



**WALRUS**  
PUMP

# TPHK\_L Series

**Immersible Pump**

**IE3**   
**Motor**



**Better Life  
Through Innovation**

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# TPHK\_L Series Immersible Pump

## 50 Hz

Power: 0.37 - 3.4 kW

Head: Up to 70 M

Flow: Up to 165 L/min

Outlet: ¾" - 1"

Inlet: 1¼"

## 60 Hz

Power: 0.37 - 3.7 kW

Head: Up to 90 M

Flow: Up to 230 L/min

Outlet: ¾" - 1"

Inlet: 1¼"



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

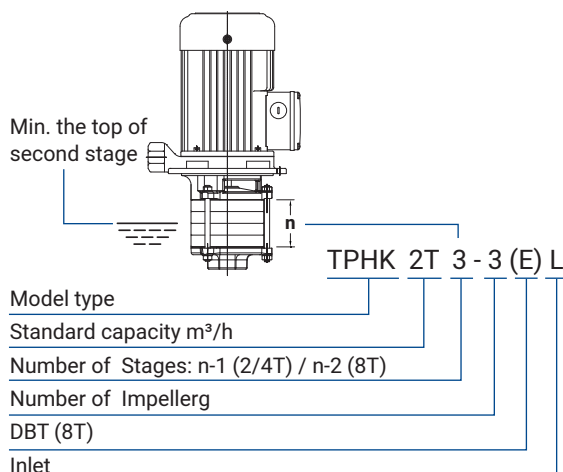
- Immersible vertical multistage centrifugal pump, self-priming, co-axial pump/motor design, impellers mounted on extended motor shaft. Main working parts made by stainless steel.

## Applications

The TPHK\_L 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



## Operating Conditions

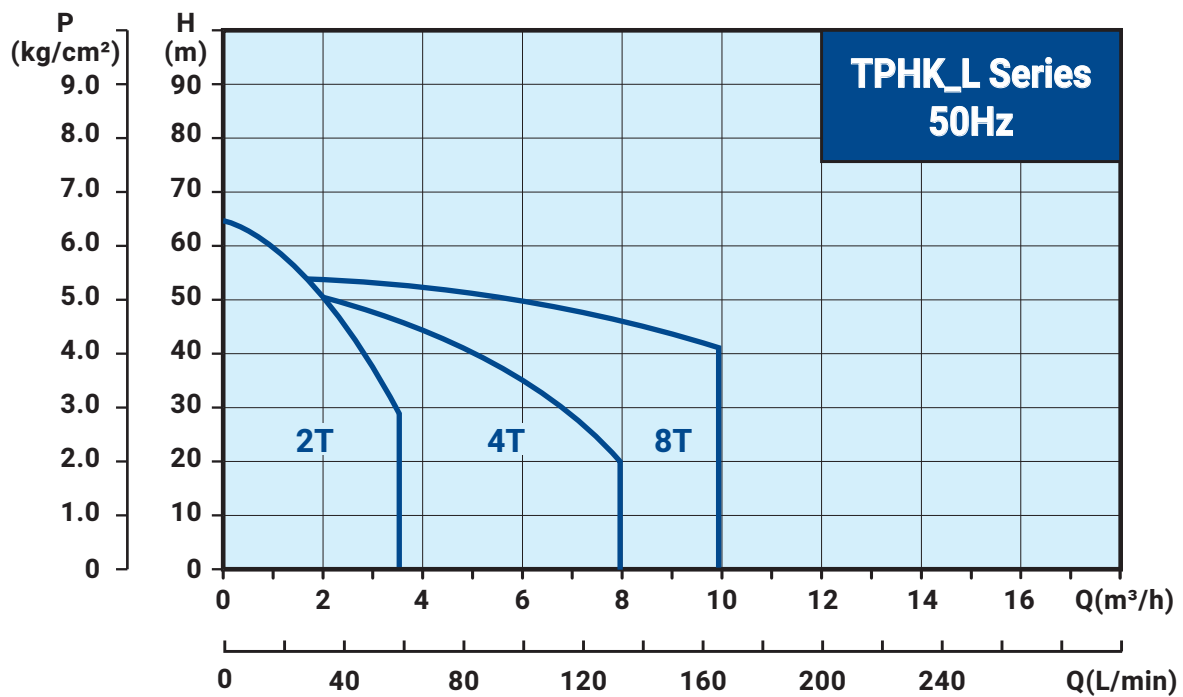
- Liquid temperature range: +0°C ~ +90°C
- Ambient temperature: Max. +40°C
- Operating pressure: Max. 15 kg/cm²
- Submerged depth: Min. Top of second stage

