

# KPL, KPG and KWM

15-1060 Hp, 60 Hz ANSI



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## 1. Introduction



TM073692

*KPL, KPG and KWM pumps*

This data booklet describes Grundfos submersible axial-flow KPL propeller pumps, KPG gate pumps and mixed-flow KWM pumps.

The KPL, KPG and KWM pumps are fitted with 15-1060 Hp (11-800 kW) motors. The motors are either 4-, 6-, 8-, 10-, 12-, 14-, 16-, 18- or 20-pole motors, depending on the motor size.

The pumps are made of resistant materials, such as cast iron and stainless steel. These materials ensure high durability in storm- and wastewater applications.

KPL and KWM pumps are designed for vertical and submerged installation. KPG pumps are designed for vertical and horizontal submerged installation.

For installation recommendations and Computational Fluid Dynamics (CFD) simulation, contact Grundfos.

### 1.1 Applications

KPL, KPG and KWM pumps are designed for pumping storm- and wastewater in a wide range of municipal and industrial applications, such as:

- flood and stormwater control
- drainage and irrigation of large quantities of water
- raw-water intake
- transfer of liquids in large-scale municipal sewage treatment plants
- circulation of large quantities of water, for example in water theme parks
- fish farming.

### 1.2 Features

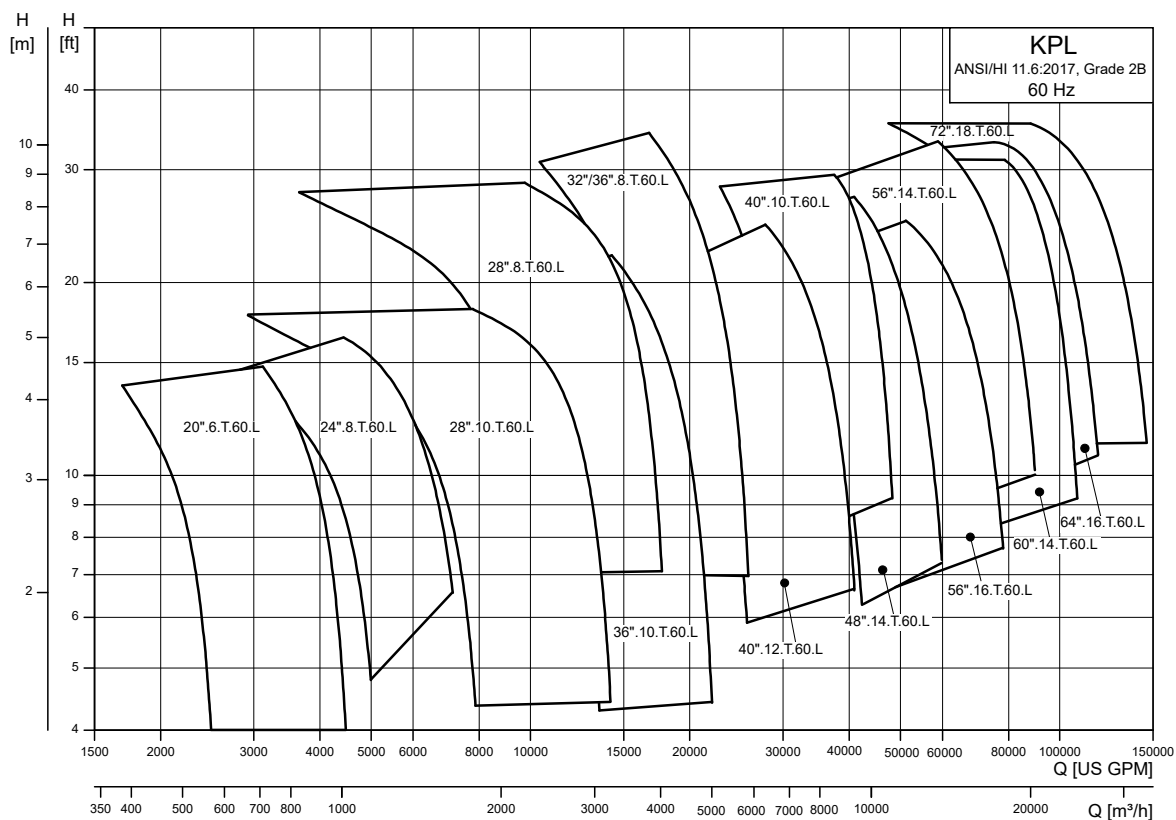
- Compact design for easy handling and installation
- High flow at low head for high versatility
- Easy maintenance
- KPL and KPG: the propeller is designed for the duty point of the pump
- KWM: the mixed-flow impeller is designed for the duty point of the pump
- Double mechanical shaft seal system for reliable sealing between the pumped liquid and the motor
- Watertight cable entry with dual sealing system (two-component epoxy casting and double rubber grommets)
- Two moisture switches for continuous monitoring of stator housing and terminal box. They ensure automatic disconnection of power in case of leakage
- Self-cleaning hydraulics reduce the risk of jamming and clogging
- Motor insulation class F [311 °F (155 °C)] as standard:
  - temperature rise class F (as standard) or B (optional), service factor 1.10
  - enclosure class IP68
  - stator windings have 3 bimetallic thermal sensors.
  - Pt100 sensor in each winding (one connected, as standard).
- Monitoring of shaft-seal condition by water-in-oil (WIO) sensor (optional)
- Pt100 sensors in upper and lower bearings.

## 2. Performance range

The figures below show the performance range of KPL propeller pumps, KPG gate pumps and KWM mixed-flow pumps and give an overview of the various sizes and motor variants.

**Note:** For information about the performance range of each individual pump, see performance curves and technical data.

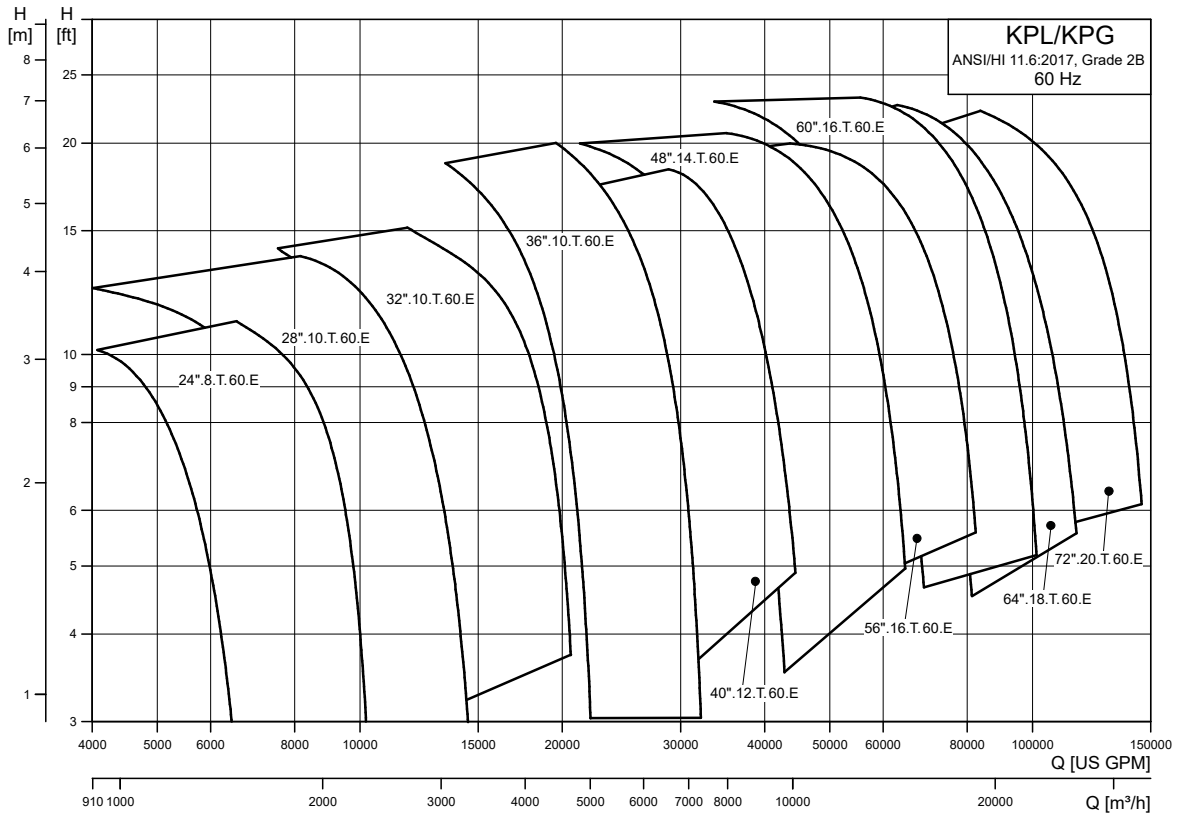
### KPL pumps fitted with low head hydraulics (KPL.L)



TM062161

*KPL pumps fitted with low head hydraulics (KPL.L)*

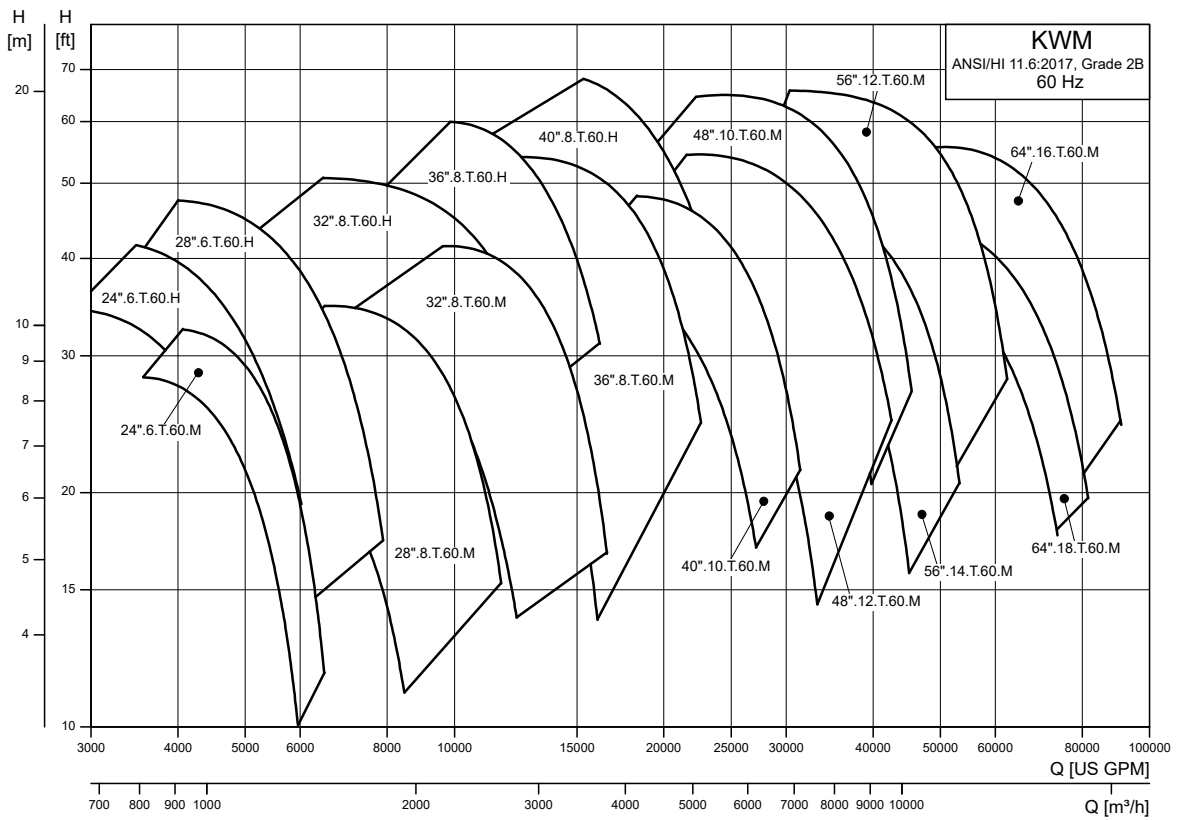
**KPL and KPG pumps fitted with Extra-low head hydraulics (KPL.E and KPG.E)**



TM065493

*Performance range, KPL.E and KPG.E (Extra-low head hydraulic variants)*

**KWM pumps fitted with Medium (M) - or High head (H) hydraulics (KWM.M and KWM.H)**



TM062162

Performance range, KWM (KWM.M/KWM.H (Medium (M) - and High (H) head hydraulic variants)

## 3. Identification

### 3.1 Type key

All KPL, KPG and KWM pumps are identified by the type designation stated in the order confirmation and other documentation supplied with the pump. The pump types described are not necessarily available in all variants.

KPL example: KPL.24.25.8.T.60.17.L.46

KPG example: KPG.24.25.8.T.60.15.E.46

KWM example: KWM.24.40.6.T.60.325.M.46

Code	Description	Explanation
KPL	Submersible axial-flow pump	Pump type
KPG	Submersible axial-flow gate pump	
KWM	Submersible mixed-flow pump	
24	24 = 24 inches	Column pipe diameter
25	Output power P2	Power [hp]
24		
6	6-pole	Number of poles
8	8-pole	
T	Three-phase motor	Number of phases
60	60 Hz	Frequency
15	15	KPL, KPG propeller number
17	17	
325	Impeller number	KWM impeller size
H	KWM - High head	Pump range and pressure
M	KWM - Medium head	
L	KPL - Low head	
E	KPL/KPG - Extra-low head	
46	460 V	Voltage
Z	Custom-built variant	Customization

### 3.2 Nameplate

The nameplate is on the top cover of the pump. The extra nameplate supplied with the pump must be fixed at the installation site.

Pos.	Description
1	Type designation
2	Serial number
3	Product number
4	Max. ambient temperature
5 <sup>1</sup>	Duty-point flow head Best-efficiency-point head Max. head
6 <sup>1</sup>	Duty-point flow rate Best-efficiency-point flow rate Max. flow rate
7	Max. installation depth
8	Enclosure class according to IEC 60529
9	Number of poles
10	Frequency
11	Rated speed
12	Voltage and current, delta connection
13	Voltage and current, star connection
14	Input power
15	Shaft power
16	Power factor
17	Insulation class
18	Production code (year and week)
19	Pump weight

<sup>1</sup> The values indicated for duty-point head and duty-point flow rate are standards. Other values are available on request.

## 4. Product selection

### 4.1 Ordering the product

Prior to ordering a pump, take the following into consideration:

- pump type
- custom-built variant (option)
- accessories
- controller
- cable suspension system.

**Note:** Cable suspension system is a mandatory requirement for all column installed KPL and KWM pumps.

### 4.2 Pump

Use the product ranges and the performance curves to identify the pump that suits your application best.

Due to harsher operating conditions, when selecting pumps for waste water treatment applications, select a motor power (P2) that is one size above that shown on the curves. For example, if you select KPL.24.20.8.T.60.17.E.46 with a 20 hp motor, consider selecting a similar pump with a 25 hp motor, e.g. KPL.24.25.8.T.60.15.E.46.

The list below is a detailed description of the pump you get if you order the following product number:

Pump	Product number
KPL.56.500.14.T.60.15.L.46	99319637

- Pump as specified in type key
- 33 ft cable
- Paint: black, NCS 9000N/RAL 9005, gloss 30, dry film thickness: 5.9 mils (150 µm)
- Three bimetal sensors in stator / one Pt100 sensor in stator and one Pt100 sensor in lower and upper bearing
- Two moisture switches: one in terminal box and one in motor housing
- Test tolerances according to ANSI HI 11.6:2017 grade 2B.

**Note:** Product-specific pump data can also be found in Grundfos Product Center using the product number 99319637.

### 4.3 Custom-built variants

KPL, KPG and KWM pumps can be customized to meet individual requirements. Several pump features and options are available for customizing, such as various cable lengths, duty point verification reports or special materials.

### 4.4 Accessories

Depending on the installation type, accessories may be required. For pumps installed in a column, a cable suspension system is mandatory to avoid cable damage, which may result in motor breakdown.

**Note:** Ordered accessories are not fitted at the factory.

### 4.5 Control units

The following Grundfos solutions can be connected to KPL, KPG and KWM pumps:

- CUE up to 335 hp (250 kW) variable speed drive
- Dedicated Controls (DC)
- MP 204 electronic motor protection
- IO 113 and SM 113 electrical sensor modules.

#### Related information

[7.3.5 Frequency converter](#)

[7.3.1 Level controllers](#)

[7.3.2 IO 113](#)

[7.3.3 SM 113](#)

[7.3.4 MP 204](#)

## 5. Product range

### 5.1 KPL pumps

#### 5.1.1 KPL.20

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.20.15.6.T.60.9.L.46	99319396	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.15.6.T.60.11.L.46	99319397	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.15.6.T.60.13.L.46	99319398	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.15.6.T.60.15.L.46	99319399	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.15.6.T.60.17.L.46	99319400	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.15.6.T.60.19.L.46	99319401	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.20.6.T.60.19.L.46	99319409	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.20.6.T.60.21.L.46	99319410	460	Direct-on-line (DOL) / Soft-starter	33	L	6
KPL.20.20.6.T.60.23.L.46	99319411	460	Direct-on-line (DOL) / Soft-starter	33	L	6

#### 5.1.2 KPL.24

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.24.20.8.T.60.9.L.46	99319412	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.20.8.T.60.11.L.46	99319413	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.20.8.T.60.13.L.46	99319414	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.25.8.T.60.13.L.46	99553182	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.25.8.T.60.15.L.46	99553183	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.25.8.T.60.17.L.46	99553184	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.25.8.T.60.19.L.46	99553185	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.25.8.T.60.21.L.46	99553186	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.24.20.8.T.60.9.E.46	99553229	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.20.8.T.60.11.E.46	99553230	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.20.8.T.60.13.E.46	99553231	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.20.8.T.60.15.E.46	99553232	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.20.8.T.60.17.E.46	99553233	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.25.8.T.60.15.E.46	99553234	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.25.8.T.60.17.E.46	99553235	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.25.8.T.60.19.E.46	99553236	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.25.8.T.60.21.E.46	99553237	460	Direct-on-line (DOL) / Soft-starter	33	E	8
KPL.24.25.8.T.60.23.E.46	99553238	460	Direct-on-line (DOL) / Soft-starter	33	E	8

#### 5.1.3 KPL.28

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.28.50.8.T.60.9.L.46	99319426	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.60.8.T.60.11.L.46	99319435	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.60.8.T.60.13.L.46	99319436	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.60.8.T.60.15.L.46	99319437	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.75.8.T.60.15.L.46	99319445	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.75.8.T.60.17.L.46	99319446	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.75.8.T.60.19.L.46	99319447	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.100.8.T.60.19.L.46	99319455	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.100.8.T.60.21.L.46	99319456	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.100.8.T.60.23.L.46	99319457	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.28.30.10.T.60.9.L.46	99319458	460	Direct-on-line (DOL) / Soft-starter	33	L	10

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.28.30.10.T.60.11.L.46	99319459	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.28.40.10.T.60.13.L.46	99319468	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.28.40.10.T.60.15.L.46	99319469	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.28.40.10.T.60.17.L.46	99319470	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.28.50.10.T.60.17.L.46	99319478	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.28.50.10.T.60.19.L.46	99319479	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.28.50.10.T.60.21.L.46	99319480	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.28.25.10.T.60.9.E.46	99319690	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.25.10.T.60.11.E.46	99319691	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.25.10.T.60.13.E.46	99553239	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.30.10.T.60.13.E.46	99319692	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.30.10.T.60.15.E.46	99319693	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.30.10.T.60.17.E.46	99319694	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.40.10.T.60.17.E.46	99319702	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.40.10.T.60.19.E.46	99319703	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.40.10.T.60.21.E.46	99319704	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.50.10.T.60.21.E.46	99319712	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.28.50.10.T.60.23.E.46	99319713	460	Direct-on-line (DOL) / Soft-starter	33	E	10

### 5.1.4 KPL.32

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.32.100.8.T.60.9.L.46	99319482	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.32.100.8.T.60.11.L.46	99319483	460	Direct-on-line (DOL) / Soft-starter	33	L	8
KPL.32.120.8.T.60.11.L.46	99319490	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.32.120.8.T.60.13.L.46	99319491	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.32.40.10.T.60.9.E.46	99319714	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.40.10.T.60.11.E.46	99319715	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.50.10.T.60.9.E.46	99319720	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.50.10.T.60.11.E.46	99319721	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.50.10.T.60.13.E.46	99319722	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.50.10.T.60.15.E.46	99319723	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.60.10.T.60.11.E.46	99319727	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.60.10.T.60.13.E.46	99319728	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.60.10.T.60.15.E.46	99319729	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.60.10.T.60.17.E.46	99319730	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.60.10.T.60.19.E.46	99319731	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.75.10.T.60.15.E.46	99319735	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.75.10.T.60.17.E.46	99319736	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.32.75.10.T.60.19.E.46	99319737	460	Direct-on-line (DOL) / Soft-starter	33	E	10

### 5.1.5 KPL.36

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.36.150.8.T.60.13.L.46	99319498	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.36.150.8.T.60.15.L.46	99319499	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.36.150.8.T.60.17.L.46	99319500	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.36.150.8.T.60.19.L.46	99319501	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.36.175.8.T.60.19.L.46	99319508	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.36.175.8.T.60.21.L.46	99319509	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.36.215.8.T.60.21.L.46	99319516	460	Direct-on-line (DOL) / Soft starter	33	L	8
KPL.36.60.10.T.60.9.L.46	99319517	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.36.60.10.T.60.11.L.46	99319518	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.36.60.10.T.60.13.L.46	99319519	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.36.75.10.T.60.13.L.46	99319528	460	Direct-on-line (DOL) / Soft-starter	33	L	10

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.36.75.10.T.60.15.L.46	99319529	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.36.75.10.T.60.17.L.46	99319530	460	Direct-on-line (DOL) / Soft-starter	33	L	10
KPL.36.100.10.T.60.17.L.46	99319538	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.36.100.10.T.60.19.L.46	99319539	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.36.100.10.T.60.21.L.46	99319540	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.36.120.10.T.60.21.L.46	99319548	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.36.120.10.T.60.23.L.46	99319549	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.36.75.10.T.60.9.E.46	99319738	460	Direct-on-line (DOL) / Soft-starter	33	E	10
KPL.36.100.10.T.60.9.E.46	99319744	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.100.10.T.60.11.E.46	99319745	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.100.10.T.60.13.E.46	99319746	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.100.10.T.60.15.E.46	99319747	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.100.10.T.60.17.E.46	99319748	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.120.10.T.60.13.E.46	99319752	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.120.10.T.60.15.E.46	99319753	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.120.10.T.60.17.E.46	99319754	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.120.10.T.60.19.E.46	99319755	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.150.10.T.60.17.E.46	99319761	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPL.36.150.10.T.60.19.E.46	99319762	460	Direct-on-line (DOL) / Soft starter	33	E	10

### 5.1.6 KPL.40

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.40.175.10.T.60.9.L.46	99319550	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.175.10.T.60.11.L.46	99319551	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.215.10.T.60.11.L.46	99319558	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.215.10.T.60.13.L.46	99319559	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.265.10.T.60.13.L.46	99319566	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.265.10.T.60.15.L.46	99319567	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.265.10.T.60.17.L.46	99319568	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.335.10.T.60.17.L.46	99319575	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.335.10.T.60.19.L.46	99319576	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.335.10.T.60.21.L.46	99319577	460	Direct-on-line (DOL) / Soft starter	33	L	10
KPL.40.120.12.T.60.9.L.46	99319578	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.120.12.T.60.11.L.46	99319579	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.175.12.T.60.11.L.46	99319587	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.175.12.T.60.13.L.46	99319588	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.175.12.T.60.15.L.46	99319589	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.175.12.T.60.17.L.46	99319590	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.215.12.T.60.19.L.46	99319598	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.215.12.T.60.21.L.46	99319599	460	Direct-on-line (DOL) / Soft starter	33	L	12
KPL.40.100.12.T.60.9.E.46	99319763	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.100.12.T.60.11.E.46	99319764	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.100.12.T.60.13.E.46	99319765	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.100.12.T.60.15.E.46	99319766	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.120.12.T.60.11.E.46	99319772	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.120.12.T.60.13.E.46	99319773	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.120.12.T.60.15.E.46	99319774	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.120.12.T.60.17.E.46	99319775	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.120.12.T.60.19.E.46	99319776	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.175.12.T.60.15.E.46	99319782	460	Direct-on-line (DOL) / Soft starter	33	E	12

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.40.175.12.T.60.17.E.46	99319783	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.175.12.T.60.19.E.46	99319784	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.175.12.T.60.21.E.46	99319785	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPL.40.175.12.T.60.23.E.46	99319786	460	Direct-on-line (DOL) / Soft starter	33	E	12

### 5.1.7 KPL.48

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.48.215.14.T.60.9.L.46	99319600	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.215.14.T.60.11.L.46	99319601	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.215.14.T.60.13.L.46	99319602	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.265.14.T.60.13.L.46	99319608	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.265.14.T.60.15.L.46	99319609	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.265.14.T.60.17.L.46	99319610	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.335.14.T.60.17.L.46	99319616	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.335.14.T.60.19.L.46	99319617	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.48.175.14.T.60.9.E.46	99319787	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.175.14.T.60.11.E.46	99319788	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.175.14.T.60.13.E.46	99319789	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.175.14.T.60.15.E.46	99319790	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.215.14.T.60.9.E.46	99319794	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.215.14.T.60.11.E.46	99319795	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.215.14.T.60.13.E.46	99319796	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.215.14.T.60.15.E.46	99319797	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.215.14.T.60.17.E.46	99319798	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.215.14.T.60.19.E.46	99319799	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.265.14.T.60.13.E.46	99319803	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.265.14.T.60.15.E.46	99319804	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.265.14.T.60.17.E.46	99319805	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.265.14.T.60.19.E.46	99319806	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.265.14.T.60.21.E.46	99319807	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.335.14.T.60.19.E.46	99319813	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPL.48.335.14.T.60.21.E.46	99319814	460	Direct-on-line (DOL) / Soft starter	33	E	14

