

# CAS/ATEX

## Centrifugal single-inlet, high-pressure fans with ATEX certification



Centrifugal high-pressure fans with ATEX certification, CEE ExII2G Ex e, explosion-proof and CEE ExII2G Ex d, Ex tc, or Ex tb flame-resistant to work in explosive atmospheres.

### Fan:

- Steel sheet casing
- Impeller with backward-facing blades made from galvanised sheet steel, except models 242-248-254-260-640-645-650 which have a cast aluminium impeller.
- Spark-proof inlet ring in copper or aluminium

### Motor:

- Class F motors with ball bearings and ATEX certification, Ex e explosion-proof and Ex d, Ex tc, or Ex tb flame-resistant
- Three phase, 50Hz, 230/400V motors up to and including 4kW. 400/690V over 4kW
- Max. air temperature to transport: -20°C+ 80°C



Ex "e" marked:  $\text{CE} \text{Ex} \text{II} 2\text{G} \text{Ex} \text{e}$   
 Ex "d" marked:  $\text{CE} \text{Ex} \text{II} 2\text{G} \text{Ex} \text{d}$   
 Ex tc marked:  $\text{CE} \text{Ex} \text{II} 3\text{D} \text{Ex} \text{tc}$   
 Ex tb marked:  $\text{CE} \text{Ex} \text{II} 2\text{D} \text{Ex} \text{tb}$   
 Notified authority: L.O.M  
 Identification No:  
 LOM4ATEX007

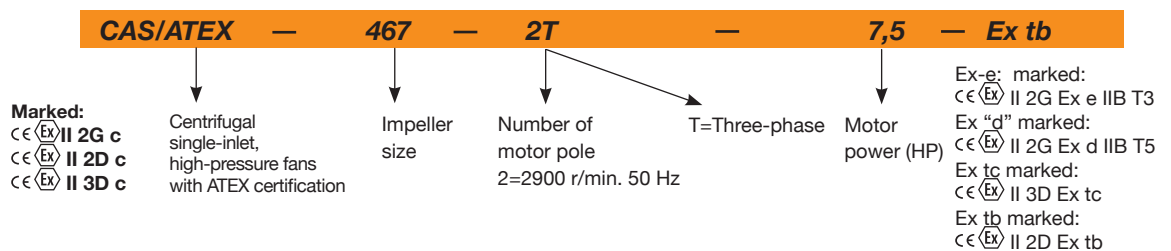
### Finish:

- Rust retardant finish with ATEX paint, containing no ferrous components, in polyester resin polymerised at 190°C, after phosphate free pre-treatment

### On request:

- Built-in motors with PTC
- Special windings for different electrical supplies and frequencies
- ATEX construction for different categories
- Fans with two-speed motor.