## Motor

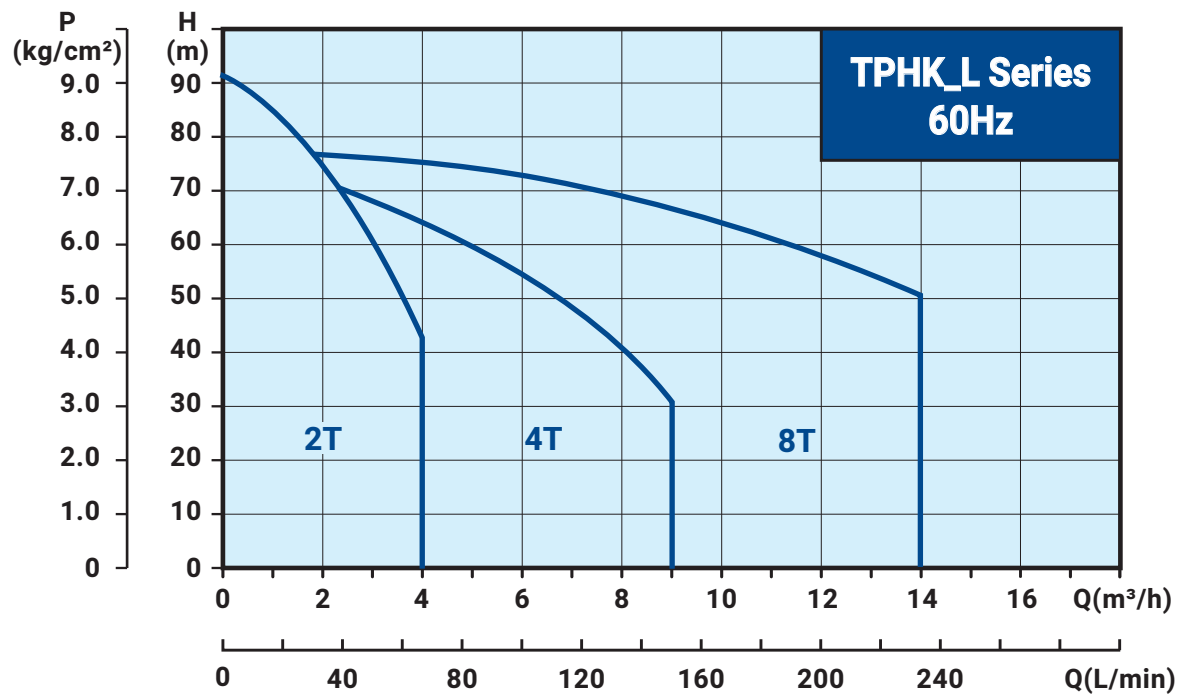
- Enclosure protection class: IP54
- Insulation class: F
- Frequency range: 50/60 Hz
- Nominal speed: 2900/3500 rpm
- Voltages code:

| Code | PH | 50Hz                | 60Hz                |
|------|----|---------------------|---------------------|
| 6V   | 3  | 200-230 / 342-415 V | 220-240 / 380-480 V |
| 9V   | 3  | 200-230 / 342-380 V | 220-240 / 380-440 V |

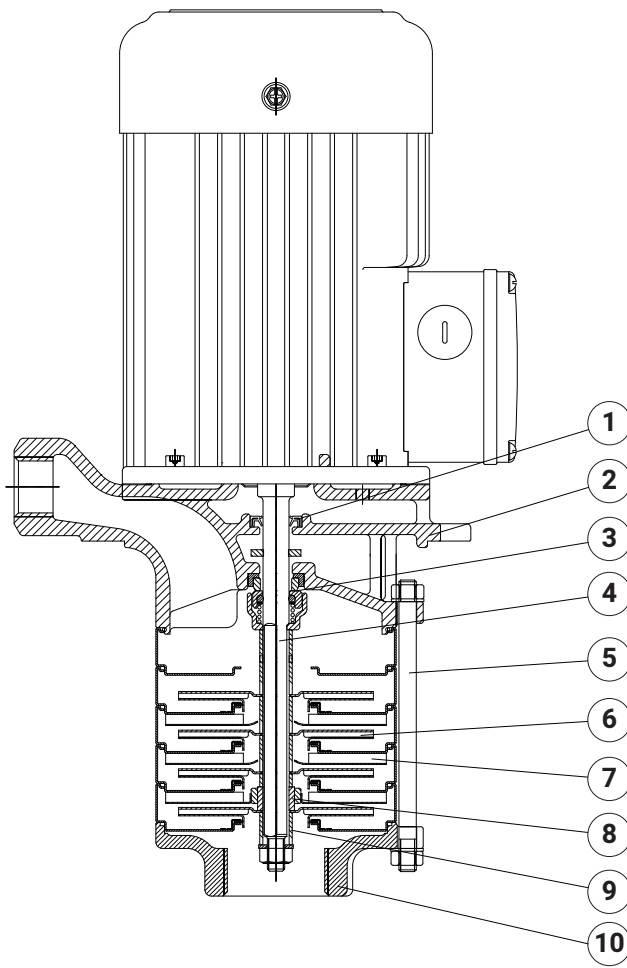
## Performance Curve, 50Hz



## Performance Curve, 60Hz



## Sectional Drawing



## Materials

| NO. | Part Name            | Material |
|-----|----------------------|----------|
| 1   | Oil Seal             | NBR      |
| 2   | Pump Casing          | FC 25    |
| 3   | Mechanical Seal      | MSSH     |
| 4   | Shaft                | SUS 304  |
| 5   | Strap                | SUS 304  |
| 6   | Impeller             | SUS 304  |
| 7   | Intermediate chamber | SUS 304  |
| 8   | Bearing              | SiC      |
| 9   | Sleeve               | SUS 304  |
| 10  | Base                 | FC 20    |

