

# HTP



High-pressure impeller

## Cased high-pressure axial fans

Robust cased axial high-pressure fans, especially designed for mining installations with large losses of load

**Fan:**

- Sheet steel thick long casing
- Motor base welded to the casing
- Guidelines for high aerodynamic performance for pressure gain
- Optimum surface protection by means of high-quality steel.
- High-performance, cast aluminium impeller.
- Airflow direction from impeller to motor
- Electrical connection in outside terminal board.

**Motor:**

- Single-phase two-speed motors with IE-2 efficiency, except lower powers 0.75 kW.
- Class F motors with ball bearings, IP-55 protection
- Three-phase 230/400V.-50Hz (up to 5.5CV) and 400/690V.-50Hz. (power over 5.5CV)
- Working temperature: -20°C +70°C

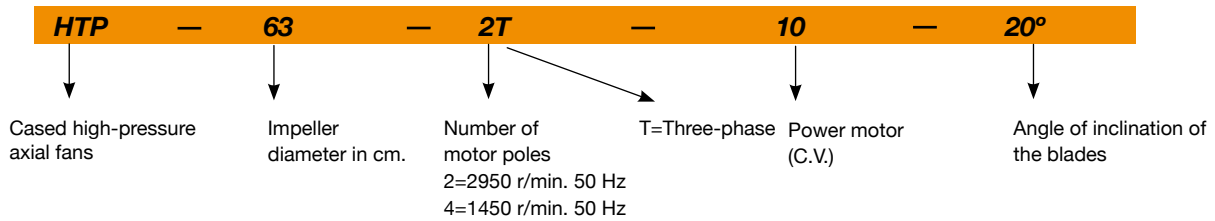
**Finish:**

- High-protection, anti-corrosion steel, specially primed and high-quality paint for corrosive environments.

**On request:**

- Standardised IP-55 motors, ATEX motors and two speeds
- Made entirely from stainless steel.
- Hot-rolled galvanised steel construction

### Order code



### Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)			Installed power (kW)	Maximum airflow (m³/h)	Approx. weight (Kg)	NPS dB(A)
		230V	400V	690V				
HTP-50-2T-4	2920	10,09	5,80	-	3,00	13850	49	82
HTP-50-2T-5,5	2920	13,22	7,60	-	4,00	16450	65	83
HTP-56-2T-5,5	2920	13,22	7,60	-	4,00	18050	69	88
HTP-56-2T-10	2920	-	14,00	8,12	7,50	25500	147	89
HTP-63-2T-10	2920	-	14,00	8,12	7,50	23850	132	94
HTP-63-2T-15	2950	-	19,20	11,13	11,00	29400	167	94
HTP-63-2T-20	2950	-	26,00	15,07	15,00	34400	181	97
HTP-63-2T-25	2950	-	31,50	18,26	18,50	37200	199	98
HTP-63-2T-30	2950	-	39,50	22,90	22,00	39800	208	99
HTP-63-4T-1,5	1430	4,17	2,40	-	1,10	12850	92	79
HTP-63-4T-2	1430	5,74	3,30	-	1,50	15650	93	79
HTP-63-4T-3	1450	8,00	4,60	-	2,20	18600	101	83
HTP-63-4T-4	1450	10,96	6,30	-	3,00	19900	104	84
HTP-71-2T-15	2950	-	19,20	11,13	11,00	32850	184	93
HTP-71-2T-20	2950	-	26,00	15,07	15,00	39250	198	95
HTP-71-2T-25	2950	-	31,50	18,26	18,50	43450	216	95
HTP-71-2T-30	2950	-	39,50	22,90	22,00	45500	225	95
HTP-71-2T-40	2950	-	51,60	29,91	30,00	52550	303	98
HTP-71-4T-2	1430	5,74	3,30	-	1,50	17500	110	83
HTP-71-4T-3	1450	8,00	4,60	-	2,20	20650	118	83
HTP-71-4T-4	1450	10,96	6,30	-	3,00	23950	121	84

## Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)			Installed power (kW)	Maximum airflow (m³/h)	Approx. weight (Kg)	NPS dB(A)
		230V	400V	690V				
HTP-71-4T-5,5	1450	15,30	8,80	-	4,00	27400	127	87
HTP-71-4T-7,5	1450	-	11,20	6,49	5,50	31700	141	90
HTP-80-4T-4	1450	10,96	6,30	-	3,00	19300	146	86
HTP-80-4T-5,5	1450	15,30	8,80	-	4,00	22850	152	86
HTP-80-4T-7,5	1450	-	11,20	6,49	5,50	28000	166	86
HTP-80-4T-10	1450	-	15,30	8,87	7,50	31500	177	87
HTP-80-4T-15	1450	-	20,90	12,12	11,00	40000	217	91
HTP-90-4T-7,5	1450	-	11,20	6,49	5,50	27450	196	90
HTP-90-4T-10	1450	-	15,30	8,87	7,50	32500	207	90
HTP-90-4T-15	1450	-	20,90	12,12	11,00	42200	247	90
HTP-90-4T-20	1450	-	28,50	16,52	15,00	50050	266	94
HTP-90-4T-25	1480	-	34,50	20,00	18,50	54550	294	95
HTP-90-4T-30	1480	-	40,90	23,71	22,00	61750	311	97
HTP-100-4T-15	1450	-	20,90	12,12	11,00	46100	282	93
HTP-100-4T-20	1450	-	28,50	16,52	15,00	56300	301	93
HTP-100-4T-25	1480	-	34,50	20,00	18,50	59900	329	93
HTP-100-4T-30	1480	-	40,90	23,71	22,00	69900	346	96
HTP-100-4T-40	1480	-	55,30	32,06	30,00	80500	401	98
HTP-125-4T-40	1480	-	55,30	32,06	30,00	81000	503	100
HTP-125-4T-50	1480	-	68,00	39,42	37,00	96800	525	100
HTP-125-4T-60	1480	-	81,30	47,13	45,00	105050	558	100
HTP-125-4T-75	1480	-	98,90	57,33	55,00	127800	599	100
HTP-125-4T-100	1480	-	135,00	78,26	75,00	147350	674	104
HTP-125-4T-125	1480	-	163,00	94,49	90,00	156800	703	105

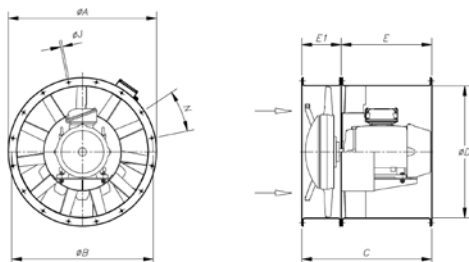
## Acoustic features

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 span 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.

