

DIRECT DRIVE MOTOR

CAST

Extremely robust open blade and single inlet centrifugal fans with sheet steel casing and impeller

Designed for air that is very dusty and with materials suspended in the air



SYSTEM

4



Motor:

- Motors with IE3 efficiency for powers equal to or greater than 0.75kW, except single-phase, 2-speed and 8-pole.
- Class F motors with ball bearings, IP55 protection.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Maximum temperature of air to be carried: -25 °C +90 °C.

Finishing:

- Anti-corrosive finish in polyester resin, polymerised at 190 °C, after degreasing with phosphate-free nanotechnology treatment.

On request:

- Special windings for different voltages.
- Fan prepared to transport air up to +150 °C.
- Special executions for temperatures + 300 °C.
- Stainless steel fan.
- ATEX certified Category 2.
- System 8 elastic coupling.

Fan:

- Sheet steel casing.
- Backward curved impeller, made of very robust sheet steel, specially designed for air with a lot of dust and suspended materials.
- Directly coupled motor.
- With inspection and cleaning hatch from size 560 and up.
- All casings continuously welded.

*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.

Order code

CAST — 500 — 2T — 15

CAST: Extremely robust open blade and single inlet centrifugal fans with sheet steel casing and impeller.

Impeller size

Number of motor poles
2=2900 r/min 50 Hz

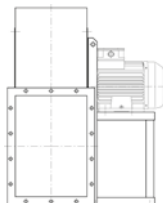
T=Three-phase

Motor power (HP)

Direct drive motor construction method

SYSTEM

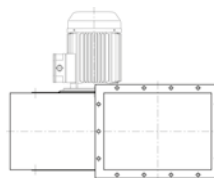
4



Direct drive, impeller mounted on the motor shaft, mounted on the pedestal.

SYSTEM

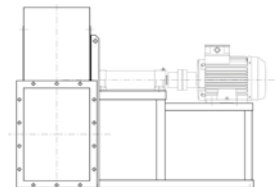
5



Direct drive, impeller mounted on the motor shaft, flange motor mounted on the fan casing.

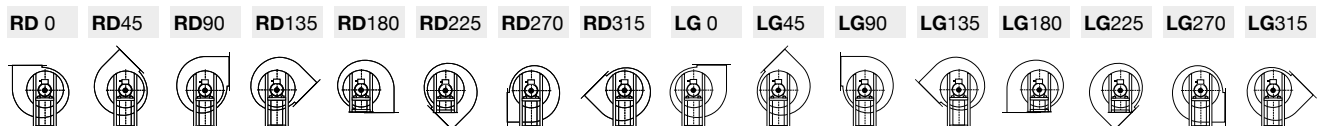
SYSTEM

8



Elastic coupling drive, impeller mounted on the support shaft, mounted on the motor via an elastic coupling. Everything mounted together on a fan pedestal.

Orientations



LG270 standard supply, other positions on request. All models are adjustable. Special sizes in positions 180 and 225.

LARGE SERIES

Technical characteristics

Model	Frame	Speed (r/min)	Maximum admissible current (A)			Installed power (kW)	Maximum flow rate (m³/h)	Sound pressure level dB(A)	Approx. weight (Kg)	According ErP
			230 V	400 V	690 V					
CAST-400-2T-3 IE3	90L	2910	7.32	4.21		2.2	1260	80	45	2015
CAST-450-2T-4 IE3	100L	2910	10	5.77		3	1620	82	60	2015
CAST-450-2T-5.5 IE3	112M	2900	13	7.5		4	1800	83	65	2015
CAST-500-2T-7.5 IE3	132S	2930		10.1	5.86	5.5	2520	85	97	2015
CAST-500-2T-10 IE3	132S	2930		14.1	8.17	7.5	3470	85	103	2015
CAST-560-2T-15 IE3	160M	2945		20	11.6	11	3600	90	158	2015
CAST-630-2T-20 IE3	160M	2945		27.7	16.1	15	4320	93	193	2015
CAST-630-2T-25 IE3	160L	2945		33.9	19.7	18.5	5040	93	203	2015
CAST-710-2T-30 IE3	180M	2950		39.7	23	22	4320	96	253	2015
CAST-710-2T-40 IE3	200L	2960		54.5	31.6	30	6480	96	365	2015
CAST-710-2T-50 IE3	200L	2960		67.8	39.3	37	7740	96	373	2015
CAST-800-4T-10 IE3	132M	1465		13.9	8.06	7.5	5040	81	250	2015
CAST-900-4T-15 IE3	160M	1470		20.9	12.1	11	7790	85	440	2015
CAST-900-4T-20 IE3	160L	1465		27.9	16.2	15	7740	86	478	2015
CAST-1000-4T-25 IE3	180M	1470		35.1	20.3	18.5	10080	86	586	2015



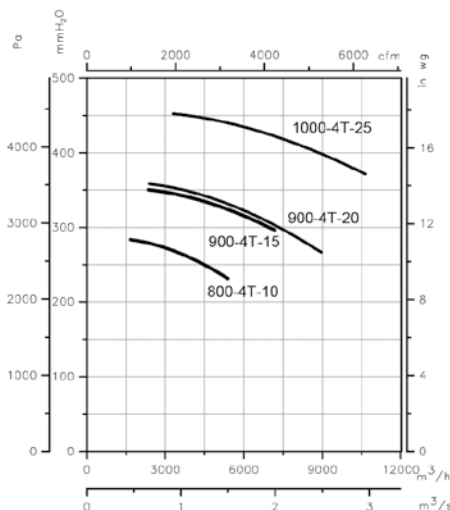
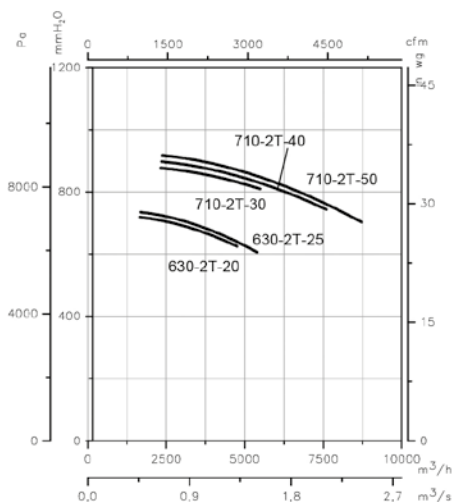
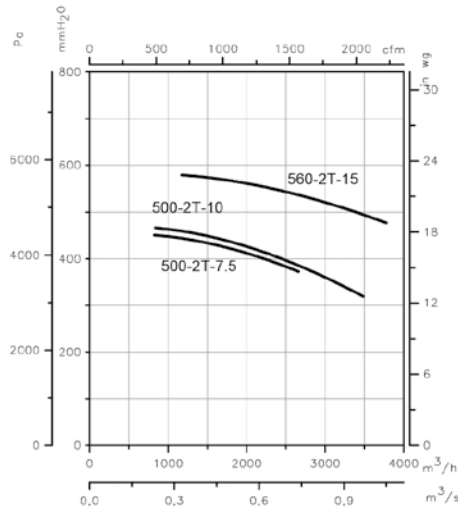
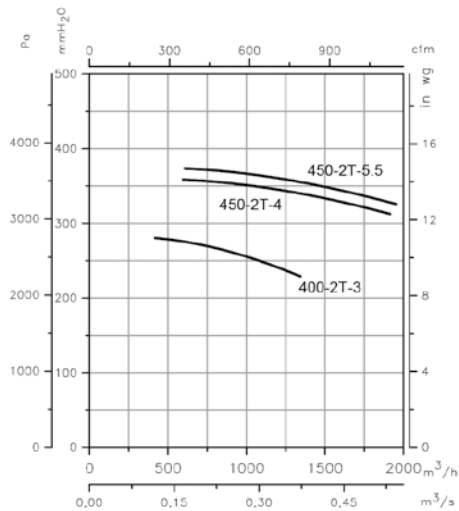
Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg



Accessories



LARGE SERIES

BELT-DRIVEN MOTOR

CAST-X

Centrifugal, open blade, belt driven fans fitted with electric motors and a standardised set of pulleys, belts and protectors in accordance with standard ISO 13857

Designed for air that is very dusty and with materials suspended in the air



Motor:

- IE3 efficiency motors.
- Class F motors with ball bearings, IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C +90°C.

