

BOX BV PLUS



BELT DRIVEN CENTRIFUGAL IN SOUNDPROOF CABINET WITH SANDWICH PANELS

MANUFACTURING FEATURES

- Impellers made of polyamide reinforced with fibreglass up to size 12/12 (33/33). Other models are made of galvanised steel sheet.
- BV, BVC, BVCR range fans assembled in soundproof cabinets.
- Ventilation box with 30 mm aluminum profile structure, nylon corners, galvanized sandwich panels with internal insulation rockwool (25mm thickness) class A1 (non-combustible) of 90kg/m3 density. All panels are equipped with "fastening system" for the quick assembly and disassembly whenever required, either for cleaning, maintenance or exchanging of panels.
- Fan assembled on antivibration mountings.
- Supplied with motor, pulleys and belts.
- Connection gland included.
- Squirrel cage asynchronous standard motor, IP-55 protection and rated class F insulation. Standard voltages 230/400V 50Hz for three phase, motors up to 4kW and 400/690V 50Hz for higher powers.

APPLICATIONS

Designed for inline installation, indoor or outdoor assembly, they are suitable for:

- Air renewal in buildings and industries.
- Industrial and professional kitchen hood.
- Maximum working temperature: 60°C.

UNDER REQUEST

- Special voltages
- 2 speed motors.
- LG0 position.
- Impeller made of galvanized sheet.

Accessories



Technical data

Three-phase motor

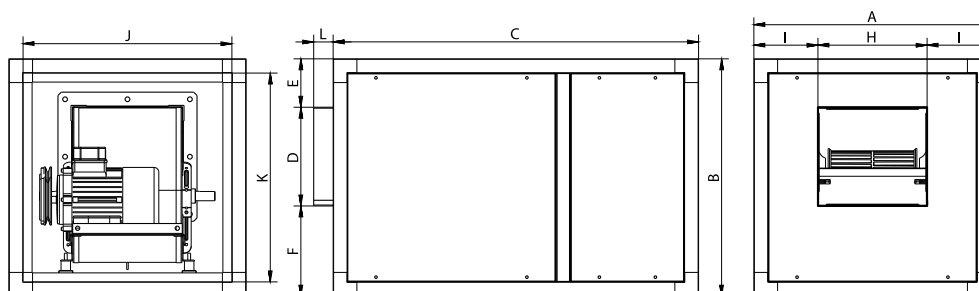
Code	Model	RPM	Min. Rated power kW	Max. Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
	BOX BV PLUS 7/7	1650 - 2000	0,37	0,75	3.170	50	32	1
	BOX BV PLUS 9/9	1200 - 1700	0,37	1,10	4.690	53	46	1
	BOX BV PLUS 10/10	1000 - 1650	0,37	1,50	6.150	56	48	1
	BOX BV PLUS 12/12	700 - 1400	0,37	2,20	9.080	60	62	1
	BOX BV PLUS 15/15	600 - 1100	0,55	4,00	11.790	56	76	1
	BOX BV PLUS 18/18	450 - 950	1,10	5,50	18.100	53	110	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



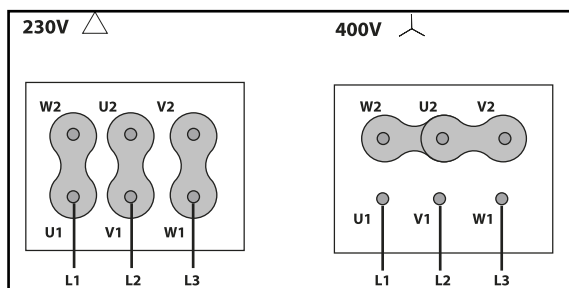
Model	A	B	C	D	E	F	H	I	J
BOX BV PLUS 7/7	500	500	770	208	102	190	230	135	440
BOX BV PLUS 9/9	550	550	820	260	82	208	301	121,5	490
BOX BV PLUS 10/10	600	600	870	291	80	229	329	135,5	540
BOX BV PLUS 12/12	700	700	970	343,5	103,25	253,25	396	152	640
BOX BV PLUS 15/15	800	800	1070	404	113	283	473	163,5	740
BOX BV PLUS 18/18	950	950	1220	483	139	328	556	197	890

Model	K	L
BOX BV PLUS 7/7	440	41
BOX BV PLUS 9/9	490	41
BOX BV PLUS 10/10	540	41
BOX BV PLUS 12/12	640	41
BOX BV PLUS 15/15	740	41
BOX BV PLUS 18/18	890	41