Model	LpdB(A)	63	125	250	500	1000	2000	4000	8000	Model	63	125	250	500	1000	2000	4000	8000	
HTP-50-2T-4	80	57	77	85	90	92	89	82	71	HTP-80-4T-4	86	58	75	86	95	96	96	93	86
HTP-50-2T-5,5	81	58	78	86	91	93	90	83	72	HTP-80-4T-5,5	86	58	76	86	95	96	96	93	86
HTP-56-2T-5,5	86	63	83	91	96	98	95	88	77	HTP-80-4T-7,5	86	58	76	86	95	96	96	93	86
HTP-56-2T-10	87	64	84	92	97	99	96	89	78	HTP-80-4T-10	87	59	77	87	97	98	98	94	88
HTP-63-2T-10	94	70	82	92	104	105	104	99	91	HTP-80-4T-15	91	63	81	91	101	102	102	99	92
HTP-63-2T-15	94	70	82	92	104	105	104	99	91	HTP-90-4T-7,5	90	62	79	90	99	100	100	97	90
HTP-63-2T-20	97	73	85	95	107	108	107	102	94	HTP-90-4T-10	90	62	80	90	99	100	100	97	90
HTP-63-2T-25	98	74	86	96	108	109	108	103	95	HTP-90-4T-15	90	62	80	90	100	101	101	98	91
HTP-63-2T-30	99	75	87	97	109	110	109	104	96	HTP-90-4T-20	94	66	83	94	103	104	104	101	94
HTP-63-4T-1,5	79	55	67	77	89	90	89	84	76	HTP-90-4T-25	95	67	85	95	104	105	105	102	95
HTP-63-4T-2	79	55	67	77	89	90	89	84	76	HTP-90-4T-30	97	69	87	97	107	108	108	104	98
HTP-63-4T-3	83	59	71	81	93	94	93	88	80	HTP-100-4T-15	93	65	83	93	102	103	103	100	93
HTP-63-4T-4	84	60	72	82	94	95	94	89	81	HTP-100-4T-20	93	65	82	93	102	103	103	100	93
HTP-71-2T-15	93	65	83	93	102	104	103	100	93	HTP-100-4T-25	93	65	83	93	102	103	103	100	93
HTP-71-2T-20	95	67	85	95	104	106	105	102	95	HTP-100-4T-30	96	67	85	96	105	106	106	103	96
HTP-71-2T-25	95	67	85	95	104	106	105	102	95	HTP-100-4T-40	98	70	88	98	107	108	108	105	98
HTP-71-2T-30	95	67	85	95	104	106	105	102	95	HTP-125-4T-40	100	72	89	100	109	110	110	107	100
HTP-71-2T-40	98	70	88	98	107	109	108	105	98	HTP-125-4T-50	100	72	90	100	109	110	110	107	100
HTP-71-4T-2	83	55	73	83	92	93	93	90	83	HTP-125-4T-60	100	72	89	100	109	110	110	107	100
HTP-71-4T-3	83	55	72	83	92	93	93	90	83	HTP-125-4T-75	100	72	90	100	110	111	111	108	101
HTP-71-4T-4	84	56	74	84	94	95	95	91	85	HTP-125-4T-100	104	76	93	104	113	114	114	111	104
HTP-71-4T-5,5	87	59	77	87	97	98	98	95	88	HTP-125-4T-125	105	77	95	105	114	115	115	112	105
HTP-71-4T-7,5	90	62	80	90	100	101	101	97	91										

## Dimensions in mm



Model	Power	ØA	ØB	ØD	E	E1	C	ØJ	N
HTP-50-2T		600	560	514	-	-	500	12	12x30°
HTP-56-2T		660	620	560	-	-	500	12	12x30°
HTP-63-2T		730	690	640	650	220	870	12	12x30°
HTP-63-4T		730	690	640	340	220	560	12	12x30°
HTP-71-2T		810	770	710	700	240	940	12	16x22°30'
HTP-71-4T		810	770	710	420	240	660	12	16x22°30'
HTP-80-4T	4 / 5.5	900	860	800	360	240	600	12	16x22°30'
HTP-80-4T	7.5 / 10 / 15	900	860	800	550	240	790	12	16x22°30'
HTP-90-4T	7'5 / 10	1015	970	900	420	250	670	15	16x22°30'
HTP-90-4T	15 / 20 / 25 / 30	1015	970	900	650	250	900	15	16x22°30'
HTP-100-4T	15 / 20	1115	1070	1000	550	270	820	15	16x22°30'
HTP-100-4T	25 / 30 / 40	1115	1070	1000	700	270	970	15	16x22°30'
HTP	-125	1360	1311	1258	-	-	810	14	20x18°

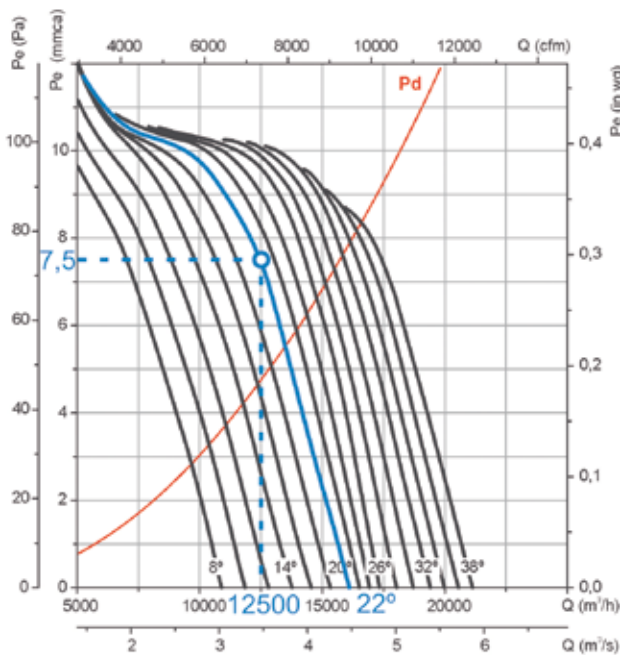
## EXAMPLE OF SELECTION

### Characteristic curves

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.

#### HTP-63-4T



#### Initial data

- Working point:
- Airflow: 12,500 m<sup>3</sup>/h
- Loss of load: 7.5 mm w.c.

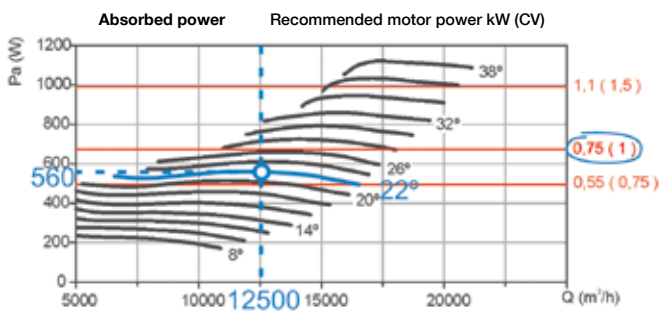
#### Steps for the selection of equipment

##### On the pressure graph:

1. Mark the working point, defined by the airflow (12,500 m<sup>3</sup>/h) and the loss of load (7.5 mm w.c.).
2. Select the curve of the equipment which is closest above the working point. In our case, a curve with a blade angle of 22° is obtained.

##### On the power graph:

3. Mark the working point, defined by the airflow (12,500 m<sup>3</sup>/h) and the selected blade angle (22°).
4. Read the absorbed power on the power axis on the left. Pa = 560 W at the working point.
5. Look for the straight red line which is closest to the working point above. On the right-hand side of the graph, the value of the installed motor power is obtained. In our case, this is 0.75 kW or 1 CV.



## EXAMPLE OF ORDER CODE

**HTP** — **63** — **4T** — **1** — **22°**

↓  
Cased high-pressure axial fans

↓  
Impeller diameter in cm.

↓  
Number of motor poles  
4=1400 r/min. 50 Hz  
6=900 r/min. 50 Hz  
8=750 r/min. 50 Hz

↓  
T=Three-phase  
M=Single-phase

↓  
Motor power (C.V.)

