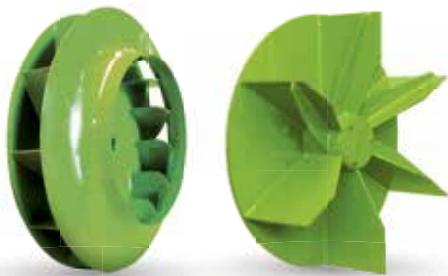


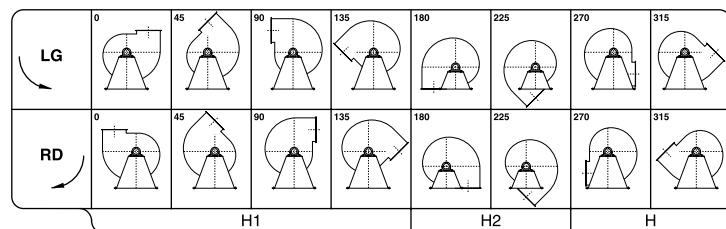
Centrifugal Fan

Series
MRb CRb

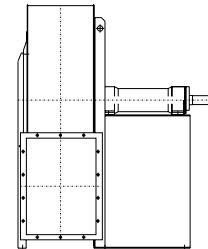


Symbols and measurement units used in the catalogue.

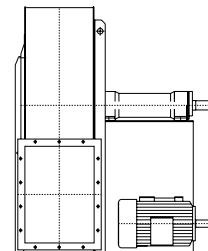
V m ³ /min	= Delivery in m ³ /min
V m ³ /h	= Delivery in m ³ /h
pt mmH ₂ O	= Total pressure in mm H ₂ O
pt Pa	= Total pressure in Pascal
pdmmH ₂ O	= Dynamic pressure in mm H ₂ O
pd Pa	= Dynamic pressure in Pascal
c ₂	= Speed in m/s on pressing throat
n	= Fan rounds
L _p	= Noise level indicated in dB/A
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

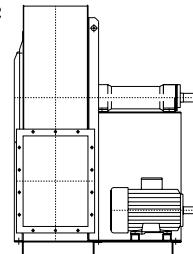
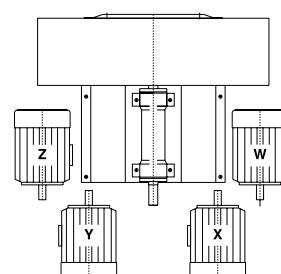
For belt drive, Whee keyed overhung, Supports mounted on a base outside the air stream.
Max air temperature 90 °C without cooling fan; 350 °C when fitted with cooling fan.

ESEC. 1

EXECUTION 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.
Position of motor W or Z.

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.
Position of motor W or Z (exceptionally X or Y).

ESEC. 12

Plan for motor positioning belt drive.


General concepts about centrifugal fans

The centrifugal fan essentially is 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 m³/sec., m³/min., or m³/h.

PRESSURE

It is usually indicated by the ratio kgf/m² 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:

$$pd = \frac{C^2}{2g} \bullet 1.226 \quad C = \frac{V}{A}$$

where:

- V = delivery m³/sec.
- A = throat surface m²
- c = medium speed of the air m/sec.
- g = acceleration of gravity (9,81 m/sec)
- 1,226 = air specific gravity kg/m³ 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:

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

where:

- V = delivery m³/min.
- pt = total pressure kgf/m²
- P = used energy by the fan indicated in kW
- η = fan efficiency

ROTATION SPEED

It is indicated by the number of roundes 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/m³, 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:

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

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

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

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

$$p_1 = P \bullet \left(\frac{n^1}{n} \right)^3$$

- 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.

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

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

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

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

$$\gamma = \frac{Pb \bullet 13.59}{29.27 \bullet (273 + t)} \text{ (kg/m}^3\text{)}$$

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/m³.

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:

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

series **MRb** SPECIFICATIONS

USE:

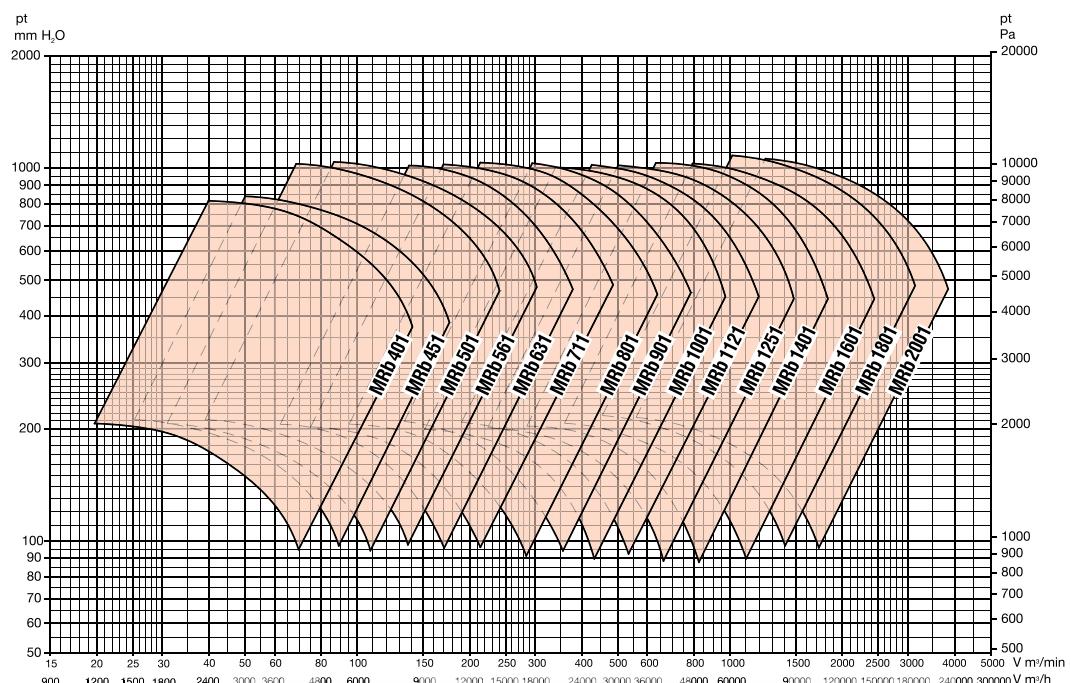
The high output centrifugal fans of this series are suitable for the suction of dusts, fumes, granulates, sawings or also wooden shavings of minimum sizes and materials in general mixed with air excluding filament material.

Their main feature is that of joining up the high output (deriving from the use of a fan wheel with reversed blades, special profile) with the suitability of transporting materials mixed with air. Besides, these fans are distinguished by a very flat curve of the absorbed power, such as to not overload the motor neither when working with free throats.

They are assembled in carpenter shops, mechanical industries, cement factories, ceramic factories, tanneries, foundries, in the molinary and chemical industries, and in all those applications where it is necessary to transport harmful air with max. temperature of 90°C.

For temperatures of the transported fluid higher than 90°C up to 350°C a small heat stopping fan is splined to the shaft between support and scroll; besides the fan is painted with a special aluminium paint suitable for high temperatures.

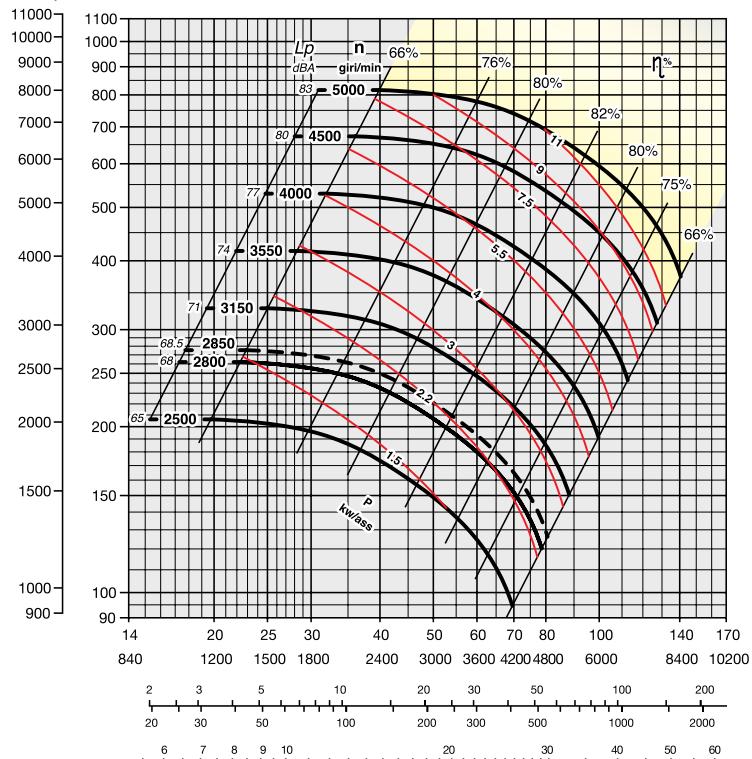
Operating range



SERIES MRb 401

SPECIFICATIONS

Pa pt mmH_O



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 5000 rounds/min.
90–200°C = 4500 rounds/min.
200–350°C = 4000 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

V m³/min

V m³/h

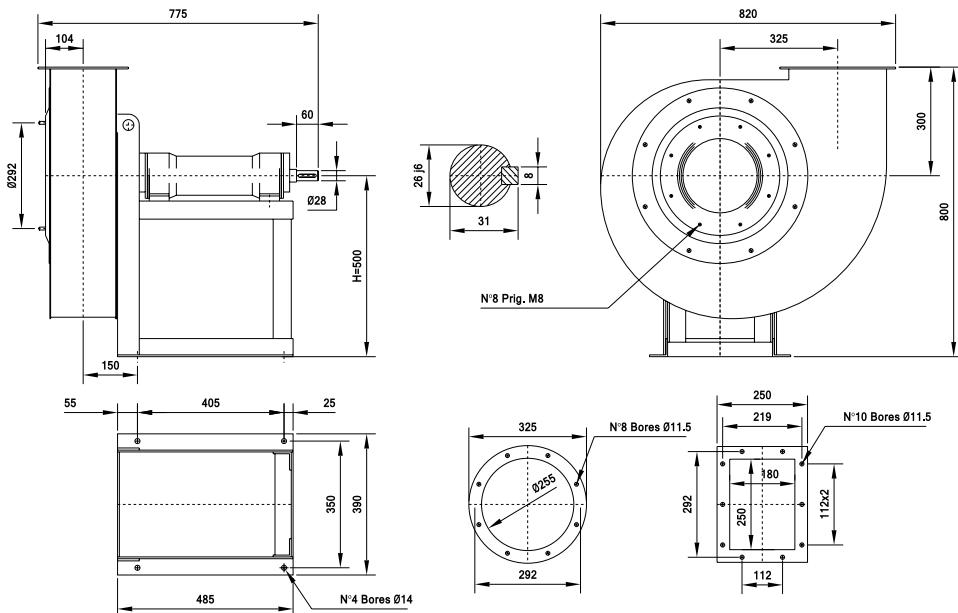
pd mmH_O

pd Pa

C₂ m/s

OVERALL DIMENSIONS in mm

Fan with cooling fan



The fan is revolvable

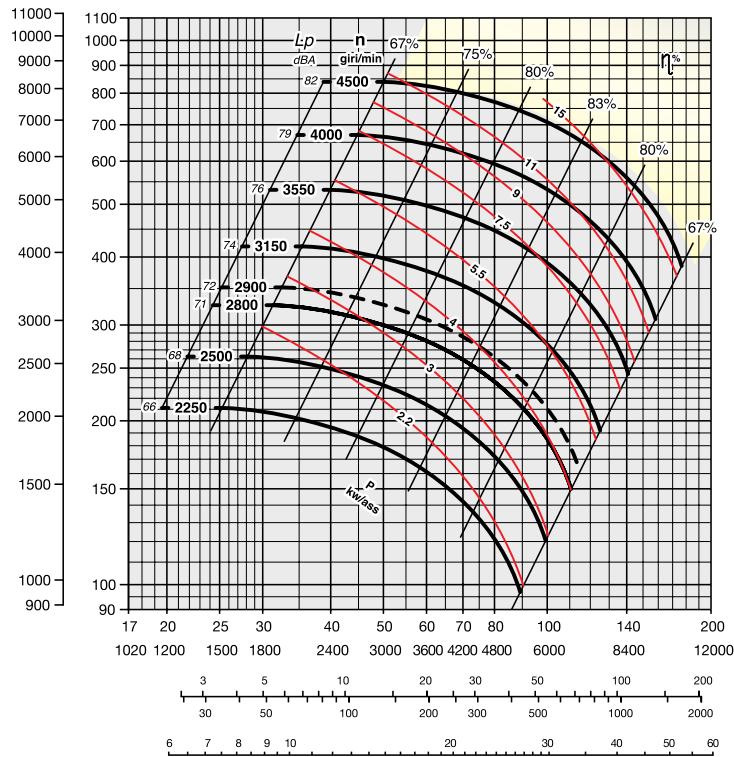
UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/								LG/							
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
	H=500				H=300			H=500	H=500				H=300		H=500	

SERIES MRb 451

SPECIFICATIONS

Pa pt mmH₂O



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 4500 rounds/min.
90–200°C = 4350 rounds/min.
200–350°C = 4000 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

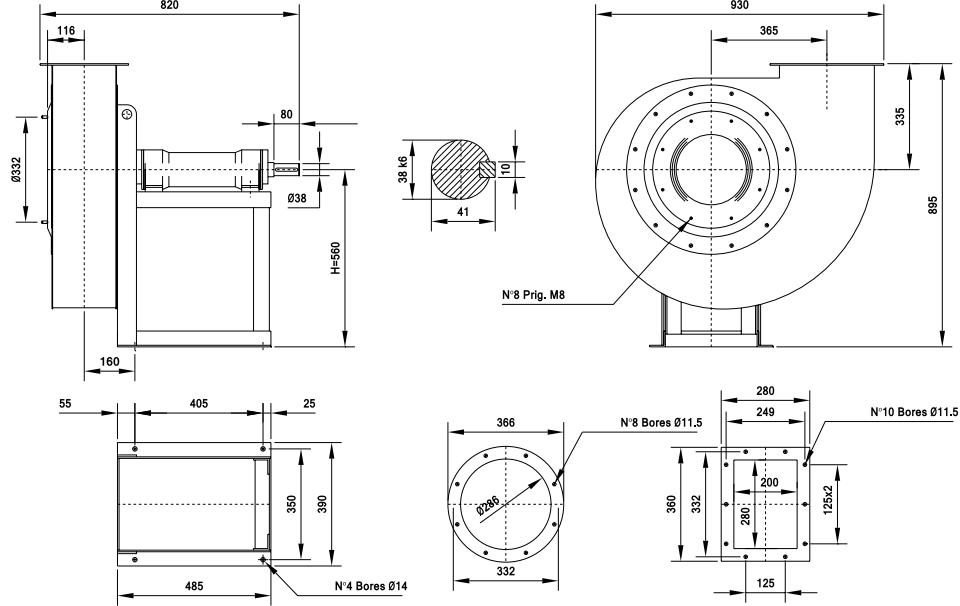
V m³/min
V m³/h
pd mmH₂O
pd Pa
C₂ m/s

OVERALL DIMENSIONS in mm

Fan with cooling fan

PD² = 1 kgm²
GD²

Weight kg 85



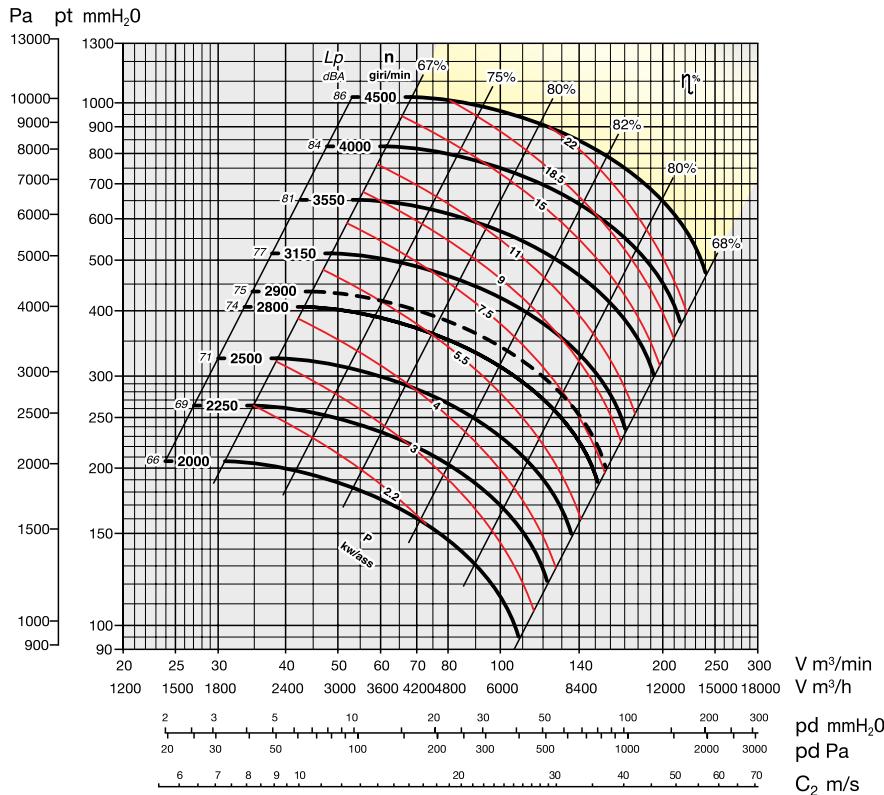
The fan is revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/								LG/							
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=560																
H=335																
H=560																

MRb 501

SERIES **MRb 501** **SPECIFICATIONS**



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 4500 rounds/min.
90–200°C = 4000 rounds/min.
200–350°C = 3550 rounds/min.