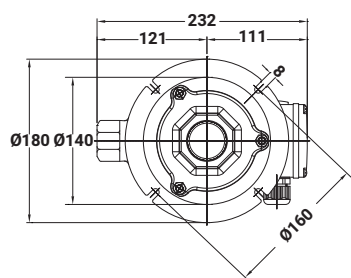
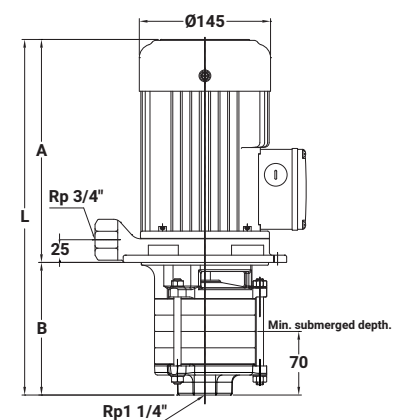
## Options on Request

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

## Electrical Data, 50/60Hz

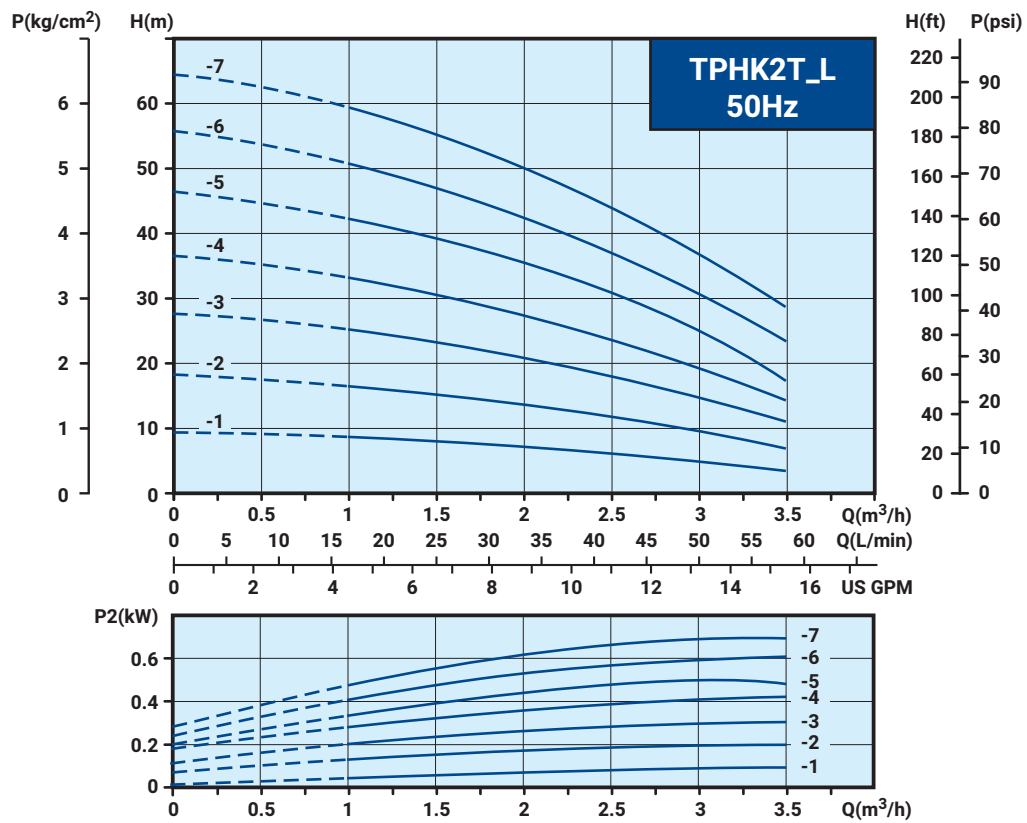
| Model              | PH<br>Ø | Voltage<br>code | Cycle<br>Hz | Volts<br>V                         | Output<br>kW | Ampere<br>I <sub>1/1</sub> (A)     | Service<br>Factor | Ampere<br>I <sub>max</sub> (A)     |
|--------------------|---------|-----------------|-------------|------------------------------------|--------------|------------------------------------|-------------------|------------------------------------|
| <b>TPHK 2T3-1L</b> | 3       | A3V             | 50<br>60    | 200-240/342-415<br>200-255/342-480 | 0.37         | 1.8-2.0/1.1-1.2<br>1.8-1.7/1.0-1.0 | 1.1<br>1.5        | 2.0-2.1/1.1-1.2<br>2.3-2.1/1.3-1.2 |
| <b>TPHK 2T3-2L</b> | 3       | A3V             | 50<br>60    | 200-240/342-415<br>200-255/342-480 | 0.37         | 1.8-2.0/1.1-1.2<br>1.8-1.7/1.0-1.0 | 1.1<br>1.5        | 2.0-2.1/1.1-1.2<br>2.3-2.1/1.3-1.2 |
| <b>TPHK 2T3-3L</b> | 3       | A3V             | 50<br>60    | 200-240/342-415<br>200-255/342-480 | 0.37         | 1.8-2.0/1.1-1.2<br>1.8-1.7/1.0-1.0 | 1.1<br>1.5        | 2.0-2.1/1.1-1.2<br>2.3-2.1/1.3-1.2 |
| <b>TPHK 2T4-4L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 0.55         | 2.5-2.4/1.5-1.4<br>2.3-2.2/1.3-1.3 | 1.1<br>1.5        | 2.7-2.6/1.6-1.5<br>3.2-3.0/1.9-1.6 |
| <b>TPHK 2T5-5L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 0.75         | 3.5-3.6/2.0-2.2<br>3.1-3.1/1.8-1.9 | 1.1<br>1.4        | 3.8-3.8/2.2-2.3<br>4.1-3.9/2.3-2.3 |
| <b>TPHK 2T6-6L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 0.75         | 3.5-3.6/2.0-2.2<br>3.1-3.1/1.8-1.9 | 1.1<br>1.4        | 3.8-3.8/2.2-2.3<br>4.1-3.9/2.3-2.3 |
| <b>TPHK 2T7-7L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 1.10         | 5.2-5.4/3.1-3.4<br>4.6-4.6/2.8-3.1 | 1.1<br>1.4        | 5.5-5.7/3.3-3.5<br>6.2-5.7/3.6-3.5 |