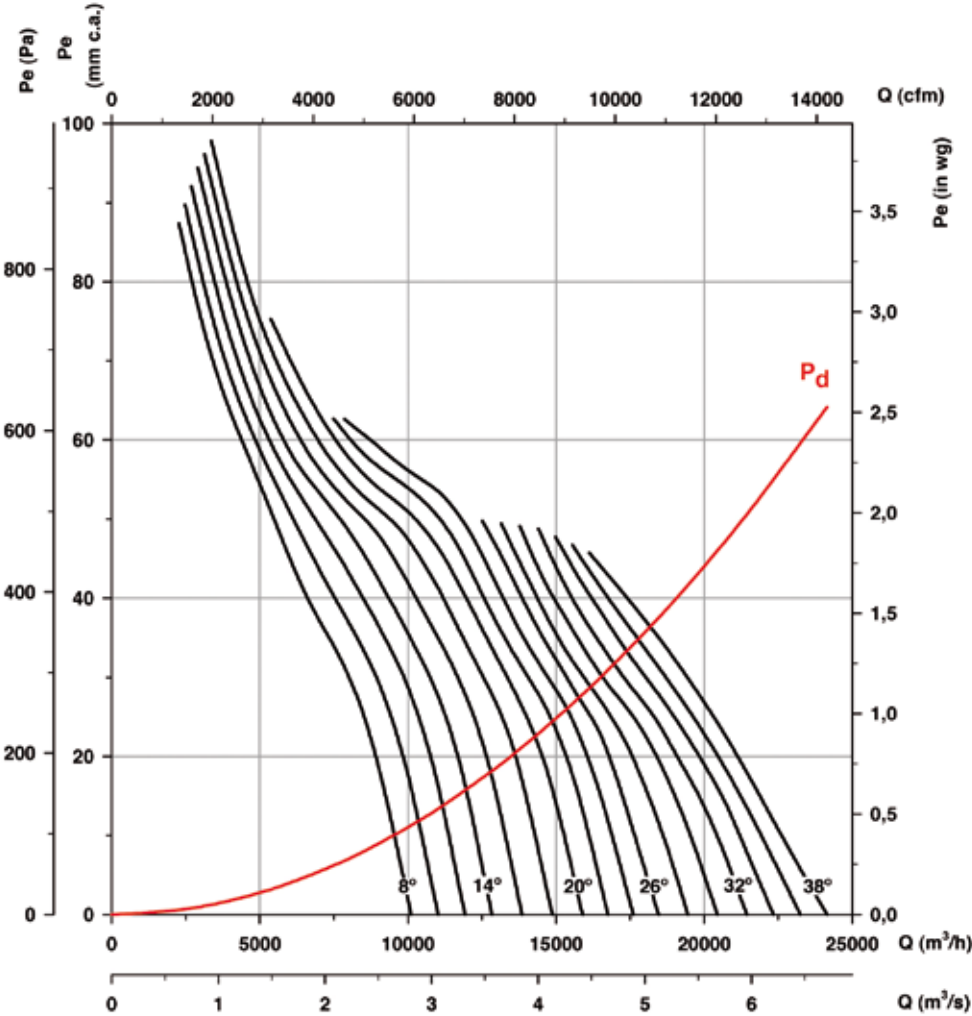
↓  
Angle of inclination of the blades

**Characteristic curves**

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

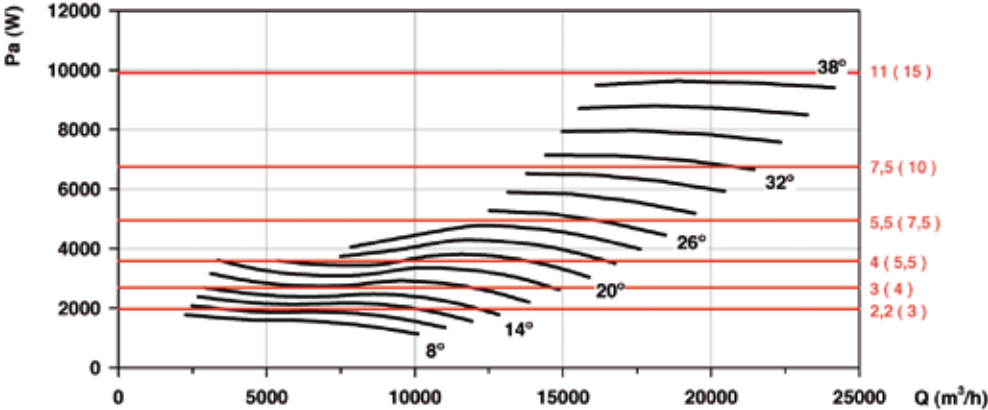
Pe = Static pressure in mm.w.c., Pa and inwg.

**HTP-50-2T**



**Absorbed power**

Recommended motor power kW (CV)

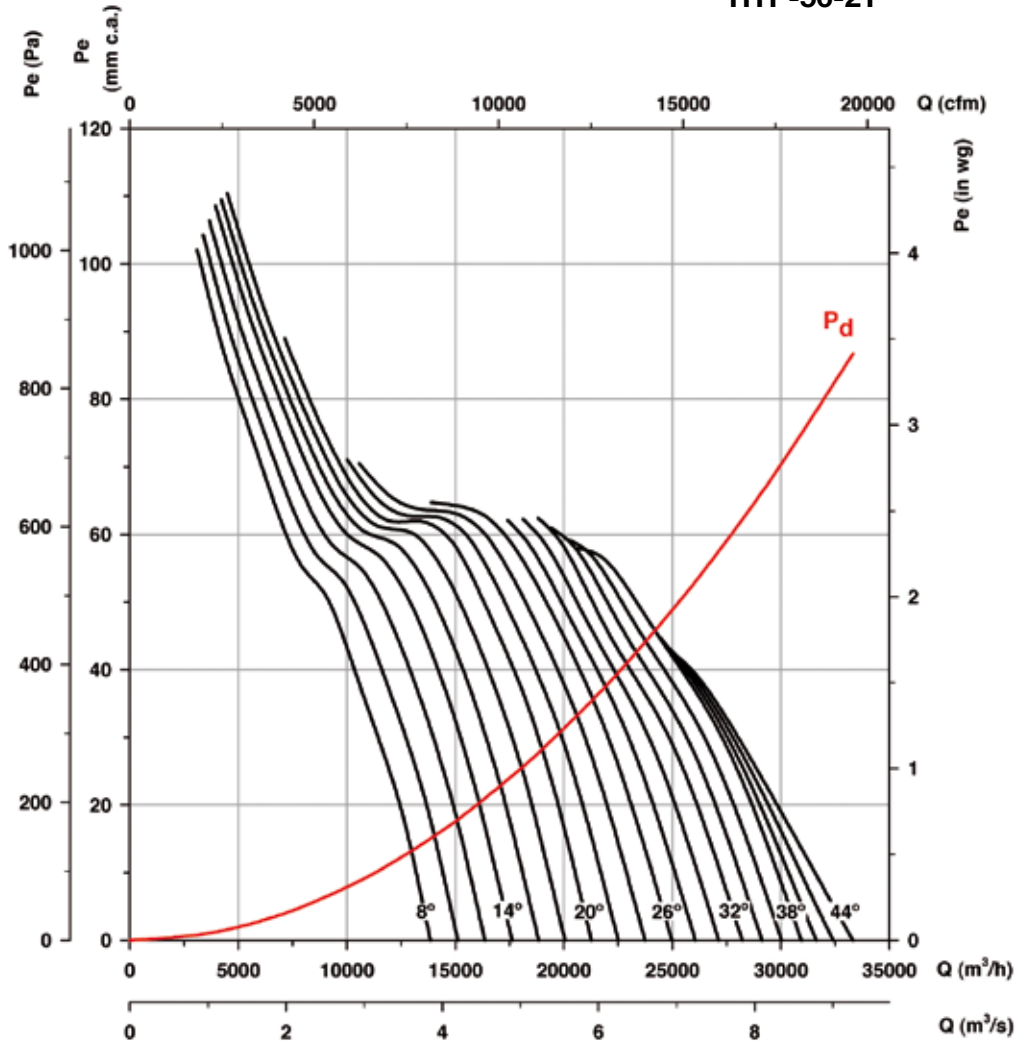


**Characteristic curves**

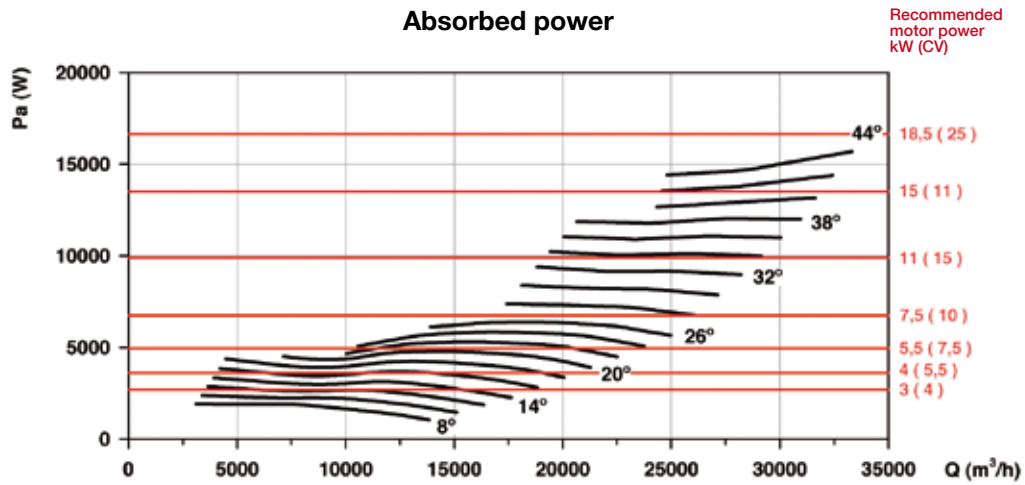
Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe= Static pressure in mm.w.c., Pa and inwg.

