

HFW-L/EW

**Cased axial fans
with EC motors**



VARIABLE SPEED DRIVE
VSD: Variable Speed Drive.
. VSD1/B
. VSD3/B
Supplied with fan

CONTROL
Supplied as an optional accessory

SUPPLY
VSD1/B:
220-240 V 50/60 Hz
VSD3/B:
380-415 V 50/60 Hz

Cased axial fans with pad mounted motors and mounting arms designed to reduce noise and vibration. Complete with aerodynamically designed impellers and EC motors.

Fan:

- Airflow direction from motor to impeller
- Cast aluminium impellers
- Sheet steel casing with double flange and cable gland
- Steel Galvanised case
- Electronic variable speed drive (VSD), is supplied with fan (three phase or single-phase)

- By default, the electronic variable speed drive (VSD) is delivered programmed to run at a constant speed
- Fan working temperature: -25 °C +50°C.
- VSD working temperature: -25 °C +50 °C.

Finish:

- Hot-galvanised

Available on request:

- Airflow direction from impeller to motor
- PL version impellers - made from glass fibre reinforced polyamide
- 100% reversible impellers

Motor and electronic variable drive:

- High-efficiency, IE4-compliant E.C. motors fitted with electronic variable speed drive (VSD), which can be adjusted through an external 0-10 V control signal. IP65 Protection
- The external signal can be supplied through a manual or automatic control with 0-10 V output.
- Electronic variable speed drives (VSD) are available with single-phase 220-240V 50/60Hz input (VSD1/B type) or three-phase 380-415V 50/60Hz (VSD3/B type). Standard IP20 protection, IP66 protection available on order

Order Code

HFW-L/EW — 56 — 4 — 1 — B — T — D

Galvanised cased axial fan with high efficiency motors

Impeller diameter in cm

Maximum speed:
4=1410 rpm
6=960 rpm

Motor power (hp)

Industrial Brushless E.C. Motors

M: Equipped with a VSD1/B, electronic variable speed drive, three-phase supply 220-240 V 50/60 Hz.

T: Equipped with a VSD3/B, electronic variable speed drive, three-phase supply 380-415 V 50/60 Hz.

D: Standard version, VSD is supplied, programmed to run at a constant speed

P: VSD supplied programmed to control pressure and Si-Prešion pressure transmitter

K: VSD supplied programmed and integrated into a BOXPRES KIT/B to control pressure.

Technical Characteristics

Model	Speed min/max (r/min)	Single-phase VSD 230 V 50/60 Hz		Three-phase VSD 400 V 50/60 Hz		Maximum electrical power (W)	Maximum Airflow min/max (m³/h)	Sound pressure level min/max dB(A)	Approx. Weight (Kg)
		Maximum input current (A)	Model VSD	Maximum input current (A)	Model VSD				
HFW-L/EW-56-4-1	300 / 1410	7.94	VSD1/B-0.75	1.87	VSD3/B-0.75	905	2395 / 11250	39 / 73	28.0
HFW-L/EW-56-4-1.5	300 / 1410	11.25	VSD1/B-0.75	2.65	VSD3/B-1.5	1295	2895 / 13600	40 / 74	32.0
HFW-L/EW-56-4-2	300 / 1410	15.89	VSD1/B-1.5	3.74	VSD3/B-1.5	1825	3200 / 15050	41 / 75	30.0
HFW-L/EW-56-6-0.75	300 / 900	5.64	VSD1/B-0.75	1.32	VSD3/B-0.75	635	3385 / 10150	38 / 62	23.0
HFW-L/EW-63-4-1	300 / 1410	7.94	VSD1/B-0.75	1.87	VSD3/B-0.75	905	3235 / 15200	39 / 73	29.0
HFW-L/EW-63-4-1.5	300 / 1410	11.25	VSD1/B-0.75	2.65	VSD3/B-1.5	1295	3785 / 17800	40 / 74	32.0
HFW-L/EW-63-4-2	300 / 1410	15.89	VSD1/B-1.5	3.74	VSD3/B-1.5	1825	4105 / 19300	41 / 75	35.0
HFW-L/EW-63-6-0.75	300 / 900	5.64	VSD1/B-0.75	1.32	VSD3/B-0.75	635	4535 / 13600	41 / 65	29.0
HFW-L/EW-63-6-1	300 / 900	8.32	VSD1/B-1.5	1.96	VSD3/B-1.5	955	5300 / 15900	42 / 66	35.0
HFW-L/EW-71-4-1.5	300 / 1410	11.25	VSD1/B-0.75	2.65	VSD3/B-1.5	1295	4150 / 19500	44 / 78	35.0
HFW-L/EW-71-4-2	300 / 1410	15.89	VSD1/B-1.5	3.74	VSD3/B-1.5	1825	4445 / 20900	45 / 79	38.0
HFW-L/EW-71-6-0.75	300 / 900	5.64	VSD1/B-0.75	1.32	VSD3/B-0.75	635	5365 / 16100	43 / 67	31.0
HFW-L/EW-71-6-1	300 / 900	8.32	VSD1/B-1.5	1.96	VSD3/B-1.5	955	5765 / 17300	44 / 68	38.0
HFW-L/EW-71-6-1.5	300 / 900	11.51	VSD1/B-1.5	2.71	VSD3/B-1.5	1325	6650 / 19950	45 / 69	40.0