Noise level tolerance + 3 dBA

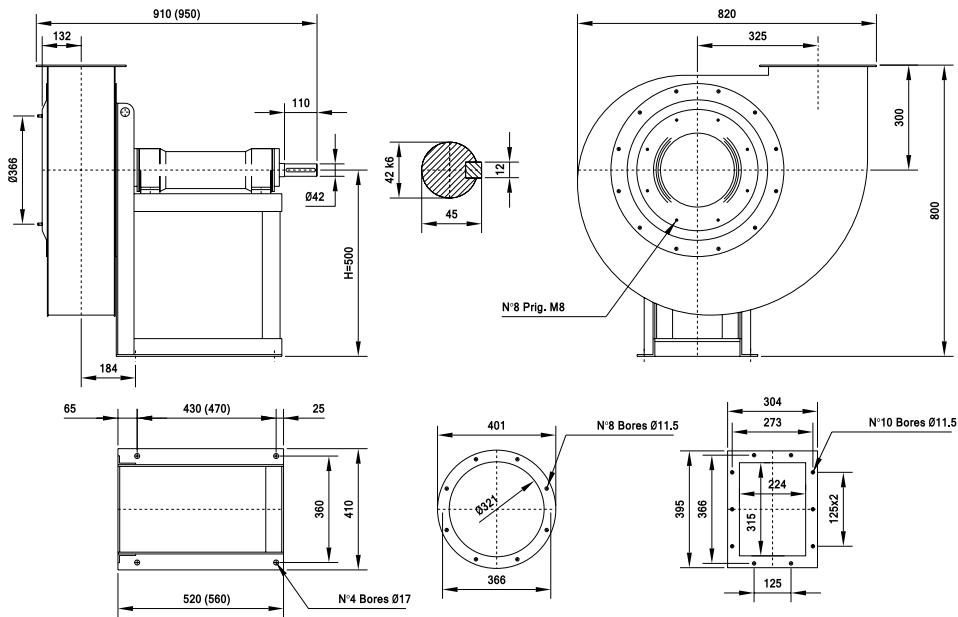
KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm

Fan with cooling fan

PD² = 2,1 kgm²
GD²

Weight kg 125



The fan is revolvable

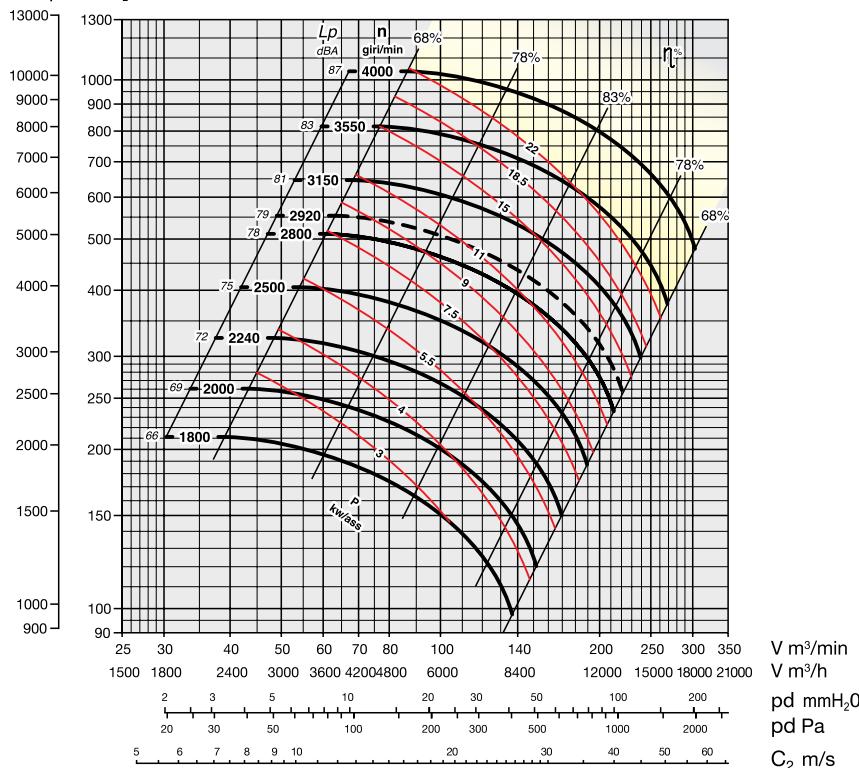
UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/	Clockwise rotation								LG/	Counter clockwise rotation							
	0	45	90	135	180	225	270	315	0		45	90	135	180	225	270	315	
	H=630				H=355				H=630				H=630			H=355	H=630	

SERIES MRb 561

SPECIFICATIONS

Pa pt mmH₂O



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 4000 rounds/min.
90–200°C = 3550 rounds/min.
200–350°C = 3150 rounds/min.

Noise level tolerance + 3 dBA

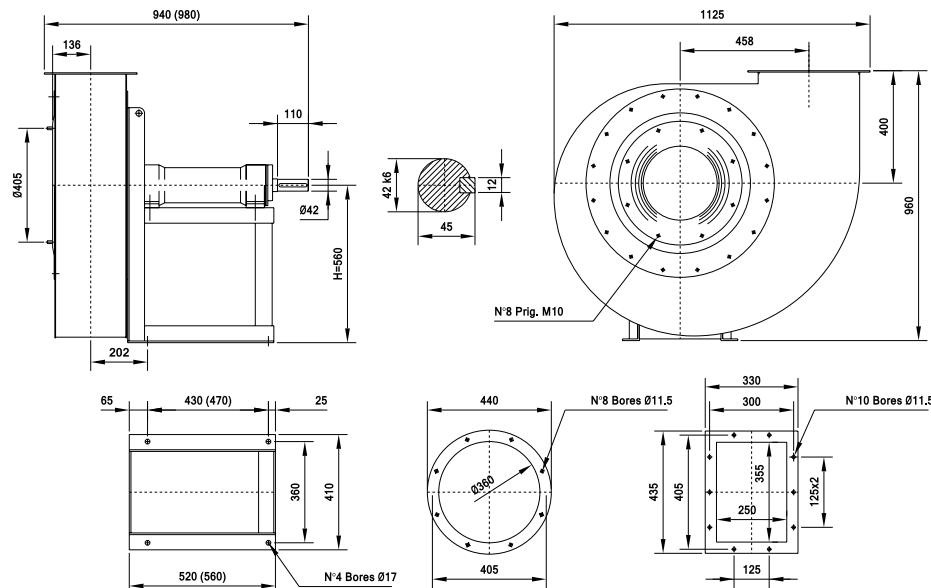
KW consumed fan tolerance $\pm 3\%$

OVERALL DIMENSIONS in mm

Fan with cooling fan

$P_D^2 = 3,2 \text{ kgm}^2$
 $G_D^2 = 3,2 \text{ kgm}^2$

Weight kg 155



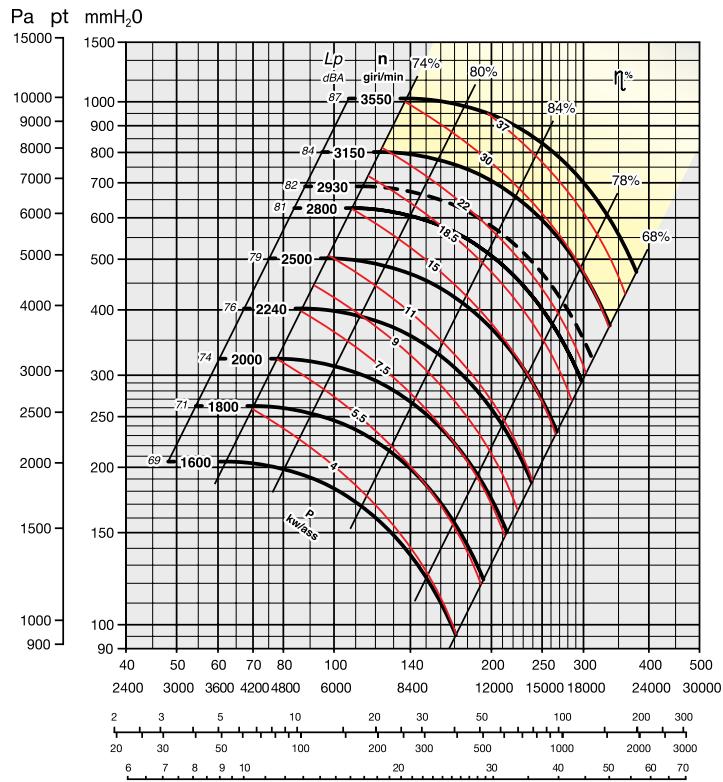
The fan is revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/								LG/							
	Clockwise rotation				Counter clockwise rotation				Clockwise rotation				Counter clockwise rotation			
0																
H=560									H=560				H=400		H=710	

MRb 631

SERIES SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 3550 rounds/min.
90–200°C = 3150 rounds/min.
200–350°C = 2800 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

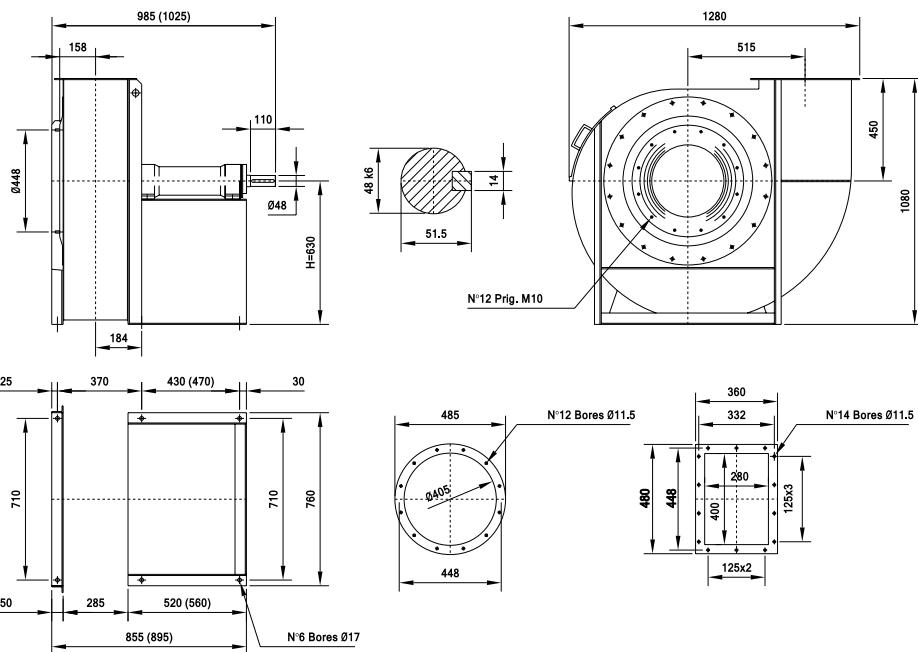
V m³/min
V m³/h
pd mmH₂O
pd Pa
C₂ m/s

OVERALL DIMENSIONS in mm

Fan with cooling fan

 PD² = 5,5 kgm²
GD²

Weight kg 180



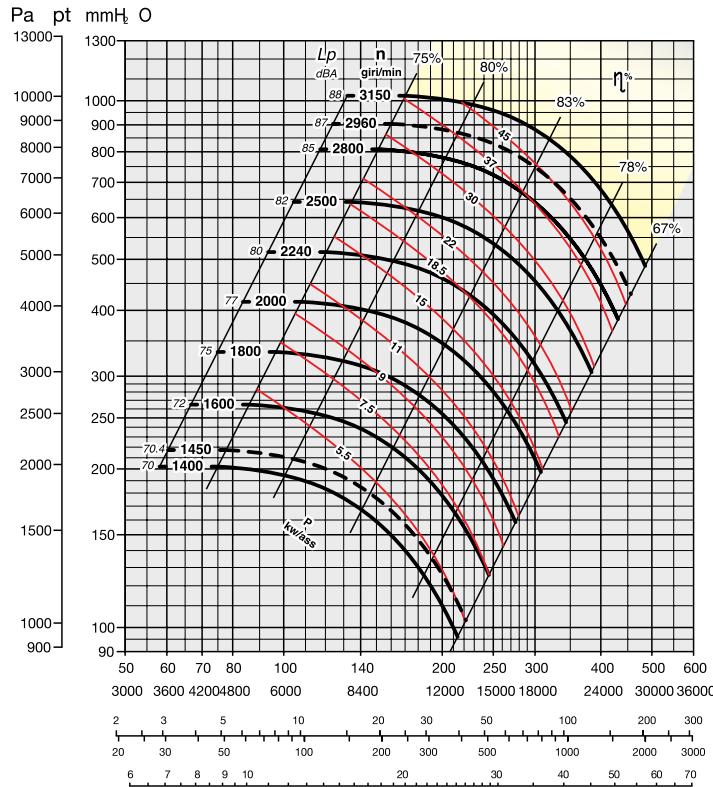
The fan is revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis height	RD/ Clockwise rotation								Axis height	LG/ Counter clockwise rotation							
	0	45	90	135	180	225	270	315		0	45	90	135	180	225	270	315
H=630									H=630								
H=450									H=450								
H=800									H=800								

MRb 711

SERIES **MRb 711** **SPECIFICATIONS**



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 3150 rounds/min.
90–200°C = 2800 rounds/min.
200–350°C = 2500 rounds/min.

Noise level tolerance + 3 dBA

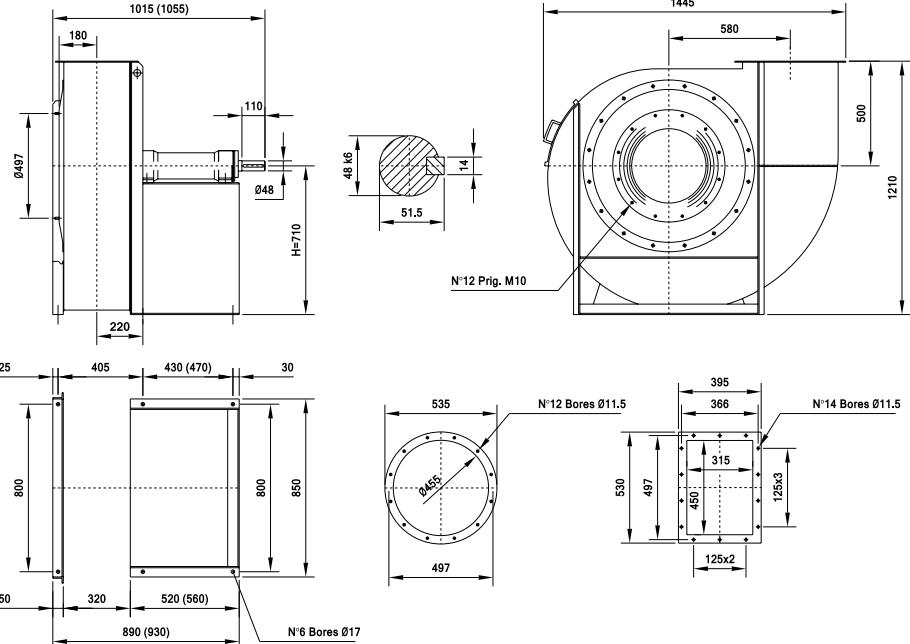
KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm

Fan with cooling fan

PD² = 10,5 kgm²
GD²

Weight kg 290



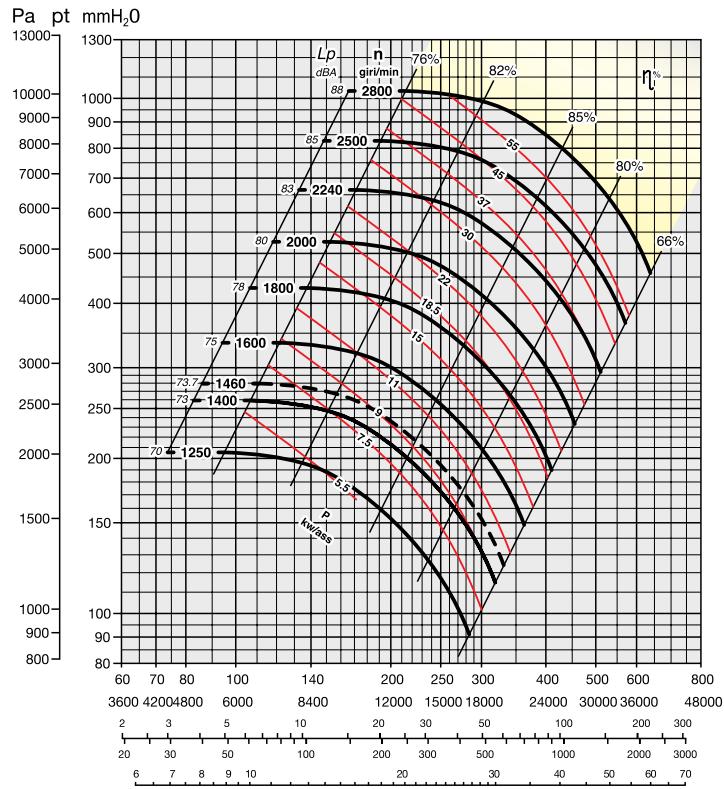
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/							LG/							Counter clockwise rotation								
	Clockwise rotation							Counter clockwise rotation															
0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=710								H=710							H=900	H=500							H=900