Finish:

- Anti-corrosive finish in polyester resin, polymerised at 190 °C, after degreasing with phosphate-free nanotechnology treatment.

On request:

- Special windings for different voltages.
- Fan prepared to transport air up to +300 °C.
- Stainless steel fan.
- ATEX certified Category 2.
- System 8 elastic coupling.

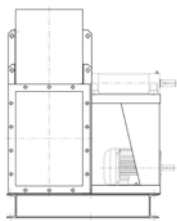
Fan:

- Sheet steel casing.
- Backward curved impeller, made of very robust sheet steel, specially designed for air with a lot of dust and suspended materials.
- Motor assembled on the general bench.
- With inspection and cleaning hatch from size 560 and up.
- All casings continuously welded.

*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.

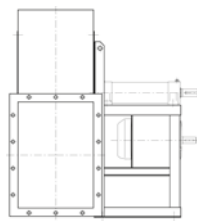
Belt-driven motor construction method

SYSTEM 12



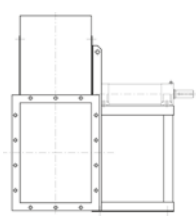
Transmission drive, identical to SYSTEM 1, with the motor and fan mounted on the common bench. Motor positions "W" or "Z" and exceptionally "X" or "Y".

SYSTEM 9



Transmission drive, identical to SYSTEM 1, with the motor mounted on the side of the pedestal, in position "W" or "Z".

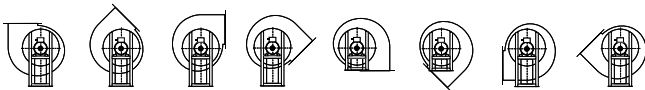
SYSTEM 1



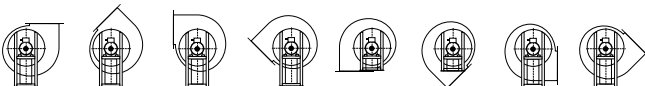
Transmission drive, impeller mounted on the support shaft. Support mounted on the pedestal.

Orientations

RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315



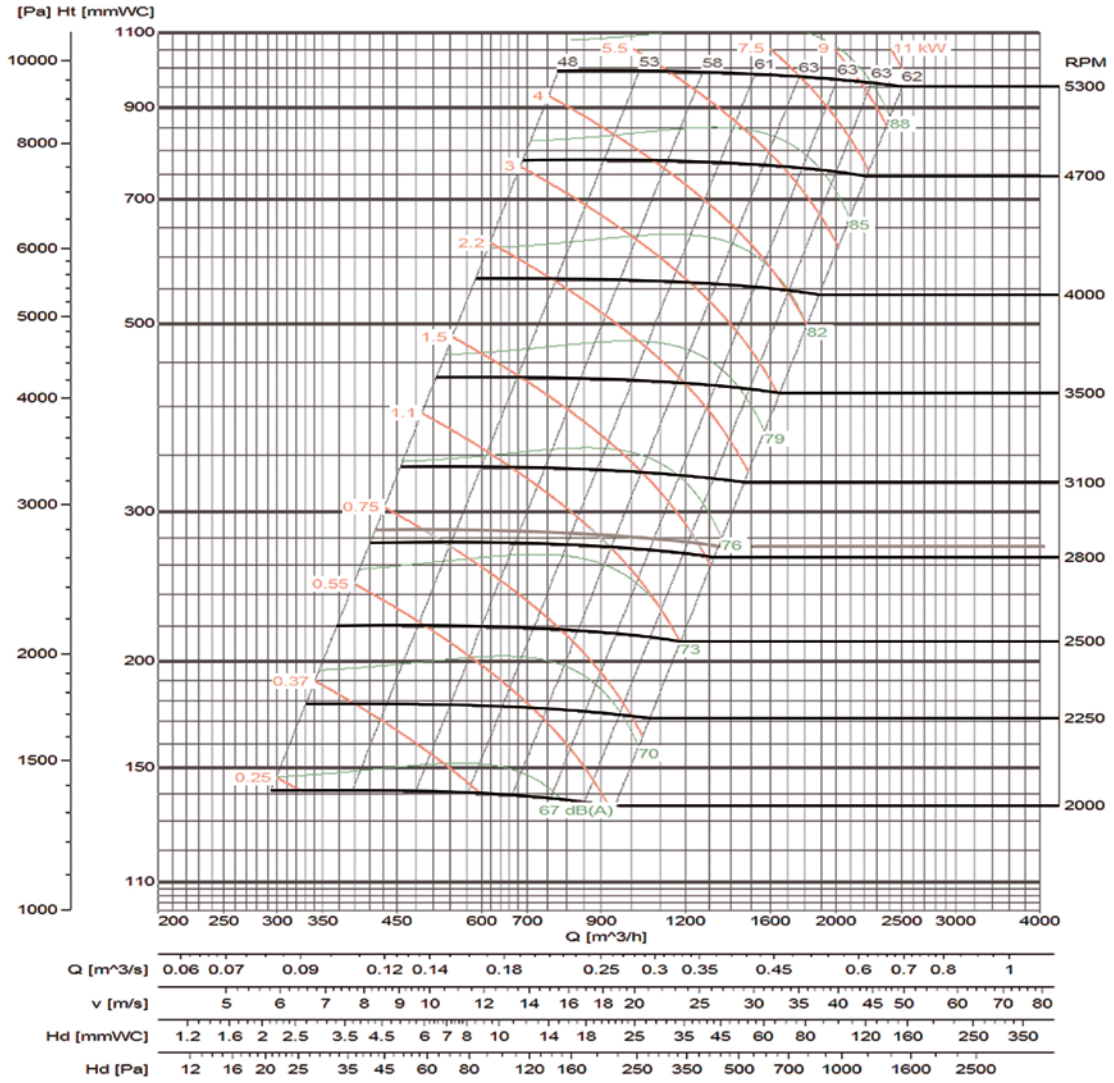
LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315



