

# Centrifugal Fan

Series  
LP LR

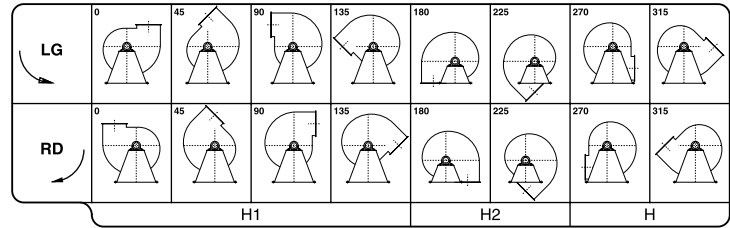


 EuroVent

**Symbols and measurement units used in the catalogue.**

- V m<sup>3</sup>/min = Delivery in m<sup>3</sup>/min
- V m<sup>3</sup>/h = Delivery in m<sup>3</sup>/h
- pt mmH<sub>2</sub>O = Total pressure in mm H<sub>2</sub>O
- pt Pa = Total pressure in Pascal
- pdmmH<sub>2</sub>O = Dynamic pressure in mm H<sub>2</sub>O
- pd Pa = Dynamic pressure in Pascal
- c2 = Speed in m/s on pressing throat
- n = Fan rounds
- Lp = Noise level indicated in dB/A
- P = Power absorbed in kW
- η = Fan output

**Table of positions of discharge**

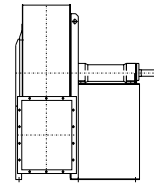


**Fans constructive executions in conformity with rules UNI EN ISO 13349 (2009).**

**EXECUTION 1**

For belt drive. Wheel keyed overhung. Supports mounted on a base outside the air stream. Max air temperature 90 °C without cooling fan; 350 °C when fitted with cooling fan.

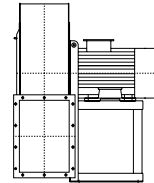
**ESEC. 1**



**EXECUTION 4**

For direct drive. Wheel keyed to motor shaft. Motor is supported by the base. Max air temperature 80 °C; when fitted with cooling fan 150 °C.

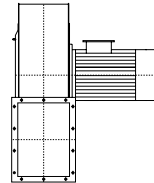
**ESEC. 4**



**EXECUTION 5**

For direct drive. Wheel keyed to motor shaft. Motor is supported by the case. Max air temperature 60 °C; when fitted with cooling fan 130 °C.

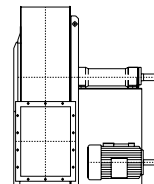
**ESEC. 5**



**EXECUTION 9**

For belt drive. Same as arrangement 1 with motor supported by the side wall of base. Max air temperature: 90 °C without cooling fan; 350 °C when fitted with cooling fan.

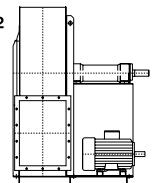
**ESEC. 9**



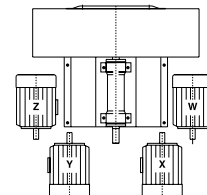
**EXECUTION 12**

For belt drive. Same as arrangement 1 with both fan and motor supported by the foundation frame. Max. air temperature: 90 °C without cooling fan; 350 °C when fitted with cooling fan.

**ESEC. 12**



**Plan for motor positioning belt drive.**



### General concepts about centrifugal fans

The centrifugal fan essentially in a scroll in which a wheel rotates. The wheel's movement is caused by an external energy source, that is usually an electric motor. The main characteristics of a centrifugal fan are:

- a) delivery
- b) pressure
- c) efficiency
- d) rotation speed

#### DELIVERY

It is indicated by the value of the fluid intaken through the fan in the time unit; normally this is stated by the ratio m<sup>3</sup>/sec., m<sup>3</sup>/min., or m<sup>3</sup>/h.

#### PRESSURE

It is usually indicated by the ratio kgf/m<sup>2</sup> or Pa. The pressure generated through a fan is named TOTAL (pt); it is the sum of two different pressures: STATIC + DYNAMIC. The static pressure (p.s.) is the potential energy that wins the circuit resistance when the fluid is passing through the circuit. The dynamic pressure (pd) is the kinetic energy of the moving fluid and it depends on the medium exit speed of the air from the fan throat; the formula is:

$$pd = \frac{C^2}{2g} \cdot 1,226 \quad C = \frac{V}{A}$$

where:

- V = delivery m<sup>3</sup>/sec.
- A = throat surface m<sup>2</sup>
- c = medium speed of the air m/sec.
- g = acceleration of gravity (9,81 m/sec)
- 1,226 = air specific gravity kg/m<sup>3</sup> at 15°C and 760 mm Hg.

#### ENERGY

It consists in the ratio between the energy supplied by the fan to the fluid and the energy used by the external source to put in operation the fan.

The formula is:

$$\eta = \frac{V \cdot pt}{6120 \cdot P}$$

where:

- V = delivery m<sup>3</sup>/min.
- pt = total pressure kgf/m<sup>2</sup>
- P = used energy by the fan indicated in kW
- η = fan efficiency

### ROTATION SPEED

It is indicated by the number of rounds per minute: at this speed the wheel must rotate in order to get the required performances. N.B. The following tables show the characteristics of an operating device at air 15°C, barometric pressure 760 mm Hg, specific gravity 1,226 kg/m<sup>3</sup>, test according to UNI EN ISO 5801:2009 (UNI 10531:1995) rules. If customer wishes get different performances with intermediary value in respect of the value shown in the tables or if he prefers a device operating with air suction at different temperature in respect of 15°C and with different specific gravity in respect of 1,226 we suggest to follow these rules the characteristics of fans change according to the variation in speed rotation and considering the specific gravity of the fluid intaken.

- a) Variation of rotation speed (n) with air specific gravity constant.

1. The delivery (V) varies directly with rotations ratio:

$$V_1 = V \cdot \frac{n^1}{n}$$

2. The pressure varies with square number of rotations ratio:

$$pt_1 = pt \cdot \left(\frac{n^1}{n}\right)^2$$

3. The energy (P) varies with cube of rotations ratio:

$$P_1 = P \cdot \left(\frac{n^1}{n}\right)^3$$

- b) Variations of specific gravity (γ) of the air when rotation speed is constant.

- 1. The delivery (V) remains constant.
- 2. The pressure (pt) and the energy (P) vary directly with the ratio of specific gravities.

$$pt_1 = pt \cdot \frac{\gamma^1}{\gamma} \quad P_1 = P \cdot \frac{\gamma^1}{\gamma}$$

The specific gravity of the air at different temperatures is obtained through the formula:

$$\gamma = \frac{1,293 \cdot 273}{(273+t)} \text{ (kg/m}^3\text{)}$$

The air density depending on a change of the atmospheric pressure is given by the following formula:

$$\gamma = \frac{Pb \cdot 13,59}{29,27 \cdot (273 + t)} \text{ (kg/m}^3\text{)}$$

where:

- γ = specific gravity at °C
- 1,293 = specific gravity of the air at 0°C
- t = air temperature indicated in °C
- 273 = absolute zero
- Pb = atmospheric pressure mm Hg

**This table shows directly the air specific gravity at different temperatures:**

t°C	-20	-10	0	+10	+15	+20	+30	+40	+50	+60	+70	+80	+90	+100	+120	+140	+160	+180	+200	+220	+240	+260	+280	+300	+325	+350
γ	1,396	1,342	1,293	1,248	1,226	1,205	1,165	1,128	1,093	1,060	1,029	1,000	0,973	0,947	0,90	0,85	0,82	0,78	0,75	0,72	0,69	0,66	0,64	0,62	0,59	0,56

**Atmospheric pressure depending on altitude above sea-level:**

mt	0	500	1000	1500	2000	2500	3000	3500	4000	4500
Pb mm Hg	760	720	680	640	600	560	530	500	470	440

**CHARACTERISTICS**

The features listed in the diagrams are referred to air at the temperature of + 15°C and at the barometrical pressure of 760 mm. Hg with specific gravity 1,226 Kg/m<sup>3</sup>.

**NOISE LEVEL**

The noise level values indicated are expressed in decibel scale A (dB/A) they are understood measured in a free range at the distance of **1.5 m** from the fan operating with the highest output capacity, connected to inlet and outlet pipe connections (rules UNI EN ISO 3740-3744-3746-13347).

**ORIENTATIONS**

All the fans can be constructed with the delivery mouth in 16 different positions (8 in clockwise rotation RD and 8 in counterclockwise rotation LG) as indicated on the orientation tables. Please note that the direction of rotation is determined by looking at the fan from the transmission side. Some sizes of these fans are revolvable always considering the rotation direction. This information is indicated at the end of the various tables of the overall dimensions. Flange see DIN 24154-24158.

**ACCESSORIES (delivery on request)**

- **intaking and pressing counterflange;**
- **inspection door:** to inspect and to clean the wheel and the scroll inside;
- **discharge cap:** it eliminates the condensate if any inside the fan and it is situated on the lowest part of the scroll.
- **vibrating proof joints in intaking and pressing time:** they are used to avoid the spreading of vibrations to the pipes;
- **safety grate for intaking throat:** it is used to avoid accidents when the fan is intaking from the room;
- **regulation lock on delivery:** it is used to regulate the fan delivery;
- **regulator of the flow rate in intaking time:** it is used to regulate the fan flow rate and it maintains high the efficiency level, also in regulating time.

**SPECIAL CONSTRUCTIONS**

**Spark proof construction:** when explosive fluids are carried or when the plant is installed in dangerous environments, the parts that come into contact with the intaken fluid are constructed by material without iron content to avoid rubbing, motor on request is supplied in special construction.

**Corosionproofing construction:** when corrosive fluids are carried, the parts that come into contact with the fluid are painted with special paints or they are constructed with special materials as austentic stainless steels (AISI 304-316 etc.).Constructions can be effected according to the customer's particular needs.