SERIES MRb 801

SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C	= 2800 rounds/min.
90–200°C	= 2500 rounds/min.
200–350°C	= 2240 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

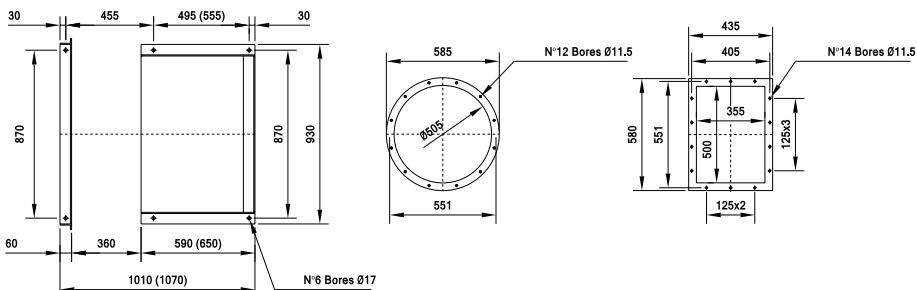
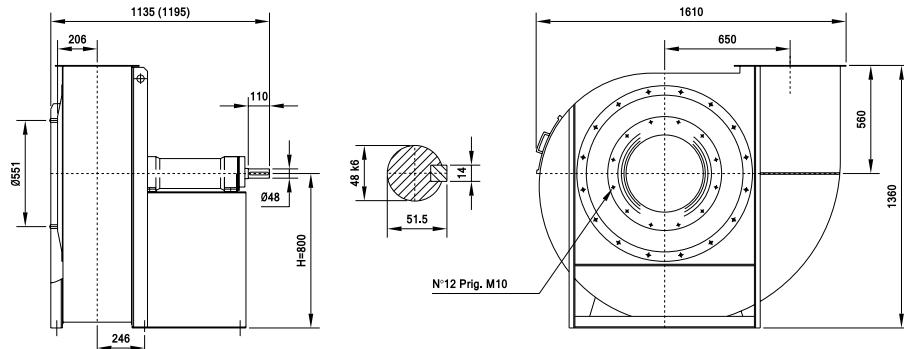
V m³/min
V m³/h
pd mmH₂O
pd Pa
C₂ m/s

OVERALL DIMENSIONS in mm

Fan with cooling fan

 PD² = 18 kgm²
GD²

Weight kg 345



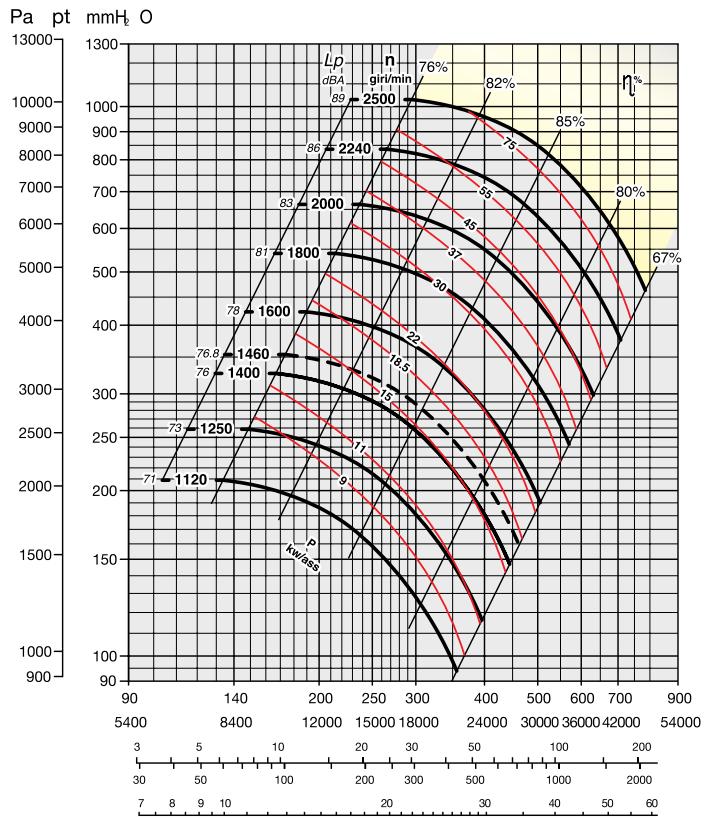
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis height	RD/							LG/							
	Clockwise rotation			Counter clockwise rotation											
0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=800				H=560				H=800				H=560			

MRb 901

SERIES **SPECIFICATIONS**



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 2500 rounds/min.
90–200°C = 2240 rounds/min.
200–350°C = 2000 rounds/min.

Noise level tolerance + 3 dBA

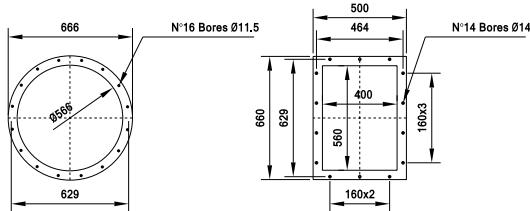
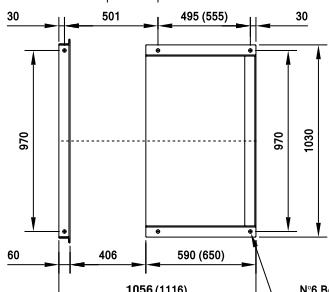
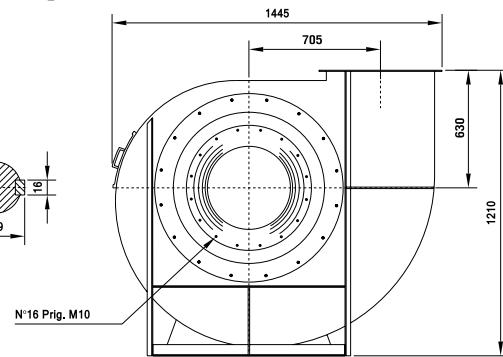
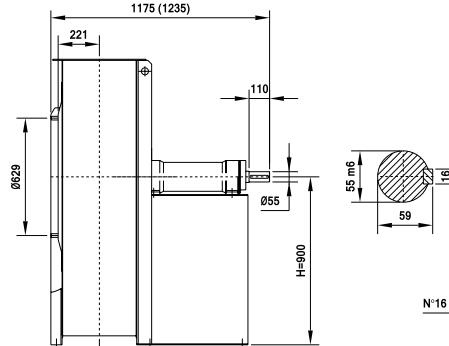
KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm

Fan with cooling fan

$PD^2 = 33 \text{ kgm}^2$
 $GD^2 = 10 \text{ kgm}^2$

Weight kg 412



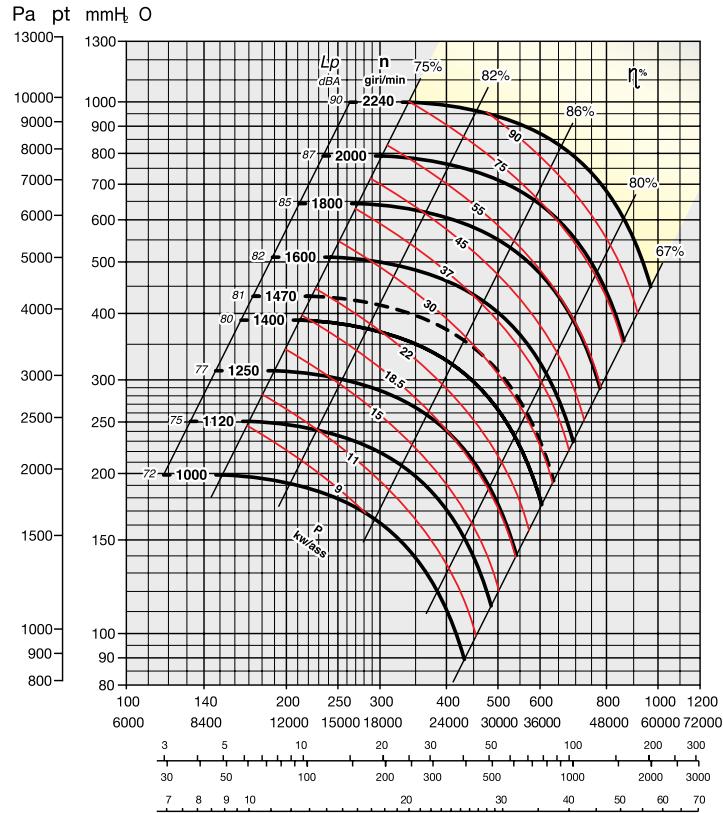
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis height	RD/ Clockwise rotation							Axis height	LG/ Counter clockwise rotation							
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=900									H=900							

SERIES MRb 1001

SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 2240 rounds/min.
90–200°C = 2000 rounds/min.
200–350°C = 1800 rounds/min.

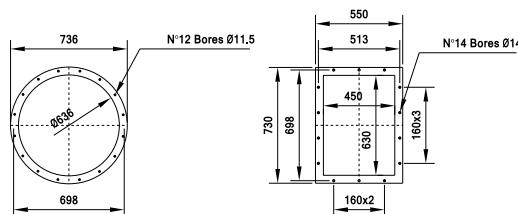
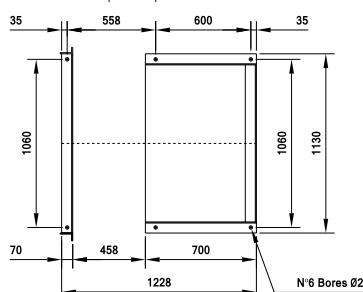
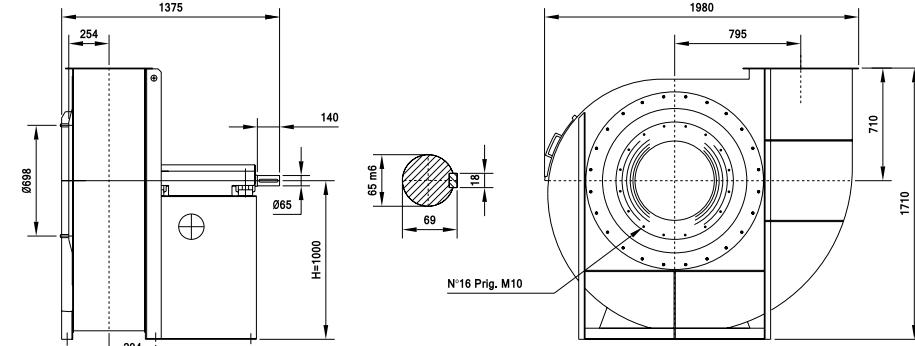
Noise level tolerance + 3 dBA

 KW consumed fan tolerance $\pm 3\%$
OVERALL DIMENSIONS in mm

Fan with cooling fan

 $\text{PD}^2 = 51 \text{ kgm}^2$
 $\text{GD}^2 = 10 \text{ kgm}^2$

Weight kg 551

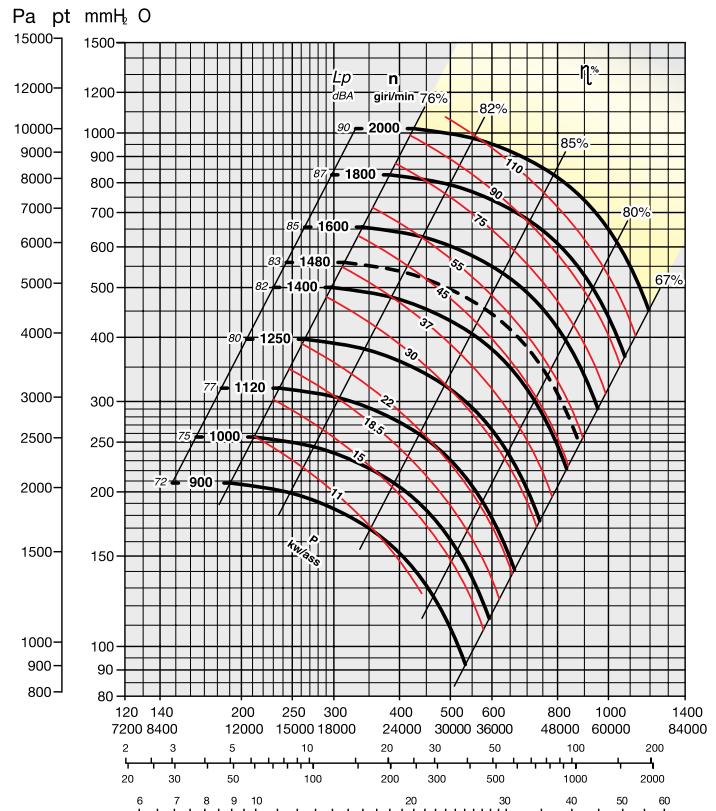


The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/	Clockwise rotation								Axis's height	LG/	Counter clockwise rotation							
	0	45	90	135	180	225	270	315	0		45	90	135	180	225	270	315		
	H=1000				H=710				H=1180				H=1000				H=710		H=1180

SERIES MRb 1121 SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 2000 rounds/min.
90–200°C = 1800 rounds/min.
200–350°C = 1600 rounds/min.

Noise level tolerance + 3 dBA

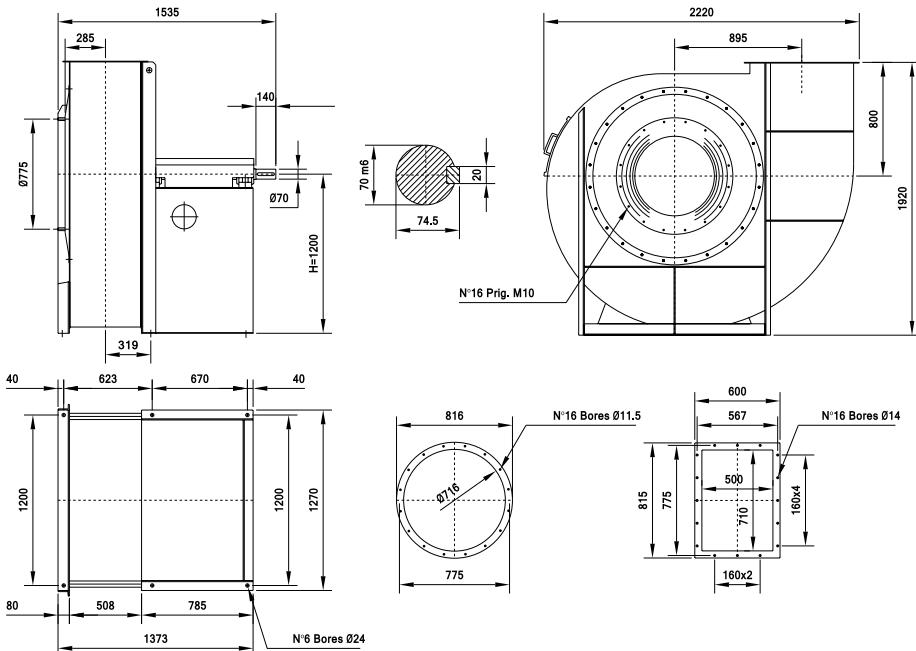
KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm

Fan with cooling fan

PD² = 80 kgm²
GD² =

Weight kg 836



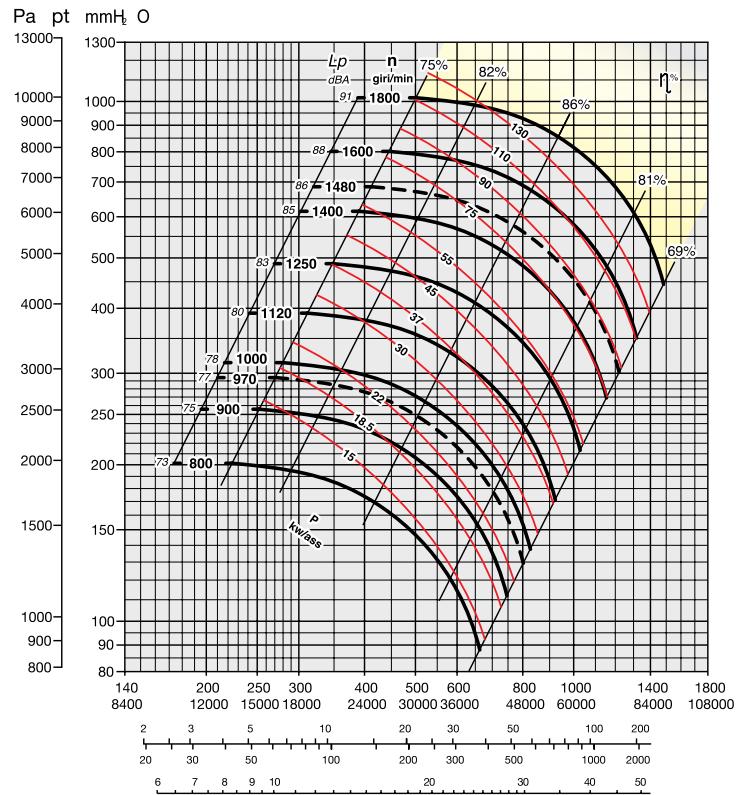
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation								Axis's height	LG/ Counter clockwise rotation							
	0	45	90	135	180	225	270	315		0	45	90	135	180	225	270	315
	H=1120				H=800			H=1320		H=1120			H=800		H=1320		