## Dimensions

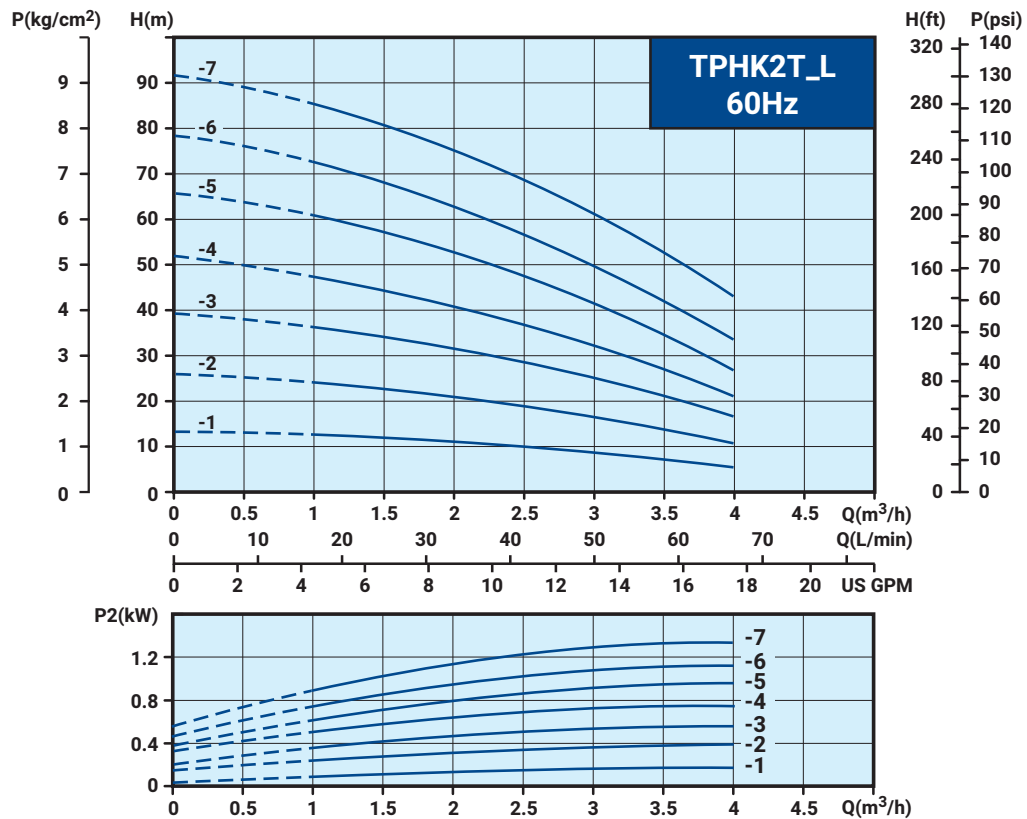


| Model              | A<br>mm | B<br>mm | L<br>mm | N.W.<br>kg |  |
|--------------------|---------|---------|---------|------------|---------------------------------------------------------------------------------------|
| <b>TPHK 2T3-1L</b> | 185     | 146     | 331     | 10.3       | 36                                                                                    |
| <b>TPHK 2T3-2L</b> | 185     | 146     | 331     | 10.5       | 36                                                                                    |
| <b>TPHK 2T3-3L</b> | 185     | 146     | 331     | 10.6       | 36                                                                                    |
| <b>TPHK 2T4-4L</b> | 245     | 164     | 409     | 11.9       | 30                                                                                    |
| <b>TPHK 2T5-5L</b> | 253     | 182     | 435     | 13.1       | 30                                                                                    |
| <b>TPHK 2T6-6L</b> | 253     | 200     | 453     | 13.9       | 24                                                                                    |
| <b>TPHK 2T7-7L</b> | 284     | 218     | 502     | 15.5       | 24                                                                                    |

## Performance Curve, 50Hz



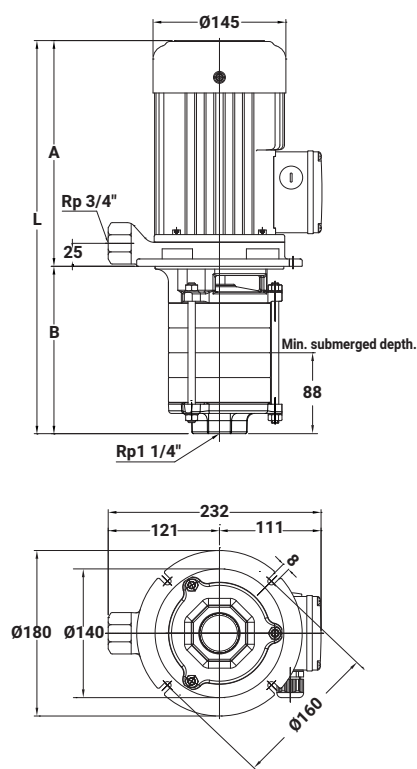
## Performance Curve, 60Hz



## Electrical Data, 50/60Hz

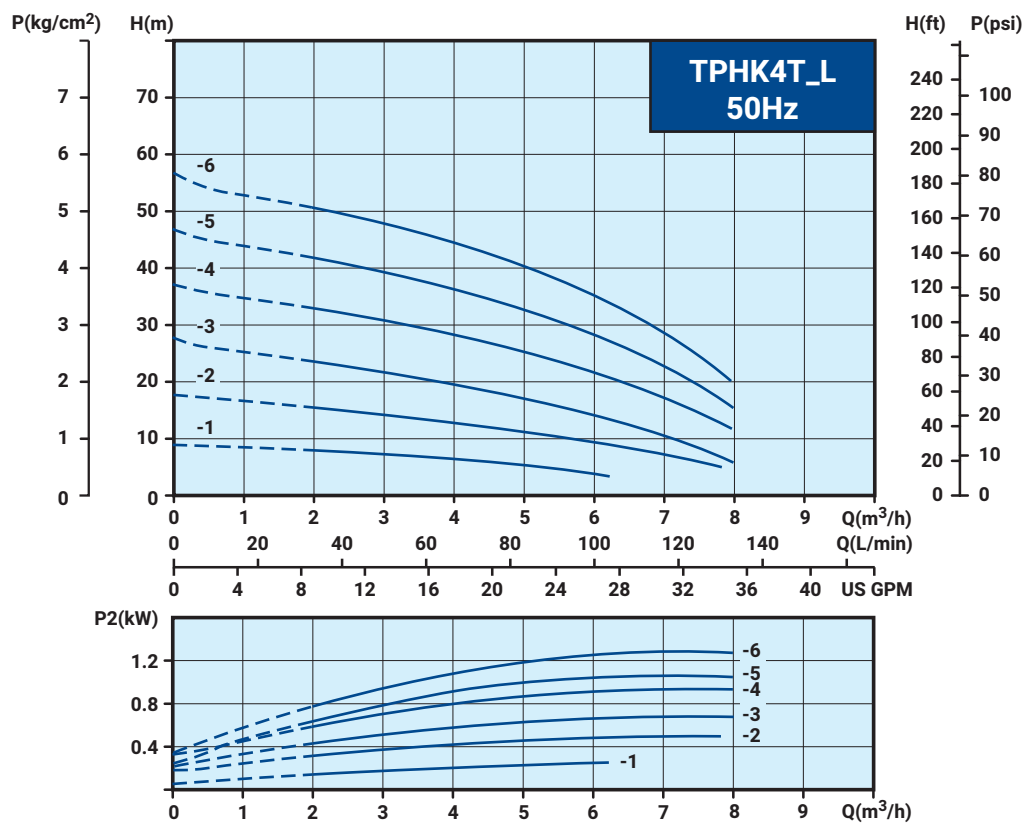
