



WALRUS

MULTISTAGE CENTRIFUGAL PUMP

TPH 2/4/8/12/25/50T

50/60Hz



WALRUS PUMP

ISO 9001 Certified



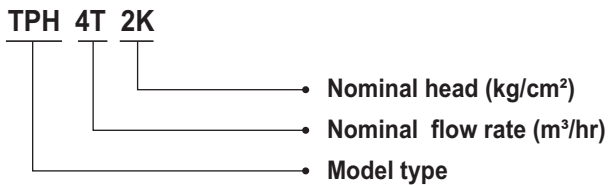


Applications

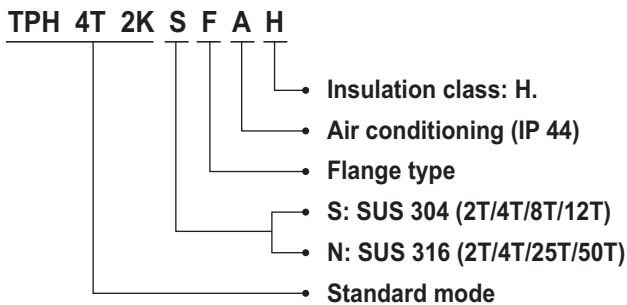
The WALRUS TPH Series is horizontal multistage centrifugal pump, suitable for clean water/liquid without abrasive matters. The applications are versatile, such as pressure boosting, transfer, circulation, and machinery.

- Industrial circulation system
- Washing/cleaning system
- Pressure booster system
- Water/liquid transfer
- Agricultural irrigation

Standard mode



Code



Operation conditions

Ambient temperature :Max. +40°C
 Liquid temperature range:+0°C ~ +90°C
 Operating pressure:Max. 10 kg/cm²
 Inlet pressure:Max. 6 kg/cm²

Pump construction

Horizontal multistage centrifugal pump, non self-priming, co-axial pump/motor design, impellers mounted on extended motor shaft. Main working parts made by stainless steel.

Motor

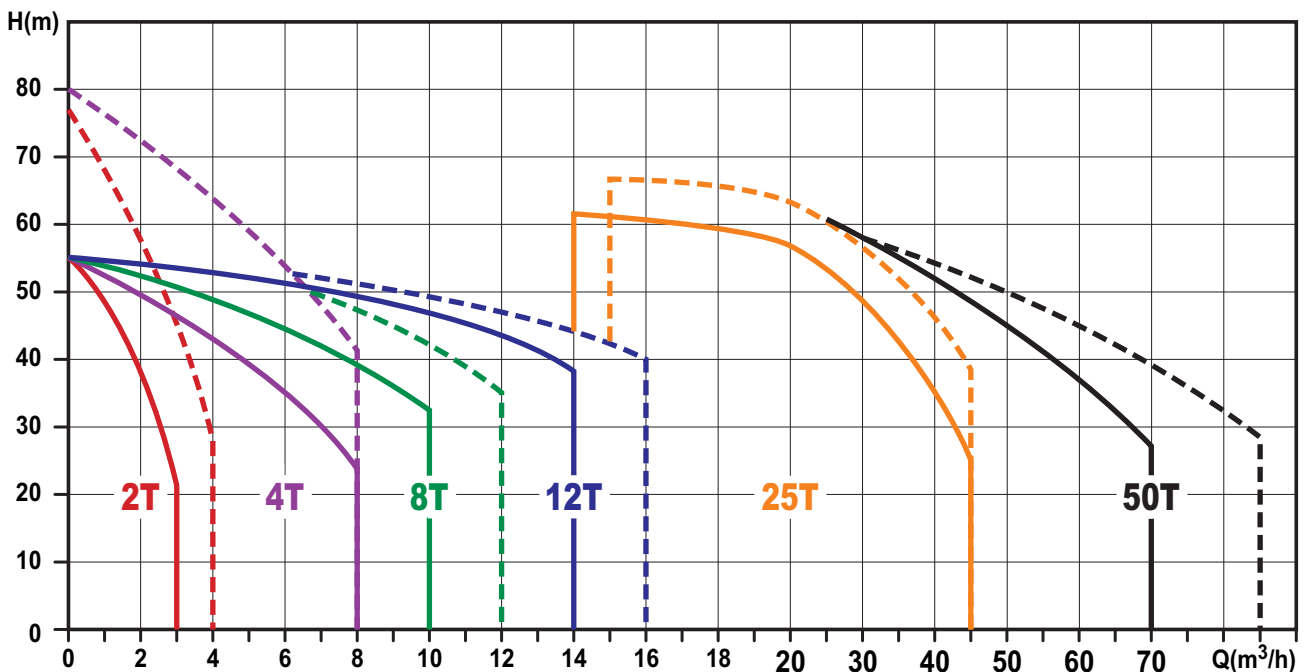
Enclosure protection class: IP54
 Insulation class: F.
 Frequency range: 50 / 60 Hz
 Nominal speed : 2900 / 3500 rpm
 Standard voltages:

NO.	PH	50Hz	60Hz
B	1	-	220V
E	1	-	110/220V
R	1	200-240V	-
F	3	-	220/380V
Q	3	200-240/380-440V	-
U*	3	220/380V	220/380V
Y*	3	400-480V	400-480V
Z*	3	200-255/380-440V	200-255/380-480V

Optional : 50hz, 60hz models are available on request.

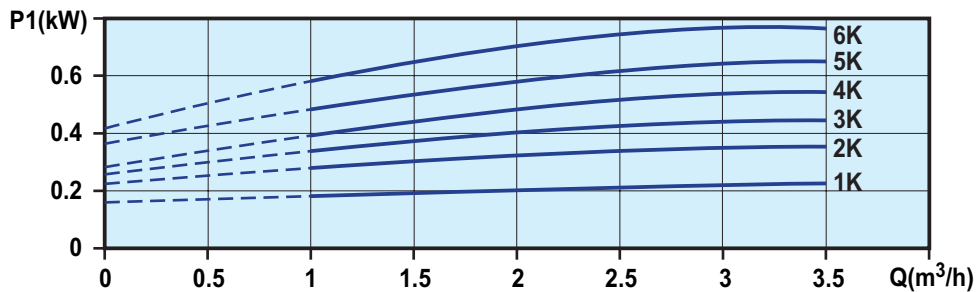
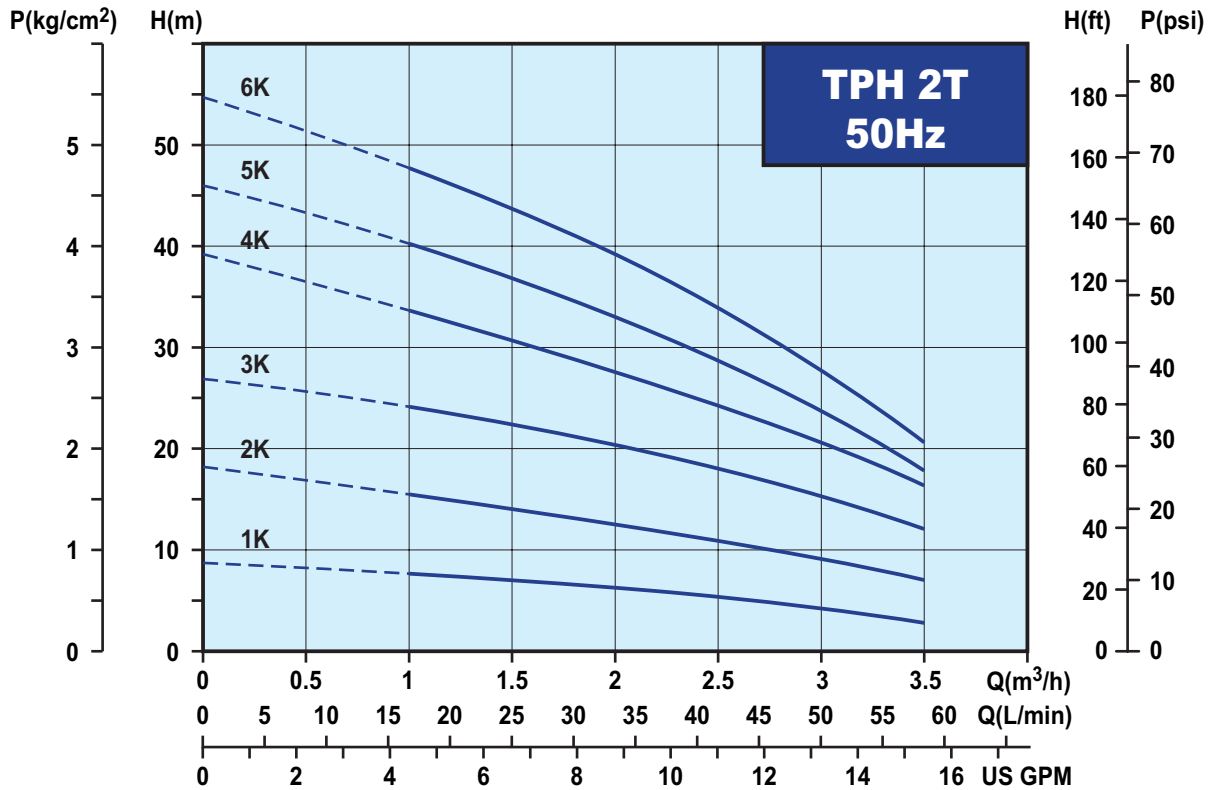
* The motor can be use in both 50/60 hz.

