

BOX BV



BELT DRIVEN CENTRIFUGAL IN SOUNDPROOF CABINET

MANUFACTURING FEATURES:

- Impellers made of polyamide reinforced with fiberglass up to size 12/12 (33/33). The rest of models are made of galvanized steel sheet.
- BV, BVC, BVCR range fans assemblies in soundproof cabinets with thermo-acoustic insulation, Bs1d0 fire class on the supply pannel.
- 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 hoods.
- Maximum working temperature: 60°C.

UNDER REQUEST:

- Special voltages.
- 2 SPEED MOTORS.
- Impellers made of galvanised steel sheet.
- LG0 position.

Accessories



Technical data

Three-phase motor

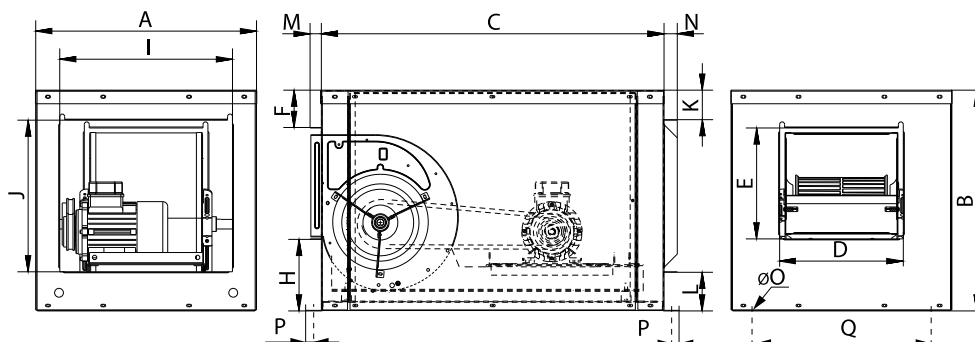
Code	Model	RPM	Min. Rated power kW	Max. Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
	BOX BV 7/7	1650 - 2000	0,37	0,75	3.170	50	32	1
	BOX BV 9/9	1200 - 1700	0,37	1,10	4.690	53	46	1
	BOX BV 10/10	1000 - 1650	0,37	1,50	6.150	56	48	1
	BOX BV 12/12	700 - 1400	0,37	2,20	9.080	60	62	1
	BOX BV 15/15	600 - 1100	0,55	4,00	11.790	56	76	1
	BOX BV 18/18	450 - 950	1,10	5,50	18.100	53	110	1
	BOX BV 20/20	400 - 800	1,50	7,50	21.510	56	200	1
	BOX BV 22/22	400 - 800	1,50	11,00	29.510	58	228	1
	BOX BV 25/25	400 - 650	2,20	11,00	36.010	56	263	1
	BOX BV 30/28	250 - 550	2,20	15,00	54.010	54	346	1

Notes:

* The motor is not included in fan weight

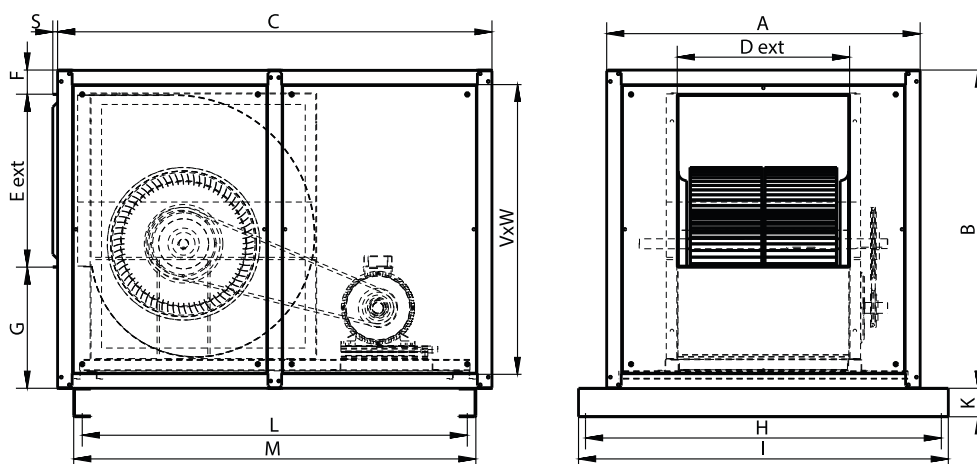
** Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions



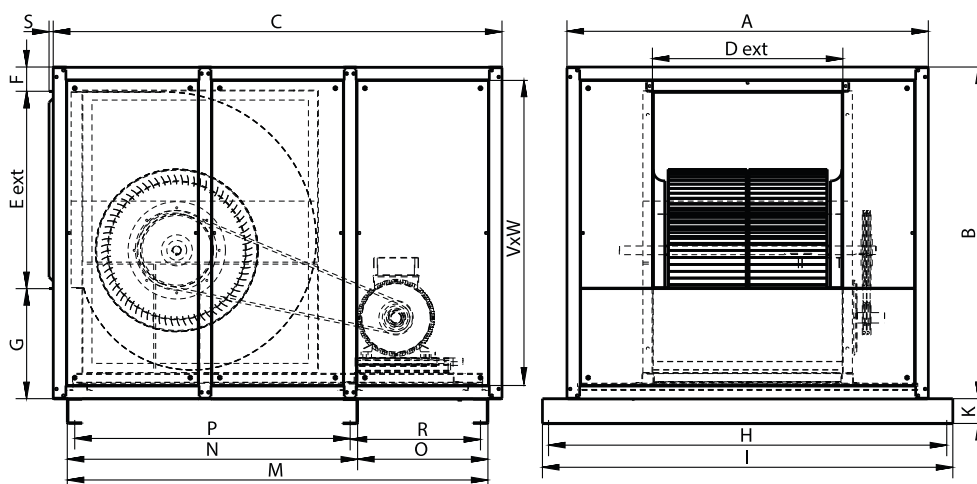
Model	A	B	C	D	E	F	H	I	J
BOX BV 7/7	450	450	698	242	216	81	151	352	309
BOX BV 9/9	535	535	768	311	268	96	169	418	359
BOX BV 10/10	580	580	798	342	299	84	195	493	421
BOX BV 12/12	650	650	868	408	349	83	216	576	500
BOX BV 15/15	775	775	988	483	411	118	244	650	650
BOX BV 18/18	870	885	1168	566	490	104	290	750	750

Model	K	L	M	N	O	P	Q
BOX BV 7/7	60	79	23	27	10	17	393,5
BOX BV 9/9	78	96	23	27	10	17	478
BOX BV 10/10	69	88	23	27	10	17	522,4
BOX BV 12/12	65	83	23	27	10	17	595,4
BOX BV 15/15	52	71	23	27	12	17	715,4
BOX BV 18/18	57	76	23	27	12	17	810,4



Model	A	B	C	Dext	Eext	F	G	H	I
BOX BV 20/20	1100,5	1117	1525	605	607	85	425	1249	1298
BOX BV 22/22	1350,5	1200	1683	658	694	85	421,5	1499	1548

Model	K	L	M	S	V	W
BOX BV 20/20	100	1351,6	1411,6	16,8	1014	994
BOX BV 22/22	100	1509,6	1569,6	16,8	1244	1097



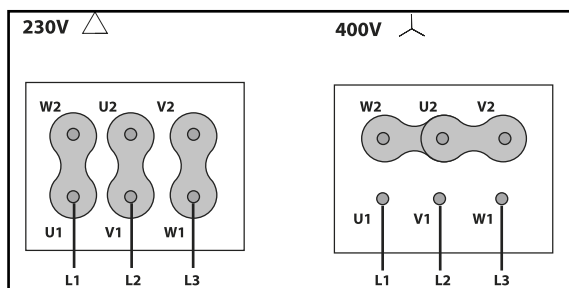
Model	A	B	C	Dext	Eext	F	G	H	I
BOX BV 25/25	1457,5	1337,5	1810	768	796	98	443,5	1606	1655
BOX BV 30/28	1650,5	1572	2040	893	936	100	535,5	1799	1848

Model	K	M	N	P	R	S	V	W
BOX BV 25/25	100	1696,5	1171	1111	525,5	16,8	1234	1351
BOX BV 30/28	100	1911,5	1316,5	1256,5	595	16,8	1469	1544