| Model              | PH<br>Ø | Voltage<br>code | Cycle<br>Hz | Volts<br>V                         | Output<br>kW | Ampere<br>I <sub>1/1</sub> (A)     | Service<br>Factor | Ampere<br>I <sub>max</sub> (A)     |
|--------------------|---------|-----------------|-------------|------------------------------------|--------------|------------------------------------|-------------------|------------------------------------|
| <b>TPHK 4T2-1L</b> | 3       | A3V             | 50<br>60    | 200-240/342-415<br>200-255/342-480 | 0.37         | 1.8-2.0/1.1-1.2<br>1.8-1.7/1.0-1.0 | 1.1<br>1.5        | 2.0-2.1/1.1-1.2<br>2.3-2.1/1.3-1.2 |
| <b>TPHK 4T2-2L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 0.55         | 2.5-2.4/1.5-1.4<br>2.3-2.2/1.3-1.3 | 1.1<br>1.5        | 2.7-2.6/1.6-1.5<br>3.2-3.0/1.9-1.6 |
| <b>TPHK 4T3-3L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 0.75         | 3.5-3.6/2.0-2.2<br>3.1-3.1/1.8-1.9 | 1.1<br>1.4        | 3.8-3.8/2.2-2.3<br>4.1-3.9/2.3-2.3 |
| <b>TPHK 4T4-4L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 1.1          | 5.2-5.4/3.1-3.4<br>4.6-4.6/2.8-3.1 | 1.1<br>1.4        | 5.5-5.7/3.3-3.5<br>6.2-5.7/3.6-3.5 |
| <b>TPHK 4T5-5L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 1.5          | 6.7-6.7/3.8-4.0<br>6.0-5.9/3.5-3.6 | 1.1<br>1.4        | 7.3-7.1/4.1-4.2<br>8.1-7.6/4.7-4.2 |
| <b>TPHK 4T6-6L</b> | 3       | A6V             | 50<br>60    | 200-230/342-415<br>220-240/380-480 | 1.5          | 6.7-6.7/3.8-4.0<br>6.0-5.9/3.5-3.6 | 1.1<br>1.4        | 7.3-7.1/4.1-4.2<br>8.1-7.6/4.7-4.2 |