SERIES MRb 1251

SPECIFICATIONS



YELLOW ZONE - Consult technical office

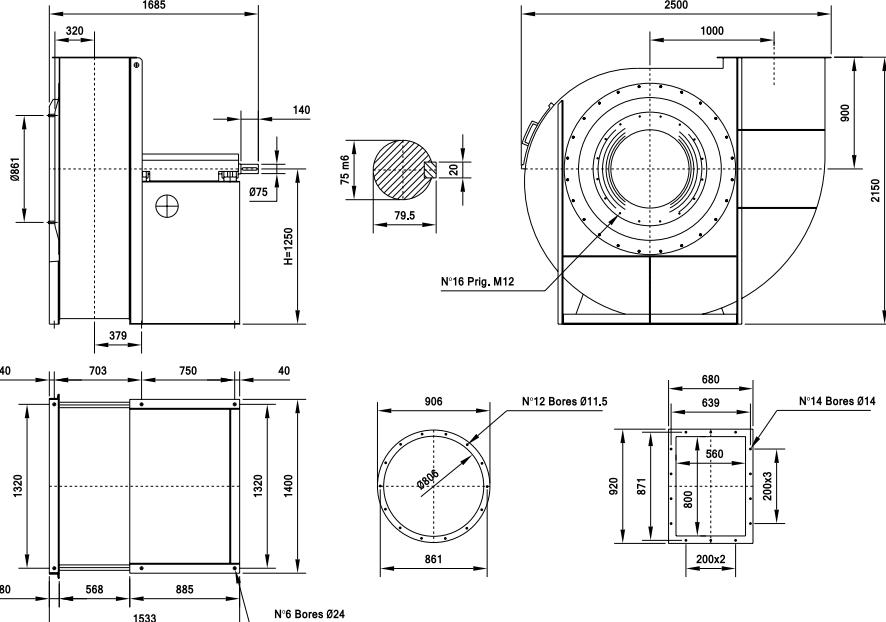
Maximum admissible rounds:

<90°C = 1800 rounds/min.
90–200°C = 1600 rounds/min.
200–350°C = 1400 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm



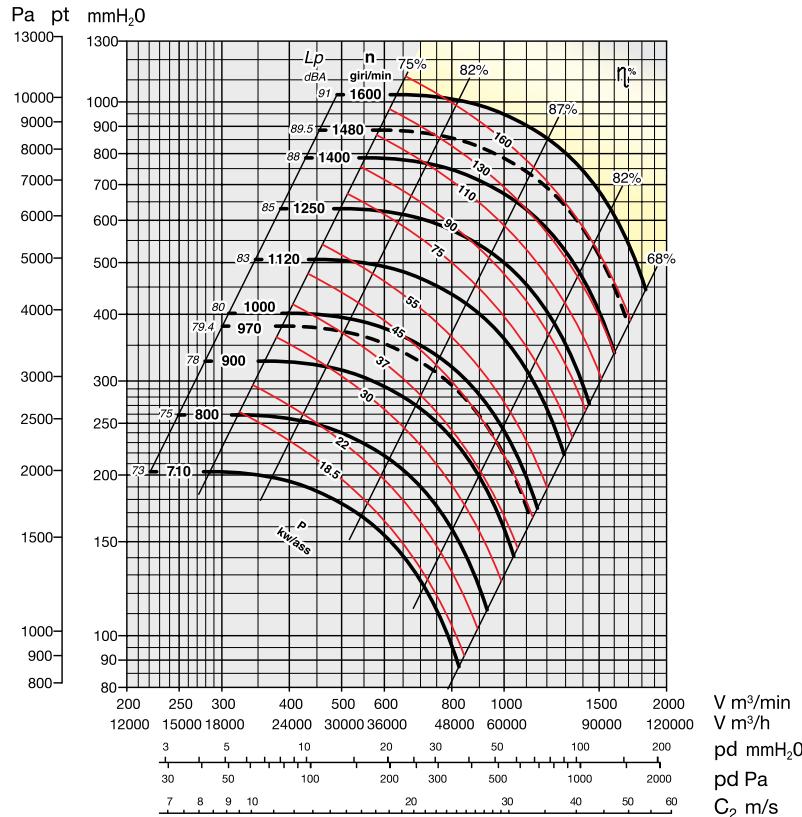
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation						Axis's height	LG/ Counter clockwise rotation							
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270
		H=1250		H=900		H=1500				H=1250		H=900		H=1500	

SERIES MRb 1401

SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

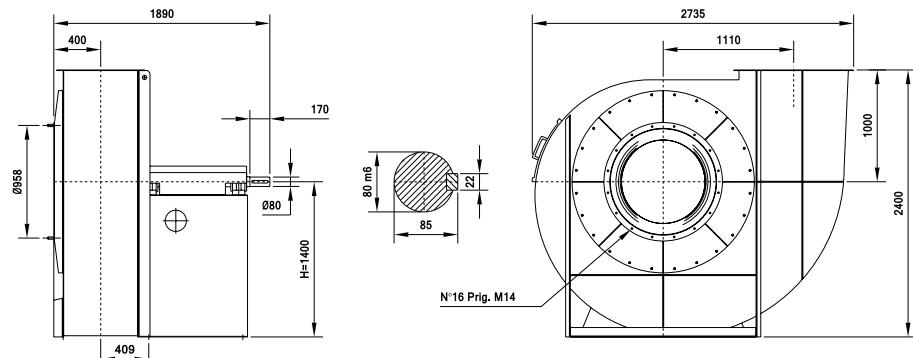
<90°C = 1600 rounds/min.
90–200°C = 1400 rounds/min.
200–350°C = 1250 rounds/min.

Noise level tolerance + 3 dBA

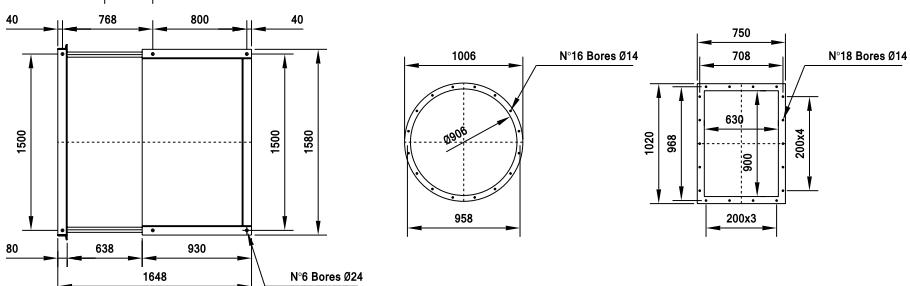
KW consumed fan tolerance $\pm 3\%$

OVERALL DIMENSIONS in mm

Fan with cooling fan



Weight kg 1385



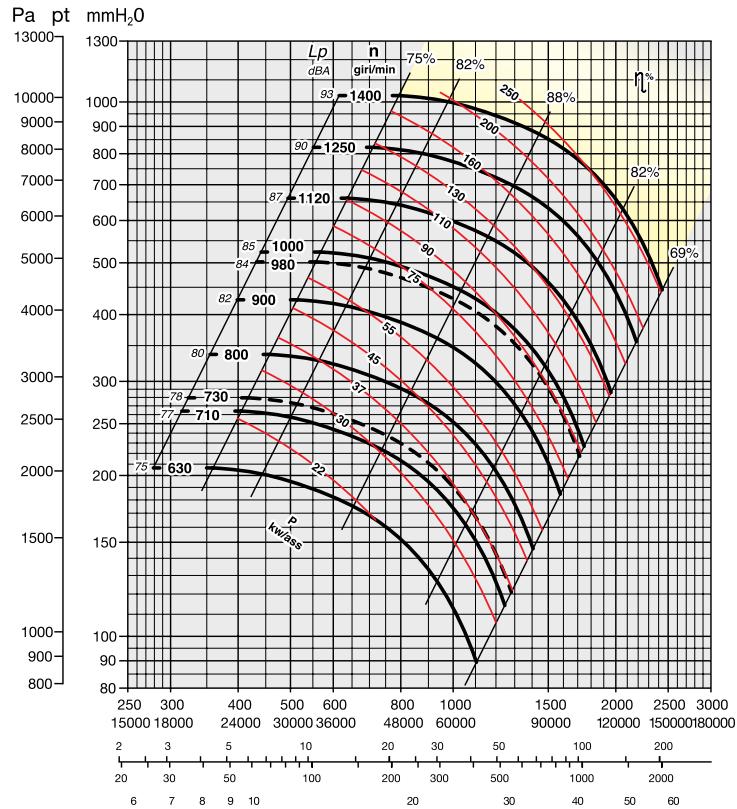
The fan is revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/								LG/							
	Clockwise rotation								Counter clockwise rotation							
0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315	
H=1400	H=1180	H=1000	H=1700	H=1400	H=1180	H=1000	H=1700									

SERIES MRb 1601

SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

 <90°C = 1400 rounds/min.
 90–200°C = 1250 rounds/min.
 200–350°C = 1100 rounds/min.

Noise level tolerance + 3 dBA

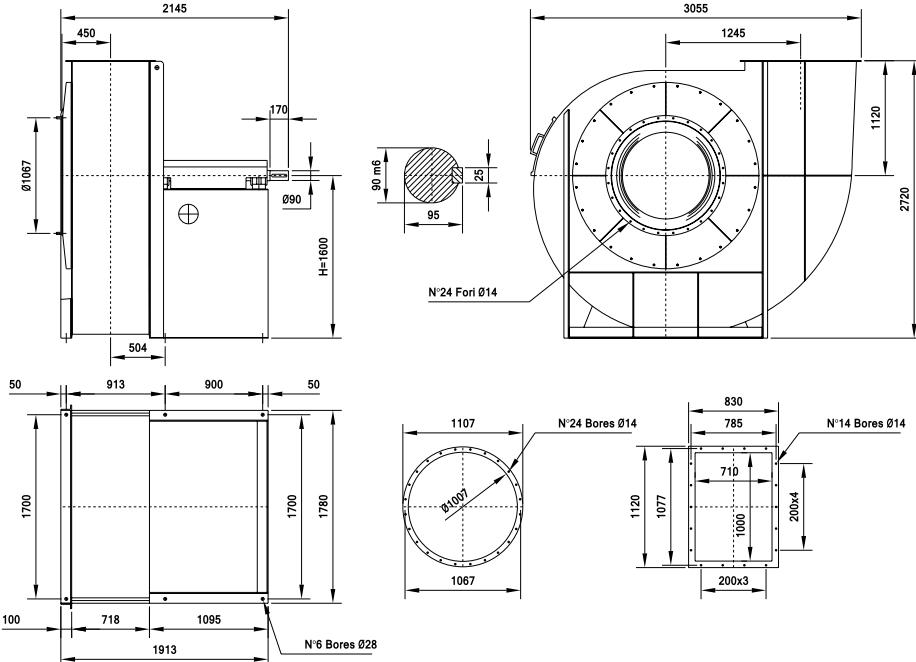
KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm

Fan with cooling fan

 PD² = 370 kgm²
 GD²

Weight kg 1810

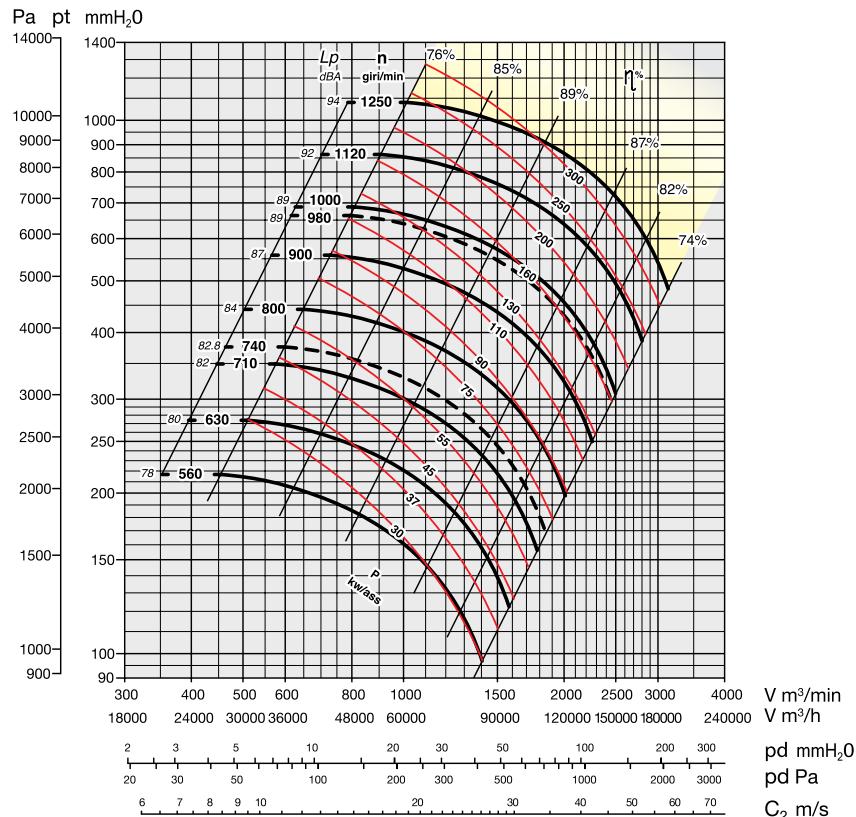


The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/					Clockwise rotation					Axis's height	LG/					Counter clock wise rotation						
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315	0	45	90	135	180		
H=1600									H=1600									H=1600					
H=1280									H=1280									H=1280					
H=1120									H=1120									H=1120					
H=1900									H=1900									H=1900					
H=1700									H=1700									H=1700					

SERIES MRb 1801 SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 1250 rounds/min.
90–200°C = 1100 rounds/min.
200–350°C = 900 rounds/min.

Noise level tolerance + 3 dBA

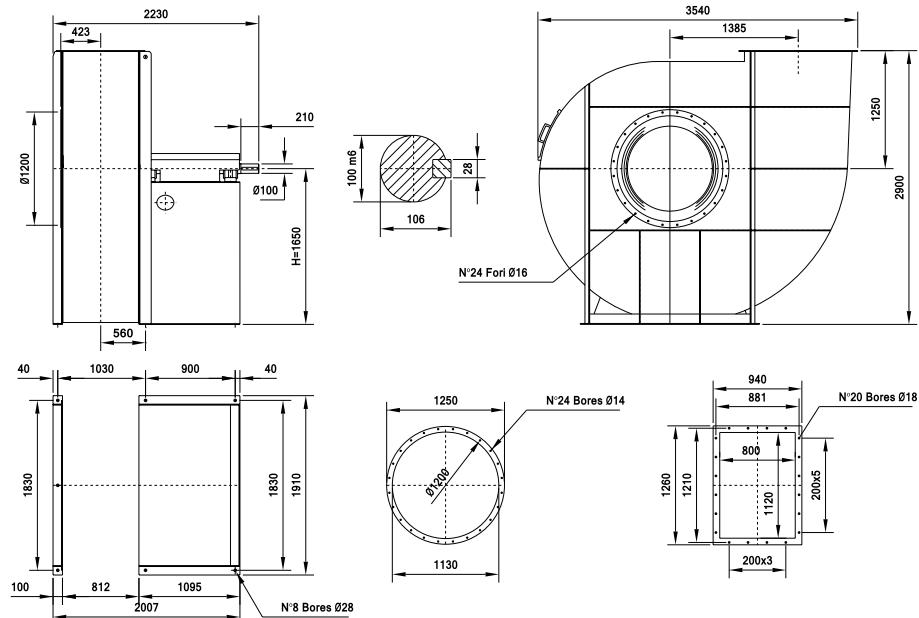
KW consumed fan tolerance $\pm 3\%$

OVERALL DIMENSIONS in mm

Fan with cooling fan

$\text{PD}^2 = 700 \text{ kgm}^2$
 $\text{GD}^2 = 700 \text{ kgm}^2$

Weight kg 2600

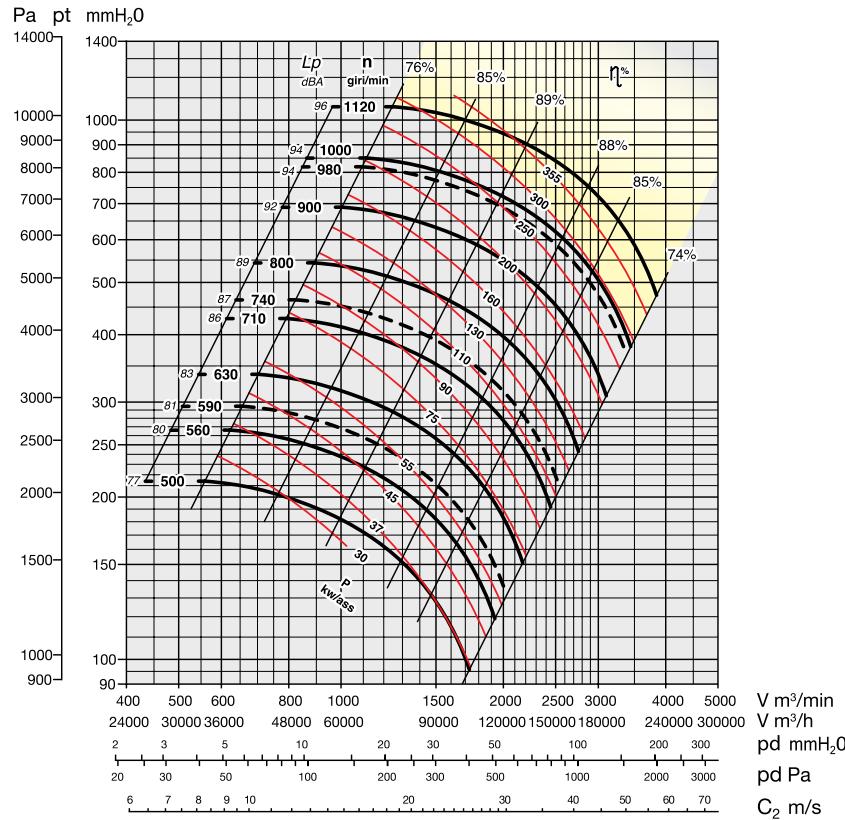


The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation					Axis's height	LG/ Counter clockwise rotation					Axis's height				
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=1650									H=1650							
H=1400									H=1400							
H=1250									H=1250							
H=2120									H=2120							
H=1850									H=1850							

