

KUVIO



HIGH EFFICIENCY IN-LINE MIXED FLOW FAN MADE OF FIRE RESISTANT PLASTIC RESIN

MANUFACTURING FEATURES

- High-efficiency in-line mixed flow fan with motor supports, inlet and impeller built in fire-resistant plastic resin, class E2, according to ISO EN 11925-2:2010, in areas close to the motor and electrical components.
- The side cones incorporate the fan anchoring supports on the surface in order to guarantee a quick and safe installation. Designed to allow the assembly or disassembly of the fans without manipulating the ducts.
- Standard version and version with timer (T).
- Induction motor, thermally protected, with shaft mounted on ball bearing supports, coupled to a mixed flow impeller. Two-speed (sizes 100 to 160) and three-speed (sizes 200 to 315) single-phase motor with thermal overload disconnection and shafts that activate ball bearings to guarantee long-term continuous work (at least 30,000 hours at the maximum temperature of the plate). Standard voltages 220-240V 50Hz and 60Hz. Adjustable speed with Casals speed devices.
- Protection degree from IP44 to IPX5, depending on the model (if installed in a conduit).
- IMQ Safety certificate to guarantee electromagnetic compatibility.
- Maximum continuous working temperature: 50°C.

| APPLICATIONS

Designed for duct supply and exhaust ventilation systems that require excellent response in terms of high pressure and air flow, while keeping noise under control.

It can be used in many small and medium ventilation installations for air renewal such as:

- Bathrooms and changing rooms.
- Commercial offices.
- Extraction in domestic kitchens after the extraction hood.
- Schools
- Waiting room.
- Commercial premises, laundries, shops, bars, restaurants etc.

Accessories



BDC



INT 3V



REG



**SIL-C
MINI**



VISC

Technical data

2 speed motor

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
KUV100	KUVIO 100	2030	0,09/0,11	0,02	260	50	2,45	1
KUV100T	KUVIO 100 T	2030	0,09/0,11	0,02	260	50	2,30	2
KUV125	KUVIO 125	2140	0,11/0,15	0,03	370	51	2,31	1
KUV125T	KUVIO 125 T	2140	0,11/0,15	0,03	370	51	2,30	2
KUV150	KUVIO 150	2100	0,18/0,26	0,06	560	55	3,05	1
KUV150T	KUVIO 150 T	2100	0,18/0,26	0,06	560	55	3	2
KUV160	KUVIO 160	2100	0,18/0,26	0,06	560	55	3,20	1
KUV160T	KUVIO 160 T	2100	0,18/0,26	0,06	560	55	3	2

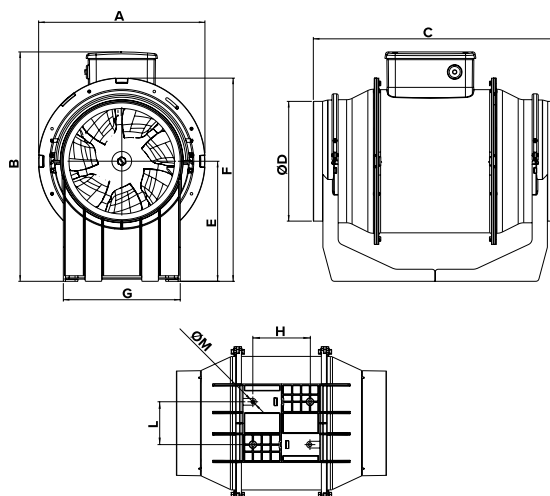
3 speed motor

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
KUV200	KUVIO 200	1925 / 2450 / 2710	0,49/0,42/0,34	0,11	1.135	63	4,64	3
KUV250	KUVIO 250	1610 / 2280 / 2760	0,65/0,55/0,42	0,15	1.475	64	8,72	3
KUV315	KUVIO 315	1900 / 2370 / 2710	1,55/1,15/0,95	0,36	2.750	69	13,50	3

Notes:

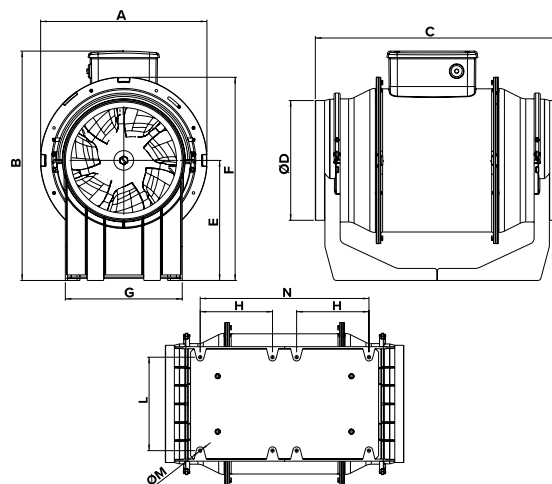
** Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

Dimensions



Model	A	B	C	D	E	F	G	H	L
KUVIO 100	188.5	211	303	96	101.5	189	90	60	80
KUVIO 100 T	188.5	211	303	96	101.5	189	90	60	80
KUVIO 125	188.5	211	258	122	101.2	189	90	60	80
KUVIO 125 T	188.5	211	258	122	101.2	189	90	60	80
KUVIO 150	214.5	234	294	146	112.5	212	110	60	80
KUVIO 150 T	214.5	234	294	146	112.5	212	110	60	80
KUVIO 160	214.5	234	272.5	156	112.5	212	110	60	80
KUVIO 160 T	214.5	234	272.5	156	112.5	212	110	60	80

Model	M
KUVIO 100	5,5
KUVIO 100 T	5,5
KUVIO 125	5,5
KUVIO 125 T	5,5
KUVIO 150	5,5
KUVIO 150 T	5,5
KUVIO 160	5,5
KUVIO 160 T	5,5

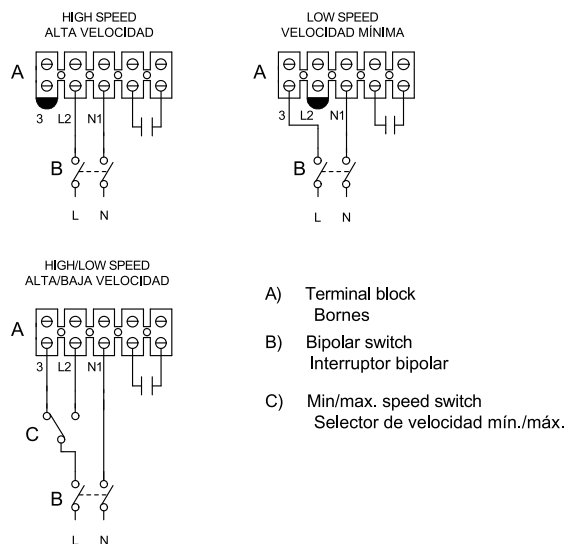


Model	A	B	C	D	E	F	G	H	L
KUVIO 200	270	373	396	194.5	195	330	190	120	155
KUVIO 250	300	378	322	243	190	329	200	70	170
KUVIO 315	373	446	420	307	224	398	309	110	255