LARGE SERIES

Characteristic curves

CAST-X 400

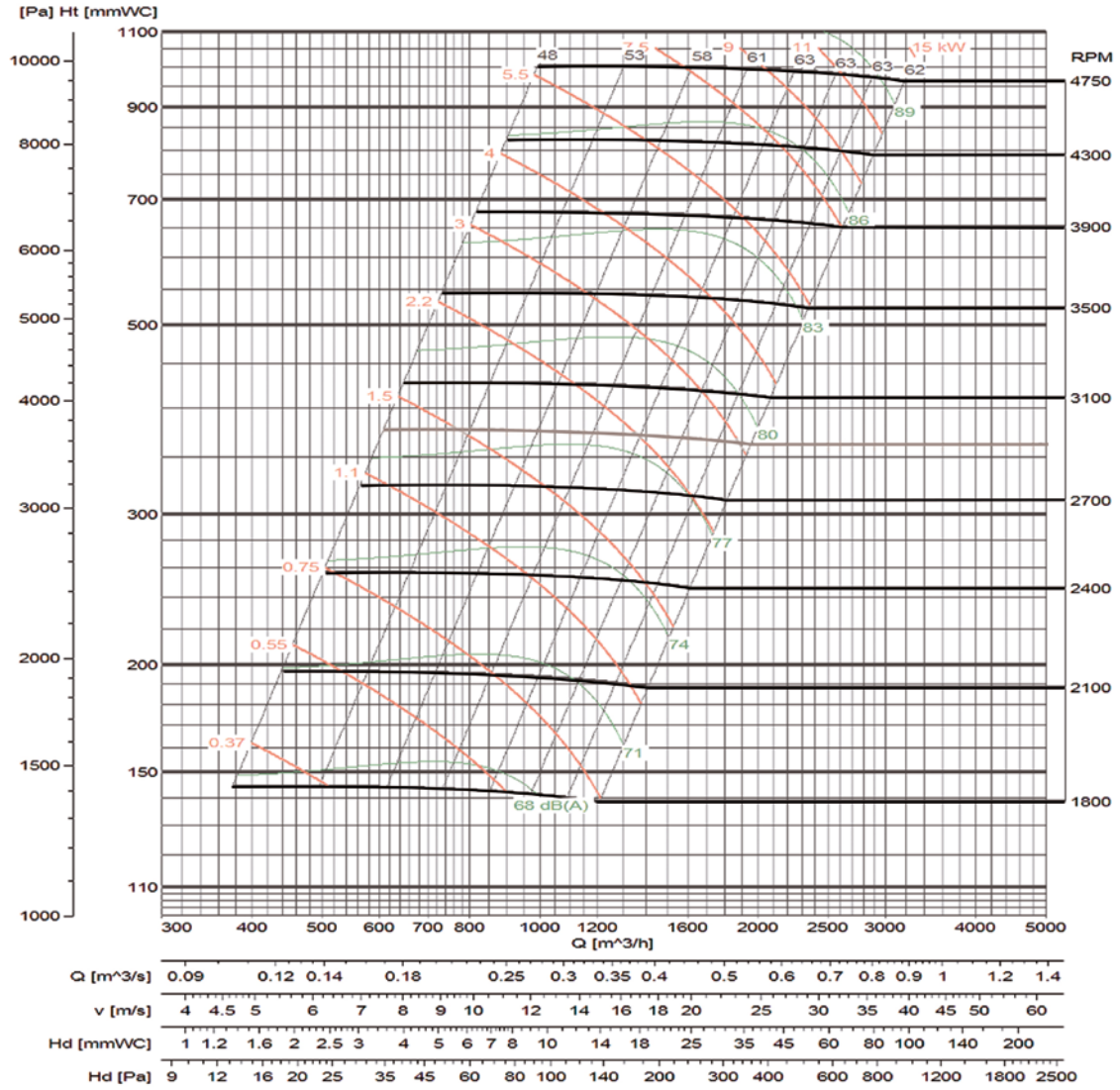


Flow margin ±5%
 Noise level margin + 3... 5 dB
 Margin of kW absorbed ±3%

Outlet characteristics.

Characteristic curves

CAST-X 450



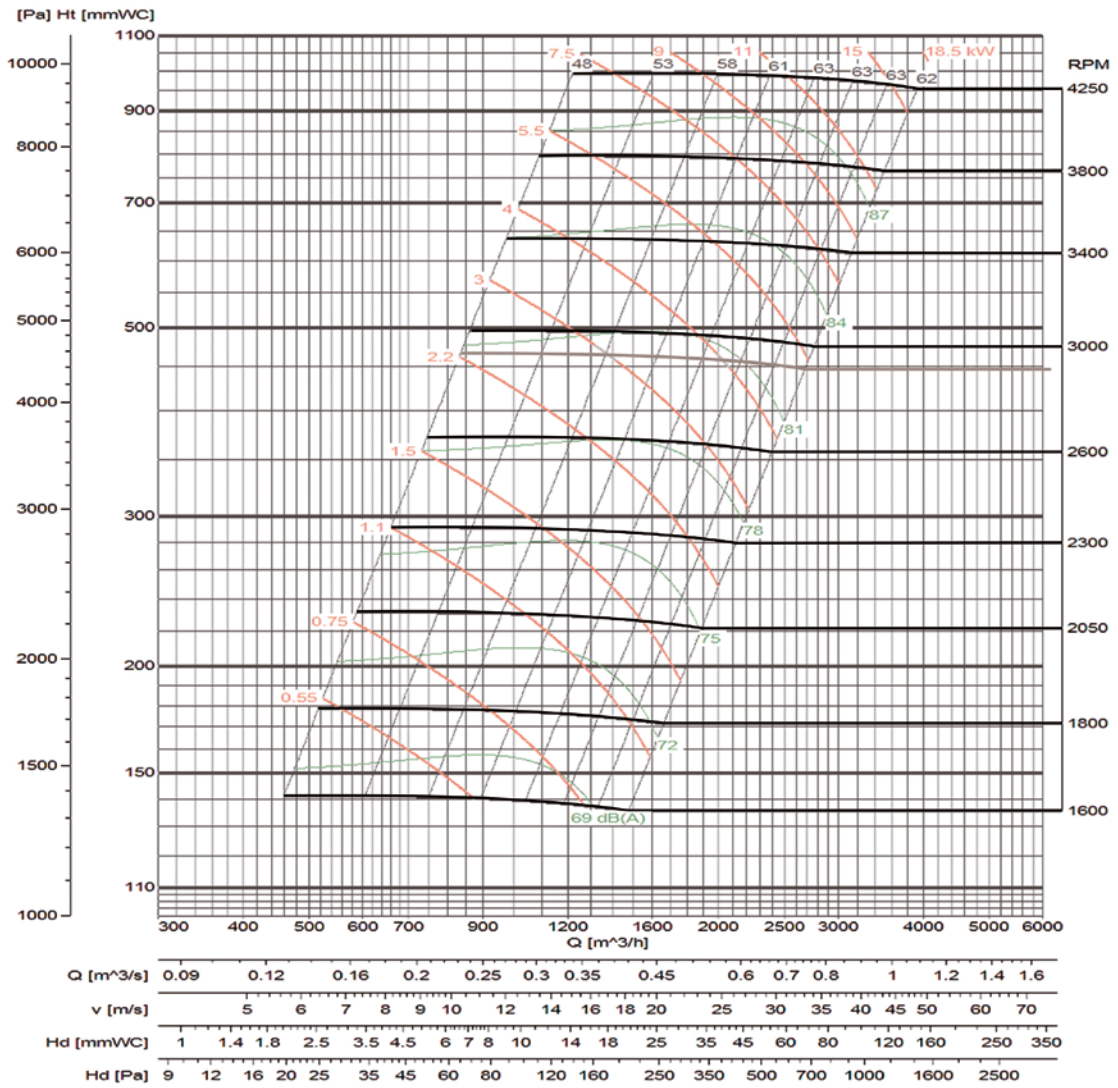
LARGE SERIES

Flow margin ±5%
 Noise level margin + 3... 5 dB
 Margin of kW absorbed ±3%

Outlet characteristics.