### Order code



### Technical characteristics

Model	Speed (r/min)	Maximum current admissible (A)			Installed power (kW)	Maximum airflow (m³/h)	Sound pressure level dB(A)	Approx. weight (Kg)
		230V	400V	690V				
CAS/ATEX-242-2T-0.33	2740	1.73	1.00		0.25	450	73	30.0
CAS/ATEX-242-2T-0.5	2770	2.08	1.20		0.37	650	73	31.0
CAS/ATEX-248-2T-0.75	2710	2.94	1.70		0.55	420	74	43.5
CAS/ATEX-248-2T-1	2820	3.46	2.00		0.75	500	75	45.0
CAS/ATEX-248-2T-1.5	2850	4.50	2.60		1.10	990	76	46.5
CAS/ATEX-254-2T-1.5	2850	4.50	2.60		1.10	600	76	56.5
CAS/ATEX-254-2T-2	2800	6.24	3.60		1.50	800	78	61.5
CAS/ATEX-254-2T-3	2860	8.66	5.00		2.20	1300	80	63.0
CAS/ATEX-260-2T-2	2800	6.24	3.60		1.50	500	77	75.0
CAS/ATEX-260-2T-3	2860	8.66	5.00		2.20	900	79	78.0
CAS/ATEX-463-2T-5.5	2910	15.42	8.90		4.00	1150	82	88.5
CAS/ATEX-463-2T-7.5	2880		10.50	6.09	5.50	2000	83	95.5
CAS/ATEX-467-2T-7.5	2880		10.50	6.09	5.50	1550	84	117.5
CAS/ATEX-467-2T-10	2880		15.70	9.06	7.50	2600	85	122.5
CAS/ATEX-571-2T-10	2880		15.70	9.06	7.50	2000	86	144.0
CAS/ATEX-571-2T-15	2930		22.00	12.70	11.00	3450	87	175.0
CAS/ATEX-640-2T-2	2800	6.24	3.60		1.50	2600	77	51.5
CAS/ATEX-645-2T-3	2860	8.66	5.00		2.20	2000	76	62.5
CAS/ATEX-645-2T-4	2845	12.12	7.00		3.00	3000	81	69.5
CAS/ATEX-650-2T-5.5	2910	15.42	8.90		4.00	3500	81	89.0
CAS/ATEX-650-2T-7.5	2880		10.50	6.09	5.50	4750	83	96.0
CAS/ATEX-852-2T-7.5	2880		10.50	6.09	5.50	3500	81	96.0
CAS/ATEX-852-2T-10	2880		15.70	9.06	7.50	5500	85	101.0
CAS/ATEX-856-2T-15	2930		22.00	12.70	11.00	7500	85	157.5
CAS/ATEX-863-2T-15	2930		22.00	12.70	11.00	4000	84	168.0
CAS/ATEX-863-2T-20	2935		27.40	15.90	15.00	7000	86	179.0
CAS/ATEX-971-2T-25	2930		32.40	18.70	18.50	5800	87	299.0
CAS/ATEX-971-2T-30	2935		38.00	22.00	22.00	8100	88	324.0
CAS/ATEX-971-2T-40	2940		50.00	29.00	30.00	12000	89	380.0
CAS/ATEX-1250-2T-15/A	2930		22.00	12.70	11.00	12000	84	220.0

Technical characteristics

Model	Speed (r/min)	Maximum current admissible (A)			Installed power (kW)	Maximum airflow (m³/h)	Sound pressure level dB(A)	Approx. weight (Kg)
		230V	400V	690V				
CAS/ATEX-1456-2T-25/A	2930		32.40	18.70	18.50	18000	87	286.0
CAS/ATEX-1663-2T-50/A	2940		64.00	37.00	37.00	25000	92	425.0
CAS/ATEX-1671-2T-60/A	2940		76.00	44.00	45.00	27000	93	575.0
CAS/ATEX-2071-2T-100/A	2970		123.00	71.00	75.00	33600	95	750.0
CAS/ATEX-2080-2T-125/A	2970		151.00	87.00	90.00	42600	96	820.0
CAS/ATEX-790-2T-20	2935		27.40	15.90	15.00	2100	88	245.0
CAS/ATEX-980-2T-30	2935		38.00	22.00	22.00	4800	87	340.0
CAS/ATEX-990-2T-50	2940		64.00	37.00	37.00	6000	90	485.0
CAS/ATEX-1080-2T-40	2940		50.00	29.00	30.00	5400	88	420.0
CAS/ATEX-1090-2T-60	2940		76.00	44.00	45.00	6000	91	530.0

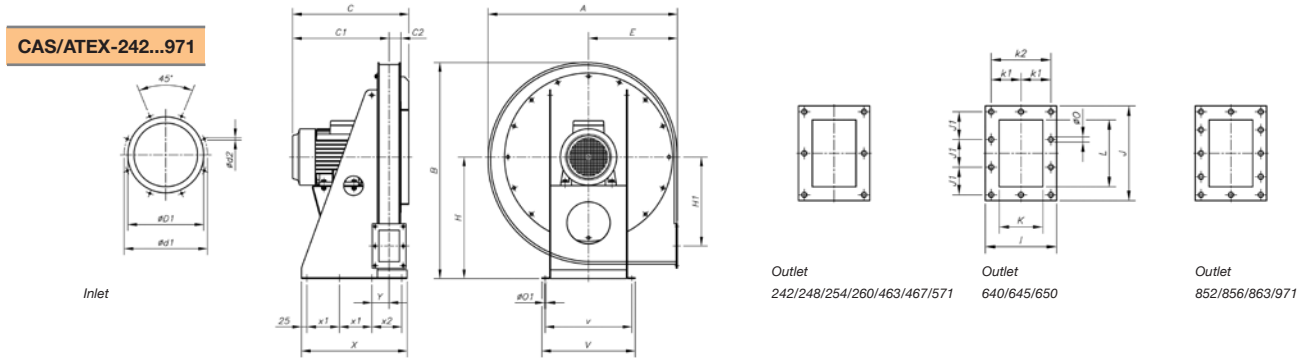
Acoustic features

The specified values are determined according to free field measurements of pressure and sound levels in dB(A) at an equivalent distance of twice the fan's span plus the turbine's diameter, with a minimum of 1.5 m.

