
KRBR-160x112	2	160	200	230	1	112	153	182	112	11,5	50
KRBR-180x125	2	180	219	250	1	125	167	195	112	11,5	50
KRBR-200x140	2	200	241	270	2	140	182	210	112	11,5	50
KRBR-224x160	2	224	265	294	2	160	200	230	112	11,5	50
KRBR-250x180	3	250	292	320	2	180	219	250	112	11,5	50



**KRBD
Double connection flange**

Double connection flange to mount at the fan inlet for the connection with a duct or a flat surface.

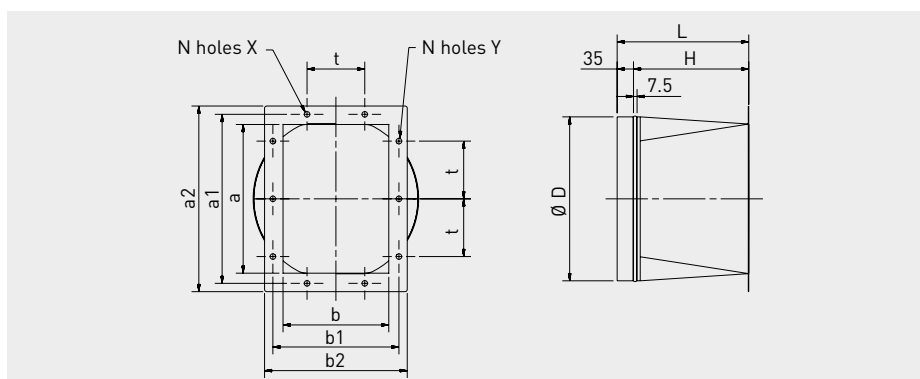


Model	Ø D	Ø D1	Ø D2	Ø DF	N	H
KRBD-125	130	165	190	10	4	80
KRBD-140	145	182	215	10	8	80
KRBD-160	160	200	235	10	8	80
KRBD-180	180	219	240	10	8	80
KRBD-200	200	241	265	10	8	80
KRBD-225	225	265	290	10	8	80
KRBD-250	250	292	320	10	8	100
KRBD-280	280	332	360	10	8	100

MOUNTING ACCESSORIES



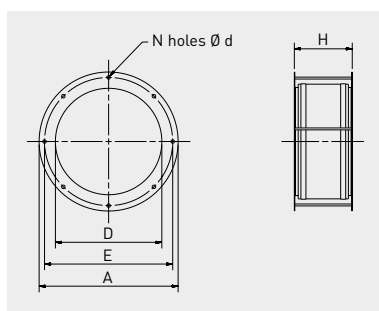
KRBI
Rectangular-circular connection
Connection flange to mount at the fan outlet for connection with a circular duct.



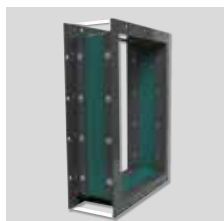
Model	N°Y	a	a1	a2	N°X	b	b1	b2	t	Ø d1	L	H	Ø D
KRBI-90x63	2	90	---	150	---	63	90	123	112	9,5	250	215	80
KRBI-100x71	2	100	---	160	---	71	100	131	125	9,5	250	215	100
KRBI-112x80	2	112	---	172	---	80	112	140	140	9,5	250	215	100
KRBI-125x90	2	125	165	185	1	90	130	150	100	9,5	250	215	125
KRBI-140x100	2	140	182	210	1	100	141	170	112	12	285	250	125
KRBI-160x112	2	160	200	230	1	112	153	182	112	12	285	250	140
KRBI-180x125	2	180	219	250	1	125	167	195	112	12	285	250	150
KRBI-200x140	2	200	241	270	2	140	182	210	112	12	285	250	180
KRBI-224x160	2	224	265	294	2	160	200	230	112	12	335	300	200
KRBI-250x180	3	250	292	320	2	180	219	250	112	12	335	300	225
KRBI-280x200	3	280	332	360	2	200	249	280	125	12	335	300	250



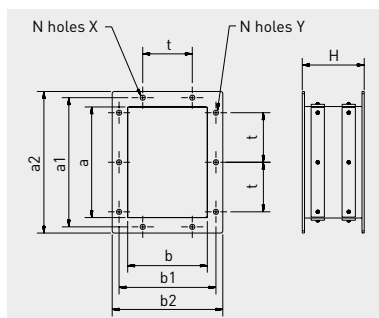
KREA
Inlet flexible connector
Flexible connector manufactured from 2 inlet flanges mounted with a flexible material to connect the duct at the fan inlet. Avoid the vibrations.