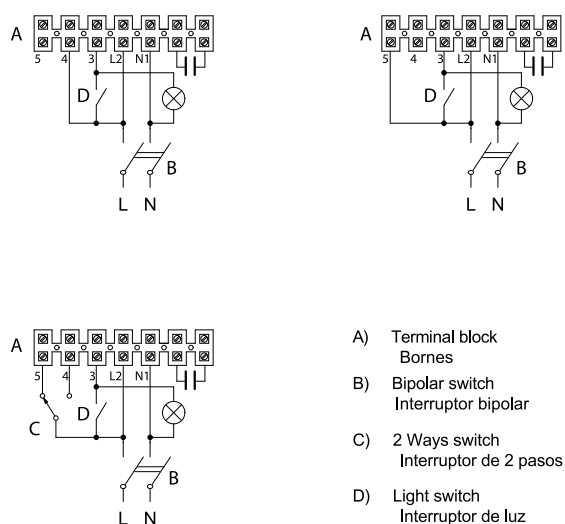
Model	M	N
KUVIO 200	5.5	280
KUVIO 250	5,5	174.5
KUVIO 315	8.5	259.5

Wiring diagram

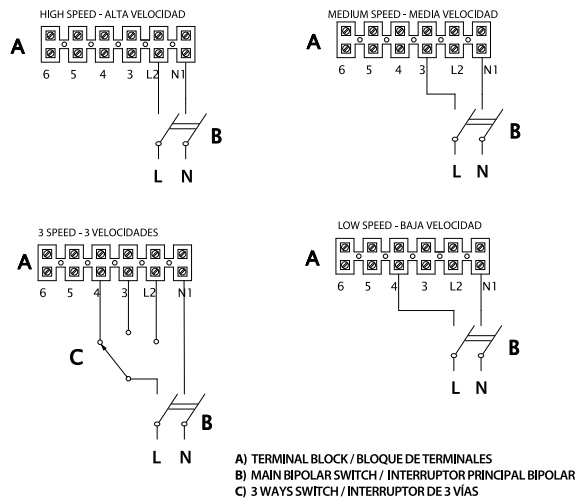
Wiring diagram Nº 1



Wiring diagram Nº 2



Wiring diagram Nº 3

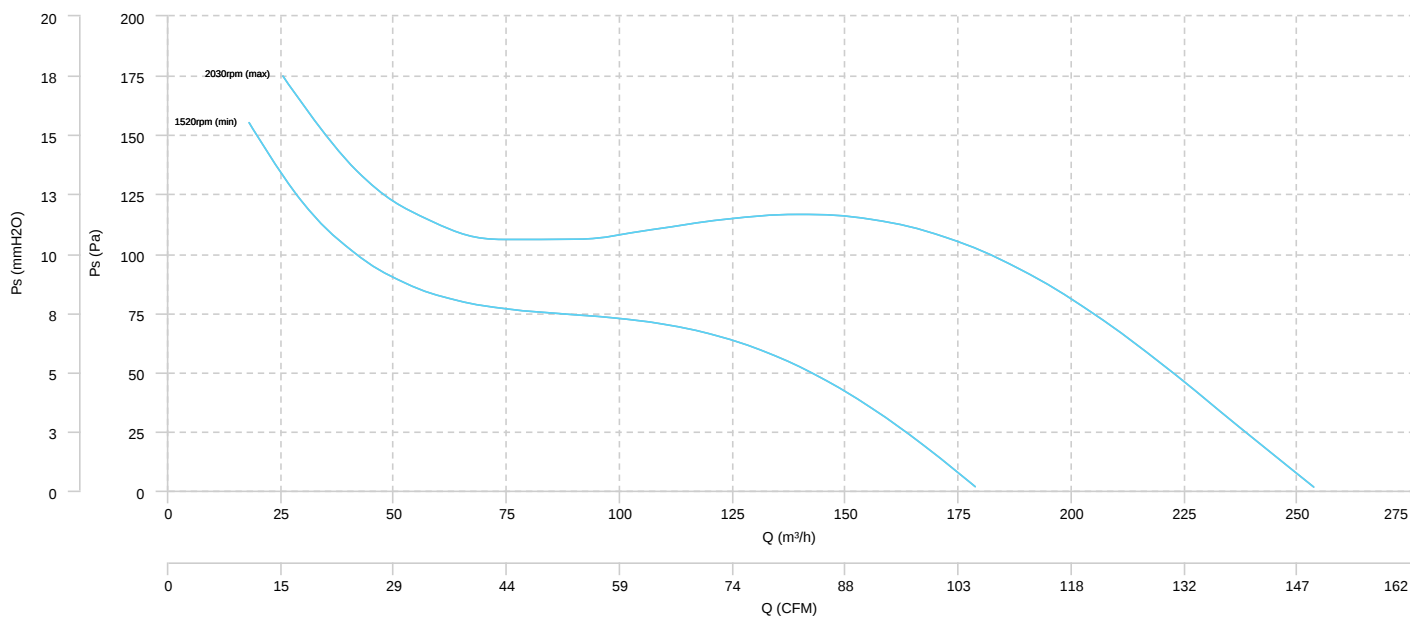


CHARACTERISCTIC CURVE

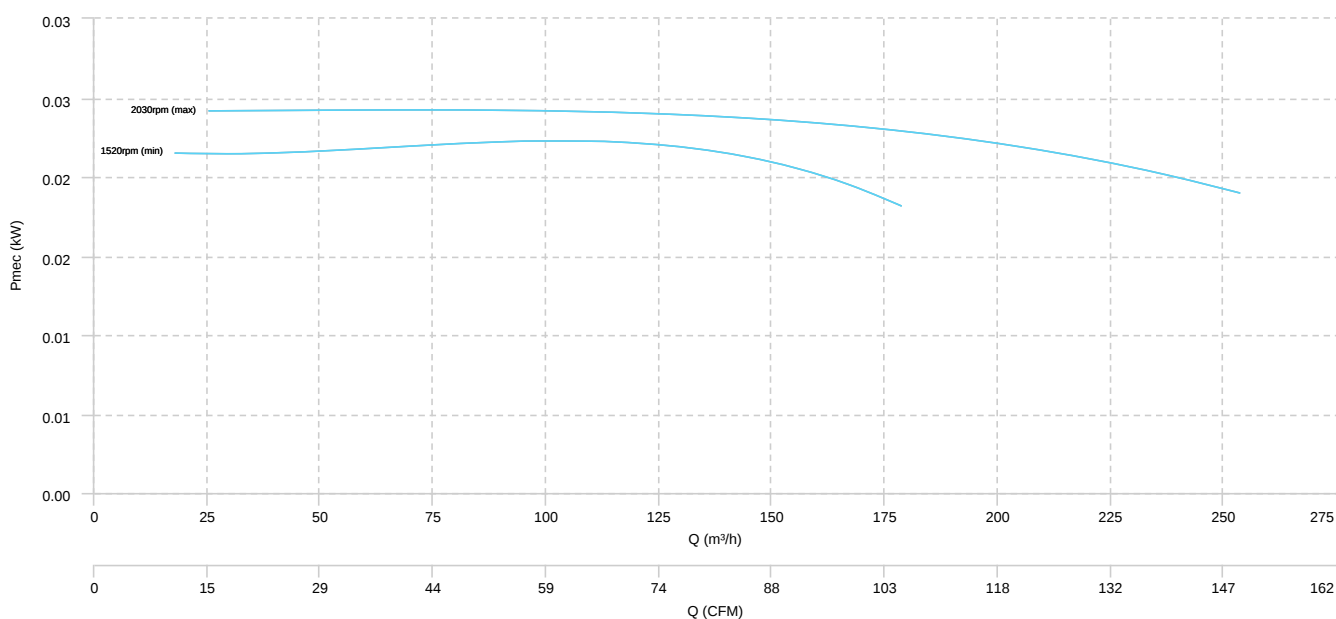
KUVIO 100

KUVIO 100 T

AIR FLOW - PRESSURE