Sound power Lw(A) spectrum in dB(A) via frequency band in Hz.

Model	63	125	250	500	1000	2000	4000	8000
CAS								
242	50	61	67	76	83	82	79	72
248-0.75	51	62	68	77	84	83	80	73
248-1	52	63	69	78	85	84	81	74
248-1.5	53	64	70	79	86	85	82	75
254-1.5	55	66	71	81	88	87	84	77
254-2	57	68	73	83	90	89	86	79
254-3	56	68	76	85	90	92	89	82
260-2	53	69	69	83	88	88	85	78
260-3	55	71	71	85	90	90	87	80
463-5.5	57	69	82	91	93	93	89	80
463-7.5	58	70	83	92	94	94	90	81
467-7.5	69	74	83	95	95	97	93	85
467-10	70	75	84	96	96	98	94	86
571-10	64	76	86	96	99	99	94	86
571-15	65	77	87	97	100	100	95	87
640	56	67	75	82	88	84	83	76
645-3	55	66	74	81	87	83	82	75
645-4	55	66	77	86	90	91	87	79
650-5.5	59	75	84	90	93	90	85	78
650-7.5	52	68	81	91	96	93	85	78

Dimensions in mm

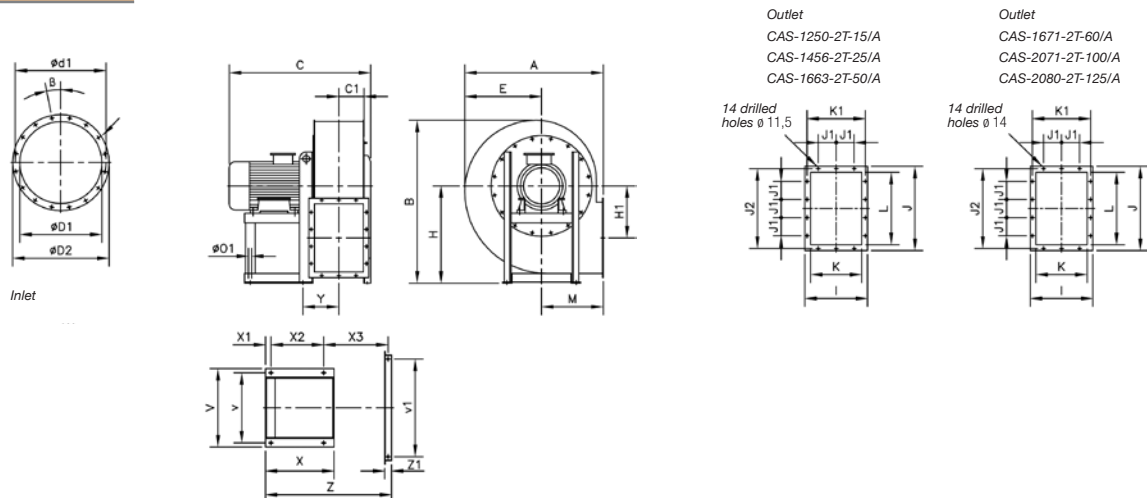


Model	A	B	C	C1	C2	øD1	ød1	ød2	E	H	H1	I	J	J1	K	k1	k2	L	øO	øO1	V	v	X	x1	x2	Y
CAS/ATEX-242-2T-0'33	576	662	282	219	33	100	130	M8	270	375	270	120	155	65	60	-	95	95	11	12	305	275	260	75	-	61
CAS/ATEX-242-2T-0'5	576	662	310	247	33	100	130	M8	270	375	270	120	155	65	60	-	95	95	11	12	305	275	260	75	-	61
CAS/ATEX-248-2T-0'75	639	728	315	249	36	112	140	M8	300	410	297	126	165	70	66	-	101	105	11	12	320	290	300	90	-	64
CAS/ATEX-248-2T-1'1'5	639	728	340	274	36	112	140	M8	300	410	297	126	165	70	66	-	101	105	11	12	320	290	300	90	-	64
CAS/ATEX-254-2T-1'5	699	788	365	294.5	40.5	125	155	M8	330	440	322	135	175	75	75	-	110	115	11	14	340	310	330	100	-	68.5
CAS/ATEX-254-2T-2	699	788	413	342.5	40.5	125	155	M8	330	440	322	135	175	75	75	-	110	115	11	14	340	310	330	100	-	68.5
CAS/ATEX-254-2T-3	699	788	443	372.5	40.5	125	155	M8	330	440	322	135	175	75	75	-	110	115	11	14	340	310	330	100	-	68.5
CAS/ATEX-260-2T-2/3	782	875	419	343.5	47.5	150	175	M8	370	485	362	145	185	80	85	-	120	125	11	14	380	350	370	115	-	73.5