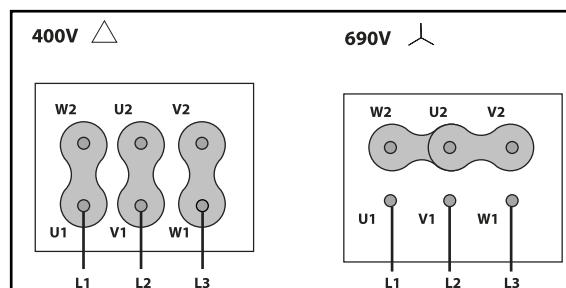
Wiring diagram

Wiring diagram N° 1

230/400V



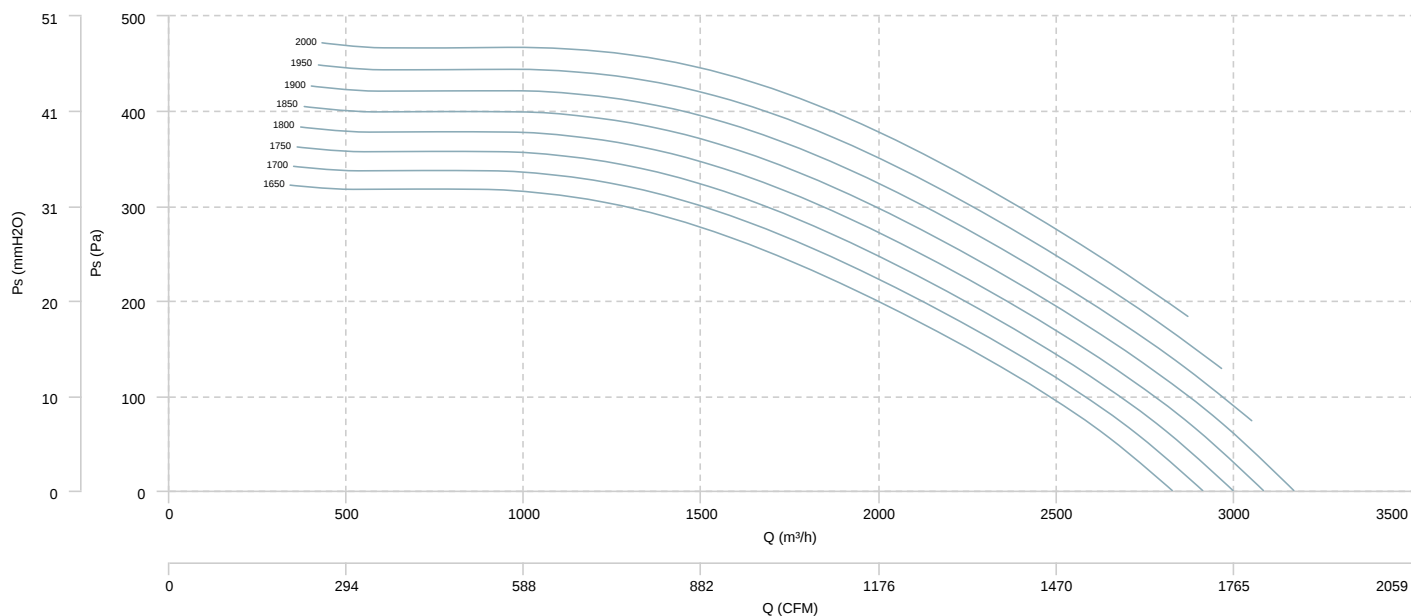
400/690V



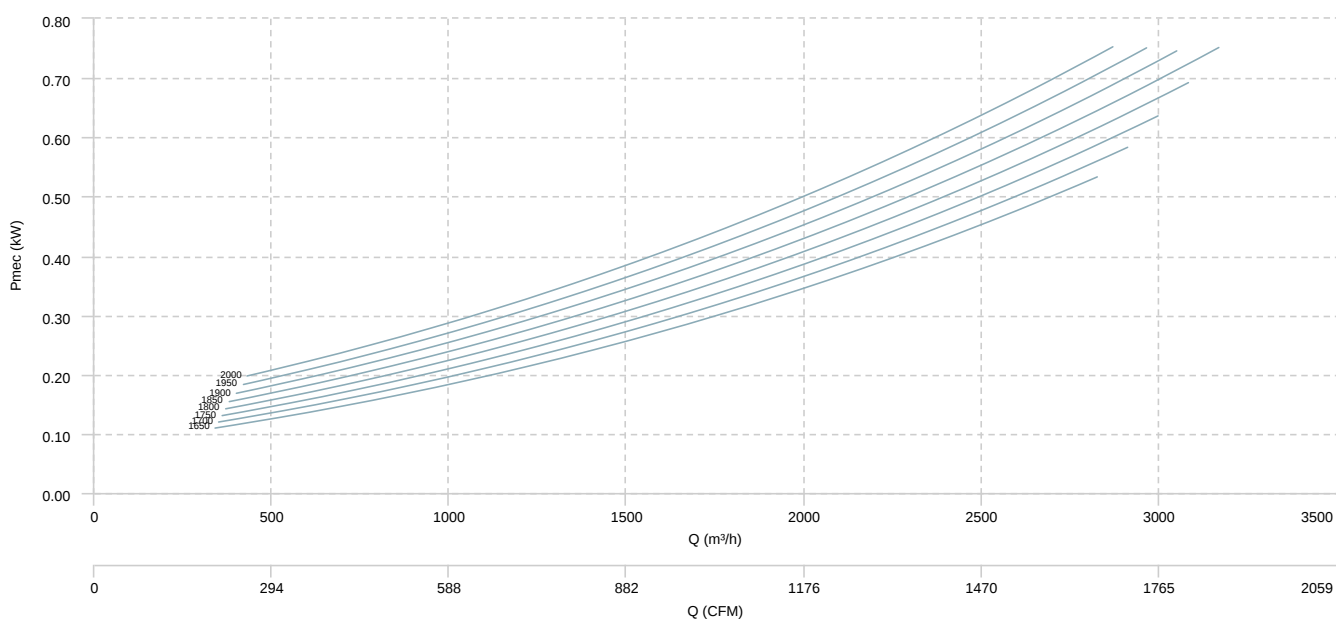
CHARACTERISCTIC CURVE

BOX BV PLUS 7/7

