

NIMUS-TR



CENTRIFUGAL FAN, FOR CLEAN OR SLIGHTLY DUSTY AIR AND BELT TRANSMISSION

MANUFACTURING FEATURES

- Medium pressure centrifugal belt driven fan.
- Reinforced housing made of carbon laminated steel, protected against corrosion by powder coating polyester resin RAL 5010. Finish C3.
- Casing fully latched and adjustable.
- Self-cleaning turbine and reinforced impeller with high-performance backward (reaction) blades made of carbon laminated steel dynamically balanced to minimize noise and vibrations. Black painted RAL 9005
- Squirrel cage standardized asynchronous IEC motor with IP-55 protection and class F electrical insulation. Standard voltages 230/400V 50Hz for three-phase motors up to 4kW and 400/690V 50Hz for higher powers. IE4 motors for 75kW power or higher.
- Motorized fan with base frame (configuration 12). Full equipped fans including: motor, pulleys, belts, belts guard and shaft guard.
- Models of size 500 and above are supplied with a front support foot, for the other models the front support foot is optional.
- Maximum working temperature: carried air: 200°C, ambient: 60°C.

- Available positions (to be indicated in case of order): LG270, LG0, LG45, LG90, LG135, LG180, LG225, LG315, RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315.
- The indicated codes correspond to the model in position LG270

APPLICATIONS

Designed to be installed in duct for air extraction or supply in:

Paint booths
Collection of dust
Food industry dryers
Food processing
Incineration
Odor control in industry
Indoor / outdoor pollution control
Big buildings
Malls
Factories / Industrial buildings
Warehouses
Extraction of smoke
Boilers and ovens
Manufacture and treatment of chemical products.
Tunnels, underground stations.

ON DEMAND

- Fans for special voltages.
- 2 speed motor.
- C4 or C5 coating painting
- Hot dip galvanized
- Inox 304 (normal or electropolished finish)
- Inox 316 (normal or electropolished finish)
- Cooling wheel
- Anticaloric paint
- Fully welded housing (waterproof)
- Inspection door to facilitate maintenance and cleaning
- Drain plug.
- Airtight axle

Accessories



AB



AC



AVR



AVS



BA-400



BADS



BIDS



EIS



INT



JE 45



RA



RIS



SFC

- Non-sparking air passage and standard motor
- Other brands of motors.

Technical data

Three-phase motor

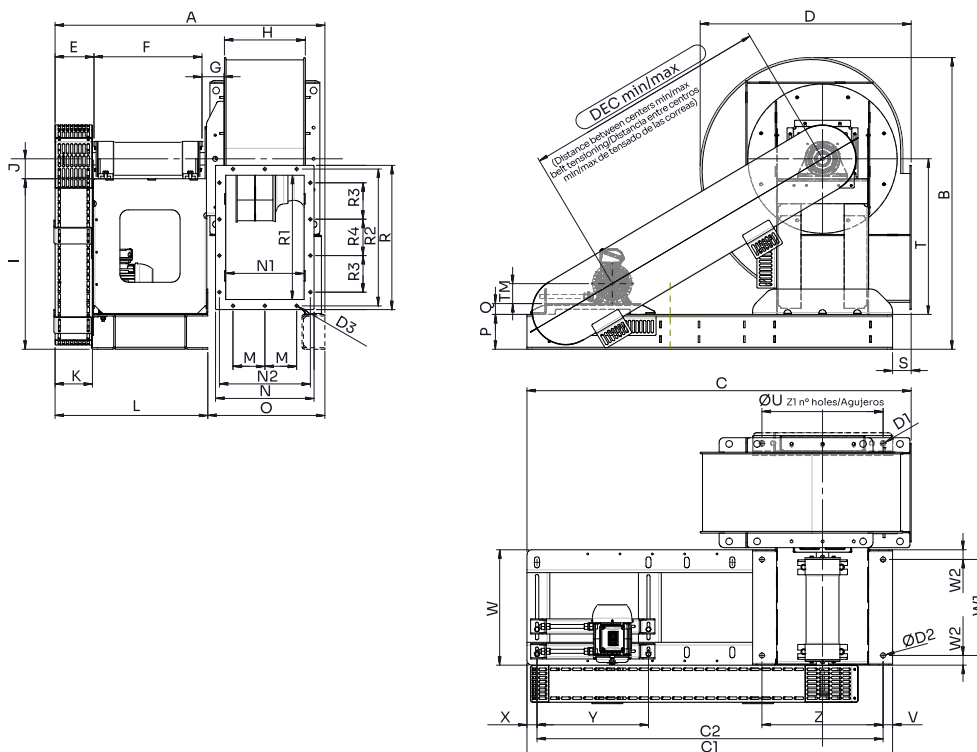
Code	Model	RPM	Min. Rated power kW	Max. Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
	NIMUS-TR 315 (Sist. 12)	1700rpm - 4500rpm	0,55	3,00	6.300	68	100	1
	NIMUS-TR 350 (Sist. 12)	1500rpm - 4000rpm	0,75	3,00	7.700	69	110	1
	NIMUS-TR 400 (Sist. 12)	1600rpm - 4000rpm	1,10	7,50	12.200	73	120	1
	NIMUS-TR 450 (Sist. 12)	1350rpm - 4000rpm	1,50	7,50	14.450	77	145	1
	NIMUS-TR 500 (Sist. 12)	1400rpm - 3400rpm	3,00	18,50	21.800	76	240	1
	NIMUS-TR 560 (Sist. 12)	1100rpm - 2800rpm	4,00	18,50	25.450	75	260	1
	NIMUS-TR 630 (Sist. 12)	1000rpm - 2450rpm	5,50	22,00	31.700	76	315	1
	NIMUS-TR 710 (Sist. 12)	800rpm - 2050rpm	5,50	22,00	37.800	75	370	1
	NIMUS-TR 800 (Sist. 12)	500rpm - 3500rpm	5,50	55,00	60.200	91	580	1
	NIMUS-TR 900 (Sist. 12)	500rpm - 3500rpm	7,50	55,00	70.400	95	700	1
	NIMUS-TR 1000 (Sist. 12)	500rpm - 3500rpm	11,00	55,00	81.400	98	780	1

Notes:

* The motor is not included in fan weight

** Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions



Model	A	B	C (T. mot < 200)	C1 (T. mot < 200)	C2 (T. mot < 200)	D	D2	D3	DEC MIN/MA X (T. mot 71)
NIMUS-TR 315 (Sist. 12)	791	776.3	1186.3	1160	1090.5	555.4	20	11.5	691, 3/815
NIMUS-TR 350 (Sist. 12)	817	853	1184.7	1160	1090.5	618.8	20	11.5	689/808
NIMUS-TR 400 (Sist. 12)	848	938.8	1212.8	1160	1090.5	690.4	20	11.5	-
NIMUS-TR 450 (Sist. 12)	890	1038.3	1243.9	1160	1090.5	769.4	20	11.5	-

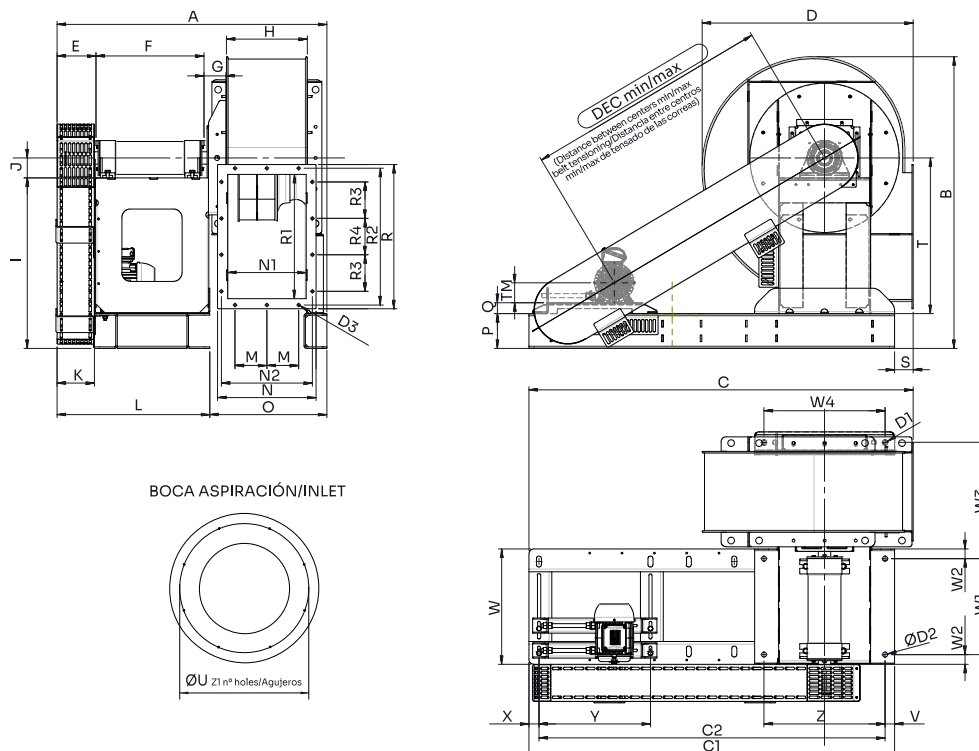
Model	DEC MIN/MA X (T. mot 80)	DEC MIN/MA X (T. mot 90)	DEC MIN/MA X (T. mot 100)	DEC MIN/MA X (T. mot 112)	DEC MIN/MA X (T. mot 132)	E	F	G	H
NIMUS-TR 315 (Sist. 12)	681, 6/805	670/795	-	-	-	104	351	92	204
NIMUS-TR 350 (Sist. 12)	678/799	667/788	593/768	-	-	104	351	92	230
NIMUS-TR 400 (Sist. 12)	705/821	693/810	620/790	601/771	579/750	104	351	92	258
NIMUS-TR 450 (Sist. 12)	739/851	727/839	657/819	637/800	615/779	104	351	92	290

Model	I	J	K	L	M	N	N1	N2	P
NIMUS-TR 315 (Sist. 12)	345.6	70	100	503.4	79	278	198	248	100
NIMUS-TR 350 (Sist. 12)	390.6	70	100	503.4	92	304	224	274	100
NIMUS-TR 400 (Sist. 12)	440.6	70	100	503.4	106	332	252	302	100
NIMUS-TR 450 (Sist. 12)	500.6	70	100	483.4	112	364	284	334	100