Performance curves 50Hz — 60Hz - - - -





Performance curves

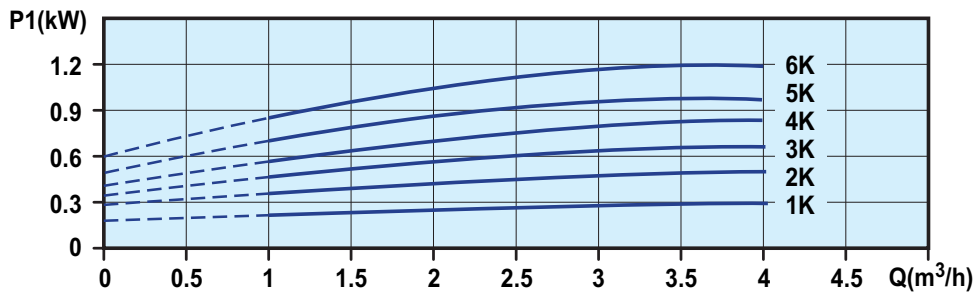
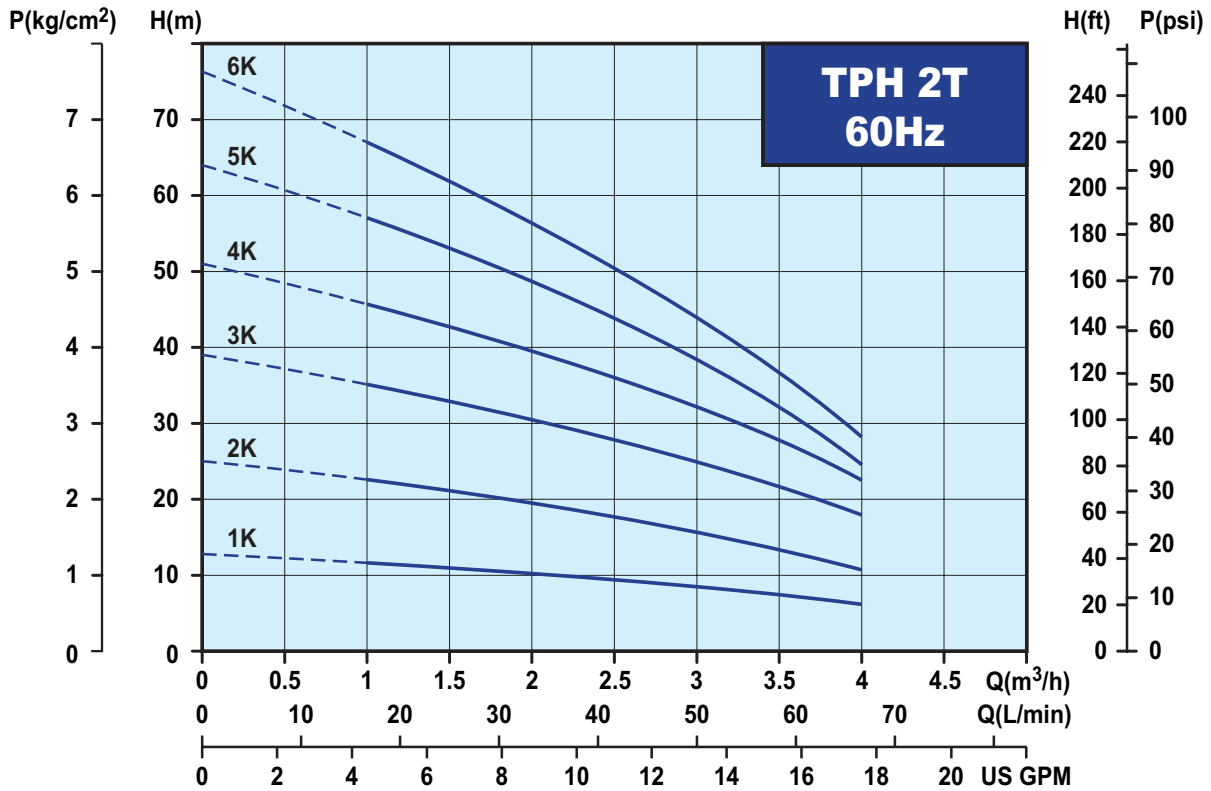


Electrical data, 50Hz , 2900rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 2T 1K	3	200-255 / 380-440	340	1.6-2.8 / 1.0-1.5
TPH 2T 2K	1	200-240	450	2.4
	3	200-255 / 380-440	450	1.9-2.8 / 1.2-1.5
TPH 2T 3K	1	200-240	500	2.5
	3	200-255 / 380-440	530	2.0-2.8 / 1.3-1.6
TPH 2T 4K	1	200-240	600	2.9
	3	200-255 / 380-440	620	2.2-2.9 / 1.4-1.7
TPH 2T 5K	1	200-240	760	4.0
	3	200-255 / 380-440	700	3.0 / 1.6
TPH 2T 6K	1	200-240	880	4.3
	3	200-255 / 380-440	830	3.6 / 2.1



Performance curves

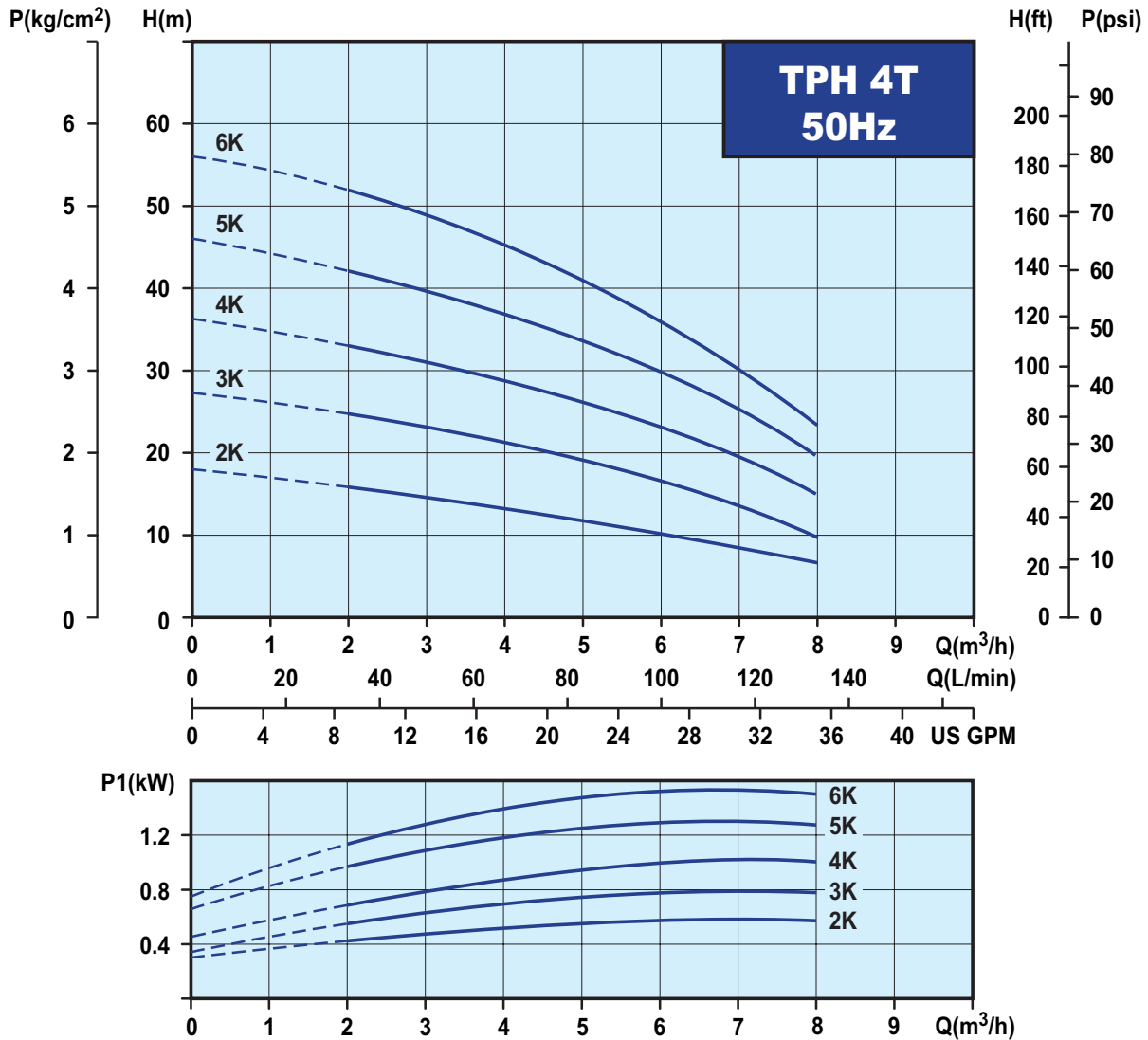


Electrical data, 60Hz , 3500rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 2T 1K	1	220	450	2.1
	3	200-255 / 380-480	370	1.5-1.9 / 1.0-1.3
TPH 2T 2K	1	220	760	4.3
	3	200-255 / 380-480	560	2.1-2.2 / 1.5-1.5
TPH 2T 3K	1	220	900	4.8
	3	200-255 / 380-480	750	2.6-2.5 / 1.6-1.6
TPH 2T 4K	1	220	1030	5.3
	3	200-255 / 380-480	910	3.0-2.9 / 1.7-1.7
TPH 2T 5K	1	220	1300	6.3
	3	200-255 / 380-480	1060	3.3 / 1.8
TPH 2T 6K	1	220	1500	7.0
	3	200-255 / 380-480	1270	4.0 / 2.4