**HTP-56-2T**



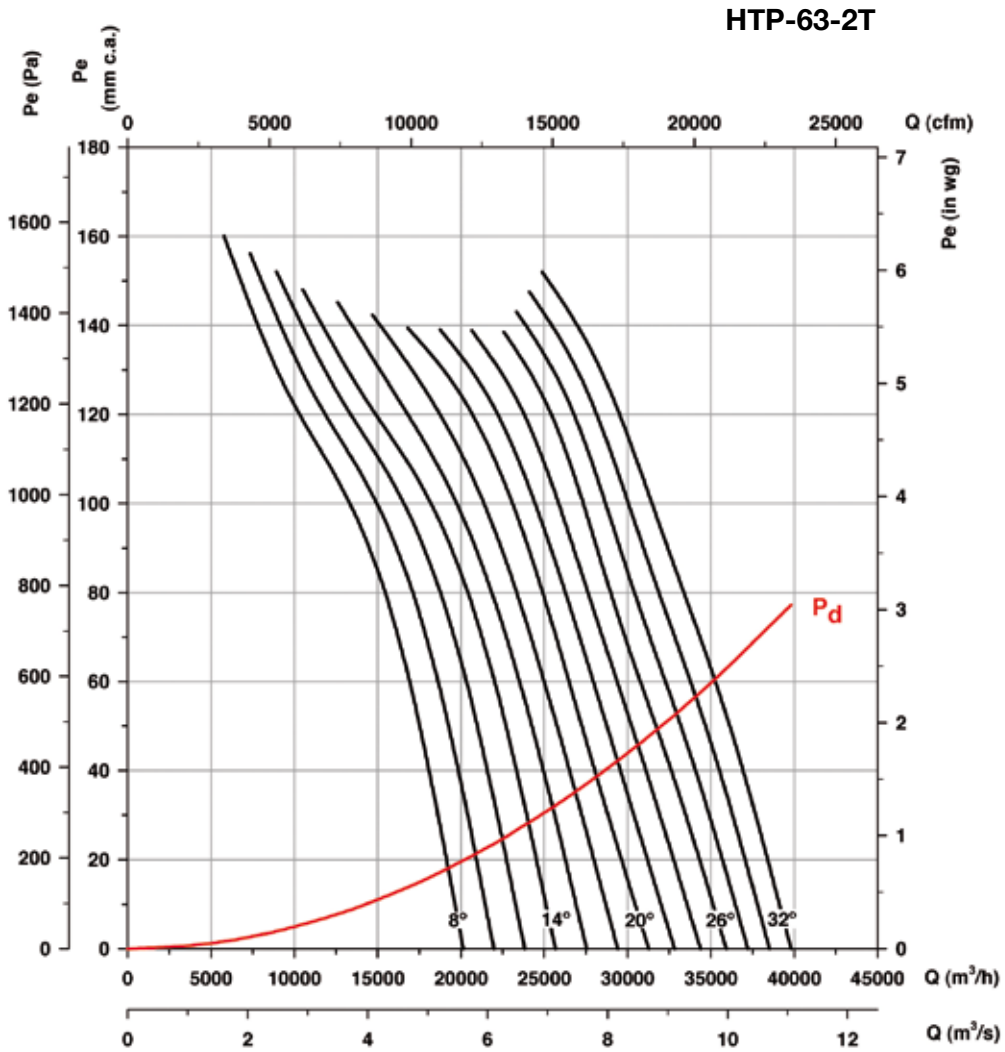
**Absorbed power**



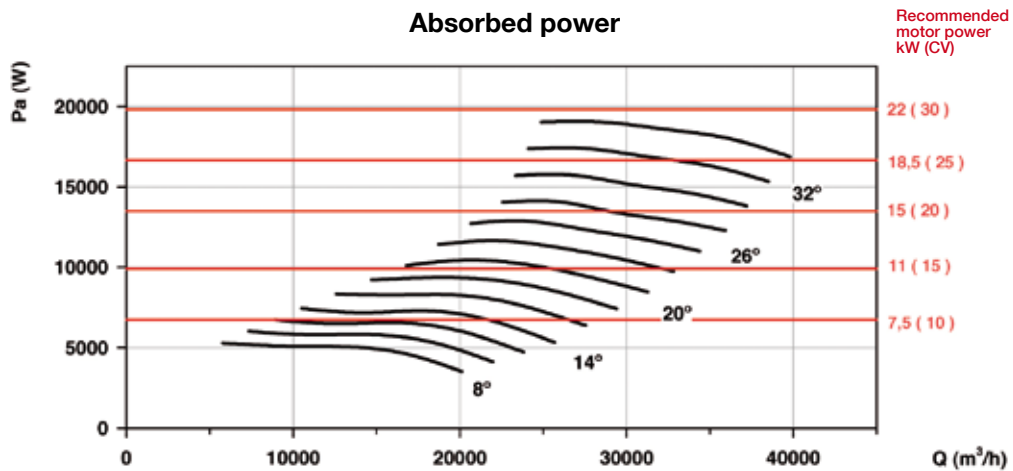
## Characteristic curves

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.