Model	Q (T. mot. 100-112-132)	Q (T. mot. ≤90)	R	R1	R2	R3	R4	S	T
NIMUS-TR 315 (Sist. 12)	51	44	395	315	365	90	95	26.3	415.6
NIMUS-TR 350 (Sist. 12)	51	44	435	355	405	105	105	24.7	460.6
NIMUS-TR 400 (Sist. 12)	51	44	480	400	450	120	120	52.8	510.6
NIMUS-TR 450 (Sist. 12)	51	44	530	450	500	130	130	83.9	570.6

Model	TM (T. mot. 71)	TM (T. mot. 80)	TM (T. mot. 90)	TM (T. mot. 100)	TM (T. mot. 112)	TM (T. mot. 132)	U	V	W
NIMUS-TR 315 (Sist. 12)	71	80	90	-	-	-	354.5	43	403.43
NIMUS-TR 350 (Sist. 12)	71	80	90	100	-	-	394.5	43	403.43
NIMUS-TR 400 (Sist. 12)	-	80	90	100	112	132	438	43	403.43
NIMUS-TR 450 (Sist. 12)	-	80	90	100	112	132	485	43	383.43

Model	W1	W2	X	Y (T. mot. ≤90)	Y (T. mot. ≥100)	Z	z1 (nº holes)
NIMUS-TR 315 (Sist. 12)	339.4	32	26.5	448	-	344	8
NIMUS-TR 350 (Sist. 12)	340.5	31.4	26.5	448	602.5	397	8
NIMUS-TR 400 (Sist. 12)	340.5	31.4	26.5	448	602.5	397	8
NIMUS-TR 450 (Sist. 12)	320.5	31.4	26.5	448	602.5	397	8



Model	A	B	C (T. mot < 200)	C (T. mot ≥ 200)	C1 (T. mot < 200)	C1 (T. mot ≥ 200)	C2 (T. mot < 200)	C2 (T. mot ≥ 200)	D
NIMUS-TR 500 (Sist. 12)	1084.65	1173	1545.1	-	1470	-	1391.5	-	848.8
NIMUS-TR 560 (Sist. 12)	1122.65	1290	1582.5	-	1470	-	1391.5	-	944
NIMUS-TR 630 (Sist. 12)	1322.28	1425.5	1626.1	-	1470	-	1391.5	-	1055
NIMUS-TR 710 (Sist. 12)	1373.28	1578.9	1676	-	1470	-	1391.5	-	181.8
NIMUS-TR 800 (Sist. 12)	1578.6	1770.3	2028.6	2493.6	1825	1672.5	1735.5	2200.5	1324.6
NIMUS-TR 900 (Sist. 12)	1655	1974.5	1973.4	2438.4	1825	1672.5	1735.5	2200.5	1483
NIMUS-TR 1000 (Sist. 12)	1720.6	2165	2035.7	2500.7	1825	1672.5	1735.5	2200.5	1641.7

Model	D1	D2	D3	DEC MIN/MA X (T. mot 80)	DEC MIN/MA X (T. mot 90)	DEC MIN/MA X (T. mot 100)	DEC MIN/MA X (T. mot 112)	DEC MIN/MA X (T. mot 132)	DEC MIN/MA X (T. mot 160)
NIMUS-TR 500 (Sist. 12)	20	20	11.5	982/1100	970, 78/1089, 33	896, 5/1069	877/1050	855, 92/1030, 49	728/967
NIMUS-TR 560 (Sist. 12)	20	20	11.5	-	1007/1122	935/1102	916/1083	894/1062	768/997
NIMUS-TR 630 (Sist. 12)	20	20	11.5	-	-	988/1148	965/1124	942/1102	818/1037
NIMUS-TR 710 (Sist. 12)	20	20	11.5	-	-	-	1024/1176	1000/1153	880/1076

Model	D1	D2	D3	DEC MIN/MA X (T. mot 80)	DEC MIN/MA X (T. mot 90)	DEC MIN/MA X (T. mot 100)	DEC MIN/MA X (T. mot 112)	DEC MIN/MA X (T. mot 132)	DEC MIN/MA X (T. mot 160)
NIMUS-TR 800 (Sist. 12)	20	20	11.5	-	-	-	1306, 26/1469	1285/14 48	1160/13 80
NIMUS-TR 900 (Sist. 12)	20	20	11.5	-	-	-	1303/14 49	1279/14 26	1181/13 57
NIMUS-TR 1000 (Sist. 12)	20	20	11.5	-	-	-	-	1360/15 00	1264/14 30

Model	DEC MIN/MA X (T. mot 180)	DEC MIN/MA X (T. mot 200)	DEC MIN/MA X (T. mot 225)	DEC MIN/MA X (T. mot 250)	E	F	G	H	I
NIMUS-TR 500 (Sist. 12)	-	-	-	-	156	435	87.78	325	685.6
NIMUS-TR 560 (Sist. 12)	-	-	-	-	156	435	87.75	363	755
NIMUS-TR 630 (Sist. 12)	796/101 6	-	-	-	159.69	571	103.75	407	825
NIMUS-TR 710 (Sist. 12)	857/106 5	-	-	-	159.69	571	103.75	458	915
NIMUS-TR 800 (Sist. 12)	1138/13 59	1395/13 80	1366/16 97	1332/16 65	206.76	676	97.25	514	1020
NIMUS-TR 900 (Sist. 12)	1151/13 35	1364/16 75	1350/16 46	1300/16 12	214	676	103.75	576	1145
NIMUS-TR 1000 (Sist. 12)	1234/14 30	1433/17 31	1418/17 01	1367/16 67	214	676	103.75	642	1256

Model	J	K	L	M	N	N1	N2	O	P
NIMUS-TR 500 (Sist. 12)	80	150	613.9	128	396	316	366	470.75	140
NIMUS-TR 560 (Sist. 12)	80	150	613.9	147	434	354	404	508.75	140
NIMUS-TR 630 (Sist. 12)	90	150	769.5	169	478	398	448	552.75	140
NIMUS-TR 710 (Sist. 12)	90	150	769.5	184.5	529	449	499	603.75	140
NIMUS-TR 800 (Sist. 12)	105	175	914.6	202.5	585	505	555	664	160
NIMUS-TR 900 (Sist. 12)	105	175	914.6	223.5	647	567	617	740.5	160
NIMUS-TR 1000 (Sist. 12)	105	175	914.6	256.5	713	633	683	806	160

Model	Q (T. mot 100-112 -132)	Q (T. mot 160-180)	Q (T. mot 200-225 -250)	Q (T. mot ≤90)	R	R1	R2	R3	R4
NIMUS-TR 500 (Sist. 12)	51	72.9	-	44	580	500	550	147	146
NIMUS-TR 560 (Sist. 12)	51	72.9	-	44	640	560	610	170	165
NIMUS-TR 630 (Sist. 12)	51	72.9	-	-	710	630	680	190	190
NIMUS-TR 710 (Sist. 12)	51	72.9	-	-	790	710	760	210	210

Model	Q (T. mot 100-112-132)	Q (T. mot 160-180)	Q (T. mot 200-225-250)	Q (T. mot ≤90)	R	R1	R2	R3	R4
NIMUS-TR 800 (Sist. 12)	51	72.9	79.9	-	880	800	850	233	234
NIMUS-TR 900 (Sist. 12)	51	72.9	79.9	-	980	900	950	260	260
NIMUS-TR 1000 (Sist. 12)	51	72.9	79.9	-	1080	1000	1050	293	294

Model	S	T	TM (T. mot. 80)	TM (T. mot. 90)	TM (T. mot. 100)	TM (T. mot. 112)	TM (T. mot. 132)	TM (T. mot. 160)	TM (T. mot. 180)
NIMUS-TR 500 (Sist. 12)	75.1	625.6	80	90	100	112	132	160	-
NIMUS-TR 560 (Sist. 12)	112.5	695	-	90	100	112	132	160	-
NIMUS-TR 630 (Sist. 12)	156.1	775	-	-	100	112	132	160	180
NIMUS-TR 710 (Sist. 12)	206	865	-	-	-	112	132	160	180
NIMUS-TR 800 (Sist. 12)	203.6	965	-	-	-	112	132	160	180
NIMUS-TR 900 (Sist. 12)	148.4	1090	-	-	-	112	132	160	180
NIMUS-TR 1000 (Sist. 12)	210.7	1201	-	-	-	-	132	160	180

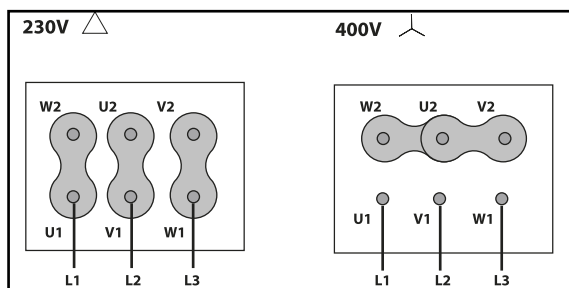
Model	TM (T. mot. 200)	TM (T. mot. 225)	TM (T. mot. 250)	V	W	W1	W2	W3	W4
NIMUS-TR 500 (Sist. 12)	-	-	-	38	463.9	385.58	39.14	466.85	487
NIMUS-TR 560 (Sist. 12)	-	-	-	38	463.9	385.81	39.14	504.85	487
NIMUS-TR 630 (Sist. 12)	-	-	-	38	619.53	541.31	39.14	548.85	487
NIMUS-TR 710 (Sist. 12)	-	-	-	38	619.53	541.31	39.14	600.85	487
NIMUS-TR 800 (Sist. 12)	200	225	250	40	739.6	630	54.35	671.35	600
NIMUS-TR 900 (Sist. 12)	200	225	250	40	739.6	627.4	55.8	749.3	600
NIMUS-TR 1000 (Sist. 12)	200	225	250	40	739.6	627.4	55.8	749.3	600

Model	X	Y (T. mot 100-132)	Y (T. mot 160-180)	Y (T. mot ≤90)	Y (T. mot ≥160)	Z	z1 (nº holes)	ØU
NIMUS-TR 500 (Sist. 12)	40.5	603	-	448	785	487	8	535
NIMUS-TR 560 (Sist. 12)	40.5	603	-	448	785	487	16	608
NIMUS-TR 630 (Sist. 12)	40.5	603	-	-	785	487	16	675
NIMUS-TR 710 (Sist. 12)	40.5	603	-	-	785	487	16	755
NIMUS-TR 800 (Sist. 12)	49.5	602.5	785	-	-	600	16	845
NIMUS-TR 900 (Sist. 12)	49.5	602.5	785	-	-	835	16	987
NIMUS-TR 1000 (Sist. 12)	49.5	-	785	-	-	835	16	1093