### 5.1.8 KPL.56

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.56.335.14.T.60.9.L.46	99319618	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.335.14.T.60.11.L.46	99319619	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.400.14.T.60.11.L.46	99319627	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.400.14.T.60.13.L.46	99319628	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.400.14.T.60.15.L.46	99319629	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.500.14.T.60.15.L.46	99319637	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.500.14.T.60.17.L.46	99319638	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.500.14.T.60.19.L.46	99319639	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.600.14.T.60.21.L.46	99319648	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.600.14.T.60.23.L.46	99319649	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.56.215.16.T.60.9.L.46	99319650	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.215.16.T.60.11.L.46	99319651	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.265.16.T.60.11.L.46	99319659	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.265.16.T.60.13.L.46	99319660	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.265.16.T.60.15.L.46	99319661	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.335.16.T.60.15.L.46	99319669	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.335.16.T.60.17.L.46	99319670	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.335.16.T.60.19.L.46	99319671	460	Direct-on-line (DOL) / Soft starter	33	L	16

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.56.400.16.T.60.19.L.46	99319679	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.400.16.T.60.21.L.46	99319680	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.400.16.T.60.23.L.46	99319681	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.56.175.16.T.60.9.E.46	99319815	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.175.16.T.60.11.E.46	99319816	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.215.16.T.60.9.E.46	99319823	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.215.16.T.60.11.E.46	99319824	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.215.16.T.60.13.E.46	99319825	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.215.16.T.60.15.E.46	99319826	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.265.16.T.60.13.E.46	99319833	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.265.16.T.60.15.E.46	99319834	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.265.16.T.60.17.E.46	99319835	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.265.16.T.60.19.E.46	99319836	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.265.16.T.60.21.E.46	99319837	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.335.16.T.60.17.E.46	99319843	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.335.16.T.60.19.E.46	99319844	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.335.16.T.60.21.E.46	99319845	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.56.335.16.T.60.23.E.46	99319846	460	Direct-on-line (DOL) / Soft starter	33	E	16

### 5.1.9 KPL.60

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.60.500.14.T.60.9.L.46	99553187	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.500.14.T.60.11.L.46	99553188	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.500.14.T.60.13.L.46	99553189	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.600.14.T.60.13.L.46	99553190	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.600.14.T.60.15.L.46	99553191	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.600.14.T.60.17.L.46	99553192	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.665.14.T.60.15.L.46	99553193	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.665.14.T.60.17.L.46	99553194	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.665.14.T.60.19.L.46	99553195	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.730.14.T.60.19.L.46	99553196	460	Direct-on-line (DOL) / Soft starter	33	L	14
KPL.60.265.16.T.60.9.E.46	99553240	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.265.16.T.60.11.E.46	99553241	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.335.16.T.60.9.E.46	99553242	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.335.16.T.60.11.E.46	99553243	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.335.16.T.60.13.E.46	99553244	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.335.16.T.60.15.E.46	99553245	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.335.16.T.60.17.E.46	99553246	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.400.16.T.60.11.E.46	99553247	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.400.16.T.60.13.E.46	99553248	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.400.16.T.60.15.E.46	99553249	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.400.16.T.60.17.E.46	99553250	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.400.16.T.60.19.E.46	99553251	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.470.16.T.60.15.E.46	99553252	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.470.16.T.60.17.E.46	99553253	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.470.16.T.60.19.E.46	99553254	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPL.60.540.16.T.60.19.E.46	99553255	460	Direct-on-line (DOL) / Soft starter	33	E	16

## 5.1.10 KPL.64

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.64.400.16.T.60.9.L.46	99553197	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.400.16.T.60.11.L.46	99553198	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.470.16.T.60.9.L.46	99553199	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.470.16.T.60.11.L.46	99553200	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.470.16.T.60.13.L.46	99553201	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.540.16.T.60.9.L.46	99553202	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.540.16.T.60.11.L.46	99553203	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.540.16.T.60.13.L.46	99553204	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.540.16.T.60.15.L.46	99553205	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.600.16.T.60.11.L.46	99553206	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.600.16.T.60.13.L.46	99553207	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.600.16.T.60.15.L.46	99553208	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.600.16.T.60.17.L.46	99553209	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.665.16.T.60.13.L.46	99553210	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.665.16.T.60.15.L.46	99553211	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.665.16.T.60.17.L.46	99553212	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.665.16.T.60.19.L.46	99553213	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.665.16.T.60.21.L.46	99553214	460	Direct-on-line (DOL) / Soft starter	33	L	16
KPL.64.335.18.T.60.9.E.46	99553256	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.335.18.T.60.11.E.46	99553257	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.335.18.T.60.13.E.46	99553258	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.400.18.T.60.9.E.46	99553259	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.400.18.T.60.11.E.46	99553260	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.400.18.T.60.13.E.46	99553261	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.400.18.T.60.15.E.46	99553262	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.400.18.T.60.17.E.46	99553263	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.470.18.T.60.13.E.46	99553264	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.470.18.T.60.15.E.46	99553265	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.470.18.T.60.17.E.46	99553266	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.470.18.T.60.19.E.46	99553267	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.540.18.T.60.15.E.46	99553268	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.540.18.T.60.17.E.46	99553269	460	Direct-on-line (DOL) / Soft starter	33	E	18
KPL.64.540.18.T.60.19.E.46	99553270	460	Direct-on-line (DOL) / Soft starter	33	E	18

## 5.1.11 KPL.72

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.72.665.18.T.60.9.L.46	99553215	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.665.18.T.60.11.L.46	99553216	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.665.18.T.60.13.L.46	99553217	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.730.18.T.60.11.L.46	99553218	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.730.18.T.60.13.L.46	99553219	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.730.18.T.60.15.L.46	99553220	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.800.18.T.60.13.L.46	99553221	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.800.18.T.60.15.L.46	99553222	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.800.18.T.60.17.L.46	99553223	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.930.18.T.60.15.L.46	99553224	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.930.18.T.60.17.L.46	99553225	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.930.18.T.60.19.L.46	99553226	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.1060.18.T.60.17.L.46	99553227	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.1060.18.T.60.19.L.46	99553228	460	Direct-on-line (DOL) / Soft starter	33	L	18
KPL.72.470.20.T.60.9.E.46	99553271	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.470.20.T.60.11.E.46	99553272	460	Direct-on-line (DOL) / Soft starter	33	E	20

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPL.72.470.20.T.60.13.E.46	99553273	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.470.20.T.60.15.E.46	99553274	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.540.20.T.60.11.E.46	99553275	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.540.20.T.60.13.E.46	99553276	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.540.20.T.60.15.E.46	99553277	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.540.20.T.60.17.E.46	99553278	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.600.20.T.60.15.E.46	99553279	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.600.20.T.60.17.E.46	99553280	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.600.20.T.60.19.E.46	99553281	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.665.20.T.60.17.E.46	99553282	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.665.20.T.60.19.E.46	99553283	460	Direct-on-line (DOL) / Soft starter	33	E	20
KPL.72.730.20.T.60.19.E.46	99553284	460	Direct-on-line (DOL) / Soft starter	33	E	20

## 5.2 KPG pumps

### 5.2.1 KPG.20

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.20.15.6.T.60.9.L.46	99553377	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.15.6.T.60.11.L.46	99553378	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.15.6.T.60.13.L.46	99553379	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.15.6.T.60.15.L.46	99553380	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.15.6.T.60.17.L.46	99553381	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.15.6.T.60.19.L.46	99553382	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.20.6.T.60.19.L.46	99553383	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.20.6.T.60.21.L.46	99553384	460	Direct-on-line (DOL) / Soft starter	33	L	6
KPG.20.20.6.T.60.23.L.46	99553385	460	Direct-on-line (DOL) / Soft starter	33	L	6

### 5.2.2 KPG.24

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.24.20.8.T.60.9.E.46	99553386	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.20.8.T.60.11.E.46	99553387	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.20.8.T.60.13.E.46	99553388	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.20.8.T.60.15.E.46	99553389	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.20.8.T.60.17.E.46	99553390	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.25.8.T.60.15.E.46	99553391	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.25.8.T.60.17.E.46	99553392	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.25.8.T.60.19.E.46	99553393	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.25.8.T.60.21.E.46	99553394	460	Direct-on-line (DOL) / Soft starter	33	E	8
KPG.24.25.8.T.60.23.E.46	99553395	460	Direct-on-line (DOL) / Soft starter	33	E	8

### 5.2.3 KPG.28

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.28.25.10.T.60.9.E.46	99553396	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.25.10.T.60.11.E.46	99553397	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.25.10.T.60.13.E.46	99553398	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.30.10.T.60.13.E.46	99553399	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.30.10.T.60.15.E.46	99553400	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.30.10.T.60.17.E.46	99553401	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.40.10.T.60.17.E.46	99553402	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.40.10.T.60.19.E.46	99553403	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.40.10.T.60.21.E.46	99553404	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.50.10.T.60.21.E.46	99553405	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.28.50.10.T.60.23.E.46	99553406	460	Direct-on-line (DOL) / Soft starter	33	E	10

### 5.2.4 KPG.32

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.32.40.10.T.60.9.E.46	99553407	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.40.10.T.60.11.E.46	99553408	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.50.10.T.60.9.E.46	99553409	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.50.10.T.60.11.E.46	99553410	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.50.10.T.60.13.E.46	99553411	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.50.10.T.60.15.E.46	99553412	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.60.10.T.60.11.E.46	99553413	460	Direct-on-line (DOL) / Soft starter	33	E	10

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.32.60.10.T.60.13.E.46	99553414	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.60.10.T.60.15.E.46	99553415	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.60.10.T.60.17.E.46	99553416	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.60.10.T.60.19.E.46	99553417	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.75.10.T.60.15.E.46	99553418	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.75.10.T.60.17.E.46	99553419	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.32.75.10.T.60.19.E.46	99553420	460	Direct-on-line (DOL) / Soft starter	33	E	10

### 5.2.5 KPG.36

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.36.75.10.T.60.9.E.46	99553421	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.100.10.T.60.9.E.46	99553422	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.100.10.T.60.11.E.46	99553423	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.100.10.T.60.13.E.46	99553424	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.100.10.T.60.15.E.46	99553425	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.100.10.T.60.17.E.46	99553426	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.120.10.T.60.13.E.46	99553427	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.120.10.T.60.15.E.46	99553428	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.120.10.T.60.17.E.46	99553429	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.120.10.T.60.19.E.46	99553430	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.150.10.T.60.17.E.46	99553431	460	Direct-on-line (DOL) / Soft starter	33	E	10
KPG.36.150.10.T.60.19.E.46	99553432	460	Direct-on-line (DOL) / Soft starter	33	E	10

### 5.2.6 KPG.40

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.40.100.12.T.60.9.E.46	99553433	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.100.12.T.60.11.E.46	99553434	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.100.12.T.60.13.E.46	99553435	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.100.12.T.60.15.E.46	99553436	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.120.12.T.60.11.E.46	99553437	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.120.12.T.60.13.E.46	99553438	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.120.12.T.60.15.E.46	99553439	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.120.12.T.60.17.E.46	99553440	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.120.12.T.60.19.E.46	99553441	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.175.12.T.60.15.E.46	99553442	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.175.12.T.60.17.E.46	99553443	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.175.12.T.60.19.E.46	99553444	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.175.12.T.60.21.E.46	99553445	460	Direct-on-line (DOL) / Soft starter	33	E	12
KPG.40.175.12.T.60.23.E.46	99553446	460	Direct-on-line (DOL) / Soft starter	33	E	12

### 5.2.7 KPG.48

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.48.175.14.T.60.9.E.46	99553447	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.175.14.T.60.11.E.46	99553448	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.175.14.T.60.13.E.46	99553449	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.175.14.T.60.15.E.46	99553450	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.215.14.T.60.9.E.46	99553451	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.215.14.T.60.11.E.46	99553452	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.215.14.T.60.13.E.46	99553453	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.215.14.T.60.15.E.46	99553454	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.215.14.T.60.17.E.46	99553455	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.215.14.T.60.19.E.46	99553456	460	Direct-on-line (DOL) / Soft starter	33	E	14

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.48.265.14.T.60.13.E.46	99553457	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.265.14.T.60.15.E.46	99553458	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.265.14.T.60.17.E.46	99553459	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.265.14.T.60.19.E.46	99553460	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.265.14.T.60.21.E.46	99553461	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.335.14.T.60.19.E.46	99553462	460	Direct-on-line (DOL) / Soft starter	33	E	14
KPG.48.335.14.T.60.21.E.46	99553463	460	Direct-on-line (DOL) / Soft starter	33	E	14

### 5.2.8 KPG.56

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KPG.56.175.16.T.60.9.E.46	99553464	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.175.16.T.60.11.E.46	99553465	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.215.16.T.60.9.E.46	99553466	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.215.16.T.60.11.E.46	99553467	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.215.16.T.60.13.E.46	99553468	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.215.16.T.60.15.E.46	99553469	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.265.16.T.60.13.E.46	99553470	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.265.16.T.60.15.E.46	99553471	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.265.16.T.60.17.E.46	99553473	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.265.16.T.60.19.E.46	99553474	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.265.16.T.60.21.E.46	99553475	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.335.16.T.60.17.E.46	99553476	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.335.16.T.60.19.E.46	99553477	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.335.16.T.60.21.E.46	99553478	460	Direct-on-line (DOL) / Soft starter	33	E	16
KPG.56.335.16.T.60.23.E.46	99553479	460	Direct-on-line (DOL) / Soft starter	33	E	16

## 5.3 KWM pumps

### 5.3.1 KWM.24

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.24.40.6.T.60.325.M.46	99553285	460	Direct-on-line (DOL) / Soft-starter	33	M	6
KWM.24.50.6.T.60.335.M.46	99553286	460	Direct-on-line (DOL) / Soft-starter	33	M	6
KWM.24.40.6.T.60.340.H.46	99553358	460	Direct-on-line (DOL) / Soft-starter	33	H	6
KWM.24.50.6.T.60.350.H.46	99553359	460	Direct-on-line (DOL) / Soft-starter	33	H	6
KWM.24.60.6.T.60.360.H.46	99553360	460	Direct-on-line (DOL) / Soft-starter	33	H	6

### 5.3.2 KWM.28

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.28.50.8.T.60.410.M.46	99553287	460	Direct-on-line (DOL) / Soft-starter	33	M	8
KWM.28.60.8.T.60.425.M.46	99553288	460	Direct-on-line (DOL) / Soft-starter	33	M	8
KWM.28.75.8.T.60.435.M.46	99553289	460	Direct-on-line (DOL) / Soft-starter	33	M	8
KWM.28.100.8.T.60.445.M.46	99553290	460	Direct-on-line (DOL) / Soft-starter	33	M	8
KWM.28.100.8.T.60.455.M.46	99553291	460	Direct-on-line (DOL) / Soft-starter	33	M	8
KWM.28.50.6.T.60.360.H.46	99553361	460	Direct-on-line (DOL) / Soft-starter	33	H	6
KWM.28.60.6.T.60.375.H.46	99553362	460	Direct-on-line (DOL) / Soft-starter	33	H	6
KWM.28.75.6.T.60.390.H.46	99553363	460	Direct-on-line (DOL) / Soft-starter	33	H	6

### 5.3.3 KWM.32

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.32.100.8.T.60.465.M.46	99553292	460	Direct-on-line (DOL) / Soft-starter	33	M	8
KWM.32.120.8.T.60.475.M.46	99553293	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.32.120.8.T.60.490.M.46	99553294	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.32.150.8.T.60.500.M.46	99553295	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.32.150.8.T.60.510.M.46	99553296	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.32.100.8.T.60.480.H.46	99553364	460	Direct-on-line (DOL) / Soft-starter	33	H	8
KWM.32.120.8.T.60.505.H.46	99553365	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.32.150.8.T.60.530.H.46	99553366	460	Direct-on-line (DOL) / Soft starter	33	H	8

### 5.3.4 KWM.36

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.36.150.8.T.60.500.M.46	99553297	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.150.8.T.60.520.M.46	99553298	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.175.8.T.60.520.M.46	99553299	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.175.8.T.60.525.M.46	99553300	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.215.8.T.60.525.M.46	99553301	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.215.8.T.60.540.M.46	99553302	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.265.8.T.60.550.M.46	99553303	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.300.8.T.60.550.M.46	99553304	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.300.8.T.60.560.M.46	99553305	460	Direct-on-line (DOL) / Soft starter	33	M	8
KWM.36.150.8.T.60.475.H.46	99553367	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.36.175.8.T.60.485.H.46	99553368	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.36.175.8.T.60.500.H.46	99553369	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.36.215.8.T.60.513.H.46	99553370	460	Direct-on-line (DOL) / Soft starter	33	H	8

### 5.3.5 KWM.40

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.40.215.10.T.60.650.M.46	99553307	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.40.265.10.T.60.660.M.46	99553308	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.40.300.10.T.60.670.M.46	99553309	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.40.335.10.T.60.670.M.46	99553310	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.40.335.10.T.60.680.M.46	99553311	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.40.265.8.T.60.580.H.46	99553371	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.40.265.8.T.60.600.H.46	99553372	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.40.300.8.T.60.600.H.46	99553373	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.40.300.8.T.60.615.H.46	99553374	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.40.335.8.T.60.615.H.46	99553375	460	Direct-on-line (DOL) / Soft starter	33	H	8
KWM.40.335.8.T.60.630.H.46	99553376	460	Direct-on-line (DOL) / Soft starter	33	H	8

### 5.3.6 KWM.48

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.48.470.10.T.60.740.M.46	99553312	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.48.540.10.T.60.760.M.46	99553313	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.48.600.10.T.60.760.M.46	99553314	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.48.600.10.T.60.770.M.46	99553315	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.48.665.10.T.60.770.M.46	99553316	460	Direct-on-line (DOL) / Soft starter	33	M	10
KWM.48.265.12.T.60.740.M.46	99553317	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.48.300.12.T.60.740.M.46	99553318	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.48.335.12.T.60.760.M.46	99553319	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.48.400.12.T.60.780.M.46	99553320	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.48.470.12.T.60.800.M.46	99553321	460	Direct-on-line (DOL) / Soft starter	33	M	12

### 5.3.7 KWM.56

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.56.600.12.T.60.865.M.46	99553322	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.56.665.12.T.60.865.M.46	99553323	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.56.665.12.T.60.880.M.46	99553324	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.56.730.12.T.60.880.M.46	99553325	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.56.730.12.T.60.895.M.46	99553326	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.56.800.12.T.60.895.M.46	99553327	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.56.865.12.T.60.910.M.46	99553328	460	Direct-on-line (DOL) / Soft starter	33	M	12
KWM.56.400.14.T.60.865.M.46	99553329	460	Direct-on-line (DOL) / Soft starter	33	M	14
KWM.56.400.14.T.60.880.M.46	99553330	460	Direct-on-line (DOL) / Soft starter	33	M	14
KWM.56.470.14.T.60.865.M.46	99553331	460	Direct-on-line (DOL) / Soft starter	33	M	14
KWM.56.470.14.T.60.880.M.46	99553332	460	Direct-on-line (DOL) / Soft starter	33	M	14
KWM.56.470.14.T.60.895.M.46	99553333	460	Direct-on-line (DOL) / Soft starter	33	M	14
KWM.56.540.14.T.60.895.M.46	99553334	460	Direct-on-line (DOL) / Soft starter	33	M	14
KWM.56.540.14.T.60.910.M.46	99553335	460	Direct-on-line (DOL) / Soft starter	33	M	14
KWM.56.600.14.T.60.910.M.46	99553336	460	Direct-on-line (DOL) / Soft starter	33	M	14

### 5.3.8 KWM.64

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.64.800.16.T.60.1085.M.46	99553337	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.800.16.T.60.1100.M.46	99553338	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.865.16.T.60.1085.M.46	99553339	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.865.16.T.60.1100.M.46	99553340	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.865.16.T.60.1118.M.46	99553341	460	Direct-on-line (DOL) / Soft starter	33	M	16

Pump type	Product number	Voltage	Starting method	Cable length [ft]	Pressure range	Poles
KWM.64.930.16.T.60.1100.M.46	99553342	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.930.16.T.60.1118.M.46	99553343	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.930.16.T.60.1125.M.46	99553344	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.1000.16.T.60.1118.M.46	99553345	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.1000.16.T.60.1125.M.46	99553346	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.1000.16.T.60.1135.M.46	99553347	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.1060.16.T.60.1125.M.46	99553348	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.1060.16.T.60.1135.M.46	99553349	460	Direct-on-line (DOL) / Soft starter	33	M	16
KWM.64.665.18.T.60.1100.M.46	99553350	460	Direct-on-line (DOL) / Soft starter	33	M	18
KWM.64.665.18.T.60.1118.M.46	99553351	460	Direct-on-line (DOL) / Soft starter	33	M	18
KWM.64.665.18.T.60.1125.M.46	99553352	460	Direct-on-line (DOL) / Soft starter	33	M	18
KWM.64.730.18.T.60.1118.M.46	99553353	460	Direct-on-line (DOL) / Soft starter	33	M	18
KWM.64.730.18.T.60.1125.M.46	99553354	460	Direct-on-line (DOL) / Soft starter	33	M	18
KWM.64.730.18.T.60.1135.M.46	99553355	460	Direct-on-line (DOL) / Soft starter	33	M	18
KWM.64.800.18.T.60.1125.M.46	99553356	460	Direct-on-line (DOL) / Soft starter	33	M	18
KWM.64.800.18.T.60.1135.M.46	99553357	460	Direct-on-line (DOL) / Soft starter	33	M	18

## 5.4 Variants

The KPL, KPG and KWM pumps can be designed to meet individual requirements. Many pump features and options are available for customization, such as various cable lengths or special materials.

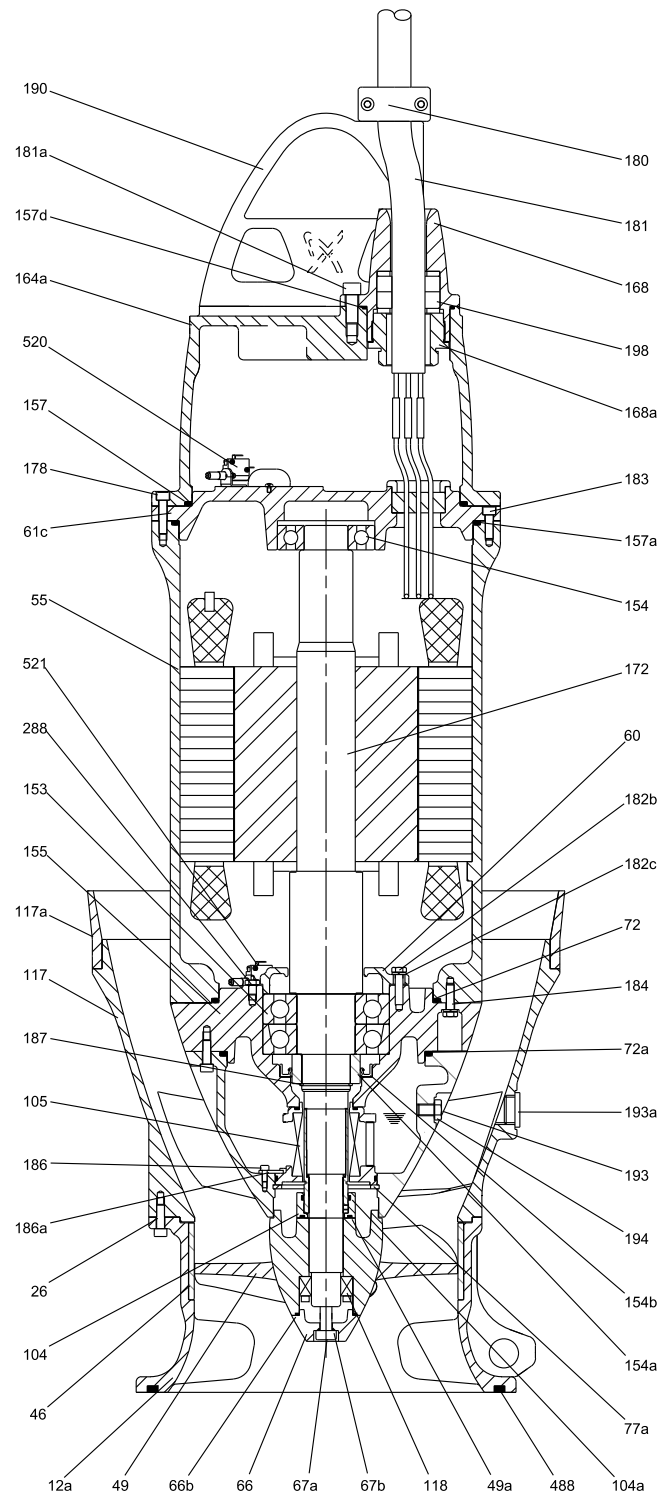
The most common variants can be seen in the table below. For requirements or designs not included in the table, contact Grundfos.