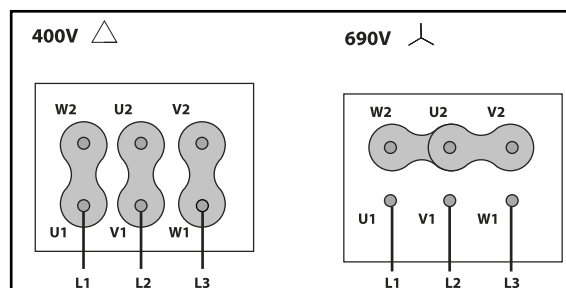
Wiring diagram

Wiring diagram N° 1

230/400V



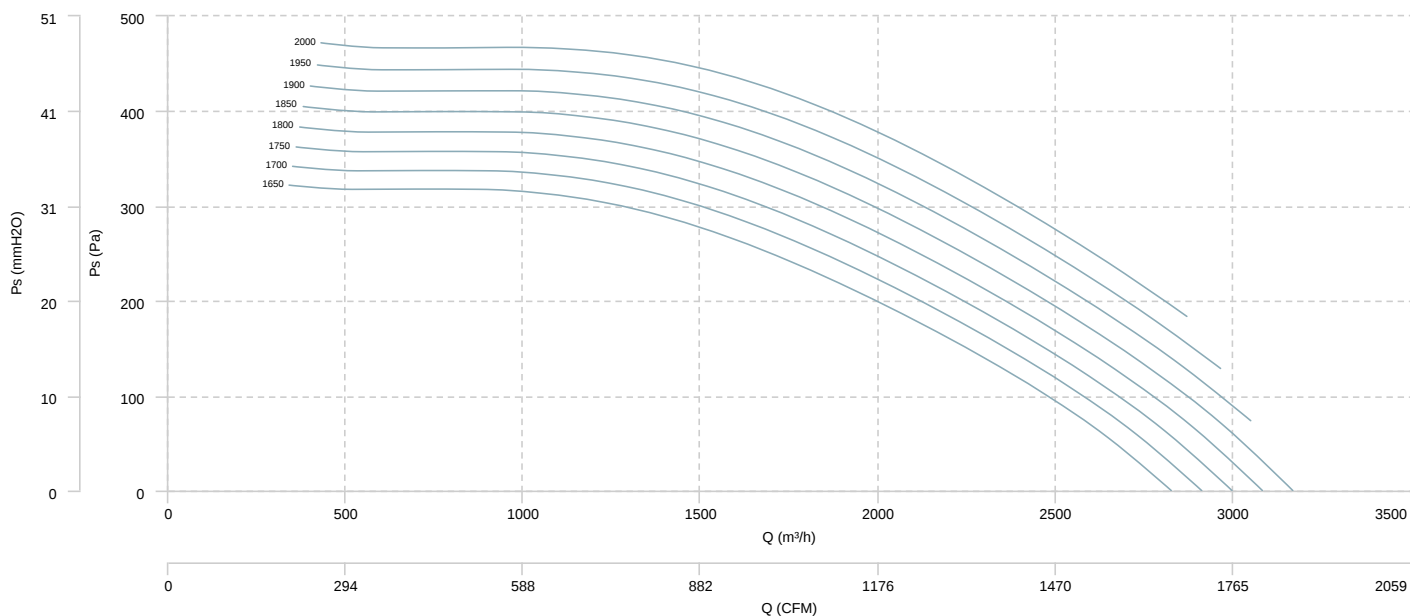
400/690V



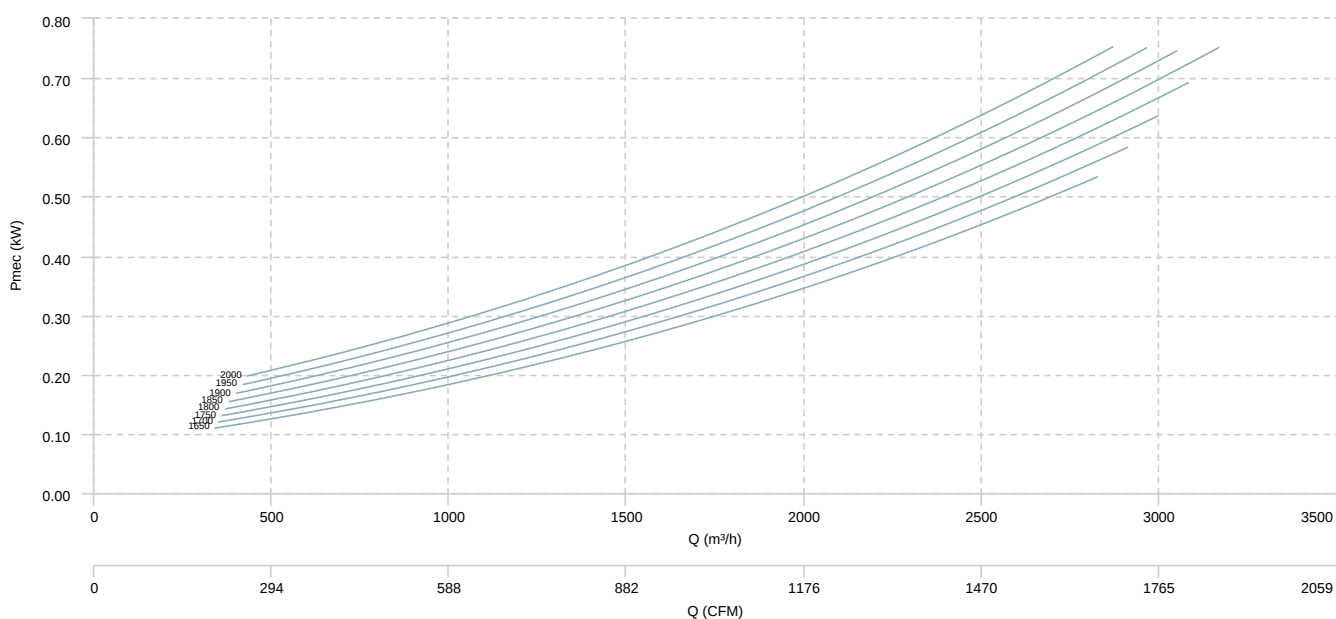
CHARACTERISCTIC CURVE

BOX BV 7/7

AIR FLOW - PRESSURE

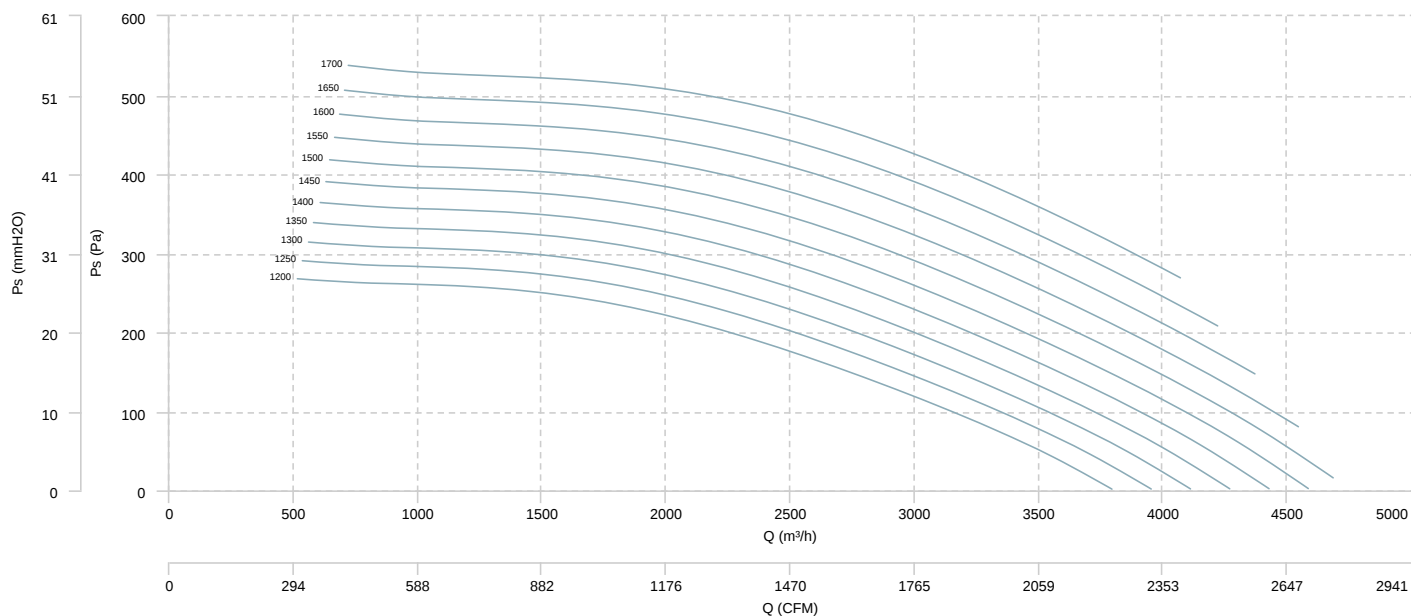


AIR FLOW - MECHANICAL POWER