HFW-L/EW

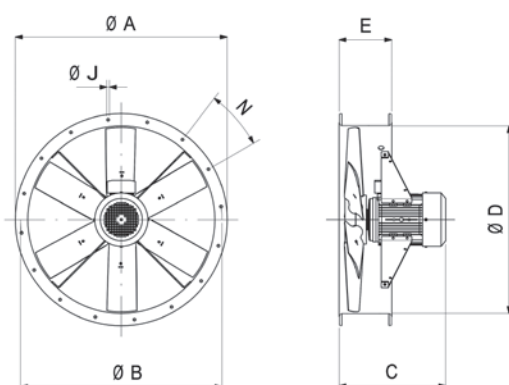
Acoustic Features

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 external diameter plus the impeller's diameter, with a minimum of 1.5 m.

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

	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
HFW-L/EW-56-4-1	48	68	76	81	83	80	73	62	HFW-L/EW-63-6-0.75	42	60	68	73	75	72	65	56
HFW-L/EW-56-4-1.5	49	69	77	82	84	81	74	63	HFW-L/EW-63-6-1	43	62	70	75	77	74	67	57
HFW-L/EW-56-4-2	50	70	78	83	85	82	75	64	HFW-L/EW-71-4-1.5	54	74	82	87	89	86	79	69
HFW-L/EW-56-6-0.75	37	57	65	70	72	69	62	51	HFW-L/EW-71-4-2	53	73	81	86	88	85	78	70
HFW-L/EW-63-4-1	50	70	78	83	85	82	75	64	HFW-L/EW-71-6-0.75	44	63	72	74	76	73	66	55
HFW-L/EW-63-4-1.5	48	68	76	81	83	80	73	65	HFW-L/EW-71-6-1	45	65	73	75	77	74	67	56
HFW-L/EW-63-4-2	52	68	76	81	83	80	73	66	HFW-L/EW-71-6-1.5	46	66	71	76	78	75	68	57

Dimensions in mm



Model	ØA	ØB	C	ØD	E	ØJ	N
HFW-L/EW-56-4-1	665	620	330	560	225	12	12x30°
HFW-L/EW-56-4-1.5	665	620	380	560	225	12	12x30°
HFW-L/EW-56-4-2	665	620	380	560	225	12	12x30°
HFW-L/EW-56-6-0.75	665	620	330	560	225	12	12x30°
HFW-L/EW-63-4-1	735	690	379	640	225	12	12x30°
HFW-L/EW-63-4-1.5	735	690	429	640	225	12	12x30°
HFW-L/EW-63-4-2	735	690	429	640	225	12	12x30°
HFW-L/EW-63-6-0.75	735	690	379	640	225	12	12x30°
HFW-L/EW-63-6-1	735	690	429	640	225	12	12x30°
HFW-L/EW-71-4-1.5	815	770	389	710	225	12	16x22°30'
HFW-L/EW-71-4-2	815	770	389	710	225	12	16x22°30'
HFW-L/EW-71-6-0.75	815	770	339	710	225	12	16x22°30'
HFW-L/EW-71-6-1	815	770	389	710	225	12	16x22°30'
HFW-L/EW-71-6-1.5	815	770	389	710	225	12	16x22°30'