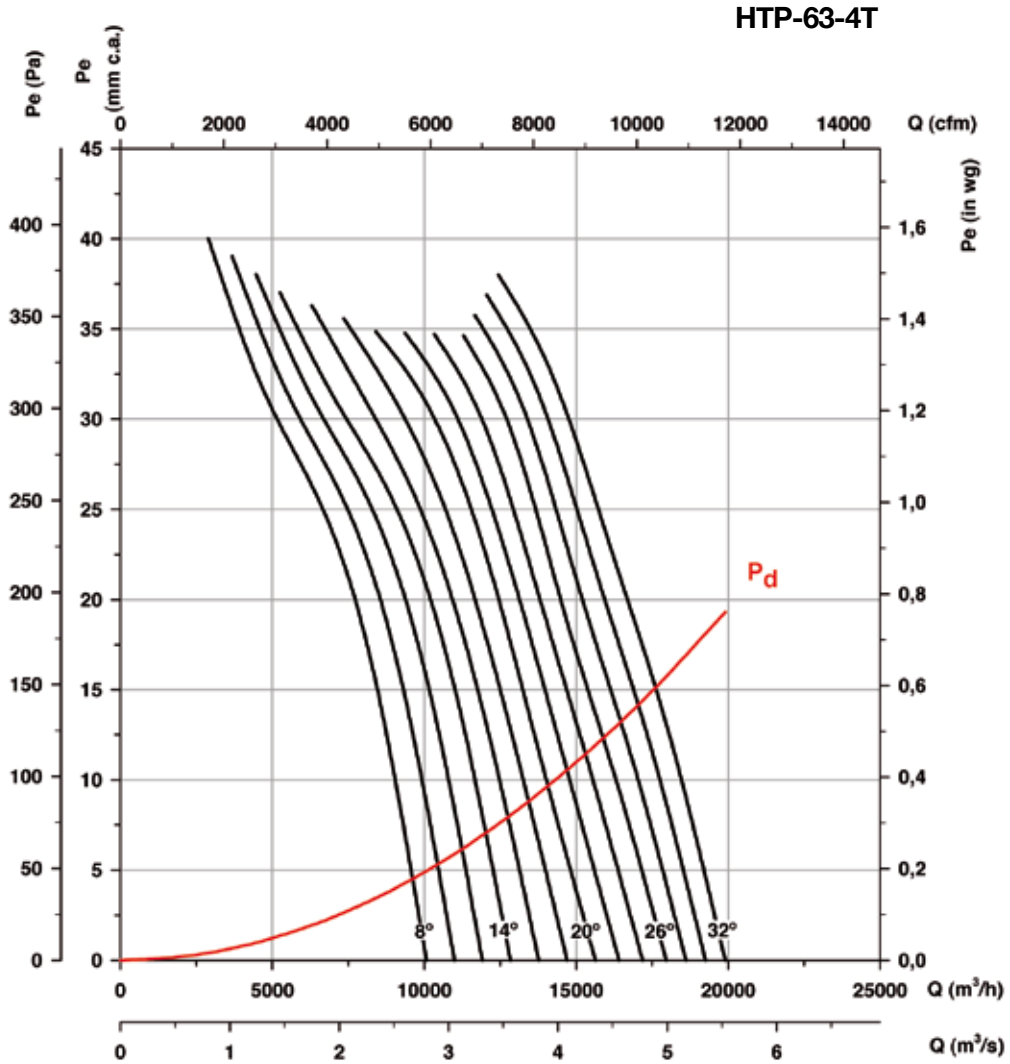
### Absorbed power



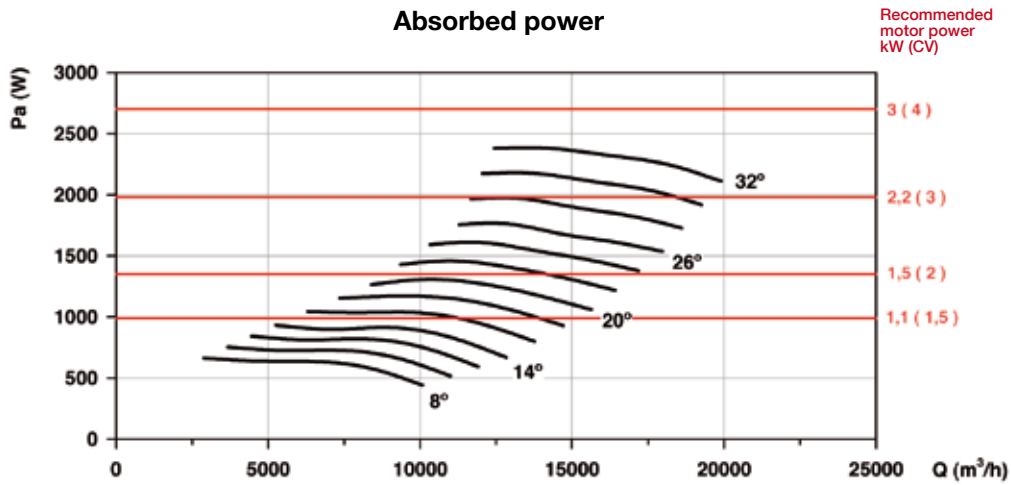
**Characteristic curves**

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.



**Absorbed power**

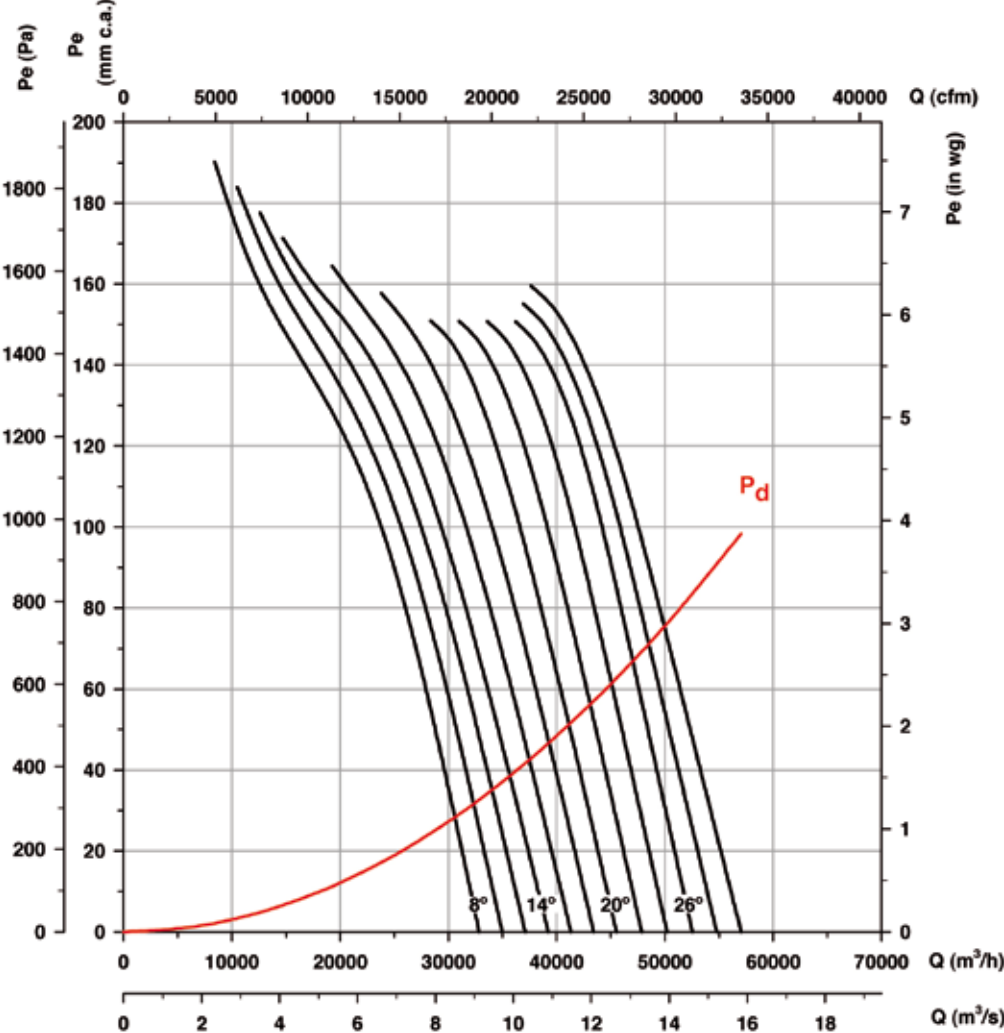


Characteristic curves

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

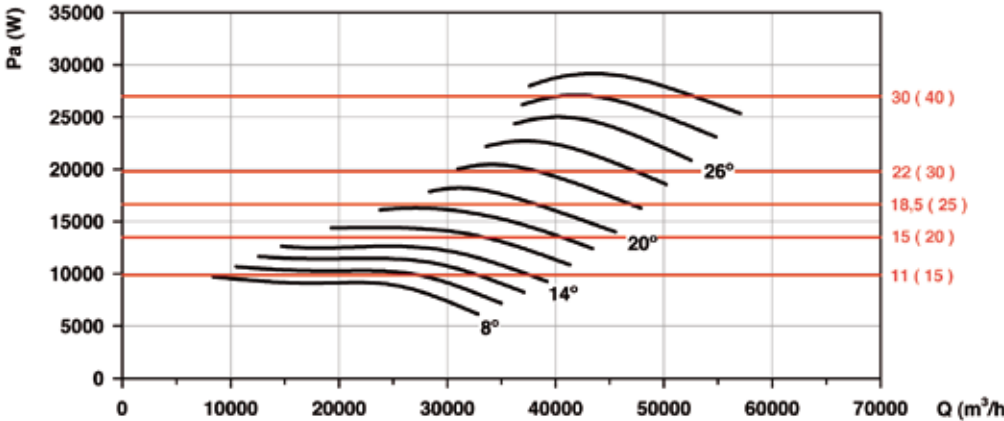
Pe= Static pressure in mm.w.c., Pa and inwg.