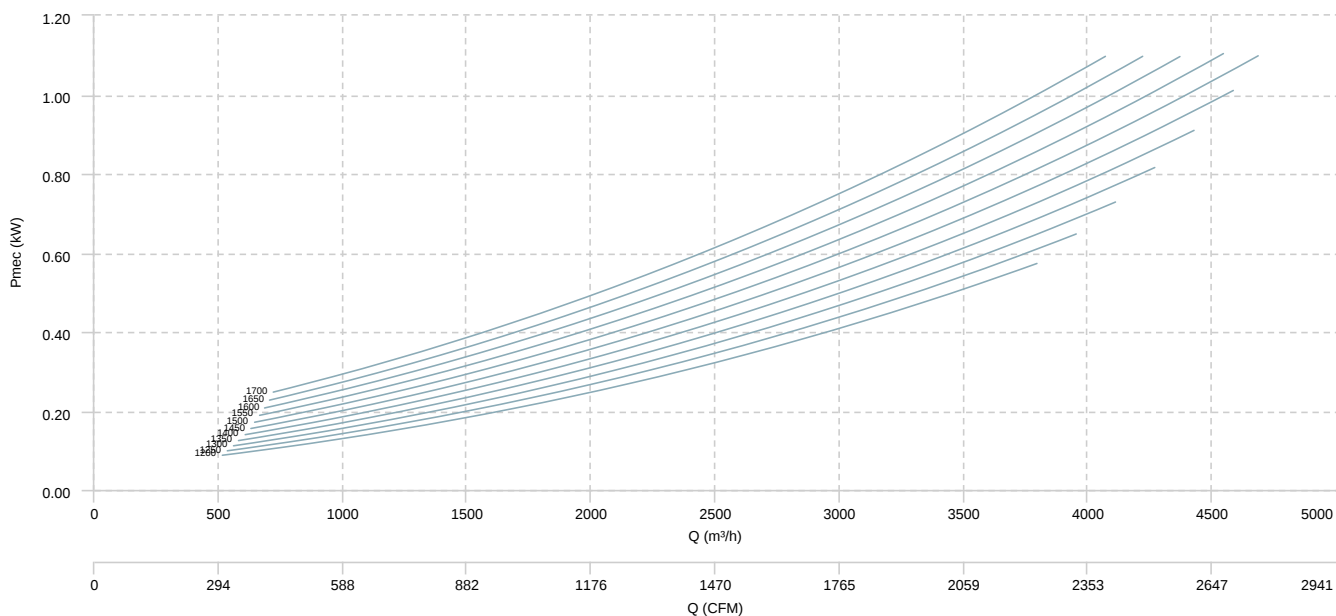


BOX BV 9/9

AIR FLOW - PRESSURE

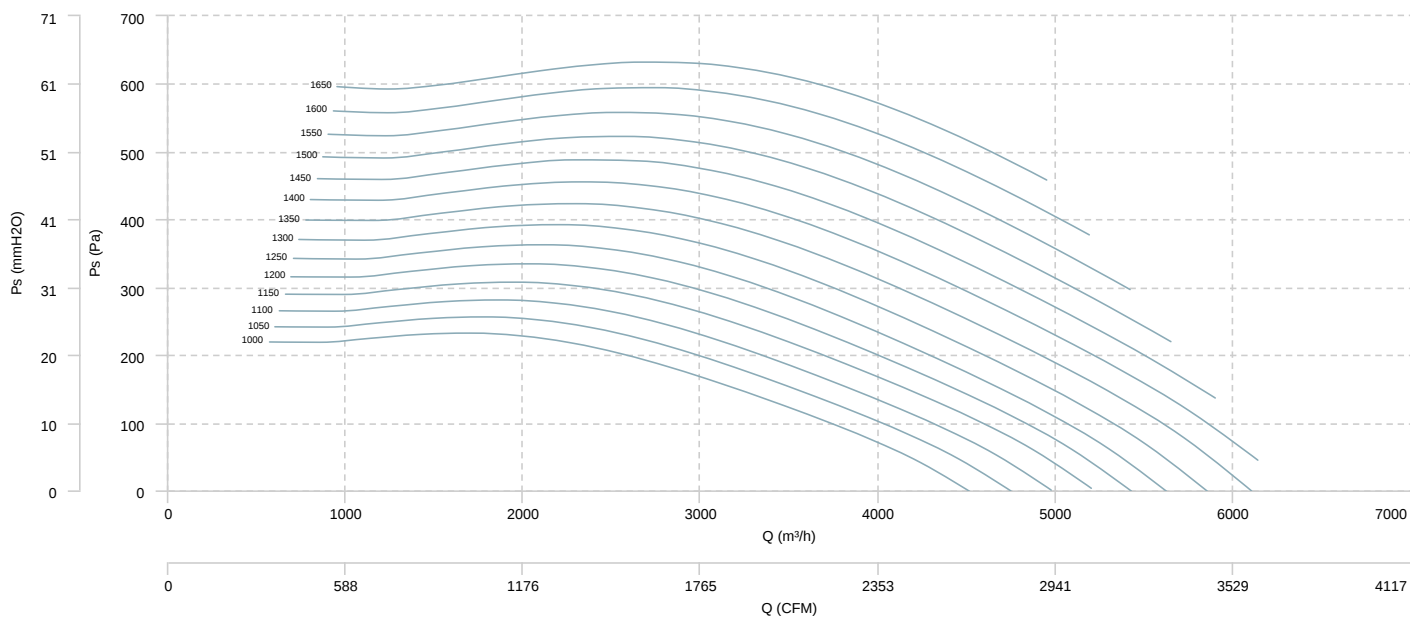


AIR FLOW - MECHANICAL POWER

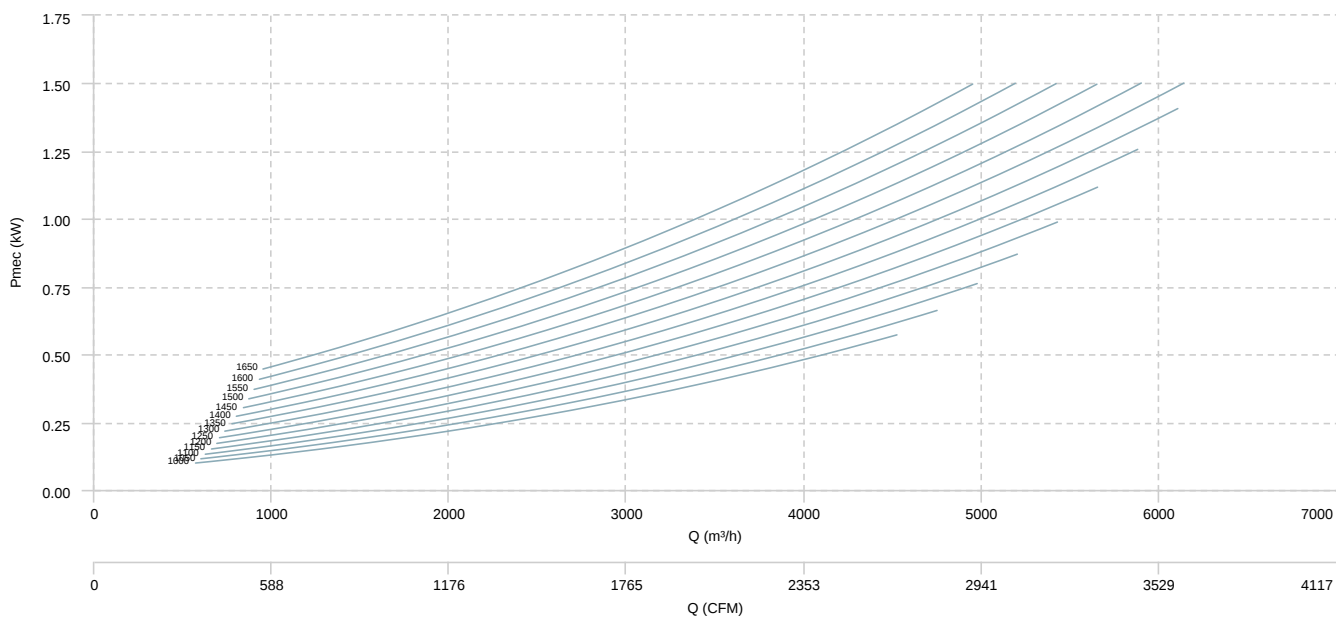


BOX BV 10/10

AIR FLOW - PRESSURE

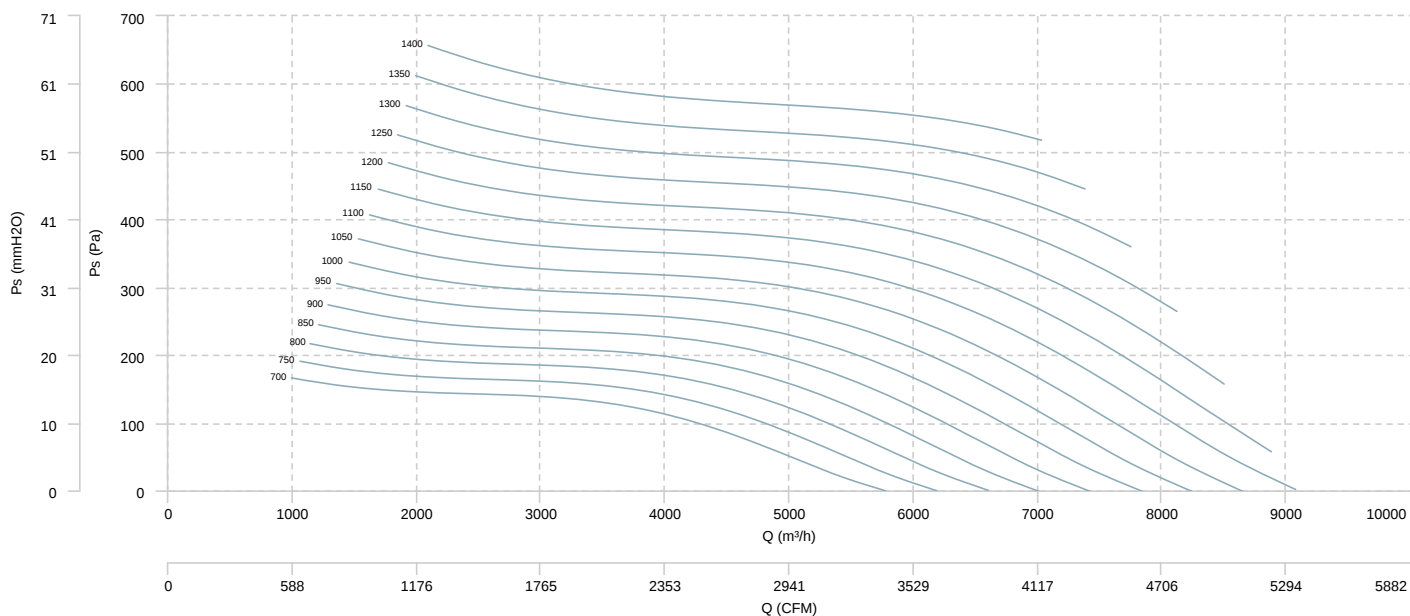


AIR FLOW - MECHANICAL POWER

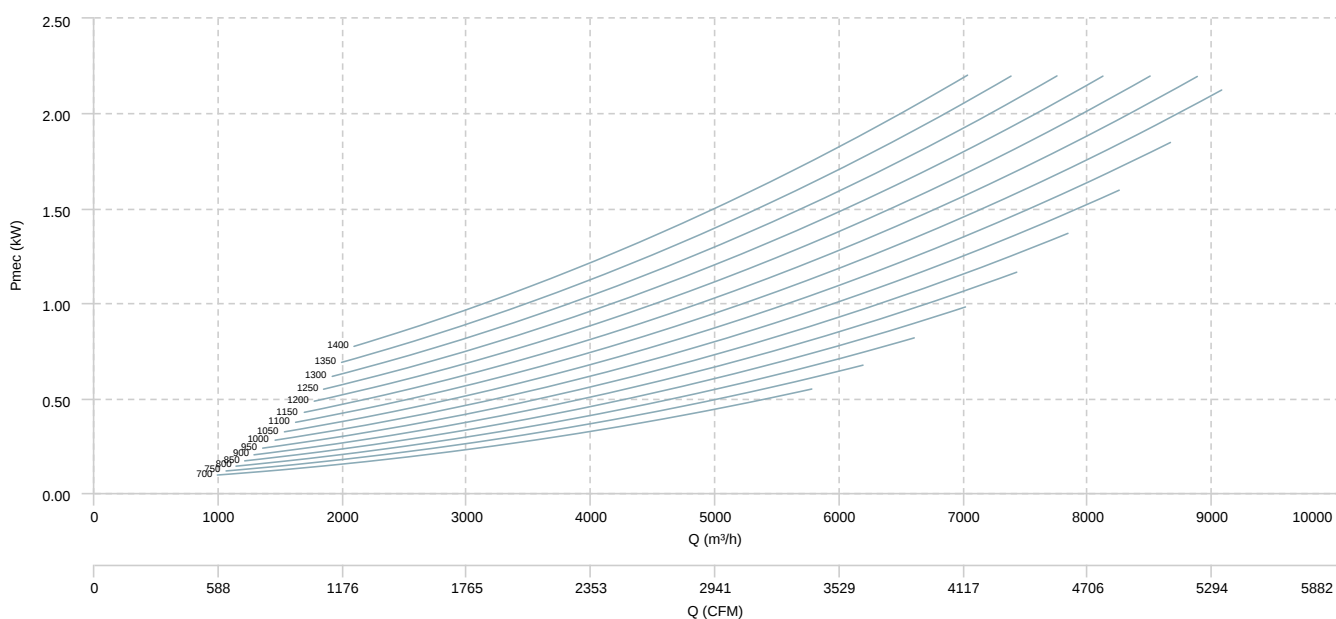