Accessories

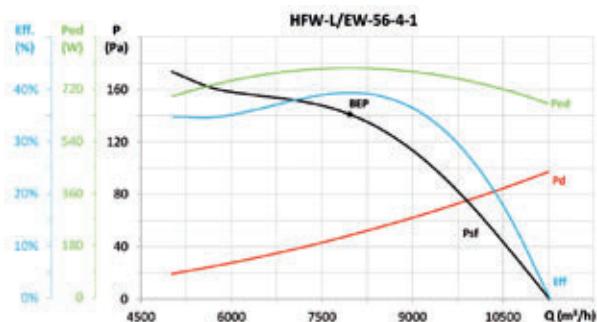
See accessories section.



HFW-L/EW

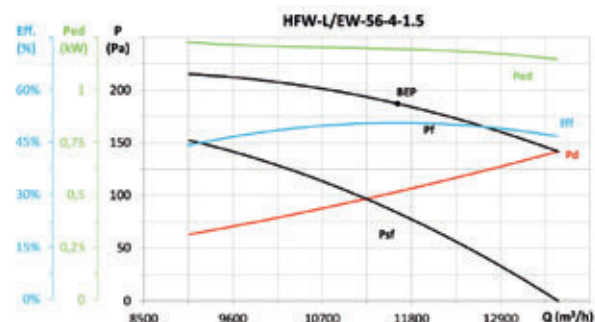


ErP. Characteristic Curves and ErP Data



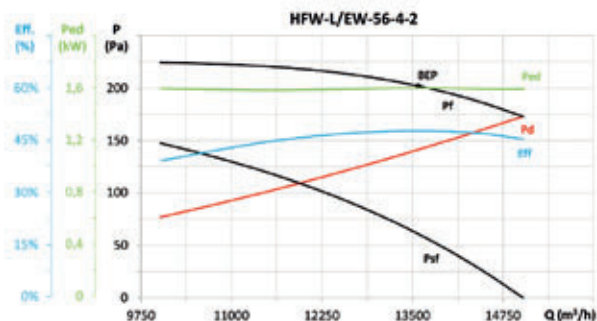
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
A	S	1,00	1,09	43,0%	50,0	0,793	7959	141	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



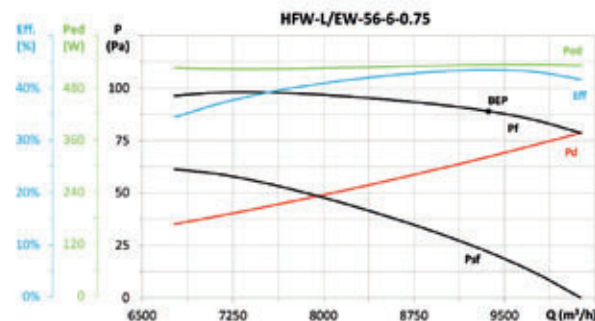
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
B	T	1,01	1,08	54,7%	60,5	1,195	11629	187	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



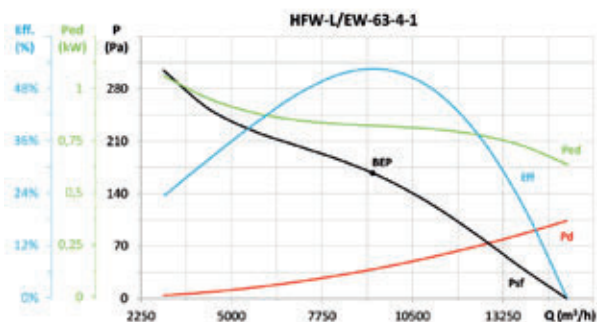
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
B	T	1,00	1,07	53,0%	58,1	1,545	13581	202	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