**SOME VALUES OF AIR SPEED THAT MUST BE OBSERVED INSIDE THE IRON PIPES FOR SUCTION PLANTS, RELATING TO FOLLOWING MATERIALS:**

Cereals dust	16–19 m/s
Varnish dust	15–18 m/s
Wooden shaving and sawdust	18–24 m/s
Dry dust of chemicals	17–20 m/s
Coal dust	20–25 m/s
Dust of plastic material working	18–23 m/s
Foundry fumes	15–18 m/s
Lapping sharpening and bufing wheels	20–25 m/s
Fumes of solvents for degreasing	12–17 m/s
Metallic shaving and dust	25–38 m/s
Rubber dust	17–20 m/s
Any toxic dust	15–25 m/s
Zinc oxide dust	18–21 m/s
Saw dust of marble	20–25 m/s
Hides buffing	18–23 m/s

**SOME DATA ABOUT THE NUMBER OF THE AIR CHANGINGS FORESEEN IN CIVIL, INDUSTRIAL AND AGRICULTURAL ENVIRONMENTS:**

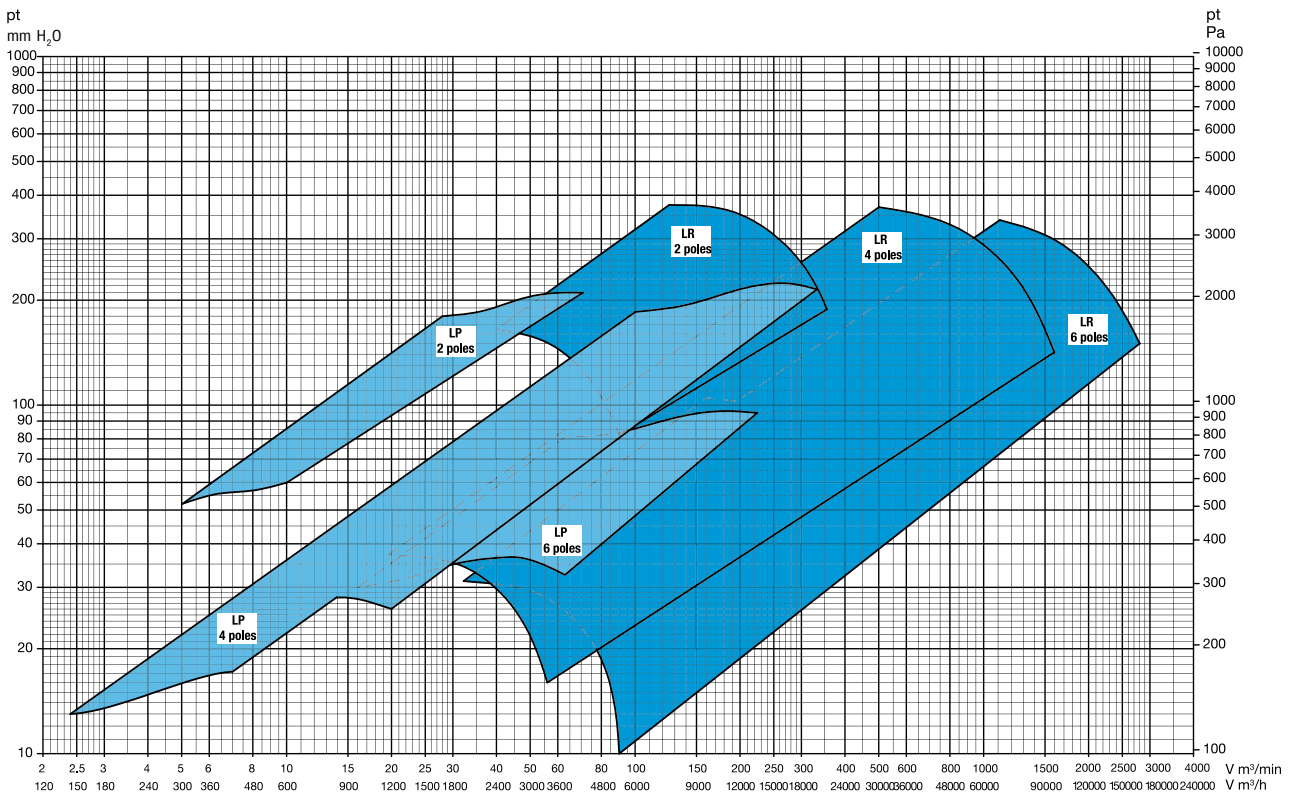
<b>Enviroments No. changings/hour</b>	Hide drying processes	35	Shops	5	
Hen - hutch	8	Facrories for rubber production	12	Hospitals	6
Bovine - swine breeding	10	Factories for alimentary pastes	6	Gymnasiums	20
Hotel halls -rooms - corridors	4	Factories for chemicals production	15	Baker shops	15
Garages	8	Joineries	6	Swimming-pools	25
Banks	6	Spinning - and weaving mills	5	Dance-halls	20
Bathrooms - showerbaths	6	Foundries	25	Card-rooms	10
Galvanic baths	25	Forge shops	25	Waiting-rooms	10
Carpenter shops - welding shops	12	Steam laundries	30	Schools	6
Heating plants	60	Rooms for electric furnaces	30	Metallurgical works	5
Churches	15	Rooms for furnace	20	Supermarkets	5
Coffee - houses - bars - restaurants	10	Warehouses for perishable goods	15	Dyeing plants	30
Cinemas - theatres	15	Warehouses for unperishable goods	5	Printing shops	20
Dye works	15	Tobacco manufactures	12	Toilettes	30
Tanneries	18	Grinding mills	20	Technical departments	15

# series LP-LR SPECIFICATIONS

**USE:**

For the removal of clean or slightly dusty air. They have high efficiency and reduced noise level, the fans of this series are largely used, in ventilation, conditioning, drying, cooling, mechanical draft, and toxic gas elimination plants. The temperature of the fluid transported must not exceed 80°C. For higher temperatures it is necessary to modify the construction of the fan.

**Operating range  
2 - 4 - 6 Poles**



**LP**



**LR**

**SERIES LP SPECIFICATIONS**

Type		kW ass.	kW inst.	n. min. <sup>-1</sup>	Lp dB/A	V = m <sup>3</sup> /min																		
						3	4	5	6	7	8	9	10	12	14	16	18	20	22	25				
Fan	Motor					Pt = mm H <sub>2</sub> O																		
LP 161/A	63 B2	0,24	0,25	2750	65			52	55	56	57	58	60											
LP 201/A	80 A2	0,7	0,75	2800	74										110	110	112	114	116					
LP 201/B	80 B2	1	1,1	2830	75										110	110	112	114	116	120				
LP 221/A	90 S2	1,4	1,5	2850	79														140	141	145			
LP 221/B	90 L2	2	2,2	2850	80														140	141	145			
LP 251/A	100 LA2	2,9	3	2900	83																			
LP 251/B	112 M2	3,8	4	2900	84																			
LP 161/B	63 A4	0,1	0,12	1360	55	13	15	16	17	17														
LP 201/C	71 A4	0,2	0,25	1360	58				25	25	26	26	27	28	28	28	27	26						
LP 221/C	71 B4	0,32	0,37	1360	59							32	33	34	36	37	38	39	39	39				
LP 251/C	80 A4	0,5	0,55	1370	62									40	41	42	43	44	46	48				
LP 281/A	80 B4	0,7	0,75	1380	66													51	52	53	55			
LP 311/A	90 S4	1	1,1	1390	70																68			
LP 311/B	90 L4	1,4	1,5	1400	71																68			
LP 351/A	100 LA4	2,1	2,2	1420	73																			
LP 351/B	100 LB4	2,8	3	1430	74																			
LP 401/A	112 M4	3,9	4	1440	77																			
LP 401/B	132 SA4	5,4	5,5	1440	78																			
LP 401/C	132 MA4	7,4	7,5	1460	80																			
LP 451/A	132 MA4	7,4	7,5	1460	80																			
LP 451/B	132 MB4	8,8	9	1470	81																			
LP 451/C	160 M4	10,5	11	1470	82																			
LP 501/A	160 M4	10,5	11	1470	83																			
LP 501/B	160 L4	14,5	15	1470	84																			
LP 501/C	180 M4	18	18,5	1470	85																			
LP 311/C	80 A6	0,35	0,37	930	61												30	30	31	32	33			
LP 311/D	80 B6	0,5	0,55	930	62												30	30	31	32	33			
LP 351/C	90 S6	0,7	0,75	930	63															39	39			
LP 351/D	90 L6	1	1,1	930	64															39	39			
LP 401/D	100 LA6	1,4	1,5	950	67																			
LP 401/E	112 M6	2	2,2	950	68																			
LP 451/D	132 SA6	2,8	3	950	70																			
LP 501/D	132 MA6	3,8	4	960	74																			
LP 501/E	132 MB6	5,2	5,5	960	75																			

Capacity tolerance ± 5 %  
Noise level tolerance + 3 dB

V = m <sup>3</sup> /min																							
28	31	35	40	45	50	56	63	71	80	90	100	112	125	140	160	180	200	225	250	280	315	335	
Pt = mm H <sub>2</sub> O																							
	120	120																					
	149	153	158																				
	149	153	158	163	163	162																	
	180	182	185	188	200	205	208																
	180	182	185	188	200	205	208	210	210														
	38	36																					
	48	48	48	47																			
	57	60	61	62	62																		
	69	70	73	75	78	80																	
	69	70	73	75	78	80	82	82	82														
			90	91	93	95	97	100	105	108													
			90	91	93	95	97	100	105	108	110	110	108										
							120	122	125	130	135	140	145										
							120	122	125	130	135	140	145	145	148								
							120	122	125	130	135	140	145	145	148	145	140	135					
										150	150	152	155	160	170	175							
										150	150	152	155	160	170	175	180	175					
										150	150	152	155	160	170	175	180	175	175	170			
												185	185	190	195	200	210	215					
												185	185	190	195	200	210	215	220	225	225		
												185	185	190	195	200	210	215	220	225	225	220	215
	34	35	36	36																			
	34	35	36	36	36	35	34	33															
	40	41	42	43	44	45	47	48															
	40	41	42	43	44	45	47	48	48	47	45												
			51	51	52	53	55	57	60	61	61	61											
			51	51	52	53	55	57	60	61	61	61	60	59									
					65	65	66	67	68	71	73	75	76	76	76	74							
								80	80	81	83	86	90	92	94	96	96						
								80	80	81	83	86	90	92	94	96	96	96	95				