BOX BV 12/12

AIR FLOW - PRESSURE

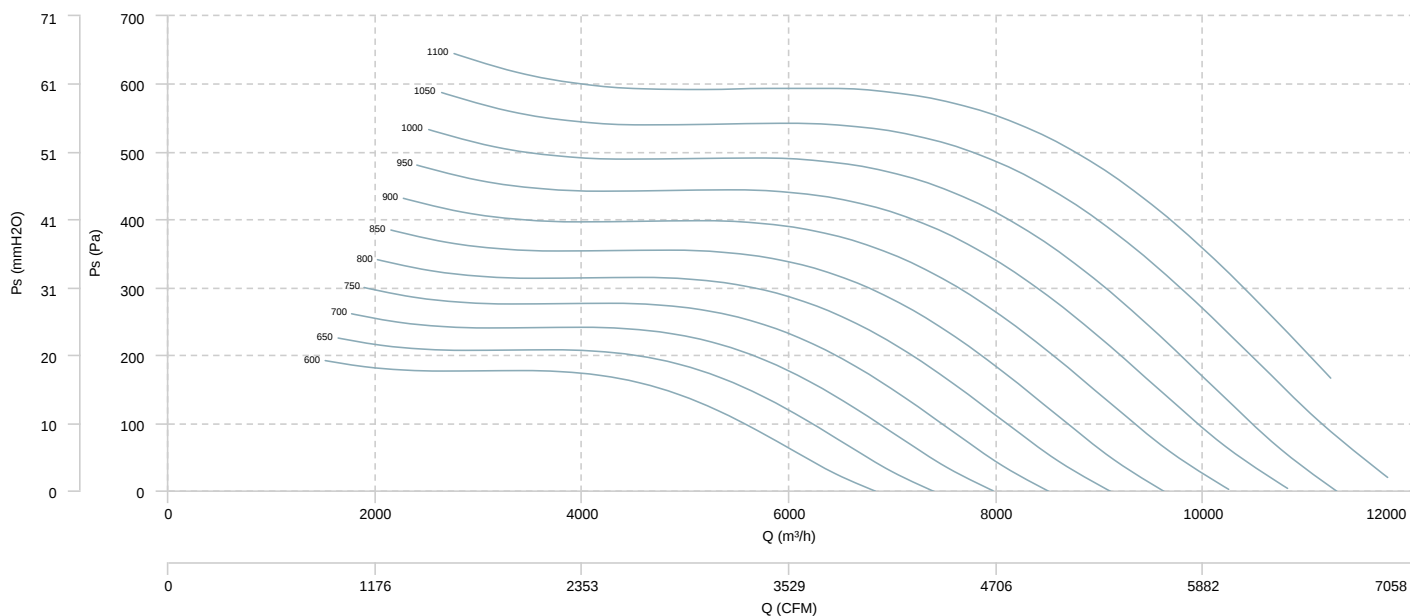


AIR FLOW - MECHANICAL POWER

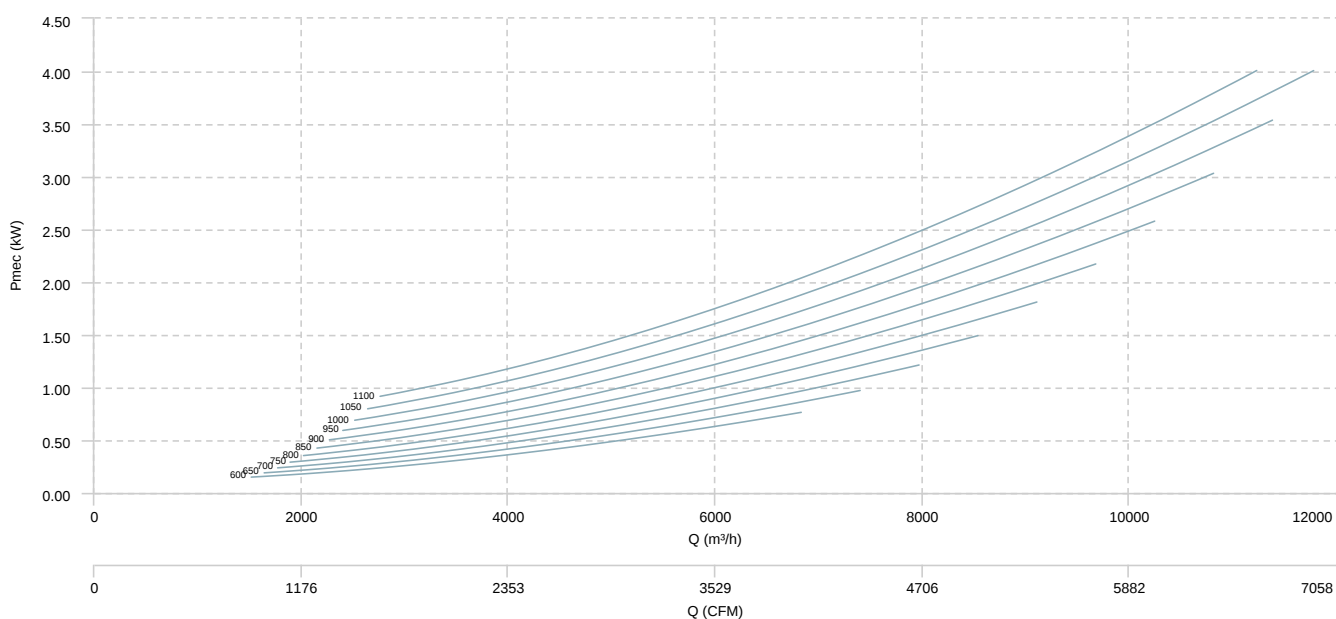


BOX BV 15/15

AIR FLOW - PRESSURE

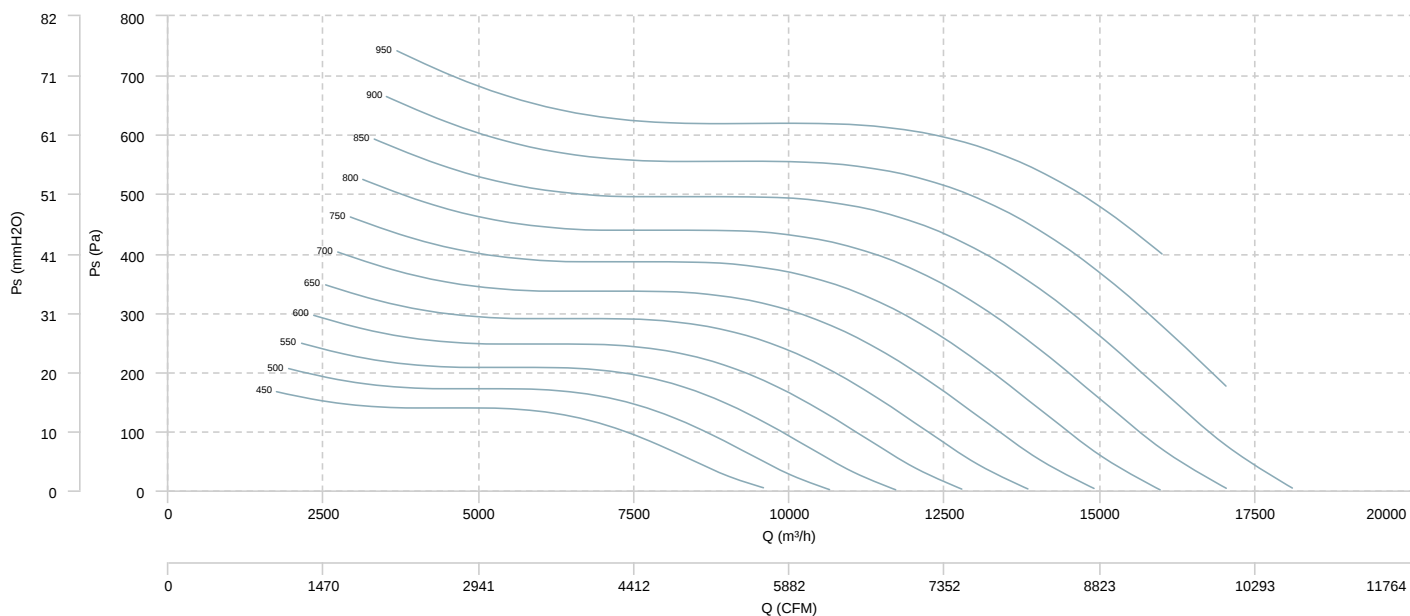


AIR FLOW - MECHANICAL POWER

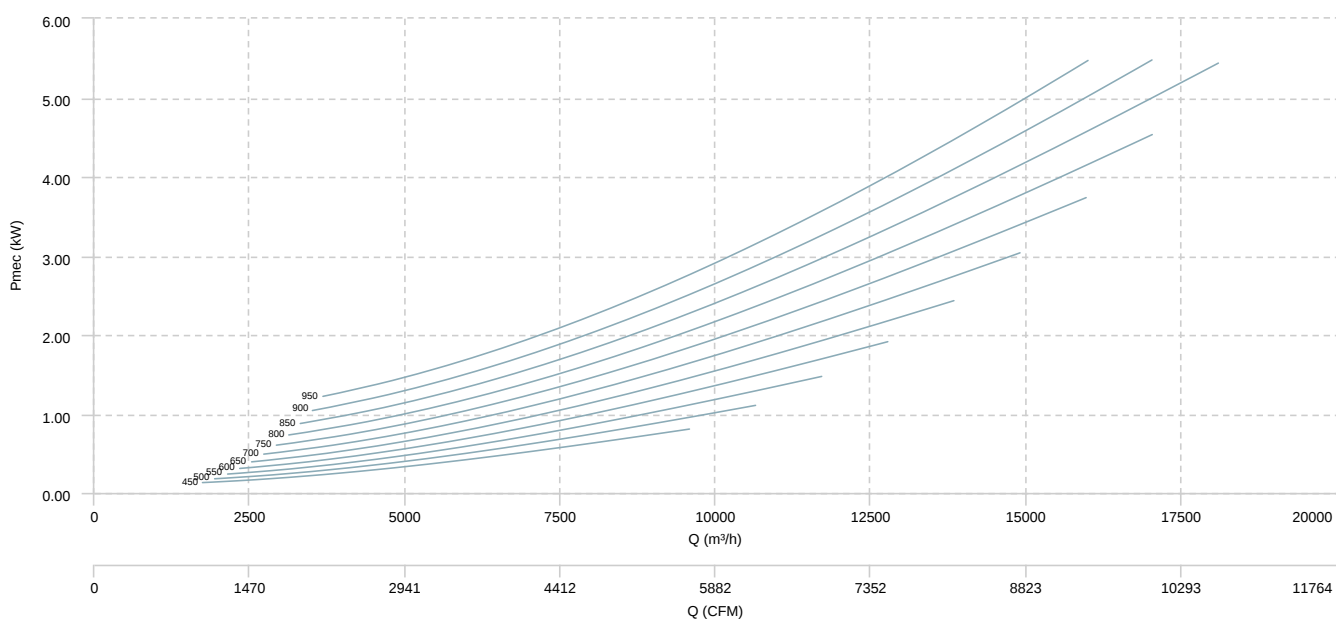


BOX BV 18/18

