



WALRUS
PUMP

TPHK Series

Immersible Pump



**Better Life
Through Innovation**

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TPHK Series Immersible Pump

50 Hz

Power: 0.37 - 2.13 kW

Head: Up to 65 M

Flow: Up to 315 L/min

Outlet: 3/4" - 1 1/4"

60 Hz

Power: 0.37 - 2.83 kW

Head: Up to 90 M

Flow: Up to 355 L/min

Outlet: 3/4" - 1 1/4"



Construction Industry



Agriculture & Fishing Industry



Manufacturing Industry



Electricity & New Energy Industry



Entertainment & Leisure Industry



Accommodation & Food Service Industry



Wholesale & Retail Industry



Water Supply & Pollution Control



Service Industry

Product Features

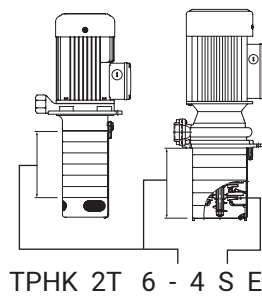
- Immersible vertical multistage centrifugal pump, self-priming, co-axial pump/motor design, impellers mounted on extended motor shaft. Main working parts made by stainless steel.

Applications

The TPHK Series is vertical multistage centrifugal pump, designed for industrial use, specially for machine tools. It is suitable to carry fluids such as water, coolant, light oil and other clean, non aggressive matters:

- Industrial circulation system
- Washing/cleaning system
- Filtration system

Model Code



Model type
Standard capacity m³/h
Number of Stages
Number of Impellers
Stainless steel series
Drain back tank structure (8T)

Operating Conditions

- Ambient temperature: Max. +40°C
- Liquid temperature range: +0°C ~ +90°C
- Operating pressure: Max. 10 kg/cm²
- Submerged depth: Min. 40 mm

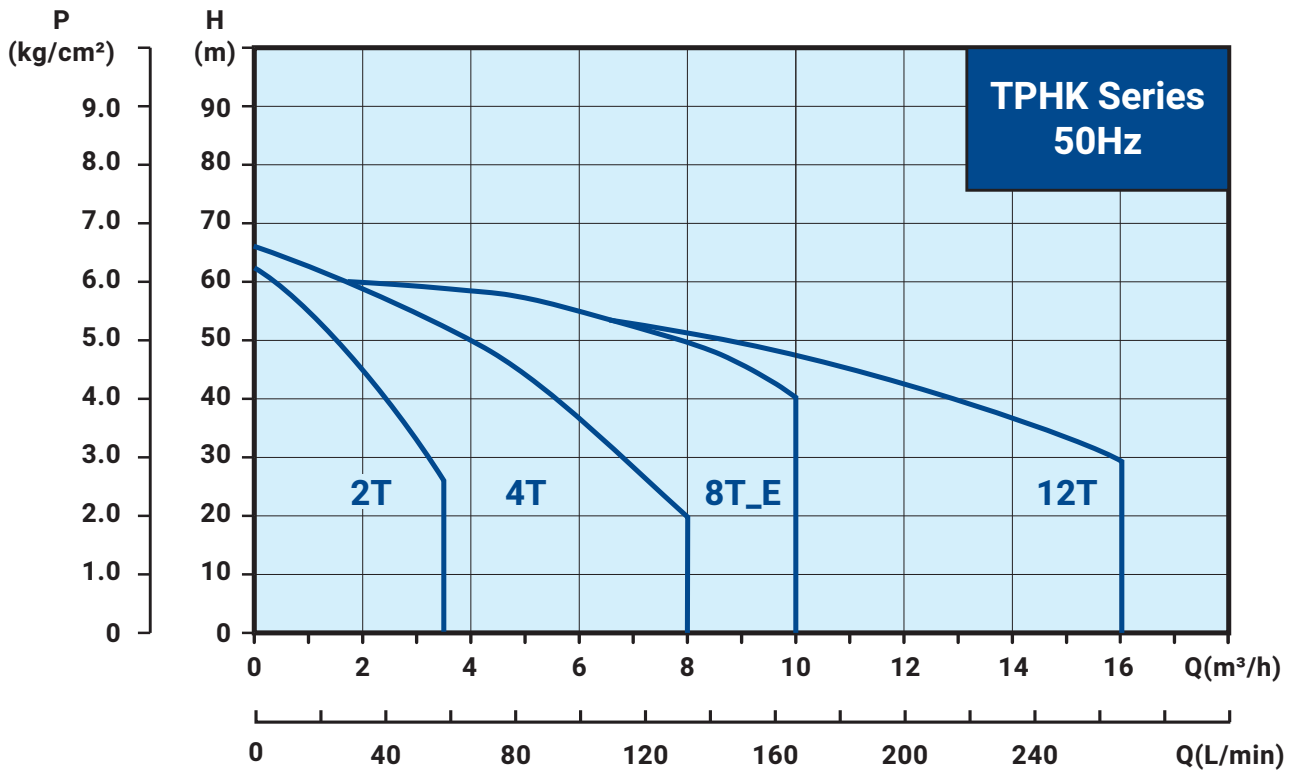
Motor

- Enclosure protection class: IP54
- Insulation class: F.
- Frequency range: 50/60 Hz
- Nominal speed: 2900/3500 rpm
- Voltages code:

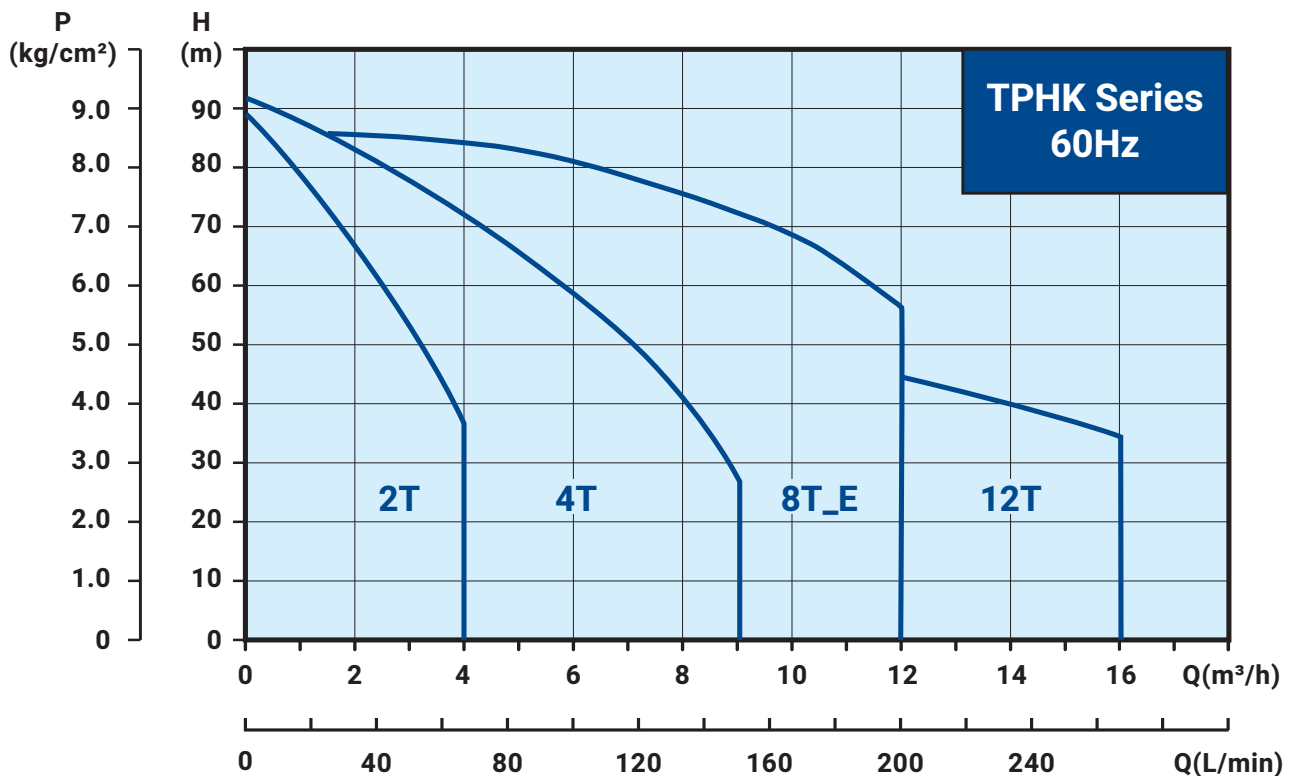
Code	PH	50Hz	60Hz
53Q	3	200-240/380-440V	-
A3Z*	3	200-255/380-440V	200-255/380-480V
A3U*	3	200-240/380-415V	200-240/380-440V
A6V*	3	200-230/342-415V	220-240/380-480V
A9V*	3	200-230/342-380V	220-240/380-440V

* The motor can be used in both 50/60Hz.

Performance Curve, 50Hz

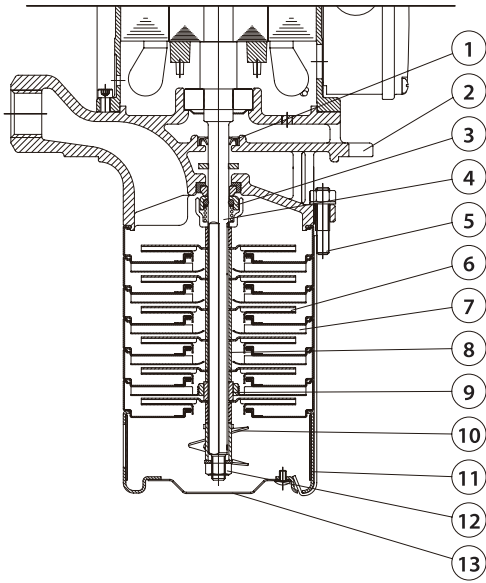


Performance Curve, 60Hz

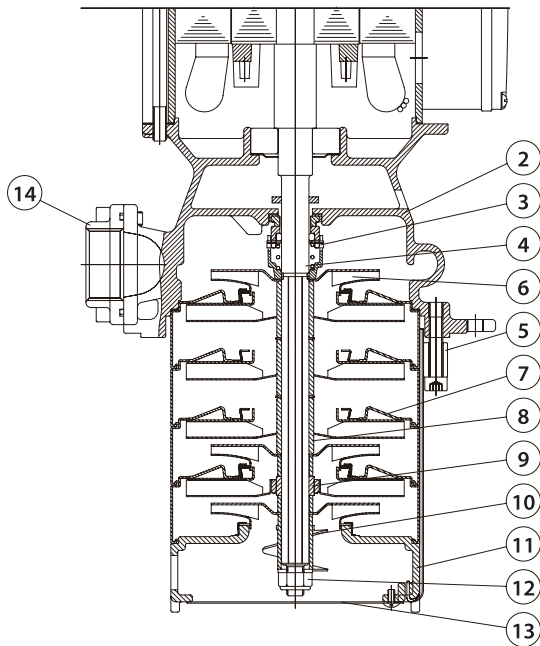


Sectional Drawing

TPHK 2T/4T/8T_E



TPHK 12T



Materials

NO.	Part Name	Material		
		Standard	S series	
1	Oil Seal	NBR		
2	Pump Casing	FC 25	SUS 304	
3	Mechanical Seal	2T/4T/8T_E	MSSH	MGSH
		12T	HSSH	HGSH
4	Shaft	SUS 304		
5	Strap	SUS 304		
6	Impeller	SUS 304		
7	Intermediate chamber	SUS 304		
8	Sleeve	SUS 304		
9	Bearing	SiC		
10	Priming screw	SUS 304		
11	Suction intercon-necter	SUS 304		
12	Lock Nut	SUS 316		
13	Filter	SUS 304		
14	Flange	SUS 304		

SUS 304 may be replaced by SUS 316, depending on stock availability.