AIR FLOW - PRESSURE

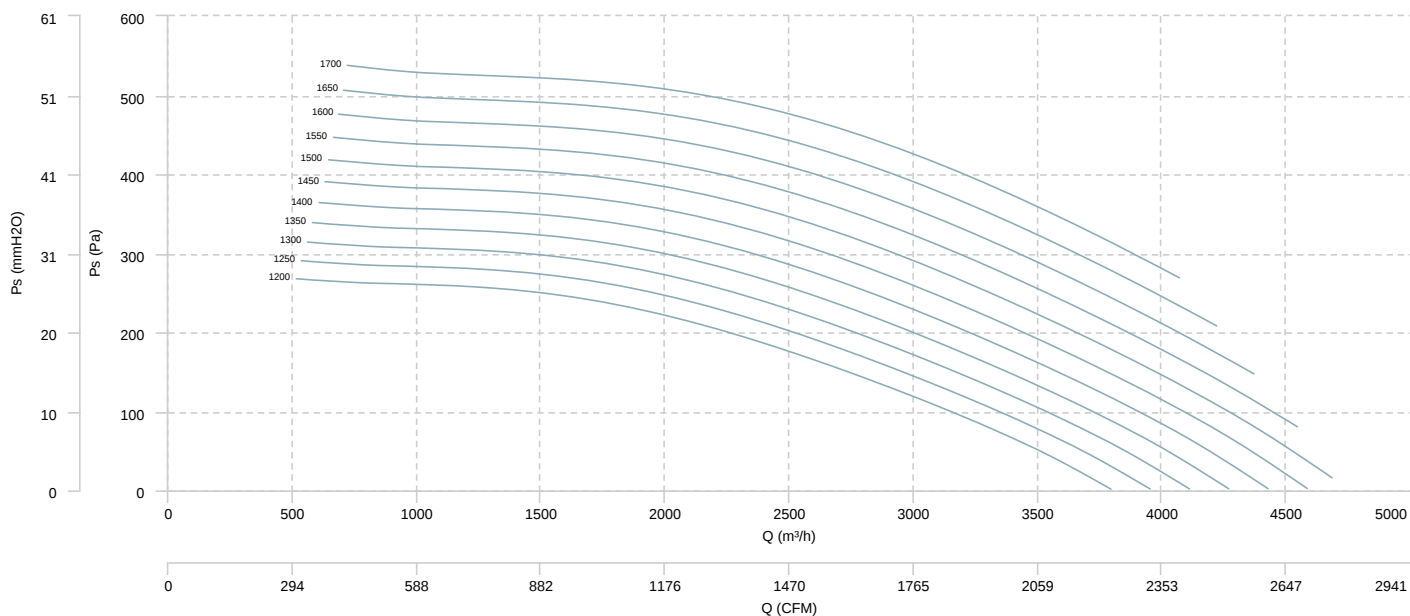


AIR FLOW - MECHANICAL POWER

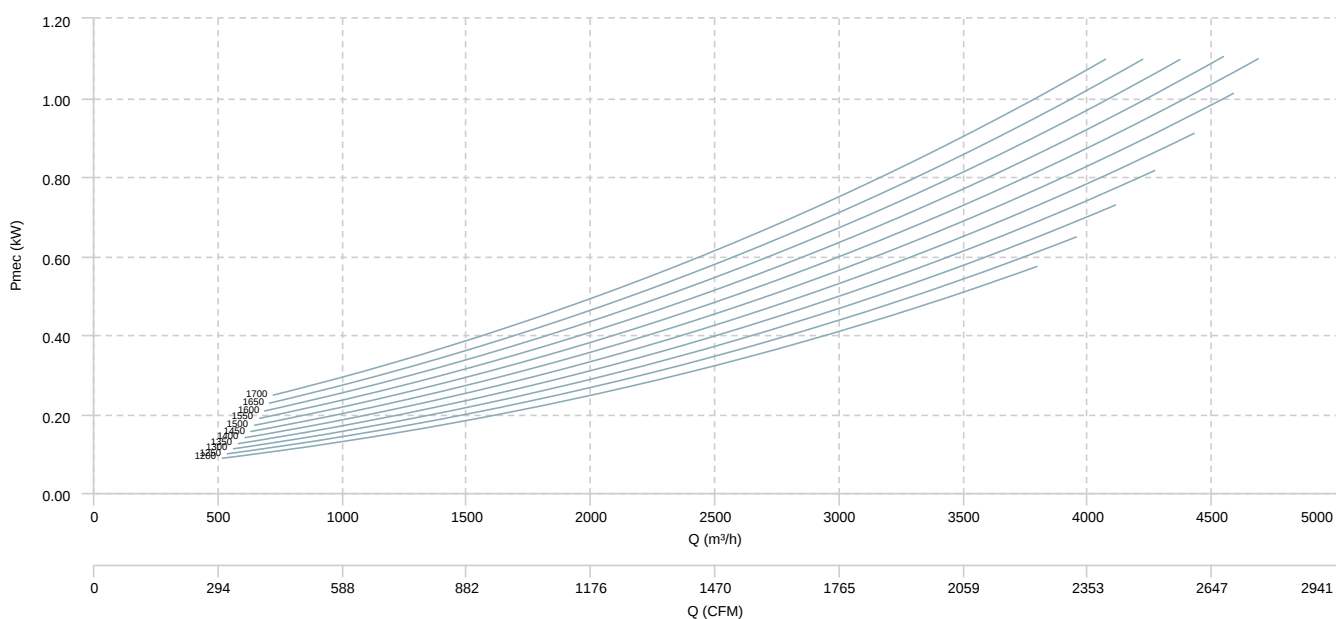


BOX BV PLUS 9/9

AIR FLOW - PRESSURE

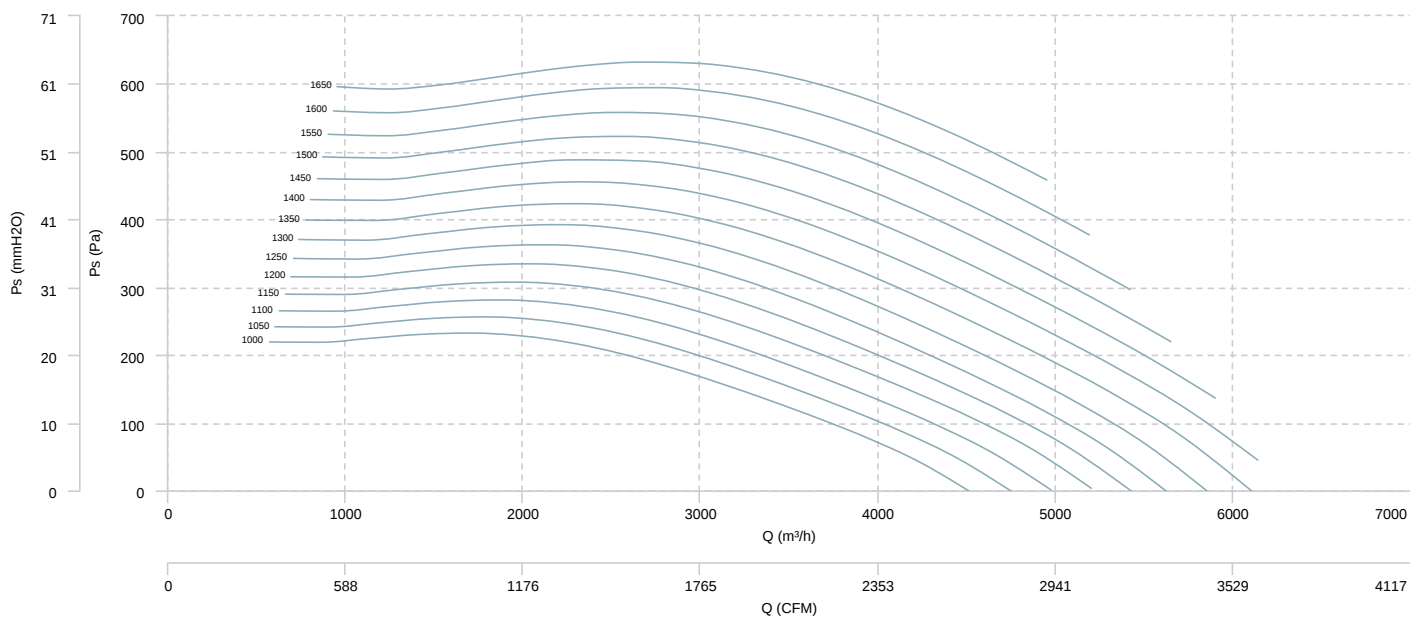