AIR FLOW - PRESSURE

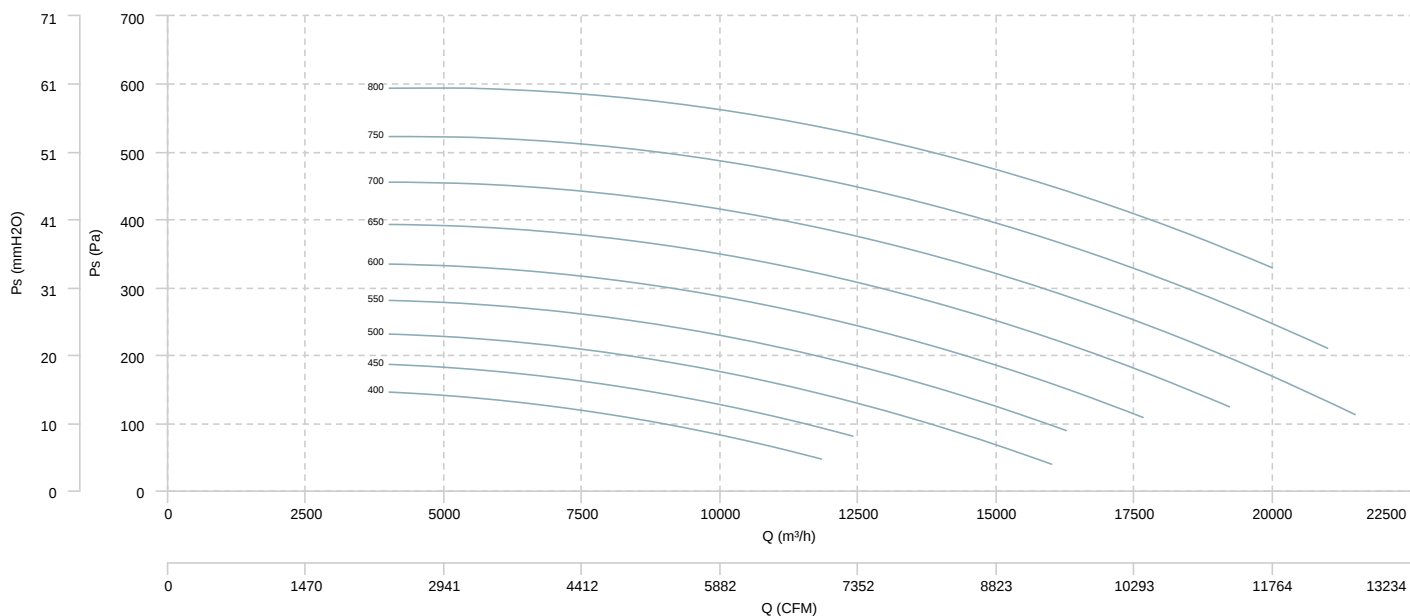


AIR FLOW - MECHANICAL POWER

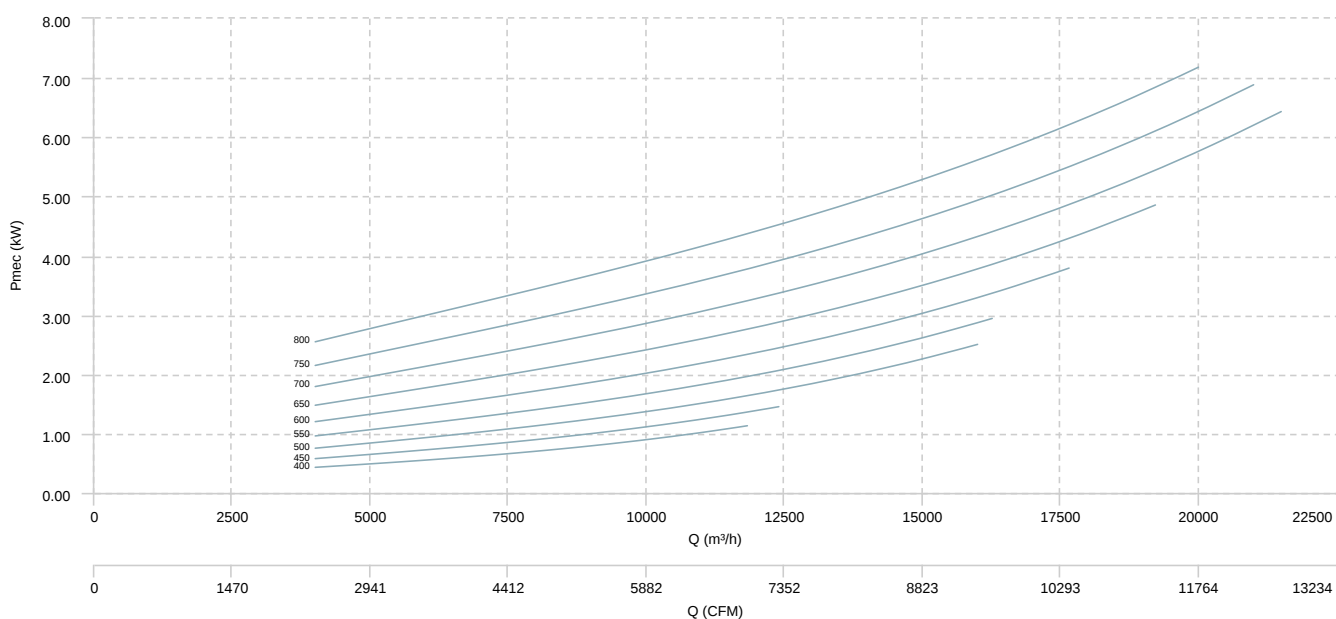


BOX BV 20/20

AIR FLOW - PRESSURE

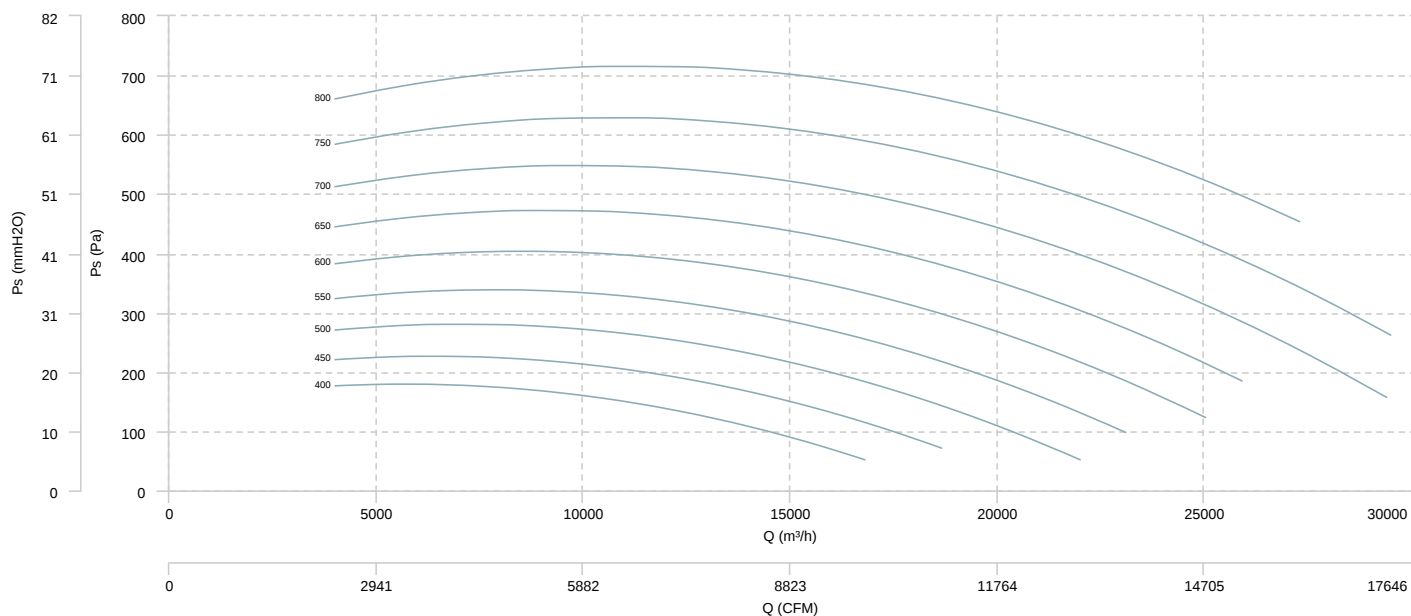


AIR FLOW - MECHANICAL POWER

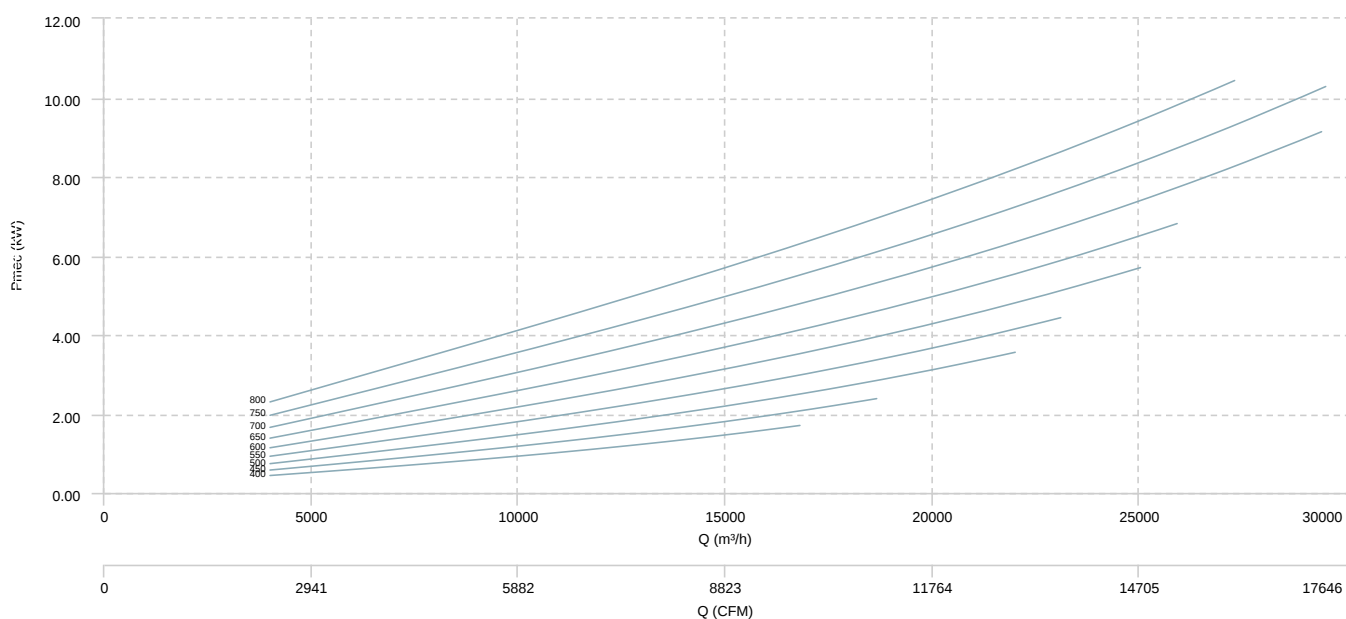


BOX BV 22/22

AIR FLOW - PRESSURE