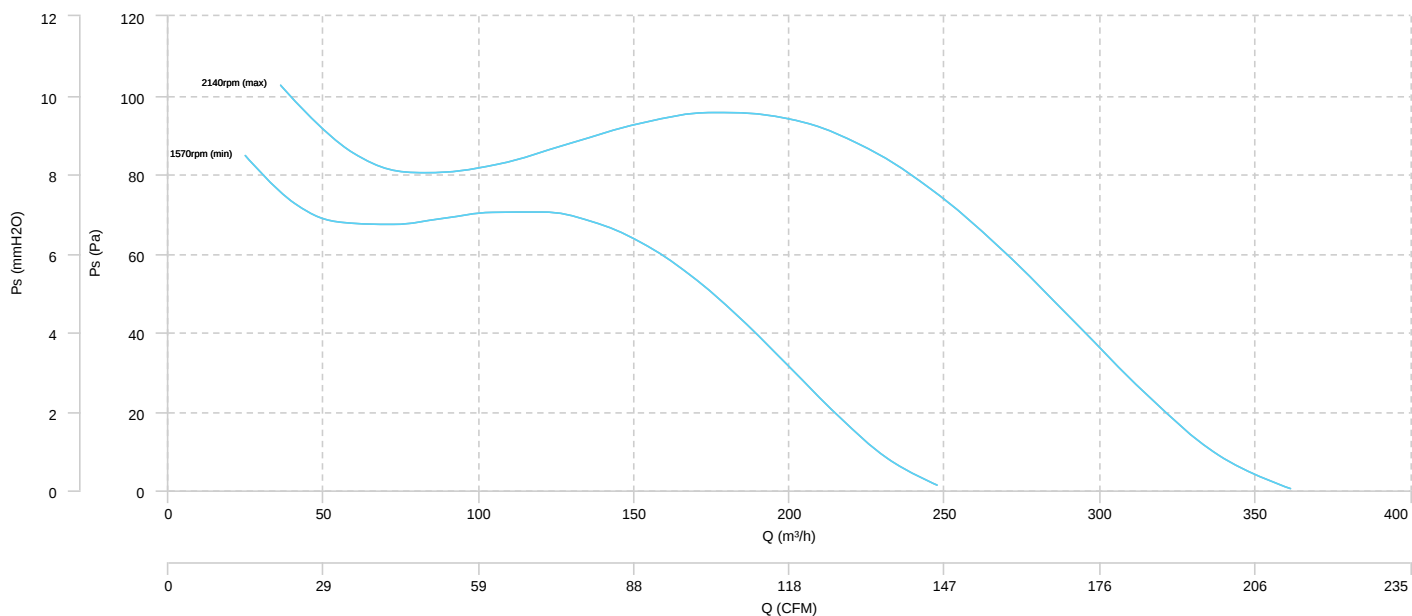
AIR FLOW - MECHANICAL POWER



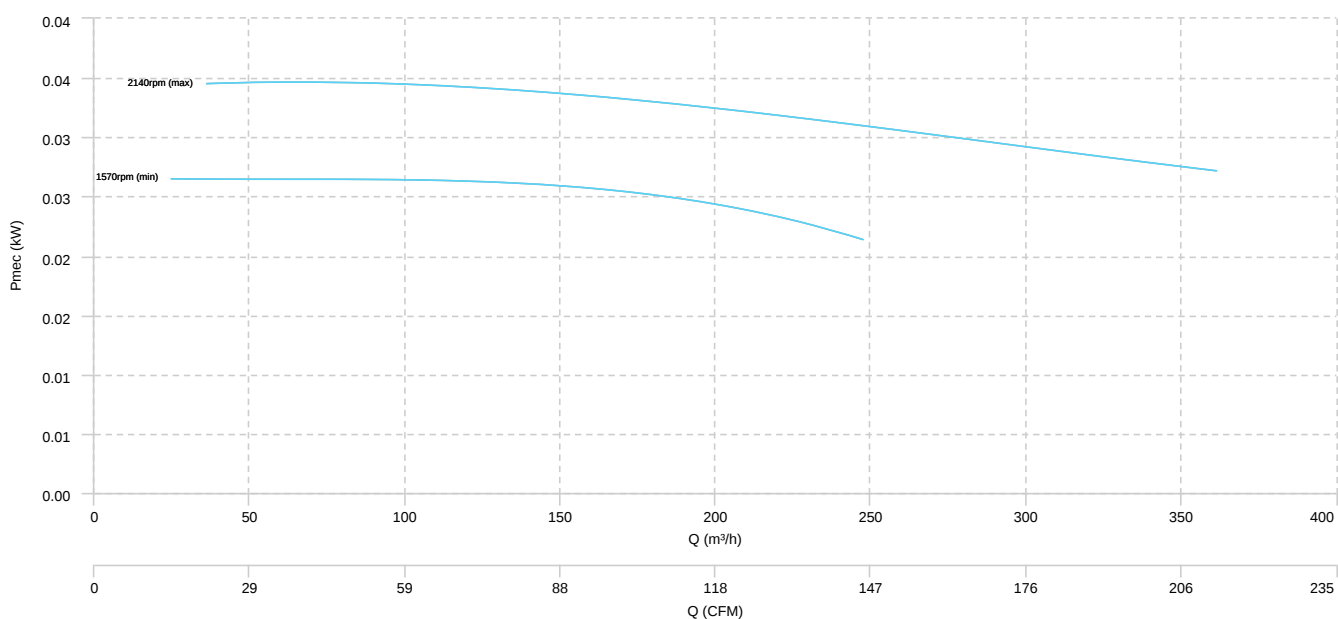
KUVIO 125

KUVIO 125 T

AIR FLOW - PRESSURE



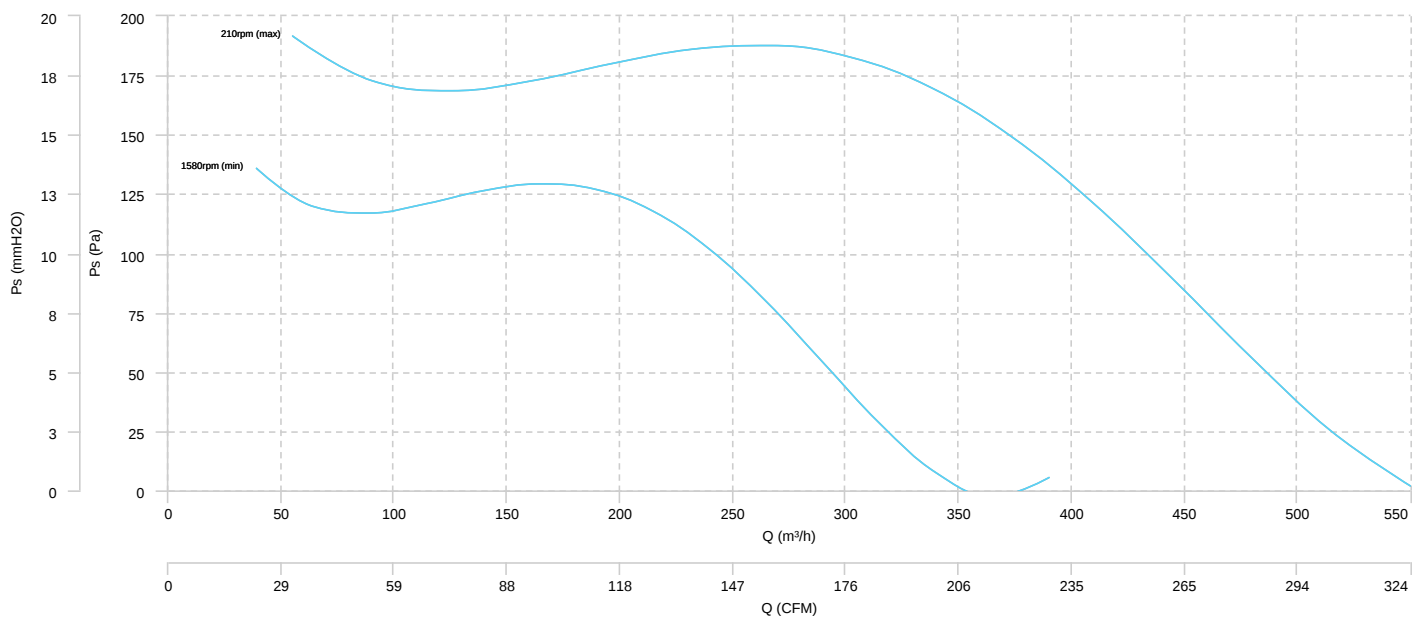
AIR FLOW - MECHANICAL POWER



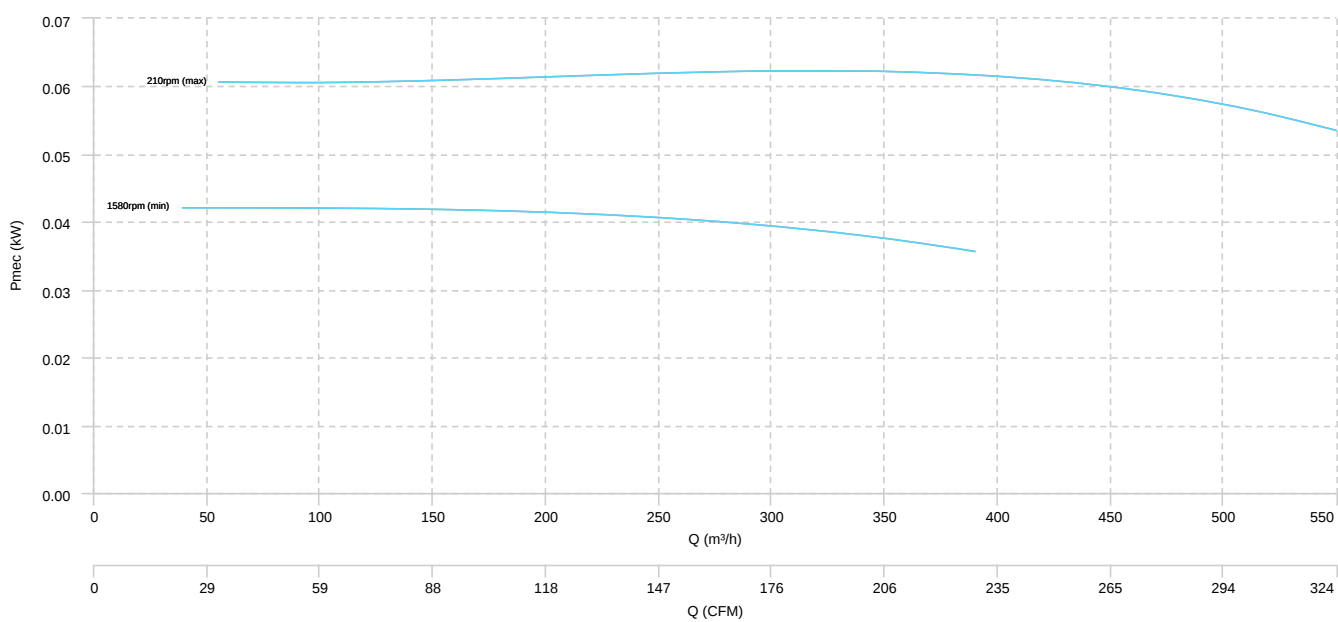
KUVIO 150

KUVIO 150 T

AIR FLOW - PRESSURE



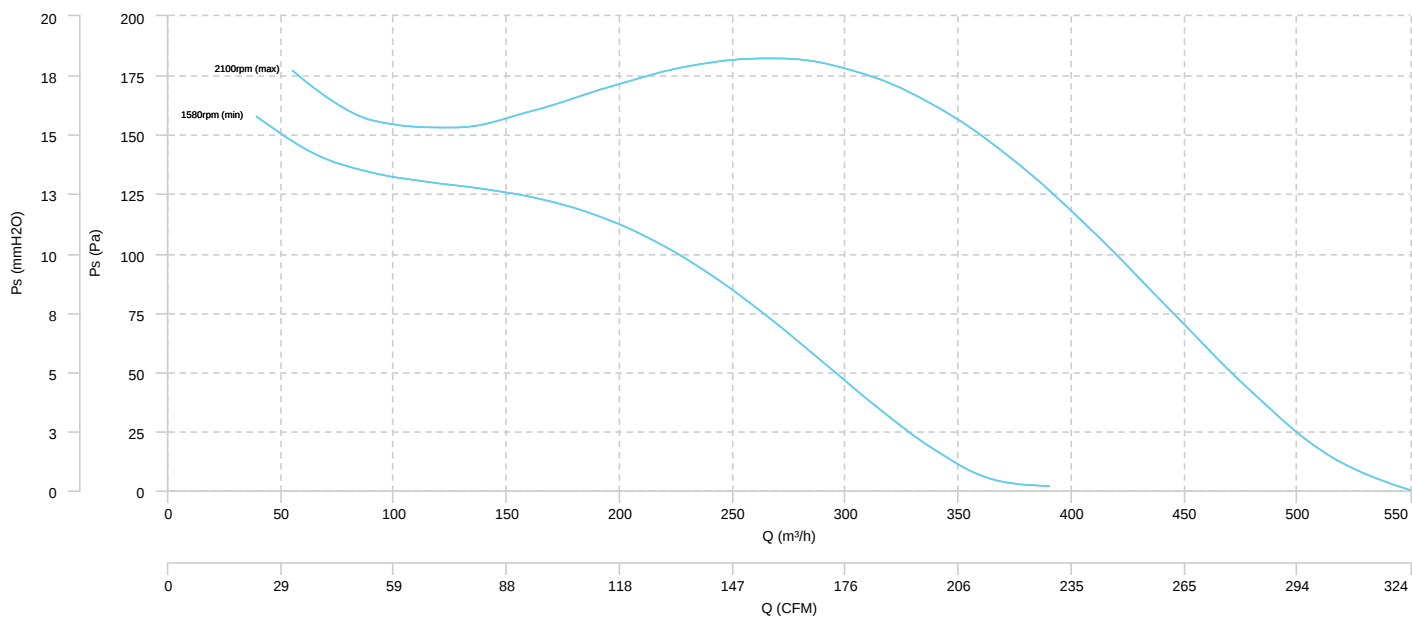
AIR FLOW - MECHANICAL POWER