AIR FLOW - MECHANICAL POWER

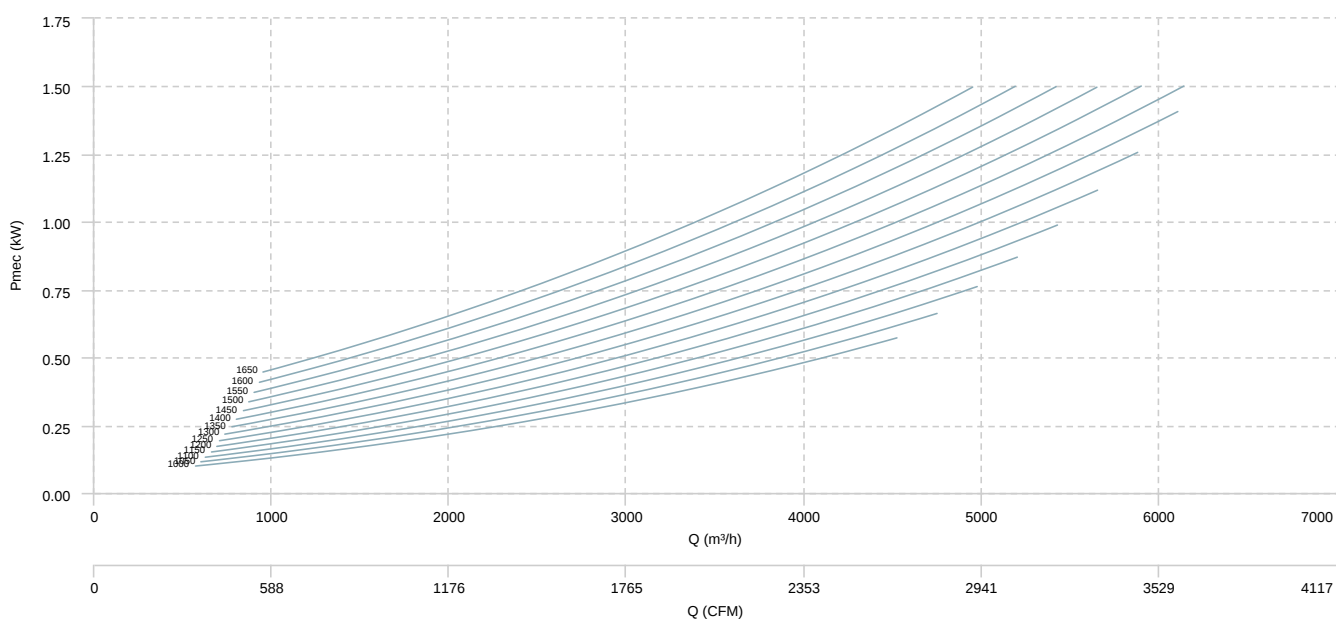


BOX BV PLUS 10/10

AIR FLOW - PRESSURE

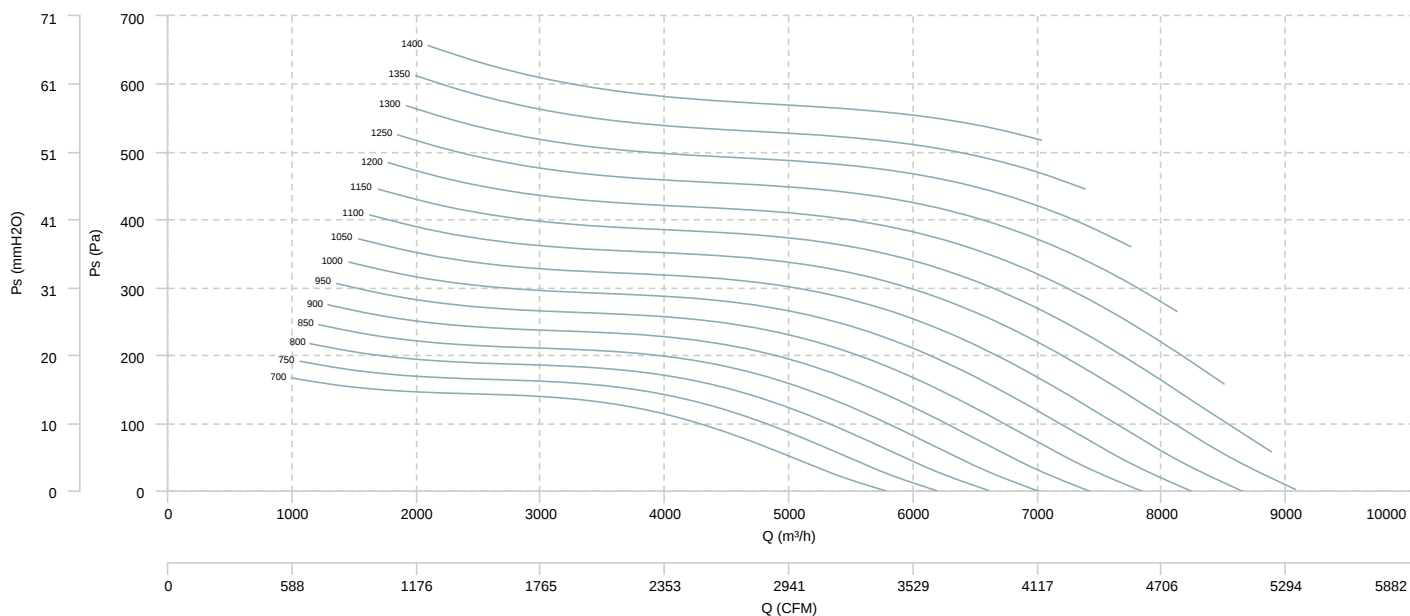


AIR FLOW - MECHANICAL POWER

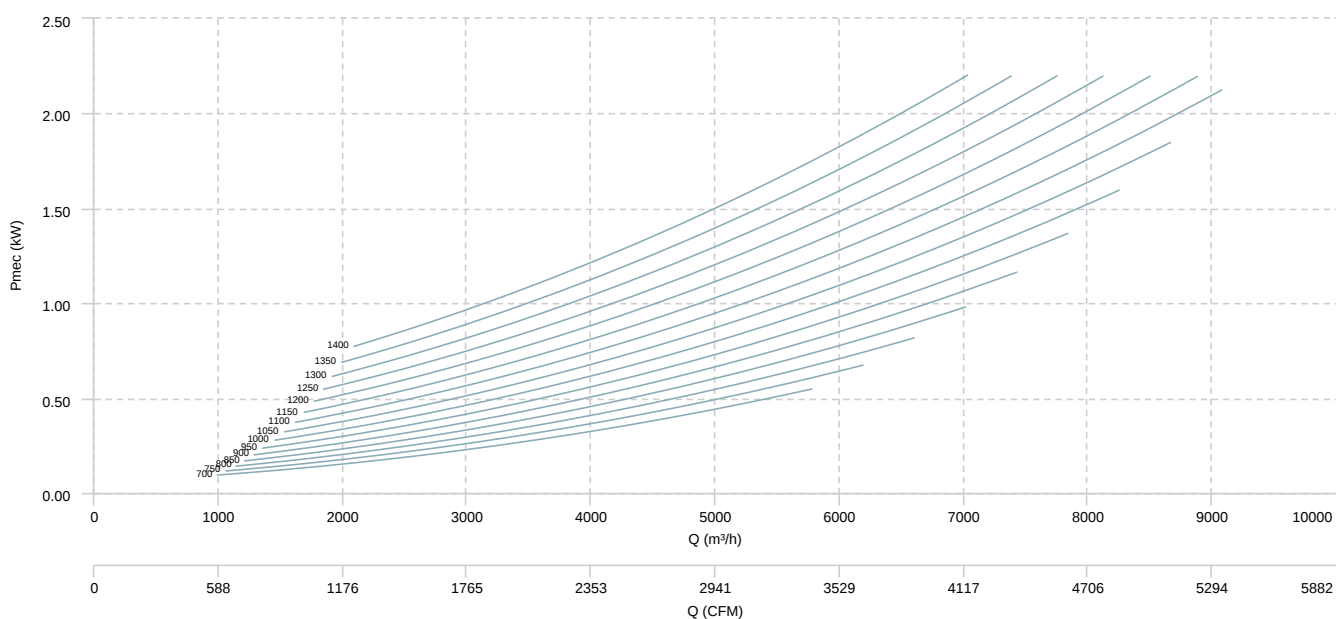


BOX BV PLUS 12/12