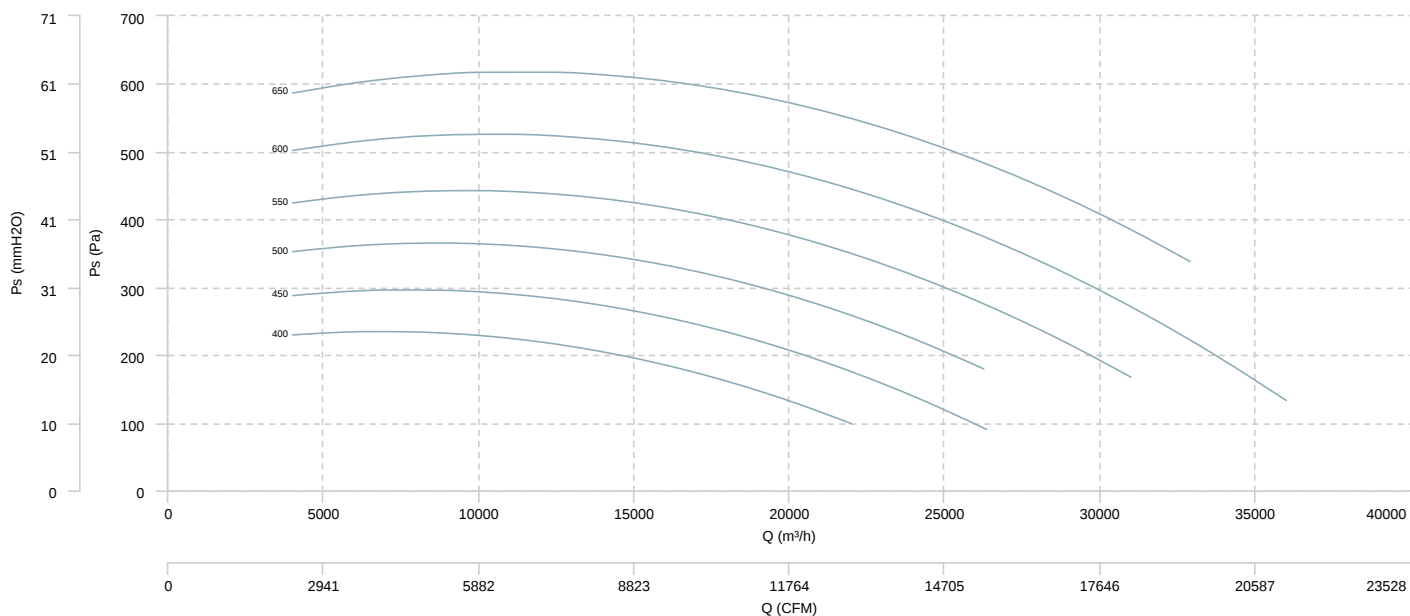


AIR FLOW - MECHANICAL POWER

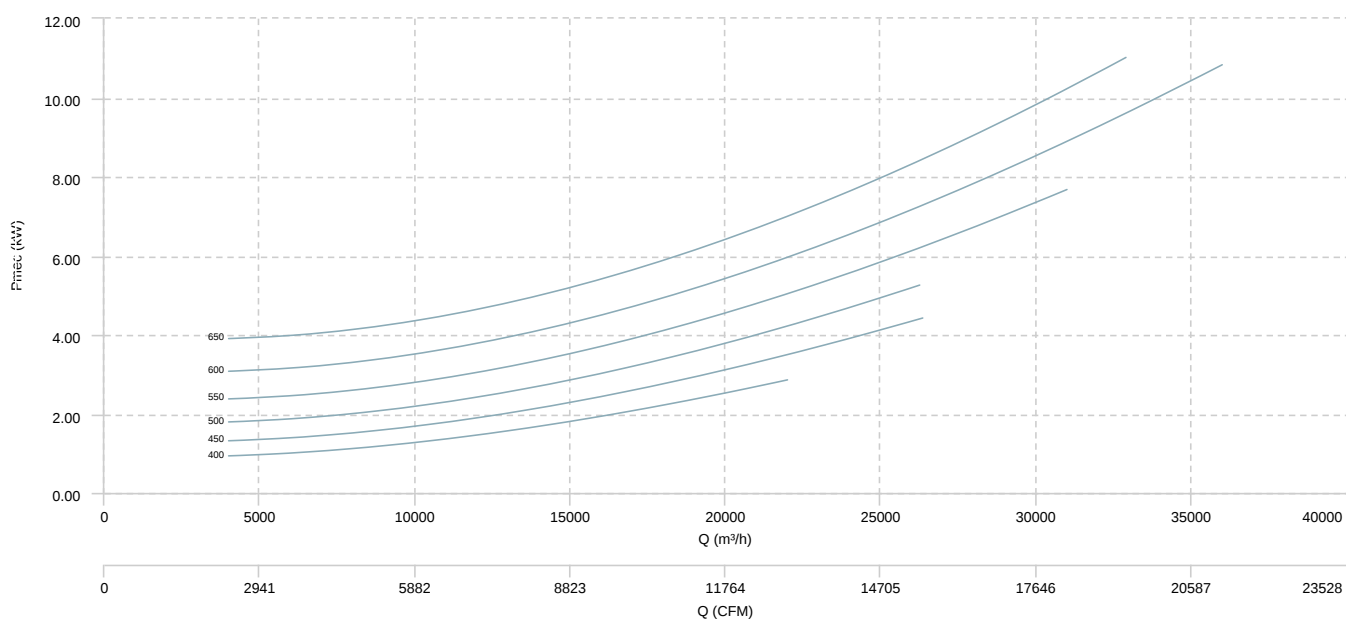


BOX BV 25/25

AIR FLOW - PRESSURE

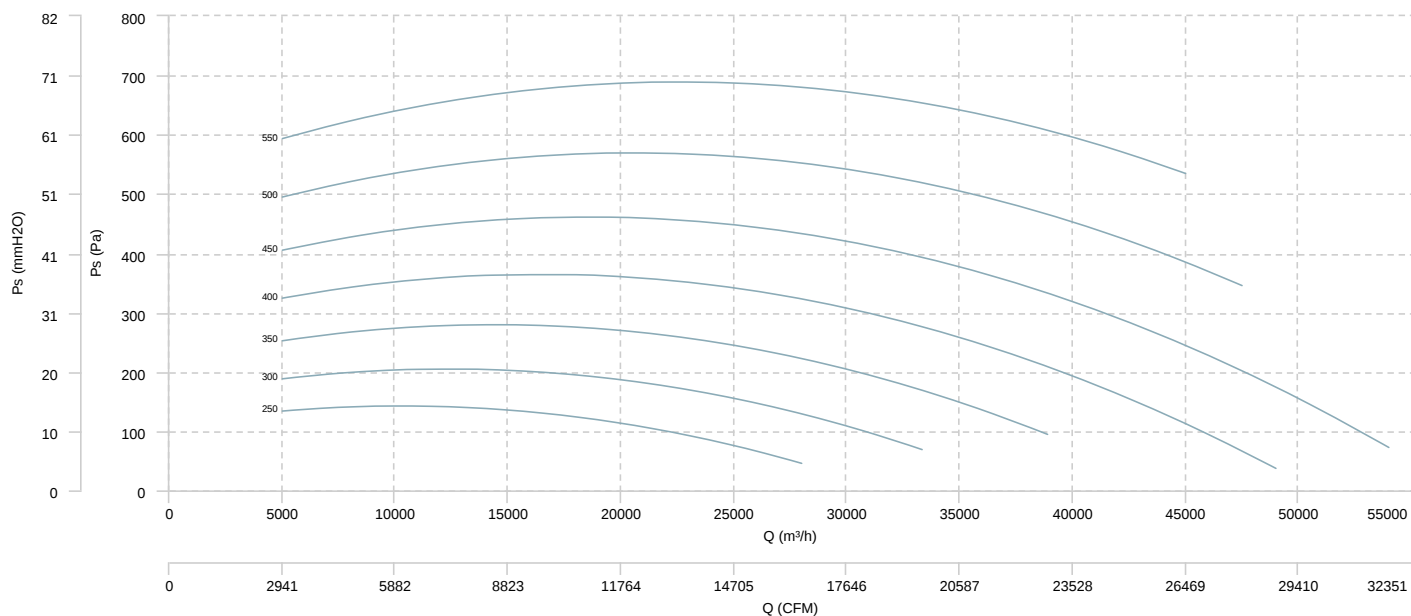


AIR FLOW - MECHANICAL POWER

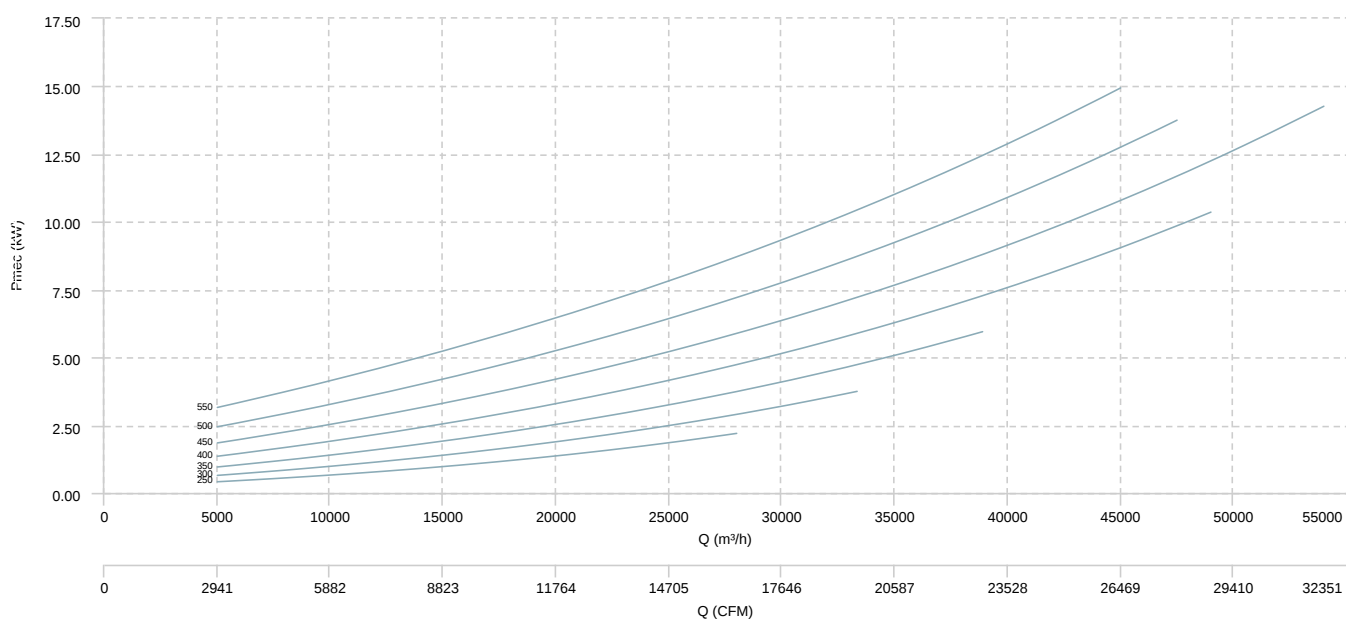


BOX BV 30/28

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 7/7 (1650)	Inlet	55	57	61	60	68	67	58	53	72
BOX BV 9/9 (1200)	Inlet	55	57	61	60	68	67	58	53	72
BOX BV 10/10 (1000)	Inlet	55	57	61	60	68	67	58	52	71
BOX BV 12/12 (700)	Inlet	55	57	60	61	66	66	56	50	71
BOX BV 15/15 (600)	Inlet	61	61	64	64	69	69	59	52	74
BOX BV 18/18 (450)	Inlet	54	53	56	56	60	59	50	43	65
BOX BV 20/20 (400)	Inlet	57	56	59	59	61	60	51	44	66
BOX BV 22/22 (400)	Inlet	60	58	62	61	62	61	52	45	68
BOX BV 25/25 (400)	Inlet	62	60	64	63	64	63	54	46	71
BOX BV 30/28 (250)	Inlet	54	52	56	55	56	55	45	38	62

Notes:

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

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