<b>Motor</b>		
Various cable lengths according to customer specifications		
EMC power cables according to customer specifications	Screened power cables for variable speed drives	
SM 113 sensor module		
Sensor options	Water in Oil sensor (WIO sensor)	
	Vibration sensor (PVS 3)	
Special motor	Insulation class H [356 °F (180 °C)]	
	Temperature rise class B	
	Special medium voltage / high voltage	
	Reinforced insulation for frequency converter operation (motors above 500 V)	
Special oil	Non-toxic Shell Ondina	
Special Options for VSD use	Insulated ceramic upper bearing	
Maximum specification	Maximum head:	131 ft (40 m) for KWM
	Maximum power:	1500 Hp (1120 kW)
	Maximum column size:	88 inch (2235 mm)
<b>Materials</b>		
	Impeller/propeller	AISI 304 and 316 and Duplex Stainless steel
	Wear ring	AISI 304 and 316 and Duplex Stainless steel
	Stainless steel lifting bracket	AISI 316
<b>Coating</b>		
	Paint	12 mils (300 µm) dry film thickness
		18 mils (450 µm) dry film thickness
	Special coating 1341 (Belzona)	Impeller (KWM)
		inside of discharge casing
		inside of suction casing
	For seawater applications: Jotun painting + Loctite SI 5368 sealant	15 mils (380 µm) dry film thickness
<b>Tests</b>		
	Trimmed impeller for specified duty test	
	Additional test of entire QH curve (including report)	5-10 points on the pump performance curve (Q/H)
	ANSI HI 11.6:2017 standard according to	Grade 1 tolerances
		Grade 2B tolerances (standard option)
		in case of higher test standards, contact Grundfos
	Vibration test (incl. report)	
	Witness test	Contact Grundfos
	Miscellaneous	
	Special packaging	Contact Grundfos
	Special nameplate	Contact Grundfos
	Other variants	Contact Grundfos

\* Beside the selected duty point, the other test points is not guaranteed to be within ANSI/HI 11.6: 2017 2B tolerances.