SERIES MRb 2001 SPECIFICATIONS

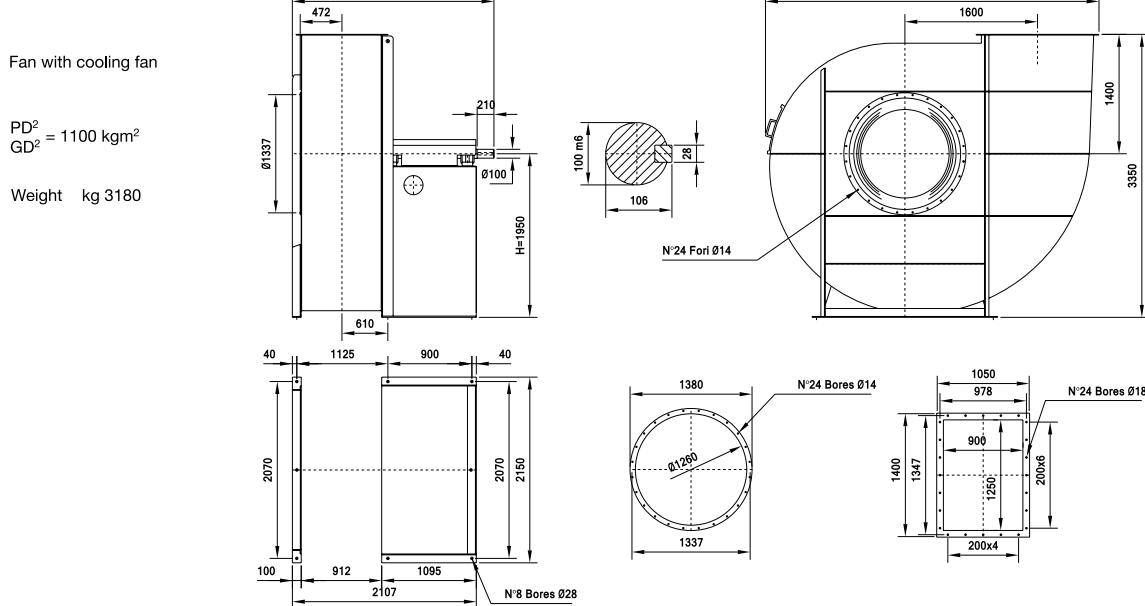


YELLOW ZONE - Consult technical office

Maximum admissible rounds:

 <90°C = 1120 rounds/min.
 90–200°C = 950 rounds/min.
 200–350°C = 800 rounds/min.

Noise level tolerance + 3 dBA

 KW consumed fan tolerance $\pm 3\%$
OVERALL DIMENSIONS in mm


The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation					Axis's height	LG/ Counter clockwise rotation					Axis's height				
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=1950									H=1950							
H=1600									H=1600							
H=1400									H=1400							
H=2360									H=2360							
H=2100									H=2100							

series CRb SPECIFICATIONS

USE:

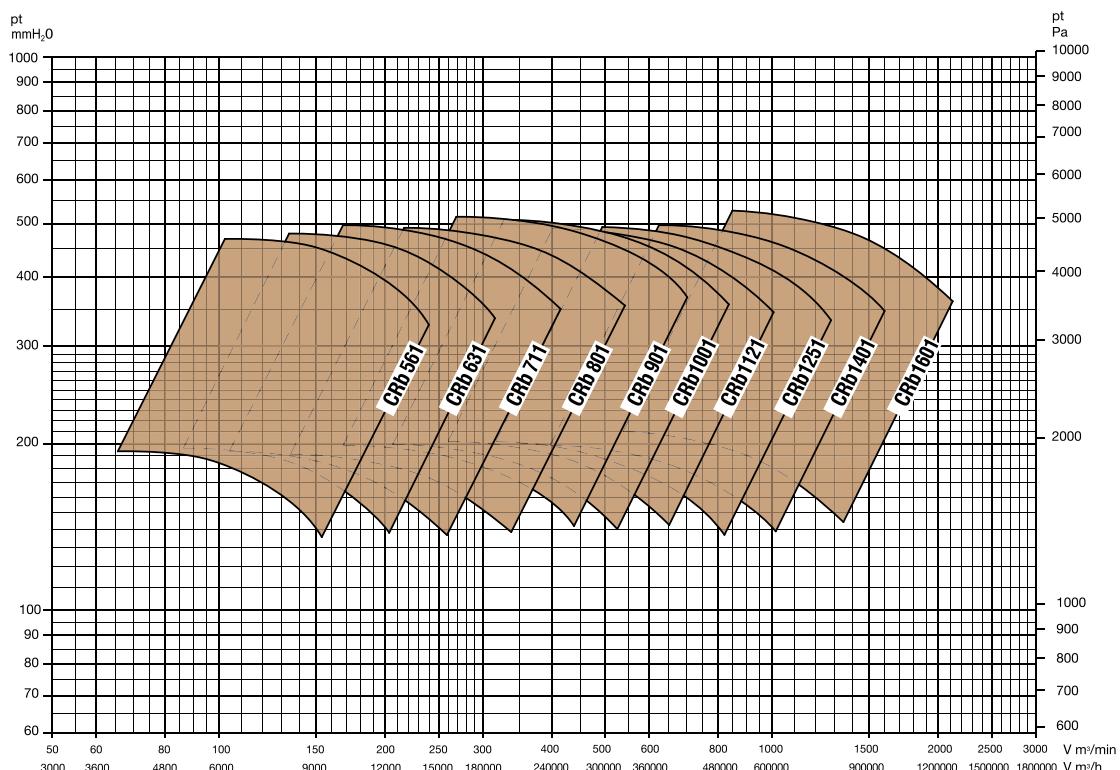
The centrifugal fans of this series are suitable for the suction of wooden shavings, paper offcuts and filament material in general.

The wheel has radial blades and it is open.

The curve of the absorbed power increases to the free throat and it is suggested to choose a motor with 25% power in addition, in order to rectify errors, if any, in valuation of circuit leaks.

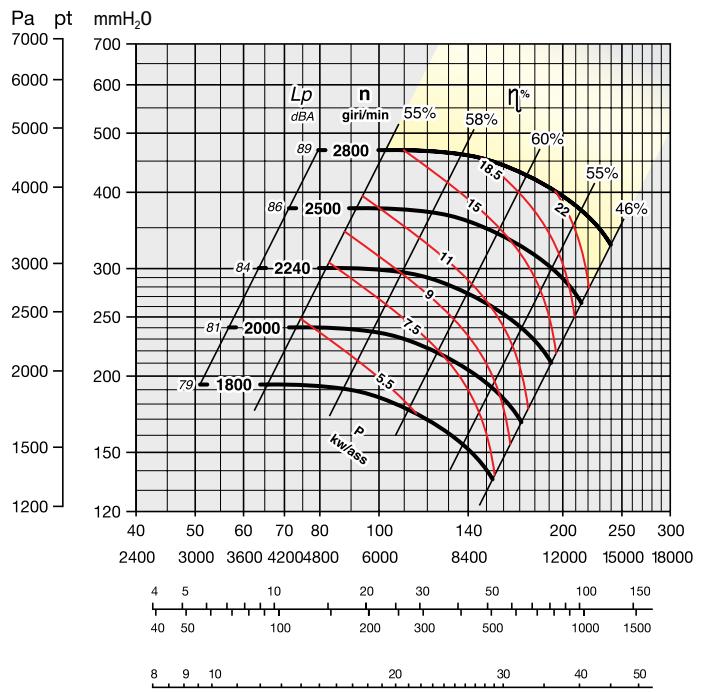
They are assembled in carpenter shops, tanneries, paper, factories, bookbinderies and in all those applications where a normal wheel can be easily obstructed.

Operating range



CRb 561

SERIES SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

 <90°C = 2800 rounds/min.
 90–200°C = 2400 rounds/min.

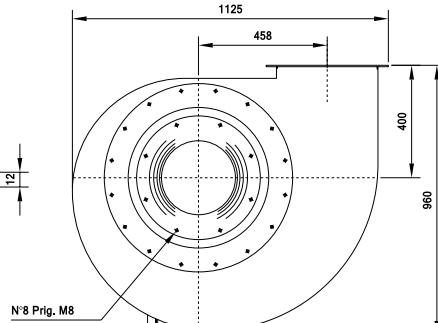
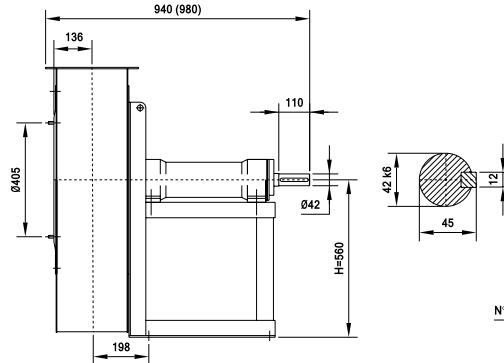
Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

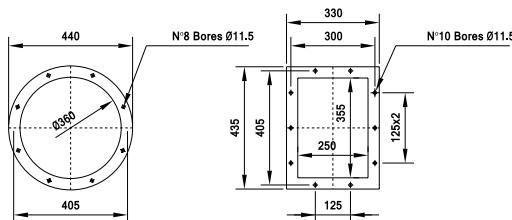
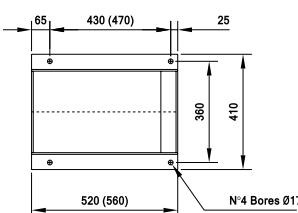
 V m³/min
 V m³/h
 pd mmH₂O
 pd Pa
 C₂ m/s

OVERALL DIMENSIONS in mm

Fan cooling with fan


 PD² = 3,2 kgm²
 GD²

Weight kg 164

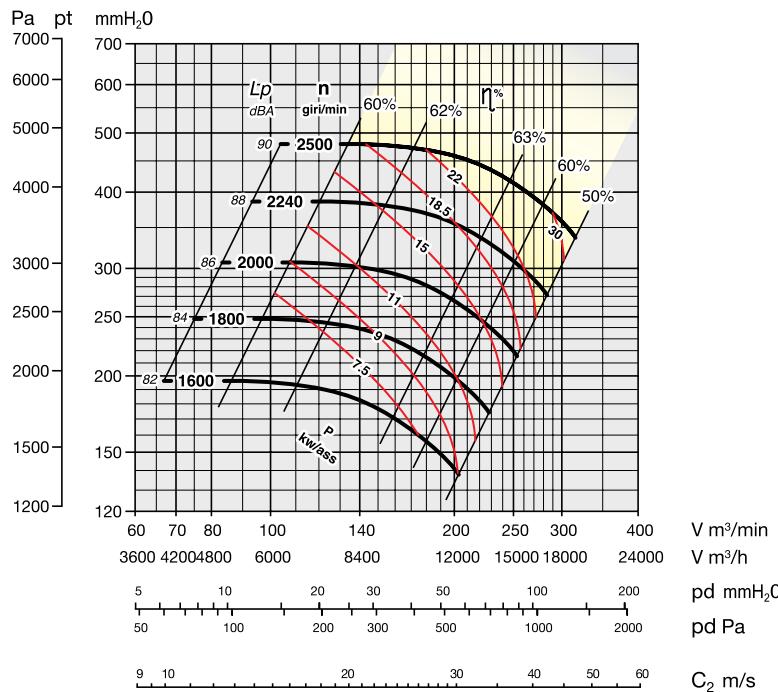

The fan is revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation							LG/ Counter clockwise rotation								
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
	H=560				H=400			H=710					H=560		H=400	H=710

CRb 631

SERIES SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

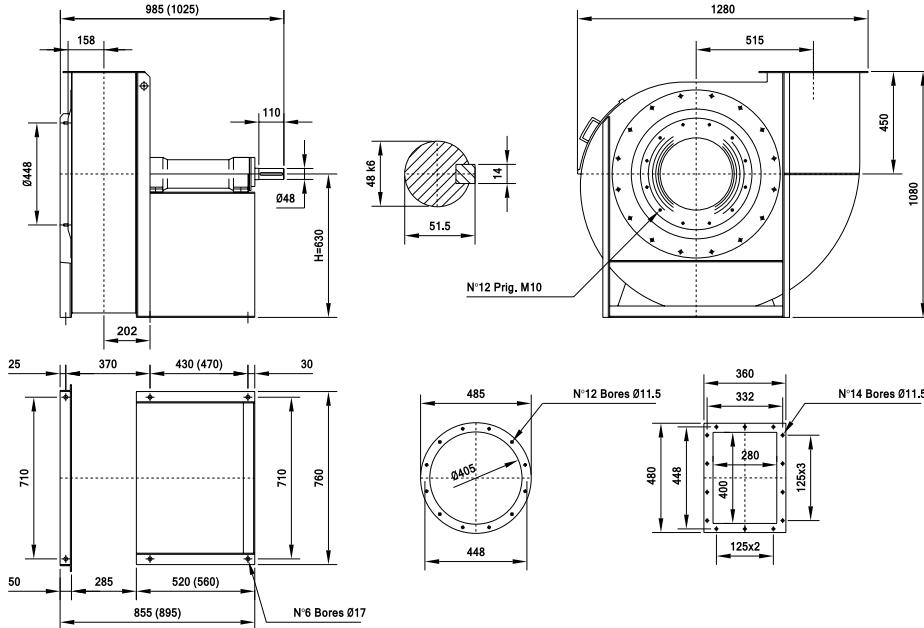
<90°C = 2500 rounds/min.
90–200°C = 2120 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance $\pm 3\%$

OVERALL DIMENSIONS in mm

Fan cooling with fan



$PD^2 = 6 \text{ kgm}^2$
 $GD^2 = 6 \text{ kgm}^2$

Weight kg 192

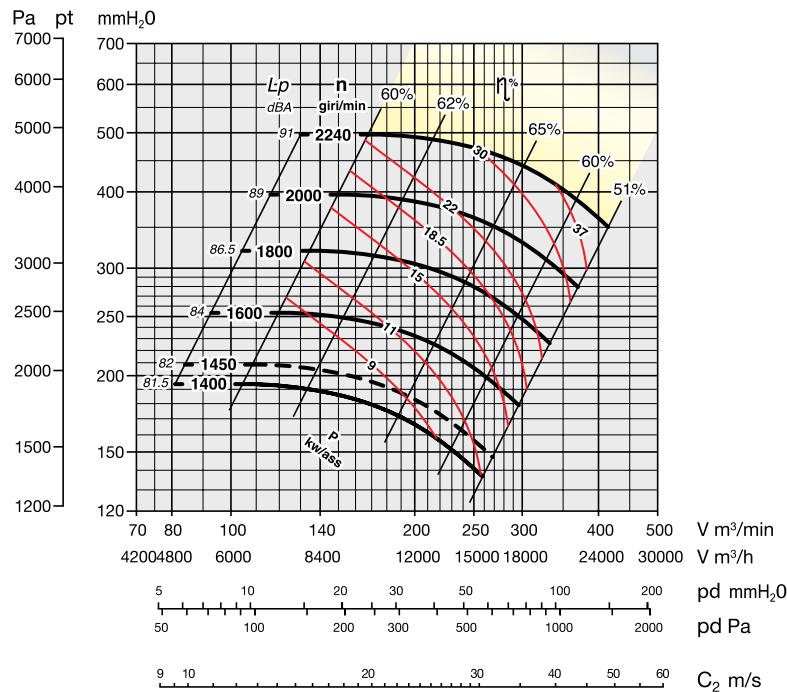
The fan is revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/	Clockwise rotation								LG/	Counter clockwise rotation									H=630							
	0	45	90	135	180	225	270	315	0		45	90	135	180	225	270	315	H=450									
	H=630								H=450								H=800										