Performance curves

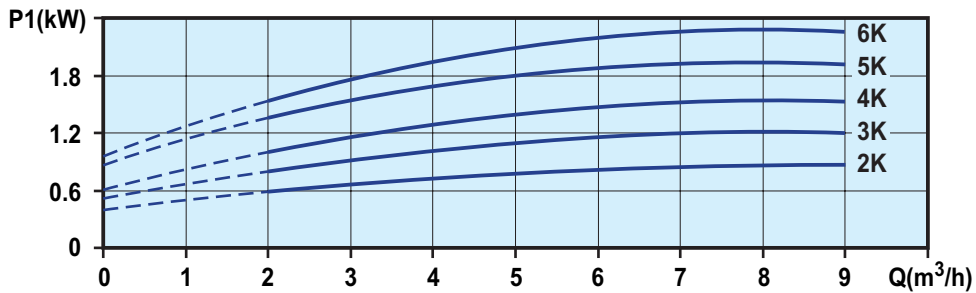
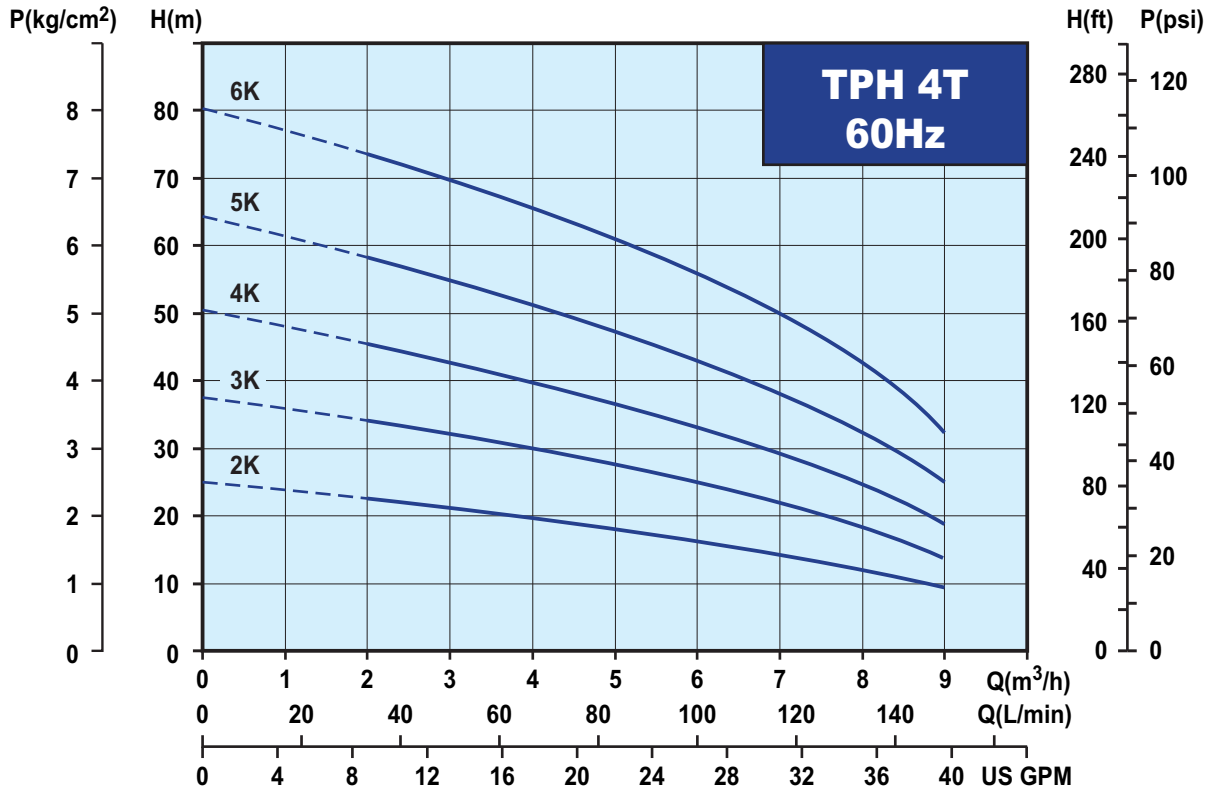


Electrical data, 50Hz , 2900rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 4T 2K	1	200-240	600	3.1-2.9
	3	200-255 / 380-440	650	2.2-2.9 / 1.4-1.7
TPH 4T 3K	1	200-240	950	4.5
	3	200-255 / 380-440	850	3.6 / 2.1
TPH 4T 4K	1	200-240	1200	5.7
	3	220 / 380	1080	3.5 / 2.0
TPH 4T 5K	1	200-240	1370	6.9
	3	220 / 380	1400	6.4 / 3.6
TPH 4T 6K	1	200-240	1470	7.7
	3	220 / 380	1600	7.9 / 4.4



Performance curves

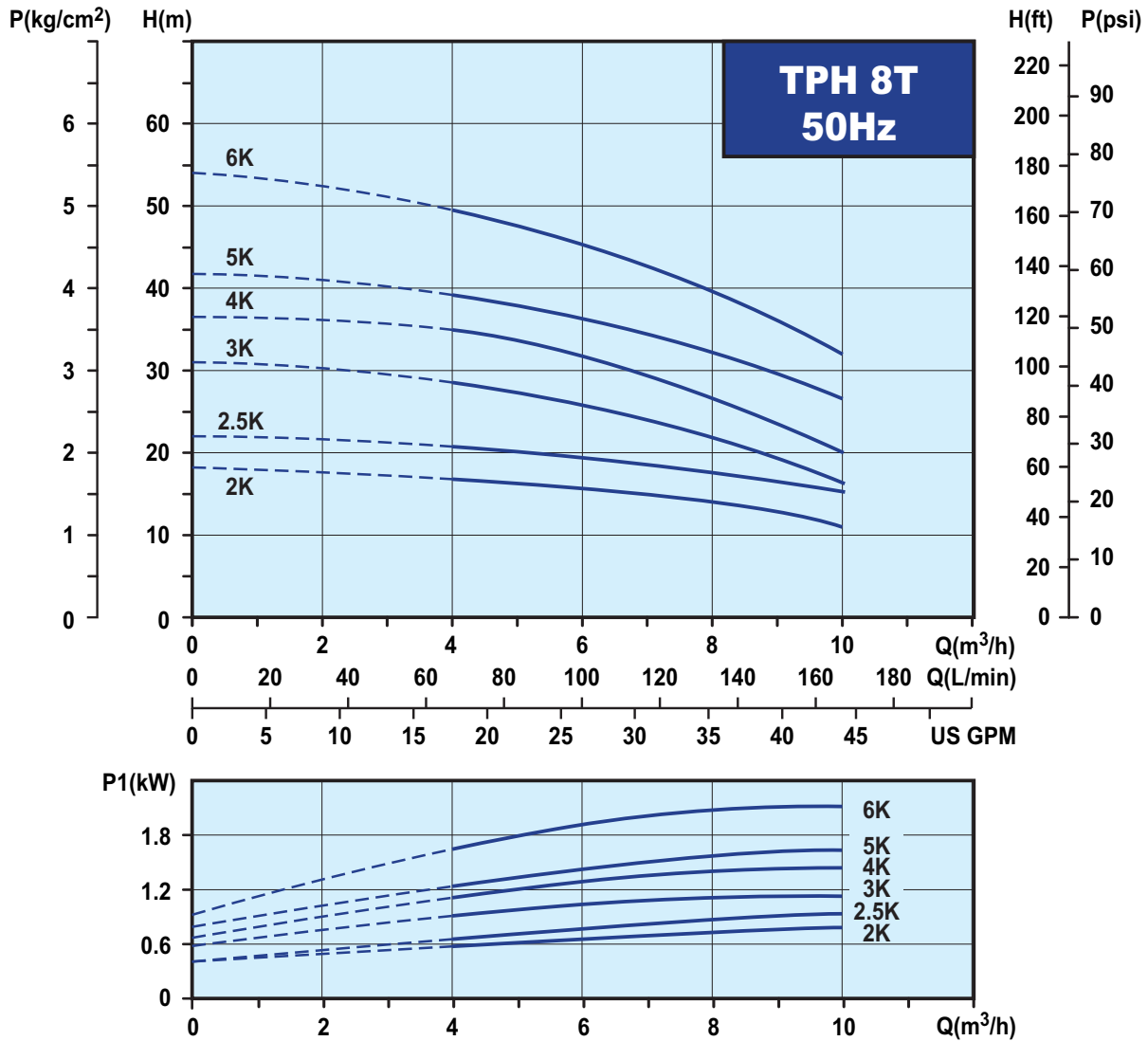


Electrical data, 60Hz , 3500rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 4T 2K	1	220	1030	5.3
	3	200-255 / 380-480	960	3.0-2.7 / 1.7-1.7
TPH 4T 3K	1	220	1500	7.0
	3	200-255 / 380-480	1270	4.0 / 2.4
TPH 4T 4K	1	220	1760	8.6
	3	220 / 380	1580	5.0 / 2.9
TPH 4T 5K	1	220	2100	10.0
	3	220 / 380	2050	6.0 / 3.5
TPH 4T 6K	1	220	2600	12.0
	3	220 / 380	2300	7.7 / 4.5