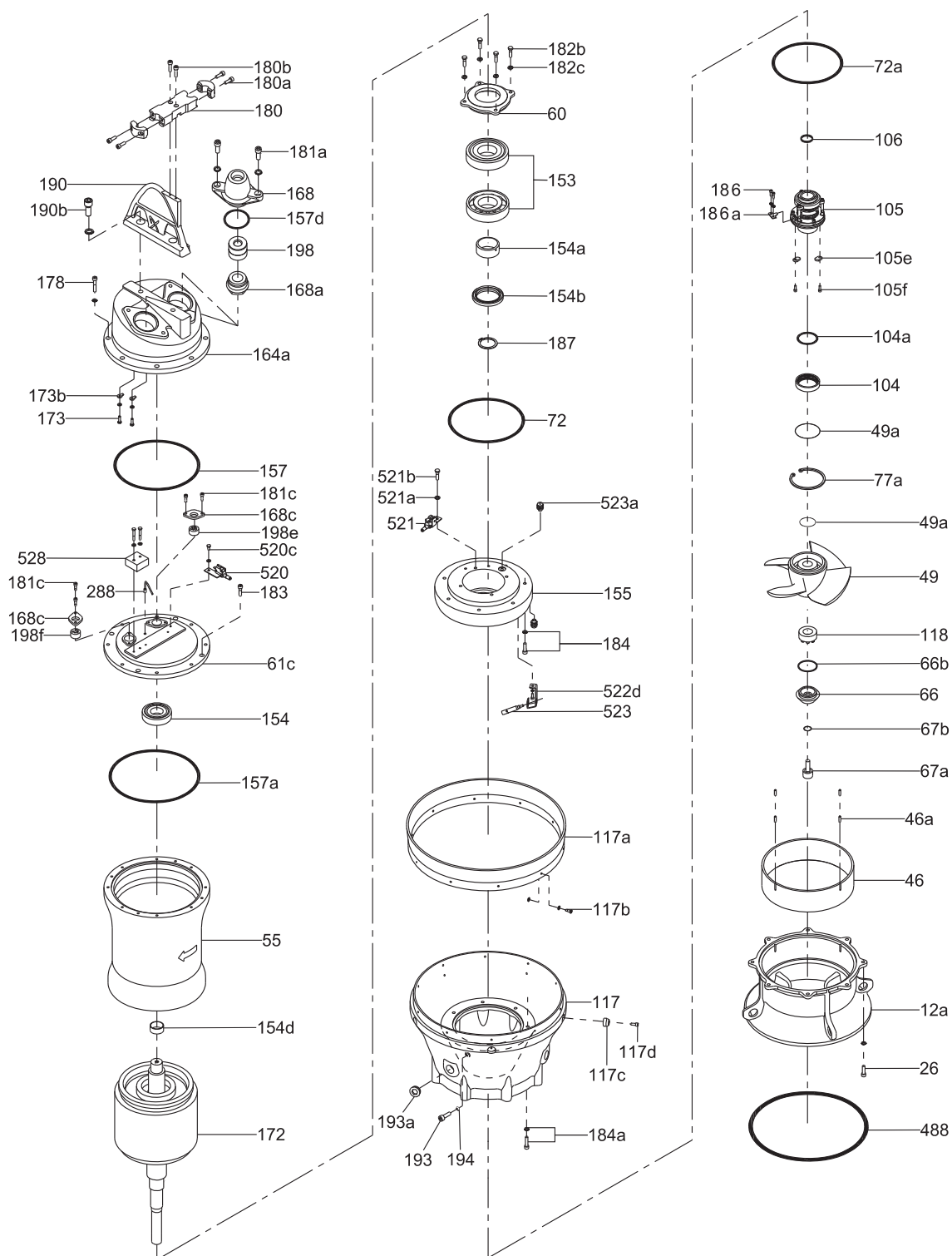
## 6. Construction

### 6.1 KPL sectional and exploded views



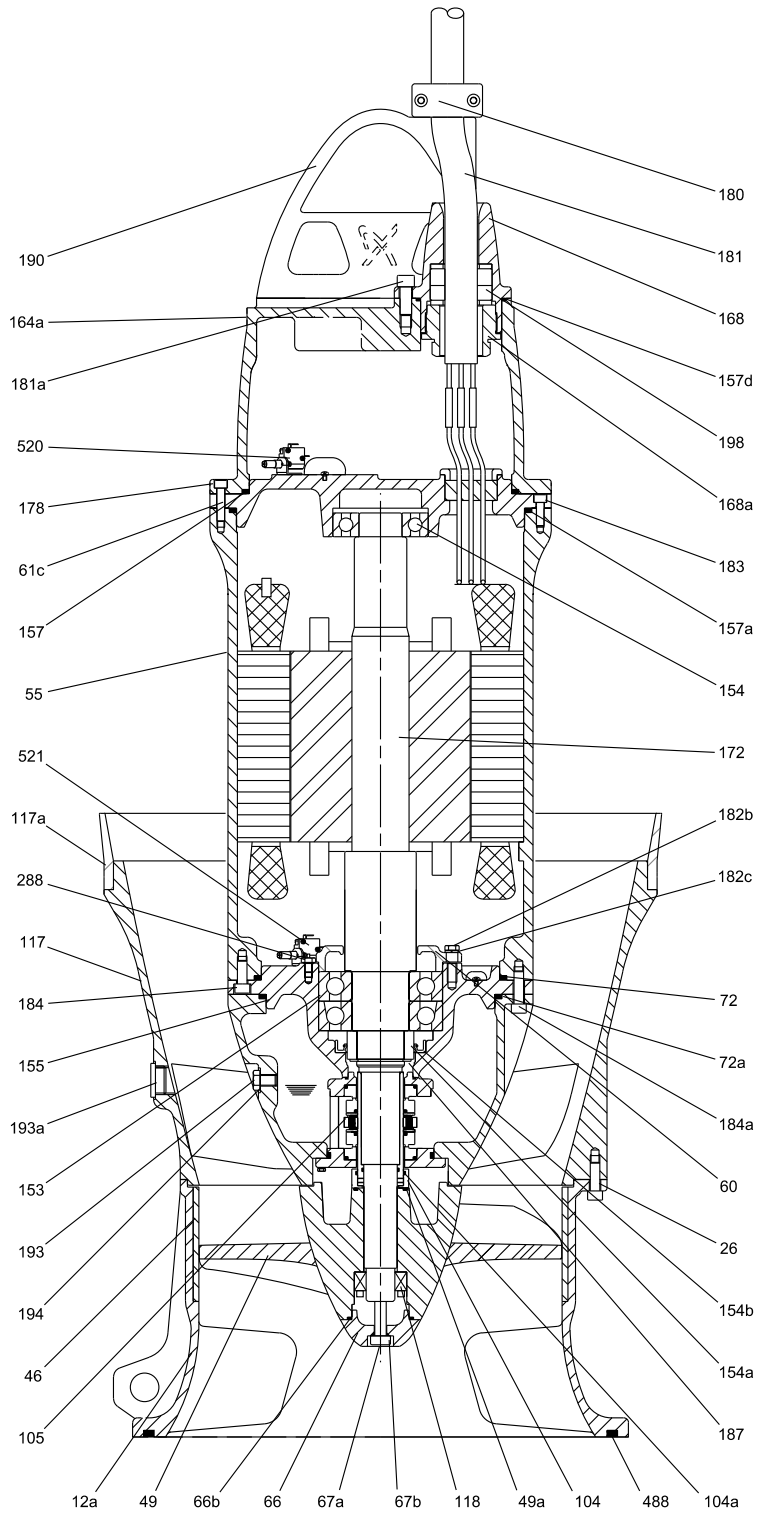
KPL.20" sectional view

TM062921



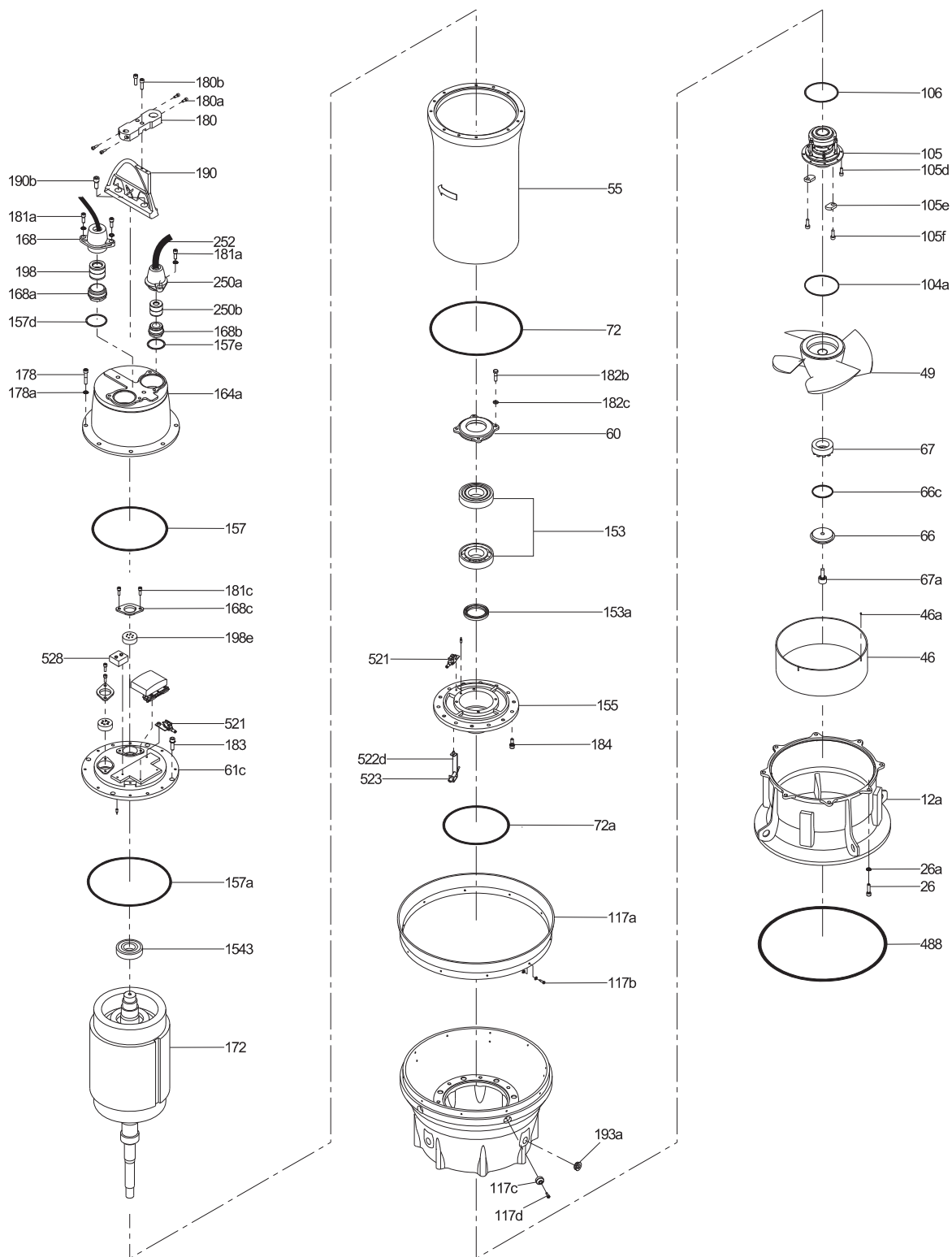
KPL.20" exploded view

TM060241



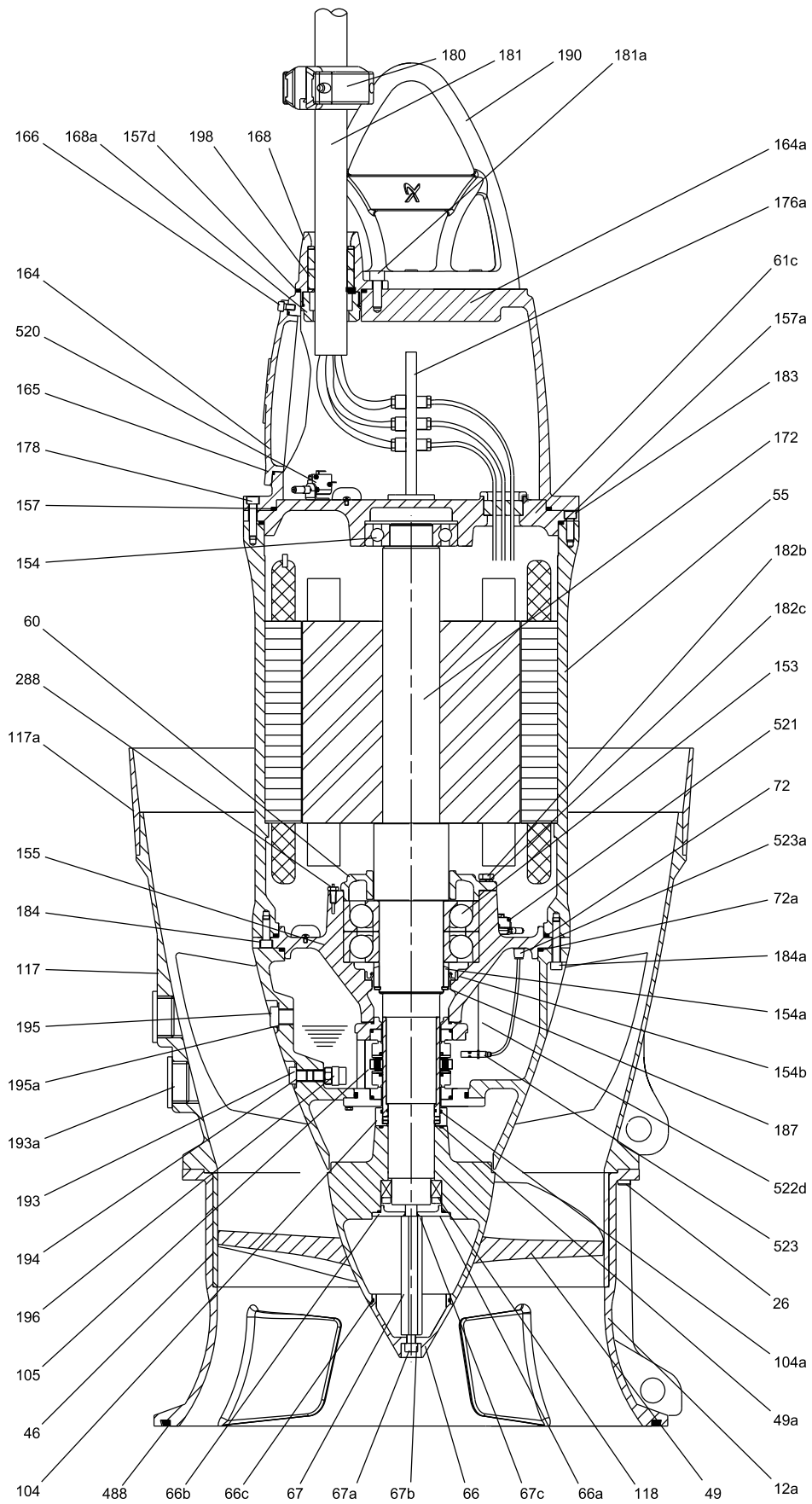
TM062922

KPL.24" sectional view



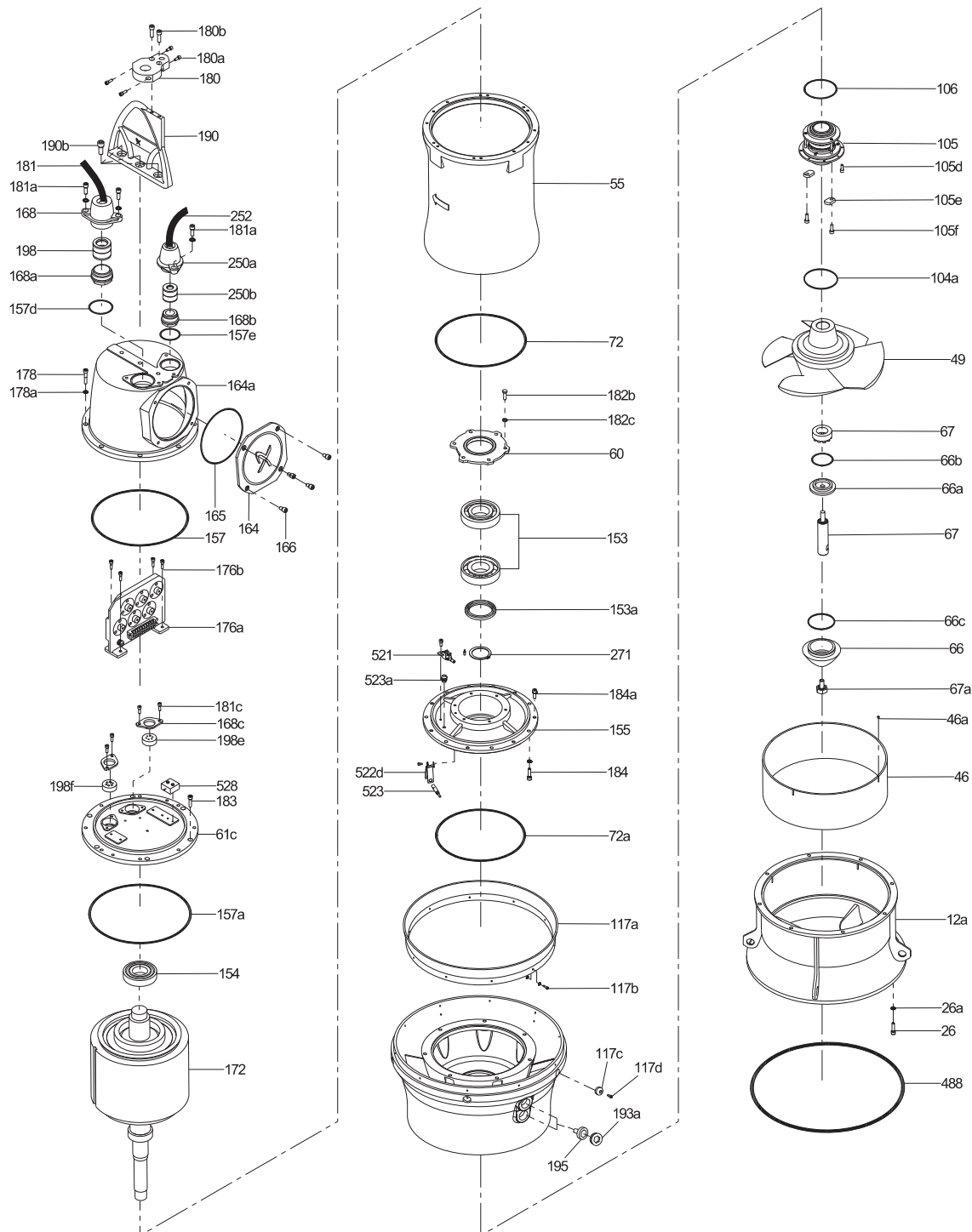
KPL.24" exploded view

TM063993



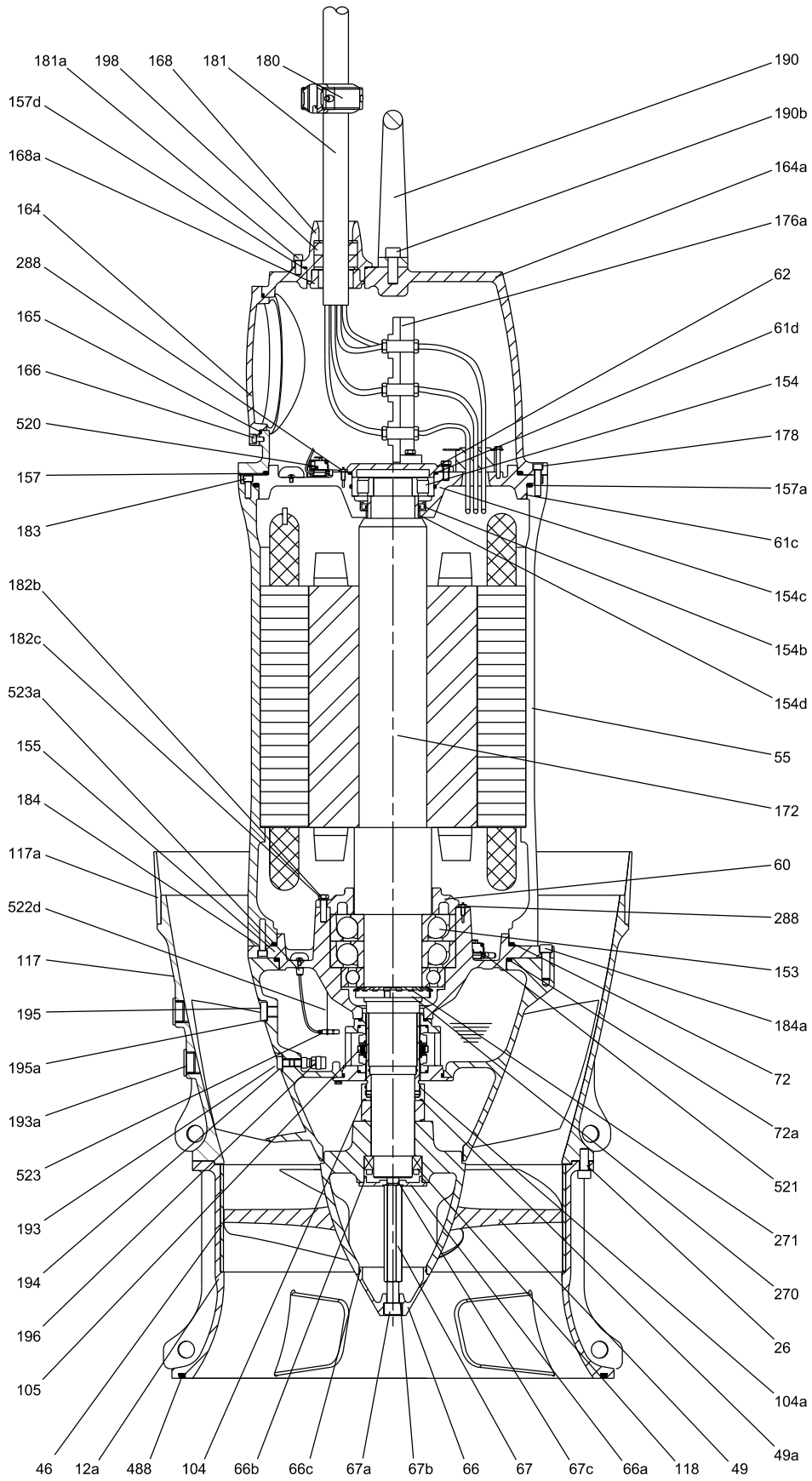
KPL.28"-32" sectional view

TM062924



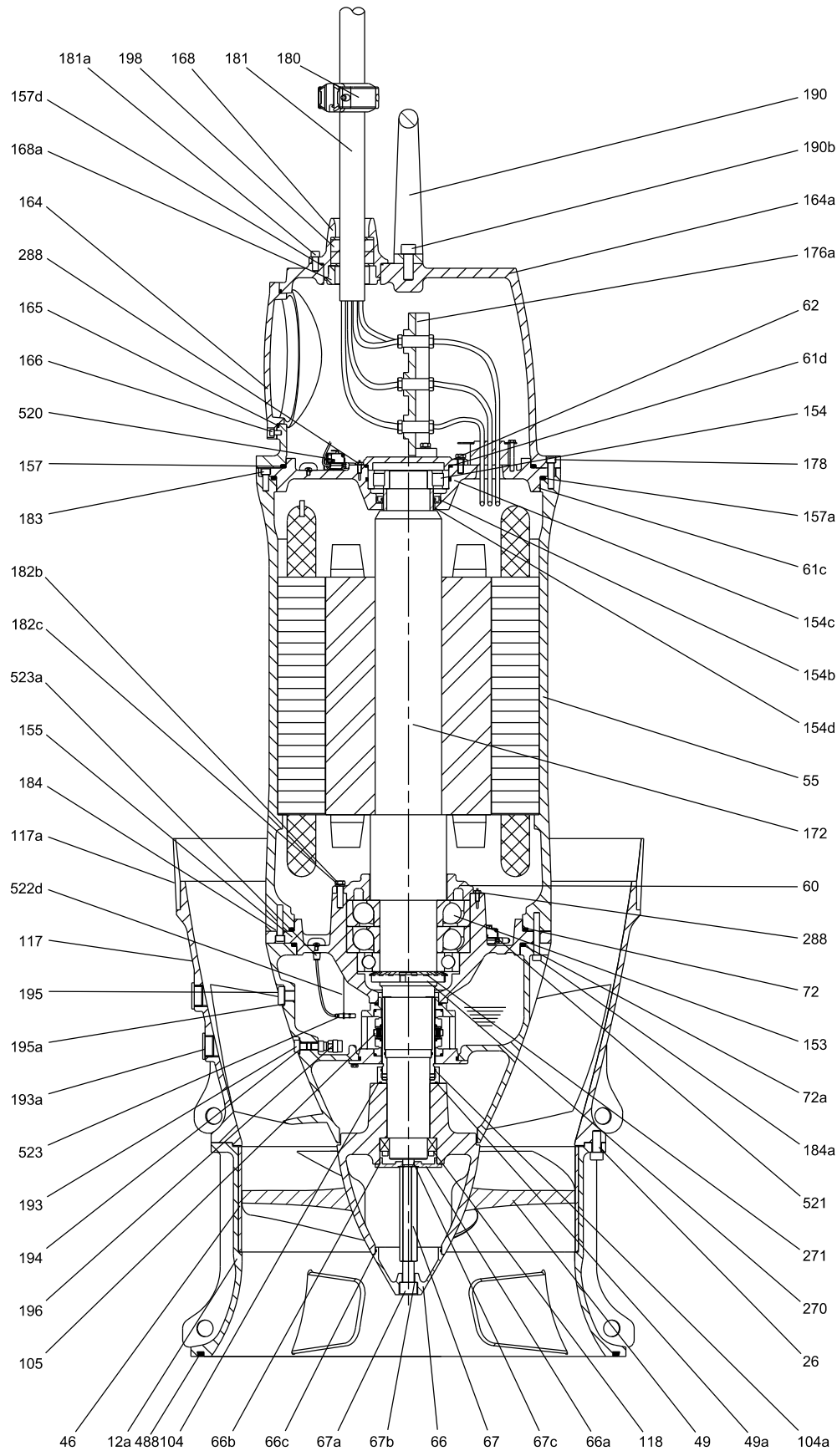
KPL.28"-32" exploded view

TM063994



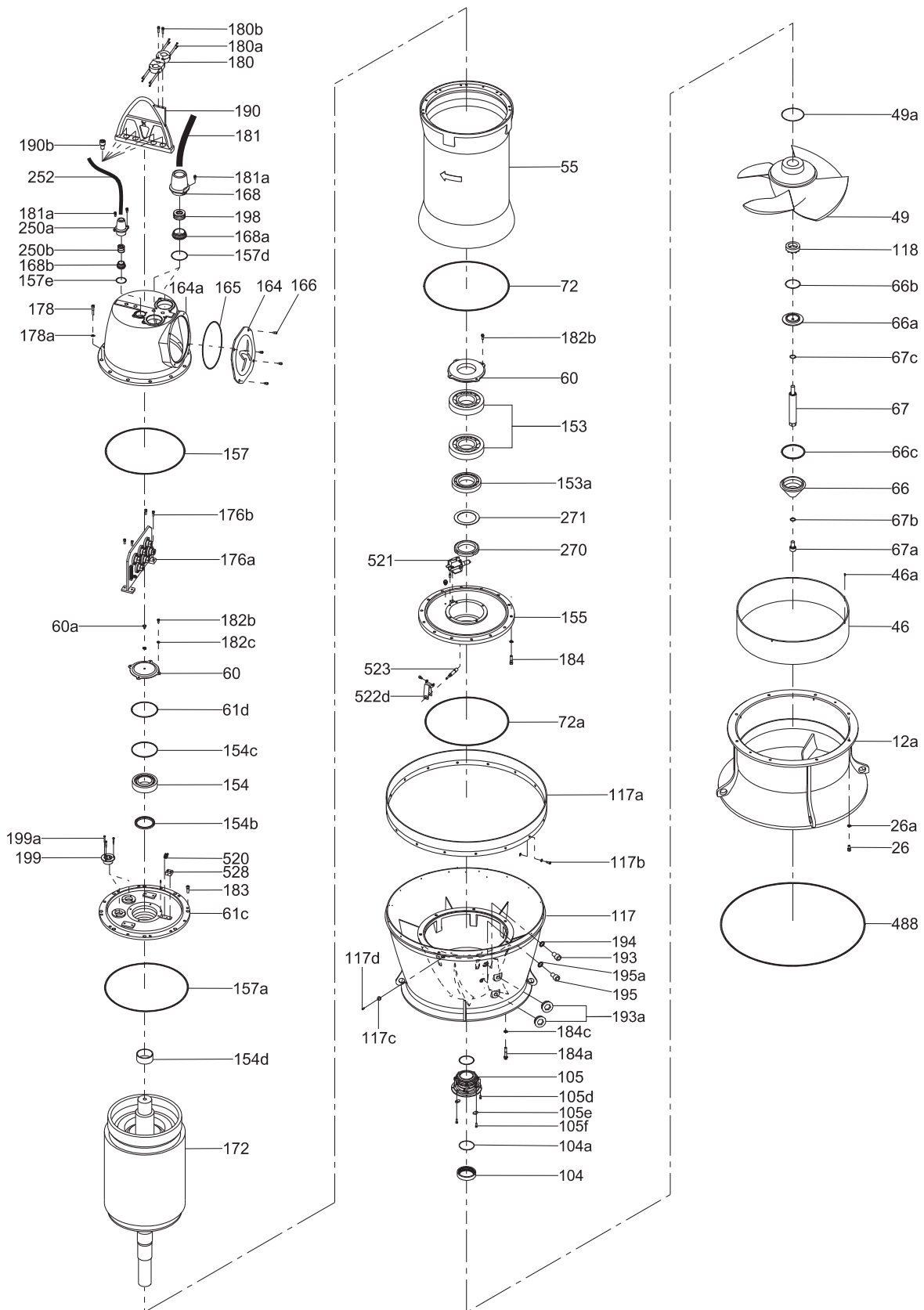
TM062925

KPL.36" sectional view



TM062926

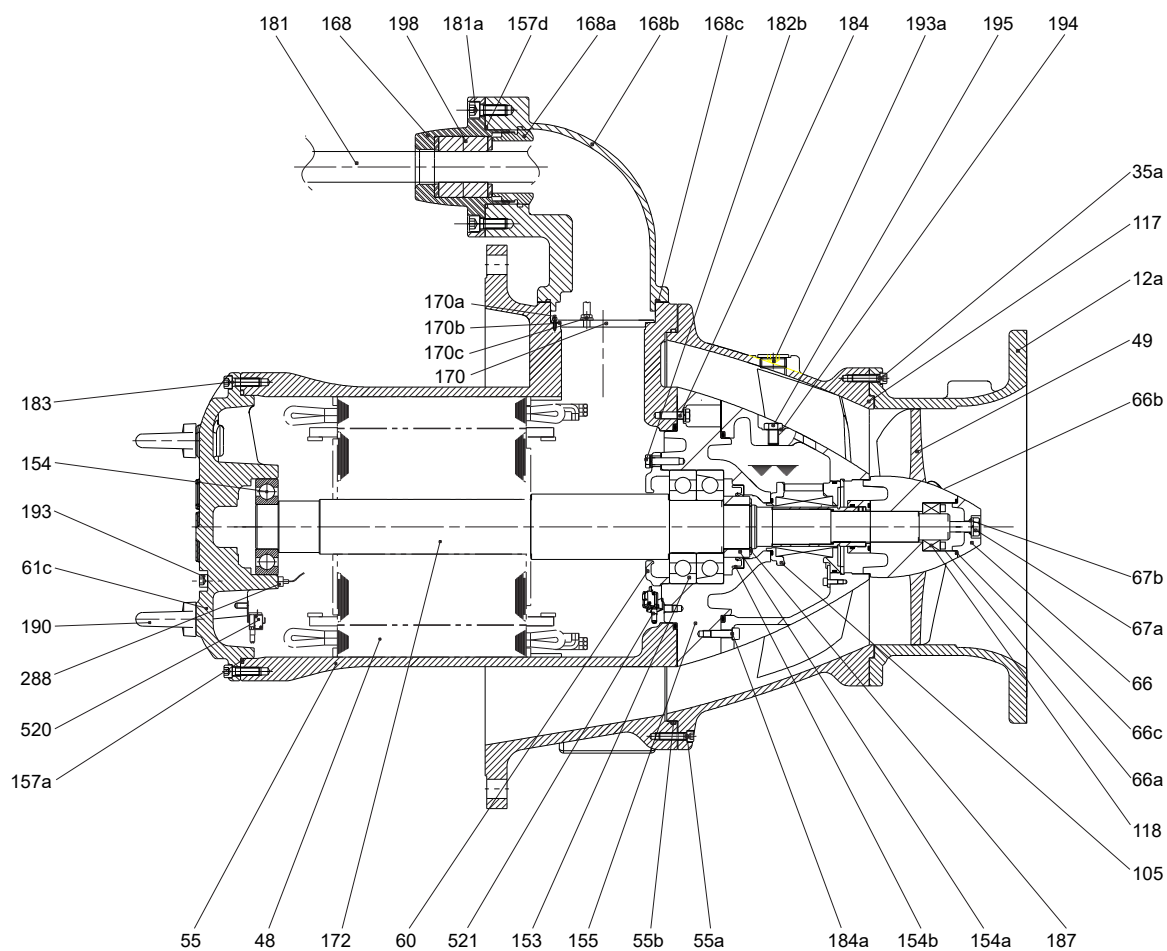
KPL.40"-72" sectional view



KPL.36" - 72" exploded view

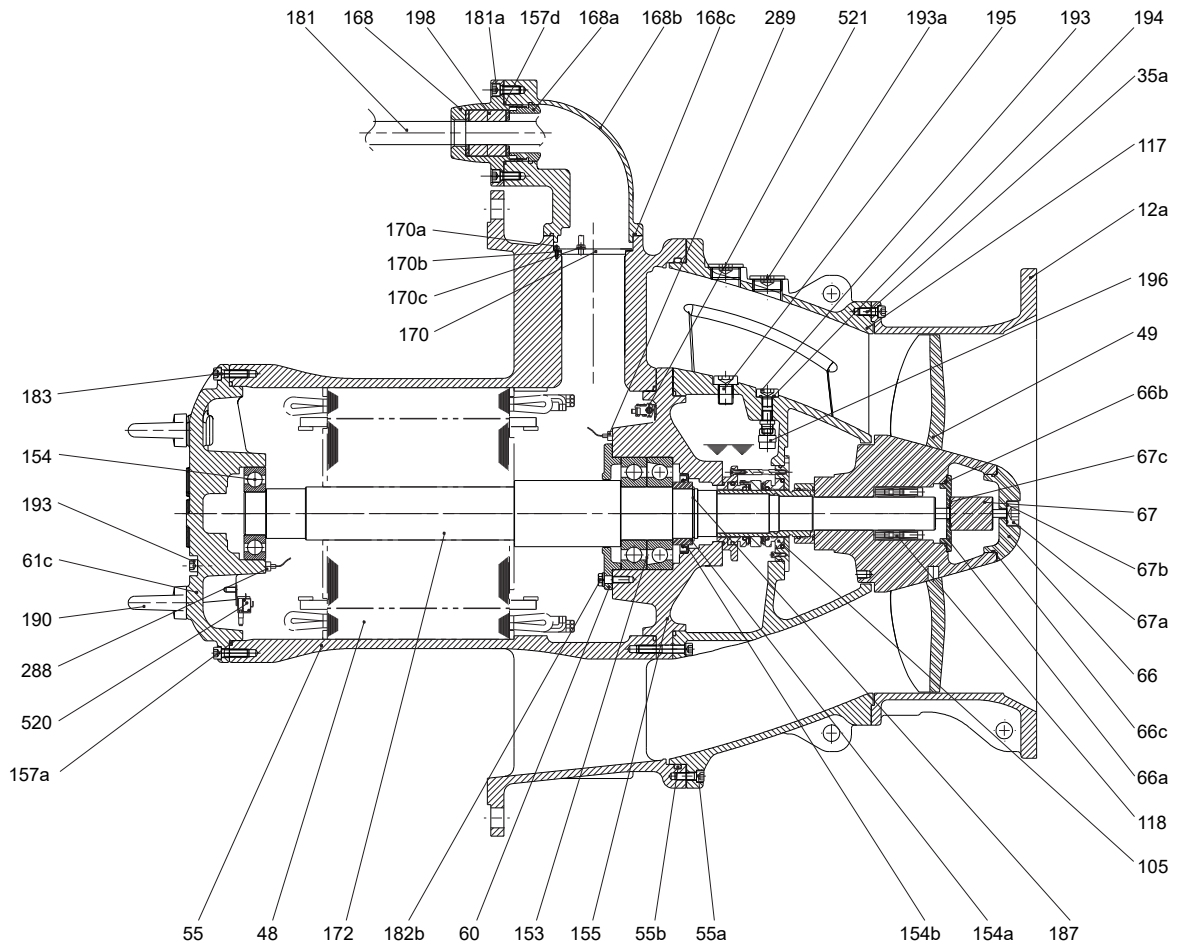
TM061885

## 6.2 KPG sectional and exploded views



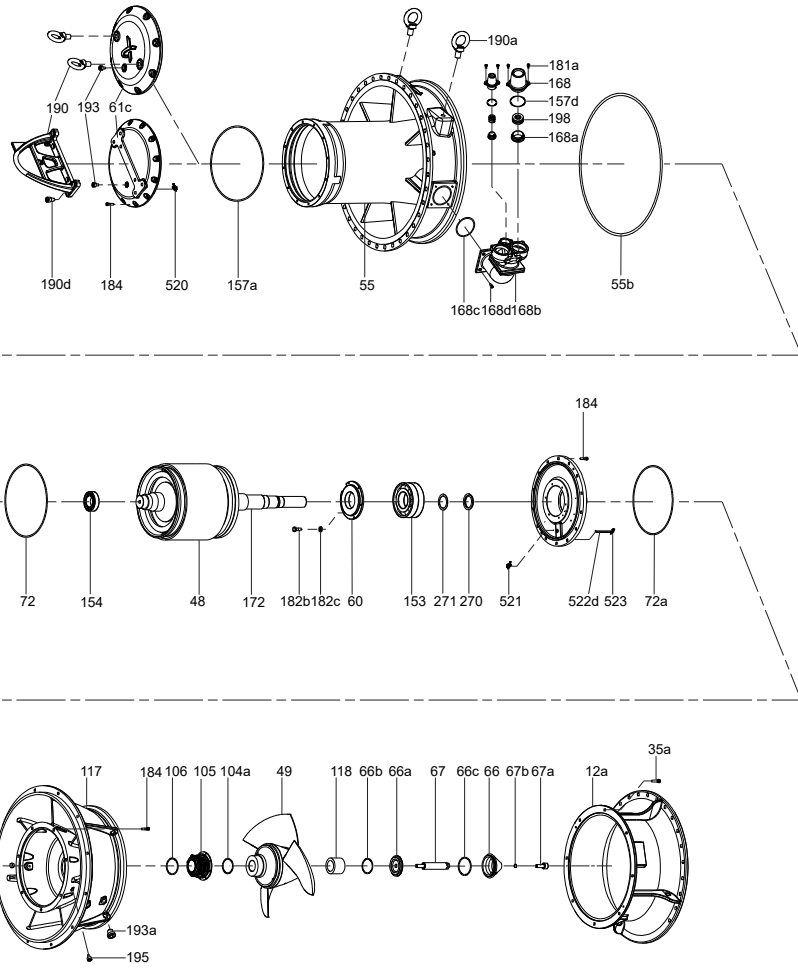
TM073696

KPG.20" sectional view



TM073697

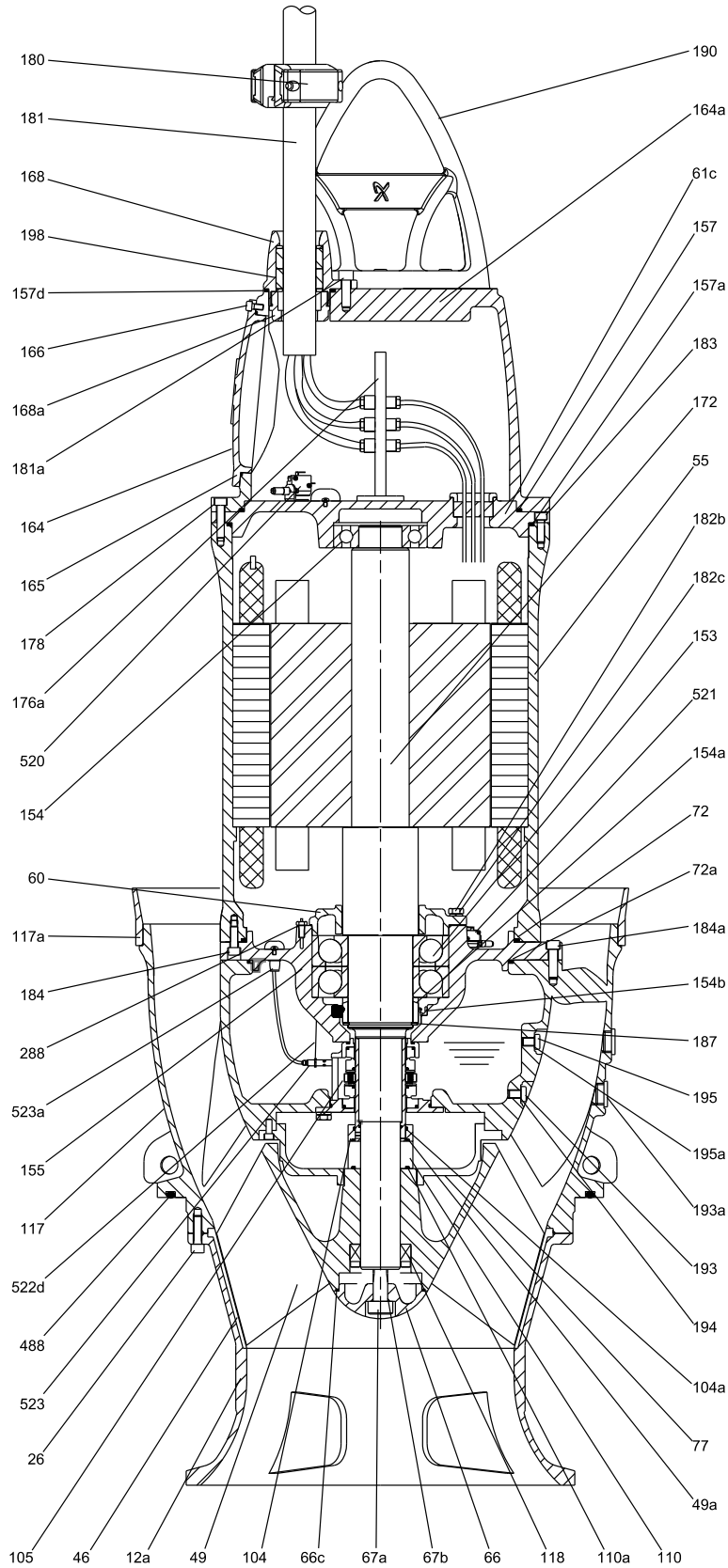
KPG.24"-56" sectional view



TM073695

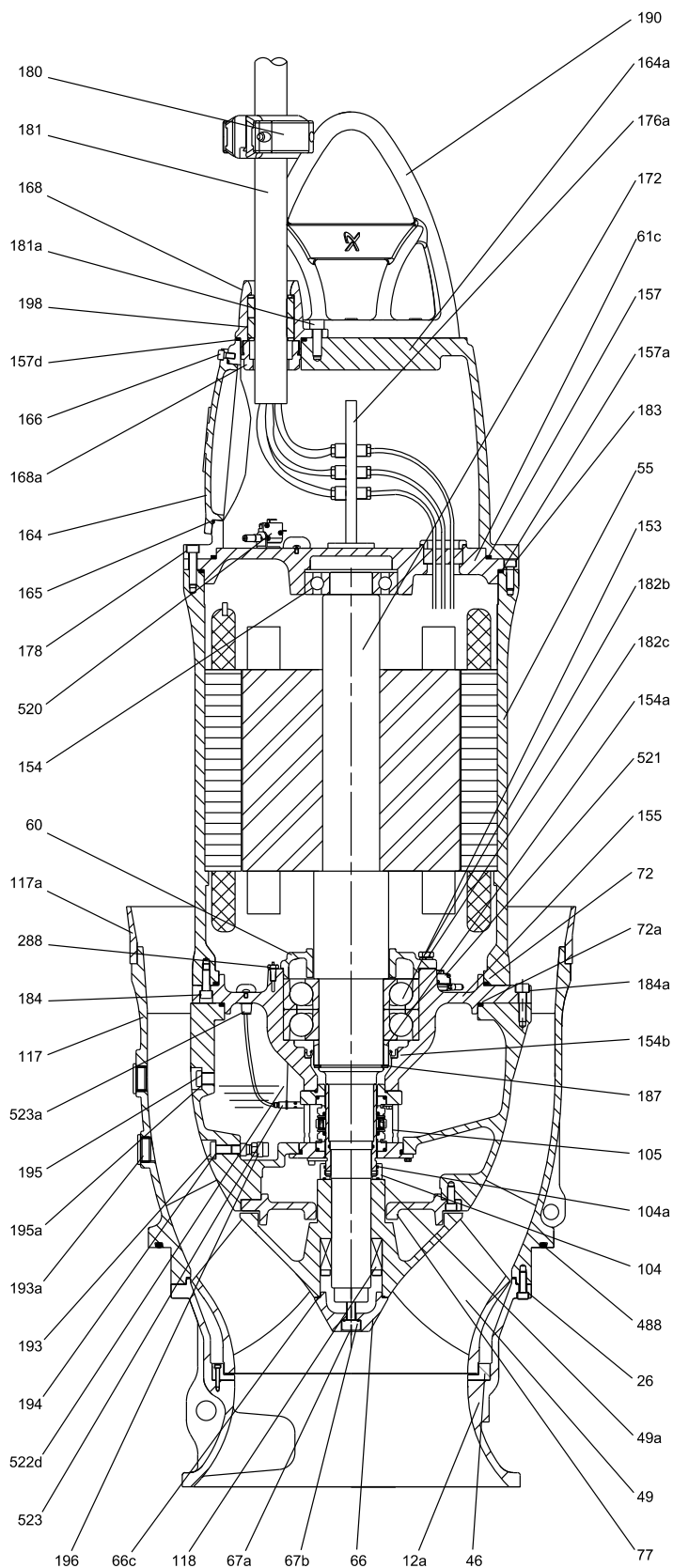
KPG exploded view

### 6.3 KWM sectional and exploded views



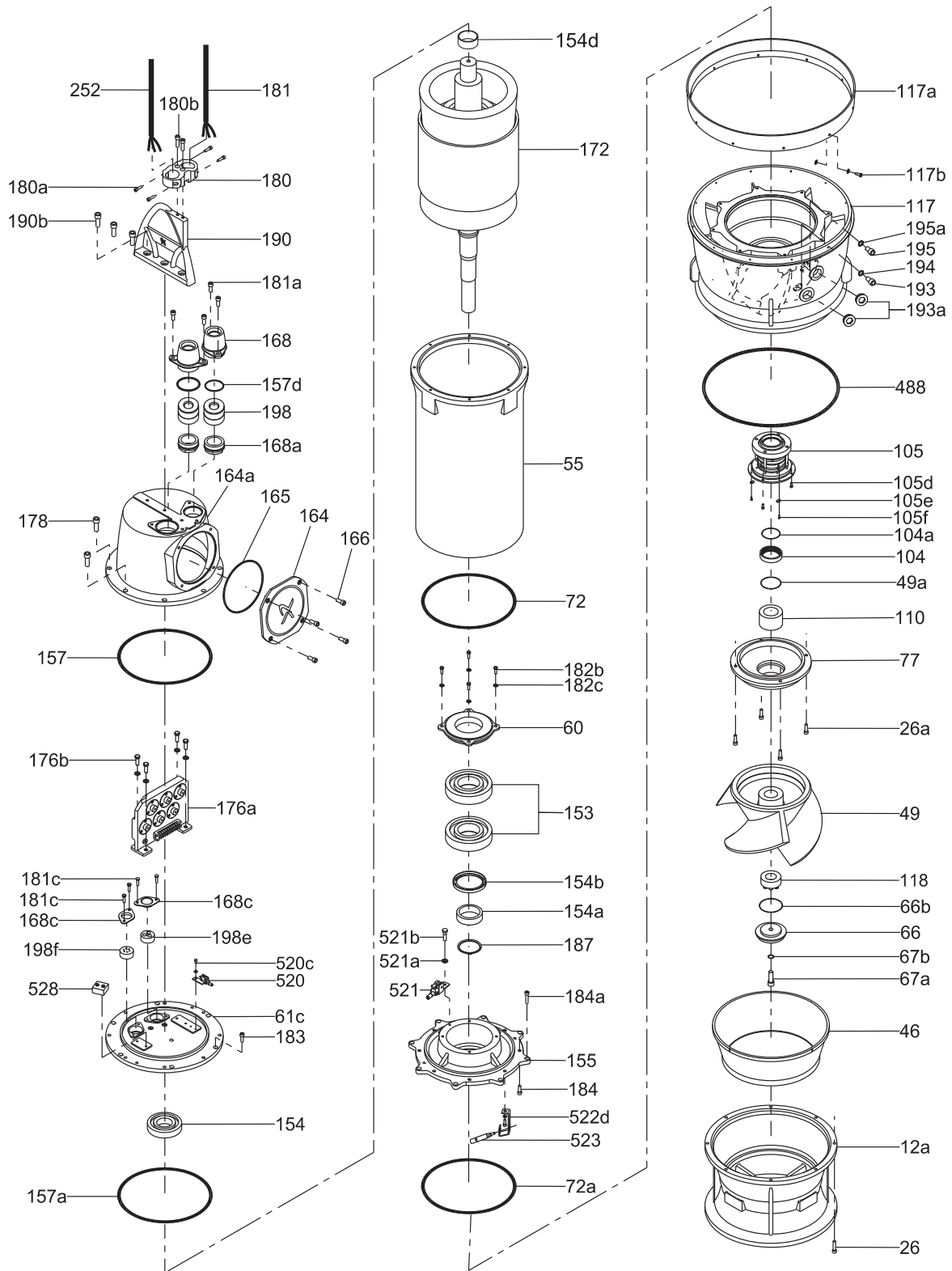
*KWM.24"-28" M sectional view*

TM062927



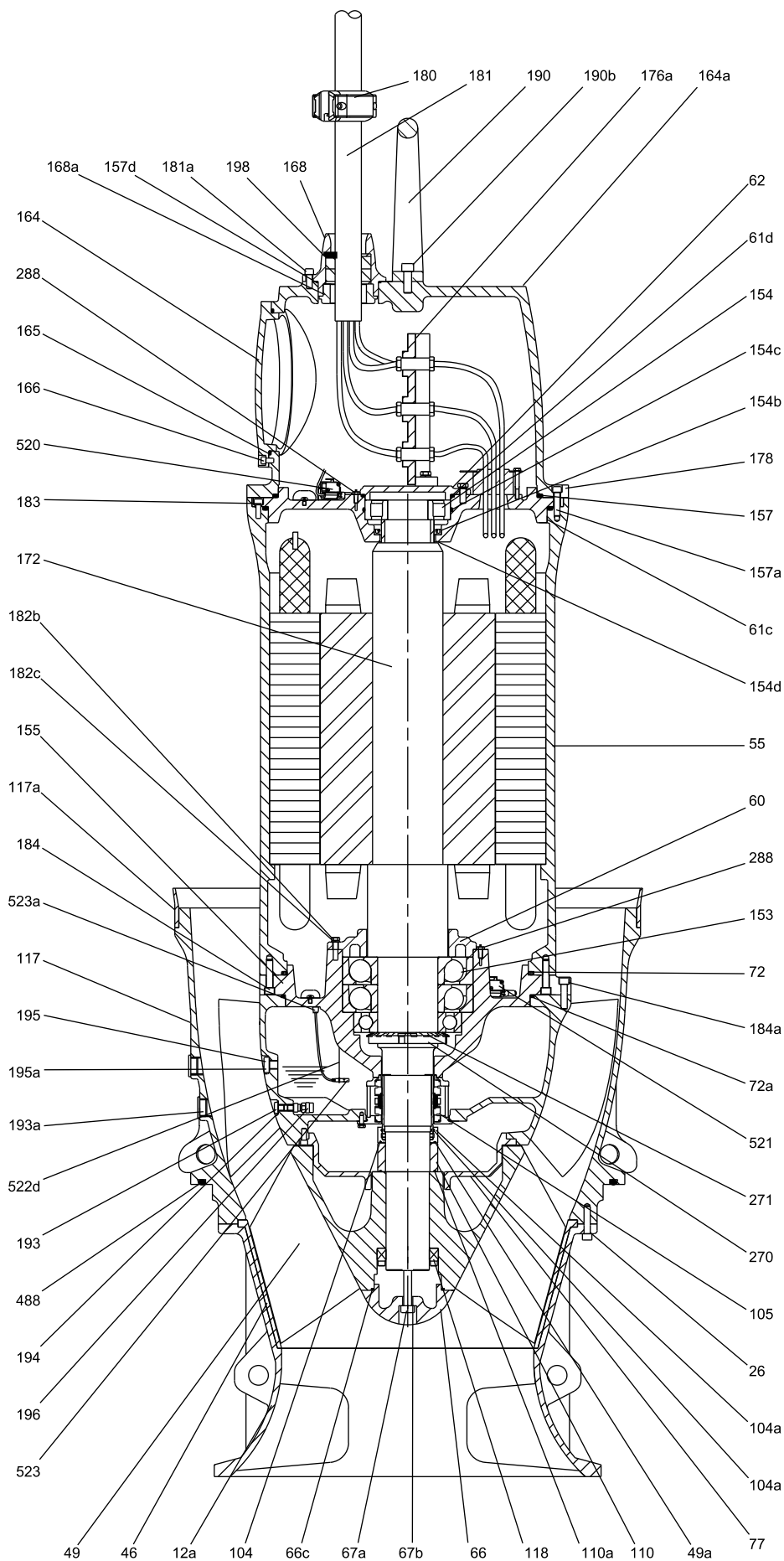
TM062928

KWM.24"-28" H sectional view



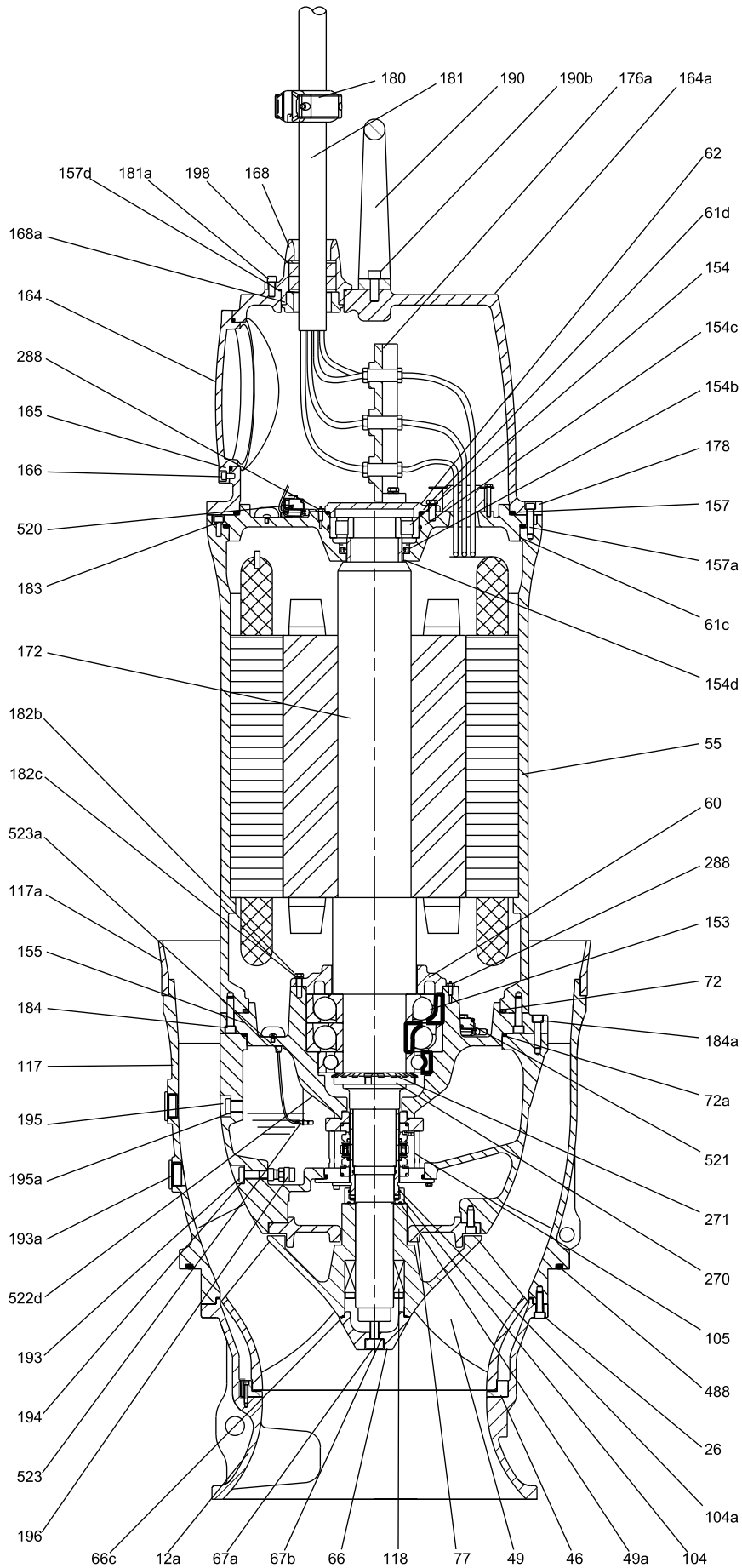
KWM.24"-28" exploded view

TM060239



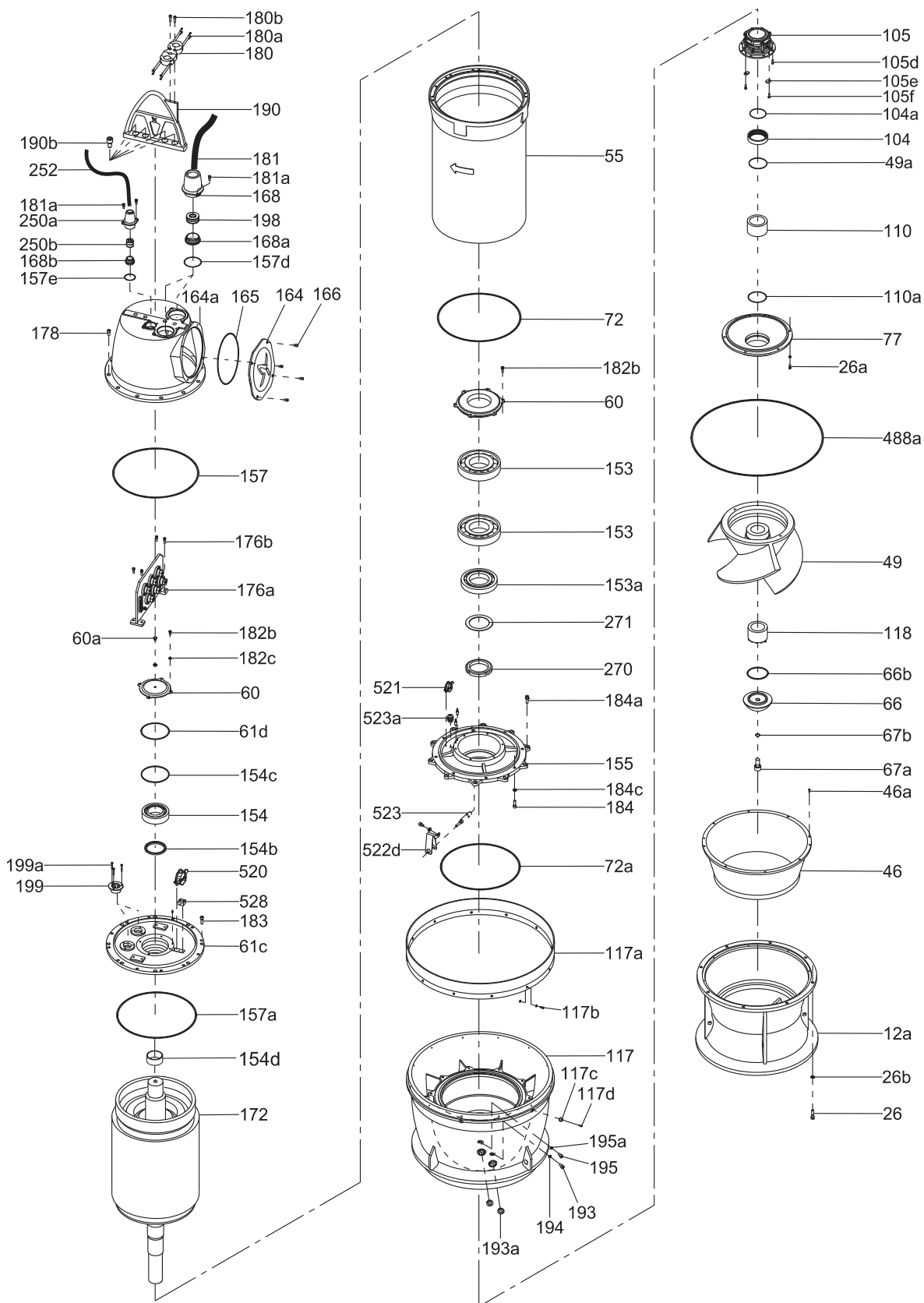
KWM.32"-64" M sectional view

TM062929



TM062930

KWM.32"-64" H sectional view



KWM.32"-64" exploded view

TM060240

## 6.4 Components and material specification

Pos.	Component	Material	DIN	ASTM
12a	Suction casing	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
26	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
46	Wear ring (KPL)	Stainless steel	X5CrNi-189-1.4301	A276-304
46	Wear ring (KWM)	Ductile cast iron	EN-GJS-450-10	A536-65-45-12
49	Impeller (KWM)	Ductile cast iron	EN-GJS-450-10	A536-65-45-12
49a	O-ring	NBR rubber		
55	Stator housing	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
60	Bearing bracket cover	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
61c	Upper bearing bracket	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
61d	O-ring	NBR rubber		
62	Bearing cover, upper	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
66	Hub cap (KPL)	Stainless steel	X5CrNi-189-1.4301	A743-CF-8
66	Hub cap (KWM)	Ductile cast iron	EN-GJS-450-10	A536-65-45-12
66a	Washer	Stainless steel	X5CrNi-189-1.4301	A276-304
66b	O-ring	NBR rubber		
66c	O-ring	NBR rubber		
67	Impeller screw	Stainless steel	X5CrNi-189-1.4301	A276-304
67a	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
67b	O-ring	NBR rubber		
67c	O-ring	NBR rubber		
72	O-ring	NBR rubber		
72a	O-ring	NBR rubber		
77	Water chamber	Cast iron		
77a	Circlip	Steel		
104	Seal ring	Stainless steel	X5CrNi-189-1.4301	A276-304
104a	Seal bushing	Stainless steel	X5CrNi-189-1.4301	A276-304
105	Mechanical seal	SIC/SIC		
110	intermediate ring	Stainless steel	X5CrNi-189-1.4301	A276-304
110a	O-ring	NBR rubber		
117	Discharge casing	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
117a	Turbulence optimizer	Rubber		
118	Tapered lock bushing			
153	Ball bearing			
154	Ball bearing			
154a	Shaft sleeve	Stainless steel		A276-304
154b	Seal ring	NBR rubber		
154c	O-ring	NBR rubber		
154d	Sleeve (top bearing)	Stainless steel		A276-304
155	Lower bearing bracket	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
157	O-ring	NBR rubber		
157a	O-ring	NBR rubber		
157d	O-ring	NBR rubber		
164	Junction box cover	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
164a	Top cover	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
165	O-ring	NBR rubber		
166	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
168	Cable entry	Stainless steel	G-X6CrNi-189	A743-CF-8
168a	Cable entry, lower	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
172	Shaft with rotor	Stainless steel	X10Cr13	A276-410
176a	Terminal board	Cast iron with insulation bushing	EN-GJL-250 (EN-JL-1040)	A48-CL35
178	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304

Pos.	Component	Material	DIN	ASTM
180	Cable clamp	Stainless steel	X5CrNi-189-1.4301	A276-304
181	Cable	PNCT		
181a	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
182b	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
182c	Washer	Stainless steel	X5CrNi-189-1.4301	A276-304
183	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
184	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
184a	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
186	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
186a	Seal bracket	Cast iron	EN-GJL-250 (EN-JL-1040)	A48-CL35
187	Circlip			
190	Lifting bracket	Stainless steel	G-X6CrNi-189	A743-CF-8
190b	Screw	Stainless steel	X5CrNi-189-1.4301	A276-304
193	Oil plug	Stainless steel	X5CrNi-189-1.4301	A276-304
193a	Plug	Stainless steel	X5CrNi-189-1.4301	A276-304
194	O-ring	NBR rubber		
195	Plug	Stainless steel		A276-304
195a	O-ring	NBR rubber		
196	Non-return valve			
198	Washer/rubber seal/washer	Stainless steel/NBR rubber		
250	Cable clamp	Stainless steel	X5CrNi-189-1.4301	A276-304
270	Lock nut	Steel		
271	Lock washer	Steel		
288	Bearing temperature sensor			
488	O-ring	NBR rubber		
520	Moisture switch, upper			
521	WIO sensor			
522d	Sensor bracket for WIO	Stainless steel		A276-304
523	WIO sensor			
523a	Cable gland			
1112	Propeller hub	Stainless steel	G-X6CrNi-189	A743-CF-8
1162	Propeller vane (KPL)	Stainless steel	G-X6CrNi-189	A743-CF-8

Material declaration:

- Grey cast iron is manufactured according to EN 1561:1997
- Cast stainless steel is manufactured according to EN 10283:2010.
- Conversion to other standards such as AISI/ASTM is normative, and products are not manufactured according to these.

## 7. Product Description

### 7.1 Features

#### 7.1.1 Bearings

The bearings are lubricated for life.

##### Main bearings

Angular contact ball bearings and roller bearing with angle ring.

##### Support bearings

Single-row deep-groove ball bearing and roller bearing.

#### 7.1.2 Shaft seal



The shaft seal separates the motor from the pumped liquid. It consists of two mechanical seals that are both made of silicon carbide.

For convenient service, the two mechanical seals are in a cartridge. This design minimizes the risk of incorrect fitting and makes the assembly length shorter compared to conventional shaft seals.

#### 7.1.3 Turbulence Optimiser™



The Turbulence Optimiser™ is an innovative solution for reducing turbulence in the gap between the pump volute and the column pipe. A further positive effect is that misalignment and production tolerances of the column pipe no longer affect efficiency. Turbulence optimization is only possible, if the pump is mounted on the appropriate column size.