CAS/ATEX-463-2T-5'5	782	875	459	383.5	45.5	200	240	M8	370	485	362	145	185	80	85	-	120	125	11	14	380	350	370	115	-	73.5
CAS/ATEX-463-2T-7'5	782	875	517	441.5	45.5	200	240	M8	370	485	362	145	185	80	85	-	120	125	11	14	380	350	370	115	-	73.5
CAS/ATEX-467-2T-7'5/10	833	945	530	442	48	224	258	M8	390	530	395	150	190	82.5	90	-	125	130	11	14	405	375	300	125	-	76
CAS/ATEX-571-2T-10	873	995	536	445.5	50.5	250	275	M8	410	560	410	155	205	90	95	-	130	145	11	14	430	400	350	150	-	79.5
CAS/ATEX-571-2T-15	873	995	671	580.5	50.5	250	275	M8	410	560	410	155	205	90	95	-	130	145	11	14	430	400	410	180	-	79.5
CAS/ATEX-640-2T-2	639	728	446	350.5	65.5	250	275	M8	300	410	250	185	260	78	125	80	-	200	11	14	340	310	350	100	-	93.5
CAS/ATEX-645-2T-3	699	788	461	358	73	250	275	M8	330	440	267.5	200	284	86	140	87.5	-	224	11	14	380	350	380	115	-	101
CAS/ATEX-645-2T-4	699	788	491	388	73	250	275	M8	330	440	267.5	200	284	86	140	87.5	-	224	11	14	380	350	380	115	-	101
CAS/ATEX-650-2T-5'5	782	875	534	421	83	250	275	M8	370	485	300	220	310	95	160	97.5	-	250	11	14	405	375	490	125	190	111
CAS/ATEX-650-2T-7'5	782	875	572	459	83	250	275	M8	370	485	300	220	310	95	160	97.5	-	250	11	14	405	375	490	125	190	111
CAS/ATEX-852-2T-7'5/10	833	945	603	470	94.5	380	310	M8	390	530	320	240	340	78	180	107.5	-	280	11	14	430	400	540	150	190	122
CAS/ATEX-856-2T-15	833	945	708	575	93	355	395	M8	390	530	320	240	340	78	180	107.5	-	280	11	14	430	400	600	180	190	122
CAS/ATEX-863-2T-15/20	873	995	728	585	103	355	410	M8	410	560	325	260	375	87.5	200	117.5	-	315	11	14	430	400	620	180	210	132
CAS/ATEX-971-2T-25	1012	1170	759	598	116	400	450	M10	460	670	420	294	425	100	224	132	-	355	11	14	550	510	715	150	215	145
CAS/ATEX-971-2T-30	1012	1170	881	720	116	400	450	M10	460	670	420	294	425	100	224	132	-	355	11	14	550	510	715	150	215	145
CAS/ATEX-971-2T-40	1012	1170	948	787	116	400	450	M10	460	670	420	294	425	100	224	132	-	355	11	14	550	510	715	150	215	145