CRb 711

SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

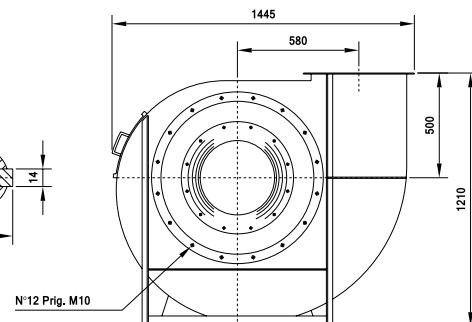
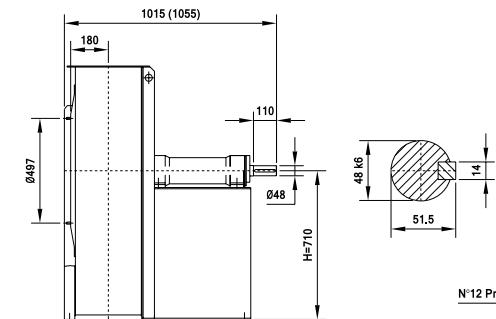
<90°C = 2240 rounds/min.
90–200°C = 1900 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm

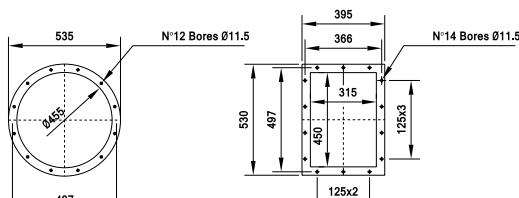
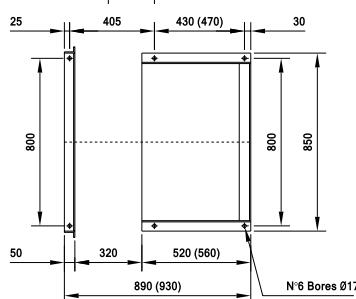
Fan with cooling fan



PD² = 11 kgm²

GD² = 11 kgm²

Weight kg 308



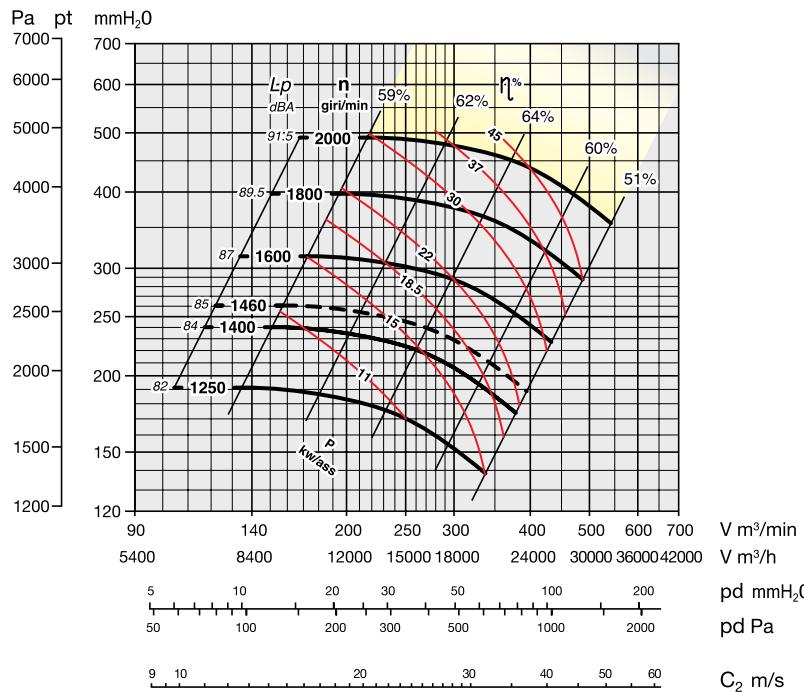
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/								LG/							
	Clockwise rotation								Counter clockwise rotation							
0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315	
H=710				H=500				H=710				H=500				

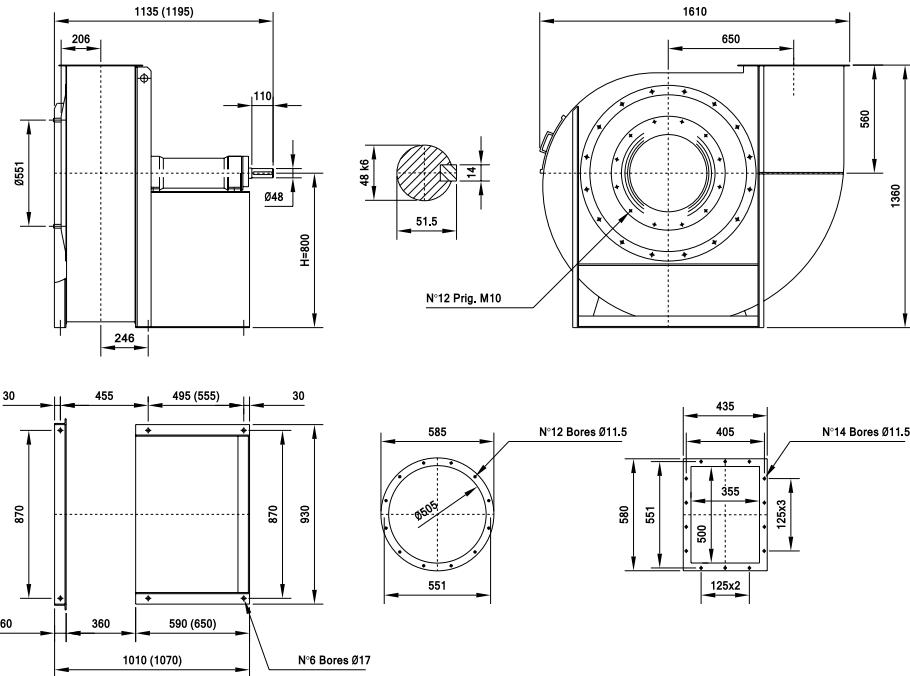
SERIES CRb 801

SPECIFICATIONS



OVERALL DIMENSIONS in mm

Fan with cooling fan



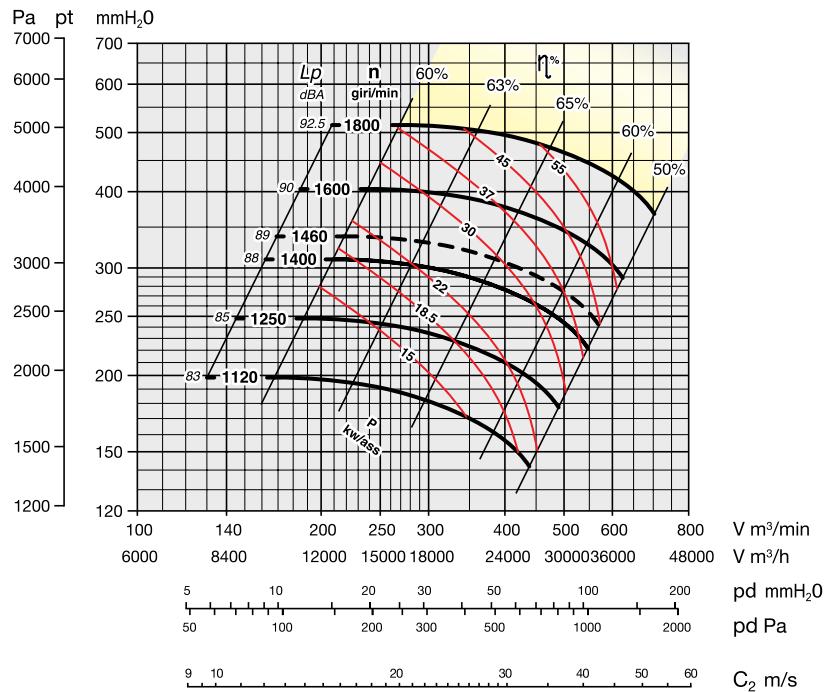
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation								Axis's height	LG/ Counter clockwise rotation							
	0	45	90	135	180	225	270	315		0	45	90	135	180	225	270	315
H=800									H=800								
H=560									H=560								
H=1000									H=1000								

SERIES CRb 901

SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

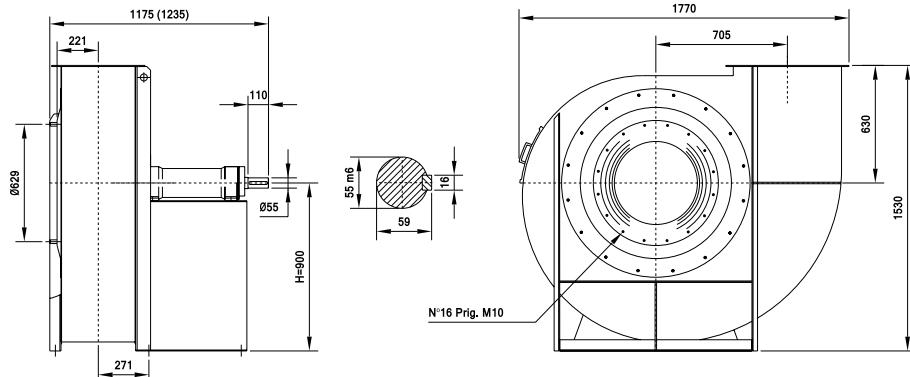
 <90°C = 1800 rounds/min.
 90–200°C = 1460 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

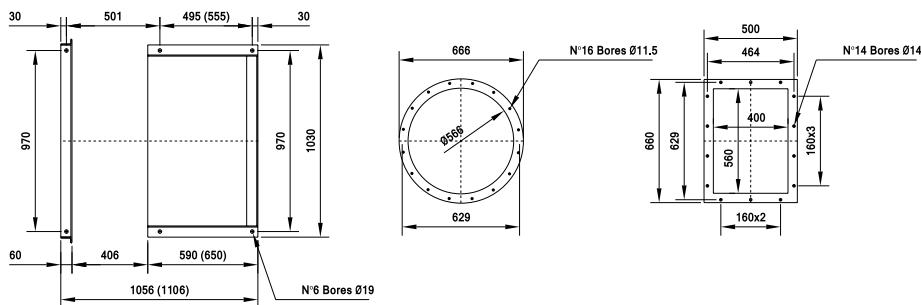
OVERALL DIMENSIONS in mm

Fan with cooling fan


 PD² = 29 kgm²

 GD² = 29 kgm²

Weight kg 433

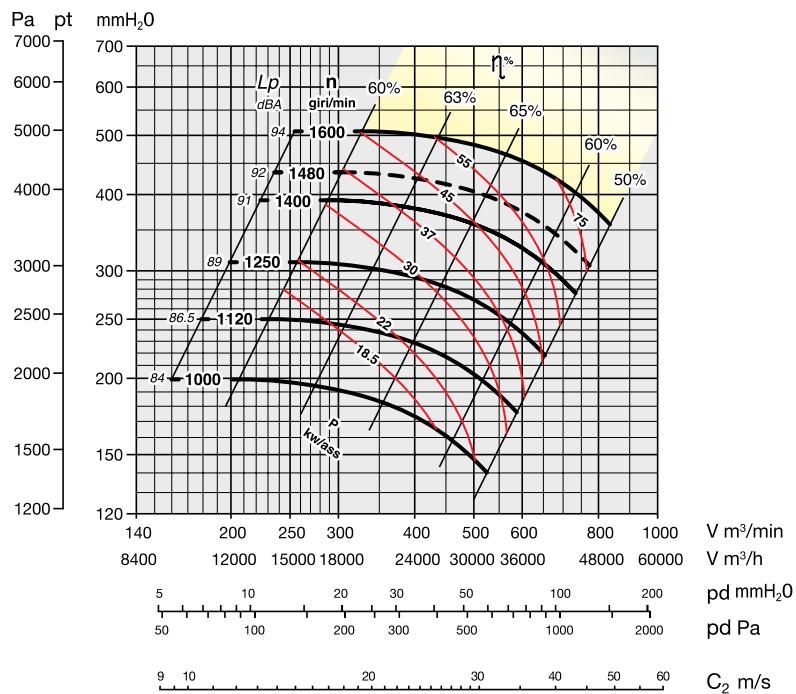

The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation								LG/ Counter clockwise rotation							
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=900									H=900							
H=630									H=630							
H=1060									H=1060							

CRb 1001

SERIES **SPECIFICATIONS**



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

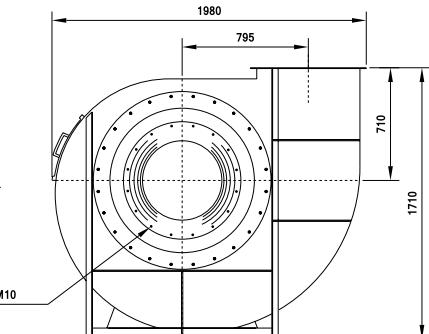
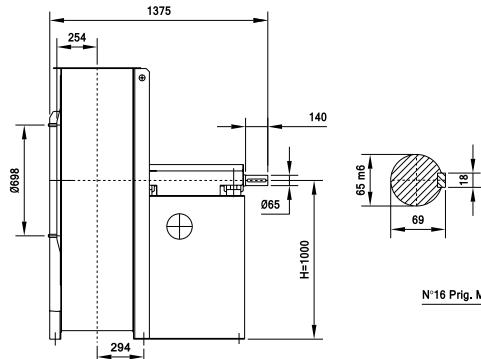
<90°C = 1600 rounds/min.
90–200°C = 1350 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

OVERALL DIMENSIONS in mm

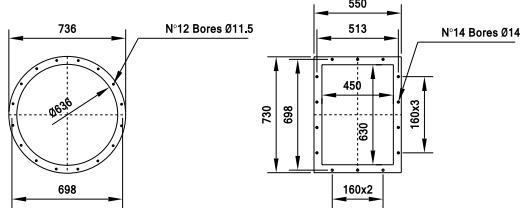
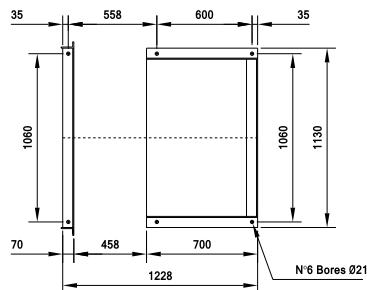
Fan with cooling fan



PD² = 55 kgm²

GD² =

Weight kg 582



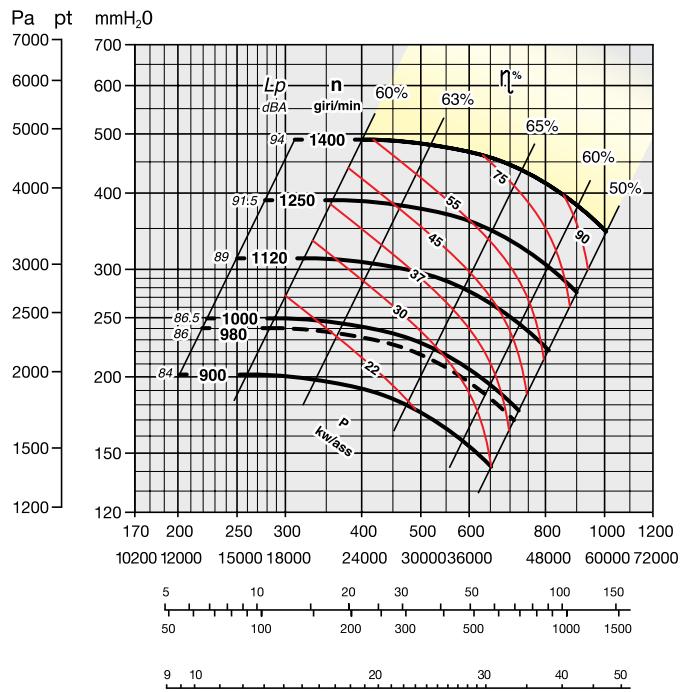
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis height	RD/		Clockwise rotation								LG/		Counter clockwise rotation							
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315	0	45	90	135
									H=1000			H=710		H=1180			H=1000		H=710	H=1180

CRb 1121

SERIES SPECIFICATIONS



YELLOW ZONE - Consult technical office

Maximum admissible rounds:

<90°C = 1400 rounds/min.
90–200°C = 1180 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance ± 3%