Pa (Pascal) = mm H<sub>2</sub>O x 9,807

SERIES **LR** SPECIFICATIONS

Type		kW ass.	kW inst.	n. min. <sup>-1</sup>	Lp dB/A	V = m <sup>3</sup> /min															
						22	25	28	32	36	40	45	50	56	63	71	80	90	100	112	
Fan	Motor	Pt = mm H <sub>2</sub> O																			
LR 352/A	90 L2	1,95	2,2	2850	77						165	162	159	150	140	125	106	82			
LR 351/B	100 LA2	2,7	3	2900	78							190	188	185	179	170	162	152	140	125	
LR 402/A	112 M2	3,8	4	2900	79									210	210	208	205	200	190	175	
LR 401/B	132 SA2	5,2	5,5	2900	82											230	230	225	220	215	200
LR 452/A	132 SB2	7	7,5	2900	84													270	270	268	262
LR 451/B	160 MR2	9,8	11	2930	85														300	298	292
LR 502/A	160 M2	13	15	2935	88																350
LR 501/B	160 L2	16	18,5	2935	89																
LR 352/C	71 A4	0,22	0,25	1360	64	37	36	35	34	32	30	26	22	16							
LR 351/D	71 B4	0,3	0,37	1360	65	41	40	39	38	36	34	31	27	23	17						
LR 401/C	80 A4	0,52	0,55	1370	67				53	52	50	48	46	43	40	35	30	24			
LR 452/C	80 B4	0,68	0,75	1380	69					58	57	56	55	53	51	46	40	33	16		
LR 451/D	90 S4	1	1,1	1390	70						70	68	66	64	61	58	54	48	42		
LR 502/C	90 L4	1,35	1,5	1400	71									79	78	77	76	74	70	65	
LR 501/D	100 LA4	2	2,2	1420	72										88	87	85	83	80	76	
LR 562/A	100 LB4	2,7	3	1430	73												100	100	99	98	
LR 561/B	112 M4	3,5	4	1430	73													112	110	108	
LR 632/A	132 SA4	5	5,5	1440	75																135
LR 631/B	132 MA4	6,5	7,5	1450	76																
LR 712/A	160 M4	10	11	1460	78																
LR 711/B	160 L4	13	15	1460	79																
LR 802/A	180 M4	17	18,5	1470	82																
LR 801/B	180 L4	20	22	1470	83																
LR 903/A	200 L4	27	30	1470	85																
LR 902/B	225 S4	33	37	1475	86																
LR 901/C	225 M4	42	45	1475	86																
LR 1002/A	250 M4	52	55	1475	87																
LR 1001/B	280 S4	68	75	1480	88																

Capacity tolerance ± 5 %  
Noise level tolerance + 3 dB



V = m <sup>3</sup> /min																							
	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	1120	1250	1400	1600
Pt = mm H <sub>2</sub> O																							
	100																						
	160	140	90																				
	185	165	140	110	70																		
	255	248	235	210	180	130																	
	282	275	260	238	215	190	158	100															
	348	342	335	325	305	290	260	225	150														
	380	377	368	360	347	335	310	280	250	205	120												
	34																						
	58	48	30																				
	70	62	51	40																			
	95	90	84	75	62	32																	
	105	100	95	85	80	65	55																
	133	130	126	122	118	110	100	85	50														
	150	148	142	138	132	123	115	105	95	74													
			165	165	163	160	156	150	140	120	105	75											
				180	180	177	172	165	160	145	130	115	97	65									
						215	215	214	210	205	200	192	170	150	90								
							235	230	228	220	210	200	185	170	145	118	90						
									250	250	248	242	232	220	205	180	145						
										265	263	260	255	250	235	215	180	125					
											300	295	290	285	270	260	240	215	185	155	110		
												330	330	325	320	315	300	275	245	200	130		
													370	365	355	345	330	310	290	260	230	195	140

Pa (Pascal) = mm H<sub>2</sub>O x 9,807



# SERIES LP OVERALL DIMENSIONS AND WEIGHTS

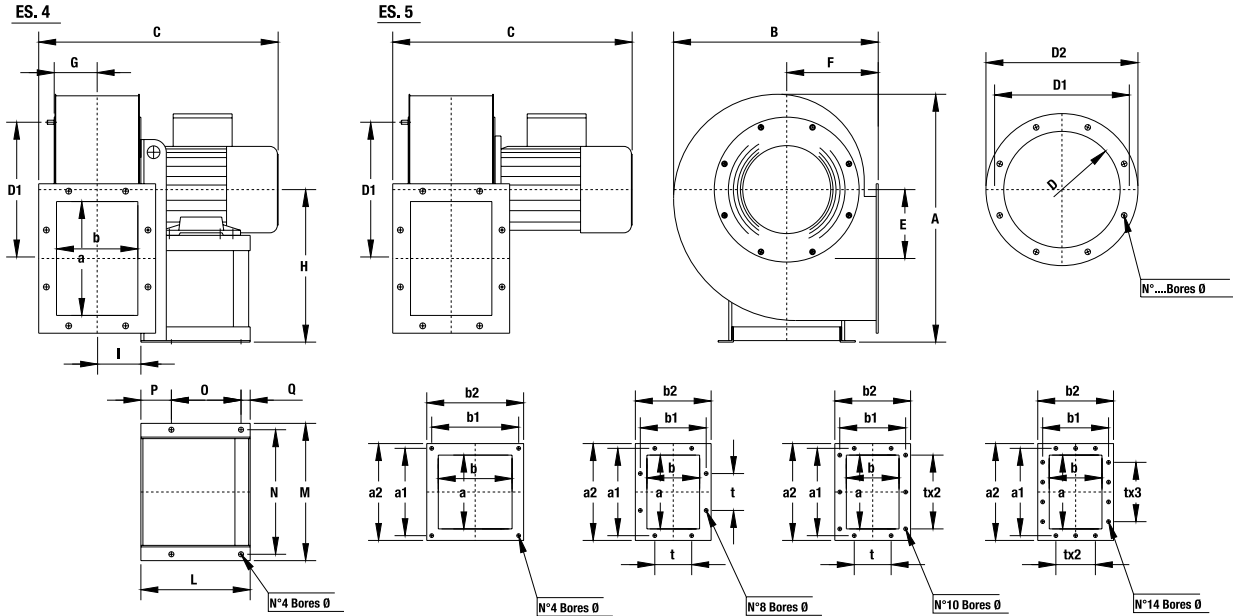
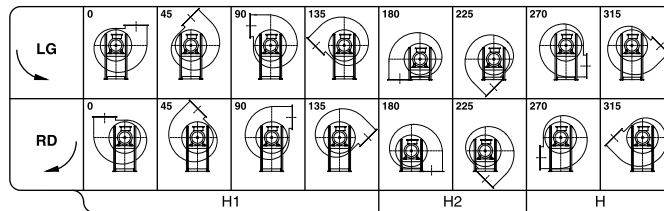


Table of discharge positions



The fan is revolvable

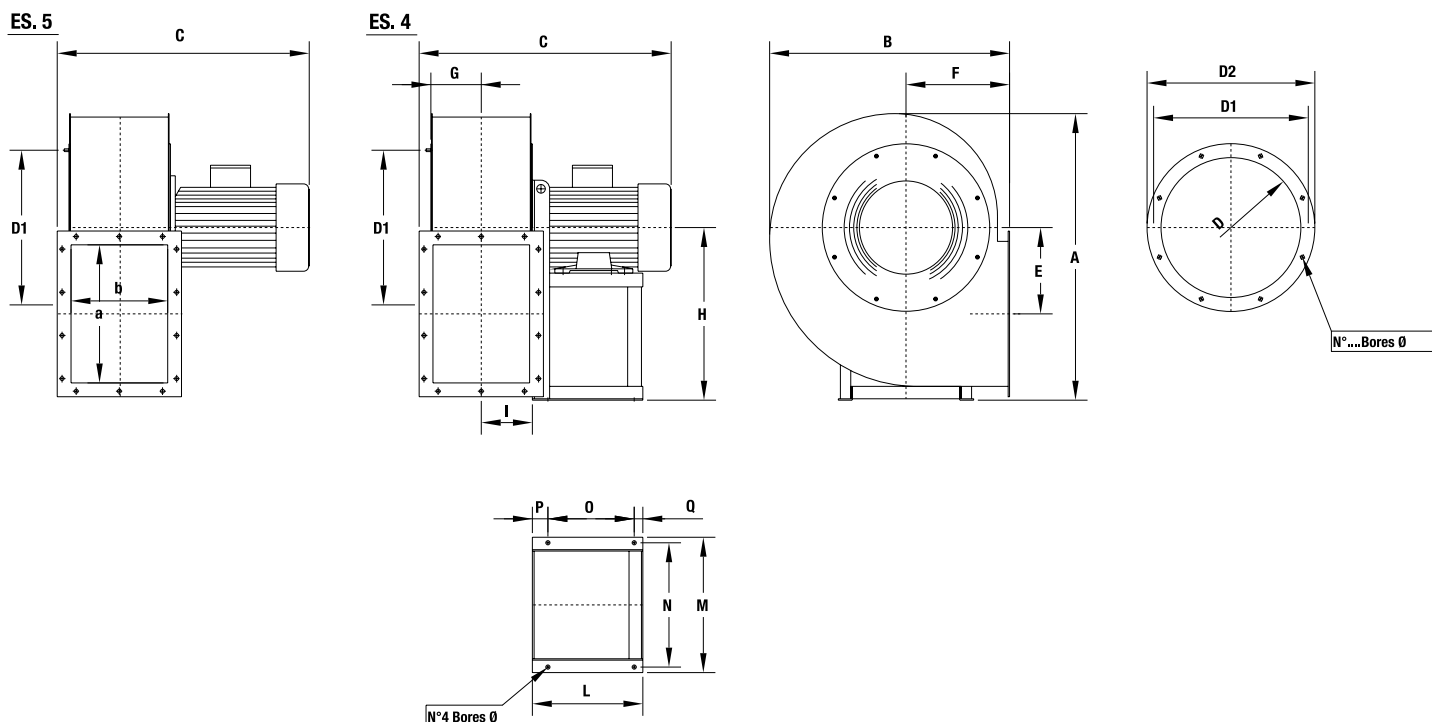
N.B.: For constructive reasons, the fans from size 451–501 follow an orientation with angles of 30° instead of 45°.