Performance curves

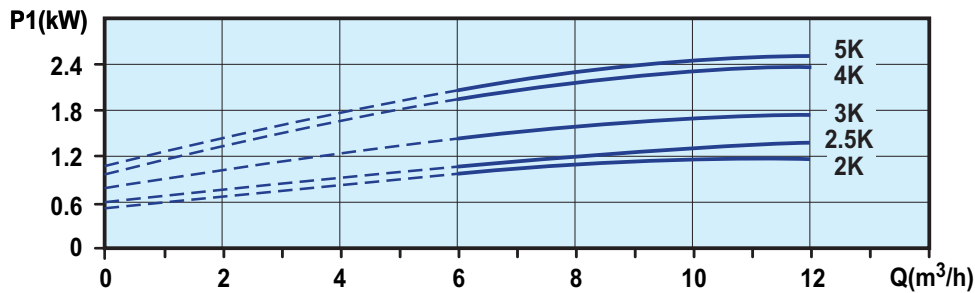
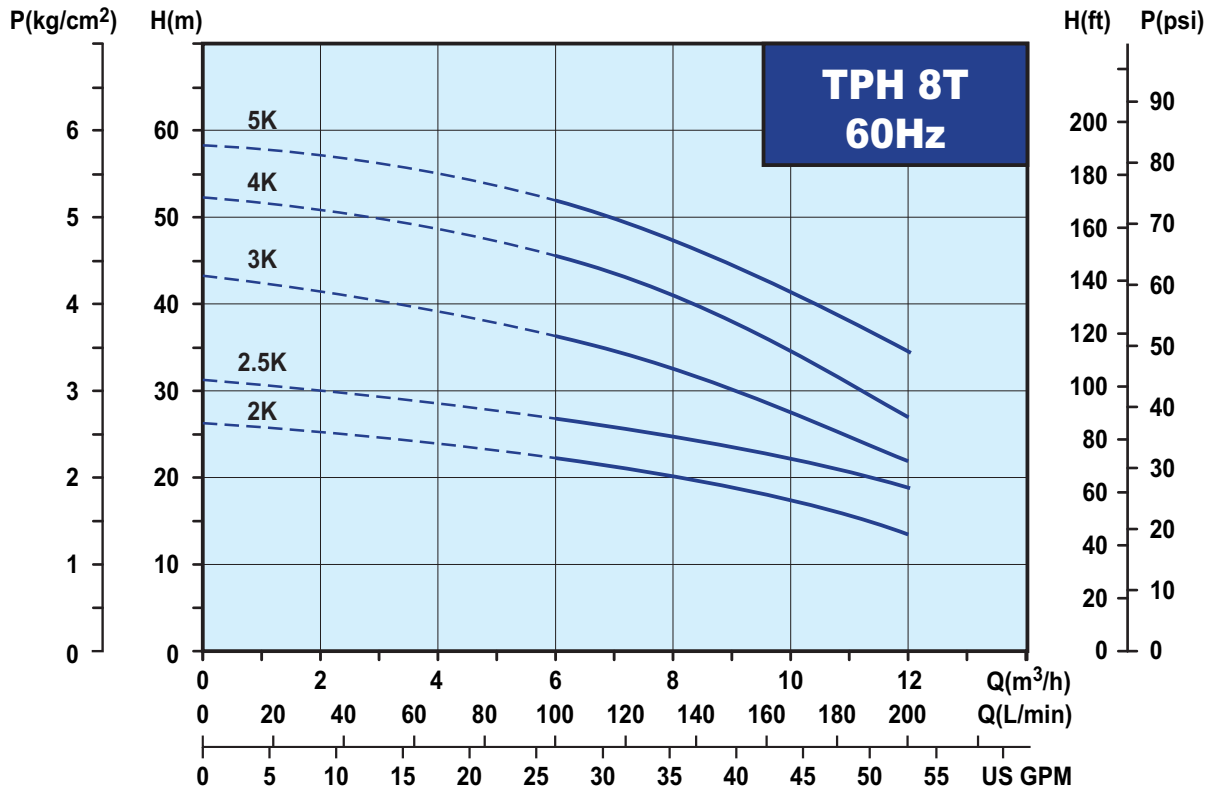


Electrical data, 50Hz , 2900rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 8T 2K	1	200-240	900	4.3
	3	200-255 / 380-440	850	3.2 / 1.8
TPH 8T 2.5K	3	220 / 380	970	3.5 / 2.0
TPH 8T 3K	1	200-240	1300	6.3
	3	220 / 380	1150	5.3 / 3.0
TPH 8T 4K	1	200-240	1520	7.6
	3	220 / 380	1680	7.2 / 4.0
TPH 8T 5K	3	220 / 380	1800	7.7 / 4.4
TPH 8T 6K	3	200-240 / 380-440	2230	6.7 / 3.9



Performance curves

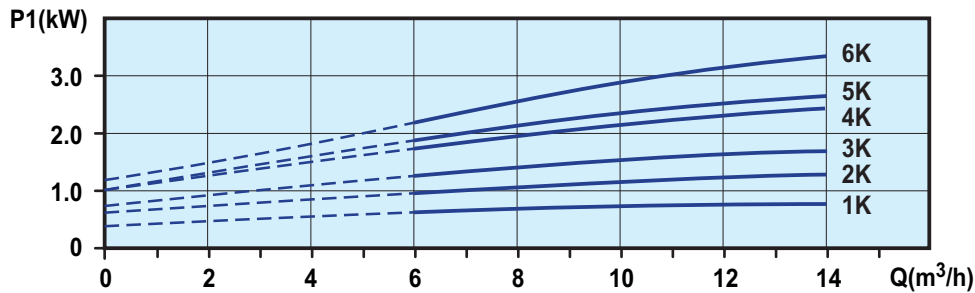
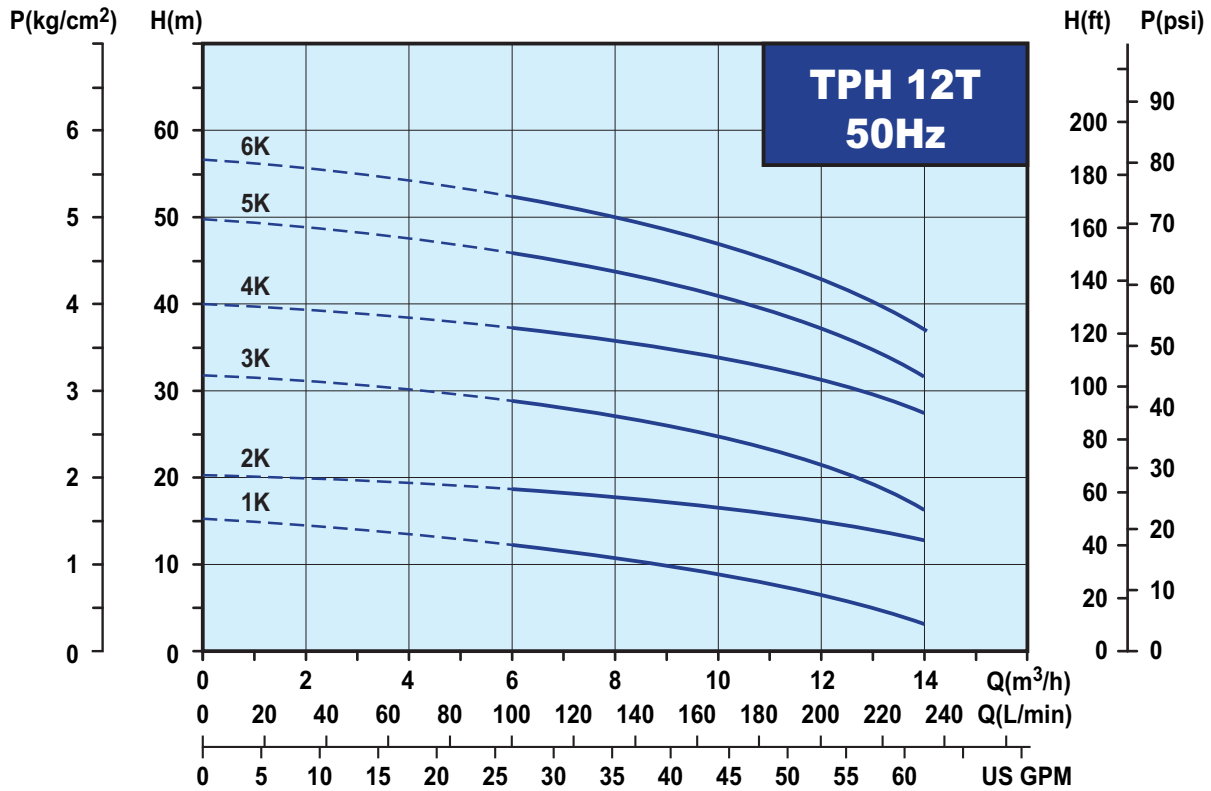


Electrical data, 60Hz , 3500rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 8T 2K	1	220	1500	7.0
	3	200-255 / 380-480	1230	3.9 / 2.1
TPH 8T 2.5K	1	220	1720	8.7
	3	220 / 380	1580	5.0 / 2.9
TPH 8T 3K	1	220	1970	10
	3	220 / 380	1770	5.9 / 3.4
TPH 8T 4K	3	220 / 380	2400	7.4 / 4.2
TPH 8T 5K	3	220 / 380	2600	8.1 / 4.6