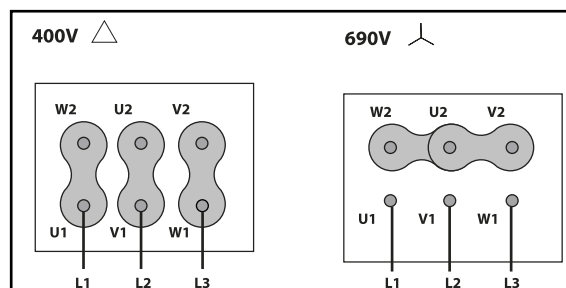
Wiring diagram

Wiring diagram N° 1

230/400V



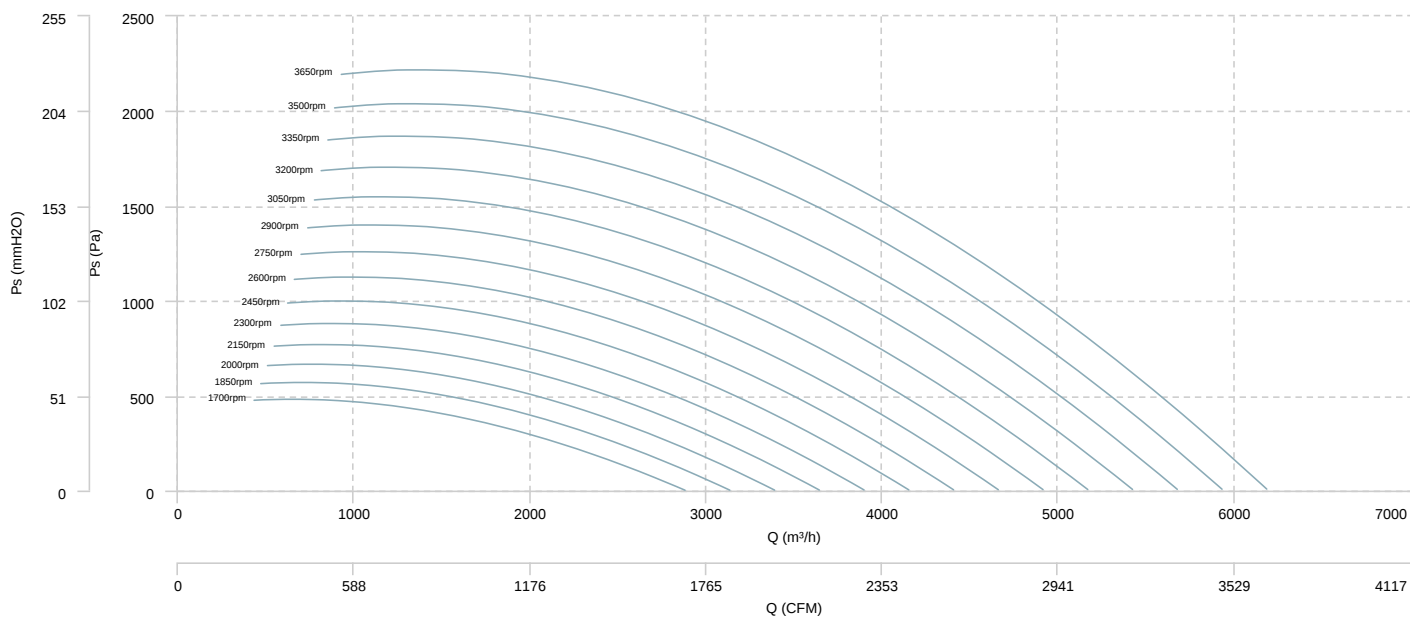
400/690V



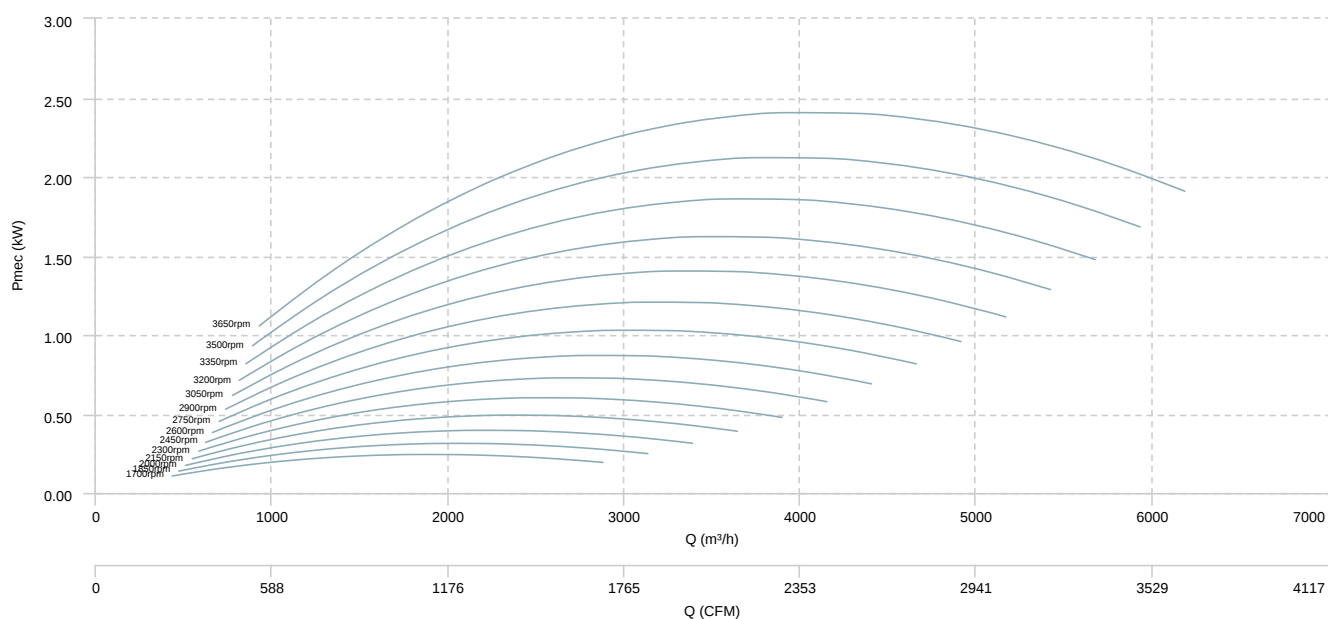
CHARACTERISCTIC CURVE

NIMUS-TR 315 (Sist. 12)

AIR FLOW - PRESSURE

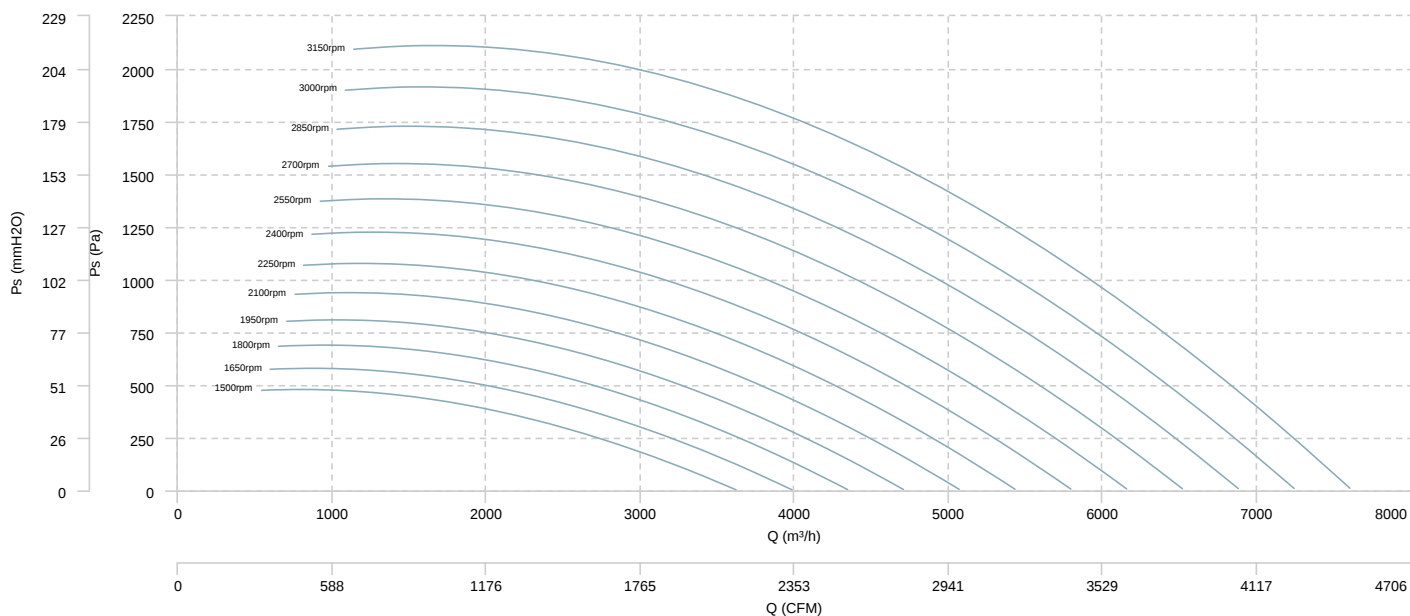


AIR FLOW - MECHANICAL POWER

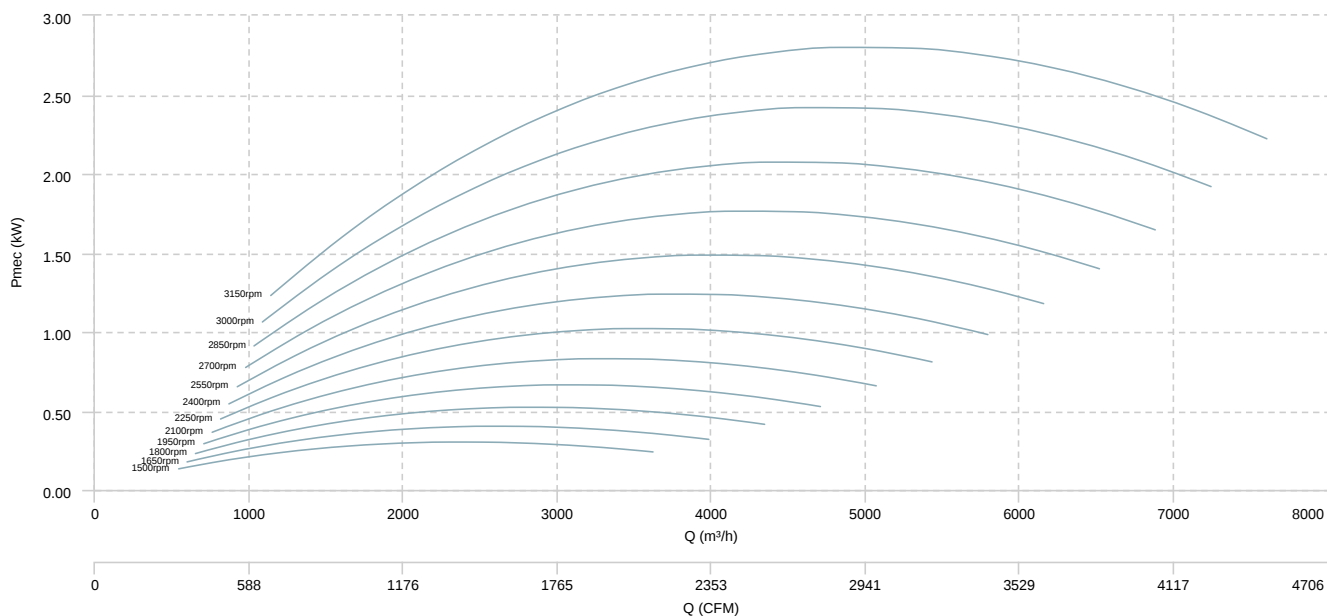


NIMUS-TR 350 (Sist. 12)