Options on Request

■ Special mechanical seal

(TPHK 2T/4T/8T_E)

Mechanical seal type	Material	
	Stationary Face/ Rotary Face	Cup Gasket & O Ring
MGSH MGSV MGSE	(G)Carbon/ (S)Silicium carbide	(H) HNBR (V) Viton (E) EPDM
MSSH MSSV MSSE	(S)Silicium carbide/ (S)Silicium carbide	

(TPHK 12T)

Mechanical seal type	Material	
	Stationary Face/ Rotary Face	Cup Gasket & O Ring
HGSH HGSV HGSE	(G)Carbon/ (S)Silicium carbide	(H) HNBR (V) Viton (E) EPDM
HSSH HSSV HSSE	(S)Silicium carbide/ (S)Silicium carbide	

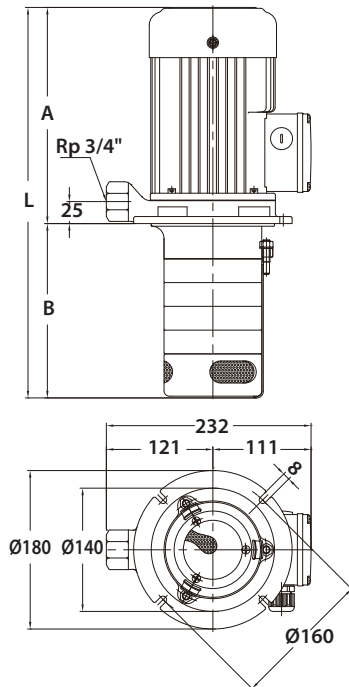
Electrical Data


Model	PH Ø	Voltage code	Cycle Hz	Volts V	Output kW	Ampere I _{1/1} (A)	Service Factor	Ampere I _{max} (A)
TPHK 2T3-1	3	A3V	50	200-240/342-415	0.37	1.8-2.0/1.1-1.2	1.1	2.0-2.1/1.1-1.2
			60	200-255/342-480				2.3-2.1/1.3-1.2
TPHK 2T3-2	3	A3V	50	200-240/342-415	0.37	1.8-2.0/1.1-1.2	1.1	2.0-2.1/1.1-1.2
			60	200-255/342-480				2.3-2.1/1.3-1.2
TPHK 2T3-3	3	A3V	50	200-240/342-415	0.37	1.8-2.0/1.1-1.2	1.1	2.0-2.1/1.1-1.2
			60	200-255/342-480				2.3-2.1/1.3-1.2

Model	PH Ø	Voltage code	Cycle Hz	Volts V	Input kW	Output kW	Ampere A
TPHK 2T4-4	3	A3Z	50	200-255/380-440	0.62	0.42	2.2-2.9/1.4-1.7
			60	200-255/380-480	0.91	0.62	3.0-2.9/1.7-1.7
TPHK 2T5-5	3	A3Z	50	200-255/380-440	0.70	0.48	2.4-3.0/1.4-1.6
			60	200-255/380-480	1.06	0.72	3.3-3.0/1.8-1.8
TPHK 2T6-6	3	A3Z	50	200-255/380-440	0.85	0.58	3.1-3.6/1.8-2.1
			60	200-255/380-480	1.29	0.88	4.0-3.6/2.4-2.4
TPHK 2T7-7	3	A3U	50	200-240/380-415	1.32	0.90	4.6-6.7/2.9-3.7
			60	200-240/380-440	1.80	1.23	5.6-5.4/3.2-3.2