#### 7.1.4 Motor

The motor is a watertight, enclosed motor.

- Motor insulation class: F [311 °F (155 °C)] as standard
- Temperature rise class: F
- Service factor: 1.10
- Enclosure class: IP68.

#### 7.1.5 Power cables

The power cable is 0.6 / 1kV PNCT (standard) or 0.6 / 1kV PNCT-S (screened). The 0.6 kV wires are sensor wires (unused when having a separate sensor cable). The 1 kV wires are the power wires.

Standard cables are 33 ft long. Other cable lengths are available on request.

- Maximum conductor temperature: + 194 °F.
- Maximum ambient temperature: + 104 °F.
- Minimum ambient temperature: - 4 °F.
- Conductor: stranded plain copper conductor, class 5 (IEC 60228).
- Insulation: extruded EP rubber.
- Sheath: extruded black rubber (CR rubber).
- Marking:
  - 4-core cable: green/yellow, white, black, red.
  - 7-core cable: green/yellow, black, black, white, white, red, red.

## 7.1.6 Cables

The pumps have 0.6/1kV PNCT (combined power and control cable) or screened 0.6/1kV PNCT-S (non-combined). All pumps have standard sensor cable PNCT-S 8 x 2.5.

Pump type	P2 [hp]	No. of power cables	Power/control cable		Cable outer diameter [mm]	Cable outer diameter [in]	Bending radius [mm]	Bending radius [in]
			[power leads] x [cross-section in mm <sup>2</sup> ] + [conductor] x [cross-section in mm <sup>2</sup> ]					
KPL.20	15, 20	1	6 x 6 + 1 x 4		24	0.94	360	14.17
KPL.24	20, 25	1	6 x 10 + 1 x 6		34	1.34	510	20.08
	25	1	6 x 10 + 1 x 6		34	1.34	510	20.08
	30, 40	1	6 x 16 + 1 x 10		34	1.34	510	20.08
KPL.28	50	1	6 x 16 + 1 x 10		34	1.34	510	20.08
		1	6 x 25 + 1 x 16		42	1.65	630	24.8
	60, 75	1	6 x 25 + 1 x 16		42	1.65	630	24.8
KPL.32	100	1	6 x 35 + 1 x 25		45	1.77	675	26.57
	40	1	6 x 16 + 1 x 10		34	1.34	510	20.08
	50, 60, 75	1	6 x 25 + 1 x 16		42	1.65	630	24.8
KPL.36	100	1	6 x 35 + 1 x 25		45	1.77	675	26.57
	60,75	1	6 x 25 + 1 x 16		42	1.65	630	24.8
	75	1	6 x 25 + 1 x 16		42	1.65	630	24.8
KPL.40	120, 150, 175	1	4 x 95		56	2.2	840	33.07
	215	1	4 x 120		65	2.56	975	38.39
	175	1	4 x 120		65	2.56	975	38.39
KPL.48	175	1	4 x 120		65	2.56	975	38.39
	120, 265, 335	1	4 x 95		56	2.2	840	33.07
	215, 265	2	4 x 95		56	2.2	840	33.07
KPL.56	175	1	4 x 120		65	2.56	975	38.39
	175, 335, 400	2	4 x 120		65	2.56	975	38.39
	215, 265	2	4 x 95		56	2.2	840	33.07
KPL.60	500	2	4 x 150		69	2.72	1035	40.75
	600	3	4 x 120		65	2.56	975	38.39
	265	2	4 x 95		56	2.2	840	33.07
KPL.64	335,400	2	4 x 120		65	2.56	975	38.39
	470, 500, 540	2	4 x 150		69	2.72	1035	40.75
	600	3	4 x 120		65	2.56	975	38.39
KPL.72	665	3	4 x 120		65	2.56	975	38.39
	665	3	4 x 120		65	2.56	975	38.39
	470, 540	2	4 x 150		69	2.72	1035	40.75
KPL.72	600	3	4 x 120		65	2.56	975	38.39
	665 (18-pole)	3	4 x 120		65	2.56	975	38.39
	665 (20-pole)	3	4 x 150		69	2.72	1035	40.75
KPL.72	730, 800	3	4 x 150		69	2.72	1035	40.75
	930	4	4 x 150		69	2.72	1035	40.75
	1060	4	4 x 150		69	2.72	1035	40.75

Pump type	P2 [hp]	No. of power cables	Power/control cable [power leads]		Cable outer diameter [mm]	Cable outer diameter [in]	Bending radius [mm]	Bending radius [in]
			x [cross-section in mm <sup>2</sup> ] + [conductor]	x [cross-section in mm <sup>2</sup> ]				
KPG.20	15, 20	1	6 x 6 + 1 x 4		24	0.94	360	14.17
KPG.24	20, 25	1	6 x 10 + 1 x 6		34	1.34	510	20.08
	25	1	6 x 10 + 1 x 6		34	1.34	510	20.08
KPG.28	30, 40	1	6 x 16 + 1 x 10		34	1.34	510	20.08
	50	1	6 x 25 + 1 x 16		42	1.65	630	24.8
KPG.32	40	1	6 x 16 + 1 x 10		34	1.34	510	20.08
	50, 60, 75	1	6 x 25 + 1 x 16		42	1.65	630	24.8
KPG.36	75	1	6 x 25 + 1 x 16		42	1.65	630	24.8
	120, 150,	1	4 x 95		56	2.2	840	33.07
KPG.40	175	1	4 x 120		65	2.56	975	38.39
	120	1	4 x 95		56	2.2	840	33.07
KPG.48	215, 265	2	4 x 95		56	2.2	840	33.07
	175	1	4 x 120		65	2.56	975	38.39
	335	2	4 x 120		65	2.56	975	38.39
KPG.56	175, 335, 400, 500	1	4 x 120		65	2.56	975	38.39
	335, 400	2	4 x 120		65	2.56	975	38.39
	500	2	4 x 150		69	2.72	1035	40.75
	600	3	4 x 120		65	2.56	975	38.39
	215, 265	2	4 x 95		56	2.2	840	33.07

Pump type	P2 [hp]	No. of power cables	Power/control cable [power leads]		Cable outer diameter [mm]	Cable outer diameter [in]	Bending radius [mm]	Bending radius [in]
			x [cross-section in mm <sup>2</sup> ] + [conductor]	x [cross-section in mm <sup>2</sup> ]				
KWM.24	40, 50	1	6 x 16 + 1 x 10		34	1.34	510	20.08
	60	1	6 x 25 + 1 x 16		42	1.65	630	24.8
KWM.28	50	1	6 x 16 + 1 x 10		34	1.34	510	20.08
	60, 75	1	6 x 25 + 1 x 16		42	1.65	630	24.8
KWM.32	100	1	6 x 35 + 1 x 25		45	1.77	675	26.57
	100	1	6 x 35 + 1 x 25		45	1.77	675	26.57
KWM.36	150	1	4 x 95		56	2.2	840	33.07
	150, 175	1	4 x 95		56	2.2	840	33.07
KWM.40	215	1	4 x 120		65	2.56	975	38.39
	265	1	4 x 120		65	2.56	975	38.39
KWM.48	215	1	4 x 120		65	2.56	975	38.39
	265 (8-pole)	2	4 x 120		65	2.56	975	38.39
	265 (10-pole)	2	4 x 95		56	2.2	840	33.07
	300, 335	2	4 x 95		56	2.2	840	33.07
	265, 300, 335	2	4 x 95		56	2.2	840	33.07
KWM.48	400	2	4 x 120		65	2.56	975	38.39
	470	2	4 x 120		65	2.56	975	38.39
	540, 600	2	4 x 150		69	2.72	1035	40.75
	665	3	4 x 120		65	2.56	975	38.39

Pump type	P2 [hp]	No. of power cables	Power/control cable [power leads]		Cable outer diameter [mm]	Cable outer diameter [in]	Bending radius [mm]	Bending radius [in]
			x [cross-section in mm <sup>2</sup> ] + [conductor]	x [cross-section in mm <sup>2</sup> ]				
KWM.56	400	2	4 x 120		65	2.56	975	38.39
	470	2	4 x 120		65	2.56	975	38.39
	540	2	4 x 150		69	2.72	1035	40.75
	600 (12-pole)	2	4 x 150		69	2.72	1035	40.75
	600 (14-pole)	3	4 x 120		65	2.56	975	38.39
	665	3	4 x 120		65	2.56	975	38.39
	730	3	4 x 150		69	2.72	1035	40.75
	800	3	4 x 150		69	2.72	1035	40.75
	865	3	4 x 150		69	2.72	1035	40.75
	665	3	4 x 120		65	2.56	975	38.39
KWM.64	730, 800, 865	3	4 x 150		69	2.72	1035	40.75
	930, 1000, 1060	4	4 x 150		69	2.72	1035	40.75

The following table can be used to compare metric and US imperial cable dimensions:

US standard		IEC and BS
AWG/MCM	Equivalent cross-section area in mm <sup>2</sup>	Nearest available cross-section in mm <sup>2</sup>
20 AWG	0.519	1.5~0.75
18	0.823	1
16	1.031	1.5
14	2.08	2.5
12	3.31	4
10	5.26	6
8	8.37	10
6	13.3	16
4	21.15	25
2	33.62	35
1/0	42.41	50
2/0	67.23	50
3/0	85.01	70
4/0	107.2	95
250 MCM	126.7	120
300	152	120~150
350	177.3	185
400	202.7	185
450	228	240
500	253.4	240~200
550	278.7	300
600	304	300
650	239.4	300~400
700	354.7	400
750	380	400
800	405.4	400
850	430.7	400
900	465	400~500
950	481.4	500
1000	506.7	500
1250	633.4	630

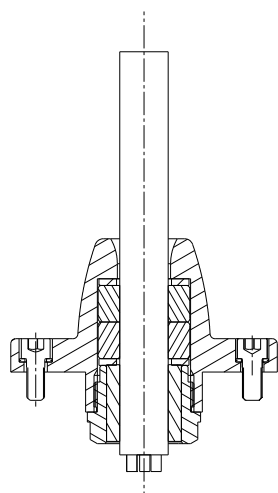
### 7.1.7 Cable inlet

The cable connection to the motor is watertight, the soft-shaped stainless steel cable entry has dual sealing system:

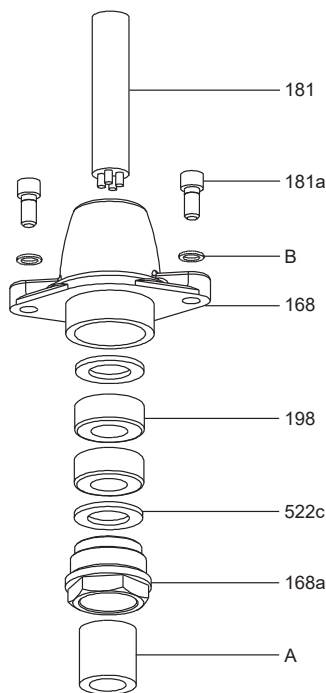
- Primary sealing system: two leak-proof rubber bushes and backup rings.
- Secondary sealing system: two-component epoxy sealing.