HTP-71-2T



Absorbed power

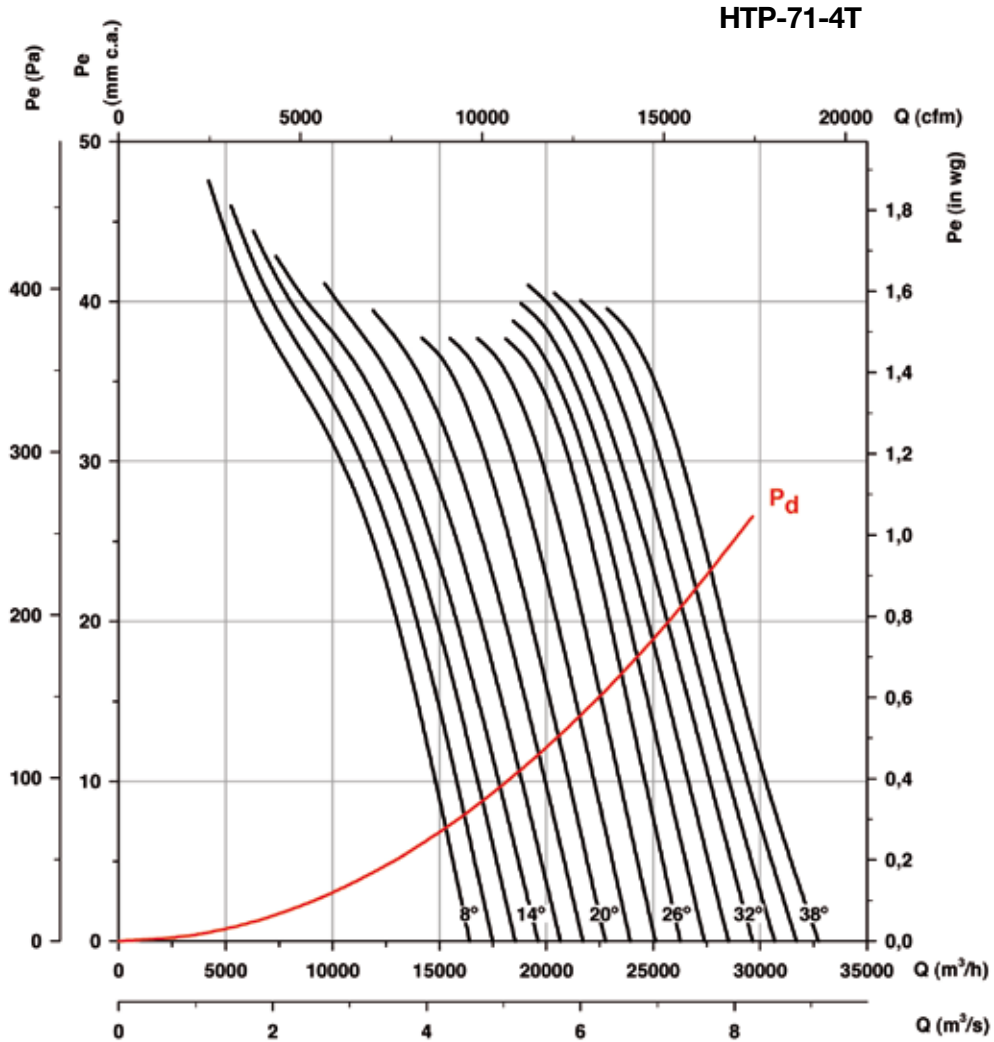
Recommended motor power kW (CV)



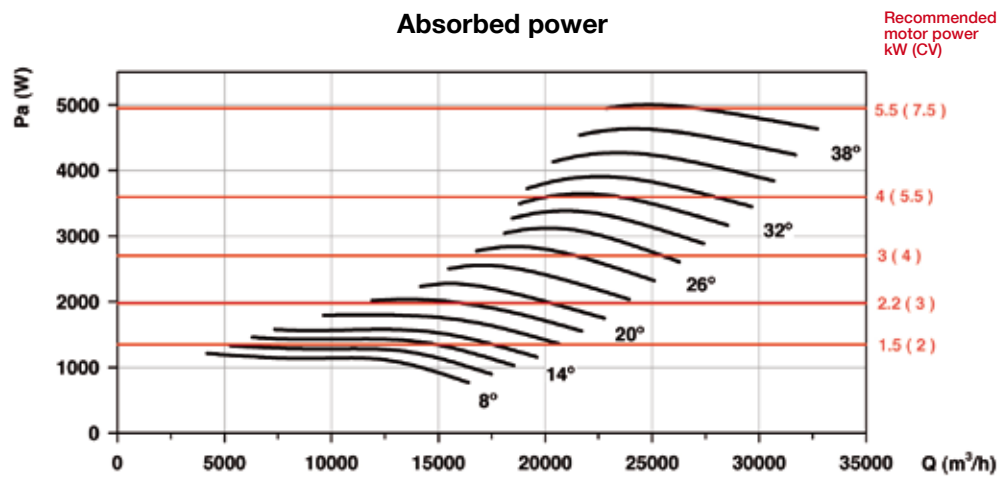
**Characteristic curves**

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.



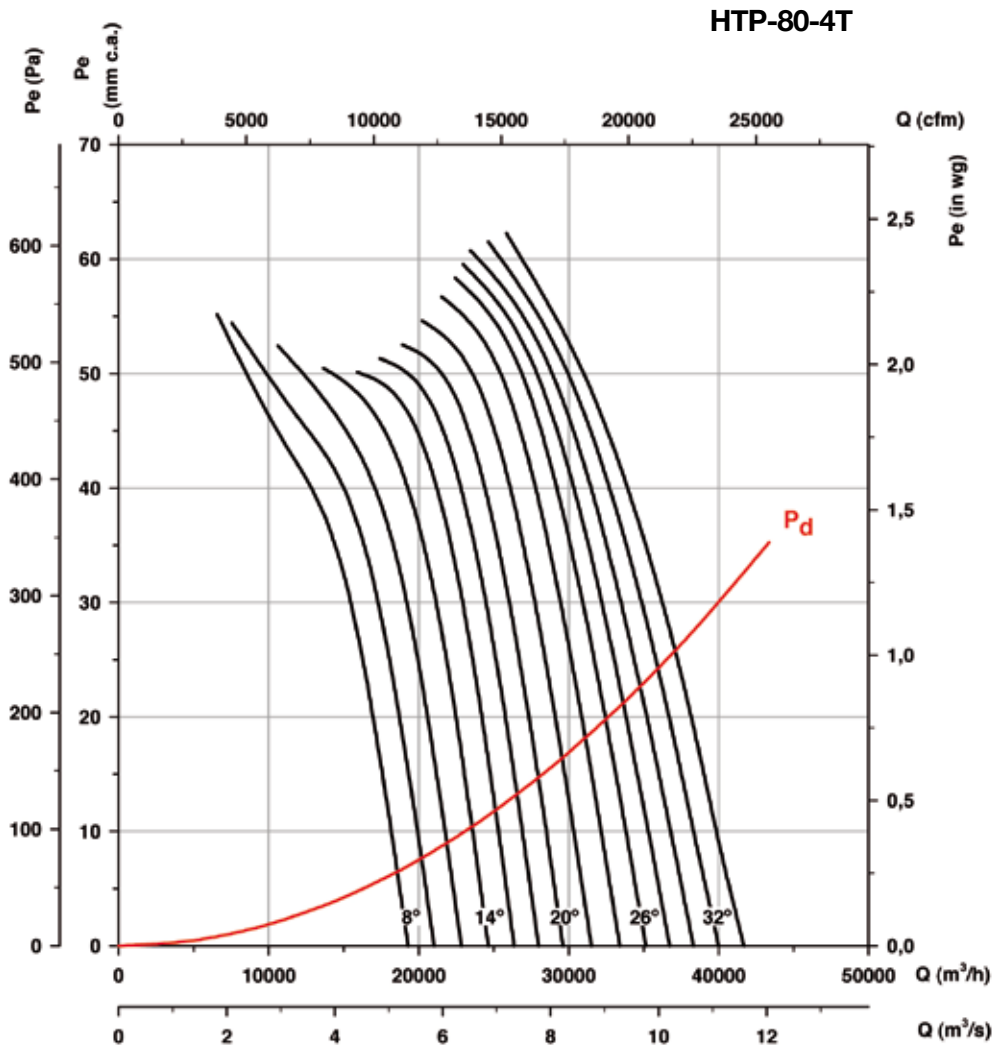
**Absorbed power**



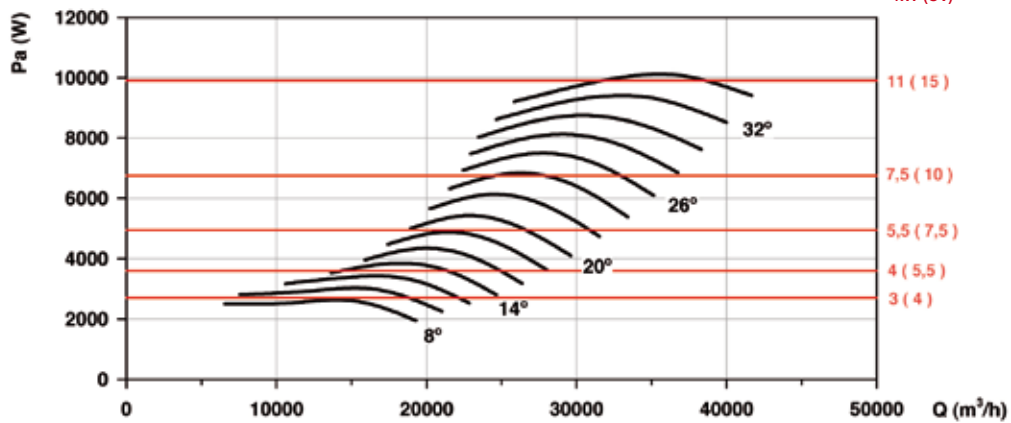
## Characteristic curves

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.