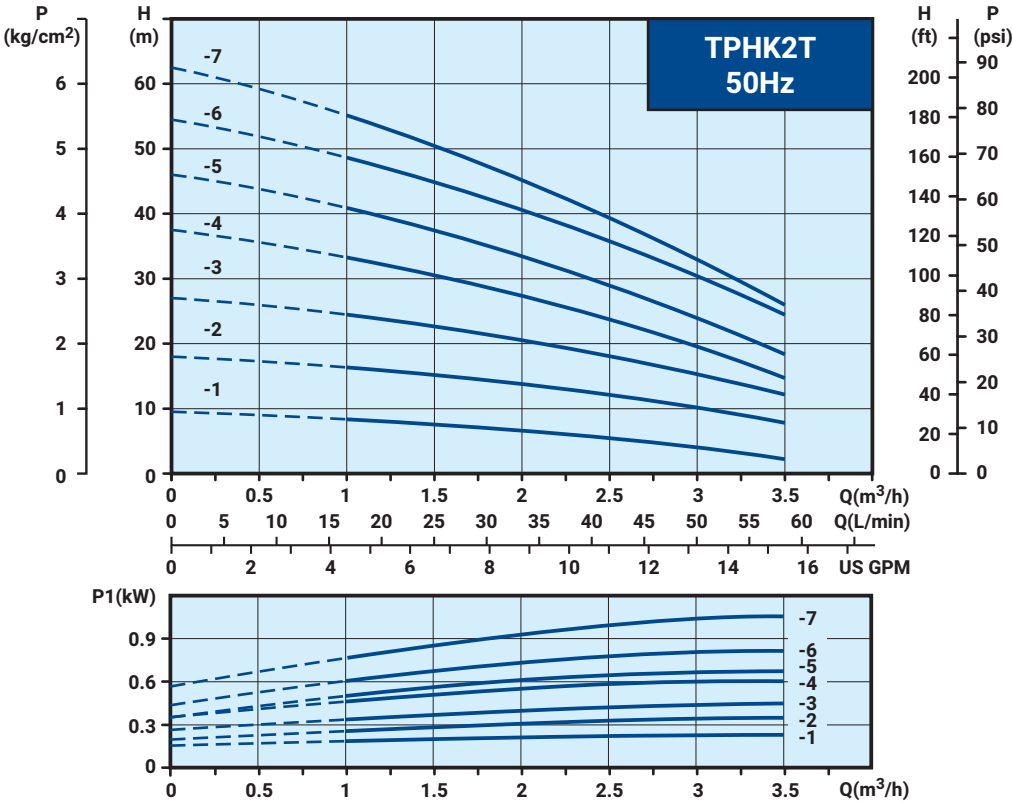
Maximum 11 Stages

Dimensions

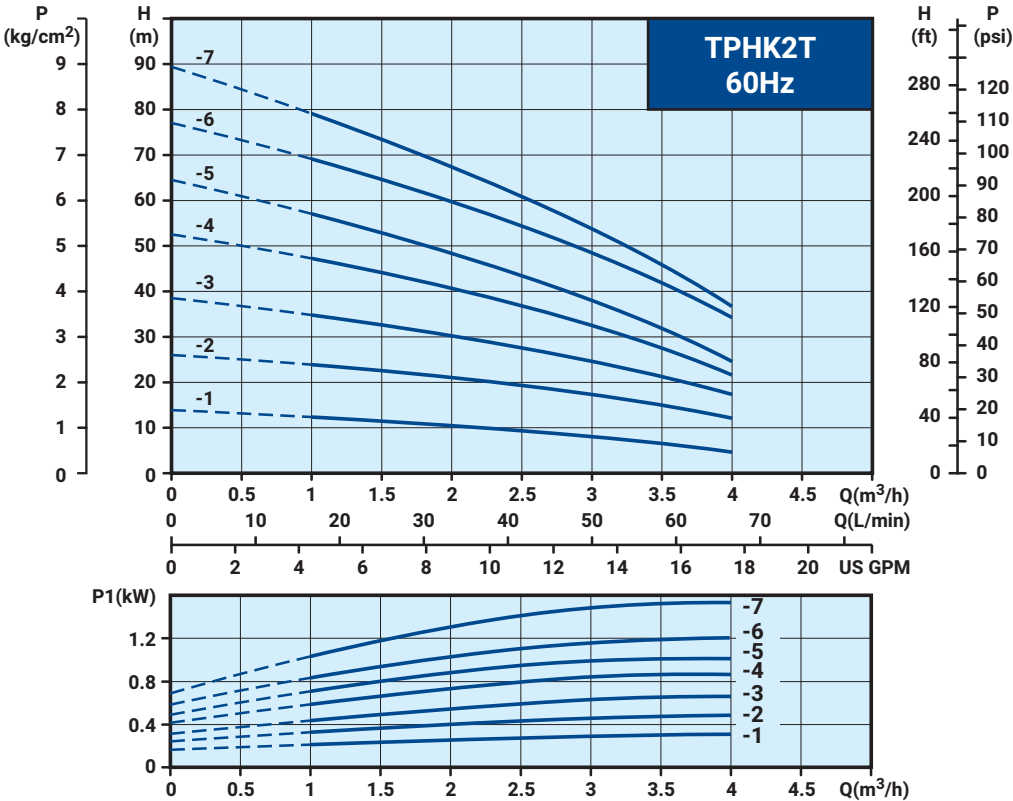


Model	A mm	B mm	L mm	N.W. kg	
TPHK 2T3-1	185.5	144	329.5	9.9	36
TPHK 2T8-1	185.5	234	419.5	10.9	30
TPHK 2T3-2	185.5	144	329.5	10.1	36
TPHK 2T5-2	185.5	180	365.5	10.5	30
TPHK 2T9-2	185.5	252	437.5	11.3	24
TPHK 2T3-3	185.5	144	329.5	10.2	36
TPHK 2T4-3	185.5	162	347.5	10.4	30
TPHK 2T5-3	185.5	180	365.5	10.6	30
TPHK 2T6-3	185.5	198	383.5	10.8	30
TPHK 2T8-3	185.5	234	419.5	11.2	24
TPHK 2T11-3	185.5	288	473.5	11.6	24
TPHK 2T4-4	205.5	162	367.5	11.5	24
TPHK 2T6-4	205.5	198	403.5	11.9	30
TPHK 2T5-5	253.5	180	433.5	12.7	30
TPHK 2T6-5	253.5	198	451.5	13.3	30
TPHK 2T6-6	253.5	198	451.5	13.5	24
TPHK 2T8-6	253.5	234	487.5	13.9	24
TPHK 2T9-6	253.5	252	505.5	14.1	24
TPHK 2T10-6	253.5	270	523.5	14.2	24
TPHK 2T11-6	253.5	288	541.5	14.4	24
TPHK 2T7-7	253.5	216	469.5	13.0	24

Performance Curve, 50Hz



Performance Curve, 60Hz



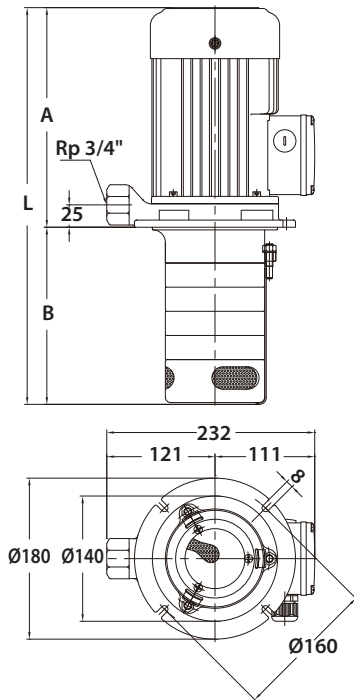
Electrical Data


Model	PH Ø	Voltage code	Cycle Hz	Volts V	Output kW	Ampere I _{1/1} (A)	Service Factor	Ampere I _{max} (A)
TPHK 4T2-1	3	A3V	50	200-240/342-415	0.37	1.8-2.0/1.1-1.2	1.1	2.0-2.1/1.1-1.2
			60	200-255/342-480				2.3-2.1/1.3-1.2