Type		Fan										Base					Inlet flange				Outlet flange						Weight	PD <sup>2</sup> GD <sup>3</sup>										
Fan	Motor	A	B	C	E	F	G	H	H <sub>1</sub>	H <sub>2</sub>	I	L	M	N	O	P	Q	α	D	D <sub>1</sub>	D <sub>2</sub>	N°	α	a	b	a <sub>1</sub>	b <sub>1</sub>	a <sub>2</sub>	b <sub>2</sub>	t	N°	α	Kg	Kg m <sup>2</sup>				
LP 161/A LP 161/B	63 B2 63 A4	330	275	310 310	110	125	48	200	200	125	50	150	196	175	85	50	15	10	145	160	180	4	8	90	90	115	115	133	133	—	4	8	8	9	0,01			
LP 201/A LP 201/B LP 201/C	80 A2 80 B2 71 A4	440	370	415 415 395	125	165	75	265	265	165	75	190	235	215	125	50	15	10	205	241	275	8	11,5	200	140	241	182	270	210	112	8	11,5	15	16	14	0,03		
LP 221/A LP 221/B LP 221/C	90 S2 90 L2 71 B4	490	405	475 475 415	135	180	85	300	300	180	85	215	270	245	137	60	18	10	229	265	299	8	11,5	224	160	265	200	294	230	112	8	11,5	19	20	17	0,07		
LP 251/A LP 251/B LP 251/C	100 LA2 112 M2 80 A4	530	450	560 560 460	145	200	95	315	315	200	95	260	332	300	200	35	25	12	255	292	325	8	11,5	250	180	292	219	320	250	112	10	11,5	25	27	22	0,10		
LP 281/A	80 B4	590	495	480	174	212	105	355	355	212	105	190	235	215	125	50	15	10	286	332	366	8	11,5	280	200	332	249	360	280	125	10	11,5	26		0,15			
LP 311/A LP 311/B LP 311/C LP 311/D	90 S4 90 L4 80 A6 80 B6	665	550	540 540 500 500	196	236	118	400	400	236	118	215	270	245	137	60	18	10	321	366	401	8	11,5	315	224	366	273	395	304	125	10	11,5	35	35	32	32	0,22	
LP 351/A LP 351/B LP 351/C LP 351/D	100 LA4 100 LB4 90 S6 90 L6	745	620	640 640 570 570	225	265	131	450	450	265	130	260	332	300	200	35	25	12	361	405	441	8	11,5	355	250	405	300	435	330	125	10	11,5	45	45	42	42	0,38	
LP 401/A LP 401/B LP 401/C LP 401/D LP 401/E	112 M4 132 SA4 132 MA4 100 LA6 112 M6	830	695	670 730 730 670 670	250	300	146	500	500	300	145	260	332	300	200	35	25	12	406	448	486	8	11,5	400	280	448	332	480	360	125	14	11,5	55	60	60	53	55	0,55
LP 451/A LP 451/B LP 451/C LP 451/D	132 MA4 132 MB4 160 M4 132 SA6	930	780	770 770 770 770	280	335	164	560	560	335	165	320	392	360	250	45	25	12	456	497	536	12	11,5	450	315	497	366	530	395	125	14	11,5	72	72	80	72	1	
LP 501/A LP 501/B LP 501/C LP 501/D LP 501/E	160 M4 160 L4 180 MA6 132 MA6 132 MB6	1040	850	940 940 810 810	315	355	184	630	630	355	186	425	440	400	340	55	30	14	506	551	586	12	11,5	500	355	551	405	580	435	125	14	11,5	102	102	119	95	1,9	

The above data are unbinding

Fan weight in kg (without motor)

# SERIES LR OVERALL DIMENSIONS AND WEIGHTS



## LR 352 – 801

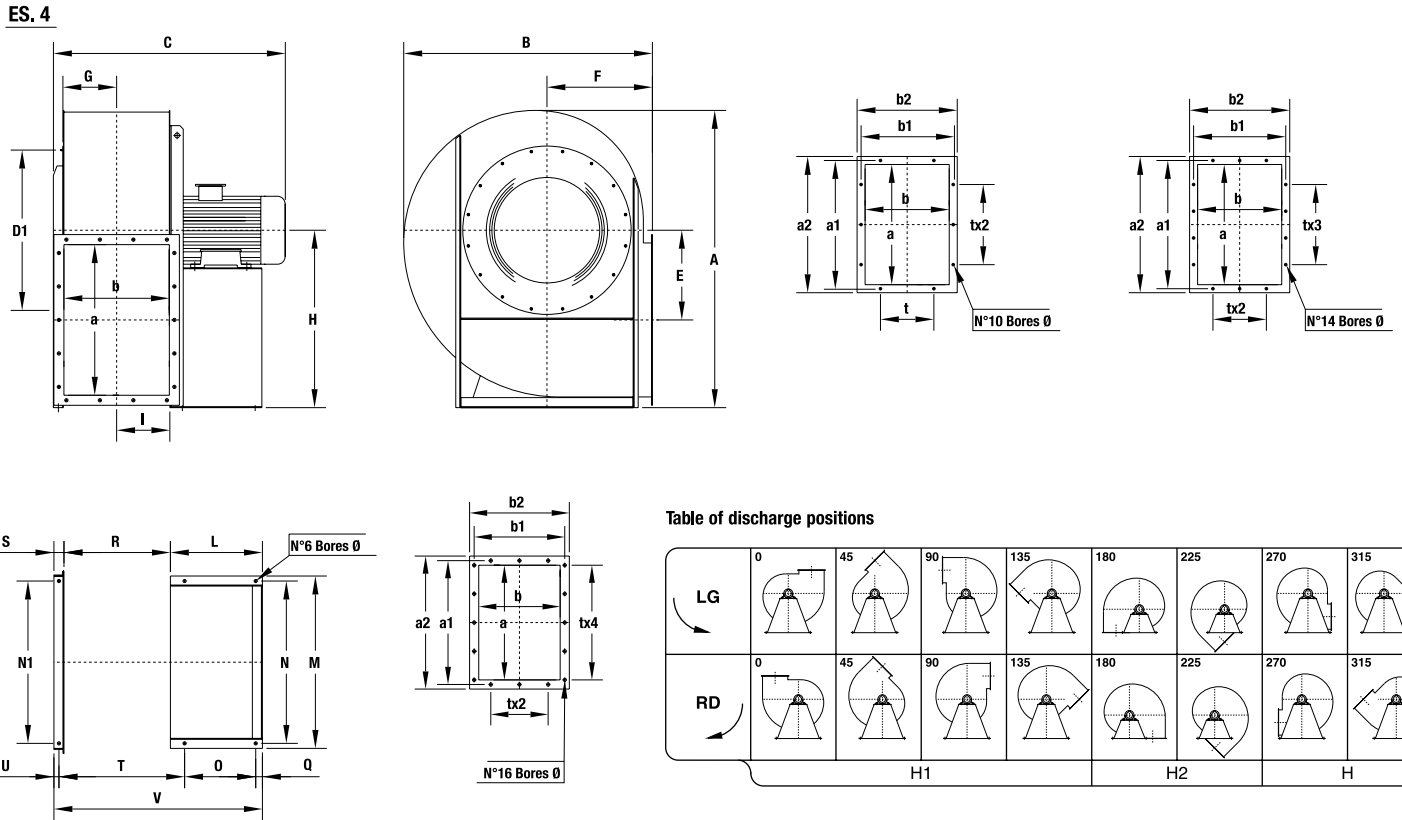
The fan is revoluble

N.B.: For constructive reasons, the fans from size 451÷501 follow an orientation with angles of 30° instead of 45°.

Type		Fan										Base									
Fan	Motor	A	B	C	E	F	G	H	H <sub>1</sub>	H <sub>2</sub>	I	L	M	N	N <sub>1</sub>	O	P	Q	R	S	
LR 352/A	90 L2			575								215	270	245		137	60	18			
LR 351/B	100 LA2	740	620	640	225	265	130	450	450	265	132	260	332	300	-	200	35	25	-	-	
LR 352/C	71 A4			500								190	235	215		125	50	15			
LR 351/D	71 B4			500								190	235	215		125	50	15			
LR 402/A	112 M2			670								260	332	300		200	35	25			
LR 401/B	132 SA2	830	695	730	250	300	146	500	500	300	148	320	392	360	-	250	45	25	-	-	
LR 401/C	80 A4			560								190	235	215		125	50	15			
LR 452/A	132 SB2			765								320	392	360		250	45	25			
LR 451/B	160 MR2			905								425	440	400		340	55	30			
LR 452/C	80 B4	930	780	600	280	335	164	560	560	335	166	190	235	215	-	125	50	15	-	-	
LR 451/D	90 S4			635								215	270	245		137	60	18			
LR 502/A	160 M2			945								425	440	400		340	55	30			
LR 501/B	160 L2			945								425	440	400		340	55	30			
LR 502/C	90 L4			675								215	270	245		137	60	18			
LR 501/D	100 LA4	1040	850	745	315	355	184	630	630	355	186	260	332	300	-	200	35	25	-	-	
LR 502/E	80 A6			635								190	235	215		125	50	15			
LR 501/F	80 B6			635								190	235	215		125	50	15			
LR 562/A	100 LB4			800								260	332	300		200	35	25			
LR 561/B	112 M4			800								260	332	300		200	35	25			
LR 562/C	90 S6	1170	955	730	355	400	207	710	560	400	208	215	270	245	-	137	60	18	-	-	
LR 561/D	90 L6			730								215	270	245		137	60	18			
LR 632/A	132 SA4			910								320	392	360		250	45				
LR 631/B	132 MA4			910								320	392	360		250	45	25			
LR 632/C	100 LA6	1320	1075	850	400	450	233	800	630	450	235	260	332	300	-	200	35		-	-	
LR 631/D	112 M6			850								260	332	300		200	35				
LR 712/A	160 M4			1100								425	440	400		340		30			
LR 711/B	160 L4			1100								425	440	400		340		30			
LR 712/C	132 SA6	1490	1200	970	450	500	258	900	710	500	260	320	392	360	800	250		25	510	50	
LR 711/D	132 MA6			970								320	392	360		250		25			
LR 802/A	180 M4			1240								470	930			370		35			
LR 801/B	180 L4			1240								470	930			370		35			
LR 802/C	132 MB6	1650	1340	1030	500	560	286	1000	800	560	283	320	930	870	870	250		25	566	60	
LR 801/D	160 M6			1165								425	930			340		30			