Performance curves

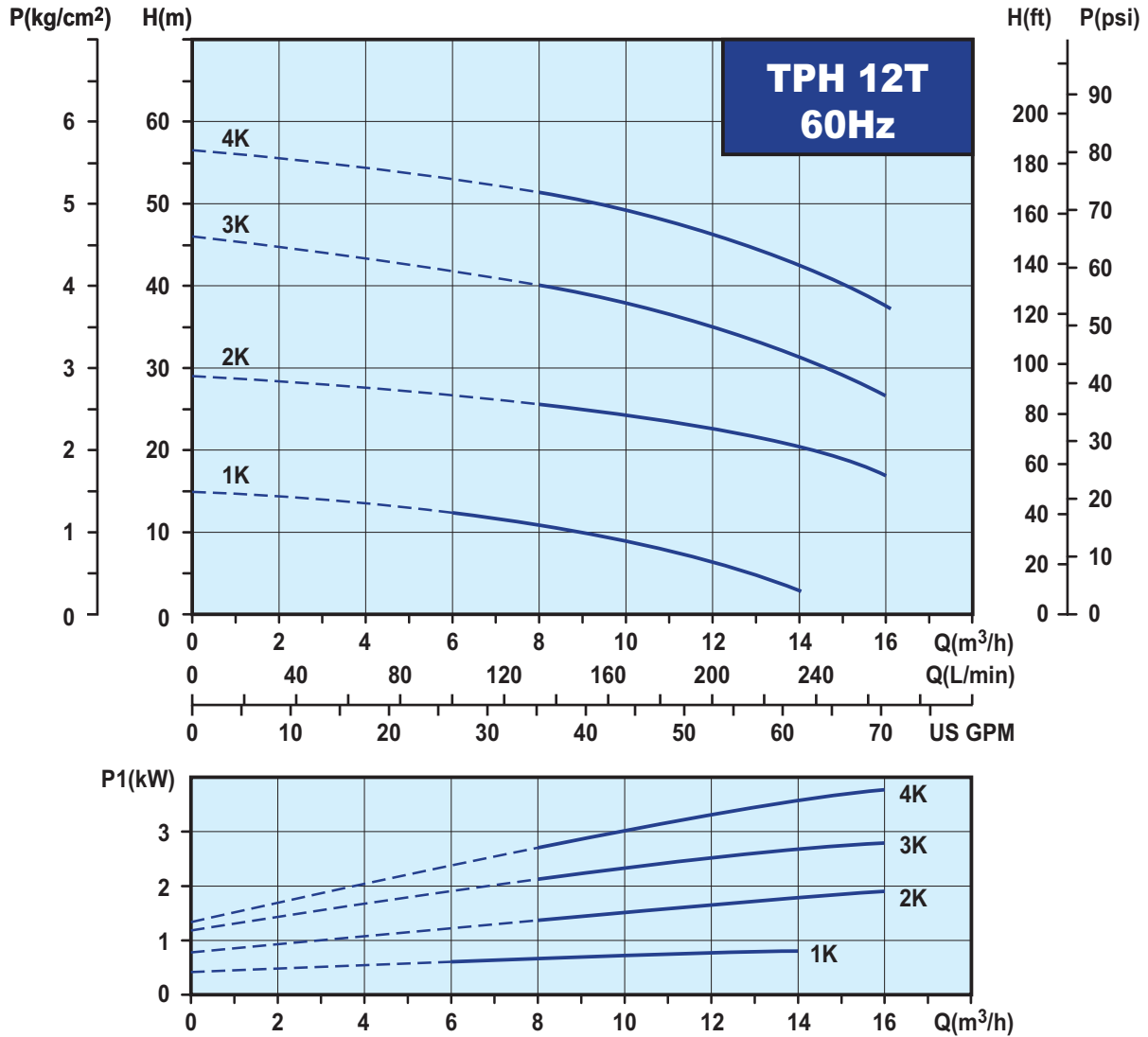


Electrical data, 50Hz , 2900rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 12T 1K	3	200-255 / 380-440	600	2.2-2.9 / 1.4-1.7
TPH 12T 2K	1	200-240	1380	6.5
	3	220 / 380	1340	5.5 / 3.2
TPH 12T 3K	1	200-240	1700	7.9
	3	220 / 380	1950	7.8 / 4.5
TPH 12T 4K	3	200-240 / 380-415	3120	10.7-13.1 / 6.1-7.9
TPH 12T 5K	3	200-240 / 380-440	3050	10.8 / 6.8
TPH 12T 6K	3	200-240 / 380-440	3580	11.3 / 7.0



Performance curves

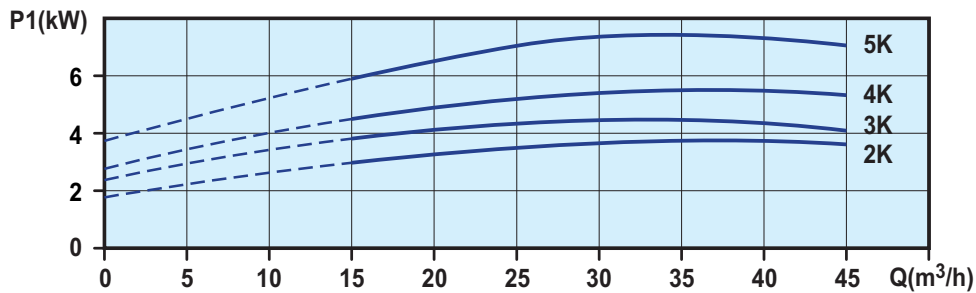
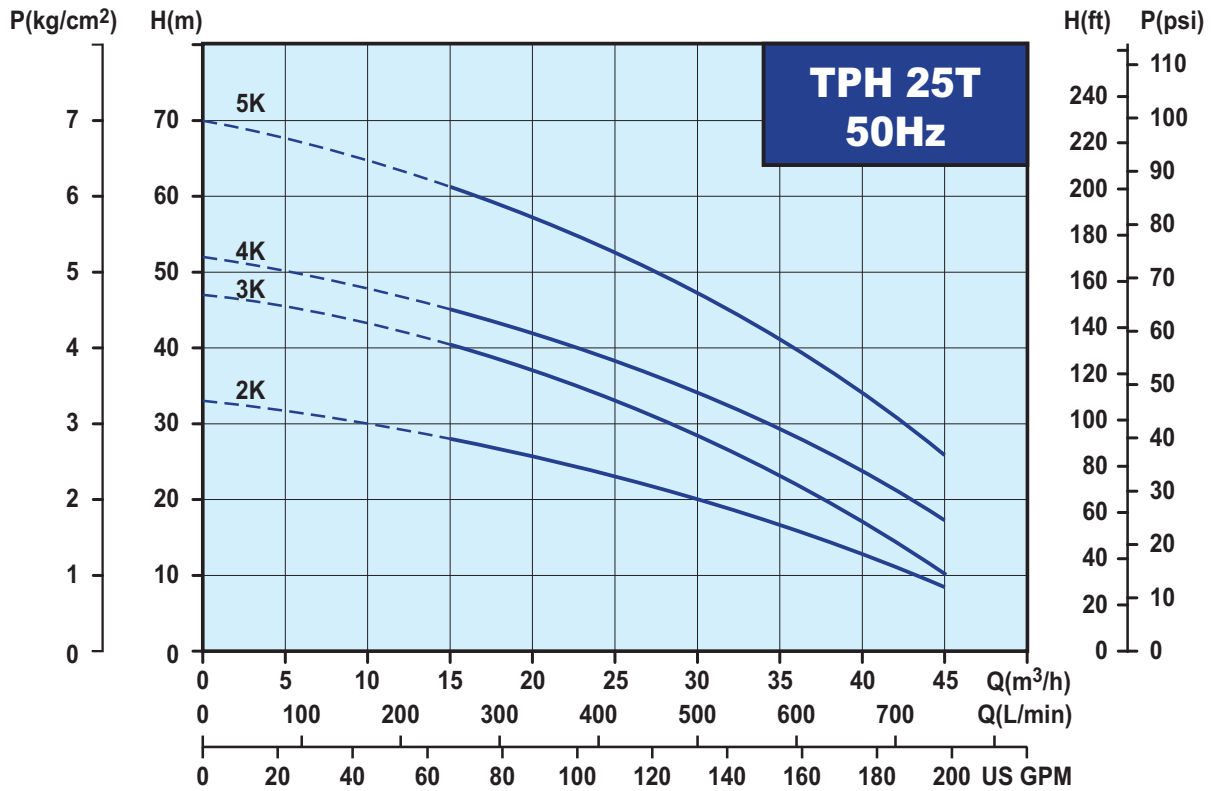


Electrical data, 60Hz, 3500rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 12T 1K	1	220	1030	5.3
	3	200-255 / 380-480	860	2.6-2.6 / 1.7-1.7
TPH 12T 2K	1	220	2200	11.2
	3	220 / 380	1900	6.2 / 3.6
TPH 12T 3K	3	220 / 380	2900	8.5 / 4.9
TPH 12T 4K	3	200-255 / 380-440	4150	12.3 / 7.1