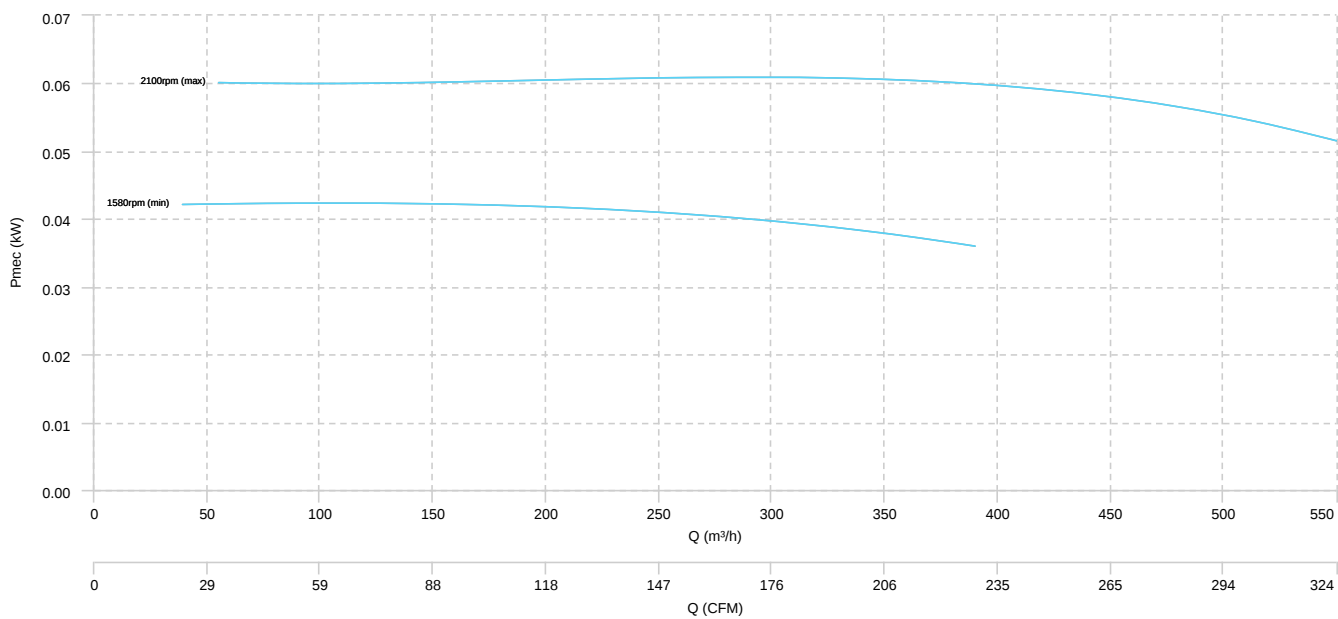
KUVIO 160

KUVIO 160 T

AIR FLOW - PRESSURE

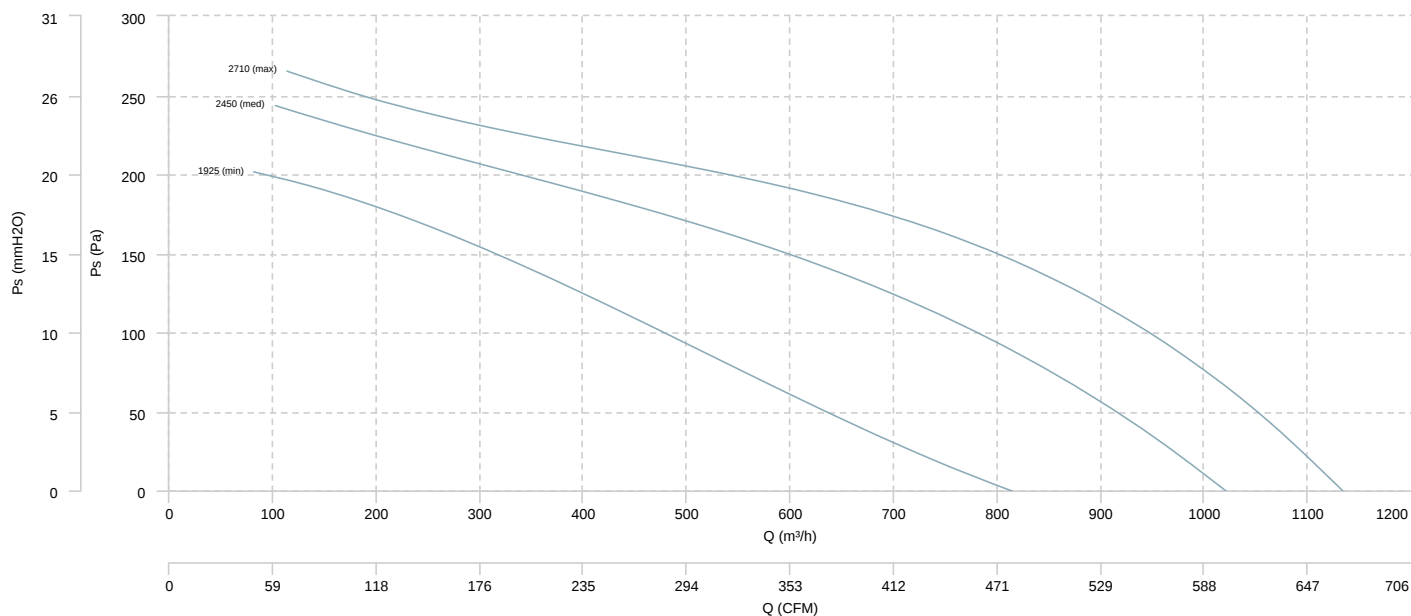


AIR FLOW - MECHANICAL POWER

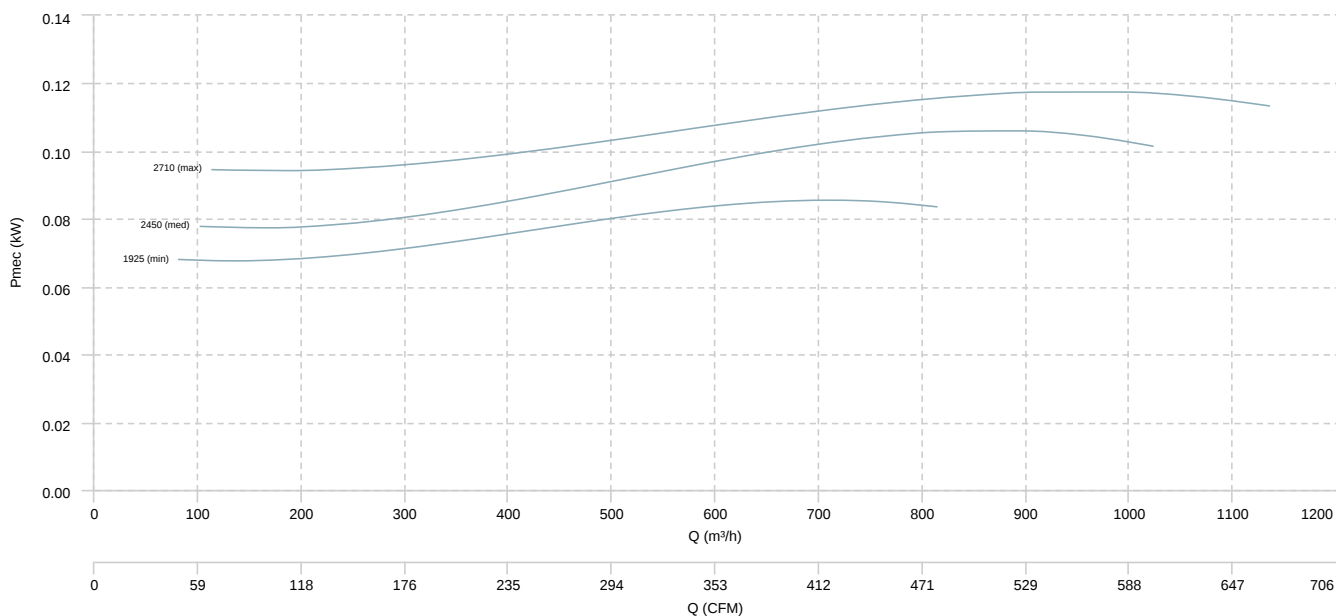


KUVIO 200

AIR FLOW - PRESSURE

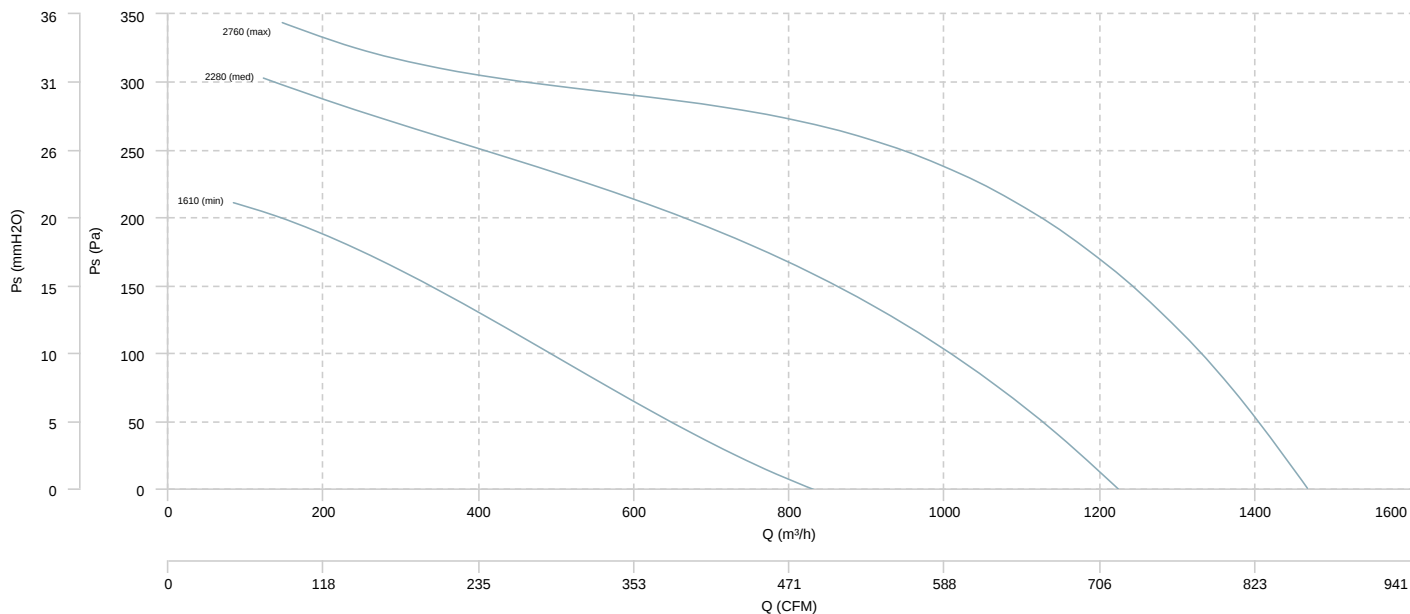


AIR FLOW - MECHANICAL POWER

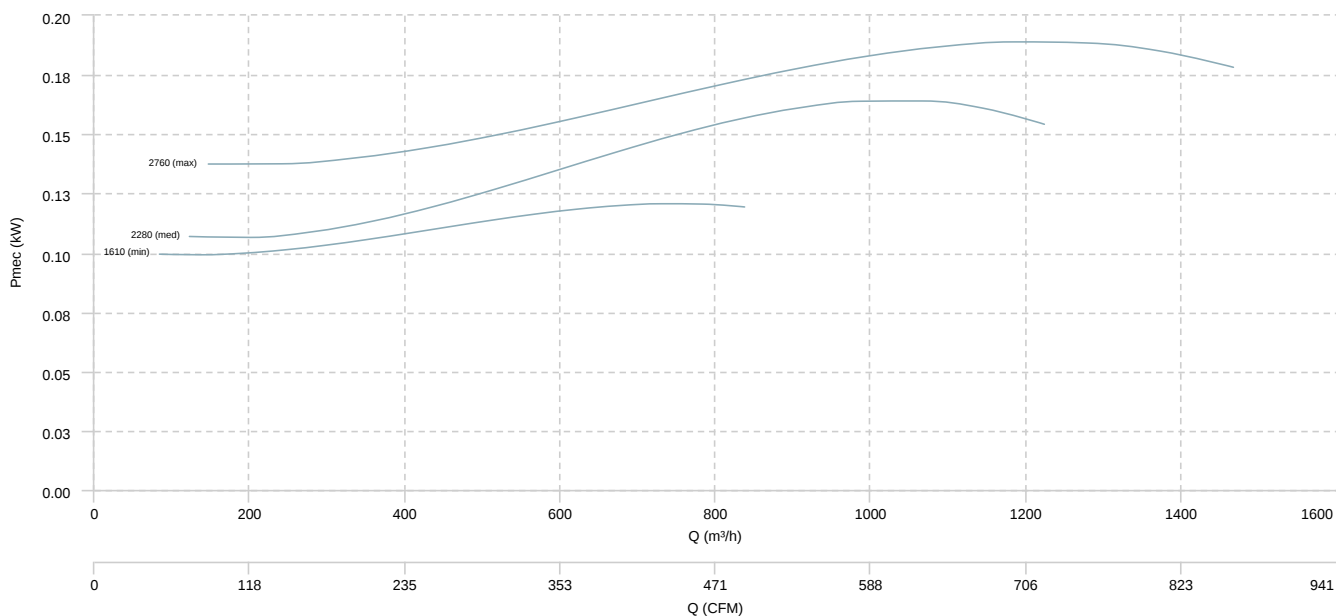


KUVIO 250

AIR FLOW - PRESSURE