The cable entry enables quick and easy disconnection of the cable. Only two bolts need to be unscrewed to remove the cable inlet.

The cable inlets have conductors cast in a potting material to eliminate the risk for penetration of moisture.



Cable inlet sectional view



Cable inlet exploded view

Pos.	Description
181	Cable
181a	Screw
B	Nord lock washer
168	Cable entry
198	Washer/rubber seal/washer
522c	Trust washer
168a	Cable nut
A	Epoxy

### 7.1.8 Cable suspension system

Keep all the chains and cables tight in a pipe installation to avoid damage to the cables during operation. Loose cables and chains are exposed to wear and damage and may result in premature failure. Therefore, a reliable cable suspension system is crucial.

**Note:** Cable suspension system is a mandatory requirement for all column installed KPL and KWM pumps.

#### Related information

[9.3 Cable suspension system](#)

### 7.1.9 Sensors

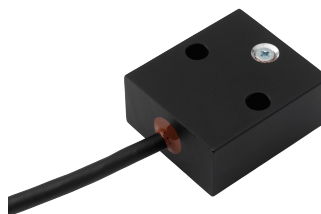
The table shows the difference between standard product and factory product variant (FPV) as to the number of sensors.

Sensor	Type	Standard [Qty]	FPV [Qty]
Stator thermal protection	Bi-metal	3	3
Stator thermal protection	Pt100	1	3 <sup>1</sup>
Terminal box moisture sensor	Switch	1	1
Motor housing moisture sensor	Switch	1	1
Bearing thermal protection (lower)	Pt100	1	1
Bearing thermal protection (upper)	Pt100	1	1
Water-in-oil (WIO) sensor	Analog		1
Vibration sensor	Analog		1

<sup>1</sup> Three Pt100 sensors are mounted in the pump at factory, but only one sensor is connected per standard. It is not possible to connect all 3 stator thermal sensors, if bearing sensors are also connected.

### 7.1.10 Customized sensor options

#### PVS 3 (pump vibration sensor)



PVS 3 vibration sensor

The vibration sensor monitors the vibration level of the pump in three axis. A change in the vibration level indicates an abnormal situation. It can be caused by a clogged propeller/impeller, worn bearings and a closed

TM077161

TM077162

outlet valve, indicating that service inspection must be carried out as soon as possible, to protect the pump or the pipe system from being damaged.

#### Water-in-oil (WIO) sensor



WIO sensor

The WIO sensor measures the water content in the oil and converts the value into an analog current signal. The two sensor conductors are for power supply and for carrying the signal to the measuring device or controller. The sensor measures the water content from 0 to 20 %. It also sends a signal, if the water content is outside the normal range (warning), or if the oil level is so low that the sensor is in the air (alarm). The sensor is fitted in a stainless steel tube for mechanical protection. The WIO sensor can be connected to the Grundfos IO 113 module.

#### 7.1.11 Testing

All pumps are tested before leaving the factory. The factory test report is based on the ANSI/HI 11.6:2017 2B standard. Test reports can be ordered directly with the pump or separately based on the pump serial number. The performance test is carried out without a Turbulence Optimiser™.

Other tests or third-party inspection certificates are available on request.

## 7.2 Operating conditions

### 7.2.1 Pumped liquids

pH value: 4-10

Liquid temperature: 32-104 °F (0-40 °C).

When pumping liquids with a density and/or a kinematic viscosity higher than that of water, use motors with correspondingly higher outputs.

### 7.2.2 Number of starts

The pumps are designed for continuous operation or for intermittent operation. The maximum numbers of starts allowed appear from this table:

Motor power	Max. no. of starts
≤ 120 hp:	15 starts per hour
> 120 hp - ≤ 265 hp:	10 starts per hour
> 265 hp:	10 starts per hour (soft-starter)
Max. 5000 starts per year.	

In order to avoid overloading of windings, seals and bearings, the above numbers of starts must not be exceeded.

### 7.2.3 Motor range

#### KPL/KPG

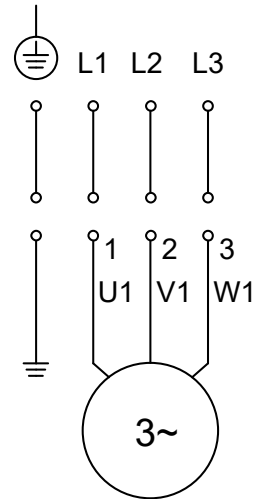
Shaft power [hp]	Number of poles
15	6
20	6/8
25	8/10
30	10
40	10
50	8/10
60	8/10
75	8/10
100	8/10/12
120	8/10/12
150	8/10
175	8/10/12/16
215	8/10/12/14/16
265	10/14/16
335	10/14/16
400	14/16
500	14
600	14
665	14/16/18/20
730	14/18/20
800	18
930	18
1060	18

#### KWM

Shaft power [hp]	Number of poles
40	6
50	6/8
60	6/8
75	6/8
100	8
120	8
150	8
175	8
215	8/10
265	8/10/12
300	8/10/12
335	8/10/12
400	12/14
465	10/12
470	14
535	10
540	14
600	10/12/14

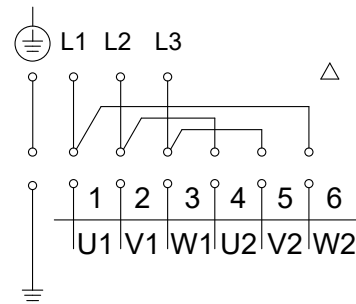
Shaft power [hp]	Number of poles
665	10/12/18
730	12/18
800	12/16/18
865	12/16
930	16
1000	16
1060	16

7.2.4 Wiring diagrams



TM059167

Direct-On-Line start



TM078374

Delta start

## 7.3 Control units

### 7.3.1 Level controllers



Grundfos DC

Grundfos Dedicated Controls (DC) are ideal for KPL, KPG and KWM pumps.

Grundfos DC is a control system designed for installation in municipal wastewater transportation, commercial buildings or network pumping stations with up to six pumps and an optional mixer or a flush valve. Grundfos DC provides advanced control and data communication.

The control cabinets are delivered with a built-in main switch and thermal magnetic circuit breaker.

Features and benefits

- Advanced flow calculation
- Automatic energy optimisation
- Easy installation and configuration
- Configuration wizard
- Electrical overview
- Advanced data communication
- Advanced alarm and warning priority
- Supports several languages
- Daily emptying
- Mixer control or flush valve
- User-defined functions
- Anti-blocking
- Start level variation
- Advanced pump alternation with pump groups
- SMS scheduling
- Communication to SCADA, BMS, GRM or cell phone.

Grundfos DC is available either with or without a built-in CIM communication interface module. The communication module enables the possibility for fieldbus protocol (e.g. PROFIBUS DP, Modbus RTU and PROFINET IO/Modbus TCP) and the communication line.

For further product information about Grundfos DC, see the following documents at Grundfos Product Center:

- Grundfos Dedicated Controls, brochure (publication no. 96925597)
- Grundfos iSolutions, data booklet (publication no. 98390992)

- Grundfos Controls Guide (publication no. 97954965)
- Grundfos Dedicated Controls, data booklet (publication no. 97722329).

### 7.3.2 IO 113



IO 113 module

IO 113 is a protection module for Grundfos storm- and wastewater pumps. IO 113 has inputs for digital and analog pump sensors, and can stop the pump, if a sensor indicates a fault. IO 113 can be connected to the Grundfos DC system and allows advanced monitoring functions:

- motor temperature
- moisture in motor
- water in oil
- insulation resistance.

### 7.3.3 SM 113



SM 113 module

SM 113 is used for collection and transfer of sensor data in pumps with multiple sensors. SM 113 can be placed either inside the pump (allowing fewer sensor leads out of the pump) or in the control cabinet next to the pump installation.

SM 113 works together with IO 113 through power-line communication using the Grundfos GENIbus protocol. SM 113 can collect data from:

- 3 current sensors, 4-20 mA
- 3 Pt100 or 3 Pt1000 thermal sensors
- 1 PTC thermal sensor
- 1 digital input.

TM077033

TM077034

### 7.3.4 MP 204



#### MP 204

MP 204 can be used as a stand-alone motor protector. MP 204 may also be incorporated in a Grundfos DC system, in which it functions as a motor protector. The pump is protected secondarily by measuring the temperature with a Pt100 sensor and a PTC sensor or thermal switch.

in addition, MP 204 offers the following features:

- anti-blocking
- monitoring of:
  - voltage
  - current
  - current asymmetry
  - phase sequence
  - power factor ( $\cos \varphi$ )
  - power
  - energy
  - insulation resistance
  - temperature, Pt100/Pt1000
  - temperature, PTC
  - temperature, Tempcon.

### 7.3.5 Frequency converter



All KPL, KPG and KWM pumps can be connected to a frequency converter - ideally to a Grundfos CUE, - or a soft starter, depending on choice. When pumps are connected to a frequency converter pay attention to the motor insulation system.

The minimum frequency depends on the type of application and the design of the discharge piping. Always consider the following when determining the minimum frequency:

- mass of the water above the propeller
- the force required to keep valves open
- the velocity reaction forces.

These factors vary from case to case. The minimum frequency has to produce the necessary torque and force from the impeller and propeller to overcome the above mentioned factors.

in environments with high content of sand, for example water treatment plants, a self-cleaning velocity of at least 1 m/s must be ensured in the column's largest diameter. Ramp down over 30 seconds is recommended to the minimum frequency of positive flow.

#### 7.3.6 Additional features, CUE or VFD

The optional CUE or VFD, which is either a Grundfos or a general variable frequency converter, offers better pump protection and a more steady flow through the pipe system.

in addition, Grundfos CUE and VFD offer the following features:

- anti-blocking
- automatic energy optimization
- specific-energy test
- output frequency
- monitoring of:
  - voltage<sup>1</sup>
  - current<sup>1</sup>
  - phase sequence<sup>1</sup>
  - power<sup>1</sup>
  - energy<sup>1</sup>
  - torque<sup>1</sup>
- reverse start

TM073846

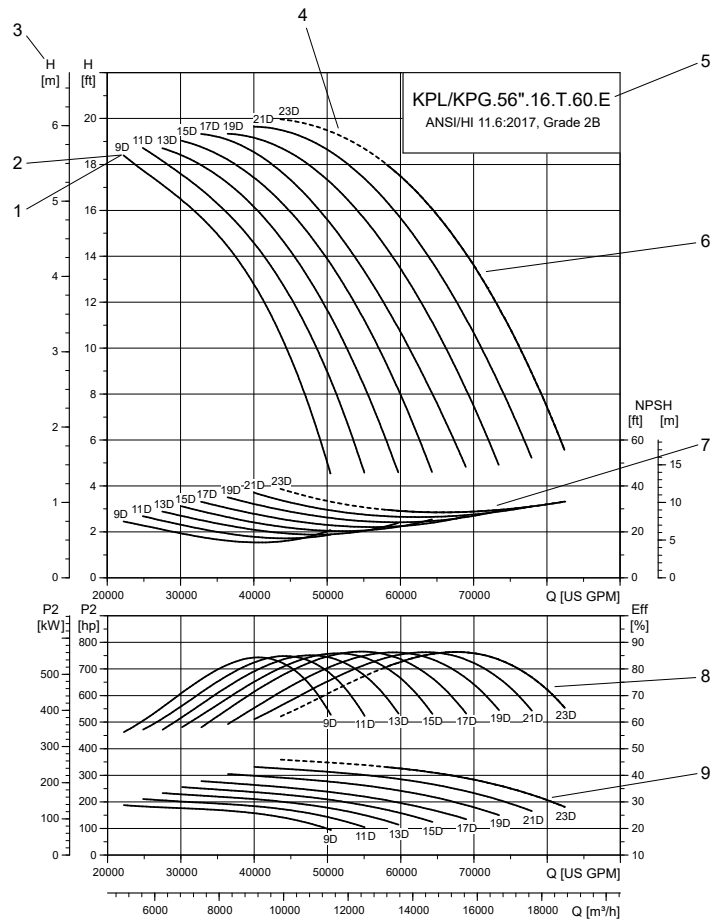
**Note:** Reverse start results in damage to the pump and column pipe. KPL and KWM pumps are forbidden to reverse start / operate.

- run flushing
- stop flushing
- PID control.

<sup>1</sup> These functions are only available with Grundfos CUE.

## 8. Performance curves and technical data

### 8.1 How to read the performance curves



TM077246

Pos.	Description
1	KPL/KPG - Propeller number
2	KWM - Impeller number
3	Total pump head: $H = H_{total}$
4	Limited P2 $P2_{max} = xx \text{ hp}$
5	Pump type
6	$P2_{max}$ range exceeded
7	NPSH curve <b>Note:</b> When sizing the pump, add a safety margin of at least 3 ft.
8	Hydraulic efficiency
9	Pump shaft power (P2)

The pumps are tested according to ANSI HI 11.6:2017 2B tolerance. Testing equipment and measuring instruments are designed and calibrated according to the standards mentioned. The pumps are approved according to tolerances for entire curves, specified in grade 2B.

## 8.2 Curve conditions

These guidelines apply to the curves indicated in the performance charts:

- Tolerances according to ANSI/HI 11.6: 2017, grade 2B
- The curves indicate pump performance with different impeller/propeller diameters at rated speed.
- NPSH: the curves indicate average values calculated under the same conditions as the performance curves.
- Consider setting up the pump based on the maximum and minimum inlet and outlet levels and select the duty point as close to the normal operating point as possible.
- Take both the net positive suction head (NPSH) and minimum water level (MWL) into consideration to avoid vortex dragging air into the pump inlet.

### Calculation of total head

$$H_{\text{total}} = H_{\text{geo}} + H_{\text{stat}} + H_{\text{dyn}}$$

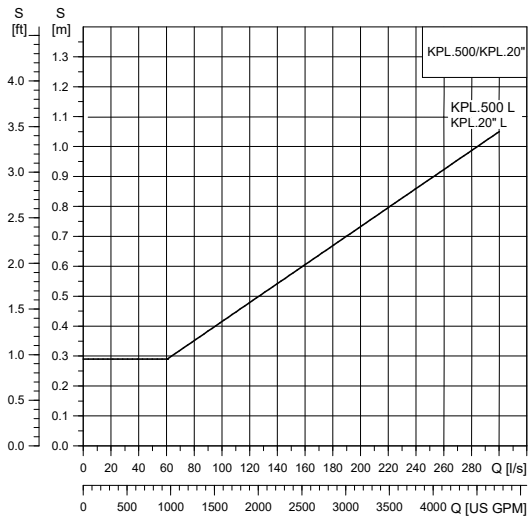
$H_{\text{geo}}$	Height difference between measuring points.
$H_{\text{stat}}$	Differential head between the inlet and the outlet side of the pump.
$H_{\text{dyn}}$	Calculated values based on the velocity of the pumped liquid on the inlet and the outlet side of the pump.

## 8.3 Performance tests

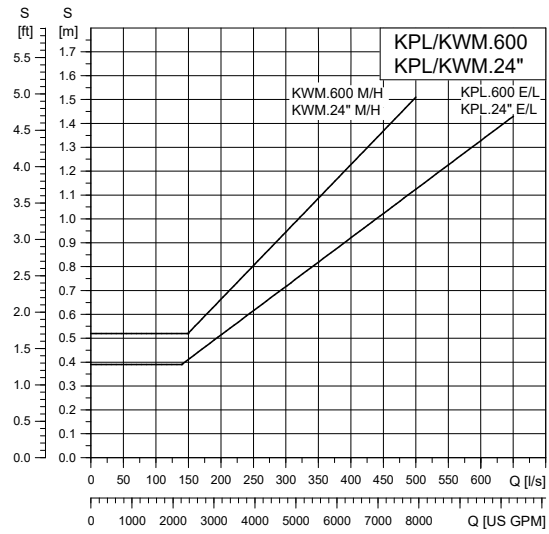
The requested duty point for every pump is tested according to ANSI HI 11.6:2017, grade 2B, and without certification.

### 8.4 Minimum water levels

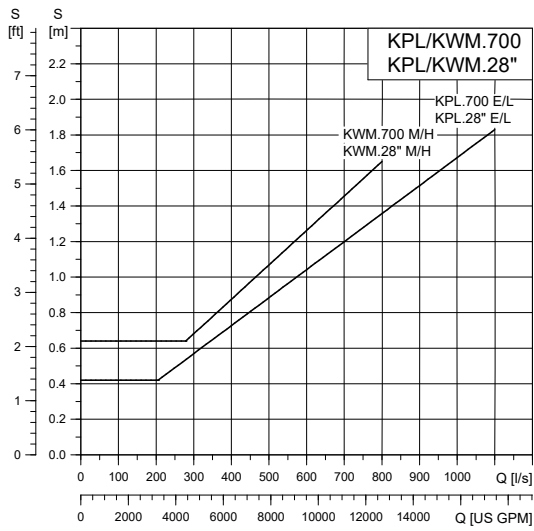
The curves charts below show the relation between flow rate and recommended minimum submergence (S).



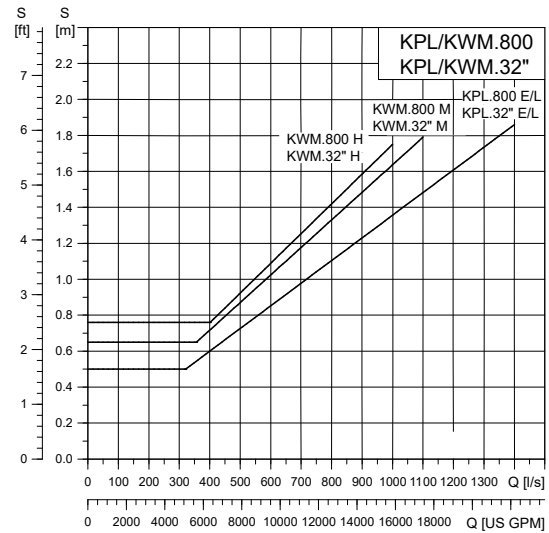
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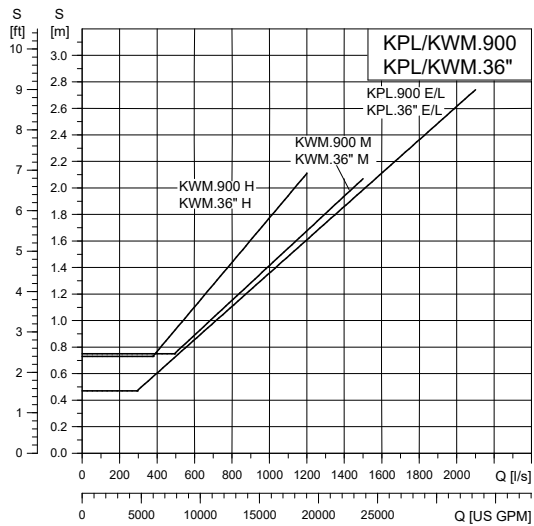
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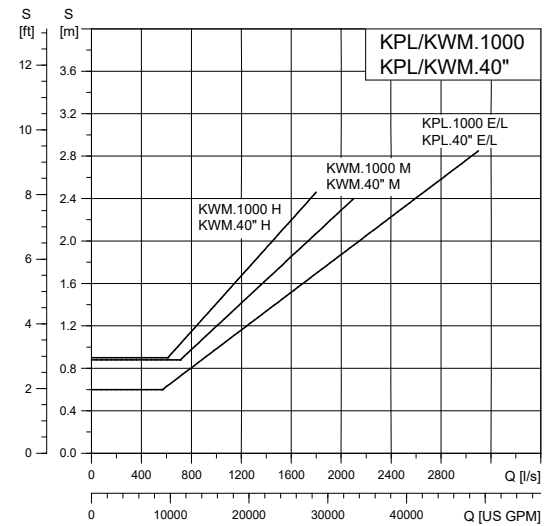
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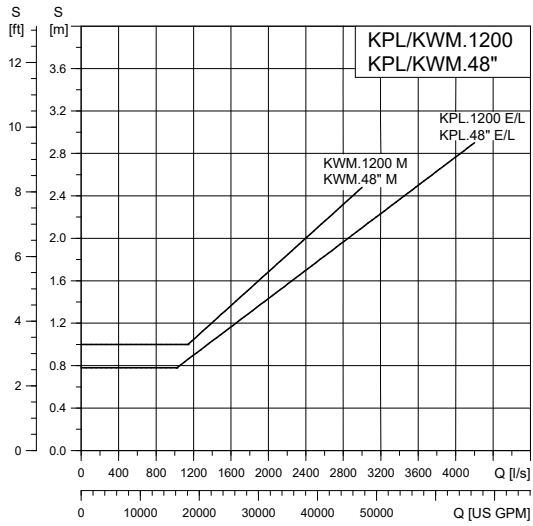
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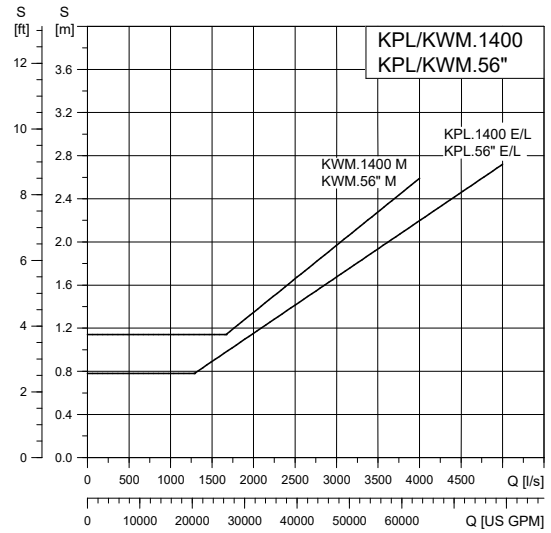
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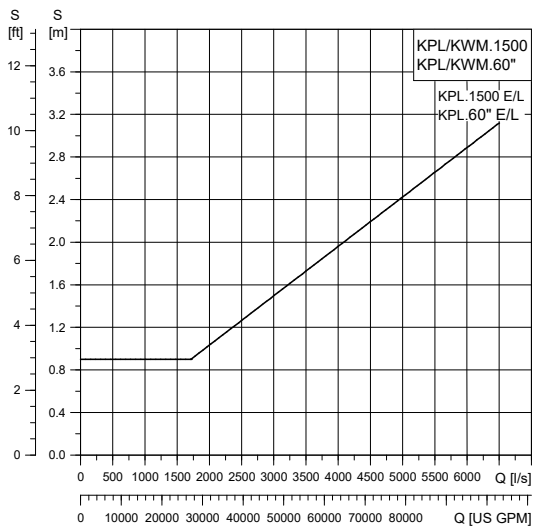
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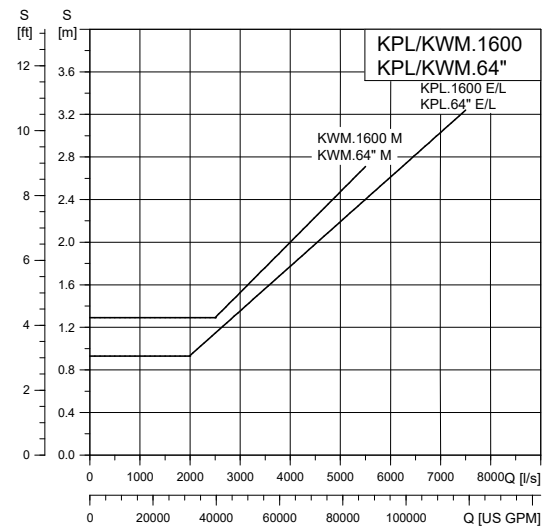
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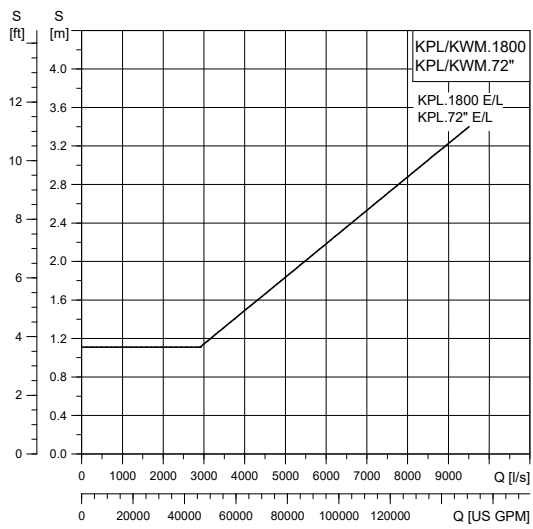
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TM078872