Characteristic curves

CAST-X 500

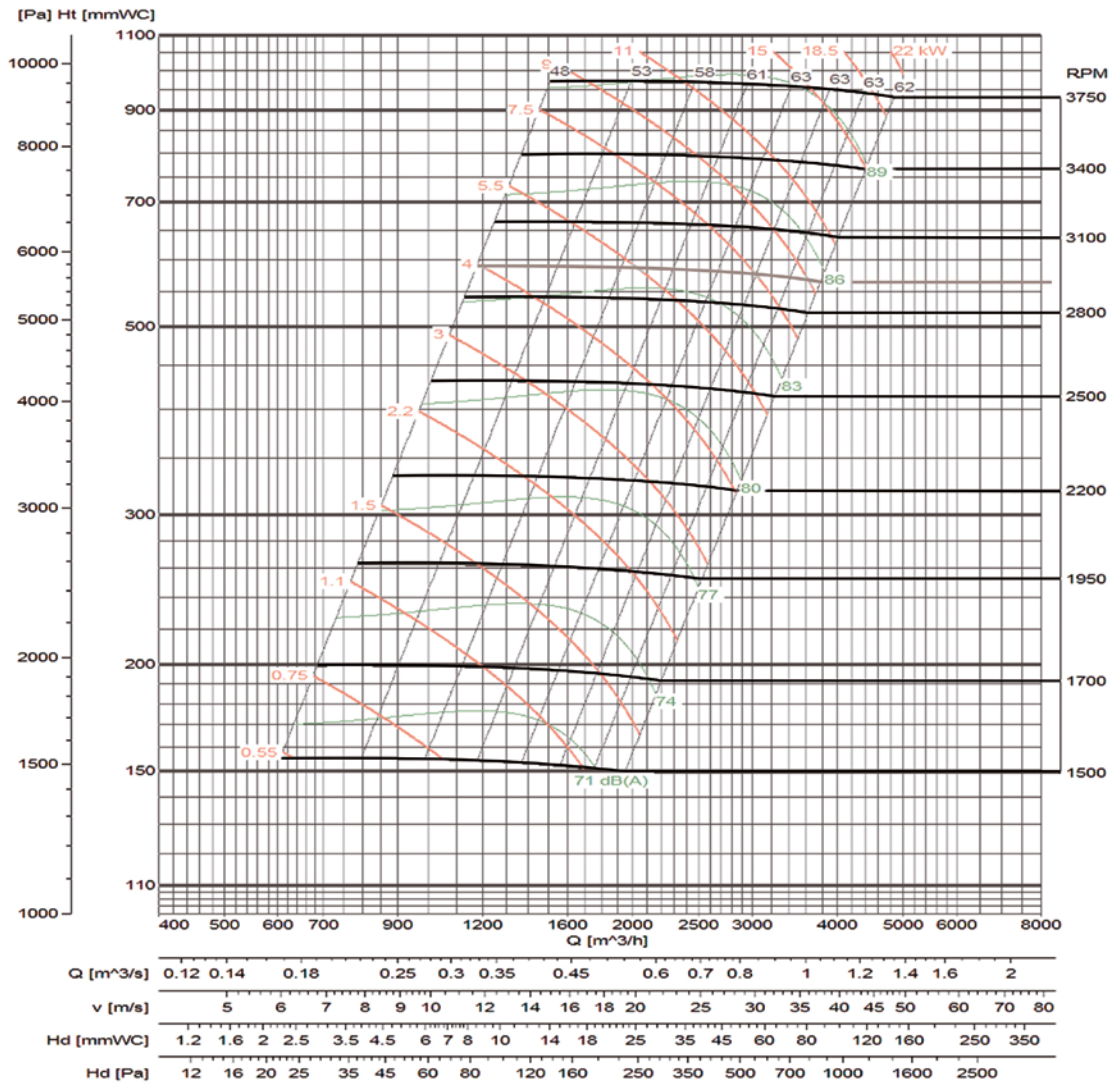


Flow margin $\pm 5\%$
 Noise level margin + 3... 5 dB
 Margin of kW absorbed $\pm 3\%$

Outlet characteristics.

Characteristic curves

CAST-X 560



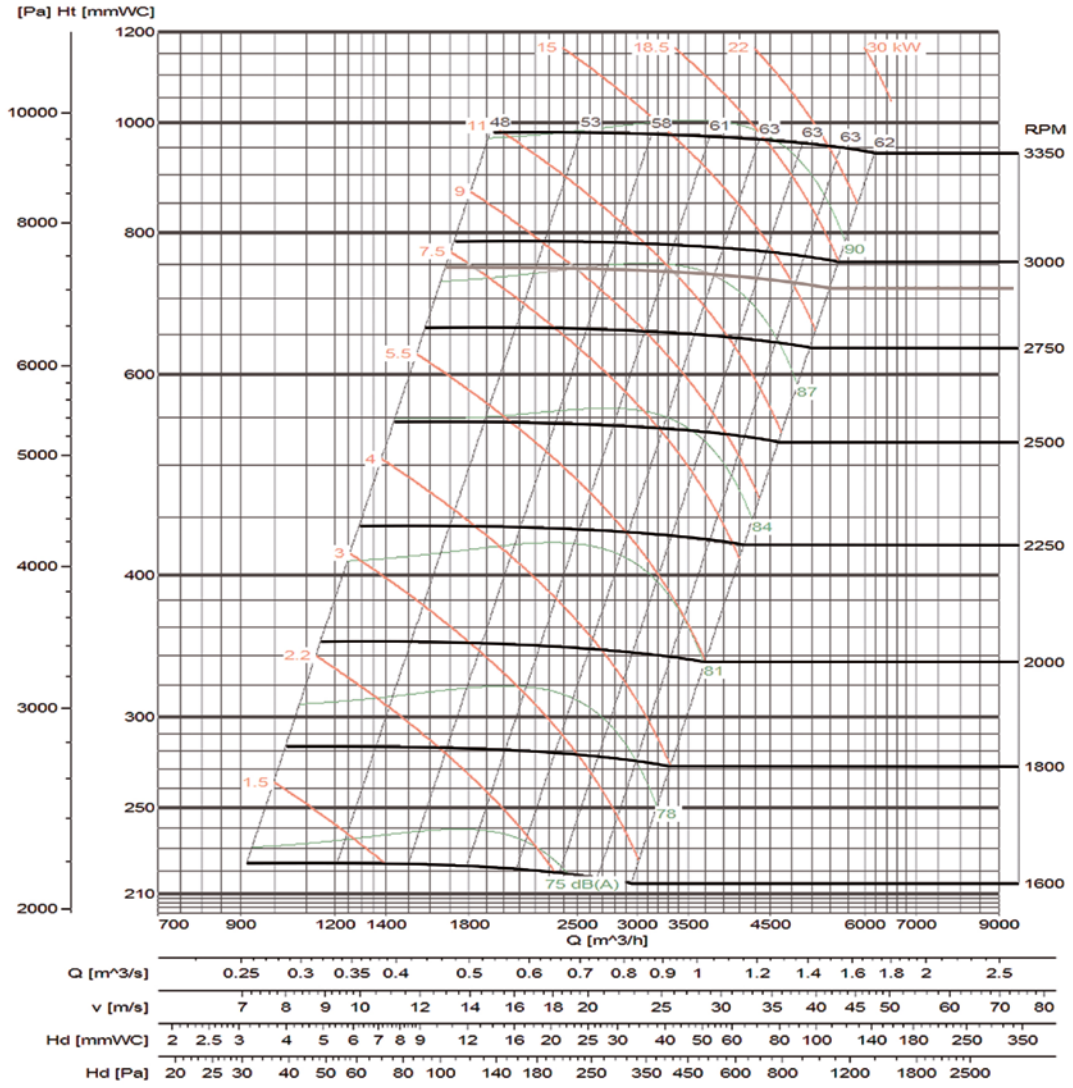
LARGE SERIES

Flow margin ±5%
 Noise level margin + 3... 5 dB
 Margin of kW absorbed ±3%

Outlet characteristics.