AIR FLOW - PRESSURE

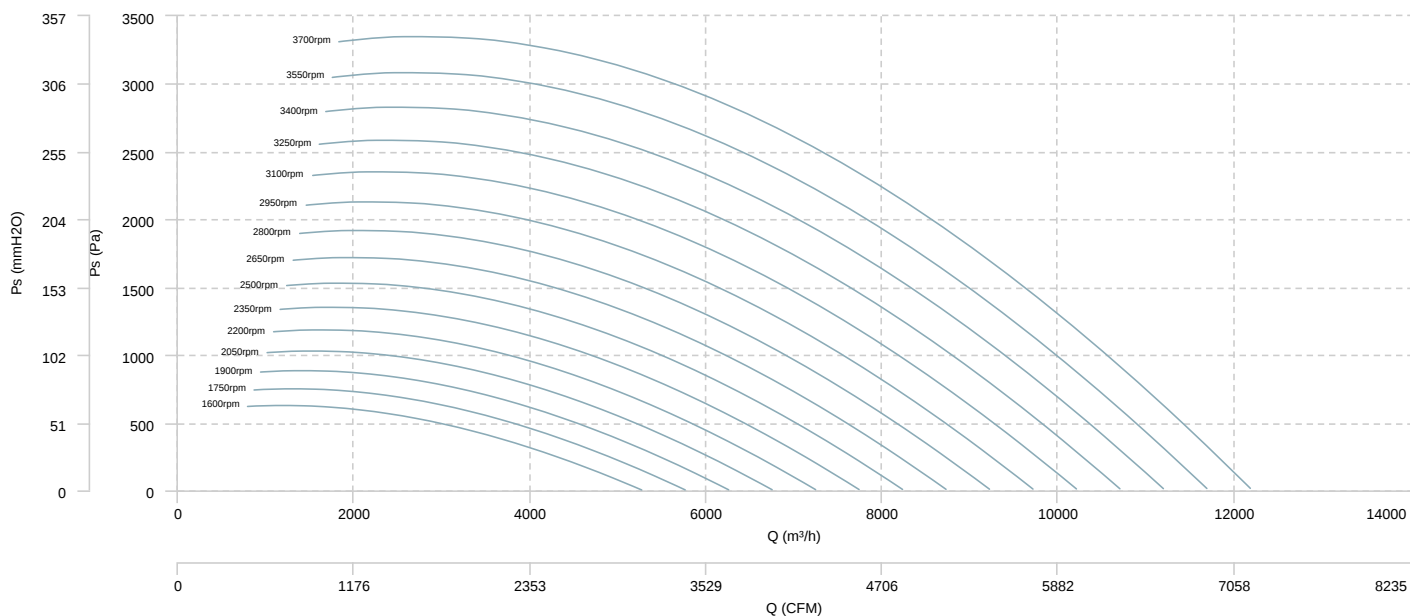


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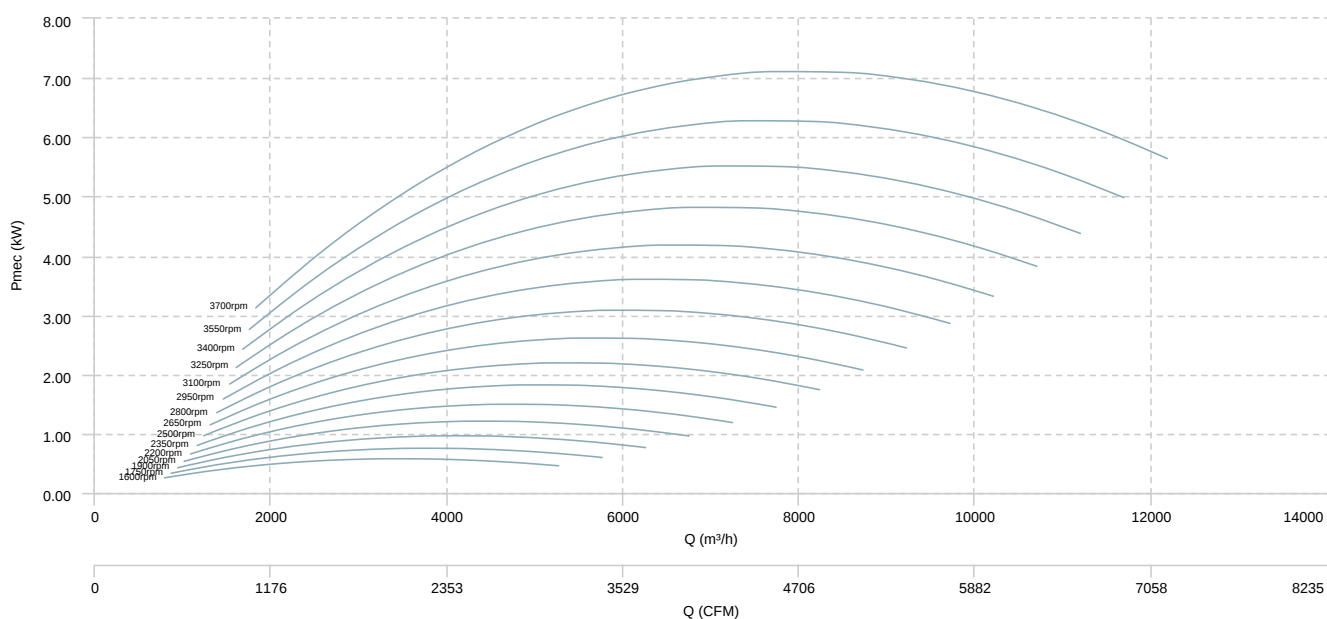


NIMUS-TR 400 (Sist. 12)