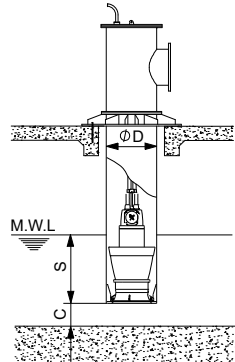
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TM078874

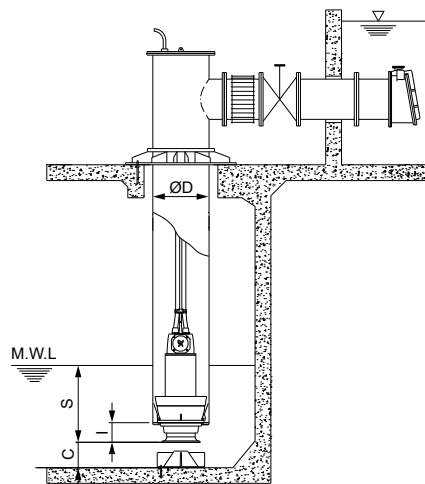
### 8.4.1 KPL installation requirements

$$\text{M.W.L} = \text{C} + \text{S}$$



TM055922

Minimum water level, KPL pump



TM059455

Installation dimensions, KPL pump, ACC installed

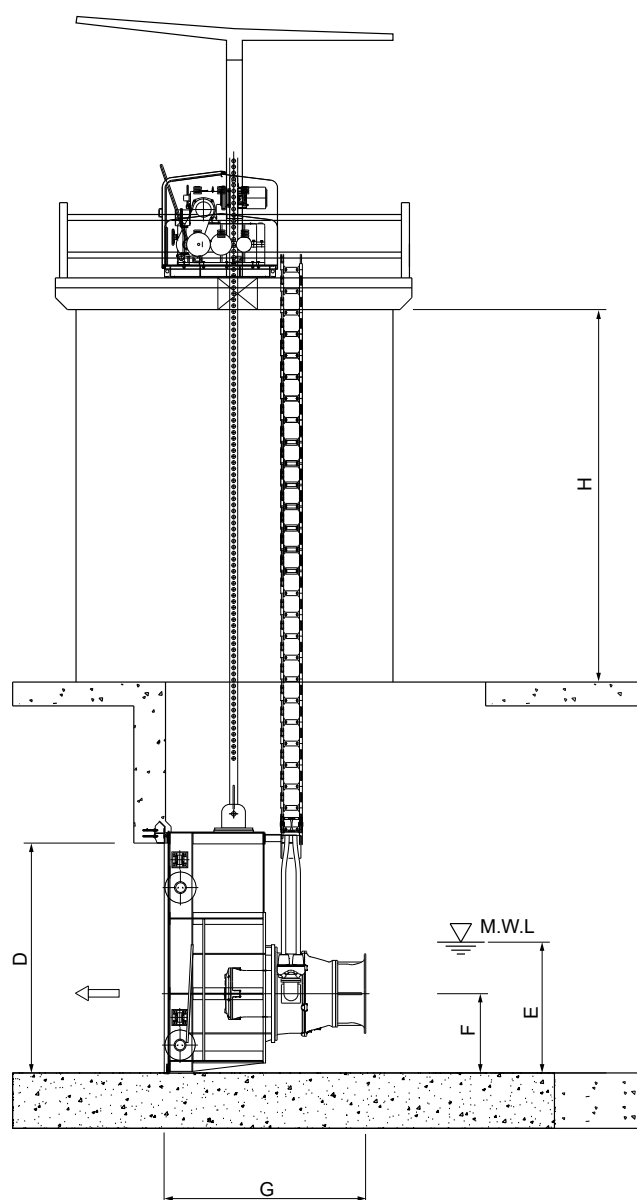
The requirements for installation are shown in the table below.

ØD [in]	C [in]
20	10
24	12
28	14
32	16
36	18
40	20
48	24
56	28

## 8.4.2 KPG installation requirements

The requirements for installation are shown in the table below.

ØD [in]	C [in]	S [in]	M.W.L* [in]
20	10	30-47	39-57
24	12	43-55	55-67
28	14	51-69	65-83
32	16	55-83	71-98
36	18	59-100	77-118
40	20	65-110	85-130
48	24	79-134	102-157
56	28	91-150	118-177



TM073741

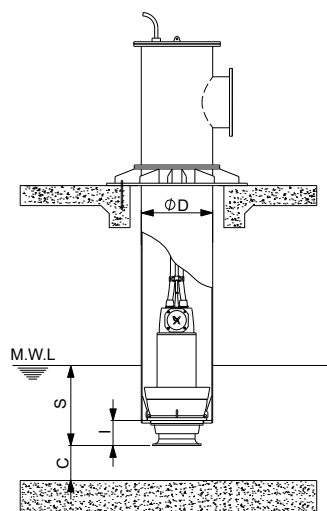
### Installation dimensions, KPG

Model	Outlet diameter [in]	D	E	F	G	H
KPG.20	20	57.09	35.43	19.69	49.21	145.67
KPG.24	24	66.93	41.34	23.62	59.06	165.35
KPG.28	28	66.93	49.21	27.56	59.06	177.17

KPG.32	32	76.77	55.12	31.50	68.90	177.17
KPG.36	36	86.61	62.99	33.46	78.74	204.72
KPG.40	40	86.61	68.90	35.43	78.74	204.72
KPG.48	48	96.46	78.74	43.31	88.58	224.41
KPG.56	56	96.46	88.58	51.18	88.58	224.41

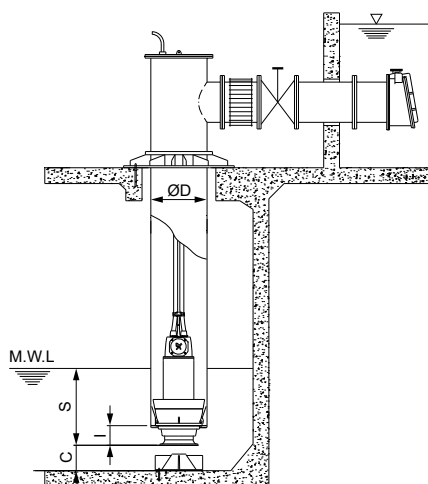
### 8.4.3 KWM installation requirements

$$M.W.L = C + S$$



TM059459

Installation dimensions, KWM pump



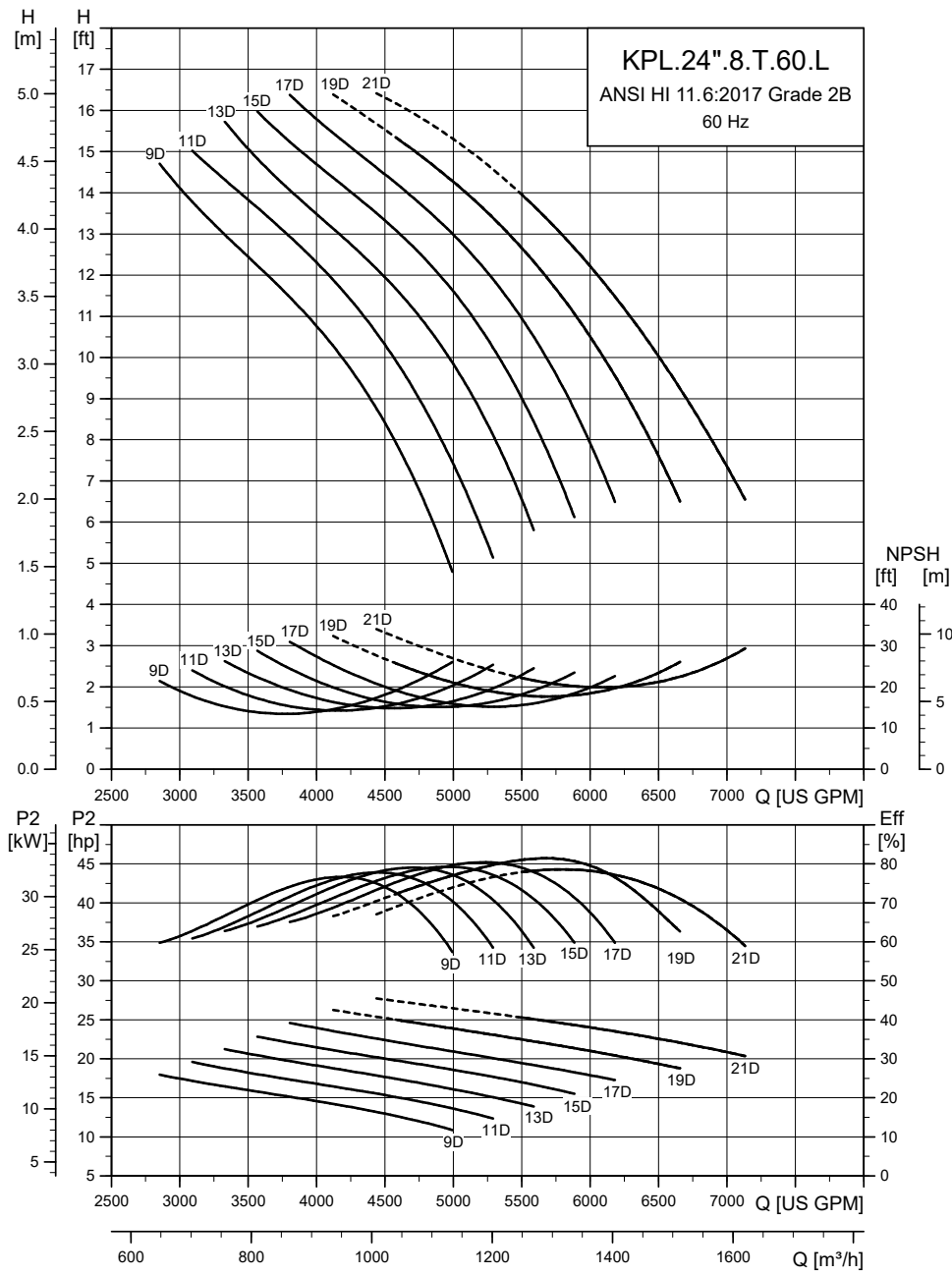
TM059455

Installation dimensions, KWM pump, ACC installed

The requirements for installation are shown in the table below.

ØD [in]	C [in]	I [in]
24H	12	10.6
24M	12	11
28	14	15.7
32H	16	16.7
32M	16	17.3
36	18	22.6
40H	20	22.6
40M	20	25.6
48	24	29.1
56	28	32.9
64	31	37.0

### 8.5 KPL.24".---.8.T.60.L



TM062133

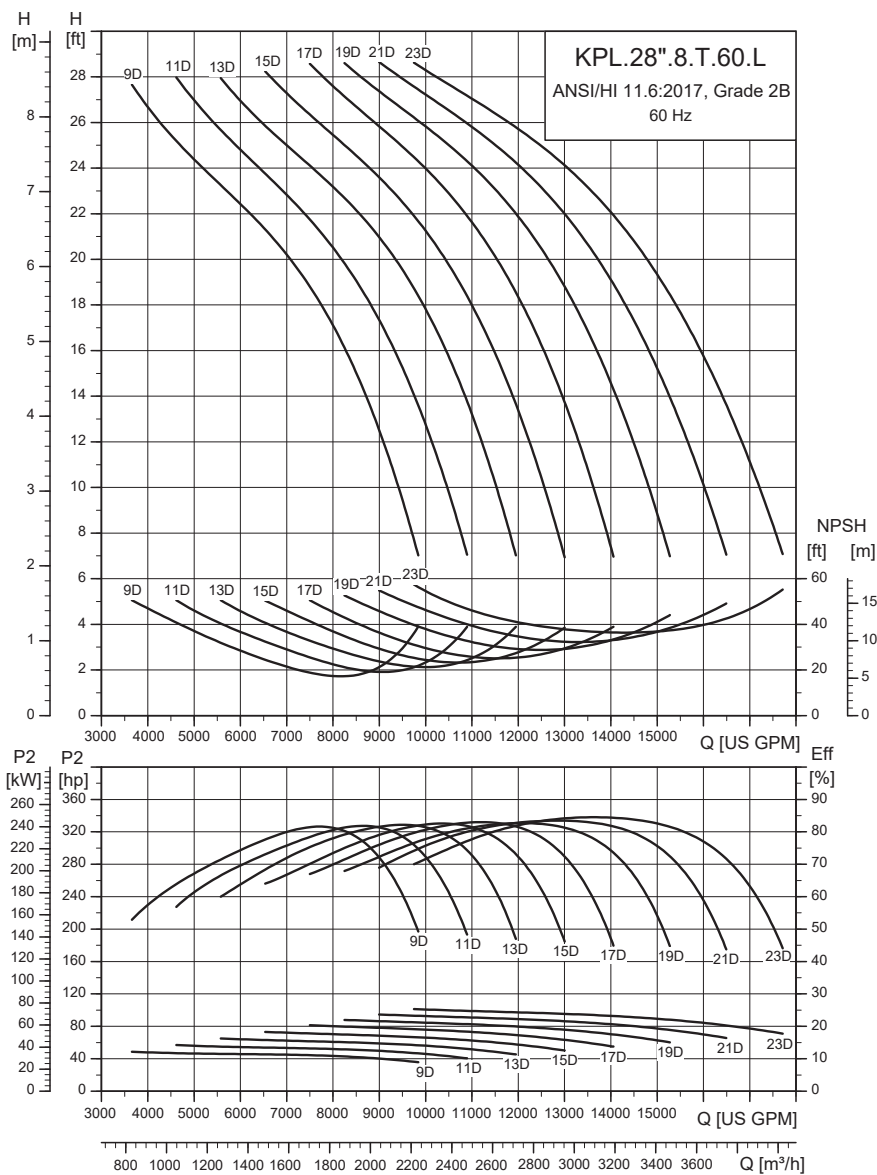
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf·ft²]	
								Motor	Propeller
KPL.24.20.8.T.60.9.L.46	8	24	9	15	4	2.0	2853.10	49.83	4.98
KPL.24.20.8.T.60.11.L.46	8	24	11	15	4	2.2	3090.80	49.83	4.98
KPL.24.20.8.T.60.13.L.46	8	24	13	15	4	2.4	3685.20	49.83	4.98
KPL.24.25.8.T.60.13.L.46	8	24	13	15	4	2.4	3328.60	64.07	4.98
KPL.24.25.8.T.60.15.L.46	8	24	15	15	4	2.6	3566.30	64.07	4.98
KPL.24.25.8.T.60.17.L.46	8	24	17	15	4	2.8	3804.10	64.07	4.98
KPL.24.25.8.T.60.19.L.46	8	24	19	15	4	3.0	4121.10	64.07	4.98
KPL.24.25.8.T.60.21.L.46	8	28	21	15	4	3.1	4438.10	64.07	4.98

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.24.20.8.T.60.9.L.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL.24.20.8.T.60.11.L.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL.24.20.8.T.60.13.L.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL.24.25.8.T.60.13.L.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL.24.25.8.T.60.15.L.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL.24.25.8.T.60.17.L.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL.24.25.8.T.60.19.L.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL.24.25.8.T.60.21.L.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875

### 8.6 KPL.28".---.8.T.60.L



TM062134

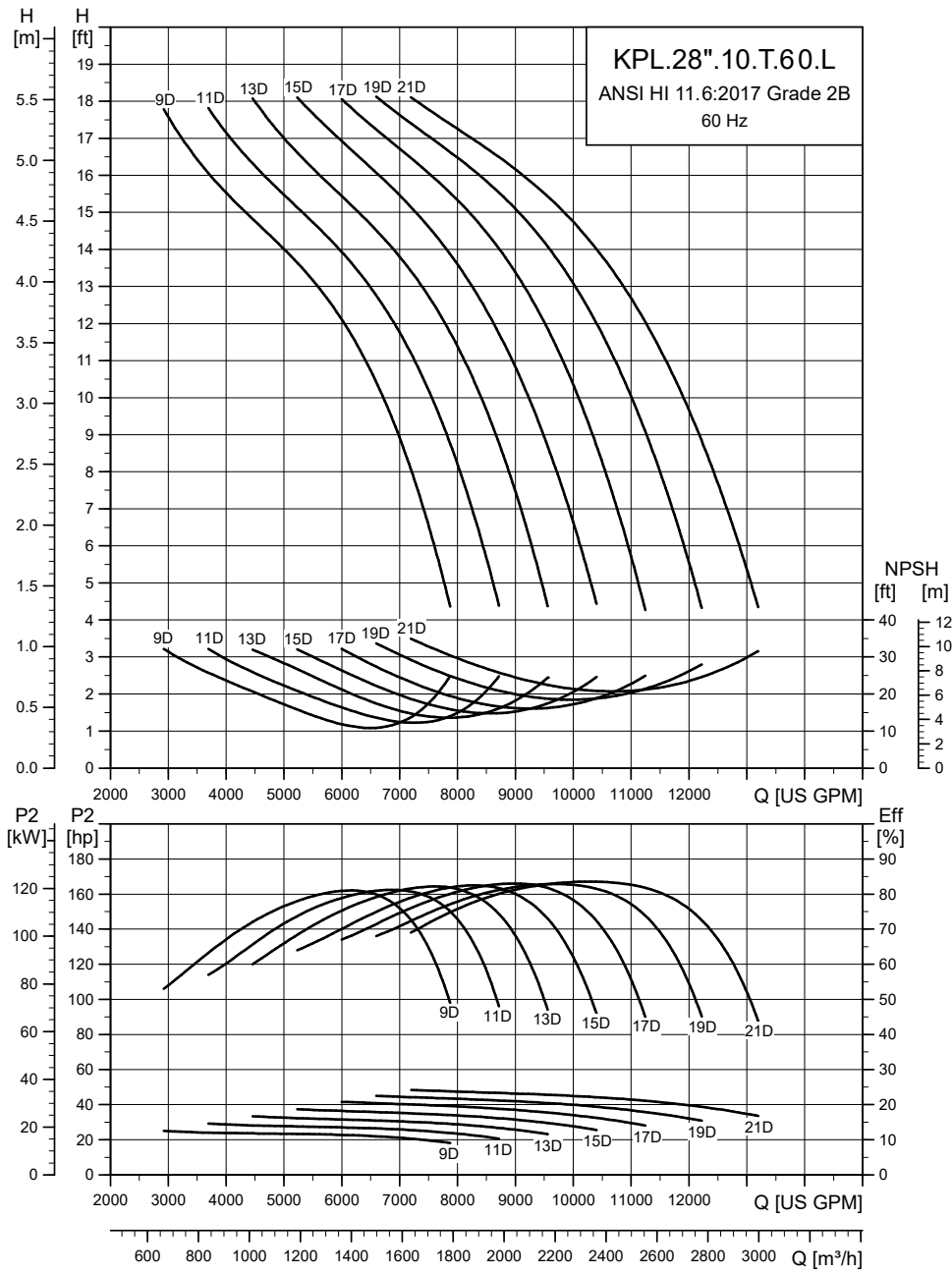
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf·ft²]	
								Motor	Propeller
KPL.28.50.8.T.60.9.L.46	8	28	9	18.5	4	2.8	3654.40	144.76	14.95
KPL.28.60.8.T.60.11.L.46	8	28	11	18.5	4	3.0	4614.20	163.74	14.95
KPL.28.60.8.T.60.13.L.46	8	28	13	18.5	4	3.1	6340.10	163.74	14.95
KPL.28.60.8.T.60.15.L.46	8	28	15	18.5	4	3.5	10311.50	163.74	14.95
KPL.28.75.8.T.60.15.L.46	8	28	15	18.5	4	3.5	10870.70	339.34	14.95
KPL.28.75.8.T.60.17.L.46	8	28	17	18.5	4	3.7	7498.10	339.34	14.95
KPL.28.75.8.T.60.19.L.46	8	28	19	18.5	4	3.9	13080.90	339.34	14.95
KPL.28.100.8.T.60.19.L.46	8	28	19	18.5	4	3.9	8246.60	405.79	14.95
KPL.28.100.8.T.60.21.L.46	8	28	21	18.5	4	4.1	8995.10	405.79	14.95
KPL.28.100.8.T.60.23.L.46	8	28	23	18.5	4	4.3	9747.90	405.79	14.95

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.28.50.8.T.60.9.L.46	50	875	374.82	68.15	86.50	86.00	88.50	60.00	72.00	77.00	G	665.225
KPL.28.60.8.T.60.11.L.46	60	875	450.38	81.89	87.00	86.00	89.00	60.50	72.50	77.50	G	774.375
KPL.28.60.8.T.60.13.L.46	60	875	450.38	81.89	87.00	86.00	89.00	60.50	72.50	77.50	G	774.375
KPL.28.60.8.T.60.15.L.46	60	875	450.38	81.89	87.00	86.00	89.00	60.50	72.50	77.50	G	774.375
KPL.28.75.8.T.60.15.L.46	75	875	491.29	98.26	87.50	86.00	89.50	61.50	73.50	78.50	F	946.2125
KPL.28.75.8.T.60.17.L.46	75	875	491.29	98.26	87.50	86.00	89.50	61.50	73.50	78.50	F	946.2125
KPL.28.75.8.T.60.19.L.46	75	875	491.29	98.26	87.50	86.00	89.50	61.50	73.50	78.50	F	946.2125
KPL.28.100.8.T.60.19.L.46	100	875	728.20	132.40	88.00	86.00	90.00	62.50	74.00	79.00	G	1288.4125
KPL.28.100.8.T.60.21.L.46	100	875	728.20	132.40	88.00	86.00	90.00	62.50	74.00	79.00	G	1288.4125
KPL.28.100.8.T.60.23.L.46	100	875	728.20	132.40	88.00	86.00	90.00	62.50	74.00	79.00	G	1288.4125

### 8.7 KPL.28".---.10.T.60.L



TM062135

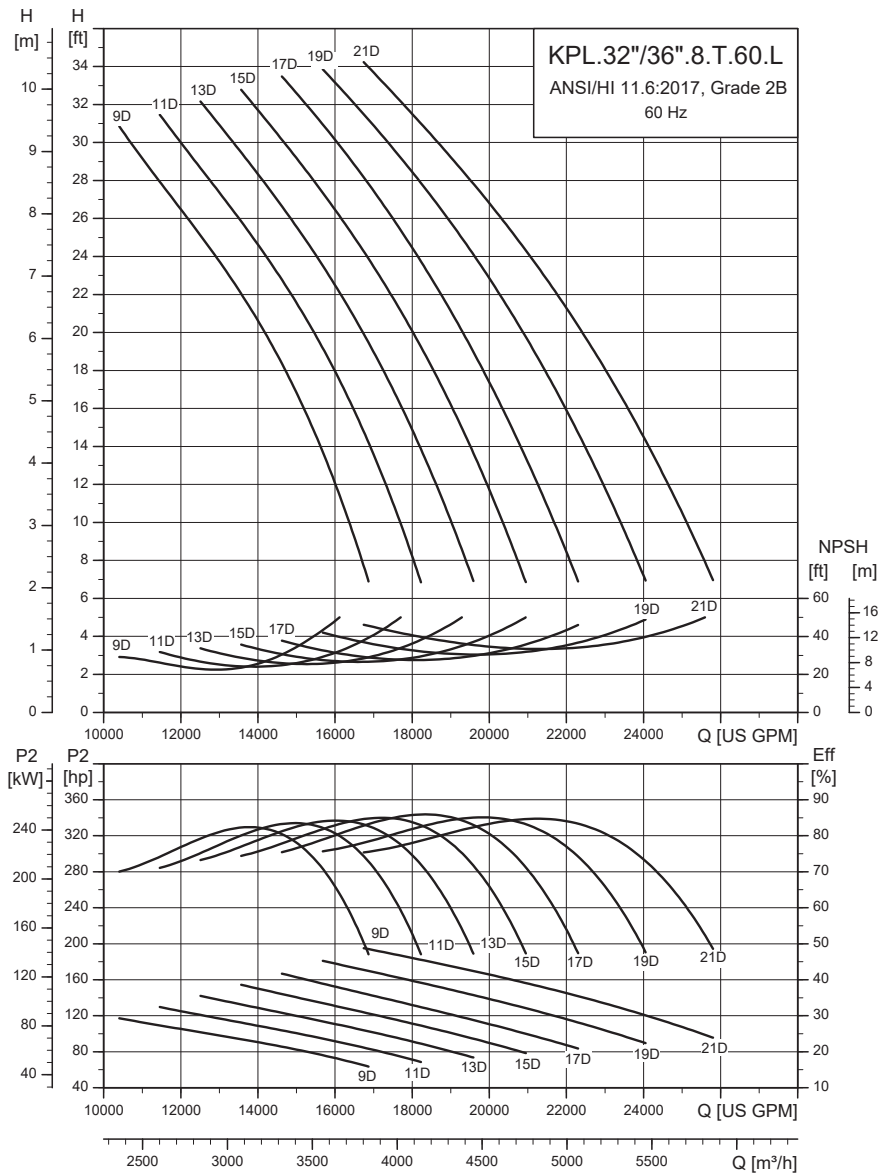
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft²]	
								Motor	Propeller
KPL.28.30.10.T.60.9.L.46	10	28	9	18.5	4	2.8	2923.50	135.26	14.95
KPL.28.30.10.T.60.11.L.46	10	28	11	18.5	4	3.0	3694.00	135.26	14.95
KPL.28.40.10.T.60.13.L.46	10	28	13	18.5	4	3.1	4460.10	161.37	14.95
KPL.28.40.10.T.60.15.L.46	10	28	15	18.5	4	3.5	5230.60	161.37	14.95
KPL.28.40.10.T.60.17.L.46	10	28	17	18.5	4	3.7	7044.60	161.37	14.95
KPL.28.50.10.T.60.17.L.46	10	28	17	18.5	4	3.7	5996.70	348.84	14.95
KPL.28.50.10.T.60.19.L.46	10	28	19	18.5	4	3.9	6595.50	348.84	14.95
KPL.28.50.10.T.60.21.L.46	10	32	21	18.5	4	4.1	7198.70	348.84	14.95