Model	PH Ø	Voltage code	Cycle Hz	Volts V	Input kW	Output kW	Ampere A
TPHK 4T2-2	3	A3Z	50	200-255/380-440	0.65	0.44	2.2-2.9/1.4-1.7
			60	200-255/380-480	0.96	0.65	3.0-2.7/1.7-1.7
TPHK 4T3-3	3	A3Z	50	200-255/380-440	0.85	0.58	3.1-3.6/1.8-2.1
			60	200-255/380-480	1.29	0.88	4.0-3.6/2.4-2.4
TPHK 4T4-4	3	A3U	50	200-240/380-415	1.08	0.74	3.4-3.5/2.0-2.0
			60	200-240/380-440	1.62	1.10	4.0-5.0/2.9-2.9
TPHK 4T5-5	3	A3U	50	200-240/380-415	1.44	0.98	4.9-6.8/3.0-3.8
			60	200-240/380-440	2.10	1.43	6.2-6.0/3.5-3.5
TPHK 4T6-6	3	A3U	50	200-240/380-415	1.74	1.19	6.3-9.9/4.2-5.5
			60	200-240/380-440	2.40	1.64	7.7-7.6/4.5-4.5
TPHK 4T7-7	3	A3U	50	200-240/380-415	2.14	1.46	6.9-10.3/4.5-5.8
			60	200-240/380-440	2.80	1.91	8.7-8.4/4.9-4.9