The measures correspond to the Ex "e" version

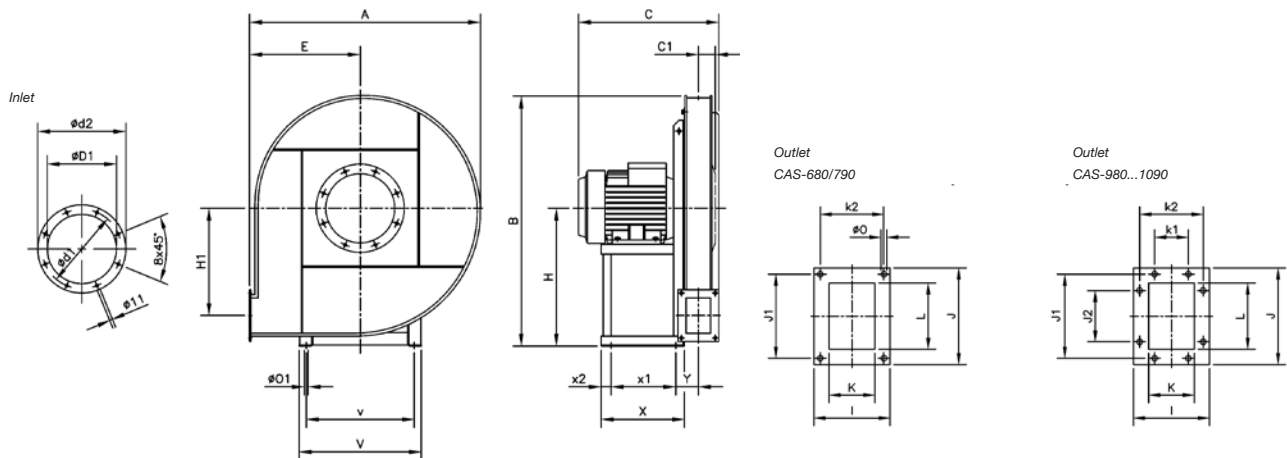
Dimensions in mm

CAS/ATEX-1250...2080



Model	A	B	C	C1	$\phi D1$	$\phi D2$	$\phi d1$	x $\phi$	$\beta$	E	H	H1	I	J	J1	J2	K	K1	L	M	$\phi O1$	V	v	v1	X	X1	X2	X3	Y	Z	Z1
CAS-1250-2T-15/A	865	1055	885	160	361	441	405	8x11.5	22°30'	510	630	365	360	480	125	448	280	332	400	355	14	440	400	-	425	30	340	-	202	-	-
CAS-1456-2T-25/A	970	1185	900	163	456	535	497	12x12	15°	555	710	410	395	530	125	497	315	366	450	400	14	440	400	-	425	30	340	-	219	-	-
CAS-1663-2T-50/A	1010	1280	1035	183	568	668	629	16x11.5	11°15'	560	800	380	435	580	125	551	355	405	500	450	16	570	510	-	500	40	385	-	263	-	-
CAS-1671-2T-60/A	1130	1340	1160	206	638	738	698	16x13	11°15'	630	800	430	500	660	160	629	400	464	560	500	19	626	565	800	550	40	425	530	292	1025	60
CAS-2071-2T-100/A	1130	1340	1290	206	638	738	698	16x13	11°15'	630	800	430	500	660	160	629	400	464	560	500	21	760	680	800	700	50	550	545	307	1125	60
CAS-2080-2T-125/A	1270	1505	1345	231	718	818	775	16x13	11°15'	710	900	486	550	730	160	698	450	513	630	560	24	760	680	900	700	50	550	595	333	1225	60