Characteristic curves

CAST-X 630

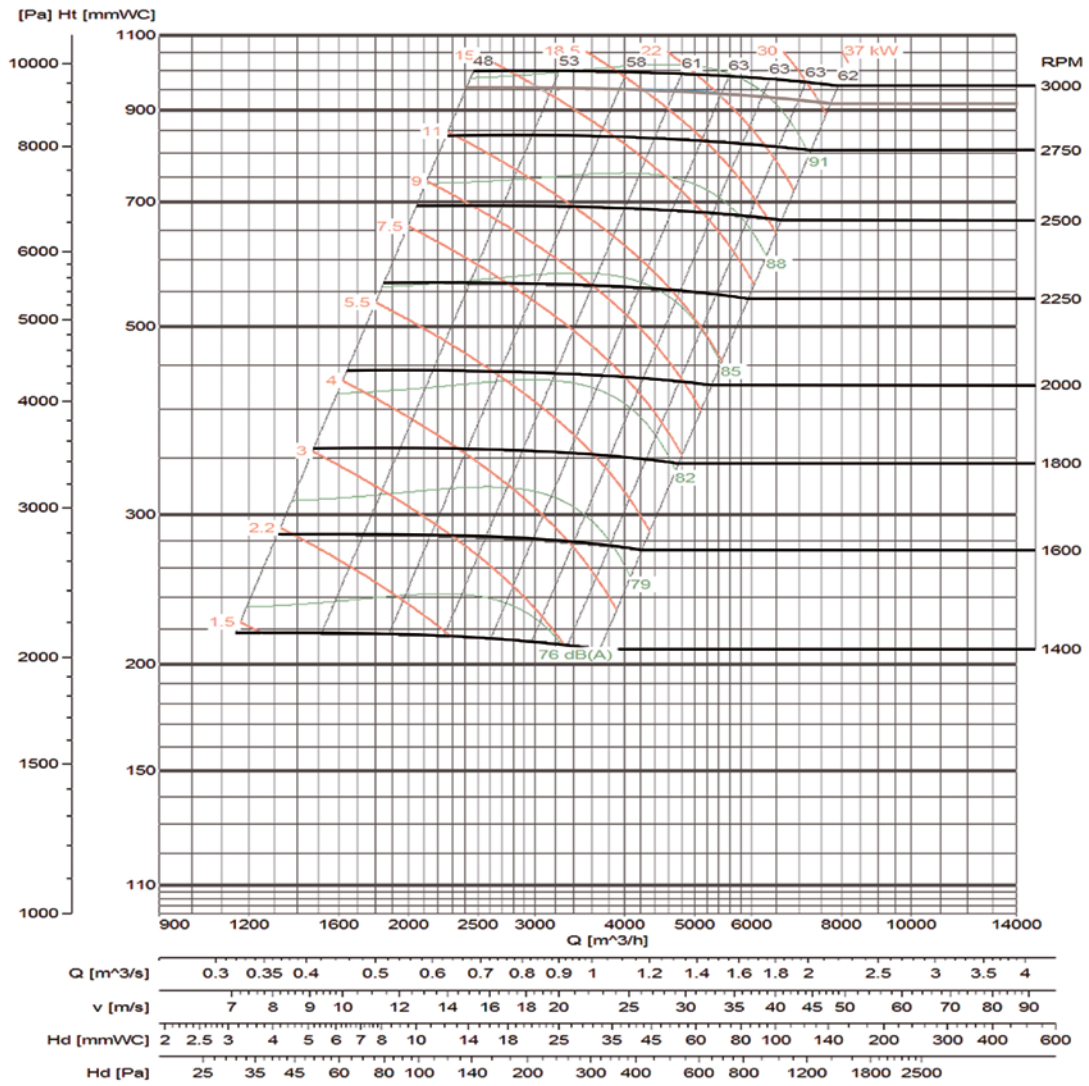


Flow margin ±5%
 Noise level margin + 3... 5 dB
 Margin of kW absorbed ±3%

Outlet characteristics.

Characteristic curves

CAST-X 710



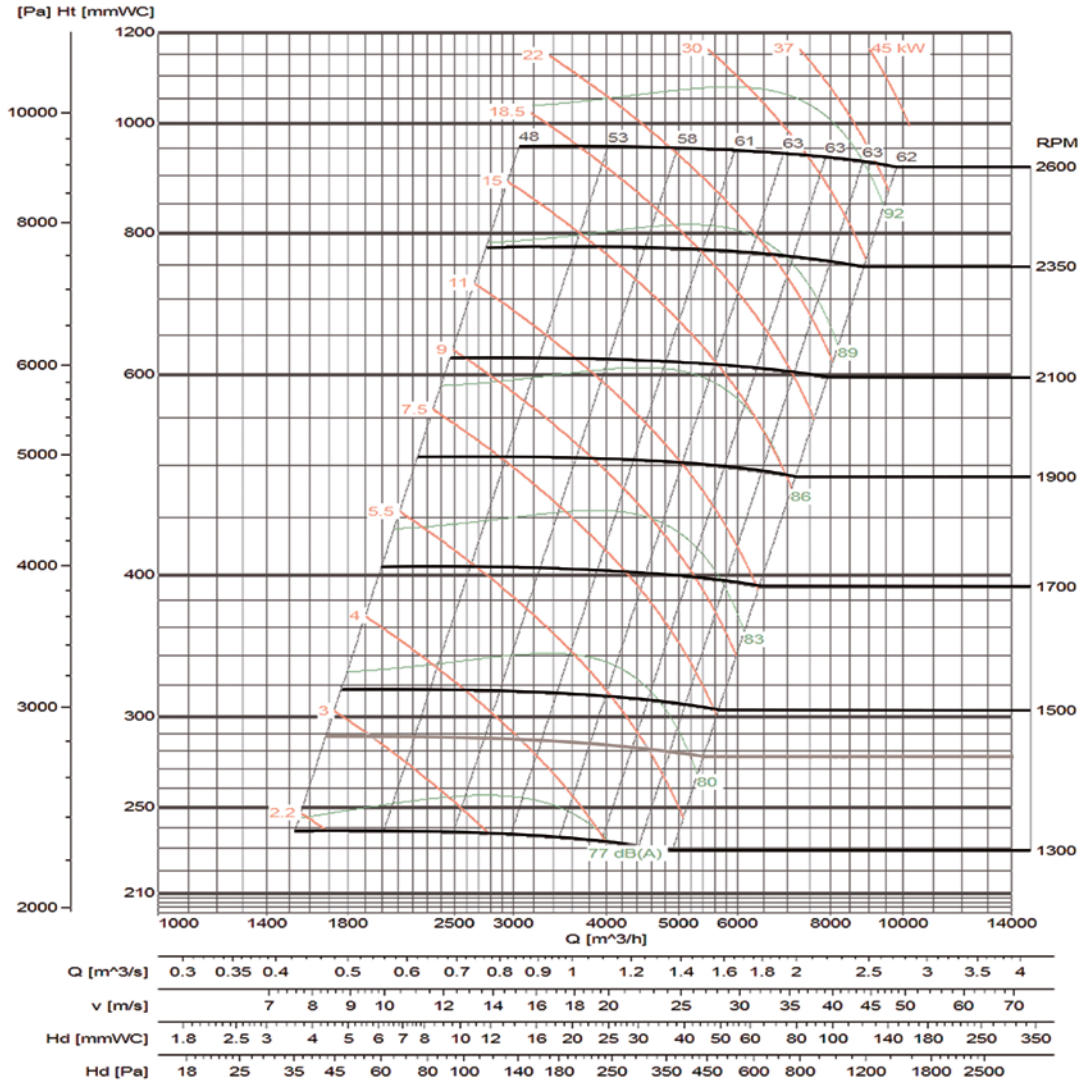
LARGE SERIES

Flow margin ±5%
 Noise level margin + 3... 5 dB
 Margin of kW absorbed ±3%

Outlet characteristics.