## Dimensions

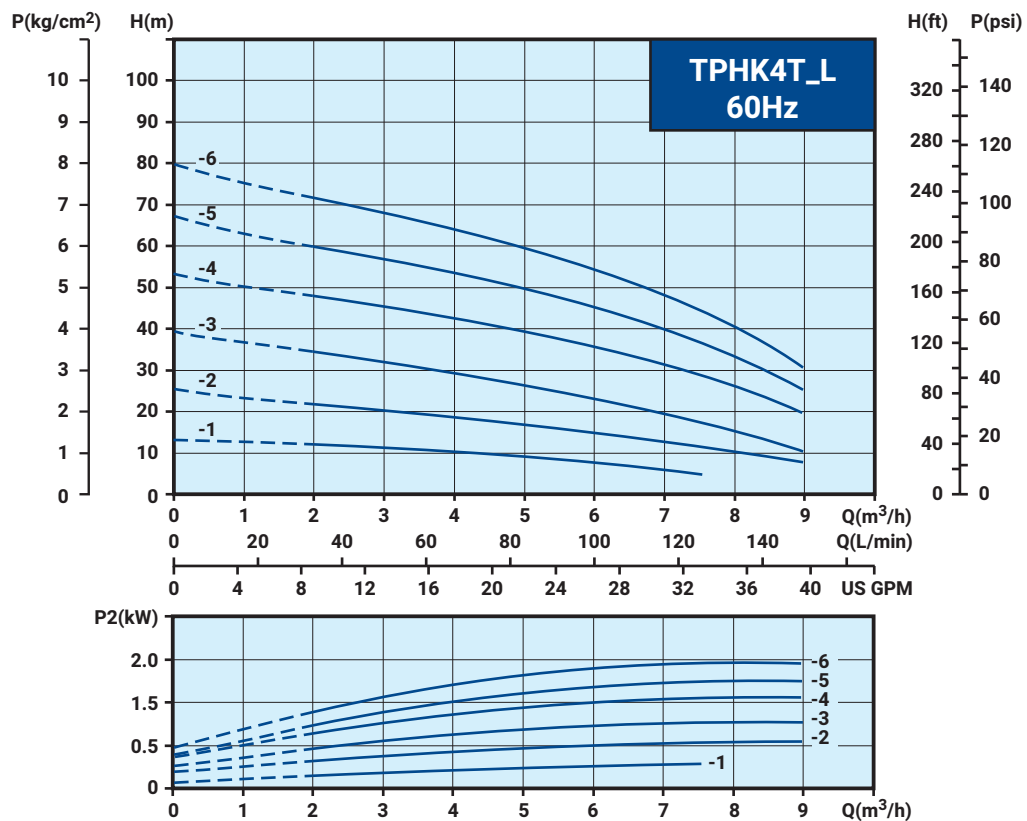


| Model              | A<br>mm | B<br>mm | L<br>mm | N.W.<br>kg |  |
|--------------------|---------|---------|---------|------------|-------------------------------------------------------------------------------------|
| <b>TPHK 4T2-1L</b> | 185     | 155     | 340     | 10.2       | 36                                                                                  |
| <b>TPHK 4T2-2L</b> | 245     | 155     | 400     | 11.4       | 30                                                                                  |
| <b>TPHK 4T3-3L</b> | 245     | 182     | 427     | 12.1       | 30                                                                                  |
| <b>TPHK 4T4-4L</b> | 284     | 209     | 493     | 13.7       | 24                                                                                  |
| <b>TPHK 4T5-5L</b> | 309     | 236     | 545     | 14.3       | 24                                                                                  |
| <b>TPHK 4T6-6L</b> | 309     | 263     | 572     | 15.0       | 24                                                                                  |

## Performance Curve, 50Hz



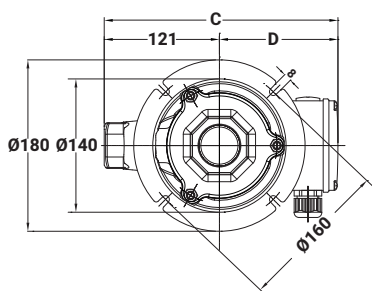
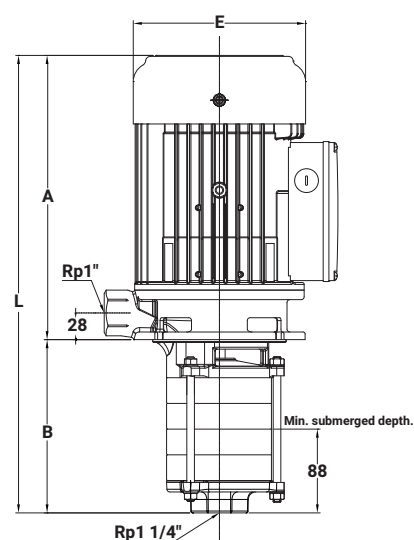