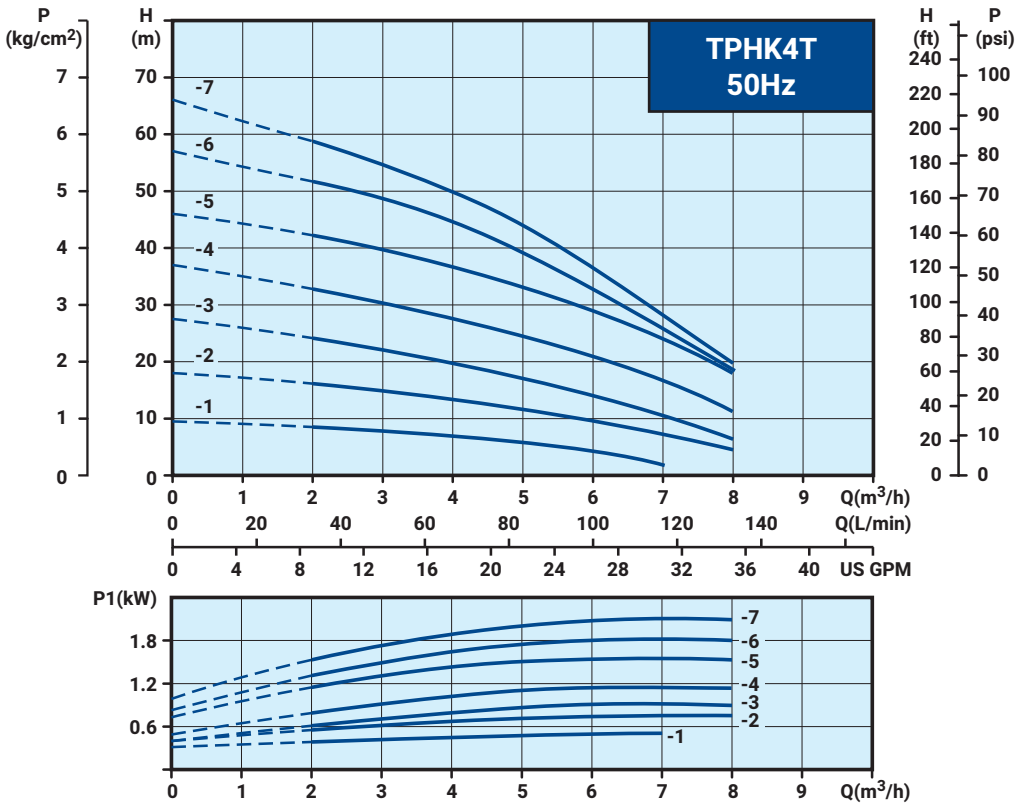
Maximum 8 Stages

Dimensions

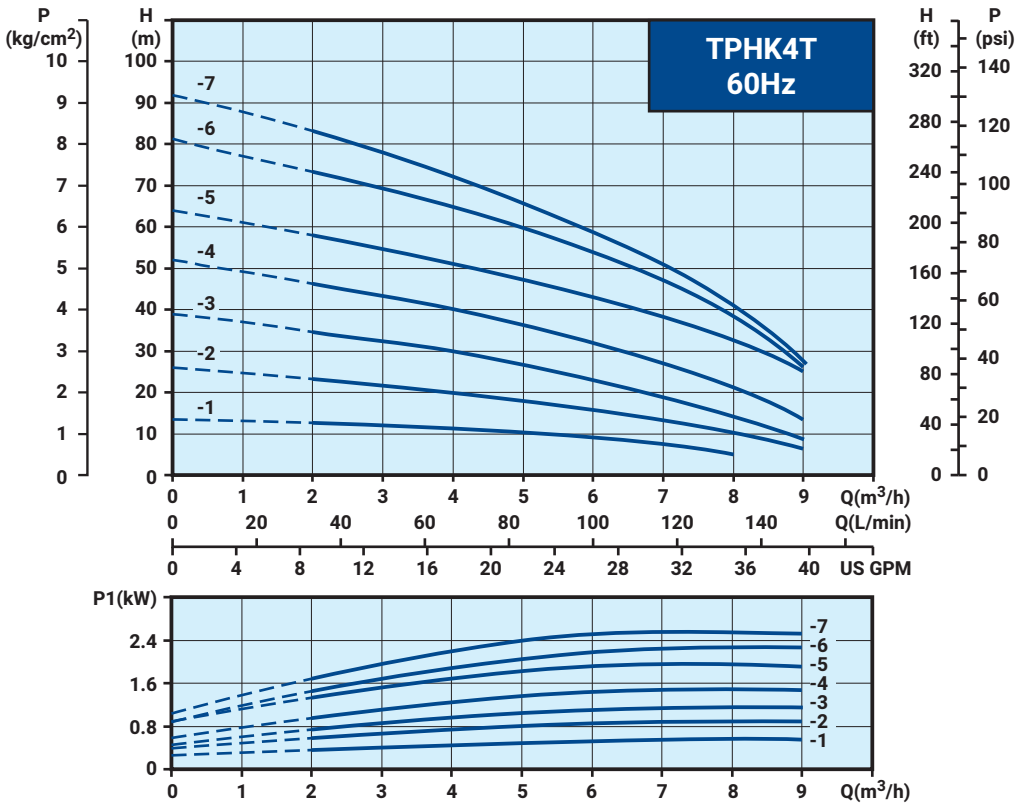


Model	A mm	B mm	L mm	N.W. kg	
TPHK 4T2-1	185.5	144	329.5	9.8	36
TPHK 4T3-1	185.5	171	356.5	10.0	30
TPHK 4T2-2	205.5	144	349.5	11.0	36
TPHK 4T3-2	205.5	171	376.5	11.2	30
TPHK 4T4-2	205.5	198	403.5	11.4	24
TPHK 4T6-2	205.5	252	457.5	11.6	24
TPHK 4T3-3	245.5	171	416.5	11.7	30
TPHK 4T4-3	245.5	198	443.5	11.9	24
TPHK 4T5-3	245.5	225	470.5	12.1	24
TPHK 4T6-3	245.5	252	497.5	12.3	24
TPHK 4T8-3	245.5	306	551.5	12.7	24
TPHK 4T4-4	245.5	198	443.5	13.3	24
TPHK 4T5-4	245.5	225	470.5	13.5	24
TPHK 4T6-4	245.5	252	497.5	13.7	24
TPHK 4T5-5	253.5	225	478.5	13.9	24
TPHK 4T8-5	253.5	306	559.5	14.5	24
TPHK 4T6-6 (50Hz)	253.5	252	505.5	13.1	24
TPHK 4T6-6 (60Hz)	284	252	536	14.1	24
TPHK 4T8-6 (50Hz)	253.5	306	559.5	13.6	15
TPHK 4T8-6 (60Hz)	284	306	590	14.6	15
TPHK 4T7-7	284	279	563	14.6	24
TPHK 4T8-7	284	306	590	14.8	15

Performance Curve, 50Hz



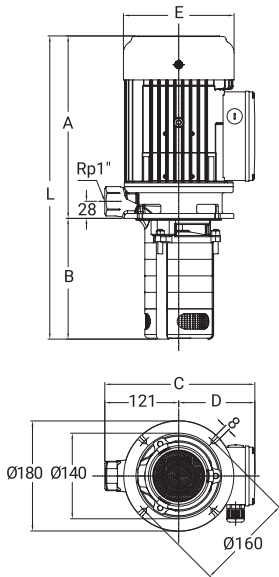
Performance Curve, 60Hz




Electrical Data, 50/60Hz

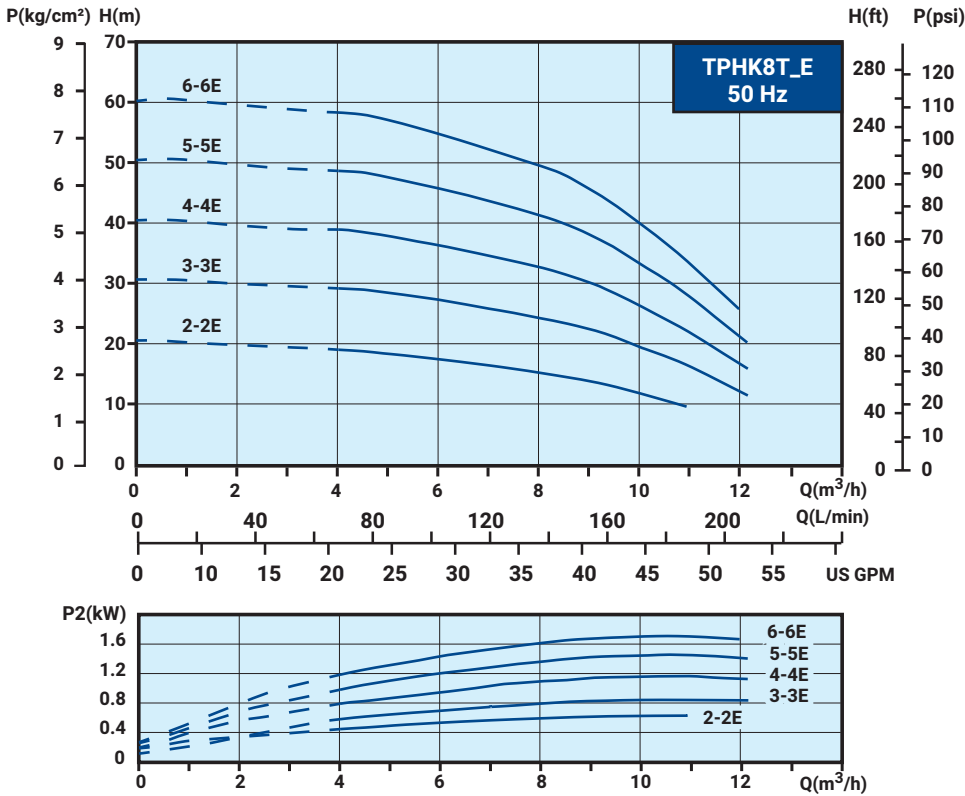
Model	PH Ø	Voltage code	Cycle Hz	Volts V	Output kW	Ampere I _{1/1} (A)	Service Factor	Ampere I _{max} (A)
TPHK 8T2-2(S)E	3	A6V	50	200-230/342-415	1.1	5.2-5.4/3.1-3.4	1.1	5.5-5.7/3.3-3.5
			60	220-240/380-480	1.1	4.6-4.6/2.8-3.1	1.4	6.2-5.7/3.6-3.5
TPHK 8T3-3(S)E	3	A9V	50	200-230/342-380	2.2	9.5-10.5/5.5-5.6	1.1	10.2-10.9/5.9-5.9
			60	220-240/380-440	2.2	8.6-8.4/4.9-5.0	1.5	12.1-11.2/6.9-6.4
TPHK 8T4-4(S)E	3	A9V	50	200-230/342-380	2.2	9.5-10.5/5.5-5.6	1.1	10.2-10.9/5.9-5.9
			60	220-240/380-440	2.2	8.6-8.4/4.9-5.0	1.5	12.1-11.2/6.9-6.4
TPHK 8T5-5(S)E	3	A9V	50	200-230/342-380	3.0	12.2-13.1/7.1-7.1	1.1	13.4-14.0/7.9-7.8
			60	220-240/380-440	3.0	11.2-10.7/6.4-6.3	1.3	14.5-13.3/8.3-7.6
TPHK 8T6-6(S)E	3	A9V	50	200-230/342-380	3.4	13.4-13.0/7.8-7.4	1.1	14.6-13.9/8.5-8.0
			60	220-240/380-440	3.7	13.4-12.6/7.7-7.0	1.3	16.4-15.1/9.4-8.4