Characteristic curves

CAST-X 800

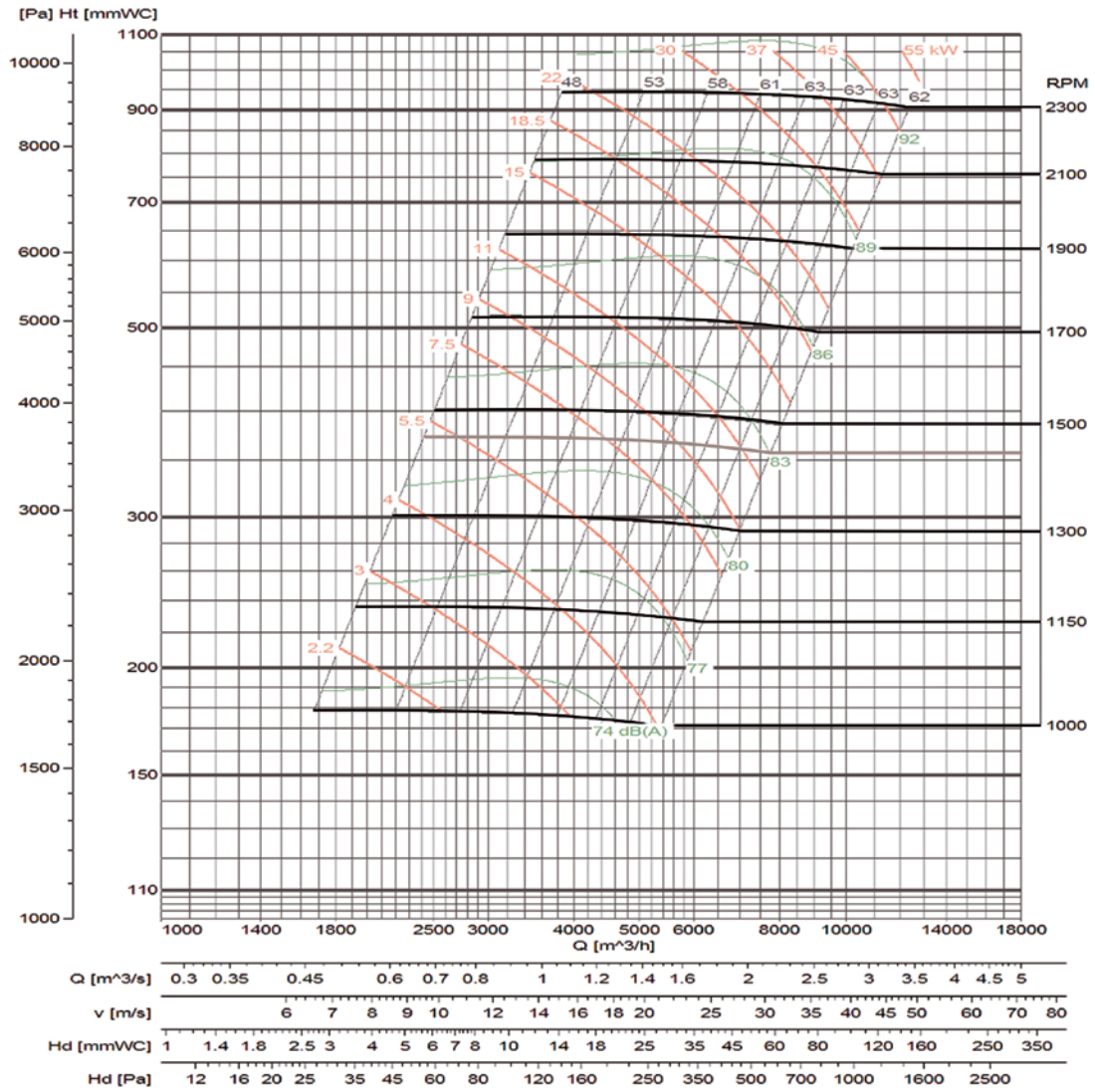


Flow margin $\pm 5\%$
 Noise level margin + 3... 5 dB
 Margin of kW absorbed $\pm 3\%$

Outlet characteristics.

Characteristic curves

CAST-X 900

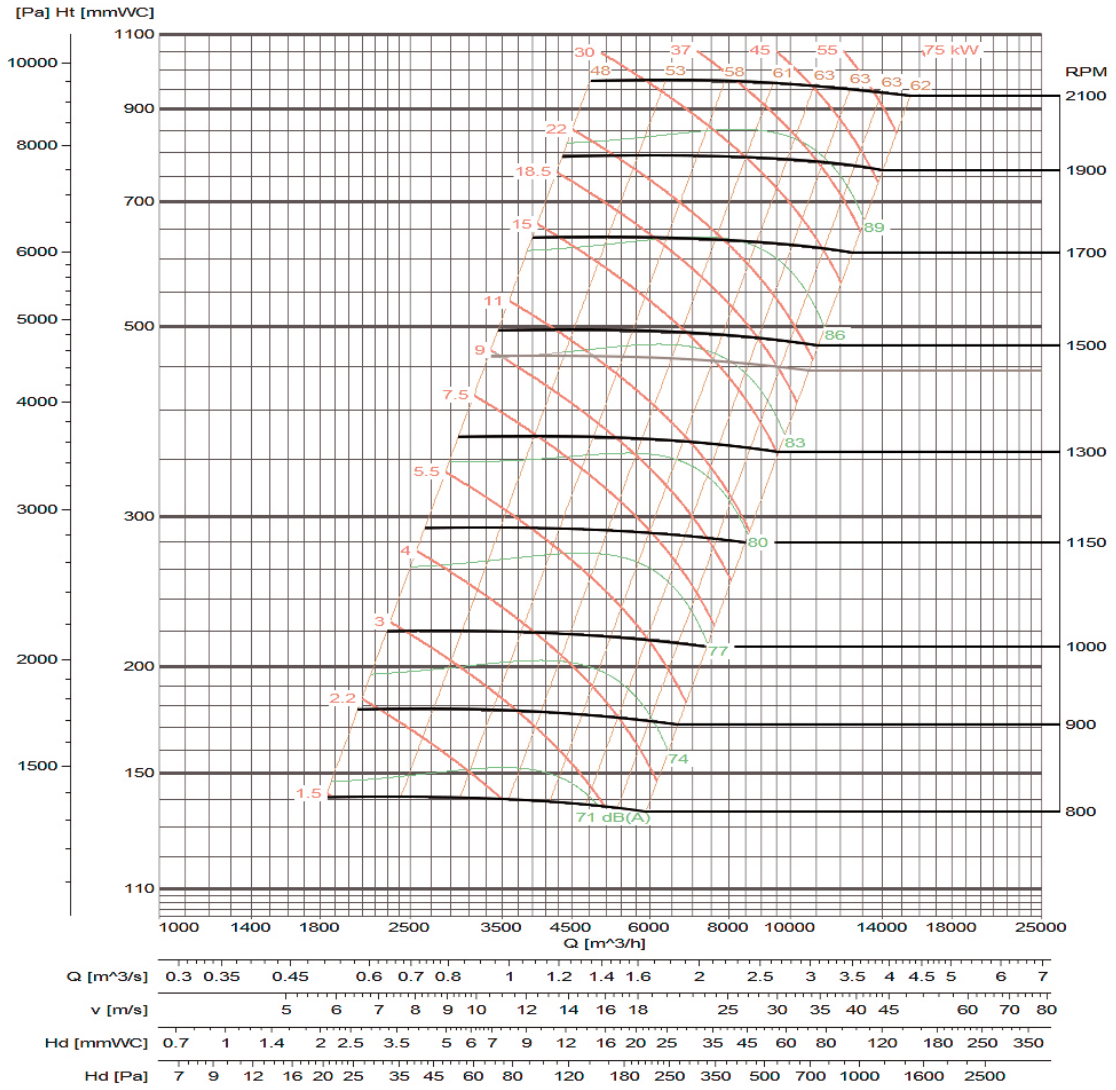


Flow margin ±5%
 Noise level margin + 3... 5 dB
 Margin of kW absorbed ±3%

Outlet characteristics.

Characteristic curves

CAST-X 1000



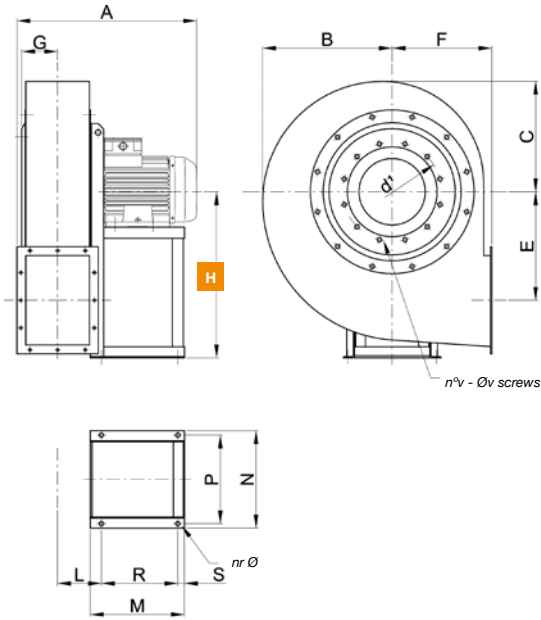
Flow margin $\pm 5\%$
 Noise level margin + 3... 5 dB
 Margin of kW absorbed $\pm 3\%$

Outlet characteristics.