AIR FLOW - PRESSURE

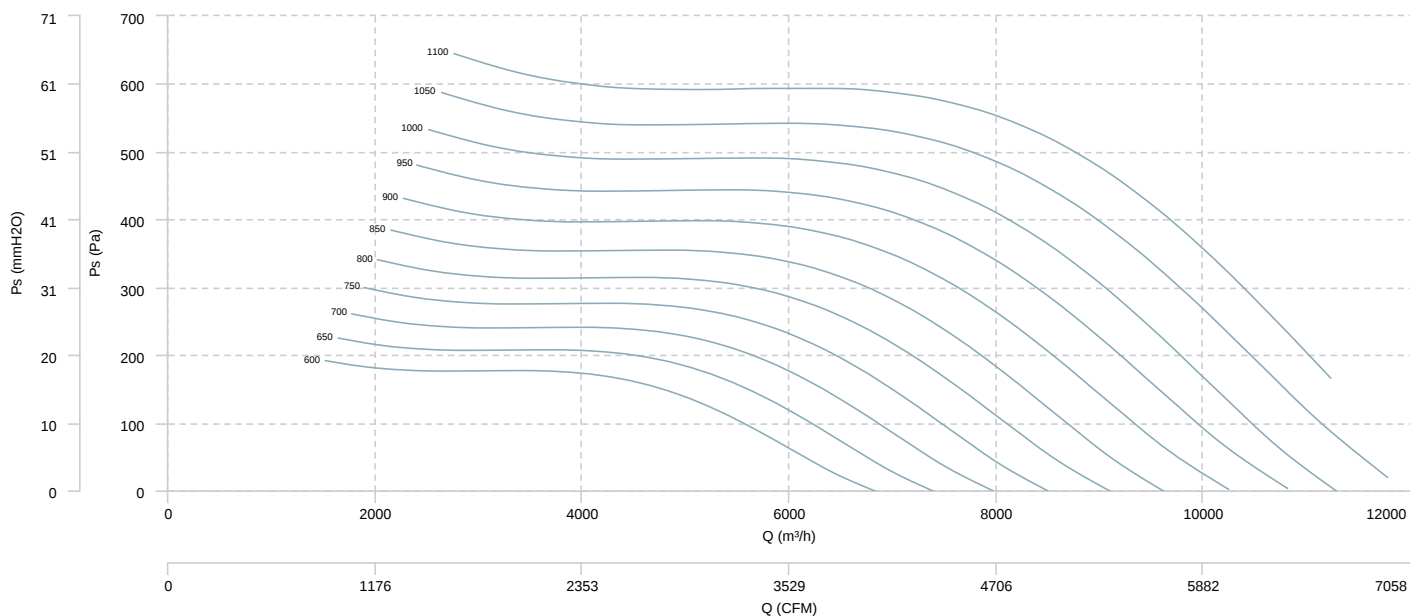


AIR FLOW - MECHANICAL POWER

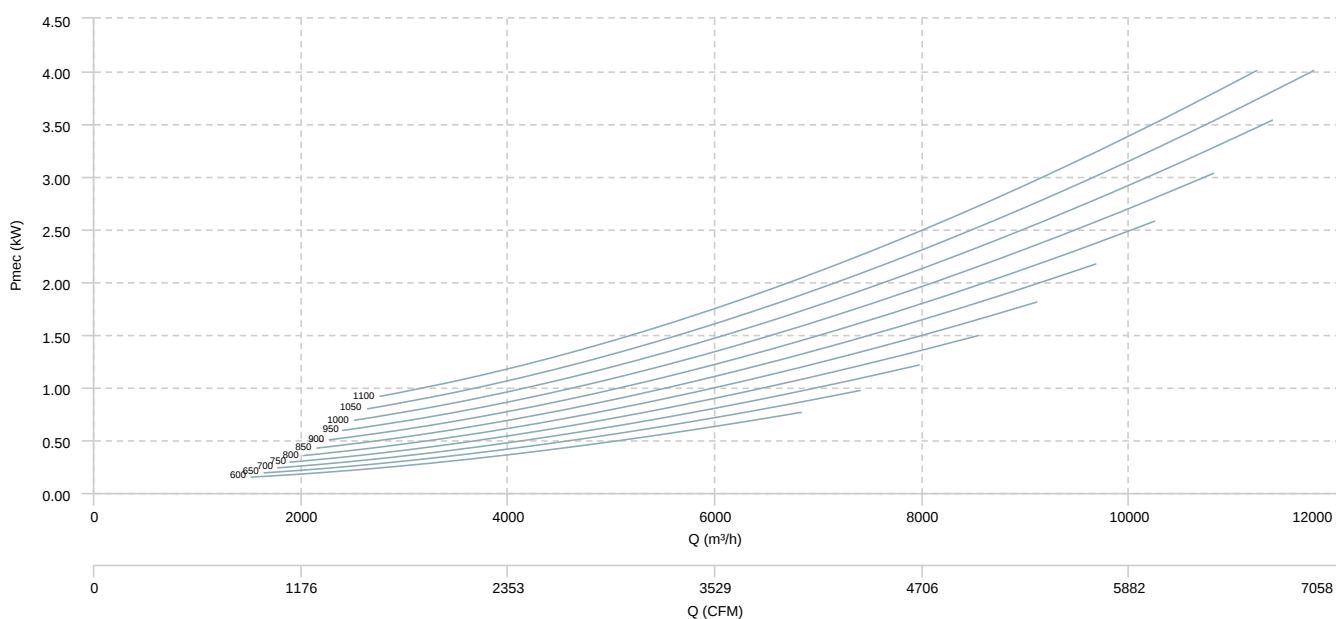


BOX BV PLUS 15/15

AIR FLOW - PRESSURE

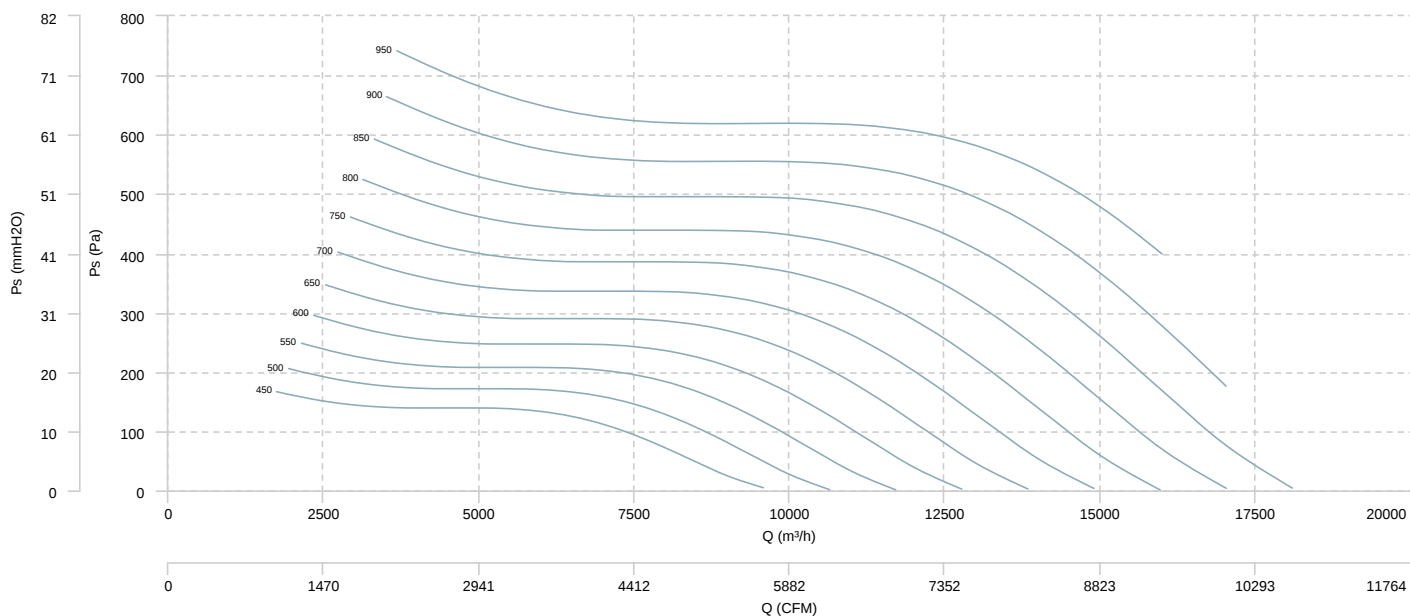