Model	Ø D	Ø E	Ø A	H	N	Ø d
KREA-125	130	165	190	150	4	11
KREA-140	145	182	215	150	8	11
KREA-160	160	200	235	150	8	11
KREA-180	180	219	240	150	8	9
KREA-200	200	241	265	150	8	9
KREA-225	225	265	290	150	8	9
KREA-250	250	292	323	150	8	10
KREA-280	280	332	360	150	8	9



KRED
Outlet flexible connector
Flexible connector manufactured from 2 inlet flanges mounted with a flexible material to connect the duct at the fan outlet. Avoid the vibrations.

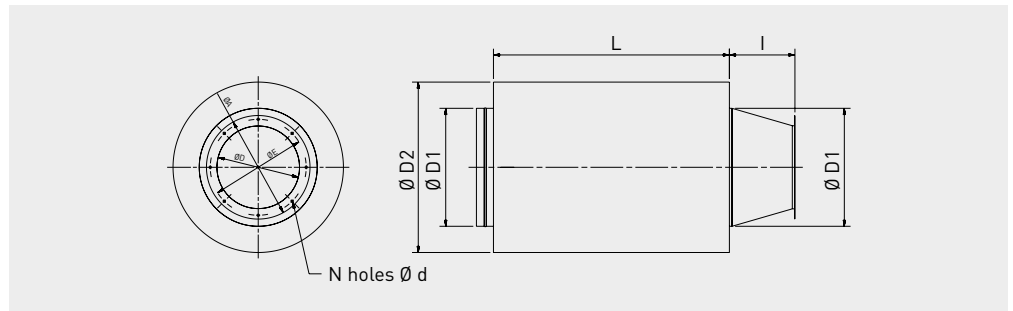


Model	N°Y	a	a1	a2	N°X	b	b1	b2	t	Ø d1	H
KRED-80x56	2	80	---	130	---	56	80	106	100	9,5	140
KRED-90x63	2	90	---	150	---	63	90	123	112	9,5	140
KRED-100x71	2	100	---	160	---	71	100	131	125	9,5	140
KRED-112x80	2	112	---	172	---	80	112	140	140	9,5	140
KRED-125x90	2	125	165	185	1	90	130	150	100	9,5	140
KRED-140x100	2	140	182	210	1	100	141	170	112	11,5	140
KRED-160x112	2	160	200	230	1	112	153	182	112	11,5	140
KRED-180x125	2	180	219	250	1	125	167	195	112	11,5	140
KRED-200x140	2	200	241	270	2	140	182	210	112	11,5	140
KRED-224x160	2	224	265	294	2	160	200	230	112	11,5	140
KRED-250x180	3	250	292	320	2	180	219	250	112	11,5	140
KRED-280x200	3	280	332	360	2	200	249	280	125	11,5	140

MOUNTING ACCESSORIES



KRTA
Inlet attenuator
Circular attenuator for mounting at the fan inlet. Incorporate circular inlet flange.