The above data are unbinding

# SERIES LR OVERALL DIMENSIONS AND WEIGHTS

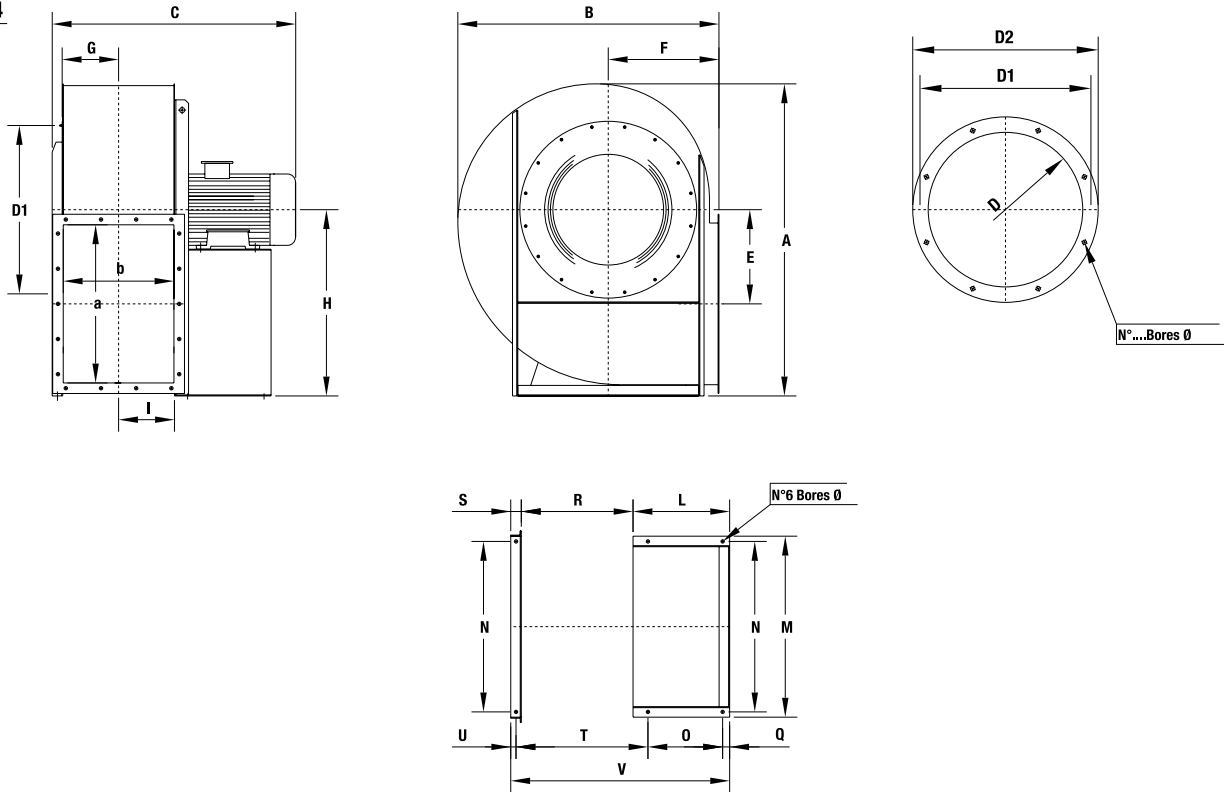


					Inlet flange					Outlet flange								Weight		PD <sup>2</sup> GD <sup>2</sup>
T	U	V	ø	D	D <sub>1</sub>	D <sub>2</sub>	N°	ø	a	b	a <sub>1</sub>	b <sub>1</sub>	a <sub>2</sub>	b <sub>2</sub>	t	N°	ø	Kg	Kg m <sup>2</sup>	
-	-	-	10 12 10 10	361	405	441	8	11,5	355	250	405	300	435	330	125	10	11,5	54 57 51 51	0,5 0,6 0,5 0,6	
-	-	-	12 12 10	405	448	485	8	11,5	400	280	448	332	480	360	125	14	11,5	62 67 60	0,95 1,25 1,25	
-	-	-	12 14 10 10	455	497	535	12	11,5	450	315	497	366	530	395	125	14	11,5	78 91 72 76	1,7 2,2 1,7 2,2	
-	-	-	14 14 10 12 10 10	506	551	585	12	11,5	500	355	551	405	580	435	125	14	11,5	112 114 95 98 92 93	2,9 3,3 2,9 3,3 2,9 3,3	
-	-	-	12 12 10 10	566	629	666	16	11,5	560	400	629	464	660	500	160	14	14	115 118 110 112	4,2 4,6 4,2 4,6	
-	-	-	12	636	698	736	16	11,5	630	450	698	513	730	550	160	14	14	147 149 133 137	5,4 6,2 5,4 6,2	
590 590 580 580	25	985 985 880 880	14 14 12 12	716	775	816	16	11,5	710	500	775	567	810	600	160	16	14	229 232 215 219	8,8 10,2 8,8 10,2	
661 661 641 641	30	1096 1096 946 1051	17	806	861	906	16	11,5	800	560	871	639	920	680	200	14	14	287 292 262 282	16,5 20 16,5 20	

Fan weight in kg (without motor)

SERIES **LR** OVERALL DIMENSIONS AND WEIGHTS

ES. 4



**LR 903 – 1401**  
The fan is not revolable

Type		Fan										Base						
Fan	Motor	A	B	C	E	F	G	H	H <sub>1</sub>	H <sub>2</sub>	I	L	M	N	O	Q	R	S
LR 903/A	200 L4			1310								500			385	40		
LR 902/B	225 S4			1390								550			425	40		
LR 901/C	225 M4	1780	1490	1390	535	630	322	1060	900	630	318	550	1030	970	425	40	636	60
LR 902/D	160 L6			1235								425			340	30		
LR 901/E	180 L6			1310								470			370	35		
LR 1002/A	250 M4			1470								600			460	45		
LR 1001/B	280 S4	1980	1670	1600	610	710	362	1180	1000	710	360	690	1130	1060	550	45	716	60
LR 1002/C	200 LR6			1390								500			385	40		
LR 1001/D	200 L6			1390								500			385	40		
LR 1122/C	225 M6	2220	1880	1570	690	800	407	1320	1120	800	404	550	1270	1200	425	40	808	70
LR 1121/D	250 M6											600			460	45		
LR 1252/C	280 M6	2470	2110	1810	775	830	462	1500	1250	830	454	690	1400	1320	550	45	908	80
LR 1251/D	315 S6			1960								800			670	40		
LR 1402/C	315 MA6	2740	2300	2060	860	950	507	* 1650	* 1320	950	504	800	1580	1500	670	40	1008	80
LR 1401/D	315 MB6																	

The above data are unbinding

# SERIES LR OVERALL DIMENSIONS AND WEIGHTS

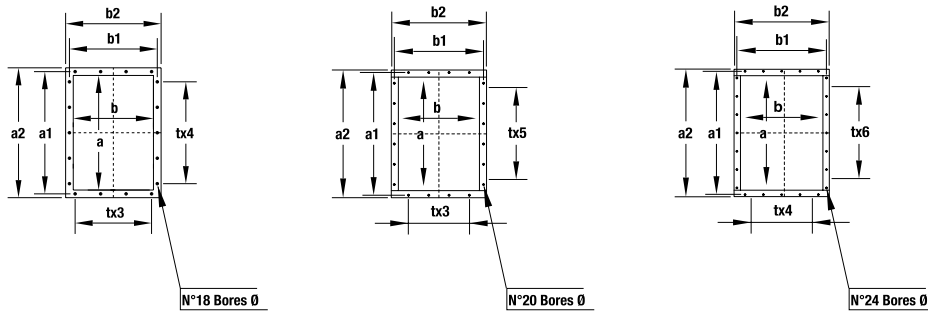
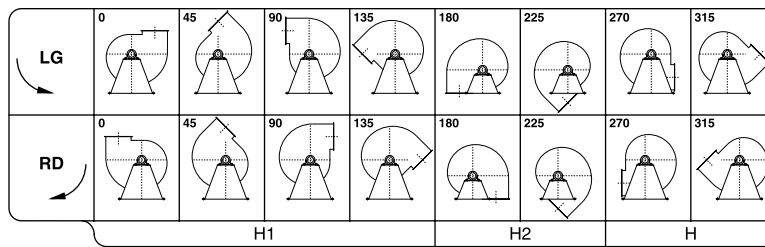


Table of discharge positions



\* LR 1401 - RD/LG 90-135 H1 = 1120

\* LR 1401 - RD/LG 315 H = 1500

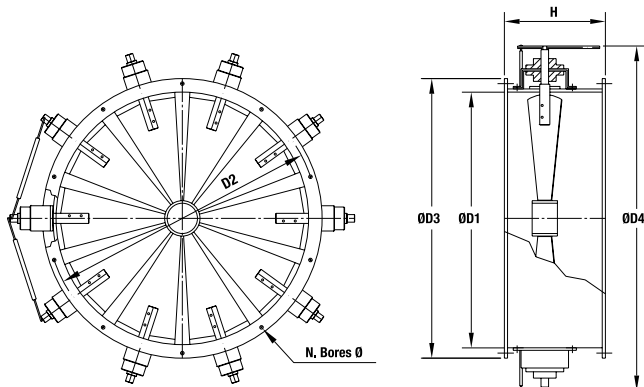
					Inlet flange					Outlet flange									Weight	PD <sup>2</sup> GD <sup>2</sup>	
	T	U	V	ø	D	D <sub>1</sub>	D <sub>2</sub>	N°	ø	a	b	a <sub>1</sub>	b <sub>1</sub>	a <sub>2</sub>	b <sub>2</sub>	t	N°	ø	Kg	Kg m <sup>2</sup>	
	741		1196																	405	30
	751		1246																	418	33
	751	30	1246	19	908	958	1008	16	14	900	630	968	708	1020	750	200	18	14	429	38	
	721		1121																	378	33
	731		1166																	390	38
	841		1376																	575	51
	841	30	1466	19	1008	1067	1108	24	14	1000	710	1077	785	1120	830	200	18	14	590	60	
	821		1276																	560	51
	821		1276																	570	60
	928		1428																	680	110
	938	35	1478	21	1128	1200	1248	24	14	1120	800	1210	881	1260	940	200	20	18	775	112	
	1043		1678																	895	160
	1038	40	1788	24	1260	1337	1380	24	14	1250	900	1347	978	1390	1040	200	24	18	985	166	
	1138		1888																	1280	260
		40		24	1420	1491	1540	24	16	1400	1000	1501	1087	1560	1160	200	24	18	1370	265	

Fan weight in kg (without motor)

Accessories

Circular flow regulators

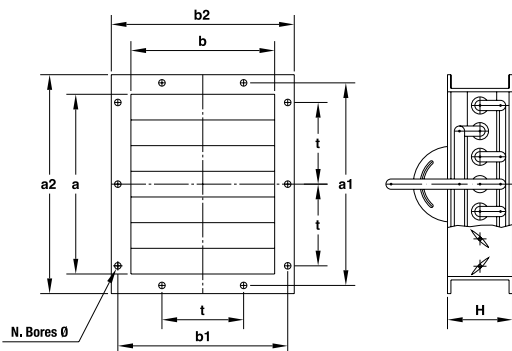
OVERALL DIMENSIONS in mm



Type	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	H	n°	Bores Ø	Weight kg
280	280	332	366	450	280	8	11,5	24
315	321	366	400	570	280			30
355	361	405	440	610	280			33
400*	406	448	485	650	315	12	11,5	36
450	456	497	535	700	315			40
500	506	551	585	820	355			53
560	568	629	666	880	355	16	14	60
630	638	698	736	990	355			68
710	718	775	816	1070	355			75
800	808	861	906	1160	400	24	16	85
900	908	958	1006	1260	400			100
1000	1008	1067	1107	1360	400			130
1120	1130	1200	1248	1480	450	32	18	160
1250	1260	1337	1380	1610	450			180
1400	1420	1491	1540	1760	450			210
1600	1610	1663	1730	1960	500	32	18	230
1800	1810	1880	1950	2200	500			280
2000	2010	2073	2130	2380	500			340