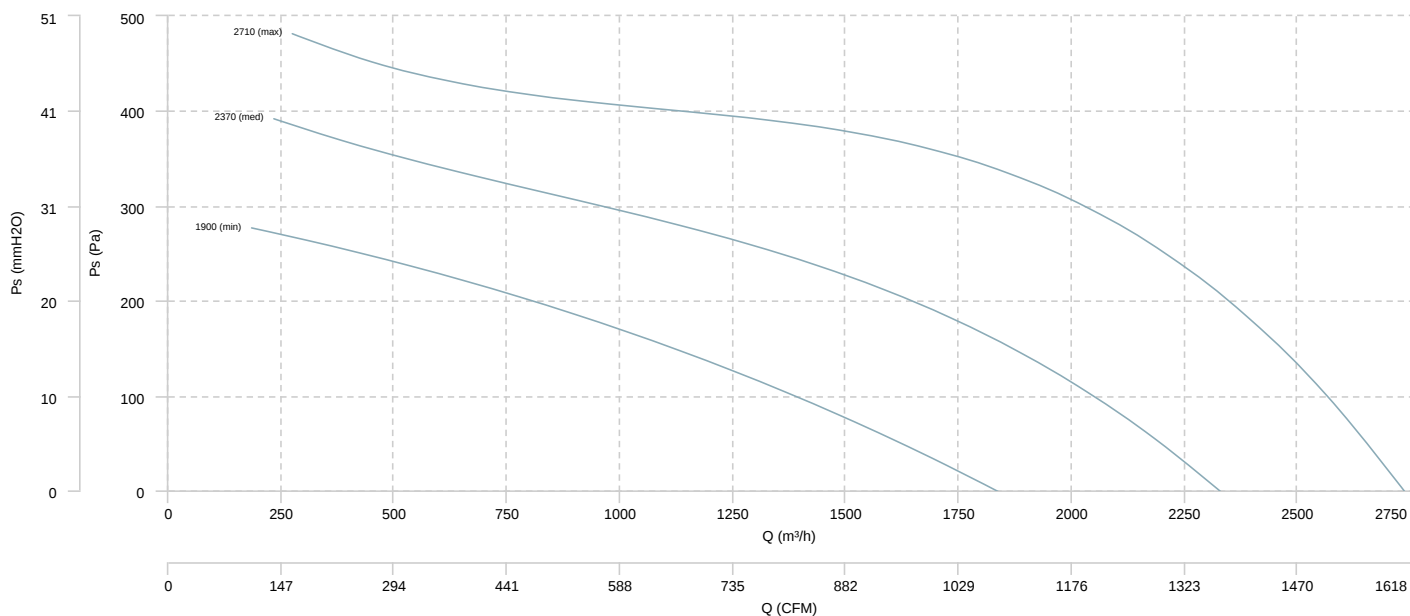


AIR FLOW - MECHANICAL POWER

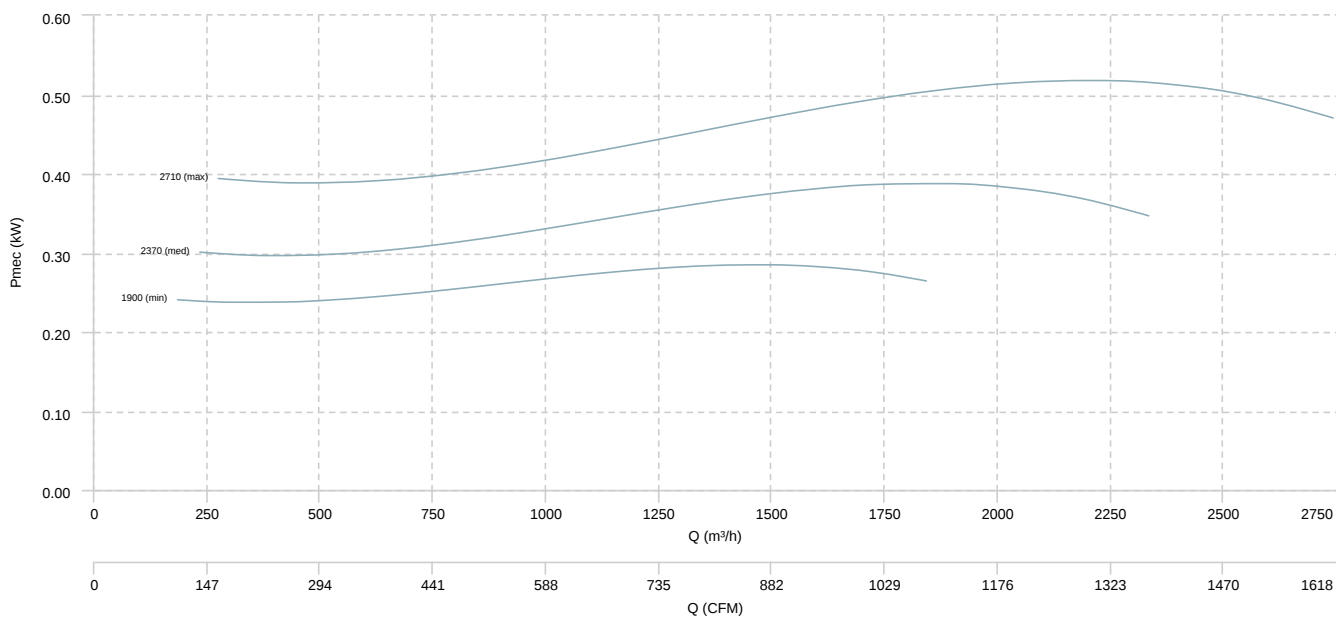


KUVIO 315

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
KUVIO 100	Inlet	-	64	69	72	66	67	55	51	76
	Outlet	-	65	68	72	68	62	57	54	75
	Radiated	-	33	43	43	37	41	33	24	48
KUVIO 100 T	Inlet	-	64	69	72	66	67	55	51	76
	Outlet	-	65	68	72	68	62	57	54	75
	Radiated	-	33	43	43	37	41	33	24	48