Performance curves

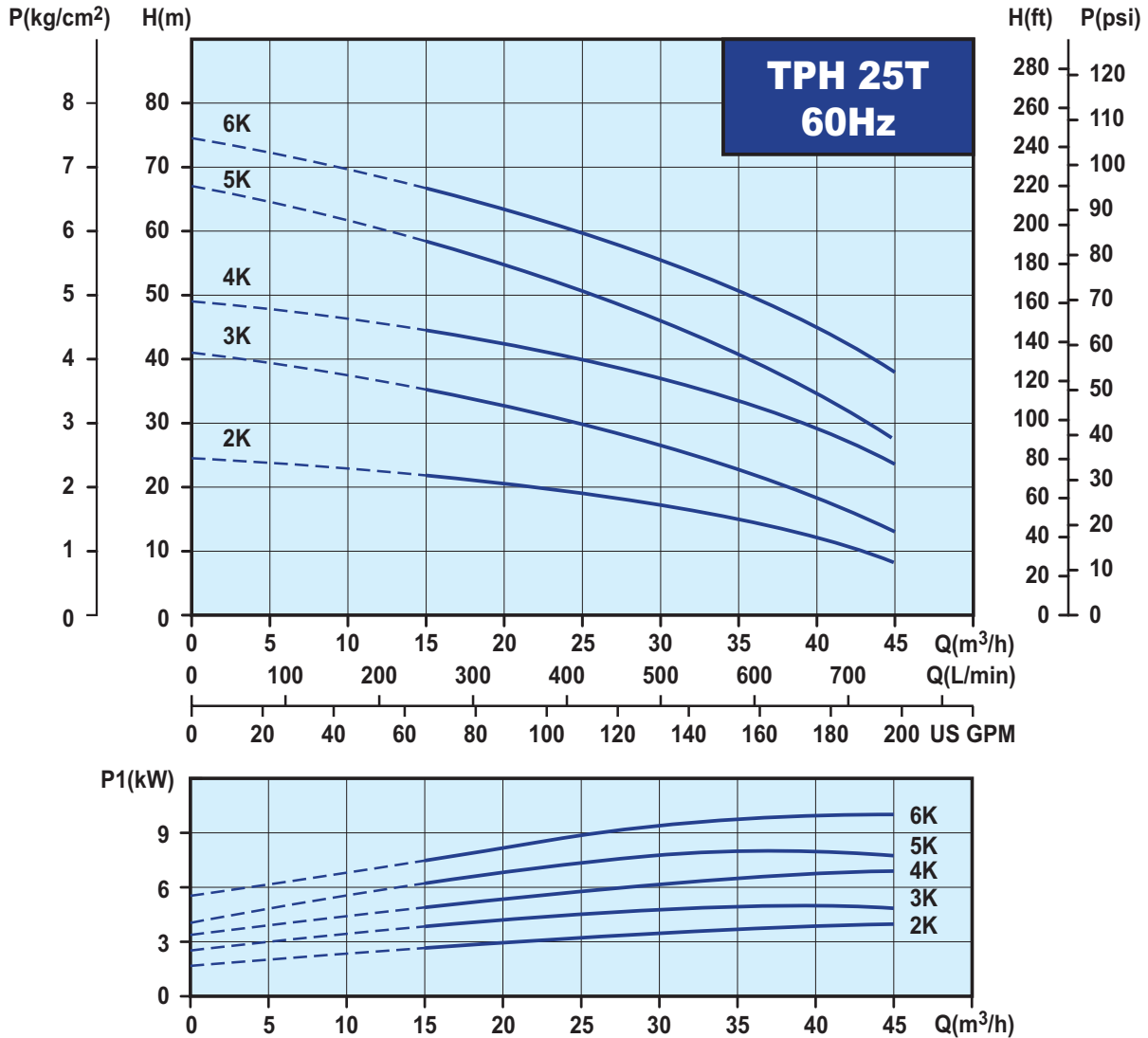


Electrical data, 50Hz , 2900rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 25T 2KF	3	200-240 / 380-440	4000	12.0 / 6.5
TPH 25T 3KF	3	200-240 / 380-440	4800	15.6 / 10.0
TPH 25T 4KF	3	220-240 / 380-440	5700	18.0 / 11.3
TPH 25T 5KF	3	220-240 / 380-440	7800	24.1 / 13.9



Performance curves

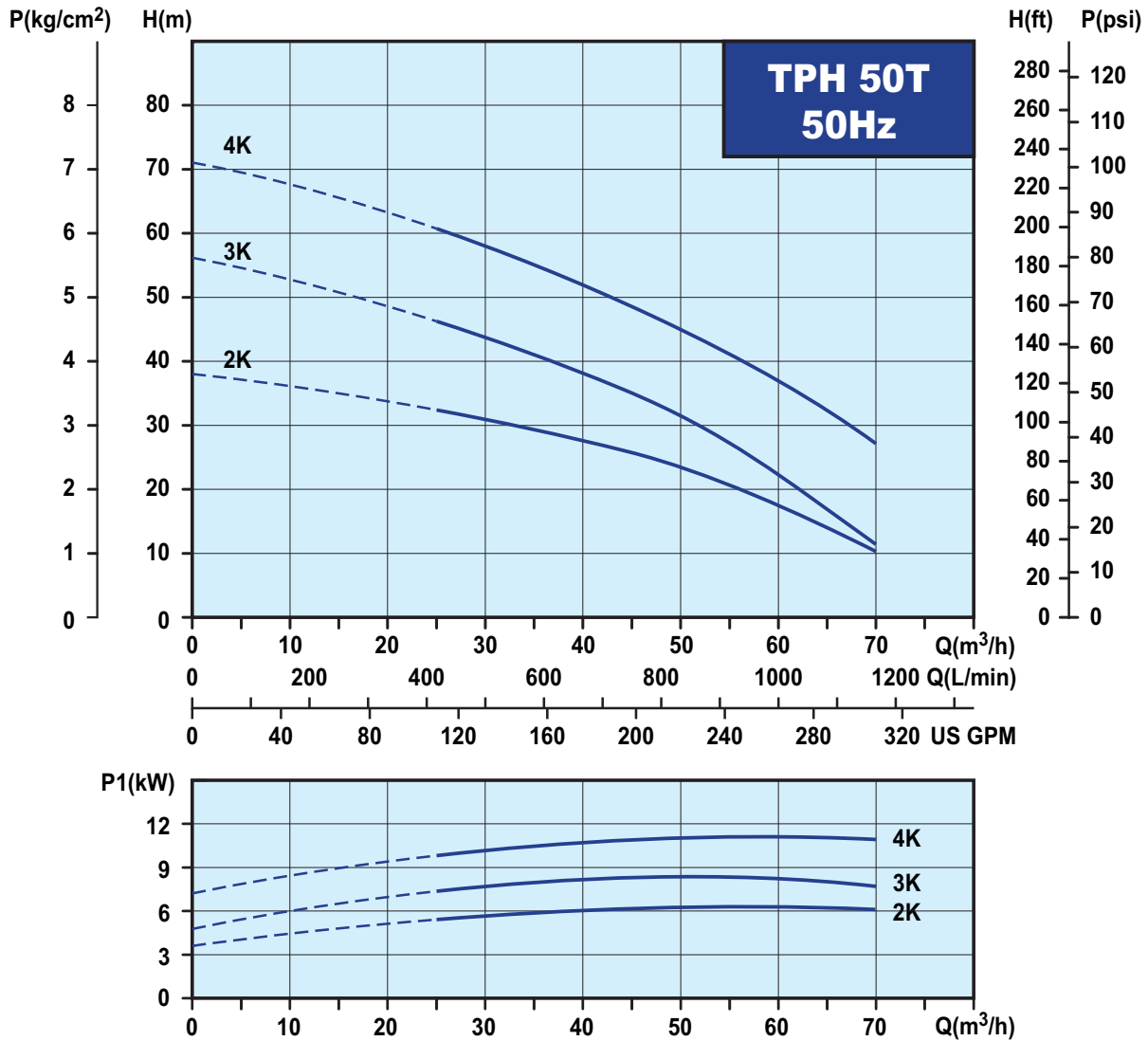


Electrical data, 60Hz , 3500rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 25T 2KF	3	200-255 / 380-480	4000	12.9-10.5 / 7.3-5.8
TPH 25T 3KF	3	200-255 / 380-480	5100	15.6-13.1 / 8.7-8.2
TPH 25T 4KF	3	220-255 / 380-480	7200	21.2-20.5 / 12.3-12.5
TPH 25T 5KF	3	220-255 / 380-480	8000	25.6-22.4 / 13.7-13.2
TPH 25T 6KF	3	220-255 / 380-480	10200	31.2-27.5 / 17.5-15.8



Performance curves

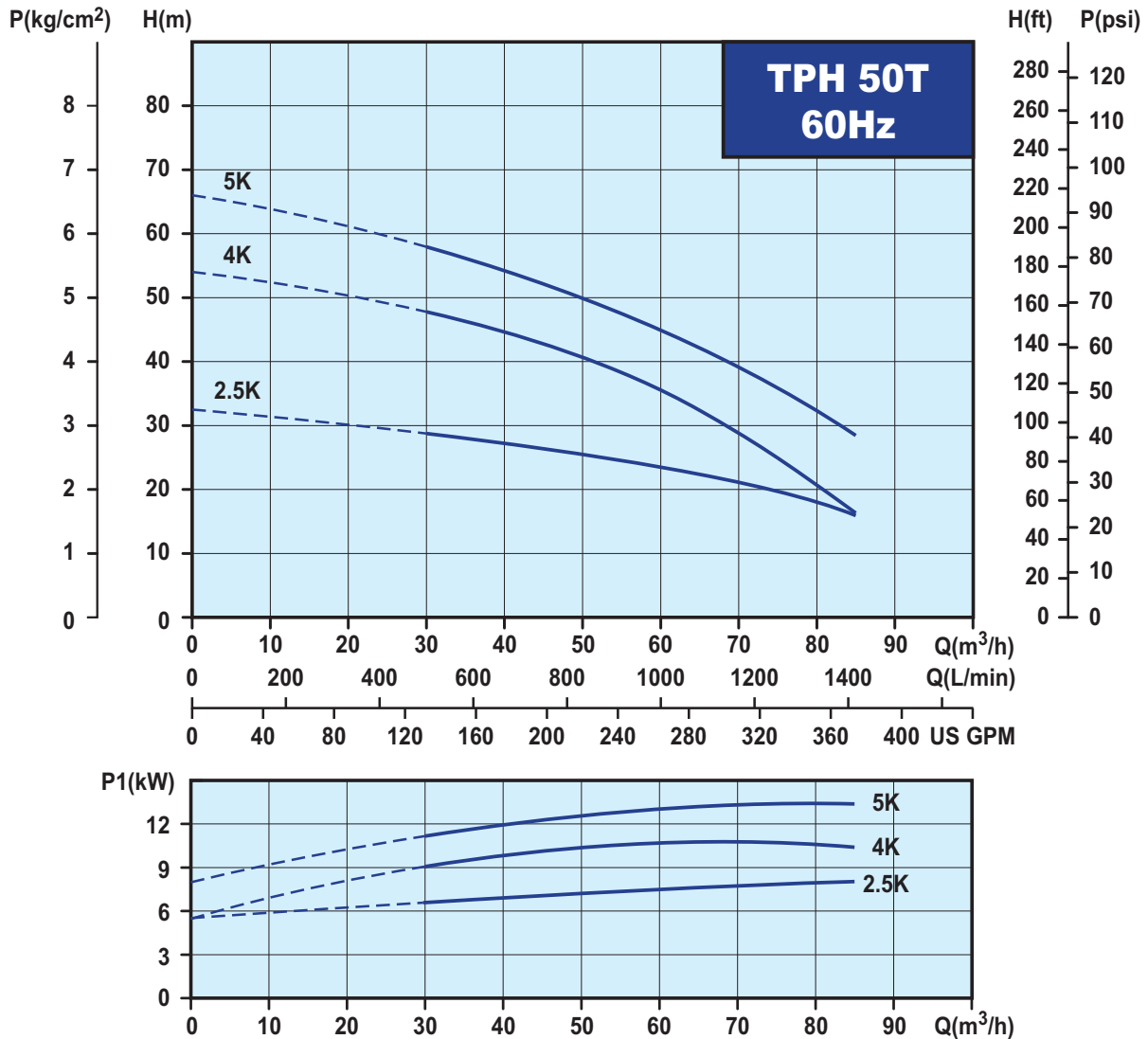


Electrical data, 50Hz , 2900rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 50 T 2 KF	3	200-240 / 380-440	6600	20.3-19.2 / 11.2-12.9
TPH 50 T 3 KF	3	200-240 / 380-440	8700	26.0-22.6 / 14.4-14.8
TPH 50 T 4 KF	3	200-240 / 380-440	11600	36.3-30.8 / 19.8-20.4