Rectangular flow regulators, outflow end

OVERALL DIMENSIONS in mm



Type	a	b	a <sub>1</sub>	b <sub>1</sub>	a <sub>2</sub>	b <sub>2</sub>	H	t	n°	Bores Ø	Weight kg
90 x 63	90	63	112	90	150	123	130	-	4	9	2,2
100 x 71	100	71	125	100	160	131	130	-			2,5
112 x 80	112	80	140	112	172	140	130	-			2,7
125 x 90	125	90	165	130	185	150	130	-	6	11,5	3
140 x 100	140	100	182	141	210	170	130	-			3,3
160 x 112	160	112	200	153	230	182	130	-			3,8
180 x 125	180	125	219	167	250	195	130	-	8	14	4,5
200 x 140	200	140	241	182	270	210	130	-			5,3
224 x 160	224	160	265	200	294	230	130	-			6,5
250 x 180	250	180	292	219	320	250	130	-	10	18	7,5
280 x 200	280	200	332	249	360	280	130	-			8,5
315 x 224	315	224	366	273	395	304	130	-			9,6
355 x 250	355	250	405	300	435	330	130	-	12	22	11
400 x 280	400	280	448	332	484	368	130	-			13
450 x 315	450	315	497	366	533	402	130	-			18
500 x 355	500	355	551	405	587	441	150	-	14	24	21
560 x 400	560	400	629	464	669	504	150	-			26
630 x 450	630	450	698	513	738	553	180	-			30
710 x 500	710	500	775	567	815	607	180	-	16	28	34
800 x 560	800	560	871	639	921	689	200	-			42
900 x 630	900	630	968	708	1018	758	200	-			48
1000 x 710	1000	710	1077	785	1127	835	200	-	18	32	65
1120 x 800	1120	800	1210	881	1270	941	220	-			80
1250 x 900	1250	900	1347	978	1407	1038	220	-			95
1400 x 1000	1400	1000	1501	1087	1560	1160	250	-	20	36	110
1600 x 1120	1600	1120	1683	1220	1760	1280	250	-			150
1800 x 1250	1800	1250	1876	1357	1960	1410	280	-			200
2000 x 1400	2000	1400	2093	1511	2180	1580	280	-	34	280	

External flow regulator designed for dusty air, sturdy construction, for industrial use.

Layout 1 = max. temperature 120°C.

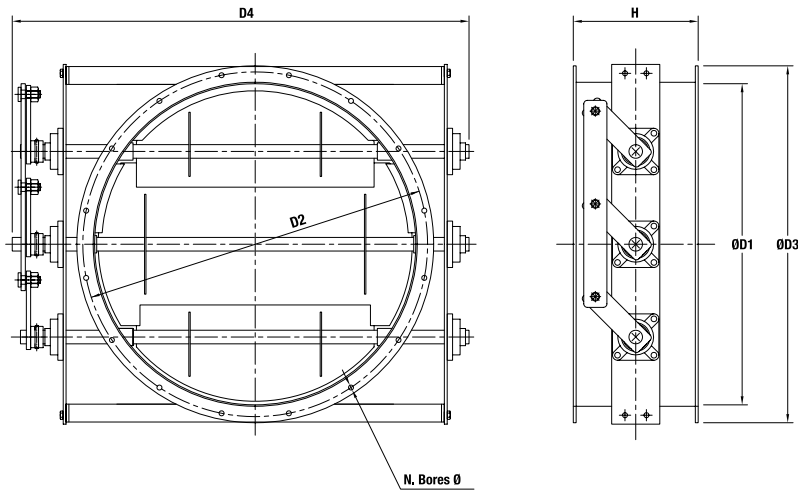
Layout 2 = from 120 to 350°C, + pression ≥ 700 mm H<sub>2</sub>O.



## Accessories

### Louver flow regulators

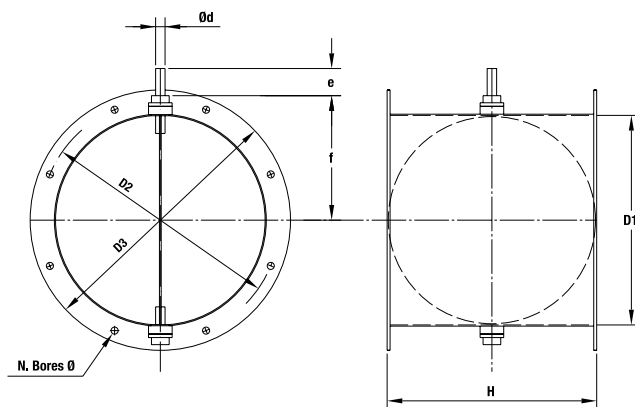
OVERALL DIMENSIONS in mm



Type	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	H	Weight kg
315	315	366	400	640	280	21
355	355	405	440	680	280	23
400*	400	448	485	720	315	29
450	450	497	535	770	315	32
500	500	551	585	820	355	60
560	560	629	666	900	355	75
630	630	698	736	1040	355	80
710	710	775	816	1130	355	86
800	800	861	906	1220	400	93
900	900	958	1006	1320	400	110
1000	1000	1067	1107	1420	400	126
1120	1120	1200	1248	1560	450	160
1250	1250	1337	1380	1690	450	192
1400	1400	1491	1540	1860	450	260
1600	1600	1663	1730	2050	500	320

### Butterfly flow regulators

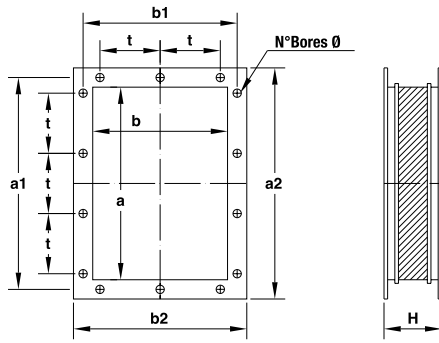
OVERALL DIMENSIONS in mm



Type	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	d	e	f	H	n°..Bores Ø	Weight kg
140	140	182	215	14	30	110	140	8 - 11,5	2,8
160	160	200	235	14	30	120	160	8 - 11,5	3,2
180	180	219	255	14	30	130	180	8 - 11,5	4
200	200	241	275	16	30	140	200	8 - 11,5	4,8
224	224	265	299	16	30	150	224	8 - 11,5	5,5
250	250	292	325	16	45	165	250	8 - 11,5	6,5
280	280	332	366	16	45	180	280	8 - 11,5	8,5
315	315	366	401	16	45	195	315	8 - 11,5	10,5
355	355	405	441	16	45	215	355	8 - 11,5	13,5
400*	400	448	486	16	45	240	400	12 - 11,5	18
450	450	497	535	20	60	280	450	12 - 11,5	23
500	500	551	585	20	60	305	500	12 - 11,5	29
560	560	629	666	20	60	335	560	16 - 11,5	36
630	630	698	736	20	60	370	630	16 - 13	47
710	710	775	816	20	60	410	710	16 - 13	61
800	800	861	906	30	70	455	800	16 - 13	80
900	900	958	1006	30	70	505	900	16 - 13	100
1000	1000	1067	1107	30	70	555	1000	24 - 14	155
1120	1120	1200	1248	30	70	615	1120	24 - 14	190

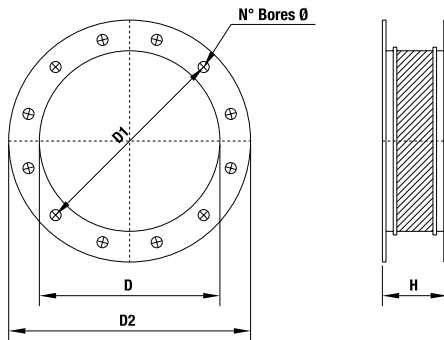
Accessories

Vibration-damping couplings outflow-end



Series	mm								Bores		Weight kg
	a	b	a <sub>1</sub>	b <sub>1</sub>	a <sub>2</sub>	b <sub>2</sub>	t	H	n°	Ø	
90 x 63	90	63	112	90	150	123	-	140	4	11	1
100 x 71	100	71	125	100	160	131	-	140	4	11	1,1
112 x 80	112	80	140	112	172	140	-	140	4	11	1,3
125 x 90	125	90	165	130	185	150	100	140	6	11	1,6
140 x 100	140	100	182	141	210	170	112	140	6	12	2,1
160 x 112	160	112	200	153	230	182	112	140	6	12	2,6
180 x 125	180	125	219	167	250	195	112	140	6	12	3,2
200 x 140	200	140	241	182	270	210	112	140	8	12	3,9
224 x 160	224	160	265	200	294	230	112	140	8	12	4,6
250 x 180	250	180	292	219	320	250	112	140	10	12	5,5
280 x 200	280	200	332	249	360	280	125	140	10	12	7
315 x 224	315	224	366	273	395	304	125	140	10	12	8,2
355 x 250	355	250	405	300	435	330	125	140	10	12	10
400 x 280	400	280	448	332	480	360	125	140	14	12	11,2
450 x 315	450	315	497	366	530	395	125	140	14	12	13
500 x 355	500	355	551	405	580	435	125	160	14	11,5	14,5
560 x 400	560	400	629	464	660	500	160	160	14	14	18
630 x 450	630	450	698	513	730	550	160	160	14	14	19,5
710 x 500	710	500	775	567	810	600	160	160	16	14	22
800 x 560	800	560	871	639	930	690	200	160	14	14	31
900 x 630	900	630	968	708	1030	760	200	160	18	14	37
1000 x 710	1000	710	1077	785	1130	830	200	200	18	14	45
1120 x 800	1120	800	1210	881	1270	940	200	200	20	18	56
1250 x 900	1250	900	1347	978	1400	1040	200	200	24	18	65
1400 x 1000	1400	1000	1501	1087	1550	1160	200	200	24	18	80
1600 x 1120	1600	1120	1683	1220	1760	1280	200	200	28	22	100
1800 x 1250	1800	1250	1876	1357	1960	1410	200	200	32	22	130
2000 x 1400	2000	1400	2093	1511	2180	1580	200	200	34	22	165