### Absorbed power

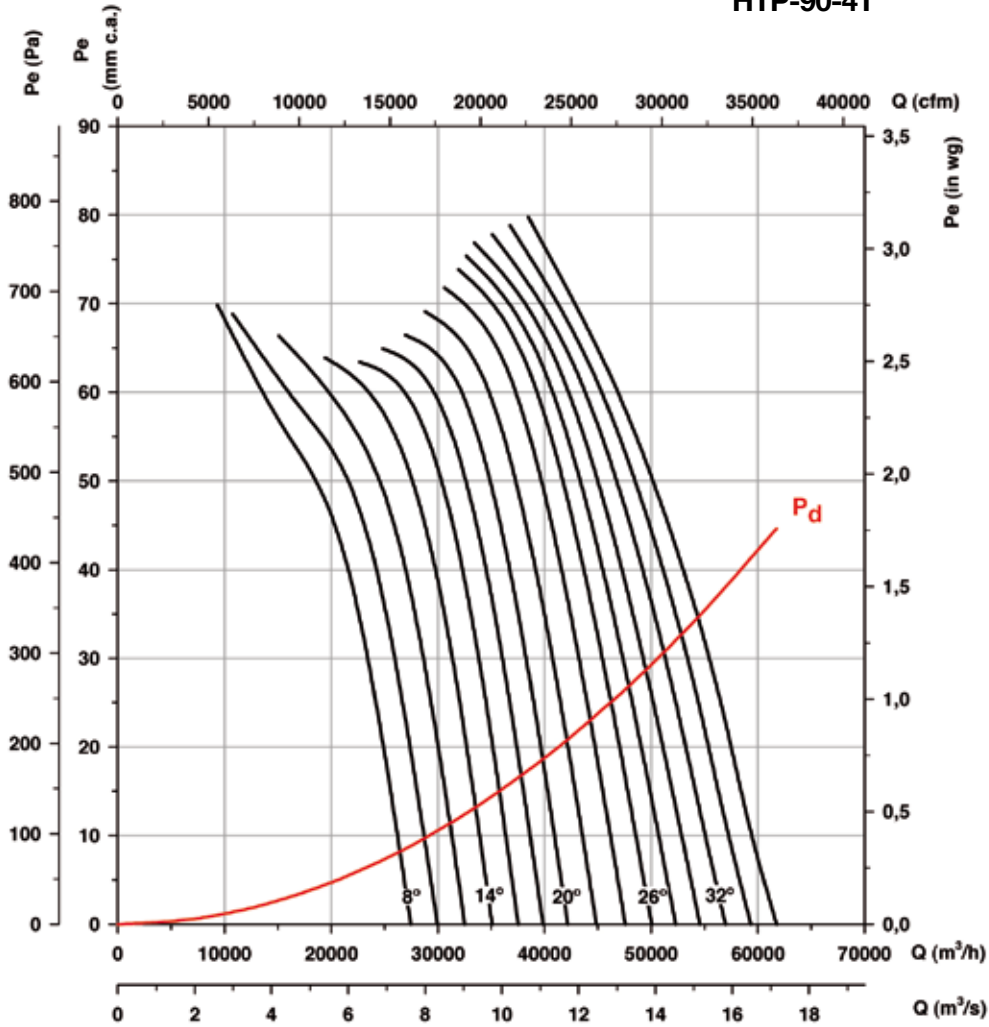


**Characteristic curves**

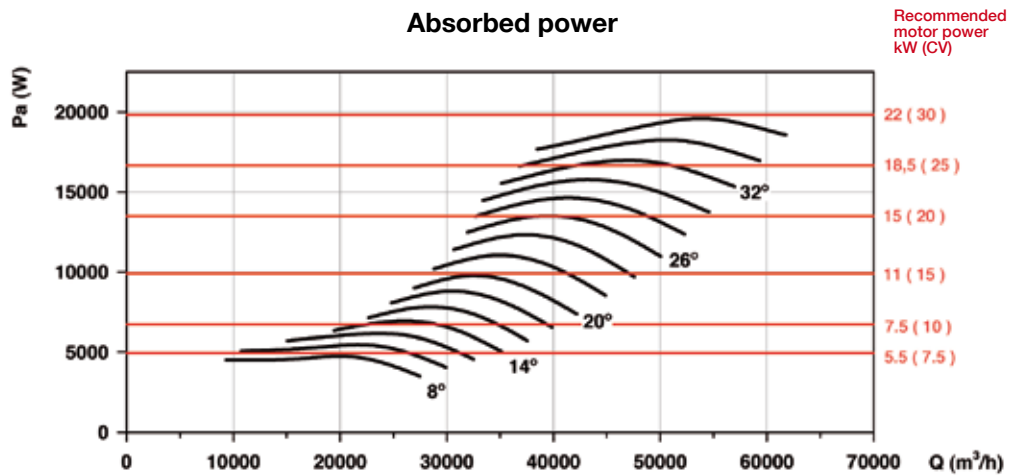
Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.