## Performance Curve, 60Hz



## Electrical Data, 50/60Hz

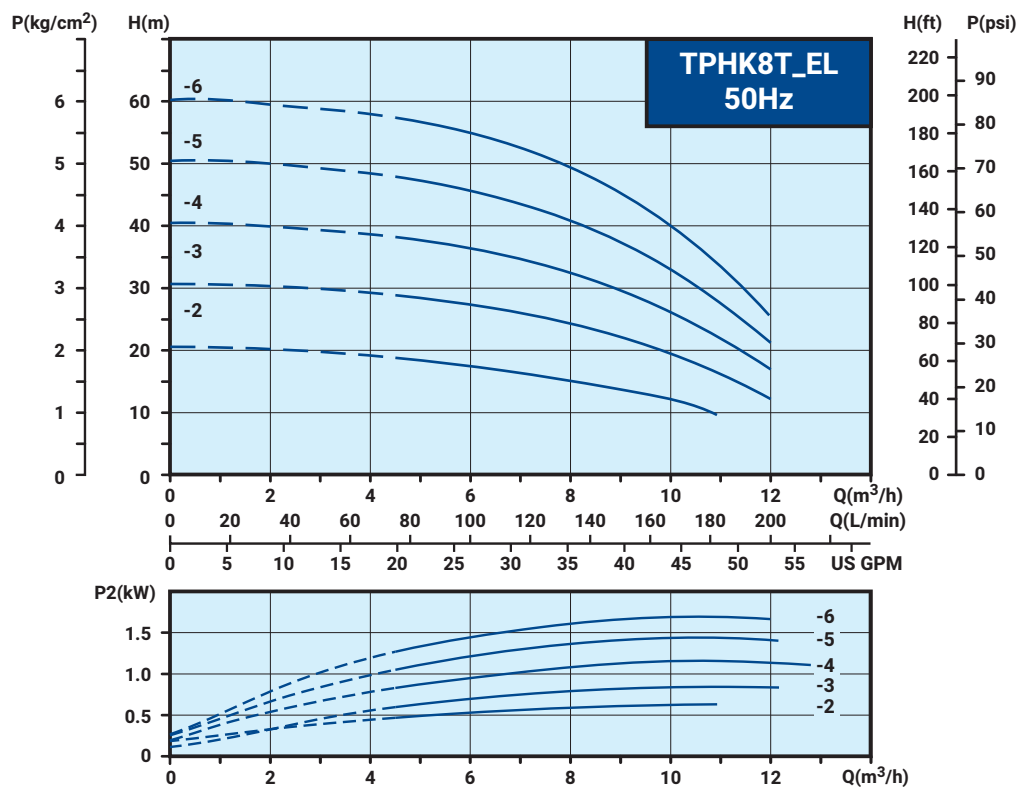
| Model        | PH<br>Ø | Voltage<br>code | Cycle<br>Hz | Volts<br>V      | Output<br>kW | Ampere<br>I <sub>1/1</sub> (A) | Service<br>Factor | Ampere<br>I <sub>max</sub> (A) |
|--------------|---------|-----------------|-------------|-----------------|--------------|--------------------------------|-------------------|--------------------------------|
| TPHK 8T2-2EL | 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 |              | 4.6-4.6/2.8-3.1                | 1.4               | 6.2-5.7/3.6-3.5                |
| TPHK 8T3-3EL | 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 |              | 8.6-8.4/4.9-5.0                | 1.5               | 12.1-11.2/6.9-6.4              |
| TPHK 8T4-4EL | 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 |              | 8.6-8.4/4.9-5.0                | 1.5               | 12.1-11.2/6.9-6.4              |
| TPHK 8T5-5EL | 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 |              | 11.2-10.7/6.4-6.3              | 1.3               | 14.5-13.3/8.3-7.6              |
| TPHK 8T6-6EL | 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 |              | 13.4-12.6/7.7-7.0              | 1.3               | 16.4-15.1/9.4-8.4              |