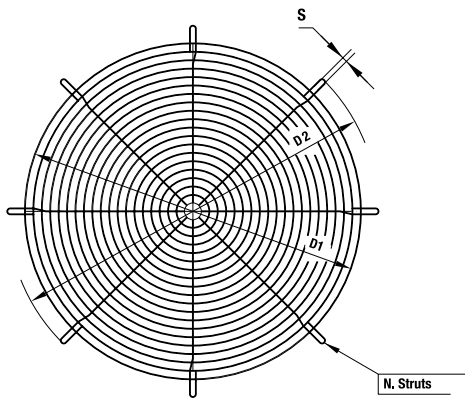
Vibration-damping couplings intake-end



Series	mm				Bores		Weight kg
	D	D <sub>1</sub>	D <sub>2</sub>	H	n°	Ø	
140	140	182	215	140	8	11,5	3
160	160	200	235	140	8	11,5	3,2
180	180	219	255	140	8	11,5	3,5
200	200	241	275	140	8	11,5	3,8
224	224	265	299	140	8	11,5	4,2
250	250	292	325	140	8	11,5	5
280	280	332	366	140	8	11,5	6,8
315	315	366	401	140	8	11,5	7,5
355	355	405	440	140	8	11,5	9
400 *	400	448	485	140	12	11,5	10
450	450	497	535	140	12	11,5	11,5
500	500	551	585	160	12	11,5	13
560	560	629	666	160	16	11,5	16
630	630	698	736	160	16	13	17,5
710	710	775	816	160	16	13	20
800	800	861	906	160	16	13	22
900	900	958	1006	160	16	13	25
1000	1000	1067	1107	200	24	14	28
1120	1120	1200	1248	200	24	14	42
1250	1250	1337	1380	200	24	14	46
1400	1400	1491	1540	200	24	16	52
1600	1600	1663	1730	200	24	16	62
1800	1810	1880	1950	200	32	18	85
2000	2010	2073	2130	200	32	18	110

## Accessories

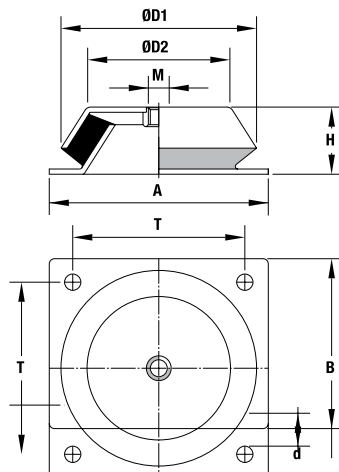
### Protection Net



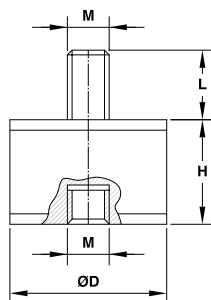
Dn	(mm)	(mm)	(mm)	
125	140	220	12	4
140				
160				
180	212	285	12	4
200				
224				
250	312	385	12	4
280				
315				
355	357	430	12	4
400	408	470	12	4
450	450	528	12	4
500	500	580	16	4
560	562	650	16	4
630	620	720	16	8
710	710	800	16	8
800	795	895	16	8
900	890	990	16	8
1000	990	1130	18	8
1120	1115	1250	18	8
1250	1245	1400	20	8
1400	1405	1560	20	8
1600	1595	1750	20	8
1800	1795	1950	20	8
2000	1995	2150	20	8

### ISOLATOR

#### TYPE A



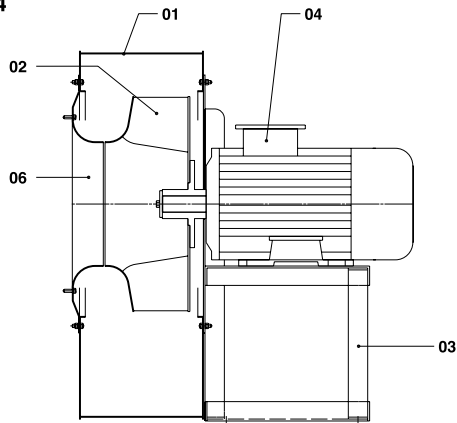
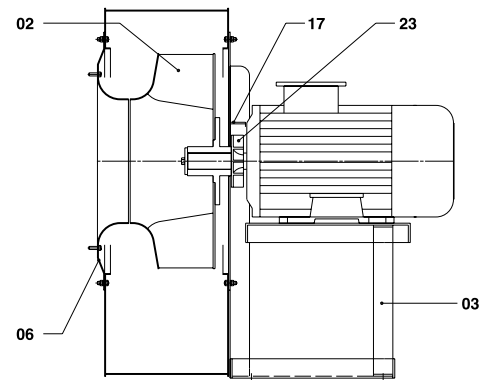
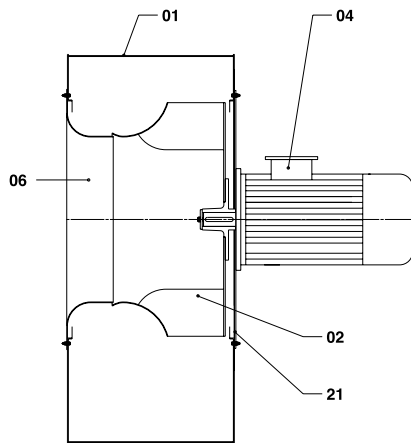
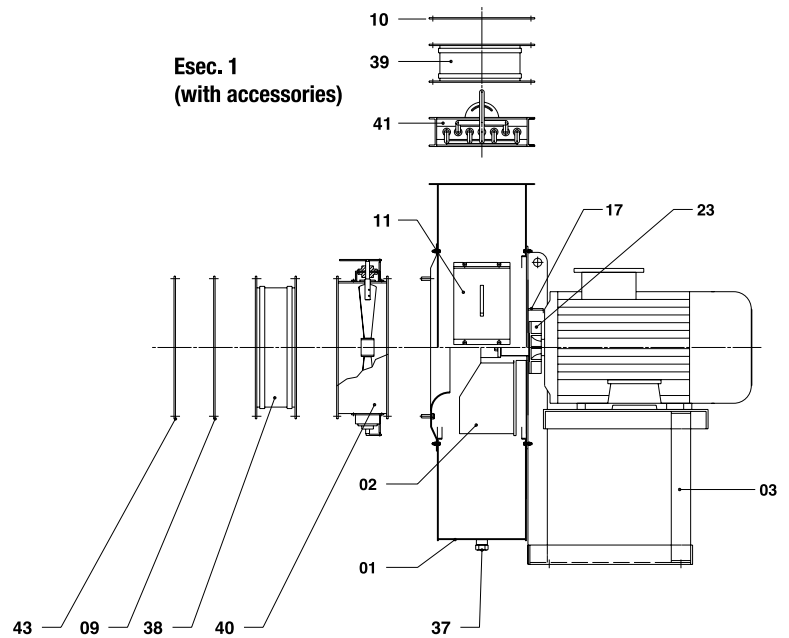
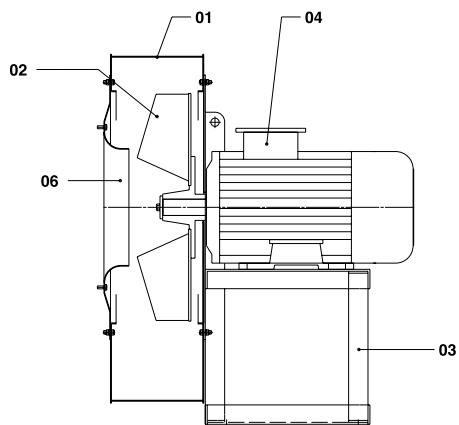
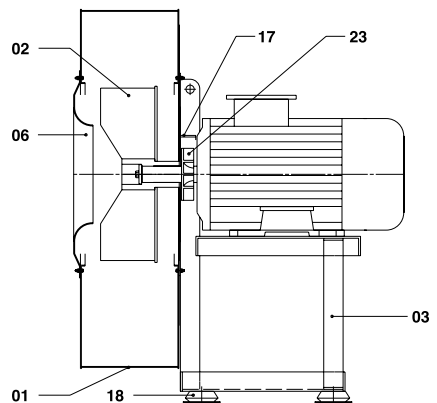
#### TYPE B



Type	A	B	H	M	T	d	D1	D2
MOD 58540	108	108	40	12	88	9	101	75
MOD 33629	168	168	50	16	132	13	136	125
MOD 58541	200	200	70	20	165	13	192	170

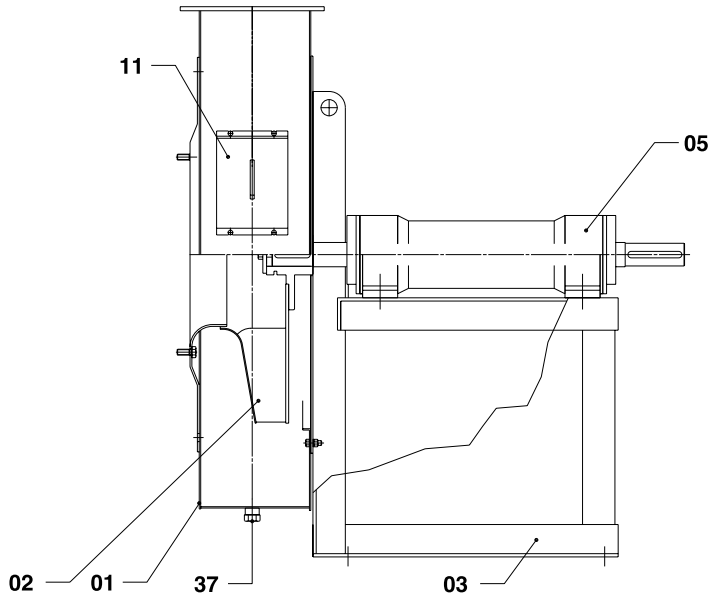
Type	D	H	M	L
B_D3020	30	20	8	20
B_D3030	30	30	8	20
B_D4030	40	30	8	23
B_D4040	40	40	8	23
B_D5020	50	20	10	28
B_D5030	50	30	10	28
B_D5045	50	45	10	28
B_D7045	70	45	10	30
B_D7540	75	40	12	37
B_D7555	75	55	12	37
B_D10040	100	40	16	45
B_D10055	100	55	16	45
B_D10075	100	75	16	45

(Quote = mm)