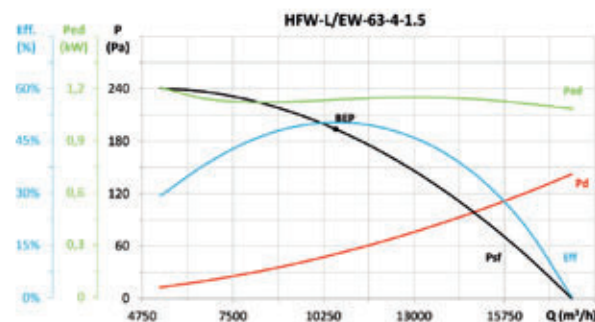
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
B	T	1,00	1,11	49,9%	58,1	0,514	9368	89	900	INCLUDED

* η_e (%) = Eff. (%) x Cc



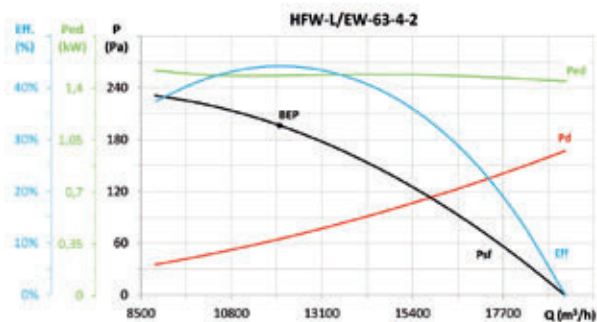
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,09	57,4%	64,3	0,822	9291	167	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



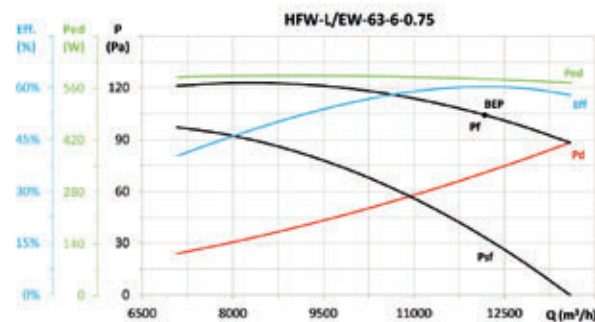
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,08	54,5%	60,5	1,136	10625	194	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,08	47,5%	52,8	1,485	12026	196	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



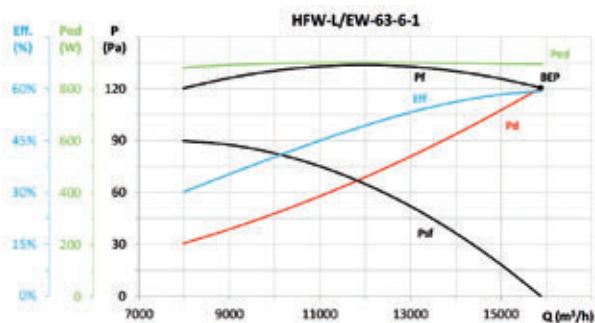
MC	EC	SR	Cc	η_e (%)*	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
B	T	1,00	1,11	69,2%	77,1	0,563	12174	104	900	INCLUDED