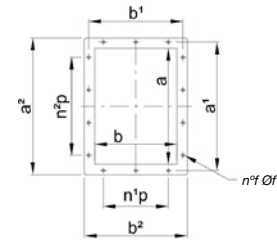
Dimensions mm

SYSTEM
4

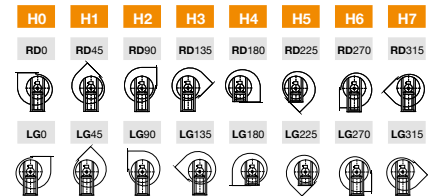
CAST 400...900



OUTLET NOZZLE



ORIENTATIONS



H *The measurement of height H (distance between the ground and the axis) varies depending on the orientations

Model	Frame	A	B	C	E	F	G	H	L	M	N	P	R	S	nr	Ø
CAST-400-2T-3 IE3	90L	410	300	274	240	270	71	375	113	215	269	245	140	25	4	10
CAST-450-2T-4 IE3	100L	490	332	302	265	300	77	400	120	260	312	280	185	25	4	12
CAST-450-2T-5.5 IE3	112M	500	332	302	265	300	77	400	120	260	312	280	185	25	4	12
CAST-500-2T-7.5 IE3	132S	590	374	342	300	335	88	450	127	320	342	310	245	25	4	12
CAST-500-2T-10 IE3	132S	590	374	342	300	335	88	450	127	320	342	310	245	25	4	12
CAST-560-2T-15 IE3	160M	732	425	390	340	375	97	500	136	425	440	400	345	30	4	14
CAST-630-2T-20 IE3	160M	800	478	440	381	425	106	560	146	425	440	400	345	30	4	14
CAST-630-2T-25 IE3	160L	835	478	440	381	425	106	560	146	425	440	400	345	30	4	14
CAST-710-2T-30 IE3	180M	860	531	485	425	475	117	630	177	470	550	510	370	30	4	17
CAST-710-2T-40 IE3	200L	890	531	485	425	475	117	630	187	540	608	565	420	40	4	19
CAST-710-2T-50 IE3	200L	890	531	485	425	475	117	630	187	540	608	565	420	40	4	19
CAST-800-4T-10 IE3	132M	650	595	545	481	530	129	710	170	320	342	310	245	25	4	12
CAST-900-4T-15 IE3	160M	850	674	616	542	600	143	800	183	425	440	400	345	30	4	14
CAST-900-4T-20 IE3	160L	870	674	616	542	600	143	800	183	425	440	400	345	30	4	14

OUTLET NOZZLE

MOD.	a	b	a'	b'	a ²	b ²	n'p	n ² p	n'f	Øf	d1	n'v	Øv
CAST-400-2T-3 IE3	165	117	200	153	235	187	-	1-112	6	10	219	8	M8
CAST-450-2T-4 IE3	185	131	219	167	255	201	-	1-112	6	10	241	8	M8
CAST-450-2T-5.5 IE3	185	131	219	167	255	201	-	1-112	6	10	241	8	M8
CAST-500-2T-7.5 IE3	205	146	241	182	275	216	1-112	1-112	8	12	265	8	M8
CAST-500-2T-10 IE3	205	146	241	182	275	216	1-112	1-112	8	12	265	8	M8
CAST-560-2T-15 IE3	229	164	265	200	299	234	1-112	1-112	8	12	292	8	M8
CAST-630-2T-20 IE3	256	183	292	219	326	253	1-112	2-112	10	12	332	8	M8
CAST-630-2T-25 IE3	256	183	292	219	326	253	1-112	2-112	10	12	332	8	M8
CAST-710-2T-30 IE3	288	205	332	249	368	285	1-125	2-125	10	12	366	8	M8
CAST-710-2T-40 IE3	288	205	332	249	368	285	1-125	2-125	10	12	366	8	M8
CAST-710-2T-50 IE3	288	205	332	249	368	285	1-125	2-125	10	12	366	8	M8
CAST-800-4T-10 IE3	322	229	366	273	402	309	1-125	2-125	10	12	405	8	M8
CAST-900-4T-15 IE3	361	256	405	300	441	336	1-125	2-125	10	12	448	12	M10
CAST-900-4T-20 IE3	361	256	405	300	441	336	1-125	2-125	10	12	448	12	M10

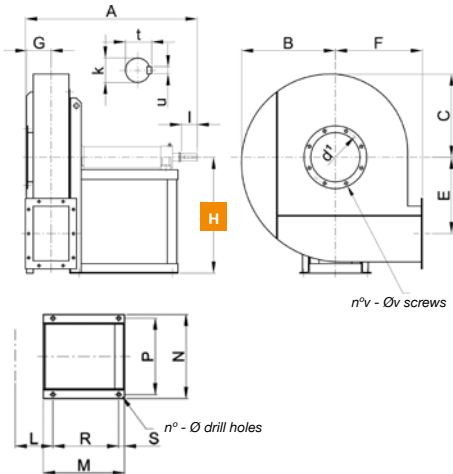
To obtain the dimensions of the 1000 model, consult our technical team.

LARGE SERIES

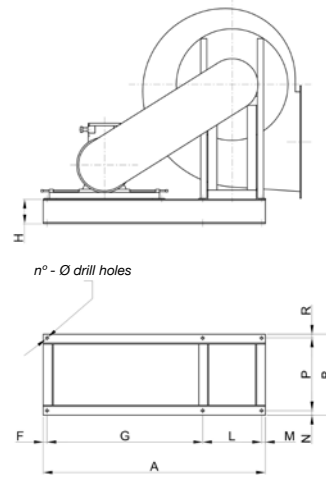
Dimensions mm

CAST-X 400...900

SYSTEM
1



SYSTEM
12



MOD.	A*	B	C	E	F	G	H	L	M*	N
CAST 400	694	300	274	240	270	71	375	113	480	350
CAST 450	807	332	302	265	300	77	400	120	560	370
CAST 500	825	374	342	300	335	88	450	127	560	370
CAST 560	823	425	390	340	375	97	500	136	520	438
CAST 630	842	478	440	381	425	106	560	146	520	438
CAST 710	979	531	485	425	475	117	630	187	605	456
CAST 800	1053	595	545	481	530	129	710	199	655	496
CAST 900	1121	674	616	542	600	143	800	183	705	564

MOD.	A	B*	H	F	G	L	M	N	P
CAST 400	900	450	120	20	550	310	20	25	400
CAST 450	1055	530	120	25	680	330	20	25	480
CAST 500	1055	530	120	25	680	330	20	25	480
CAST 560	1265	485	160	25	830	385	25	30	430
CAST 630	1445	550	160	25	1010	385	25	30	495
CAST 710	1505	575	180	30	1050	395	30	30	515
CAST 800	1775	700	180	30	1280	435	30	30	640
CAST 900	1880	750	180	30	1320	500	30	35	680

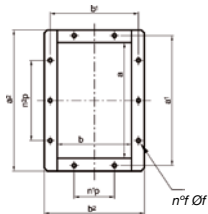
MOD.	P	R*	S	n°	Φ	k	l	t	u	d1	n° v	Ø v
CAST 400	310	400	30	4	14	28 k6	60	31	8	219	8	M8
CAST 450	330	480	30	4	14	38 k6	80	41	10	241	8	M8
CAST 500	330	480	30	4	14	38 k6	80	41	10	265	8	M8
CAST 560	385	430	40	4	17	42 k6	110	45	12	292	8	M8
CAST 630	385	430	40	4	17	48 k6	110	51.5	14	332	8	M8
CAST 710	395	515	40	4	19	48 k6	110	51.5	14	366	8	M8
CAST 800	435	565	40	4	19	55 m6	110	59	16	405	12	M10
CAST 900	500	605	50	4	19	65 m6	140	69	18	448	12	M10

MOD.	R	n°	Φ	Kg
CAST 400	25	6	14	40
CAST 450	25	6	14	45
CAST 500	25	6	14	45
CAST 560	25	6	17	70
CAST 630	25	6	17	90
CAST 710	30	6	19	100
CAST 800	30	6	19	130
CAST 900	35	6	19	185

*For "HIGH TEMP." constructions, elevations "A-M-R" + 50 mm.

(*) For "HIGH TEMP." constructions, elevations "B-P" + 50 mm.
Kg = Weight of the support base

OUTLET NOZZLE



OUTLET NOZZLE

MOD.	a	b	a'	b'	a''	b''	n°p	n°p'	n°f	Φf
CAST 400	165	117	200	153	235	187	-	1-112	6	10
CAST 450	185	131	219	167	255	201	-	1-112	6	10
CAST 500	205	146	241	182	275	216	1-112	1-112	8	12
CAST 560	229	164	265	200	299	234	1-112	1-112	8	12
CAST 630	256	183	292	219	326	253	1-112	2-112	10	12
CAST 710	288	205	332	249	368	285	1-125	2-125	10	12
CAST 800	322	229	366	273	402	309	1-125	2-125	10	12
CAST 900	361	256	405	300	441	336	1-125	2-125	10	12

ORIENTATIONS

H0	H1	H2	H3	H4	H5	H6	H7
RD0	RD45	RD90	RD135	RD180	RD225	RD270	RD315
LG0	LG45	LG90	LG135	LG180	LG225	LG270	LG315

H *The measurement of height H (distance between the ground and the axis) varies depending on the orientations

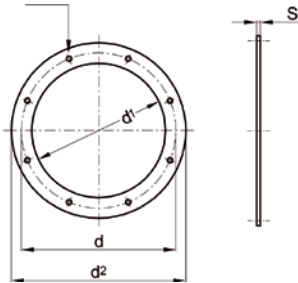
To obtain the dimensions of the 1000 model, consult our technical team.