Performance curves

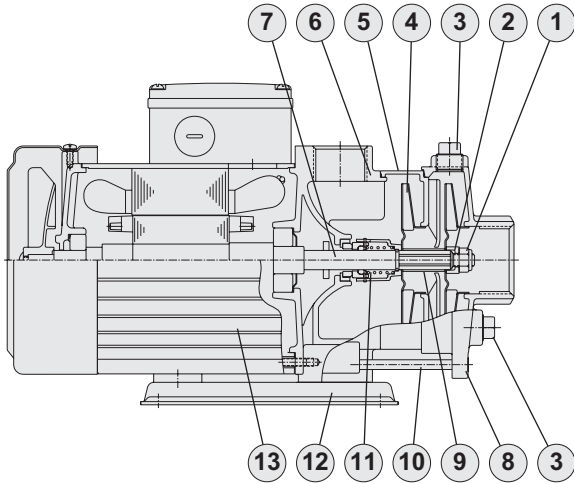


Electrical data, 60Hz, 3500rpm

Model	PH (Ø)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 50 T2.5KF	3	200-240 / 380-440	8500	25.0-23.3 / 14.1-14.8
TPH 50 T 4 KF	3	200-255 / 380-480	11500	34.8-32.2 / 19.1-21.7
TPH 50 T 5 KF	3	220-240 / 380-480	14200	41.0 / 23.7



Sectional drawing

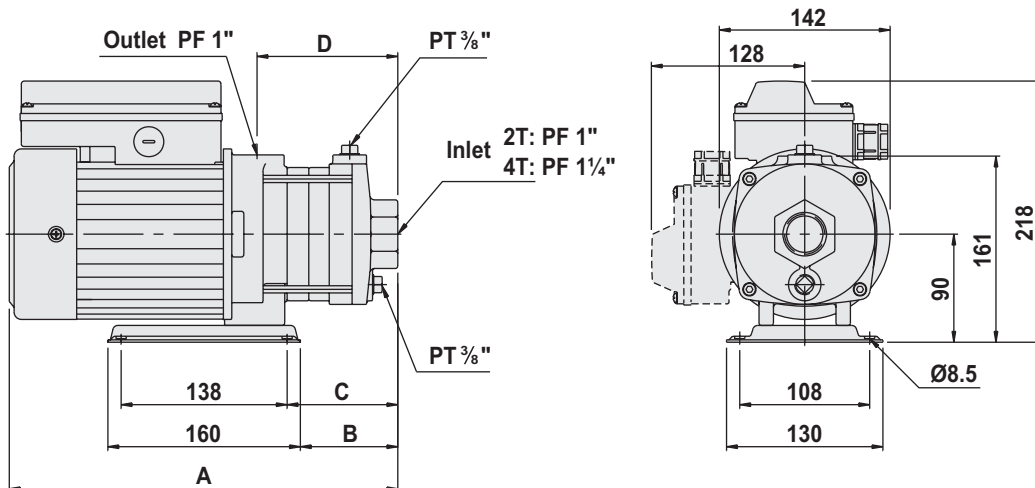


Materials

No.	Part name	Material		
		Standard	S series	N series
1	Lock Nut	SUS 316	SUS 316	SUS 316
2	Sleeve(Shaft End)	SUS 304	SUS 304	SUS 316
3	Water Plug	FC 20	SUS 304	SUS 316
4	Impeller	SUS 304	SUS 304	SUS 316
5	Intermediate Chamber	SUS 304	SUS 304	SUS 316
6	Pump Casing	FC 20	SUS 304	SUS 316
7	Shaft	SUS 304	SUS 304	SUS 316
8	Suction Chamber	FC 20	SUS 304	SUS 316
9	Sleeve	SUS 304	SUS 304	SUS 316
10	Stud Bolt	SCM 435	SUS 304	SUS 304
11	Mechanical Seal	Silicon Carbide+Carbon+Viton		
12	Mounted Base	Coating Steel	SUS 316	
13	Motor Shell	Aluminum alloy		

SUS 304 may be replaced by SUS316 depended on stock availability.

Dimensions (TPH 2/4)



* Optional : flange type inlet & outlet.

TPH 2T

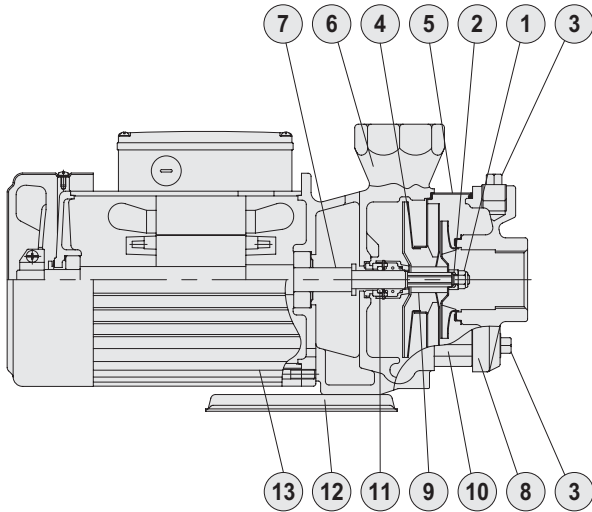
Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 2T 1K	305	63	74	99	11.7
TPH 2T 2K	305	63	74	99	11.8
TPH 2T 3K	323	81	92	117	11.9
TPH 2T 4K	341	99	110	135	12.0
TPH 2T 5K	399	117	128	153	13.5
TPH 2T 6K	417	135	146	171	13.6

TPH 4T

Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 4T 2K	315	73	84	109	11.7
TPH 4T 3K	381	99	110	135	13.3
TPH 4T 4K	408	126	137	162	14.1
TPH 4T 5K	435	153	164	189	14.2
TPH 4T 6K	493	181	192	217	16.1



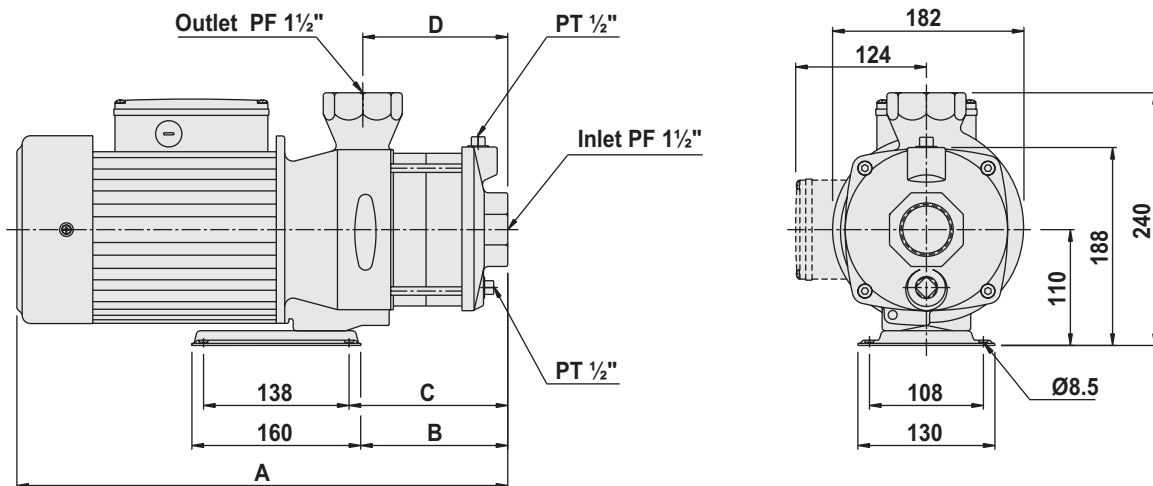
Sectional drawing



Materials

No.	Part name	Material	
		Standard	S series
1	Lock Nut	SUS 316	SUS 316
2	Sleeve (Shaft End)	SUS 304	SUS 304
3	Water Plug	FC 20	SUS 304
4	Impeller	SUS 304	SUS 304
5	Intermediate Chamber	SUS 304	SUS 304
6	Pump Casing	FC 20	SUS 304
7	Shaft	SUS 304	SUS 304
8	Suction Chamber	FC 20	SUS 304
9	Sleeve	SUS 316	SUS 316
10	Stud Bolt	SUS 304	SUS 304
11	Mechanical Seal	Silicon Carbide+Carbon+Viton	
12	Mounted Base	Coating Steel	
13	Motor Shell	Aluminum alloy	

Dimensions (TPH 8/12)