## Dimensions

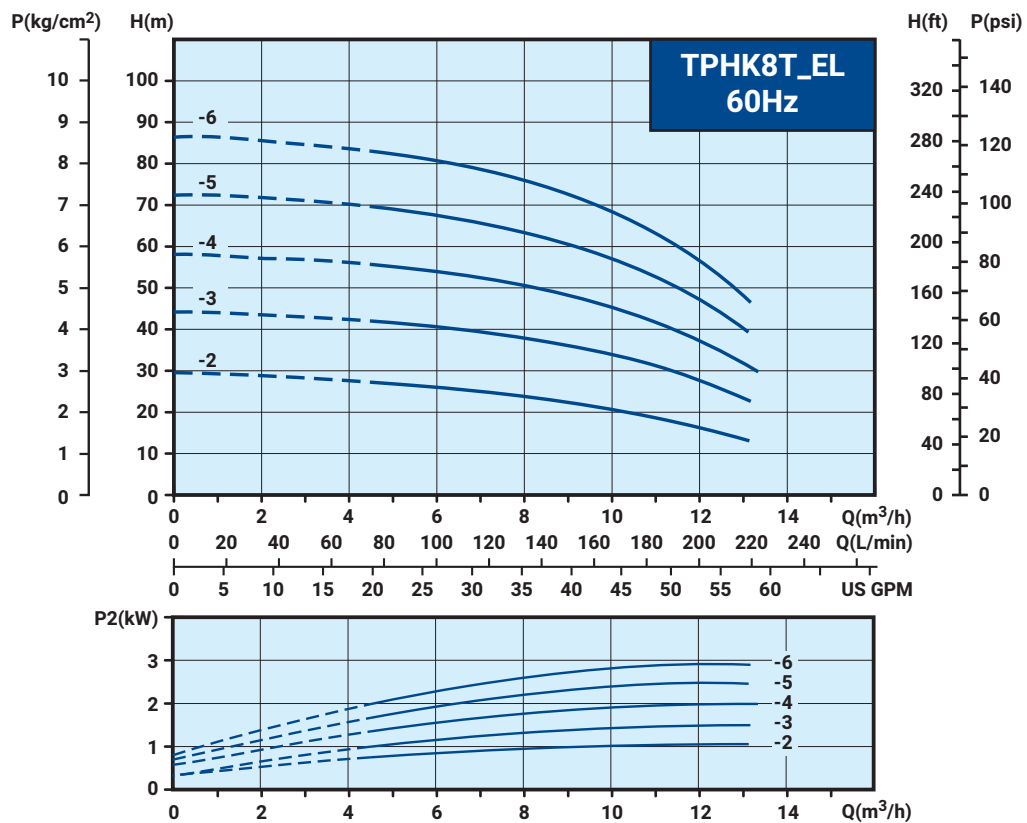


| Model        | A<br>mm | B<br>mm | L<br>mm | C<br>mm | D<br>mm | E<br>mm | N.W.<br>kg |  |
|--------------|---------|---------|---------|---------|---------|---------|------------|-------------------------------------------------------------------------------------|
| TPHK 8T2-2EL | 284     | 182     | 466     | 231     | 110     | 145     | 17.7       | 24                                                                                  |
| TPHK 8T3-3EL | 321     | 209     | 530     | 244     | 123     | 181     | 24.7       | 24                                                                                  |
| TPHK 8T4-4EL | 321     | 236     | 557     | 244     | 123     | 181     | 25.7       | 15                                                                                  |
| TPHK 8T5-5EL | 346     | 263     | 609     | 244     | 123     | 181     | 28.7       | 15                                                                                  |
| TPHK 8T6-6EL | 366     | 290     | 656     | 244     | 123     | 181     | 31.7       | 15                                                                                  |

## Performance Curve, 50Hz



## Performance Curve, 60Hz





**WALRUS**  
PUMP

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All specifications are subject to change without notice. TPHK\_L-IE3-EN002-202405