Dimensions

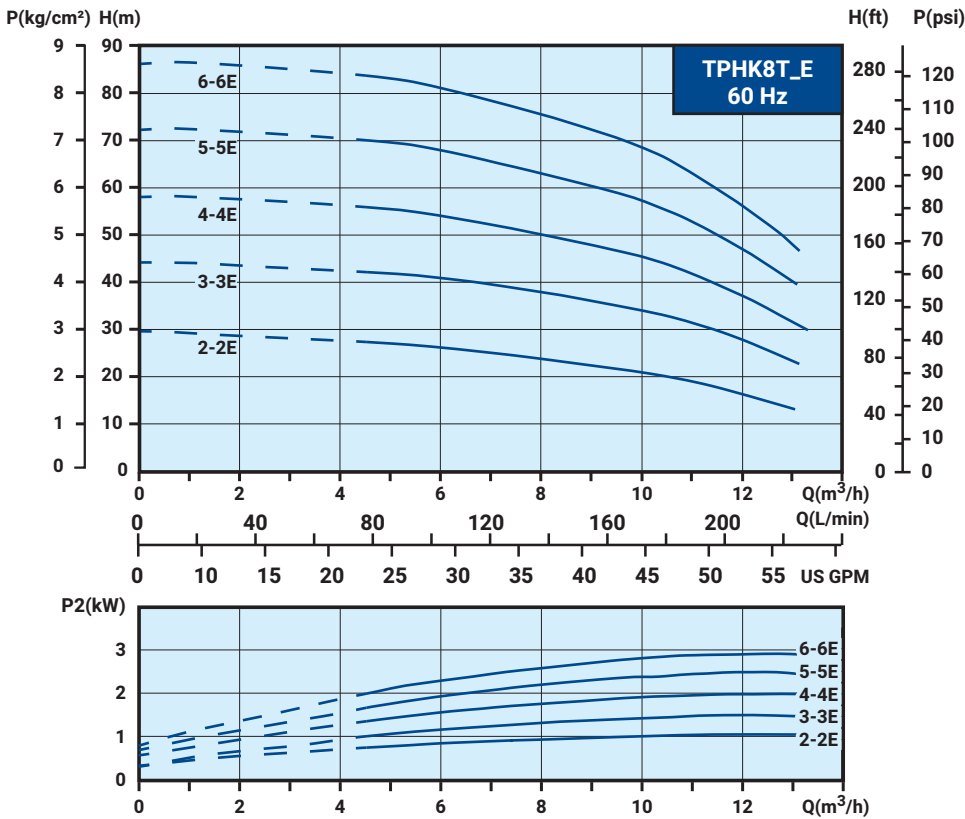


Model	Cycle Hz	L mm	A mm	B mm	C mm	D mm	E mm	N.W. kg	
TPHK 8T2-2(S)E	50/60	455	284	171	232	111	145	17	24
TPHK 8T3-3(S)E	50/60	519	321	198	244	123	181	24	24
TPHK 8T4-4(S)E	50/60	546	321	225	244	123	181	25	24
TPHK 8T5-5(S)E	50/60	598	346	252	244	123	181	28	15
TPHK 8T6-6(S)E	50/60	645	366	279	244	123	181	31	15

Performance Curve, 50Hz



Performance Curve, 60Hz

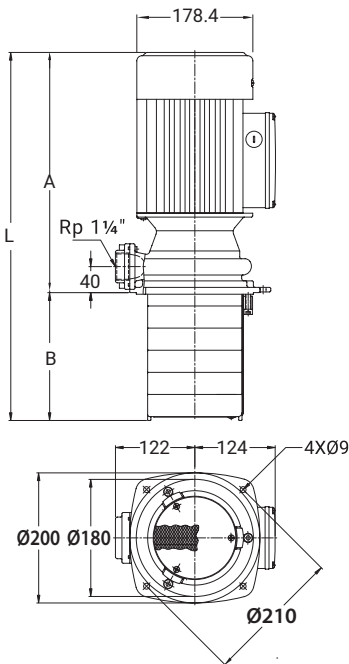



Electrical Data

Model	PH Ø	Voltage code	Cycle Hz	Volts V	Input kW	Output kW	Ampere A
TPHK 12T6-1	3	A3Z	50	200-255/380-440	1.40	0.95	4.5-6.3/2.7-3.4
			60	200-255/380-480	2.00	1.36	6.6-5.8/3.6-2.9
TPHK 12T6-2	3	A3U	50	200-240/380-415	3.12	2.13	9.6-13.9/6.4-8.4
			60	200-240/380-440	4.15	2.83	12.8-12.4/7.1-7.4
TPHK 12T6-3	3	53Q	50	200-240/380-440	3.83	2.61	11.6-11.5/6.5-7.2