**SECTION**
**Esec. 4**

**Esec. 4 (with fan)**

**Esec. 5**

**Esec. 1  
(with accessories)**

**Esec. 4**

**Esec. 4 (with fan)**


## SECTION

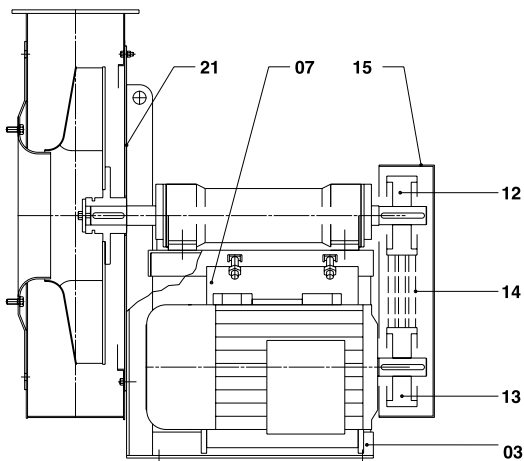
### Esec. 1



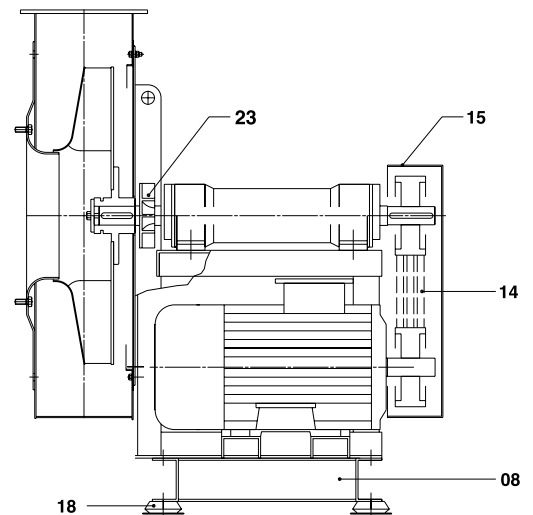
## SPARE PARTS

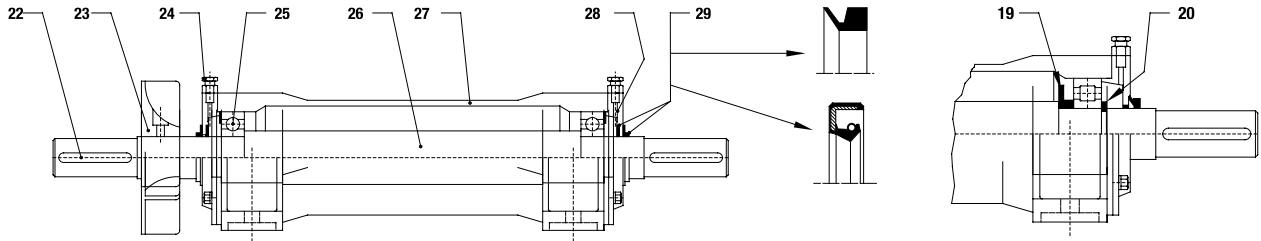
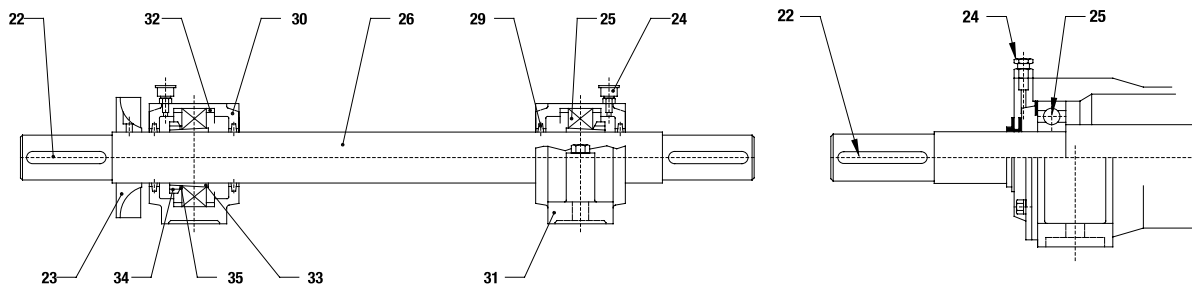
- 01 - CASE
- 02 - IMPELLER
- 03 - BASE
- 04 - MOTOR
- 05 - SUPPORT
- 06 - NOZZLE
- 07 - TURNING BASE
- \* 09 - SUCKING COUNTERFLANGE
- \* 10 - PRESSING COUNTERFLANGE
- \* 11 - INSPECTION DOOR
- 15 - BELT PROTECTION CASE
- 16 - CONNECTIME PIPE
- 17 - COOLING FAN PROTECTION
- \* 18 - SHOCK ISOLATING MOUNTINGS
- 19 - GREASE PROTECTION RING
- 22 - KEY
- 23 - COOLING FAN
- 24 - LUBRIFICATOR
- 25 - BEARING
- 26 - SHAFT
- 27 - CASE
- 28 - CAP
- 29 - PROTECTION RING
- 30 - COVER
- 31 - HOUSING
- 32 - FIXING COLLARS
- 33 - LOCKING COMPASS
- 34 - RING NUT
- 35 - SECURITY WASHER
- 36 - SEMI-ELASTIC JOINT
- \* 37 - DISCHARGE CAP
- \* 38 - SUCKING FLEXIBLE JOINT
- \* 39 - PRESSING FLEXIBLE JOINT
- \* 40 - CIRCULAR FLOW REGULATOR
- \* 41 - RECTANGULAR FLOW REGULATOR
- \* 43 - PROTECTION NET

### Esec. 9



### Esec. 12



**SECTION**
**Monoblock housing**
**Frame size**
**35 A/B 28 – 60 A/B 55**
**50 A/B R 48 – 60 A/B R 55  
50 AL R 48 – 60 AL R 55**

**Frame size**
**SNL 515 – SNL 524**
**35 AL 28 – 60 AL 55**

**SPARE PARTS**

- |                                |                                 |
|--------------------------------|---------------------------------|
| 01 - CASE                      | 22 - KEY                        |
| 02 - IMPELLER                  | 23 - COOLING FAN                |
| 03 - BASE                      | 24 - LUBRIFICATOR               |
| 04 - MOTOR                     | 25 - BEARING                    |
| 05 - SUPPORT                   | 26 - SHAFT                      |
| 06 - NOZZLE                    | 27 - SUPPORT HOUSING            |
| 07 - TURNING BASE              | 28 - CAP                        |
| 08 - BEDPLATE                  | 29 - PROTECTION RING            |
| 09 - SUCKING COUNTERFLANGE     | 30 - COVER                      |
| 10 - PRESSING COUNTERFLANGE    | 31 - HOUSING                    |
| 11 - INSPECTION DOOR           | 32 - FIXING COLLARS             |
| 12 - FAN PULLEY                | 33 - LOCKING COMPASS            |
| 13 - MOTOR PULLEY              | 34 - RING NUT                   |
| 14 - FAN BELTS                 | 35 - SECURITY WASHER            |
| 15 - BELT PROTECTION CASE      | 37 - DISCHARGE CAP              |
| 17 - COOLING FAN PROTECTION    | 38 - SUCKING FLEXIBLE JOINT     |
| 18 - SHOCK ISOLATING MOUNTINGS | 39 - PRESSING FLEXIBLE JOINT    |
| 19 - GREASE PROTECTION RING    | 40 - CIRCULAR FLOW REGULATOR    |
| 20 - SEEGER RING               | 41 - RECTANGULAR FLOW REGULATOR |
| 21 - BASE PLATE                | 43 - PROTECTION NET             |

## Inquiry for Eurovent Blower

Subject : \_\_\_\_\_ Data : \_\_\_\_\_  
 From : \_\_\_\_\_ Job No.: \_\_\_\_\_  
 Company \_\_\_\_\_  
 Contact \_\_\_\_\_  
 Tel : \_\_\_\_\_  
 Fax : \_\_\_\_\_ E-mail : \_\_\_\_\_

### Fan Specification

Technical Data Information		
Model	m <sup>3</sup> /min	
Air volume	mm Wg	
Staic pressure	mm Wg	
Total pressure	°C	
Service Temperature	rpm	
Fan speed	KW	
Motor	%	
Efficiency		
Colour (Standard Green)		
Qty .	Set	
Construction		
Type	<input type="checkbox"/> Centifugal <input type="checkbox"/> Axial <input type="checkbox"/> Propeller <input type="checkbox"/> recommended by vendor	
Power Transmission	<input type="checkbox"/> Direct <input type="checkbox"/> Belt <input type="checkbox"/> recommended by vendor	
Position (see table 1)		
Accessory	<input type="checkbox"/> Inlet Damper <input type="checkbox"/> Outlet Damper <input type="checkbox"/> Filter <input type="checkbox"/> Expansion joint <input type="checkbox"/> Inspection Hole <input type="checkbox"/> Drain with plug	
Application		

if replace for old blower please give original information.

**\*\* Do not use direct drive for hot air fan**

This information above is for guideline only , fan supplier should re-check and select the proper solutions.

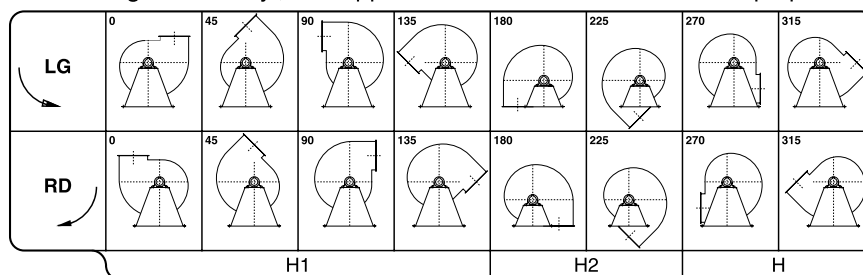


Table 1 Show position

**Please send to**

E-mail : [info@euroventblower.com](mailto:info@euroventblower.com)

Checked by	Approve by



EUROVENT CO.,LTD

18/5 Moo 13 Soi Watmainongpa-ong Petchkasem Rd.  
Omnoi Krathumban Samutsakorn 74130 Thailand.

Tel : +66(2) 813 8118 +66(2) 115 5000

Fax : +66(2) 811 0808 +66(2) 115 5555

E-mail : [info@euroventblower.com](mailto:info@euroventblower.com)

[www.euroventblower.com](http://www.euroventblower.com) [www.tngroup.co.th](http://www.tngroup.co.th)