* η_e (%) = Eff. (%) x Cc

HFW-L/EW

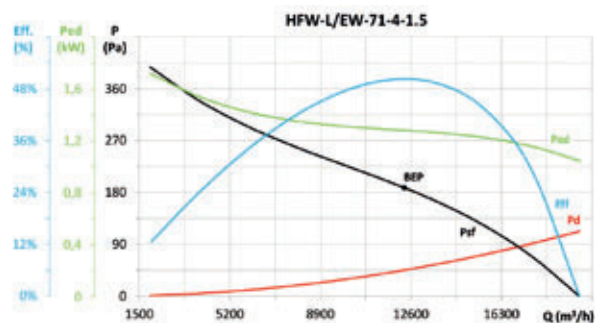


ErP. Characteristic Curves and ErP Data



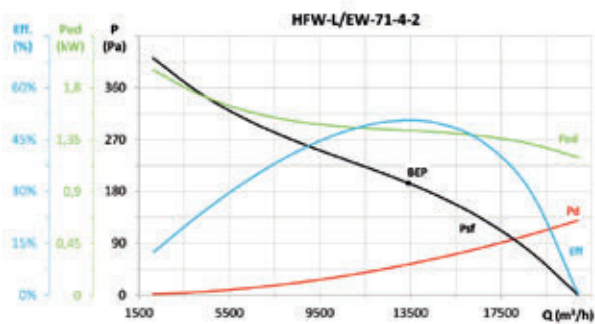
MC	EC	SR	Cc	η_e (%) [*]	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
B	T	1,00	1,09	66,6%	73,4	0,871	15880	121	900	INCLUDED

* η_e (%) = Eff. (%) x Cc



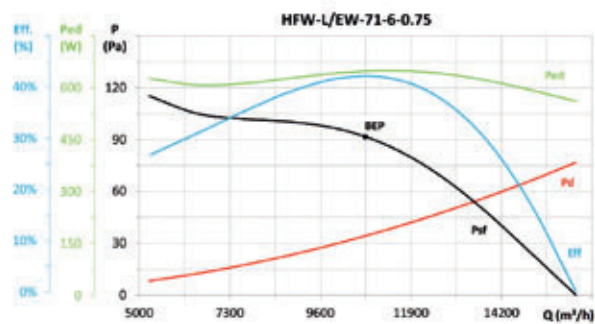
MC	EC	SR	Cc	η_e (%) [*]	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,08	54,3%	59,9	1,282	12330	188	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



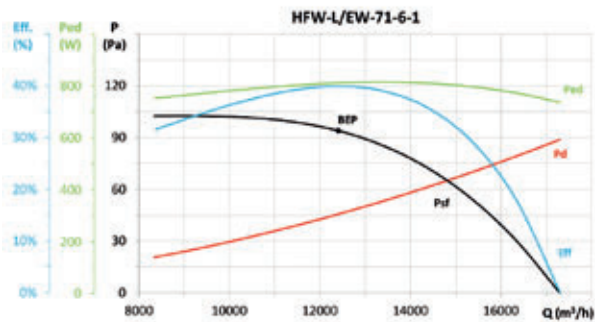
MC	EC	SR	Cc	η_e (%) [*]	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,08	54,4%	59,8	1,432	13405	195	1410	INCLUDED

* η_e (%) = Eff. (%) x Cc



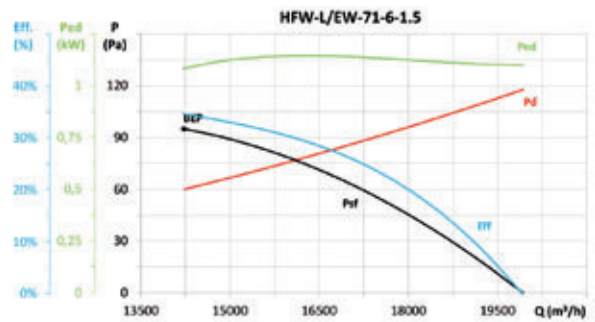
MC	EC	SR	Cc	η_e (%) [*]	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,10	48,2%	55,8	0,625	10743	92	900	INCLUDED

* η_e (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%) [*]	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,10	44,9%	51,9	0,789	12404	94	900	INCLUDED

* η_e (%) = Eff. (%) x Cc



MC	EC	SR	Cc	η_e (%) [*]	N	[kW]	[m³/h]	[Pa]	[rpm]	VSD
C	S	1,00	1,09	38,5%	44,7	1,059	14226	95	900	INCLUDED

* η_e (%) = Eff. (%) x Cc