KUVIO 125	Inlet	-	61	69	71	71	72	60	59	77
	Outlet	-	60	67	71	72	69	61	60	76
	Radiated	-	32	45	41	41	46	39	25	50
KUVIO 125 T	Inlet	-	61	69	71	71	72	60	59	77
	Outlet	-	60	67	71	72	69	61	60	76
	Radiated	-	32	45	41	41	46	39	25	50
KUVIO 150	Inlet	-	62	70	73	75	78	67	66	81
	Outlet	-	62	74	73	76	74	68	64	81
	Radiated	-	32	43	46	46	52	47	30	55
KUVIO 150 T	Inlet	-	62	70	73	75	78	67	66	81
	Outlet	-	62	74	73	76	74	68	64	81
	Radiated	-	32	43	46	46	52	47	30	55
KUVIO 160	Inlet	-	62	70	73	75	78	67	66	81
	Outlet	-	62	74	73	76	74	68	64	81
	Radiated	-	32	43	46	46	52	47	30	55
KUVIO 160 T	Inlet	-	62	70	73	75	78	67	66	81
	Outlet	-	62	74	73	76	74	68	64	81
	Radiated	-	32	43	46	46	52	47	30	55
KUVIO 200 (1925 (min))	Inlet	-	65	72	74	71	72	70	64	80
	Outlet	-	64	71	72	70	71	68	62	78
	Radiated	-	36	51	51	50	49	45	31	57
KUVIO 250 (1610 (min))	Inlet	-	59	66	69	73	72	68	61	78
	Outlet	-	59	66	68	70	70	67	59	76
	Radiated	-	-	-	-	-	-	-	-	56
KUVIO 315 (1900 (min))	Inlet	-	64	74	79	81	79	79	71	86
	Outlet	-	66	76	80	80	80	77	69	86
	Radiated	-	-	-	-	-	-	-	-	63

Notes:

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

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