* Optional inlet & outlet: 1. 1 1/2 inch or 2 inch.
2. flange type

TPH 8T

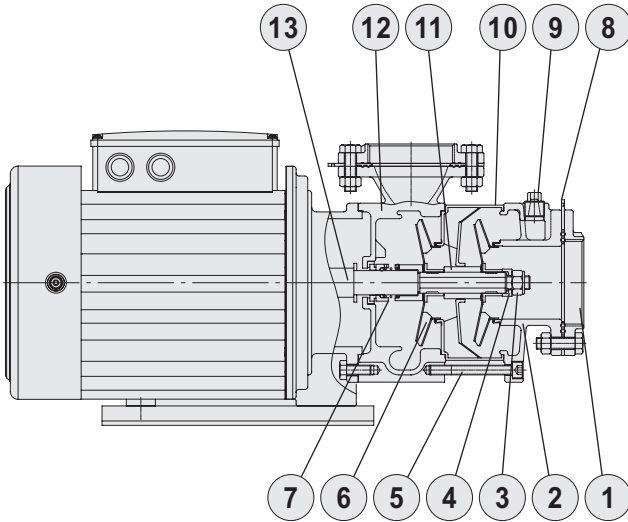
Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 8T 2K	375	77	88	75	18.8
TPH 8T 2.5K	407	109	120	107	19.5
TPH 8T 3K	407	109	120	107	20.0
TPH 8T 4K	435	109	120	107	25.4
TPH 8T 5K	471	143	154	141	25.5
TPH 8T 6K	471	143	154	141	25.5

TPH 12T

Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 12T 1K	335	77	88	75	17.6
TPH 12T 2K	375	77	88	75	20.0
TPH 12T 3K	435	109	120	107	25.4
TPH 12T 4K	435	109	120	107	28.0
TPH 12T 5K	471	143	154	141	29.2
TPH 12T 6K	471	143	154	141	29.2



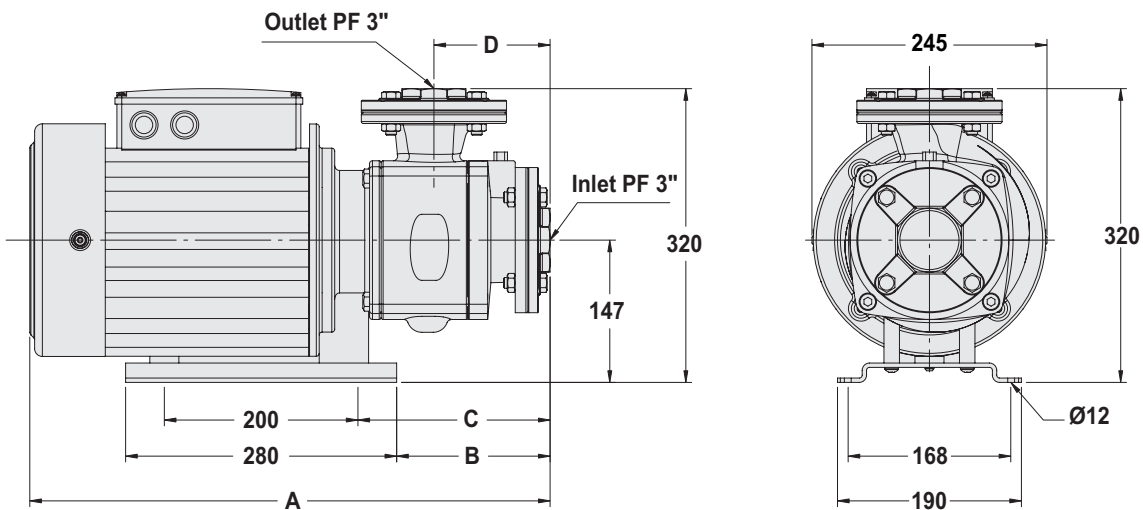
Sectional drawing



Materials

No.	Part name	Material	
		Standard	N series
1	Flange	FC 20	SUS 316
2	Suction Chamber	FC 20	SUS 316
3	Lock Nut	SUS 316	SUS 316
4	Sleeve (Shaft End)	SUS 316	SUS 316
5	Stud Bolt	SCM 435	SCM 435
6	Impeller	SUS 316	SUS 316
7	Mechanical Seal	Silicon Carbide+Carbon+Viton	
8	Gasket	Teflon+NBR	
9	Water Plug	FC 20	SUS 316
10	Intermediate Chamber	SUS 316	SUS 316
11	Sleeve	SUS 316	SUS 316
12	Pump Casing	FC 20	SUS 316
13	Shaft	SUS 316	SUS 316

Dimensions (TPH 25T)



TPH 25T 50Hz

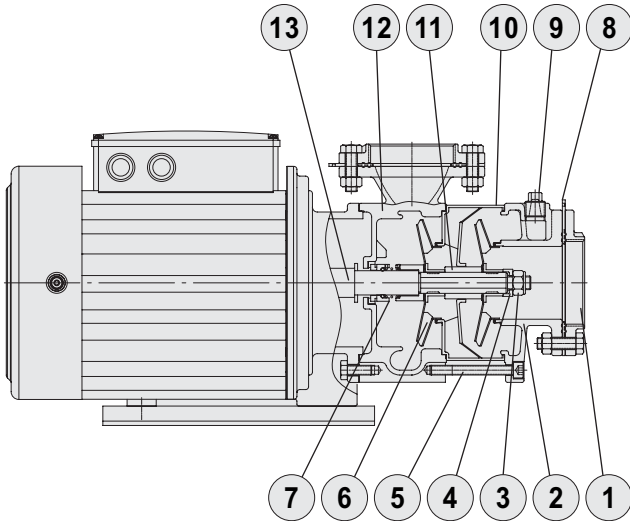
Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 25T2KF	597.5	218.5	258.5	180	53.0
TPH 25T3KF	707.5	278.5	318.5	240	58.8
TPH 25T4KF	707.5	278.5	318.5	240	59.0
TPH 25T5KF	767.5	338.5	378.5	300	71.0

TPH 25T 60Hz

Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 25T2KF	537.5	158.5	198.5	120	51.0
TPH 25T3KF	597.5	218.5	258.5	180	56.8
TPH 25T4KF	597.5	218.5	258.5	180	57.0
TPH 25T5KF	707.5	278.5	318.5	240	68.8
TPH 25T6KF	707.5	278.5	318.5	240	69.0



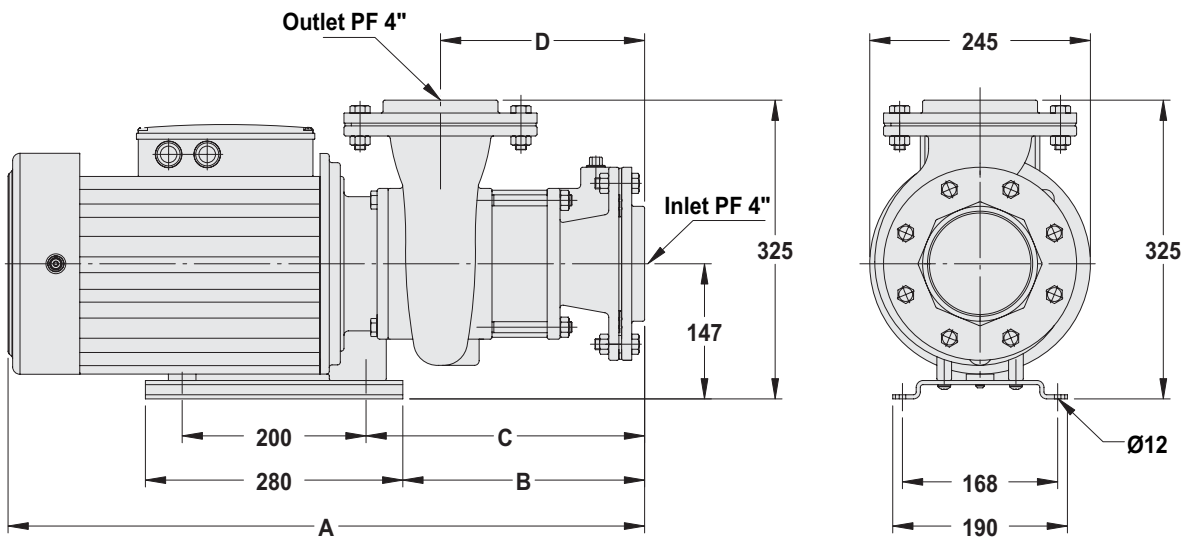
Sectional drawing



Materials

No.	Part name	Material	
		Standard	N series
1	Flange	FC 20	SUS 316
2	Suction Chamber	FC 20	SUS 316
3	Lock Nut	SUS 316	SUS 316
4	Sleeve(Shaft End)	SUS 316	SUS 316
5	Stud Bolt	S20C	S20C
6	Impeller	SUS 316	SUS 316
7	Mechanical Seal	Silicon Carbide+Carbon+Viton	
8	Gasket	Teflon+NBR	
9	Water Plug	FC 20	SUS 316
10	Intermediate Chamber	SUS 316	SUS 316
11	Sleeve	SUS 316	SUS 316
12	Pump Casing	FC 20	SUS 316
13	Shaft	SUS 316	SUS 316

Dimensions (TPH 50T)



TPH 50T 50Hz

Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 50T 2KF	642.5	263	303	222	61.5
TPH 50T 3KF	752.5	323	363	282	80.6
TPH 50T 4KF	802.5	323	363	282	88.0

TPH 50T 60Hz

Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 50T2.5KF	582.5	203	243	162	55.6
TPH 50T 4KF	692.5	263	303	222	77.6
TPH 50T 5KF	742.5	263	303	222	86.7



WALRUS

TPH

TPK Series



TPHK Series



TPRK Series



TPR Series



WALRUS

WALRUS PUMP