AIR FLOW - PRESSURE

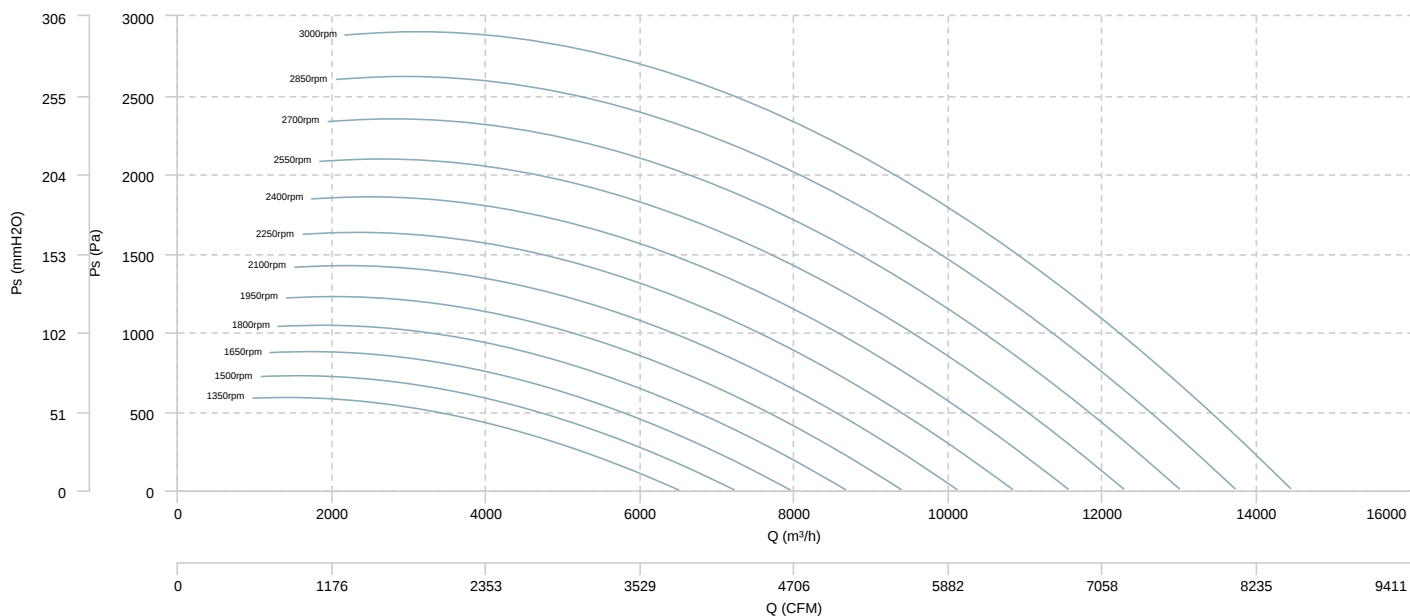


AIR FLOW - MECHANICAL POWER

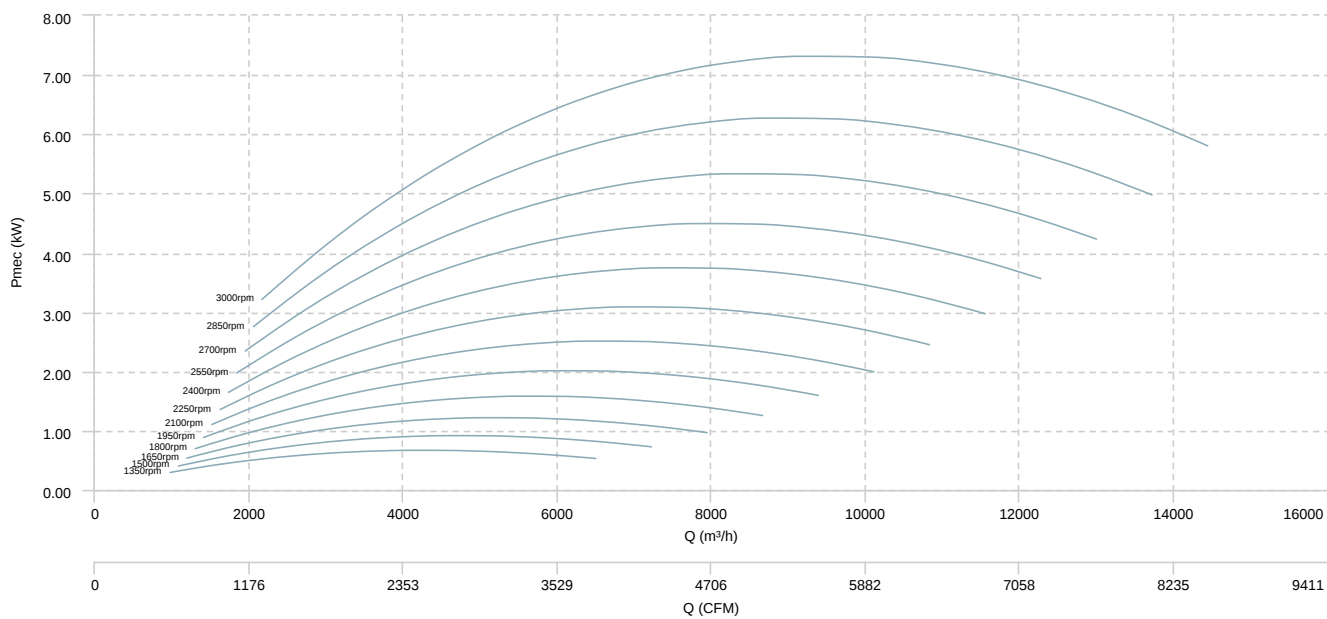


NIMUS-TR 450 (Sist. 12)

AIR FLOW - PRESSURE

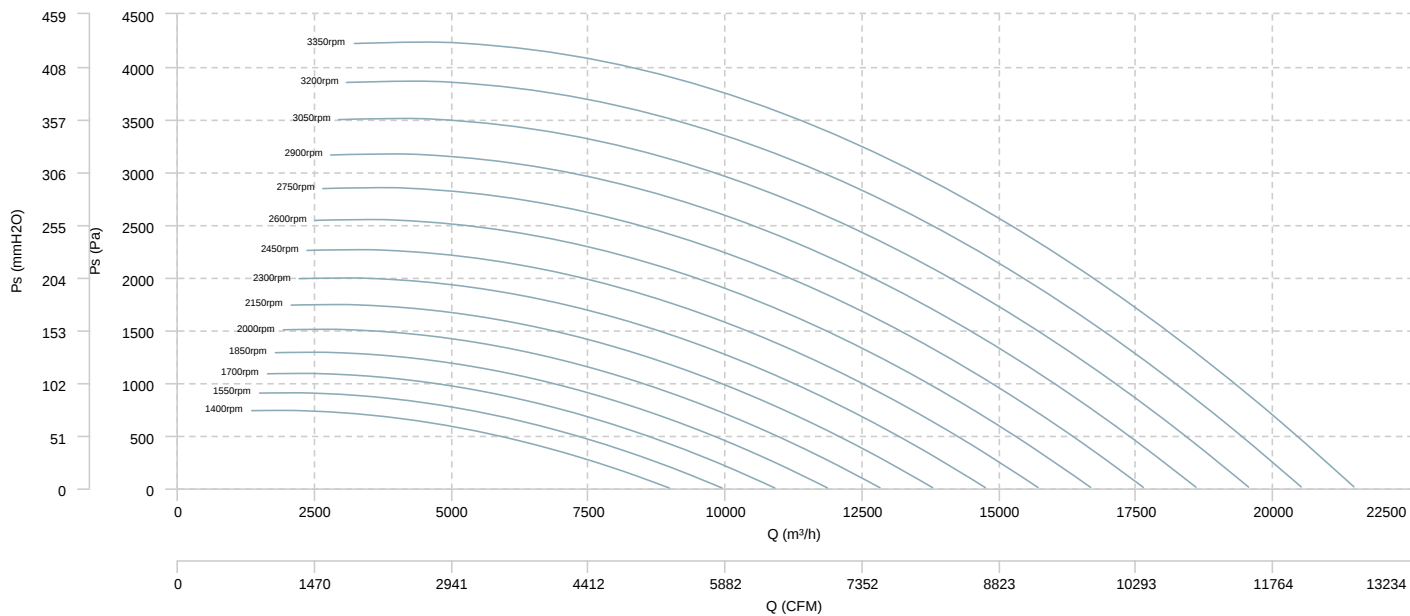


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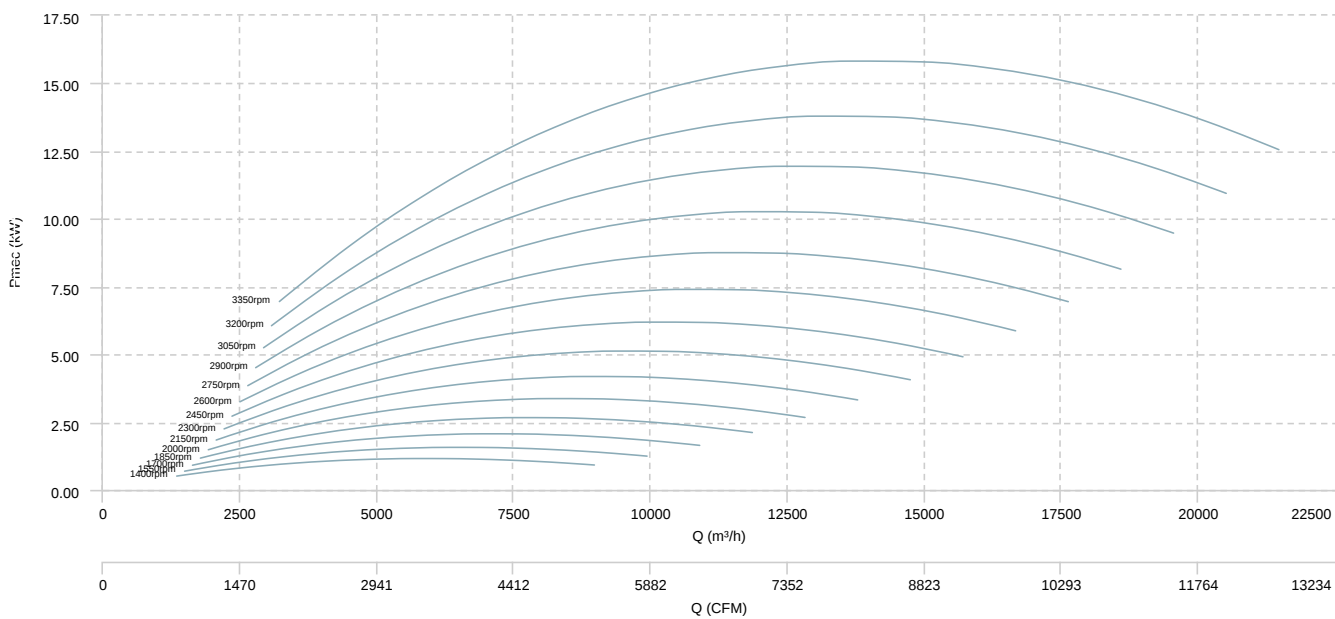


NIMUS-TR 500 (Sist. 12)