V m³/min

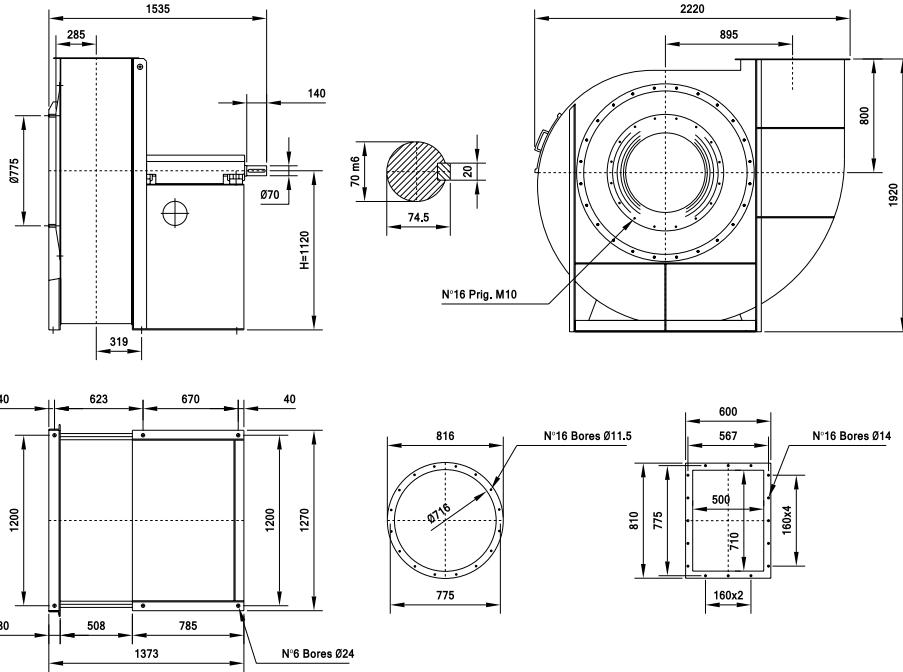
V m³/h

pd mmH₂O

pd Pa

C₂ m/s

OVERALL DIMENSIONS in mm



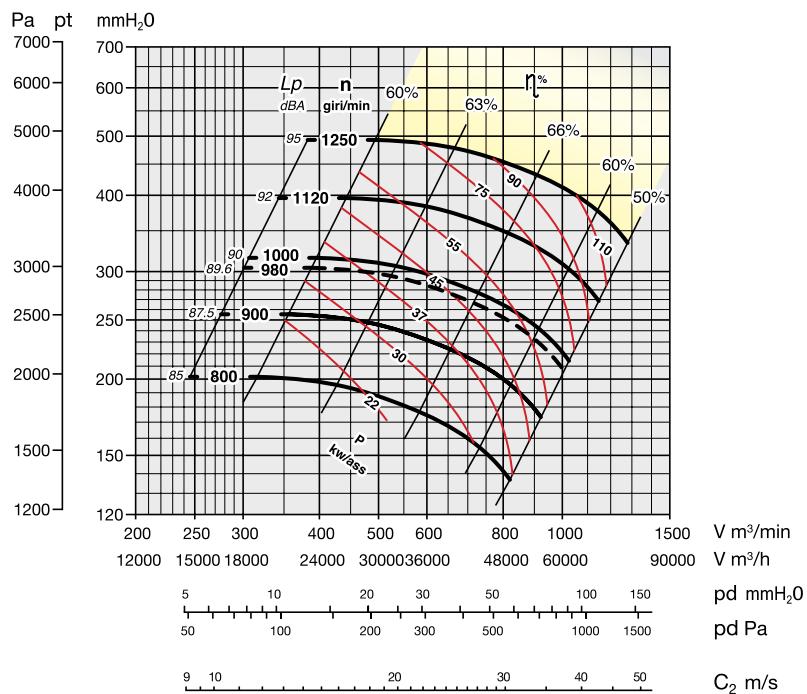
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/	Clockwise rotation								LG/	Counter clockwise rotation							
	0	45	90	135	180	225	270	315	0		45	90	135	180	225	270	315	
										H=1120	H=800	H=1320	H=1120	H=800	H=1320			

CRb 1251

SERIES **CRb 1251** **SPECIFICATIONS**



YELLOW ZONE - Consult technical office

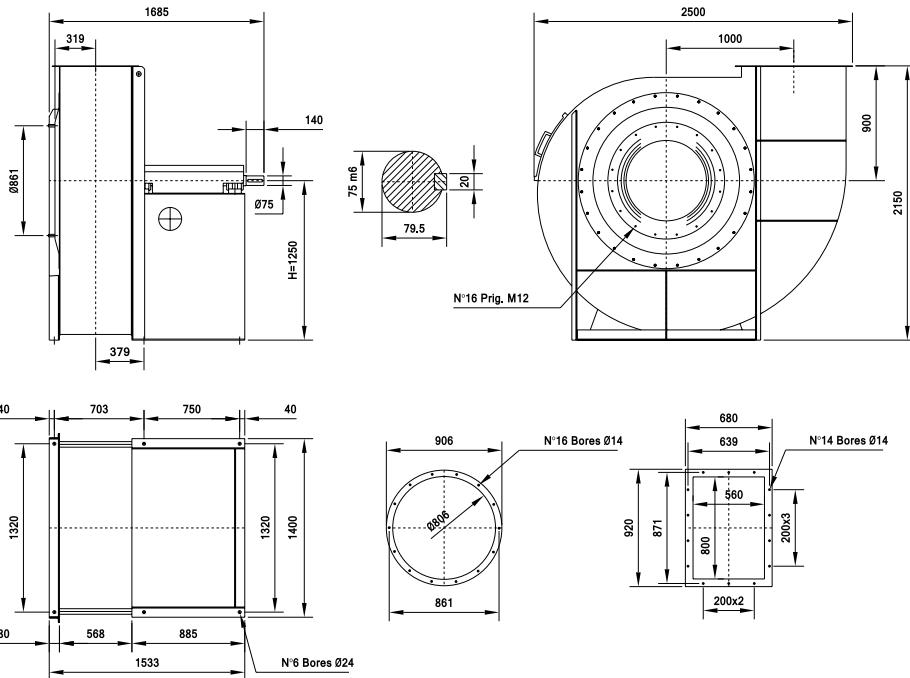
Maximum admissible rounds:

<90°C = 1250 rounds/min.
90–200°C = 1050 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance $\pm 3\%$

OVERALL DIMENSIONS in mm



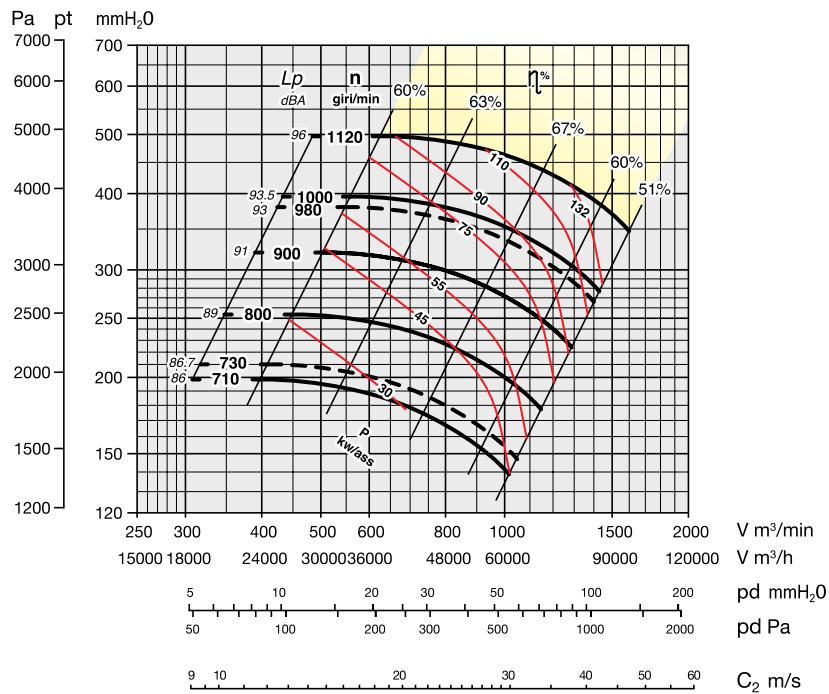
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/	Clockwise rotation	LG/	Counter clockwise rotation													
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315	
	H=1250		H=1250		H=900		H=1500		H=1250		H=900		H=1500		H=1250		H=900

CRb 1401

SPECIFICATIONS

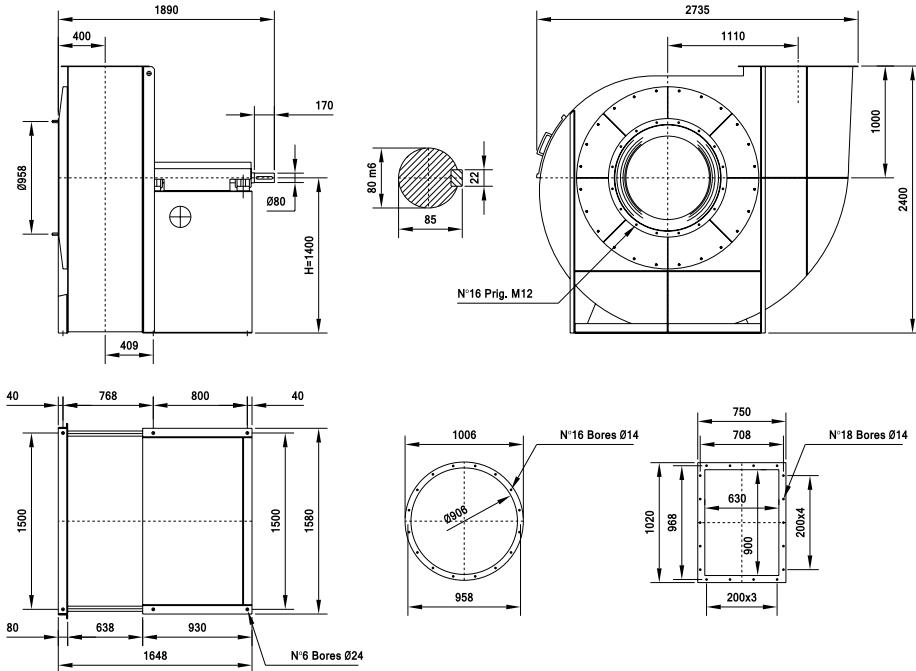


YELLOW ZONE - Consult technical office

Maximum admissible rounds:

 <90°C = 1120 rounds/min.
 90–200°C = 930 rounds/min.

Noise level tolerance + 3 dBA

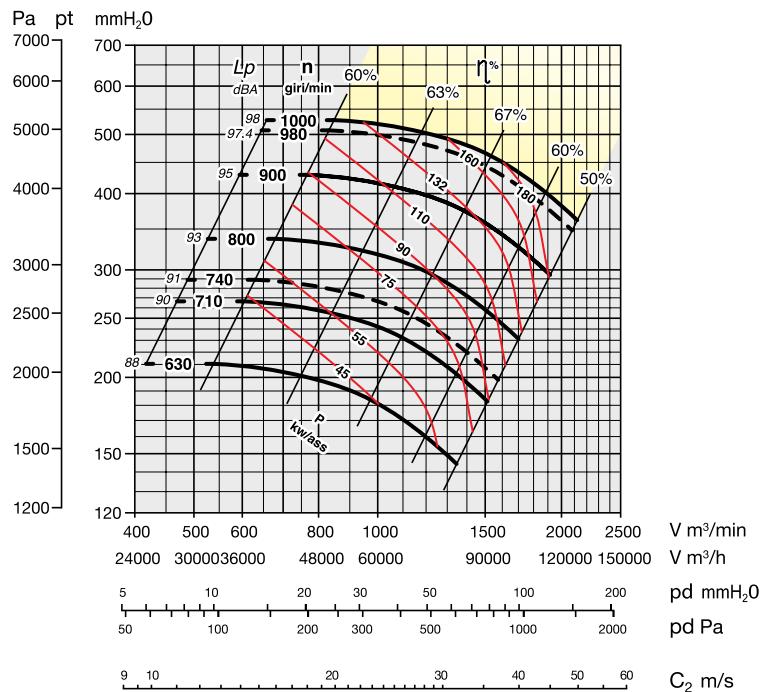
 KW consumed fan tolerance $\pm 3\%$
OVERALL DIMENSIONS in mm


The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis's height	RD/ Clockwise rotation							LG/ Counter clockwise rotation								
	0	45	90	135	180	225	270	315	0	45	90	135	180	225	270	315
H=1400									H=1400							
H=1180									H=1180							
H=1000									H=1000							
H=1700									H=1700							

CRb 1601



YELLOW ZONE - Consult technical office

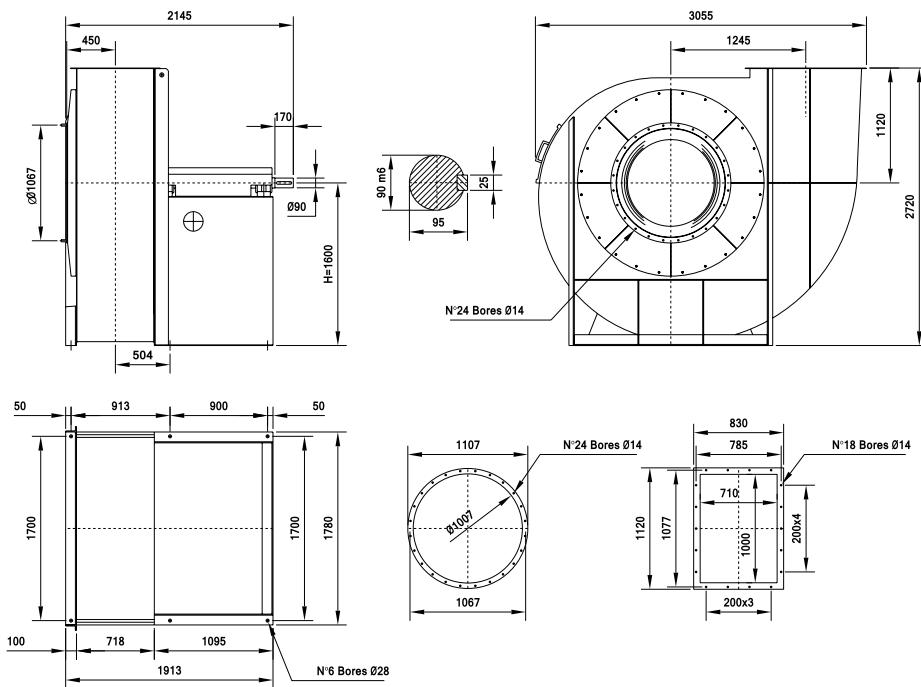
Maximum admissible rounds:

<90°C = 1000 rounds/min.
90–200°C = 800 rounds/min.

Noise level tolerance + 3 dBA

KW consumed fan tolerance $\pm 3\%$

OVERALL DIMENSIONS in mm



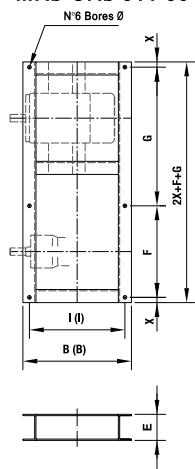
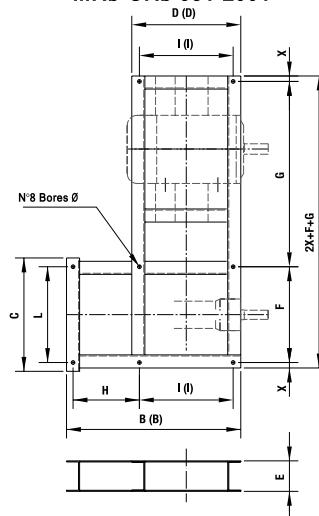
The fan is not revolvable

UNI ISO 13349 rules orientations (transmission side)

Axis height									
RD/ Clockwise rotation					LG/ Counter clockwise rotation				
0	45	90	135	180	225	270	315	0	45
									
H=1600	H=1280	H=1120	H=1900	H=1700	H=1600	H=1280	H=1120	H=1900	H=1700

Bedplate (Esec. 12)

MOTOR TYPE	Fino 4	5.5-15	18.5-30	37-55	75+	75+
G	500	670	750	980	1200	1400

MRb-CRb 311-561

MRb-CRb 631-2001

Dimensions

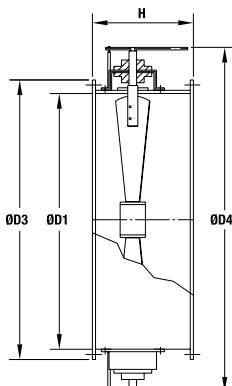
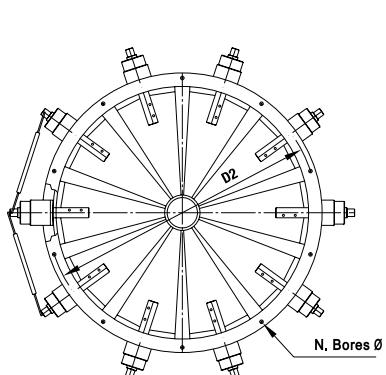
Series	mm													Weight kg
	B	(B)	C	D	(D)	E	F	X	H	I	(l)	L	Ø	
MRb 401	415	455	—	—	—	100	350	20	—	365	405	—	14	20
MRb 451	415	455	—	—	—	100	350	20	—	365	405	—	14	20
MRb 501	520	560	—	—	—	100	360	25	—	430	470	—	17	24
MRb-CRb 561	480	520	—	—	—	100	360	25	—	430	470	—	17	24
MRb-CRb 631	865	905	820	490	530	125	710	25	370	490	530	710	17	36
MRb-CRb 711	895	935	910	490	530	125	800	25	405	430	470	800	17	45
MRb-CRb 801	1020	1080	990	555	615	150	870	30	455	495	555	870	17	70
MRb-CRb 901	1065	1125	1090	555	615	150	970	30	505	495	555	970	19	80
MRb-CRb 1001	1228	1228	1220	670	670	180	1060	35	558	600	600	1060	21	110
MRb-CRb 1121	1373	1373	1350	750	750	180	1200	35	623	670	670	1200	21	120
MRb-CRb 1251	1528	1528	1520	830	830	180	1320	40	703	750	750	1320	24	130
MRb-CRb 1401	1648	1648	1660	880	880	180	1500	40	768	800	800	1500	24	175
MRb-CRb 1601	1893	1893	1880	980	980	200	1700	40	913	900	900	1700	28	230
MRb 1801	2007	2007	2150	980	980	250	2x915	40	1027	900/870	900/870	2x915	028	760
MRb 2001	2107	2107	2390	980	980	250	2x1035	40	1125	900/870	900/870	2x1035	028	795