AIR FLOW - MECHANICAL POWER

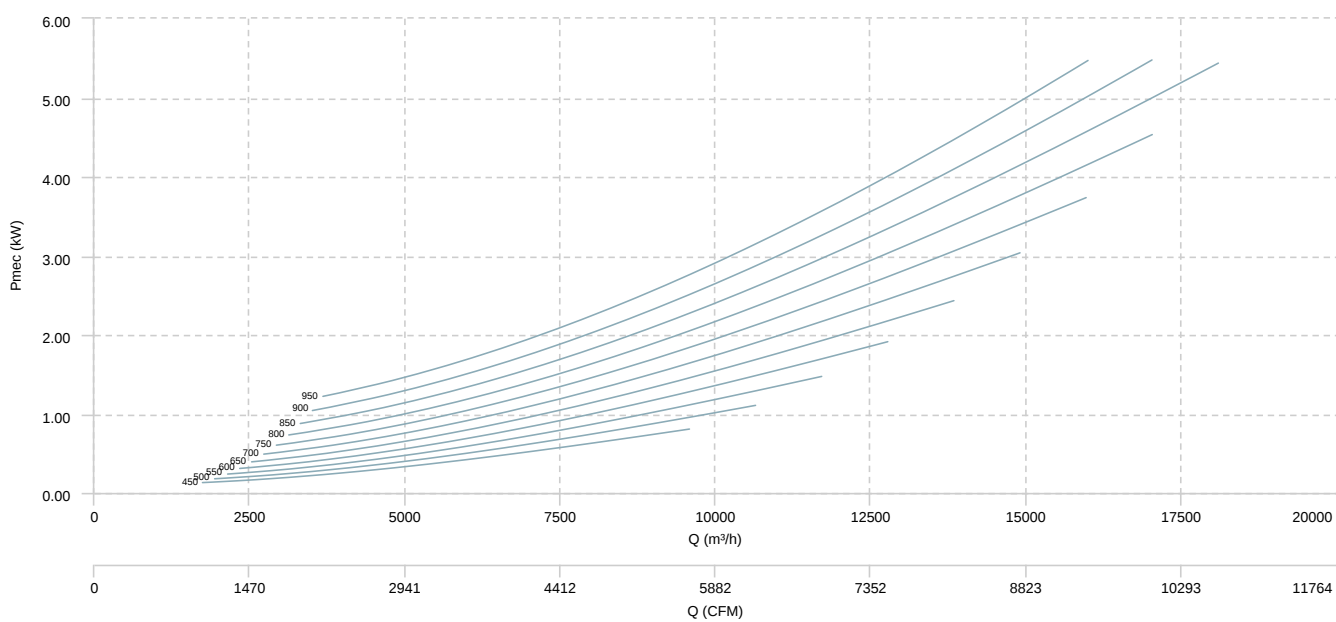


BOX BV PLUS 18/18

AIR FLOW - PRESSURE



AIR FLOW - MECHANICAL POWER



Sound data

Sound / 4 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BOX BV PLUS 7/7 (1650)	Inlet	55	57	61	60	68	67	58	53	72
BOX BV PLUS 9/9 (1200)	Inlet	55	57	61	60	68	67	58	53	72
BOX BV PLUS 10/10 (1000)	Inlet	55	57	61	60	68	67	58	52	71
BOX BV PLUS 12/12 (700)	Inlet	55	57	60	61	66	66	56	50	71
BOX BV PLUS 15/15 (600)	Inlet	61	61	64	64	69	69	59	52	74
BOX BV PLUS 18/18 (450)	Inlet	54	53	56	56	60	59	50	43	65

Notes:

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

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