AIR FLOW - PRESSURE

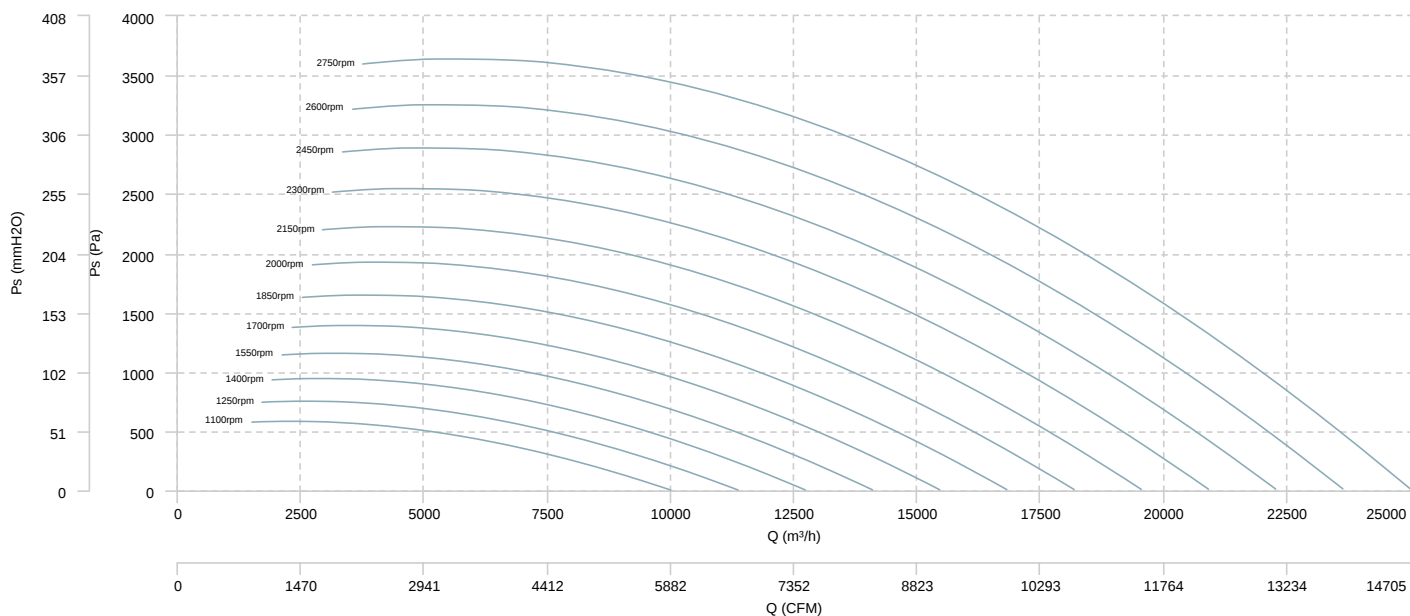


AIR FLOW - MECHANICAL POWER

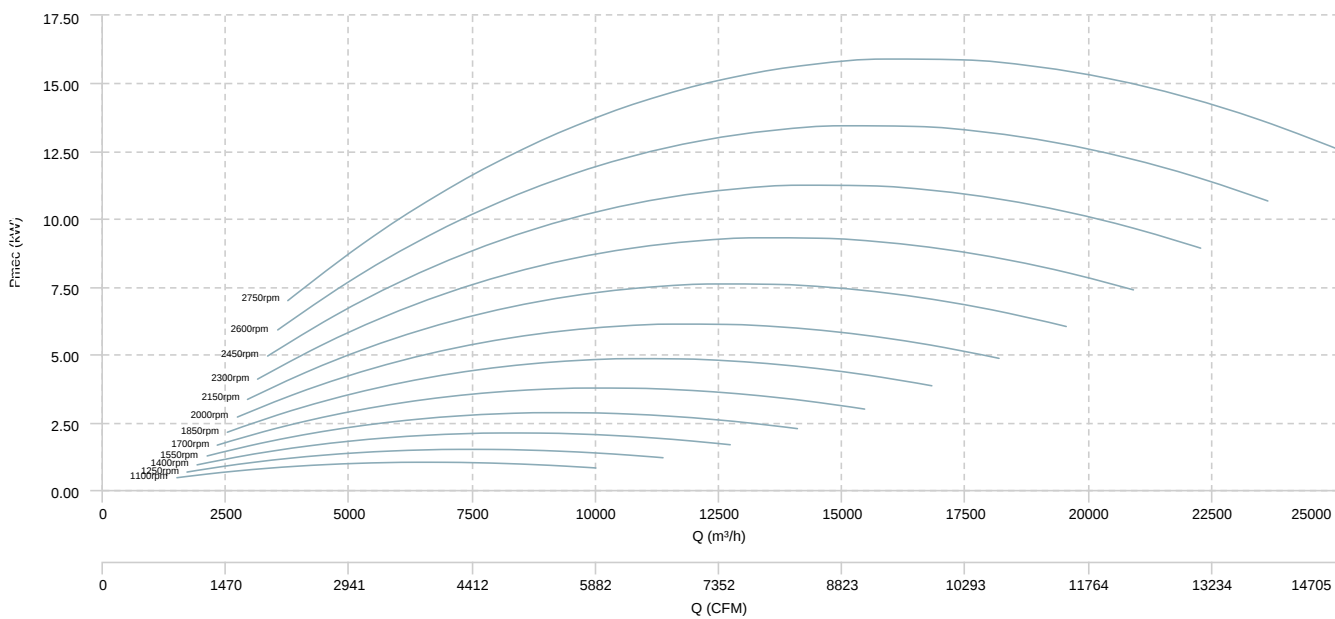


NIMUS-TR 560 (Sist. 12)

AIR FLOW - PRESSURE

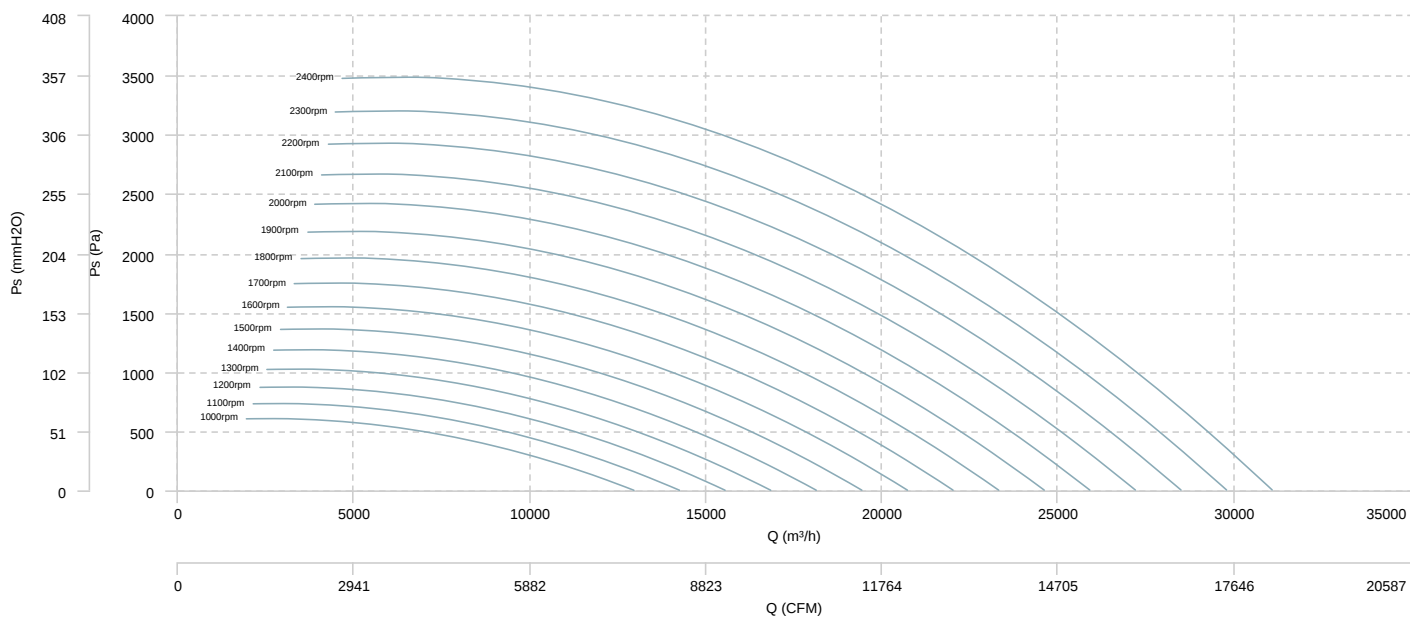


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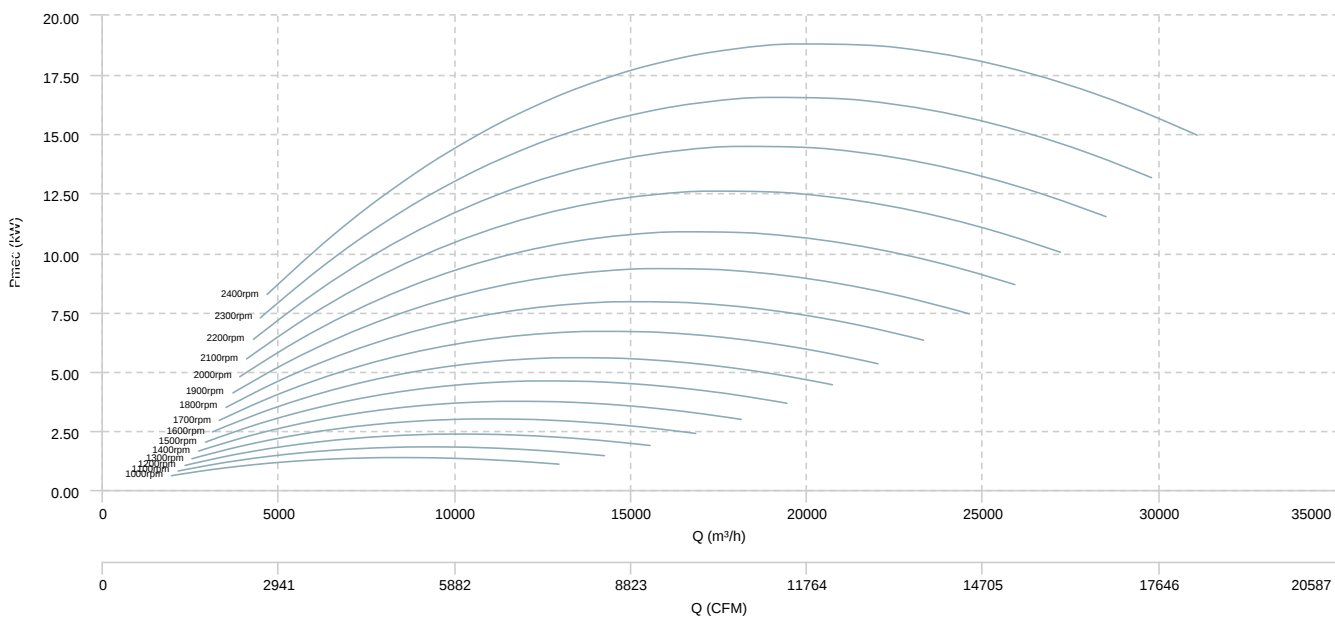


NIMUS-TR 630 (Sist. 12)