(B) - (D) - (l) Fan with cooling fan

Accessories

Circular flow regulators

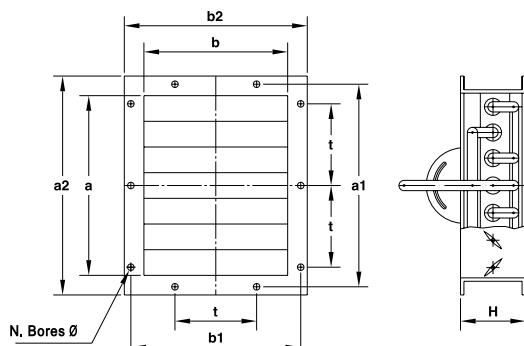
OVERALL DIMENSIONS in mm



Type	D ₁	D ₂	D ₃	D ₄	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			36
450	456	497	535	700	315			40
500	506	551	585	820	355			53
560	568	629	666	880	355			60
630	638	698	736	990	355			68
710	718	775	816	1070	355	16	18	75
800	808	861	906	1160	400			85
900	908	958	1006	1260	400			100
1000	1008	1067	1107	1360	400			130
1120	1130	1200	1248	1480	450	24	16	160
1250	1260	1337	1380	1610	450			180
1400	1420	1491	1540	1760	450			210
1600	1610	1663	1930	1960	500			230
1800	1810	1880	1950	2200	500	32	18	280
2000	2010	2073	2130	2380	500			340

Rectangular flow regulators, outflow end

OVERALL DIMENSIONS in mm



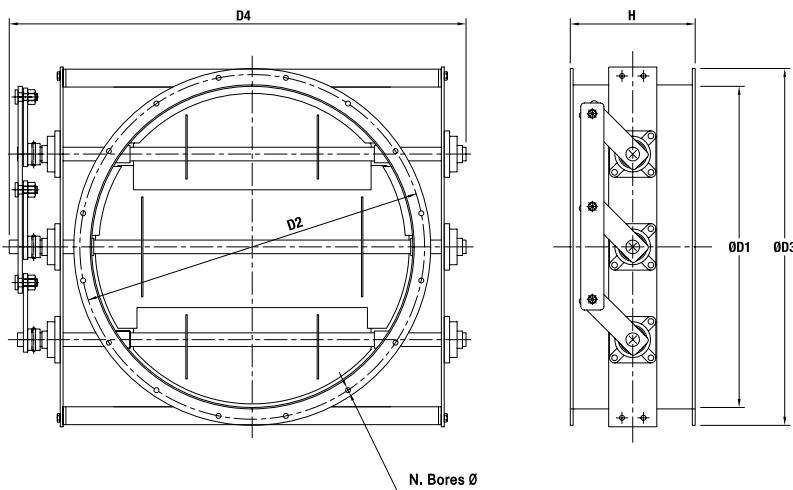
Type	a	b	a ₁	b ₁	a ₂	b ₂	H	t	n°	Bores Ø	Weight kg
90 x 63	90	63	112	90	150	123	130	-	4	9	2,2
100 x 71	100	71	125	100	160	131	130	-			2,5
112 x 80	112	80	140	112	172	140	130	-			2,7
125 x 90	125	90	165	130	185	150	130	-			3
140 x 100	140	100	182	141	210	170	130	-			3,3
160 x 112	160	112	200	153	230	182	130	-			3,8
180 x 125	180	125	219	167	250	195	130	-			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	11,5	6,5
250 x 180	250	180	292	219	320	250	130	-			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	-	8	125	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	-			21
560 x 400	560	400	629	464	669	504	150	-	14	160	26
630 x 450	630	450	698	513	738	553	180	-			30
710 x 500	710	500	775	567	815	607	180	-			34
800 x 560	800	560	871	639	921	689	200	-			42
900 x 630	900	630	968	708	1018	758	200	-	18	200	48
1000 x 710	1000	710	1077	795	1127	835	200	-			65
1120 x 800	1120	800	1210	881	1270	941	220	-			80
1250 x 900	1250	900	1347	978	1407	1038	220	-	24	22	95
1400 x 1000	1400	1000	1501	1087	1560	1160	250	-			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	22	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. + pressure ≥ 700 mm H₂O.

Accessories

Louver flow regulators

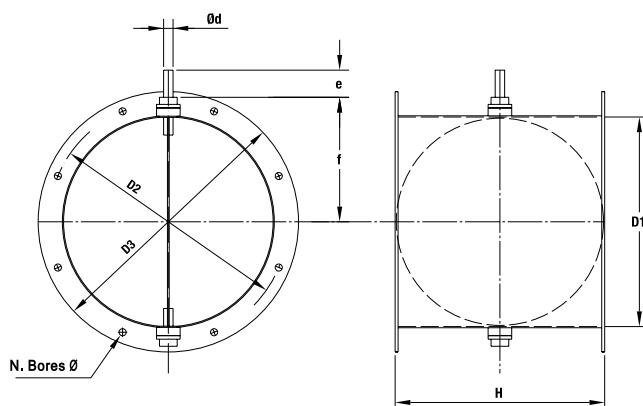
OVERALL DIMENSIONS in mm



Type	D ₁	D ₂	D ₃	D ₄	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

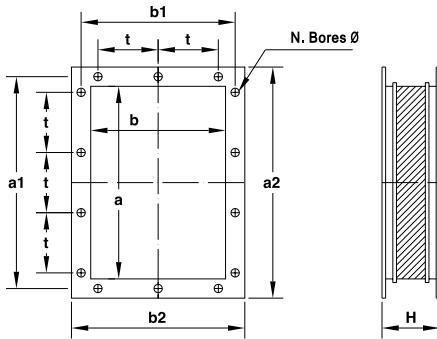
OVERALL DIMENSIONS in mm



Type	D ₁	D ₂	D ₃	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

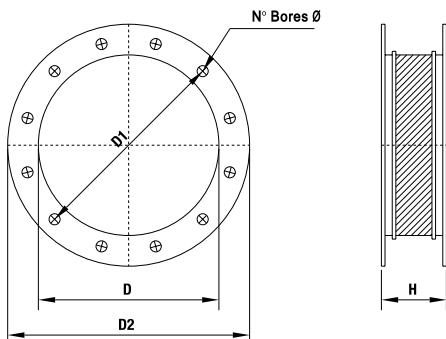
Accessories

Vibration-damping couplings outflow-end

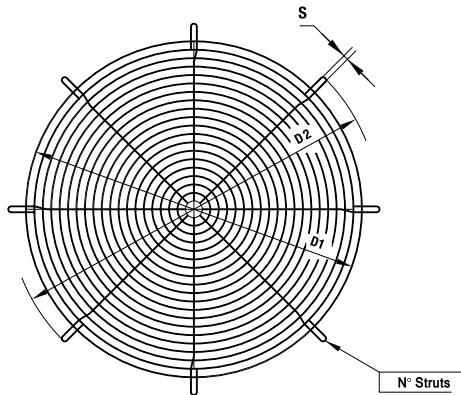


Series	mm								Bores		Weight kg
	a	b	a ₁	b ₁	a ₂	b ₂	t	H	n°	Ø	
90 x 63	90	63	112	90	150	123	-	140	4	11	1
100 x 71	100	71	125	100	160	131	-	140	4	11	1,1
112 x 80	112	80	140	112	172	140	-	140	4	11	1,3
125 x 90	125	90	165	130	185	150	100	140	6	11	1,6
140 x 100	140	100	182	141	210	170	112	140	6	12	2,1
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

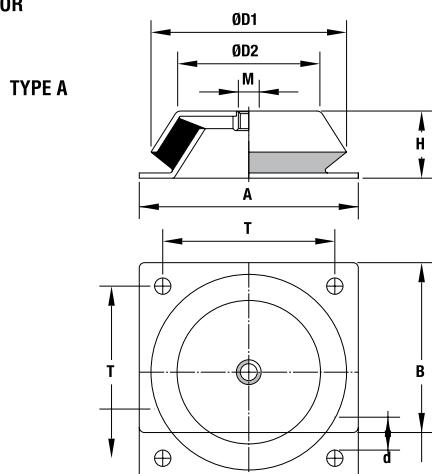
Vibration-damping couplings intake-end



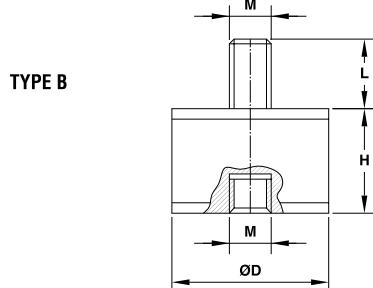
Series	mm					Bores		Weight kg
	D	D ₁	D ₂	H	n°	Ø		
140	140	182	215	140	8	11,5		3
160	160	200	235	140	8	11,5		3,2
180	180	219	255	140	8	11,5		3,5
200	200	241	275	140	8	11,5		3,8
224	224	265	299	140	8	11,5		4,2
250	250	292	325	140	8	11,5		5
280	280	332	366	140	8	11,5		6,8
315	315	366	401	140	8	11,5		7,5
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	D ₁ (mm)	D ₂ (mm)	S (mm)	N° Struts
125				
140	140	220	12	4
160				
180				
200	212	285	12	4
224				
250				
280	312	385	12	4
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	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

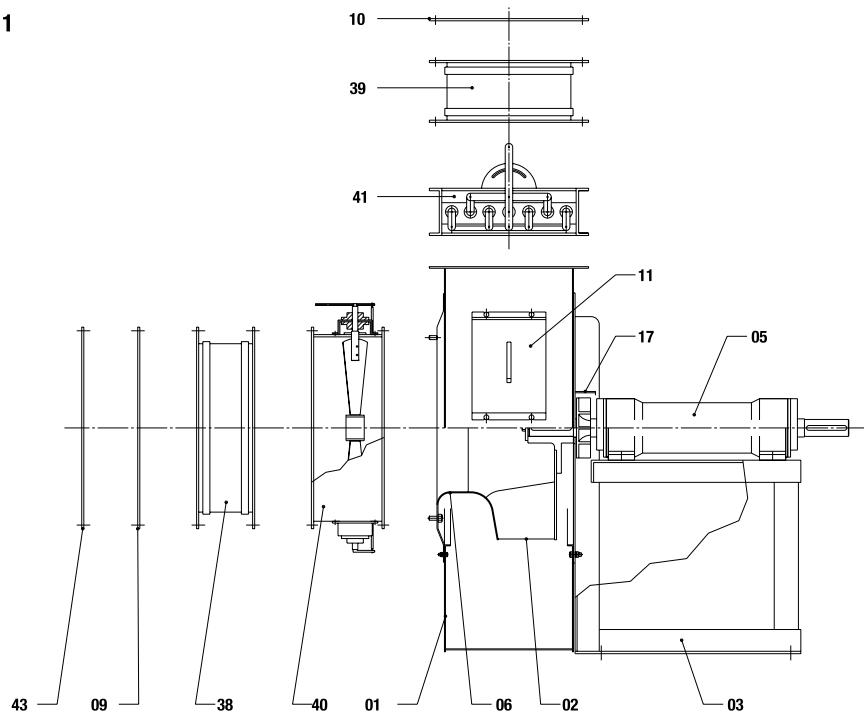


Type	D	H	M	L
B_D3020	30	20	8	20
B_D3030	30	30	8	20
B_D4030	40	30	8	23
B_D4040	40	40	8	23
B_D5020	50	20	10	28
B_D5030	50	30	10	28
B_D5045	50	45	10	28
B_D7045	70	45	10	30
B_D7540	75	40	12	37
B_D7555	75	55	12	37
B_D10040	100	40	16	45
B_D10055	100	55	16	45
B_D10075	100	75	16	45

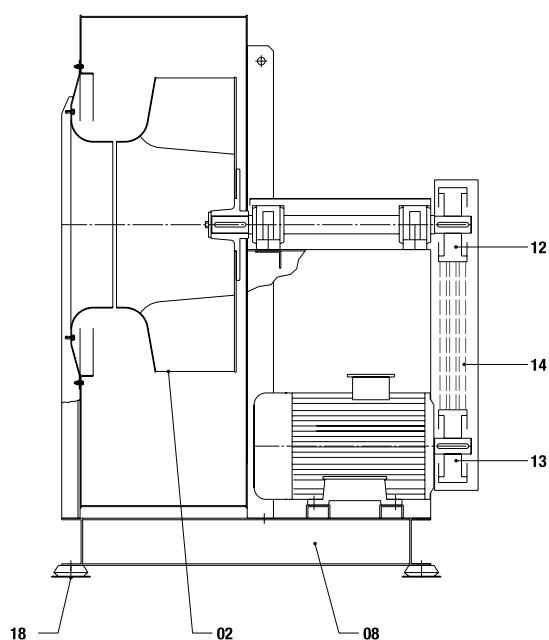
(Quote = mm)

SECTION

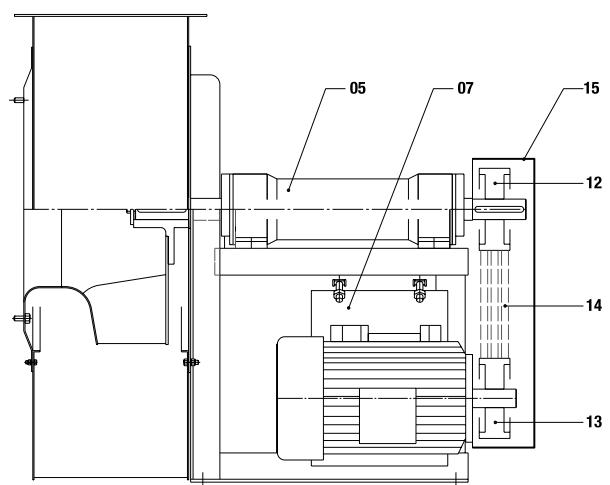
Esec. 1



Esec. 12



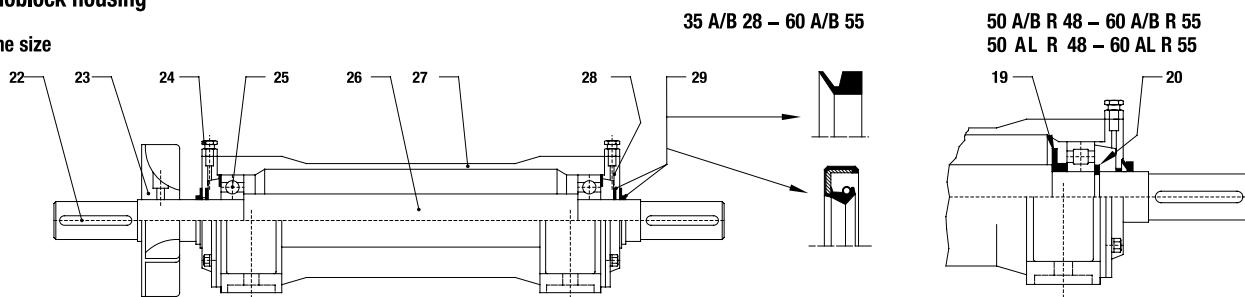
Esec. 9



SECTION

Monoblock housing

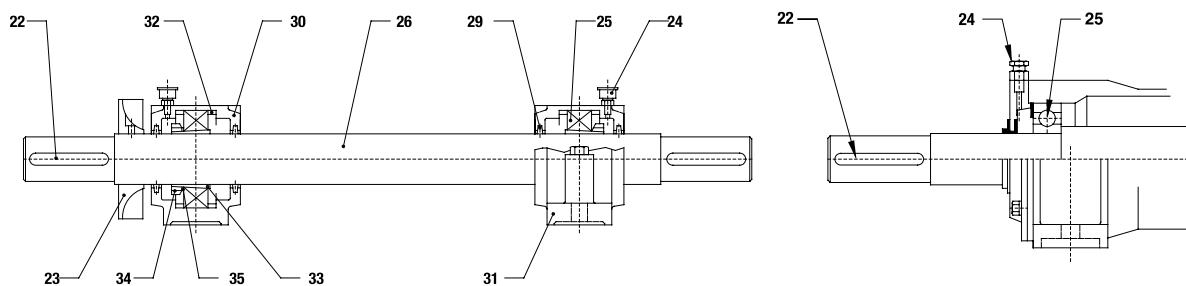
Frame size



Frame size

SNL 515 - SNL 524

35 AL 28 - 60 AL 55



SPARE PARTS

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

Inquiry for Eurovent Blower

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

Fan Specification

Technical Data Information		
Model	m^3/min	
Air volume	mm Wg	
Static pressure	mm Wg	
Total pressure	$^{\circ}\text{C}$	
Service Temperature	rpm	
Fan speed	KW	
Motor	%	
Efficiency		
Colour (Standard Green)		
Qty .	Set	
Construction		
Type	<input type="checkbox"/> Centrifugal <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.

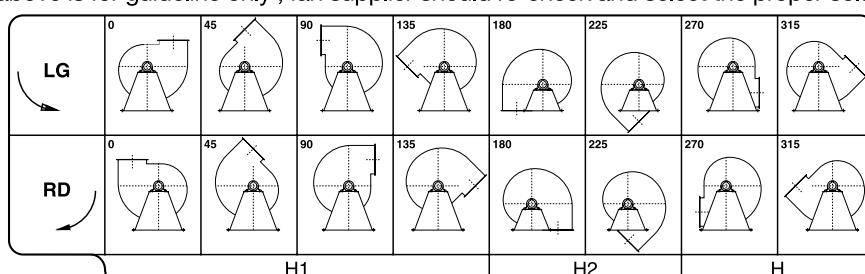


Table 1 Show position

Please send to

E-mail : info@euroventblower.com

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
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