**HTP-90-4T**



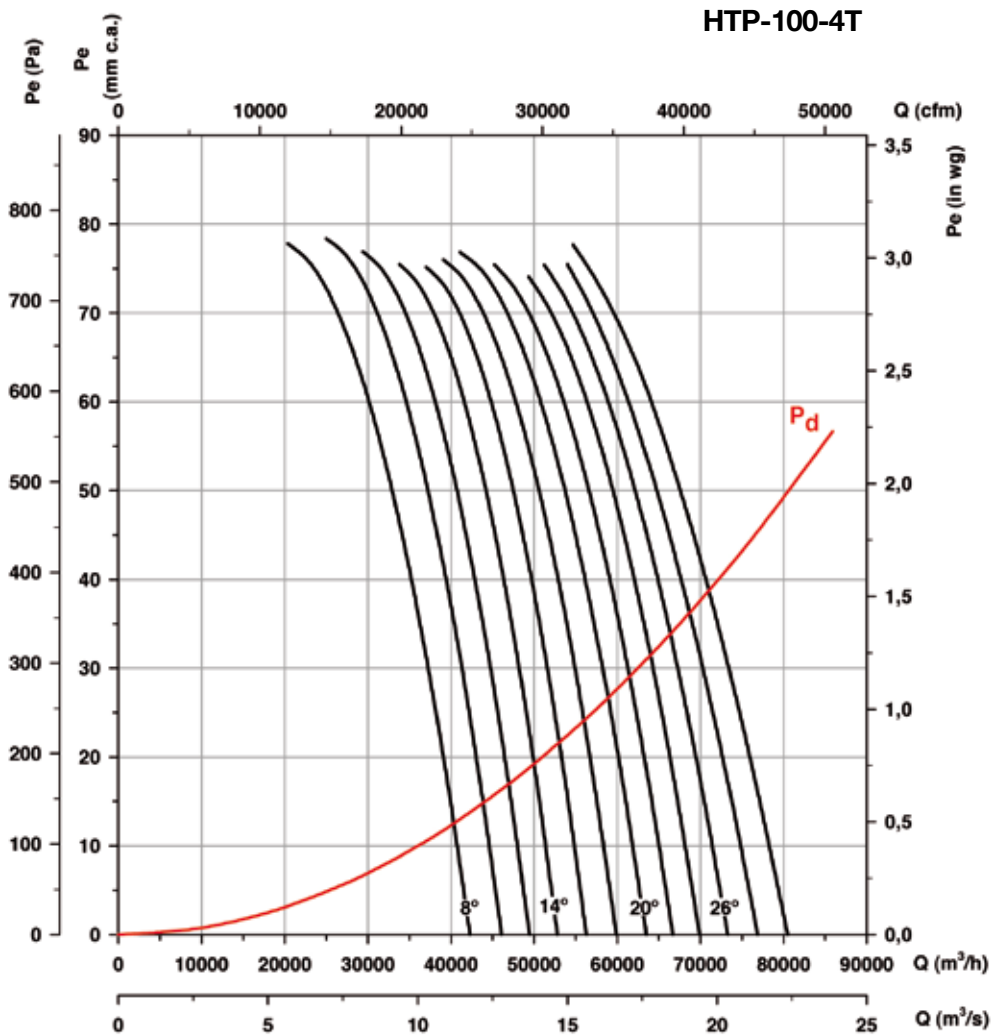
**Absorbed power**



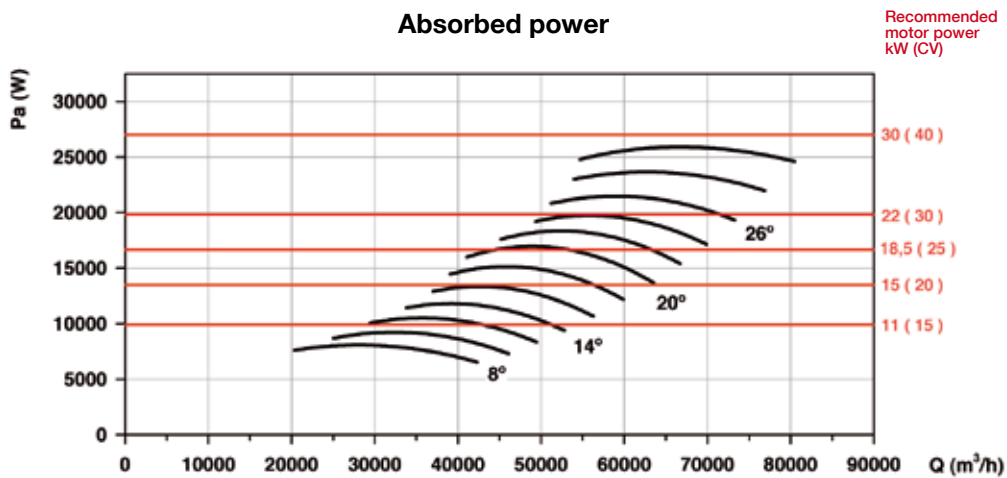
## Characteristic curves

Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.



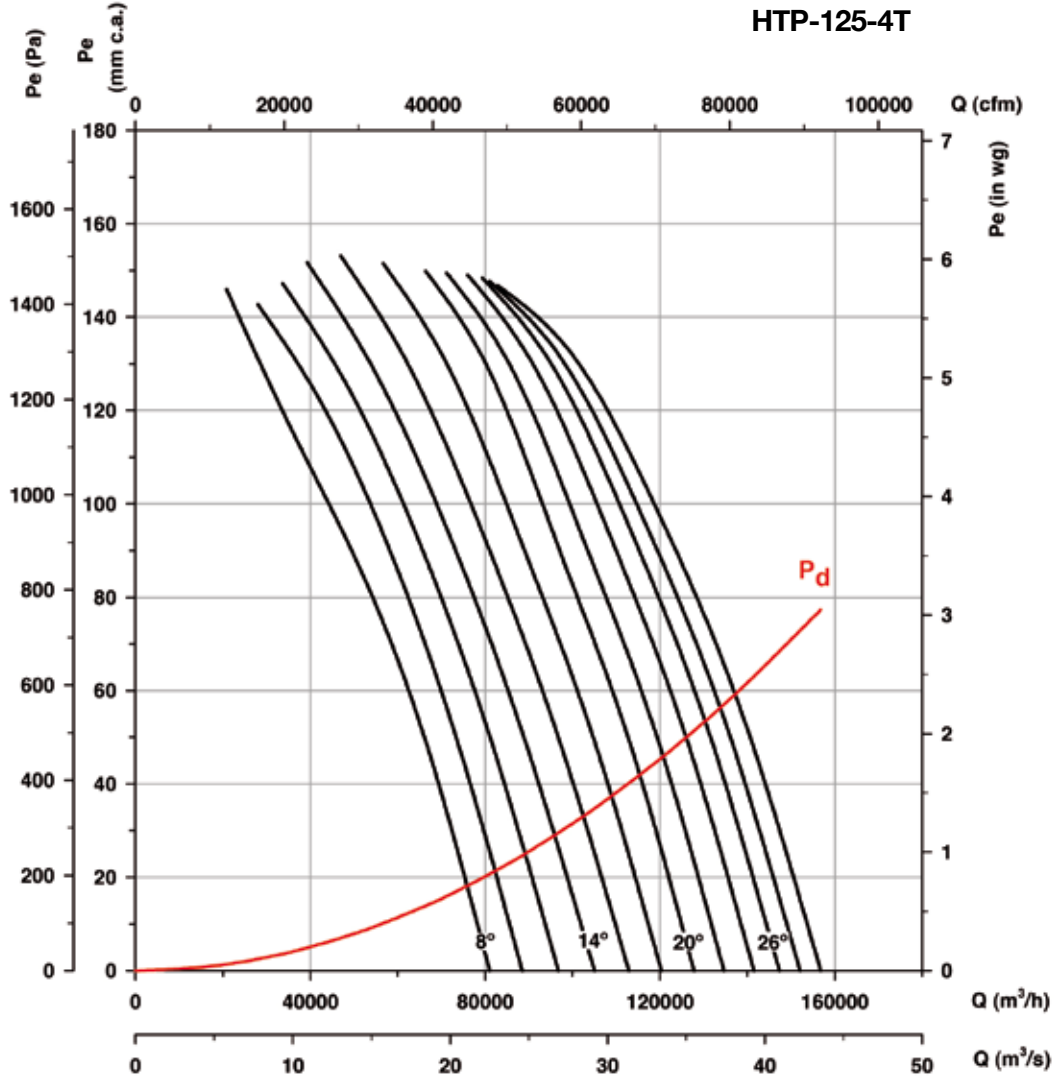
## Absorbed power



**Characteristic curves**

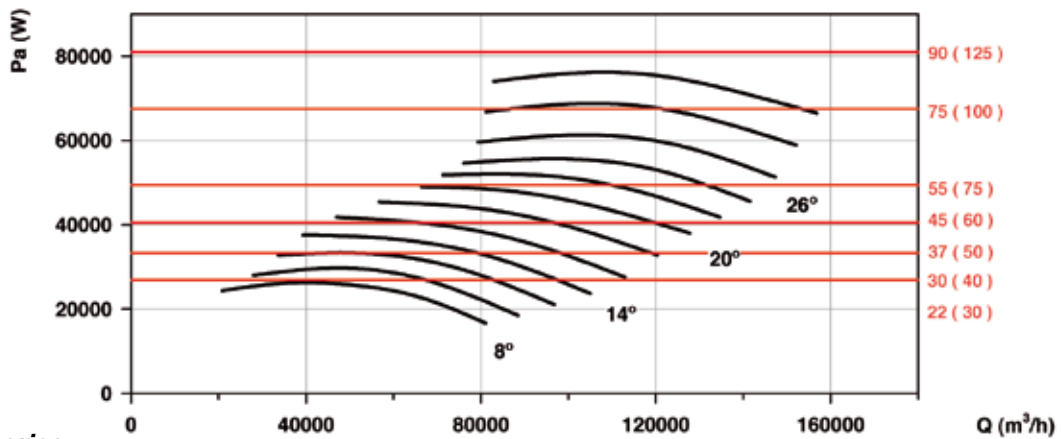
Q = Airflow in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm.

Pe = Static pressure in mm.w.c., Pa and inwg.



Absorbed power

Recommended motor power  
kW (CV)



**Accessories**

See accessories section.