AIR FLOW - PRESSURE

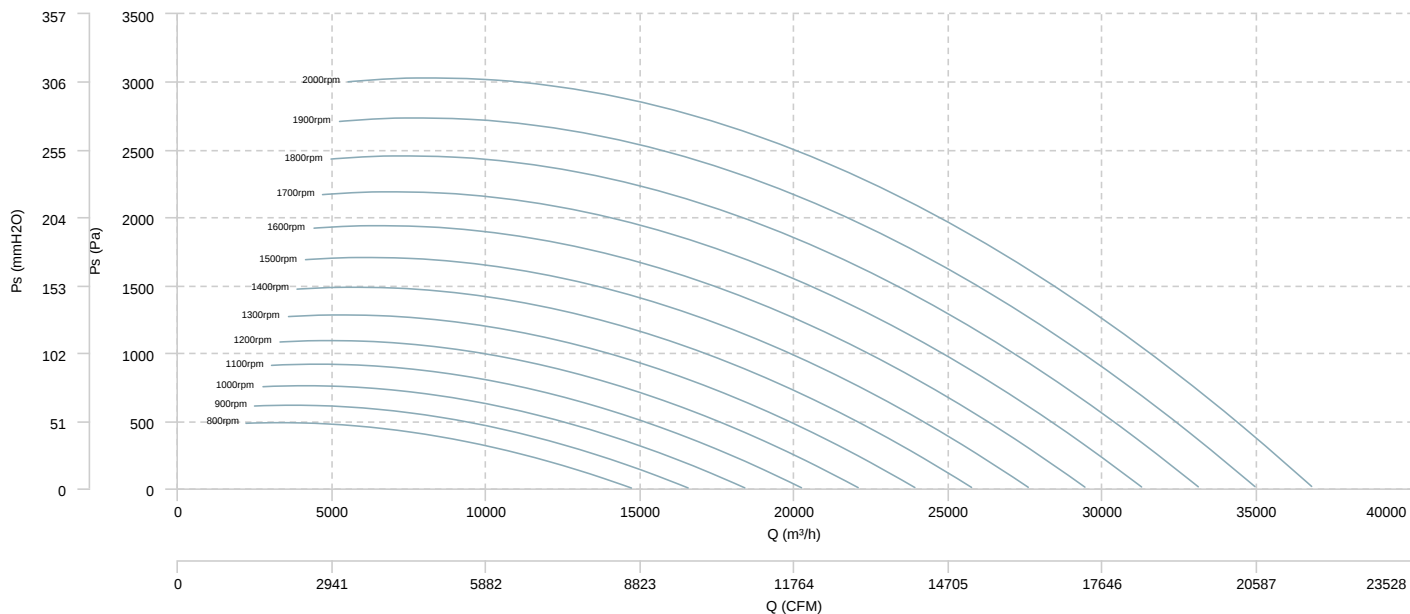


AIR FLOW - MECHANICAL POWER

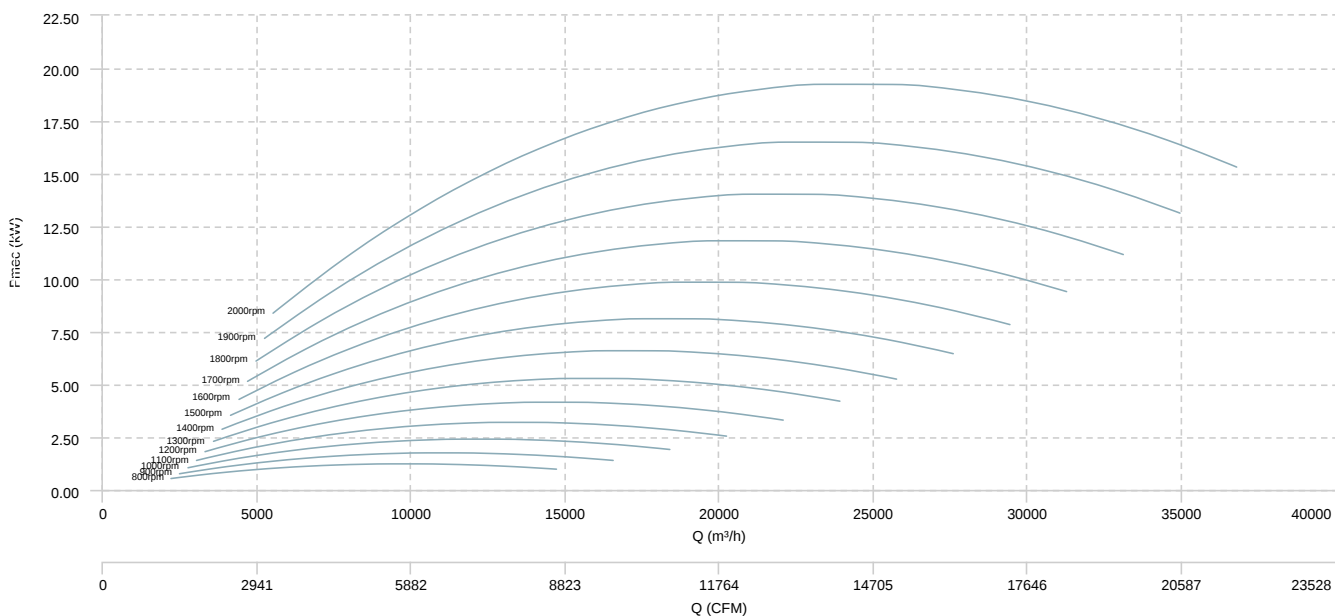


NIMUS-TR 710 (Sist. 12)

AIR FLOW - PRESSURE

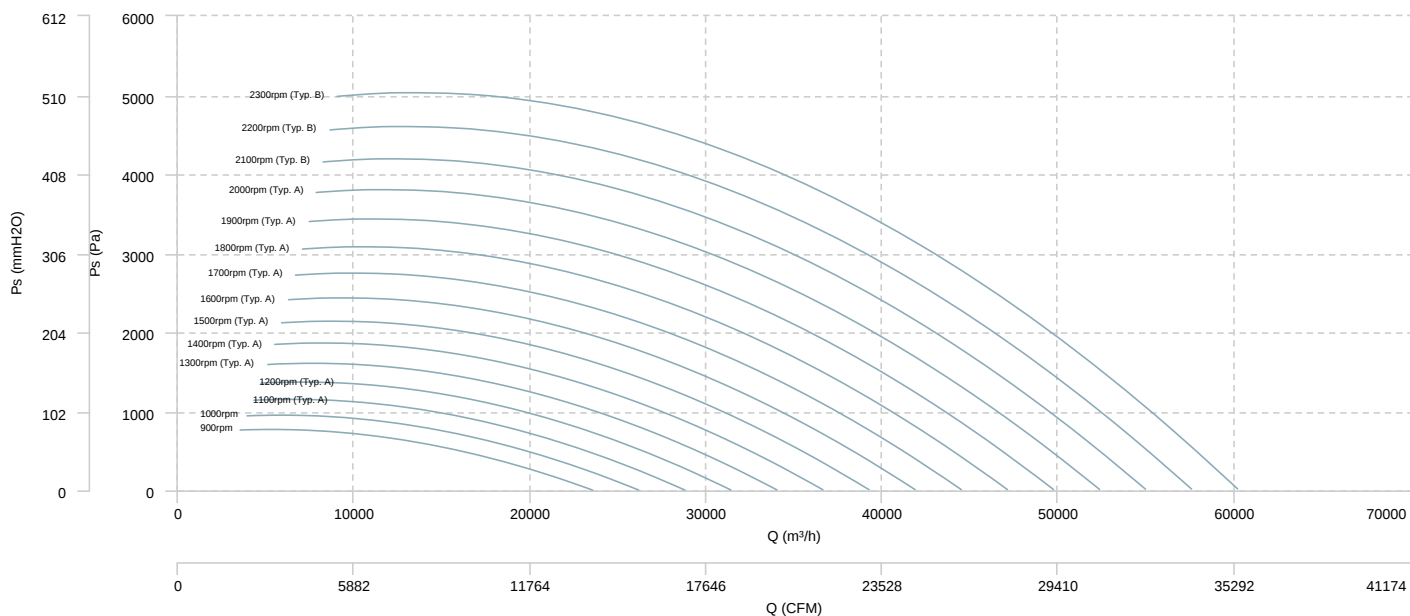


AIR FLOW - MECHANICAL POWER

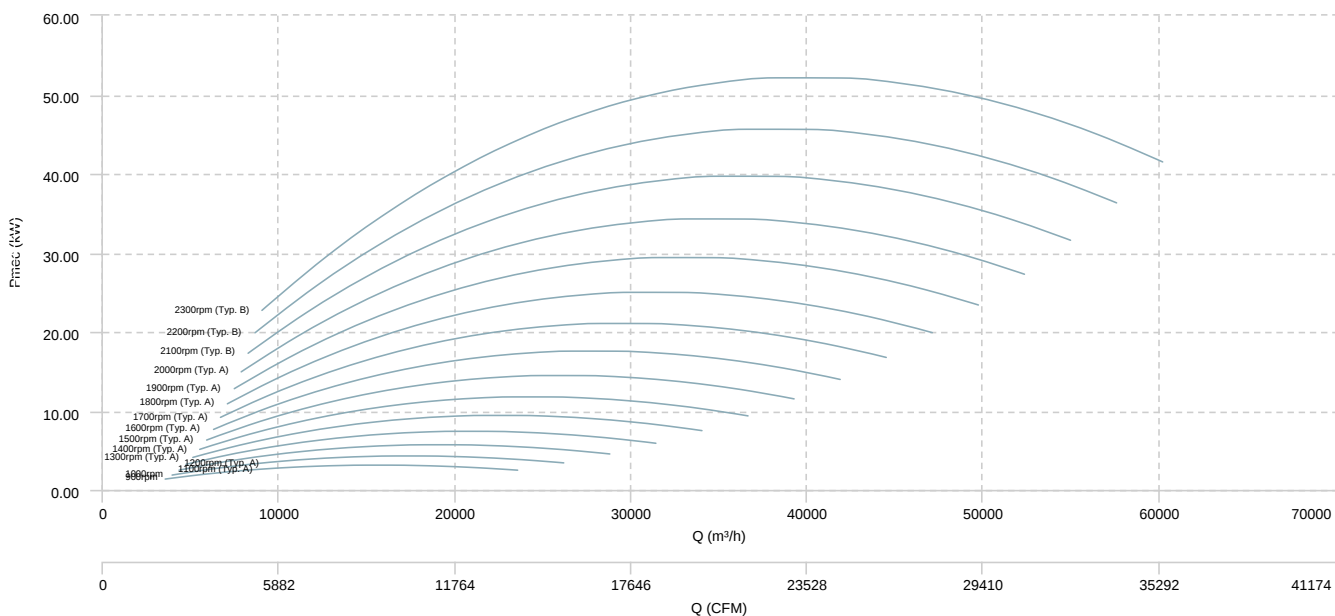


NIMUS-TR 800 (Sist. 12)