CAS/ATEX-680...1090

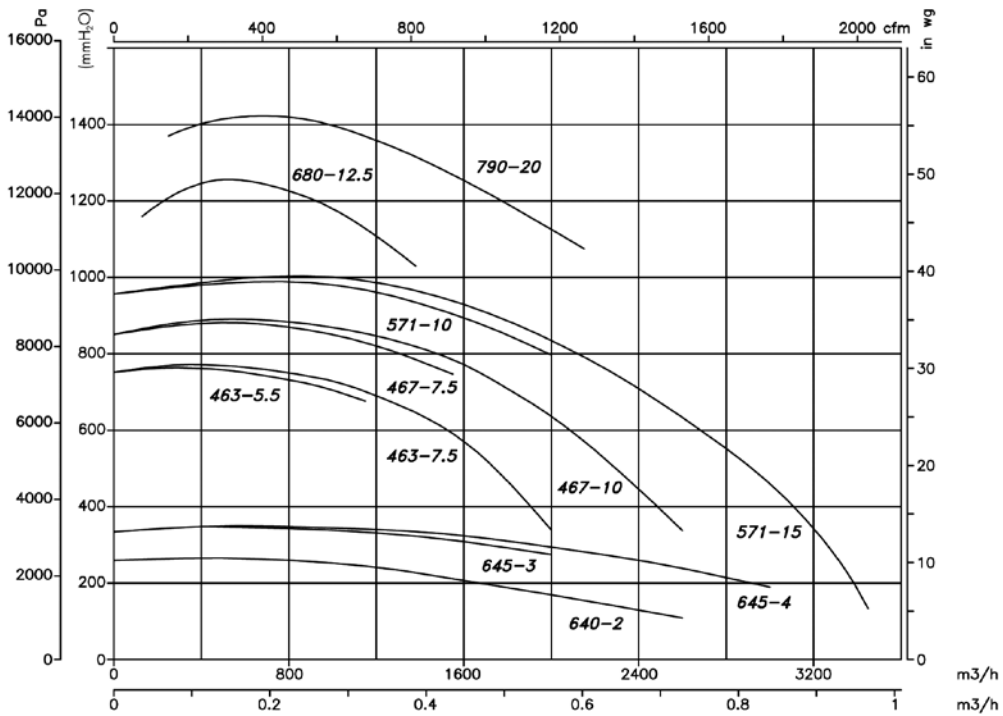
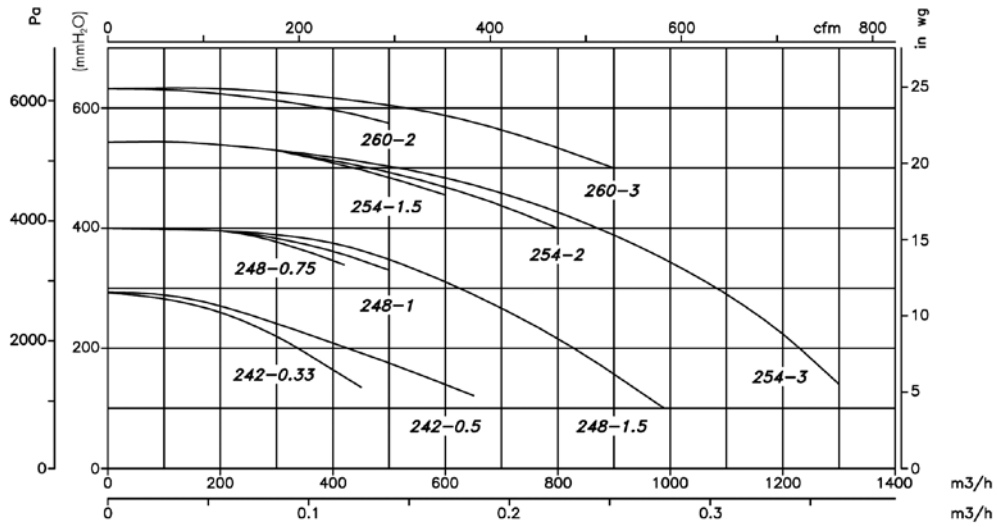


Model	A	B	C	C1	$\phi D1$	$\phi d1$	$\phi d2$	E	H	H1	I	J	J1	J2	K	k1	k2	L	$\phi O1$	$\phi O1$	V	v	X	x1	x2	Y
CAS-680-2T-12'5	925	995	550	50	165	200	235	450	530	430	131	160	125	-	71	-	100	100	9	12	392	360	320	250	25	87
CAS-790-2T-20	1100	1180	650	58	185	219	255	530	630	520	140	172	140	-	80	-	112	112	9	14	440	400	425	340	30	103
CAS-980-2T-30	1120	1250	725	90	255	292	325	530	710	530	210	270	241	112	140	112	182	200	11.5	14	440	400	425	340	35	145
CAS-990-2T-50	1250	1400	900	100	286	332	366	600	800	600	230	294	265	112	160	112	200	224	11.5	16	570	510	500	385	40	165
CAS-1080-2T-40	1120	1250	850	90	255	392	325	530	710	530	210	270	241	112	140	112	182	200	11.5	16	570	510	500	385	40	155
CAS-1090-2T-60	1250	1400	930	100	286	332	366	600	800	600	230	294	265	112	160	112	200	224	11.5	16	626	565	550	425	40	175

**Characteristic Curves**

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe= Static pressure in mmH<sub>2</sub>O, Pa and inwg.