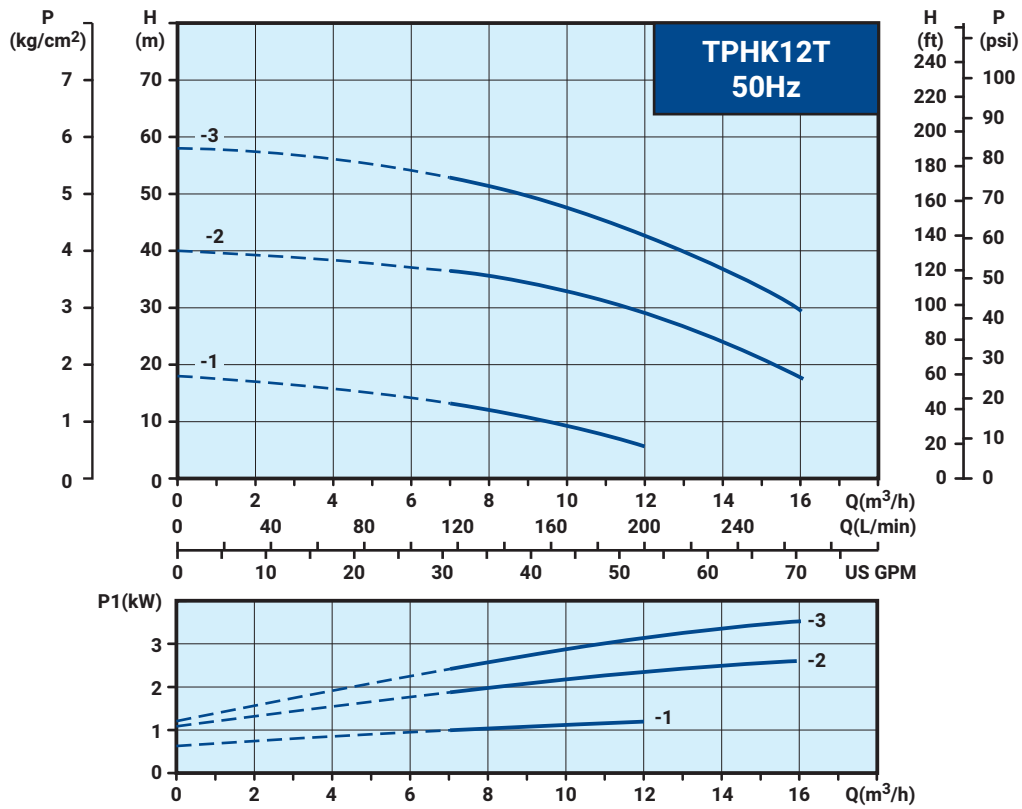
Maximum 9 Stages

Dimensions

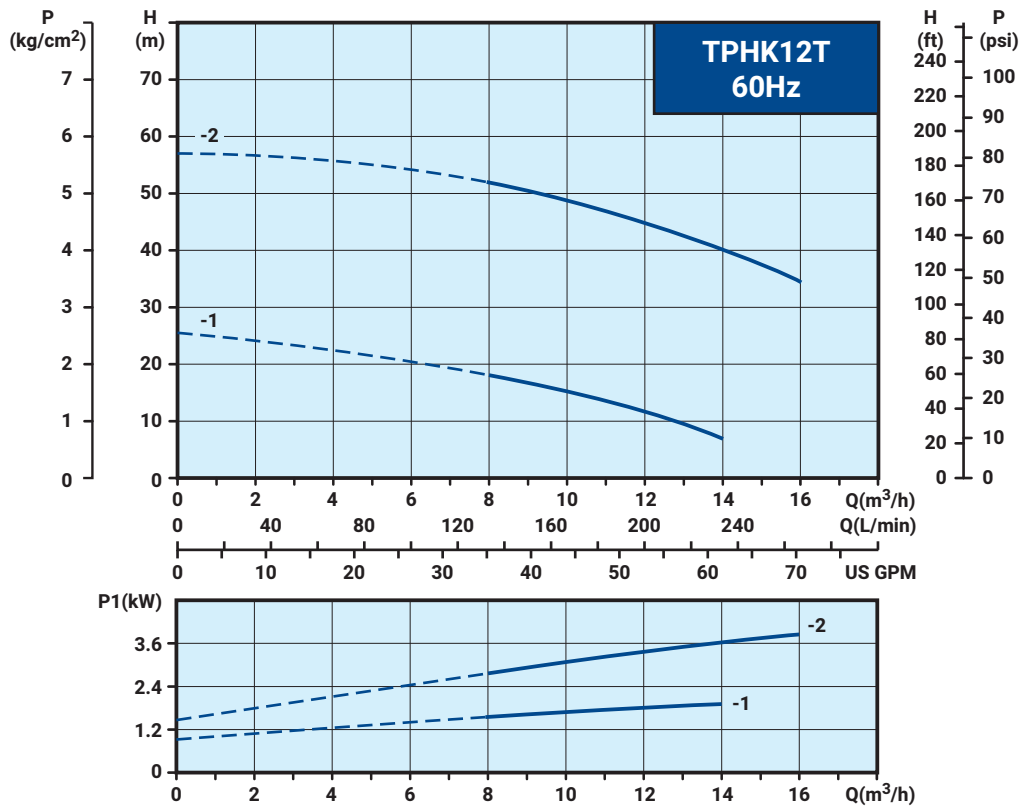


Model	A mm	B mm	L mm	N.W. kg	
TPHK 12T6-1	369	196.5	565.5	27.0	15
TPHK 12T6-2	369	196.5	565.5	29.0	15
TPHK 12T9-2	369	298.5	667.5	30.5	15
TPHK 12T6-3	369	196.5	565.5	30.0	15
TPHK 12T9-3	369	298.5	667.5	31.5	15

Performance Curve, 50Hz



Performance Curve, 60Hz





WALRUS
PUMP

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All specifications are subject to change without notice. TPHK-EN018-202309