AIR FLOW - PRESSURE

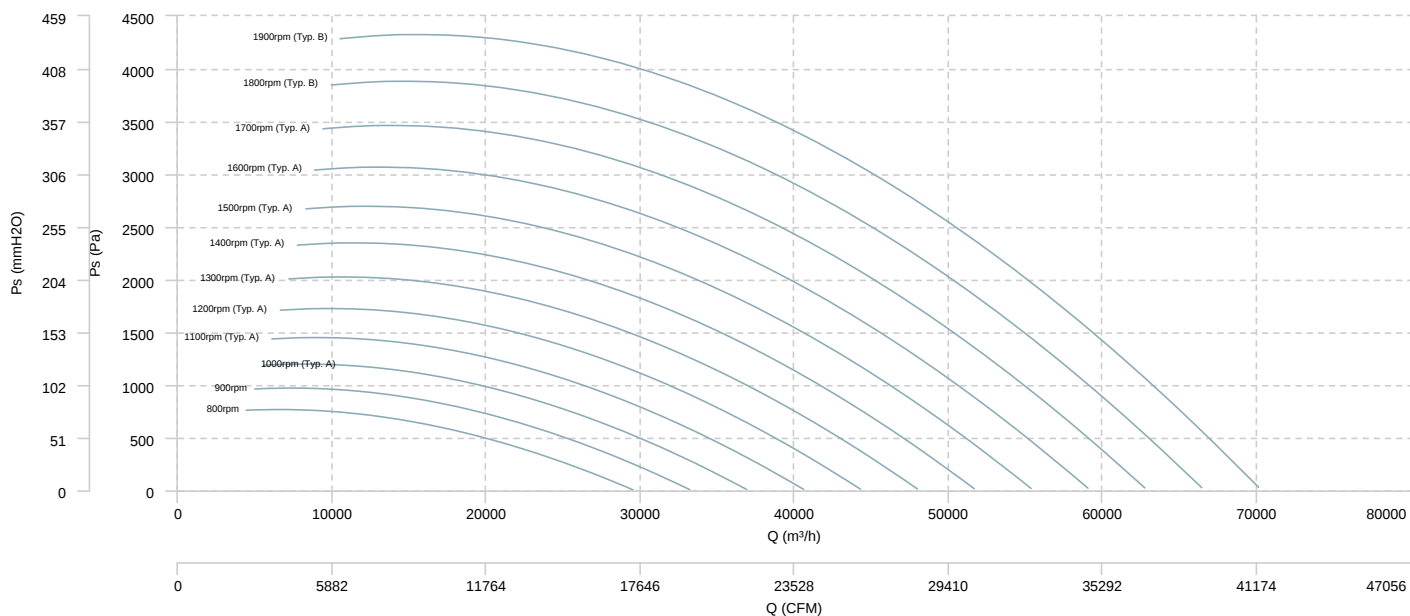


AIR FLOW - MECHANICAL POWER

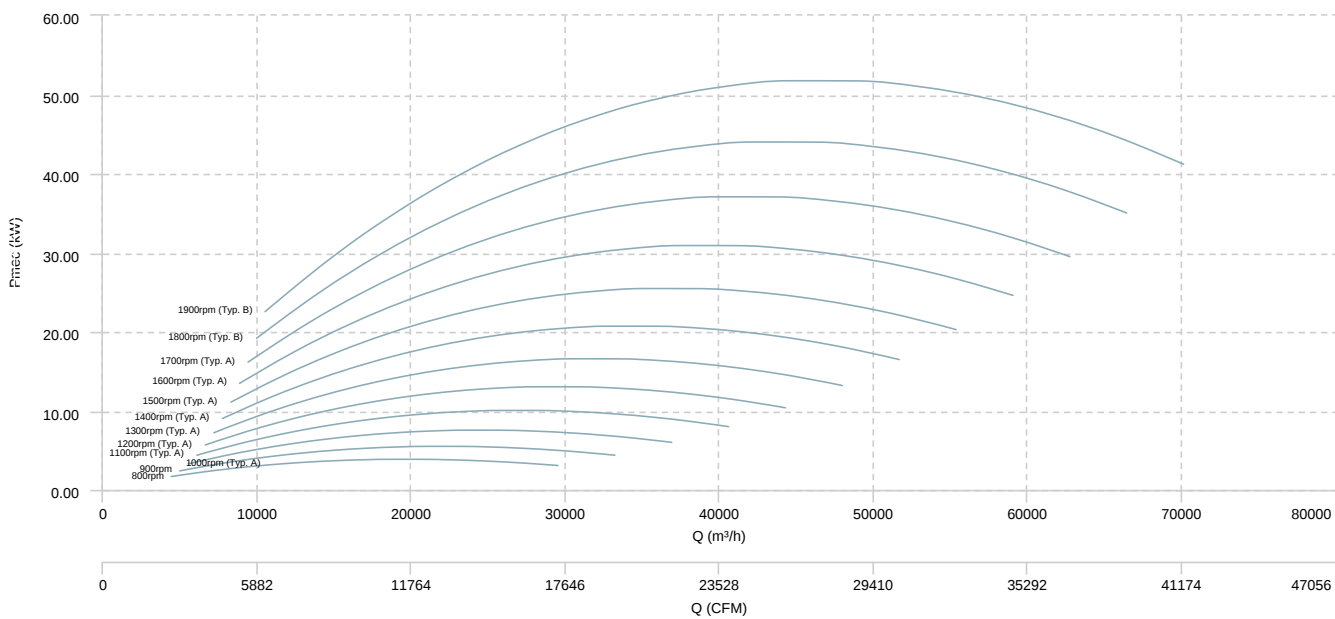


NIMUS-TR 900 (Sist. 12)

AIR FLOW - PRESSURE

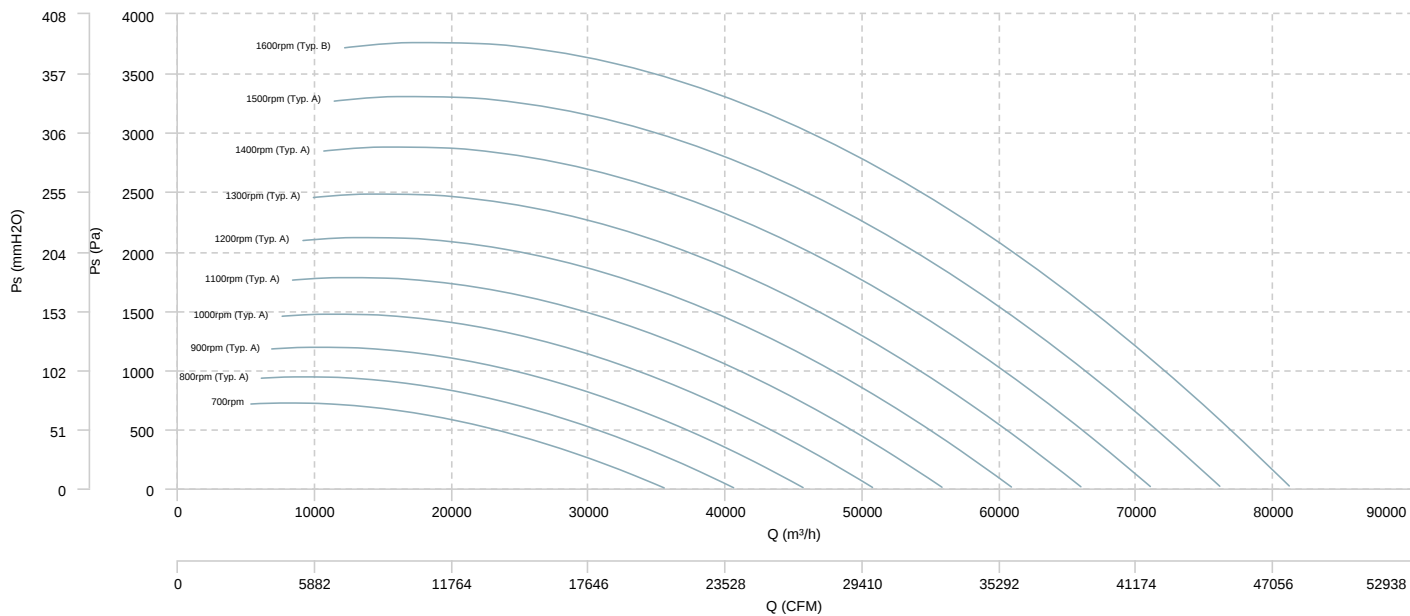


AIR FLOW - MECHANICAL POWER

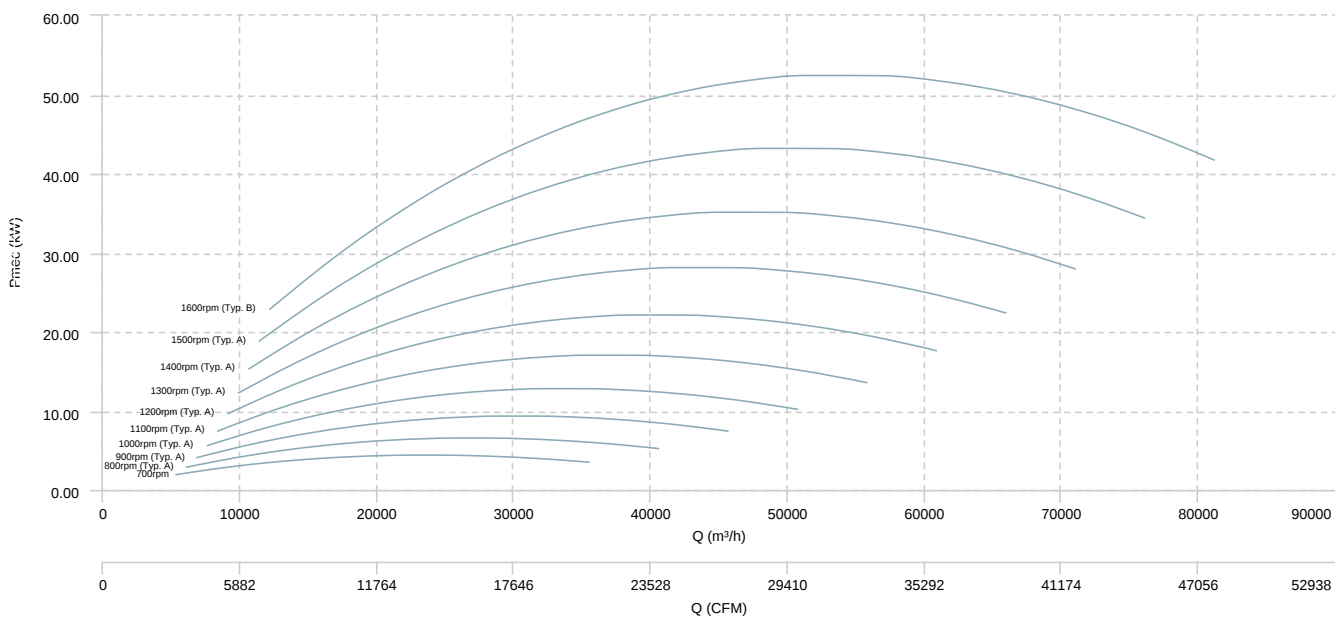


NIMUS-TR 1000 (Sist. 12)

AIR FLOW - PRESSURE



AIR FLOW - MECHANICAL POWER



Sound data

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
NIMUS-TR 315 (Sist. 12) (1700rpm)	Inlet	68	66	63	61	59	56	53	50	72
NIMUS-TR 350 (Sist. 12) (1500rpm)	Inlet	69	67	64	62	60	57	54	51	73
NIMUS-TR 400 (Sist. 12) (1600rpm)	Inlet	74	72	69	67	65	62	59	56	78
NIMUS-TR 450 (Sist. 12) (1350rpm)	Inlet	74	72	69	67	65	62	59	56	78
NIMUS-TR 500 (Sist. 12) (1400rpm)	Inlet	78	76	73	71	69	66	63	60	82
NIMUS-TR 560 (Sist. 12) (1100rpm)	Inlet	76	74	71	69	67	64	61	58	80
NIMUS-TR 630 (Sist. 12) (1000rpm)	Inlet	77	75	72	70	68	65	62	59	81
NIMUS-TR 710 (Sist. 12) (800rpm)	Inlet	76	74	71	69	67	64	61	58	80
NIMUS-TR 800 (Sist. 12) (500rpm)	Inlet	69	67	64	62	60	57	54	51	73
NIMUS-TR 900 (Sist. 12) (500rpm)	Inlet	72	70	67	65	63	60	57	54	76
NIMUS-TR 1000 (Sist. 12) (500rpm)	Inlet	76	74	71	69	67	64	61	58	80

Notes:

* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$Lw \text{ dB(A)}_{rpmA} = Lw \text{ dB(A)}_{rpmB} + 52.5 \cdot \log_{10} \frac{rpmA}{rpmB}$$