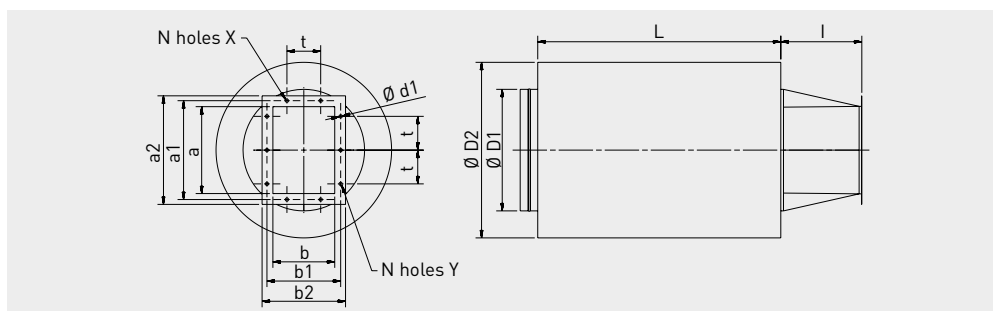


Model	Ø D	Ø E	Ø A	N	Ø d	L	I	Ø D1	Ø D2
KRTA-125/160	130	165	189	4	11	600	150	160	360
KRTA-140/140	145	182	215	8	11	600	150	140	340
KRTA-160/160	160	200	235	8	11	600	150	160	360
KRTA-160/200	160	200	235	8	11	600	150	200	400
KRTA-160/355	160	200	235	8	11	600	150	355	555
KRTA-180/200	180	219	240	8	11	600	150	200	400
KRTA-180/250	180	219	240	8	11	600	150	250	450
KRTA-200/200	200	241	265	8	9	900	150	200	400
KRTA-200/250	200	241	265	8	9	900	150	250	450
KRTA-200/315	200	241	265	8	9	900	150	315	515
KRTA-225/250	225	265	290	8	9	900	200	250	450
KRTA-225/280	225	265	290	8	9	900	200	280	480
KRTA-225/315	225	265	290	8	9	900	200	315	515
KRTA-225/355	225	265	290	8	9	900	200	355	555
KRTA-225/400	225	265	290	8	9	900	200	400	600
KRTA-250/315	250	292	320	8	9	900	200	315	515
KRTA-250/355	250	292	320	8	9	900	200	355	555
KRTA-250/400	250	292	320	8	9	900	200	400	600
KRTA-250/450	250	292	320	8	9	900	200	450	650
KRTA-280/355	280	332	360	8	9	900	200	355	555
KRTA-280/400	280	332	360	8	9	900	200	400	600
KRTA-280/500	280	332	360	8	9	900	200	500	700
KRTA-280/560	280	332	360	8	9	900	200	560	760

MOUNTING ACCESSORIES



KRTI
Outlet attenuator
Circular sound attenuator for mounting at the fan outlet. Incorporate outlet rectangular flange.



Model	N°Y	a	a1	a2	N°X	b	b1	b2	t	$\varnothing d_1$	L	I	$\varnothing D_1$	$\varnothing D_2$
KRTI-90x63/140	2	90	---	150	---	63	90	123	112	9,5	600	215	140	340
KRTI-100x71/160	2	100	---	160	---	71	100	131	125	9,5	600	215	160	360
KRTI-100x71/200	2	100	---	160	---	71	100	131	125	9,5	600	215	200	400
KRTI-112x80/250	2	112	---	172	---	80	112	140	140	9,5	600	215	250	450
KRTI-125x90/200	2	125	165	185	1	90	130	150	100	9,5	600	250	200	400
KRTI-140x100/160	2	140	182	210	1	100	141	170	112	11,5	600	250	160	360
KRTI-140x100/200	2	140	182	210	1	100	141	170	112	11,5	600	250	200	400
KRTI-140x100/250	2	140	182	210	1	100	141	170	112	11,5	600	250	250	450
KRTI-160x112/200	2	160	200	230	1	112	153	182	112	11,5	900	250	200	400
KRTI-160x112/250	2	160	200	230	1	112	153	182	112	11,5	900	250	250	450
KRTI-160x112/315	2	160	200	230	1	112	153	182	112	11,5	900	250	315	515
KRTI-180x125/250	2	180	219	250	1	125	167	195	112	11,5	900	300	250	450
KRTI-180x125/315	2	180	219	250	1	125	167	195	112	11,5	900	300	315	515
KRTI-180x125/355	2	180	219	250	1	125	167	195	112	11,5	900	300	355	555
KRTI-200x140/200	2	200	241	270	2	140	182	210	112	11,5	900	300	200	400
KRTI-200x140/250	2	200	241	270	2	140	182	210	112	11,5	900	300	250	450
KRTI-200x140/315	2	200	241	270	2	140	182	210	112	11,5	900	300	315	515
KRTI-200x140/355	2	200	241	270	2	140	182	210	112	11,5	900	300	355	555
KRTI-200x140/400	2	200	241	270	2	140	182	210	112	11,5	900	300	400	600
KRTI-224x160/250	2	224	265	294	2	160	200	230	112	11,5	900	300	250	450
KRTI-224x160/280	2	224	265	294	2	160	200	230	112	11,5	900	300	280	480
KRTI-224x160/315	2	224	265	294	2	160	200	230	112	11,5	900	300	315	515
KRTI-224x160/355	2	224	265	294	2	160	200	230	112	11,5	900	300	355	555
KRTI-224x160/400	2	224	265	294	2	160	200	230	112	11,5	900	300	400	600
KRTI-224x160/450	2	224	265	294	2	160	200	230	112	11,5	900	300	450	650
KRTI-250x180/315	3	250	292	320	2	180	219	250	112	11,5	900	300	315	515
KRTI-250x180/400	3	250	292	320	2	180	219	250	112	11,5	900	300	400	600
KRTI-250x180/500	3	250	292	320	2	180	219	250	112	11,5	900	300	500	700
KRTI-250x180/560	3	250	292	320	2	180	219	250	112	11,5	900	300	560	760