LARGE SERIES

Accessories

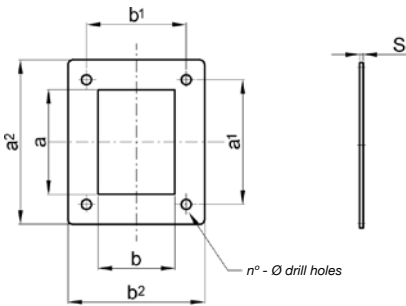
Inlet counter flange

n° - Ø drill holes



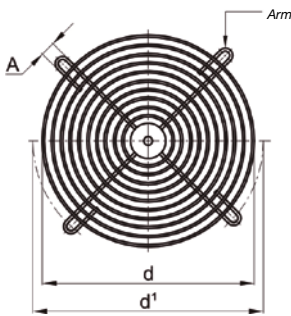
MOD.	d	d ¹	d ²	n°	Φ
CAST 400	219	185	255	8	M8
CAST 450	241	205	275	8	M8
CAST 500	265	229	299	8	M8
CAST 560	292	255	325	8	M8
CAST 630	332	286	366	8	M8
CAST 710	366	321	401	8	M8
CAST 800	405	361	441	8	M8
CAST 900	448	406	486	12	M10
CAST 1000	497	456	536	12	M10

Impulsion counter-flange



MOD.	a	b	a ¹	b ¹	a ²	b ²	n ¹ p	n ² p	n°	Φ	s
CAST 400	165	117	200	153	235	187	-	1-112	6	10	4
CAST 450	185	131	219	167	255	201	-	1-112	6	10	4
CAST 500	205	146	241	182	275	216	1-112	1-112	8	12	4
CAST 560	229	164	265	200	299	234	1-112	1-112	8	12	5
CAST 630	256	183	292	219	326	253	1-112	2-112	10	12	5
CAST 710	288	205	332	249	368	285	1-125	2-125	10	12	5
CAST 800	322	229	366	273	402	309	1-125	2-125	10	12	5
CAST 900	361	256	405	300	441	336	1-125	2-125	10	12	5
CAST 1000	404	288	448	332	484	362	2-126	3-127	14	12	5

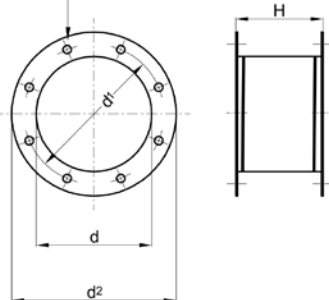
Inlet protection mesh



MOD.	d	d ¹	d ²	A	n°
CAST 400	185	219	255	9	4
CAST 450	205	241	275	11	4
CAST 500	229	265	299	11	4
CAST 560	255	292	325	11	4
CAST 630	286	332	366	11	8
CAST 710	321	366	401	11	8
CAST 800	361	405	441	11	8
CAST 900	406	448	486	11	8
CAST 1000	456	497	536	11	8

Inlet anti-vibration seal

n° - Ø drill holes

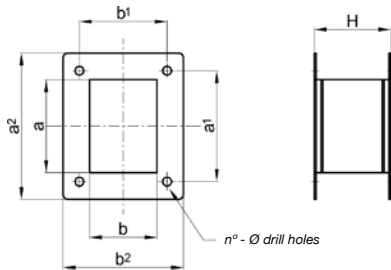


MOD.	d	d ¹	d ²	n°	Φ	H
CAST 400	119	185	255	8	M8	200
CAST 450	241	205	275	8	M8	200
CAST 500	265	229	299	8	M8	200
CAST 560	292	255	325	8	M8	200
CAST 630	332	286	366	8	M8	200
CAST 710	366	321	401	8	M8	200
CAST 800	405	361	441	8	M8	200
CAST 900	448	406	486	12	M10	200
CAST 1000	497	456	536	12	M10	200

LARGE SERIES

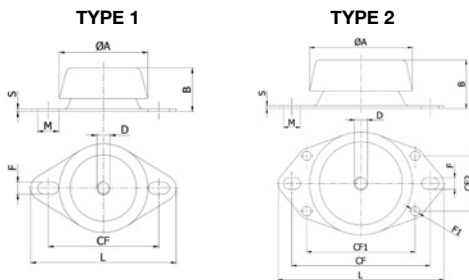
Accessories

Impulsion anti-vibration seal



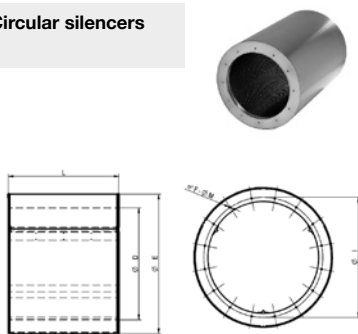
MOD.	a	b	a ¹	b ¹	a ²	b ²	n ¹ p	n ² p	n ⁰	Φ	H
CAST 400	165	117	200	153	235	187	-	1-112	6	10	200
CAST 450	185	131	219	167	255	201	-	1-112	6	10	200
CAST 500	205	146	241	182	275	216	1-112	1-112	8	12	200
CAST 560	229	164	265	200	299	234	1-112	1-112	8	12	200
CAST 630	256	183	292	219	326	253	1-112	2-112	10	12	200
CAST 710	288	205	332	249	368	285	1-125	2-125	10	12	200
CAST 800	322	229	366	273	402	309	1-125	2-125	10	12	200
CAST 900	361	256	405	300	441	336	1-125	2-125	10	12	200
CAST 1000	404	288	448	332	484	362	2-126	3-127	14	12	200

Shock absorbers



MOD.	SHOCK-ABSORBERS MODEL	TYPE	øA	B	D	CF	CF1	CF2	F	øF1	L	M	S
CAST 400	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAST 450	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAST 500	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAST 560	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAST 630	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAST 710	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
CAST 800	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
CAST 900	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
CAST 1000	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5

Circular silencers



Silencers are used to lower the noise level at air conditioning or ventilation installation manufactured using galvanised steel.

- Upon request: other constructions using different materials.

øD	øE	L	øI	F	øM	øD	øE	L	øI	F	øM
315	515	ØD,1,5ØD, 2ØD	355	8	M8	900	1100	ØD,1,5ØD, 2ØD	970	16	M10
355	555	ØD,1,5ØD, 2ØD	395	8	M8	1000	1200	ØD,1,5ØD, 2ØD	1070	16	M10
400	600	ØD,1,5ØD, 2ØD	450	8	M8	1120	1320	ØD,1,5ØD, 2ØD	1190	20	M10
450	650	ØD,1,5ØD, 2ØD	500	8	M8	1250	1450	ØD,1,5ØD, 2ØD	1320	20	M10
500	700	ØD,1,5ØD, 2ØD	560	12	M8	1400	1600	ØD,1,5ØD, 2ØD	1470	20	M10
560	760	ØD,1,5ØD, 2ØD	620	12	M8	1500	1700	ØD,1,5ØD, 2ØD	1570	20	M10
630	830	ØD,1,5ØD, 2ØD	690	12	M8	1600	1800	ØD,1,5ØD, 2ØD	1680	24	M14
710	910	ØD,1,5ØD, 2ØD	770	16	M8	1700	1900	ØD,1,5ØD, 2ØD	1780	24	M14
800	1000	ØD,1,5ØD, 2ØD	860	16	M8	1800	2000	ØD,1,5ØD, 2ØD	1880	24	M14