**Accessories**

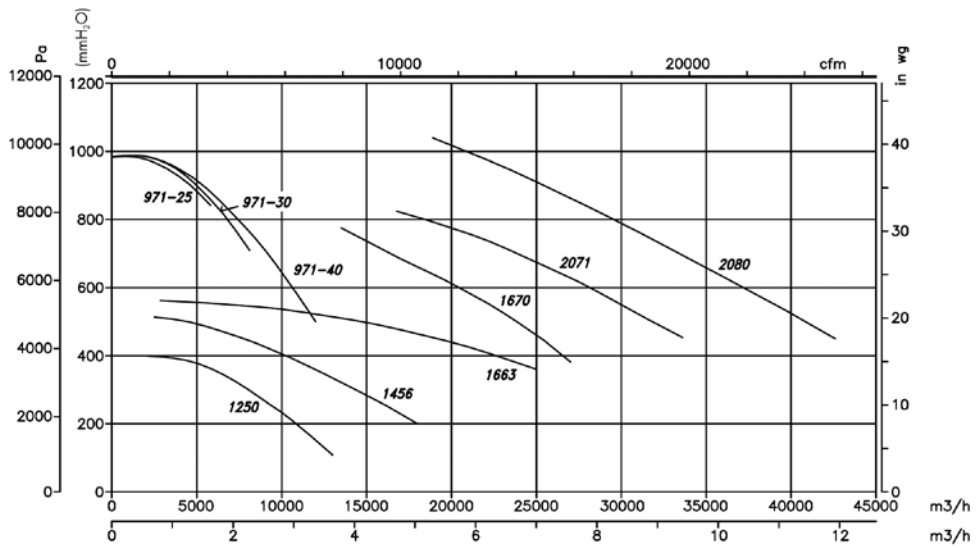
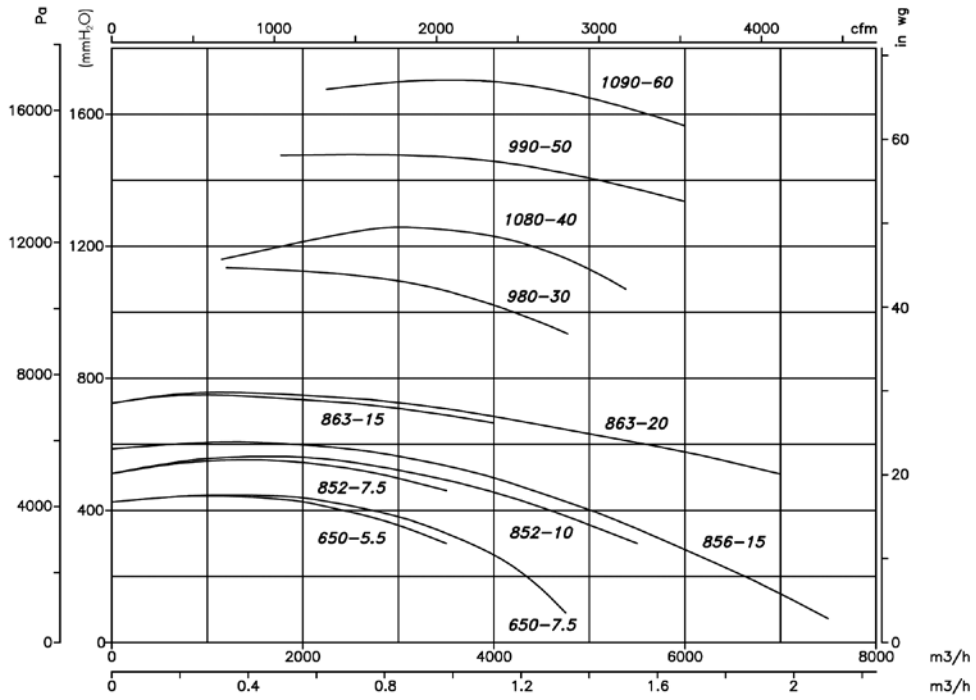
See accessories section.



**Curvas Características**

Q= Caudal en m<sup>3</sup>/h, m<sup>3</sup>/s y cfm.

Pe= Presión estática en mmH<sub>2</sub>O, Pa e inwg.



**Positions**

LG 270 standard supply  
 LG 180 positions on request  
 and with special fixing measurements.



Supplied on request  
 RD 180 positions with special  
 fixing measurements.