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.28.30.10.T.60.9.L.46	30	700	217.2	43.4	84.2	86.0	86.5	58.5	68.5	73.5	G	486.75
KPL.28.30.10.T.60.11.L.46	30	700	217.2	43.4	84.2	86.0	86.5	58.5	68.5	73.5	G	486.75
KPL.28.40.10.T.60.13.L.46	40	700	292.4	58.5	84.7	86.0	87.0	59.0	69.0	74.0	G	663.75
KPL.28.40.10.T.60.15.L.46	40	700	292.4	58.5	84.7	86.0	87.0	59.0	69.0	74.0	G	663.75
KPL.28.40.10.T.60.17.L.46	40	700	292.4	58.5	84.7	86.0	87.0	59.0	69.0	74.0	G	663.75
KPL.28.50.10.T.60.17.L.46	50	700	358.6	71.7	85.2	86.0	87.5	59.0	69.0	74.0	G	781.0125
KPL.28.50.10.T.60.19.L.46	50	700	358.6	71.7	85.2	86.0	87.5	59.0	69.0	74.0	G	781.0125
KPL.28.50.10.T.60.21.L.46	50	700	358.6	71.7	85.2	86.0	87.5	59.0	69.0	74.0	G	781.0125

### 8.8 KPL.32"/36".---.8.T.60.L



TM062136

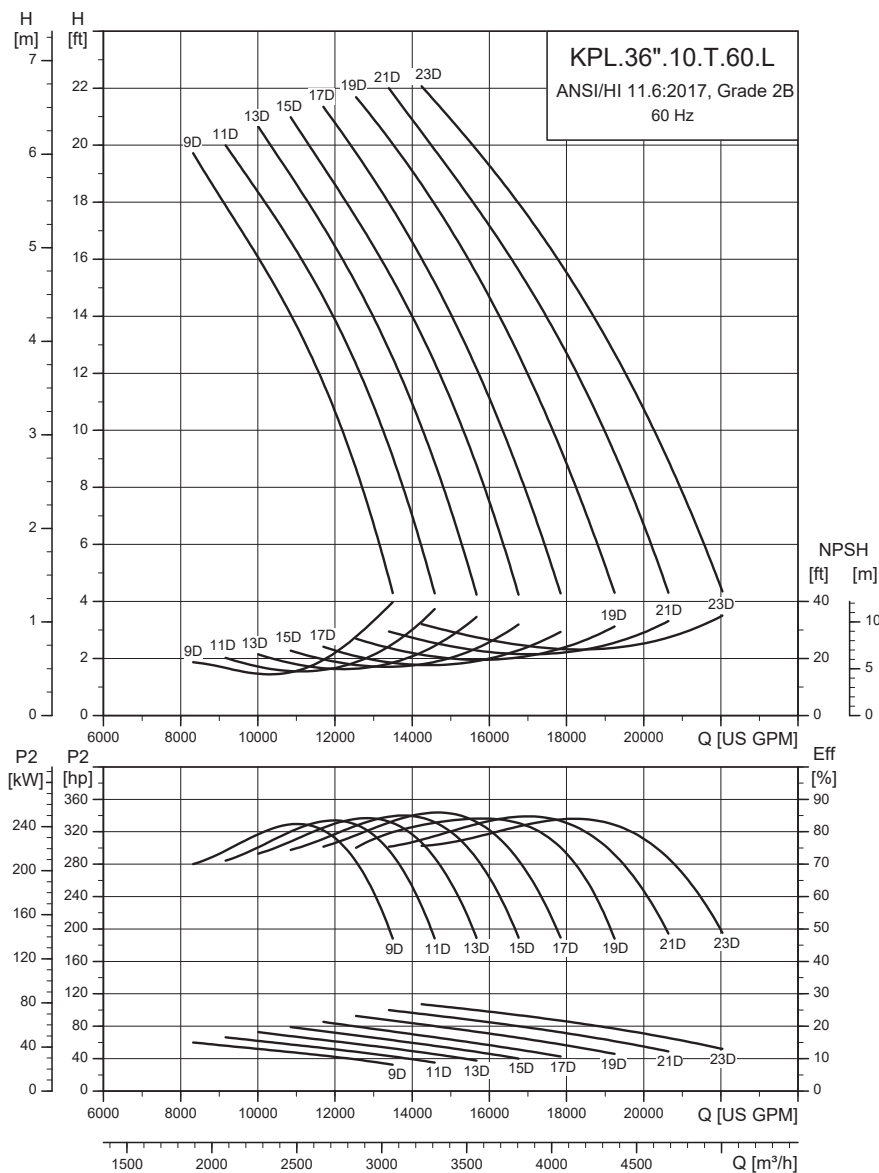
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.32.100.8.T.60.9.L.46	8	32	9	21.3	4	3.1	12134.30	405.79	27.29
KPL.32.100.8.T.60.11.L.46	8	32	11	21.3	4	3.3	14221.30	405.79	27.29
KPL.32.120.8.T.60.11.L.46	8	32	11	21.3	4	3.3	12649.40	500.71	27.29
KPL.32.120.8.T.60.13.L.46	8	36	13	21.3	4	3.5	14850.90	500.71	27.29
KPL.36.150.8.T.60.13.L.46	8	36	13	21.3	4	3.5	12508.50	844.80	27.29
KPL.36.150.8.T.60.15.L.46	8	36	15	21.3	4	3.7	14137.60	844.80	27.29
KPL.36.150.8.T.60.17.L.46	8	36	17	21.3	4	4.1	16475.50	844.80	27.29
KPL.36.150.8.T.60.19.L.46	8	36	19	21.3	4	4.3	18976.40	844.80	27.29
KPL.36.175.8.T.60.19.L.46	8	36	19	21.3	4	4.3	15678.60	837.68	27.29
KPL.36.175.8.T.60.21.L.46	8	36	21	21.3	4	4.6	18113.40	837.68	27.29
KPL.36.215.8.T.60.21.L.46	8	36	21	21.3	4	4.6	16744.10	887.52	27.29

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.32.100.8.T.60.9.L.46	100	875	728.2	132.4	88.0	86.0	90.0	62.5	74.0	79.0	G	1288.4125
KPL.32.100.8.T.60.11.L.46	100	875	728.2	132.4	88.0	86.0	90.0	62.5	74.0	79.0	G	1288.4125
KPL.32.120.8.T.60.11.L.46	120	875	866.4	157.5	88.2	86.0	90.2	64.0	74.5	79.5	G	1473.525
KPL.32.120.8.T.60.13.L.46	120	875	866.4	157.5	88.2	86.0	90.2	64.0	74.5	79.5	G	1473.525
KPL.36.150.8.T.60.13.L.46	150	875	1036.6	188.5	89.0	86.0	91.0	65.5	75.5	80.5	F	1654.95
KPL.36.150.8.T.60.15.L.46	150	875	1036.6	188.5	89.0	86.0	91.0	65.5	75.5	80.5	F	1654.95
KPL.36.150.8.T.60.17.L.46	150	875	1036.6	188.5	89.0	86.0	91.0	65.5	75.5	80.5	F	1654.95
KPL.36.150.8.T.60.19.L.46	150	875	1036.6	188.5	89.0	86.0	91.0	65.5	75.5	80.5	F	1654.95
KPL.36.175.8.T.60.19.L.46	175	875	1211.5	220.3	90.4	91.4	91.5	68.3	77.5	82.2	F	2771.525
KPL.36.175.8.T.60.21.L.46	175	875	1211.5	220.3	90.4	91.4	91.5	68.3	77.5	82.2	F	2771.525
KPL.36.215.8.T.60.21.L.46	215	875	1456.6	264.8	90.9	91.7	91.8	67.4	77.7	82.6	F	3282.6125

### 8.9 KPL.36".---.10.T.60.L



TM062137

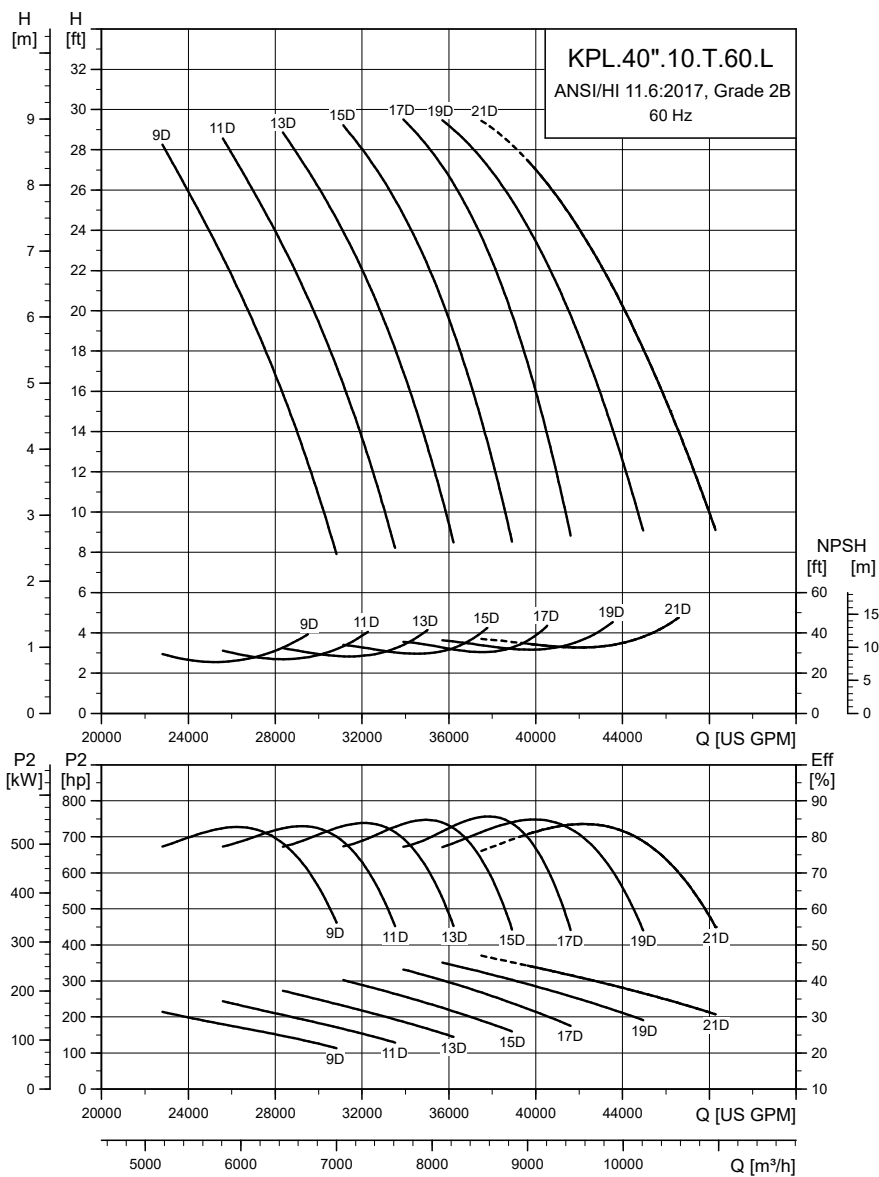
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft²]	
								Motor	Propeller
KPL.36.60.10.T.60.9.L.46	10	36	9	21.3	4	3.1	8321.40	401.04	27.29
KPL.36.60.10.T.60.11.L.46	10	36	11	21.3	4	3.3	10126.60	401.04	27.29
KPL.36.60.10.T.60.13.L.46	10	36	13	21.3	4	3.5	11887.70	401.04	27.29
KPL.36.75.10.T.60.13.L.46	10	36	13	21.3	4	3.5	10007.70	465.12	27.29
KPL.36.75.10.T.60.15.L.46	10	36	15	21.3	4	3.7	11447.50	465.12	27.29
KPL.36.75.10.T.60.17.L.46	10	36	17	21.3	4	4.1	13428.70	465.12	27.29
KPL.36.100.10.T.60.17.L.46	10	36	17	21.3	4	4.1	11694.00	757.00	27.29
KPL.36.100.10.T.60.19.L.46	10	36	19	21.3	4	4.3	12543.80	757.00	27.29
KPL.36.100.10.T.60.21.L.46	10	36	21	21.3	4	4.6	13393.50	757.00	27.29
KPL.36.120.10.T.60.21.L.46	10	36	21	21.3	4	4.6	13393.50	849.55	27.29
KPL.36.120.10.T.60.23.L.46	10	40	23	21.3	4	4.9	14243.30	849.55	27.29

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.36.60.10.T.60.9.L.46	60	700	430.76	86.2	85.7	87.8	88.0	59.5	69.5	74.5	G	950.6375
KPL.36.60.10.T.60.11.L.46	60	700	430.76	86.2	85.7	87.8	88.0	59.5	69.5	74.5	G	950.6375
KPL.36.60.10.T.60.13.L.46	60	700	430.76	86.2	85.7	87.8	88.0	59.5	69.5	74.5	G	950.6375
KPL.36.75.10.T.60.13.L.46	75	700	516.58	103.3	86.2	88.3	88.5	60.5	70.5	75.5	F	1161.5625
KPL.36.75.10.T.60.15.L.46	75	700	516.58	103.3	86.2	88.3	88.5	60.5	70.5	75.5	F	1161.5625
KPL.36.75.10.T.60.17.L.46	75	700	516.58	103.3	86.2	88.3	88.5	60.5	70.5	75.5	F	1161.5625
KPL.36.100.10.T.60.17.L.46	100	700	691.31	138.3	87.0	88.7	89.0	61.5	71.5	76.5	F	1508.1875
KPL.36.100.10.T.60.19.L.46	100	700	691.31	138.3	87.0	88.7	89.0	61.5	71.5	76.5	F	1508.1875
KPL.36.100.10.T.60.21.L.46	100	700	691.31	138.3	87.0	88.7	89.0	61.5	71.5	76.5	F	1508.1875
KPL.36.120.10.T.60.21.L.46	120	700	819.58	163.9	87.5	89.3	89.5	62.0	72.0	77.0	F	1809.825
KPL.36.120.10.T.60.23.L.46	120	700	819.58	163.9	87.5	89.3	89.5	62.0	72.0	77.0	F	1809.825

### 8.10 KPL.40".----.10.T.60.L



TM062138

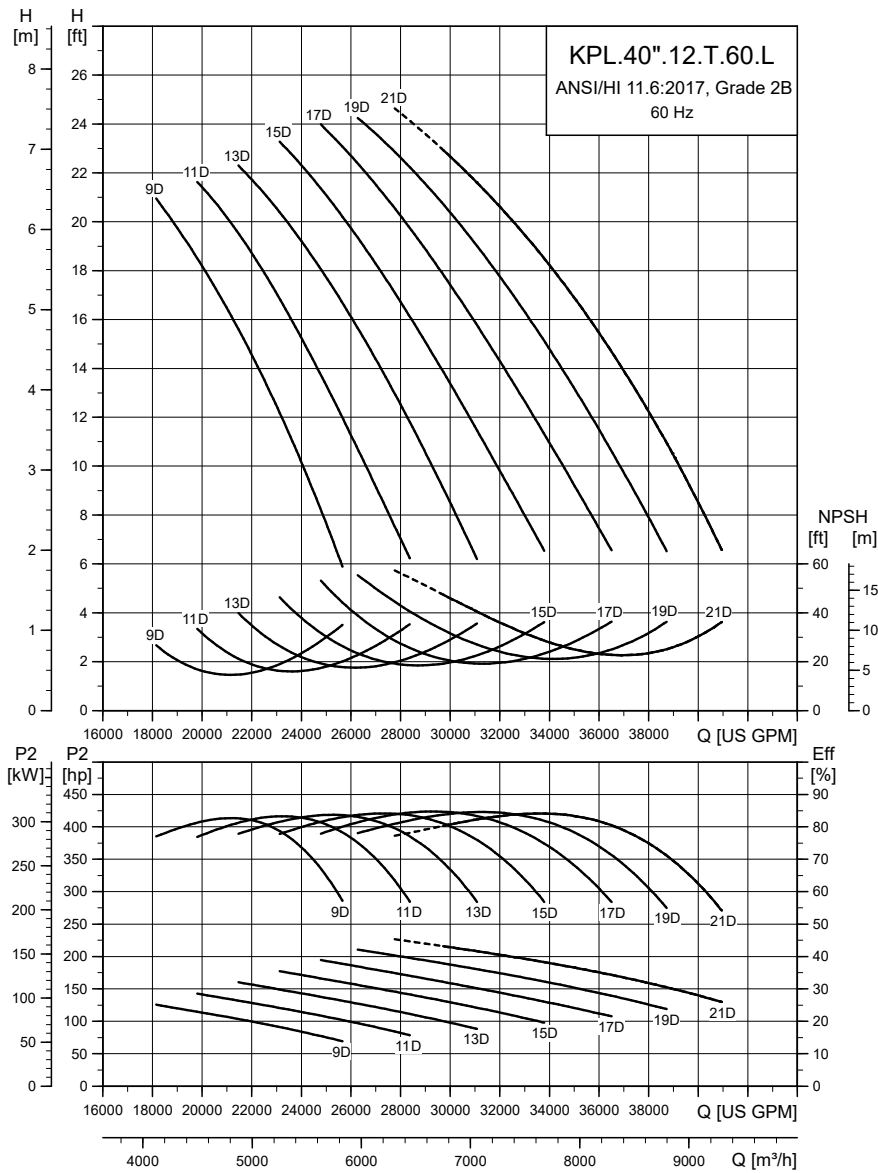
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.40.175.10.T.60.9.L.46	10	40	9	27.6	4	3.7	25633.50	968.20	103.70
KPL.40.175.10.T.60.11.L.46	10	40	11	27.6	4	3.9	29851.40	968.20	103.70
KPL.40.215.10.T.60.11.L.46	10	40	11	27.6	4	3.9	27038.00	1416.70	103.70
KPL.40.215.10.T.60.13.L.46	10	40	13	27.6	4	4.3	31982.40	1416.70	103.70
KPL.40.265.10.T.60.13.L.46	10	40	13	27.6	4	4.3	28354.50	1542.47	103.70
KPL.40.265.10.T.60.15.L.46	10	40	15	27.6	4	4.7	32739.70	1542.47	103.70
KPL.40.265.10.T.60.17.L.46	10	40	17	27.6	4	5.1	36984.10	1542.47	103.70
KPL.40.335.10.T.60.17.L.46	10	40	17	27.6	4	5.1	33902.10	1815.37	103.70
KPL.40.335.10.T.60.19.L.46	10	40	19	27.6	4	5.5	356676.30	1815.37	103.70
KPL.40.335.10.T.60.21.L.46	10	40	21	27.6	4	6.1	39603.80	1815.37	103.70

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.40.175.10.T.60.9.L.46	175	700	1188.77	237.75	90.30	90.40	90.50	60.30	71.60	77.00	F	3191.1625
KPL.40.175.10.T.60.11.L.46	175	700	1188.77	237.75	90.30	90.40	90.50	60.30	71.60	77.00	F	3191.1625
KPL.40.215.10.T.60.11.L.46	215	700	1498.84	272.52	90.90	91.90	92.00	64.50	75.50	80.10	F	3812.875
KPL.40.215.10.T.60.13.L.46	215	700	1498.84	272.52	90.90	91.90	92.00	64.50	75.50	80.10	F	3812.875
KPL.40.265.10.T.60.13.L.46	265	700	1678.58	335.72	90.90	92.10	92.20	66.00	76.20	81.10	F	4543.7375
KPL.40.265.10.T.60.15.L.46	265	700	1678.58	335.72	90.90	92.10	92.20	66.00	76.20	81.10	F	4543.7375
KPL.40.265.10.T.60.17.L.46	265	700	1678.58	335.72	90.90	92.10	92.20	66.00	76.20	81.10	F	4543.7375
KPL.40.335.10.T.60.17.L.46	335	700	2091.74	418.35	91.20	92.40	92.60	66.40	76.40	81.00	E	6023.1625
KPL.40.335.10.T.60.19.L.46	335	700	2091.74	418.35	91.20	92.40	92.60	66.40	76.40	81.00	E	6023.1625
KPL.40.335.10.T.60.21.L.46	335	700	2091.74	418.35	91.20	92.40	92.60	66.40	76.40	81.00	E	6023.1625

### 8.11 KPL.40".---.12.T.60.L



TM062139

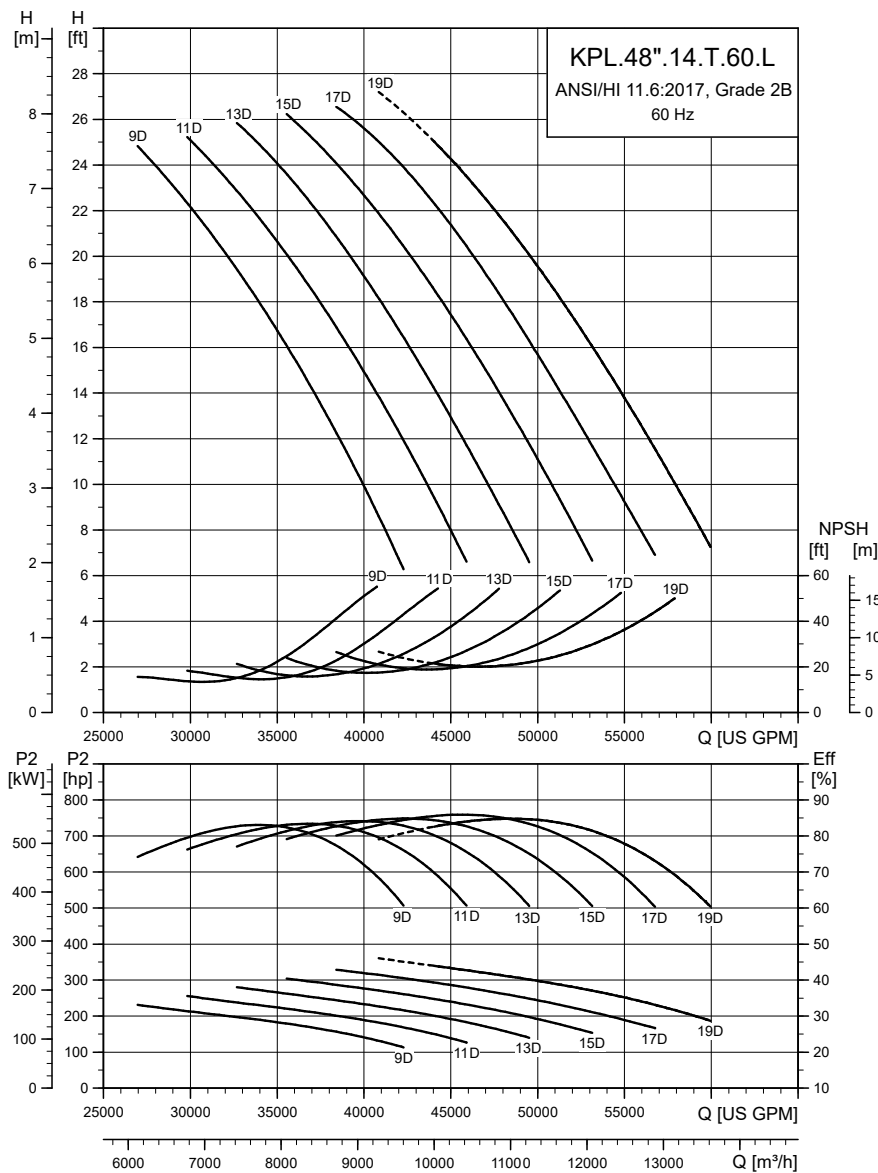
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf <sup>2</sup> ]	
								Motor	Propeller
KPL.40.120.12.T.60.9.L.46	12	40	9	27.6	4	3.7	18144.2	1034.64	103.70
KPL.40.120.12.T.60.11.L.46	12	40	11	27.6	4	3.9	22278.5	1034.64	103.70
KPL.40.175.12.T.60.11.L.46	12	40	11	27.6	4	3.9	19804.1	1214.99	103.70
KPL.40.175.12.T.60.13.L.46	12	40	13	27.6	4	4.3	21464	1214.99	103.70
KPL.40.175.12.T.60.15.L.46	12	40	15	27.6	4	4.7	23119.5	1214.99	103.70
KPL.40.175.12.T.60.17.L.46	12	40	17	27.6	4	5.1	26694.6	1214.99	103.70
KPL.40.215.12.T.60.19.L.46	12	40	19	27.6	4	5.5	26271.9	1881.82	103.70
KPL.40.215.12.T.60.21.L.46	12	48	21	27.6	4	6.1	29785.4	1881.82	103.70

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.40.120.12.T.60.9.L.46	120	585	900.72	163.77	89.80	89.90	91.00	56.00	69.00	75.80	G	2455.875
KPL.40.120.12.T.60.11.L.46	120	585	900.72	163.77	89.80	89.90	91.00	56.00	69.00	75.80	G	2455.875
KPL.40.175.12.T.60.11.L.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL.40.175.12.T.60.13.L.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL.40.175.12.T.60.15.L.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL.40.175.12.T.60.17.L.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL.40.215.12.T.60.19.L.46	215	585	1598.85	290.70	91.40	91.50	91.50	60.60	70.60	75.50	G	6276.125
KPL.40.215.12.T.60.21.L.46	215	585	1598.85	290.70	91.40	91.50	91.50	60.60	70.60	75.50	G	6276.125

### 8.12 KPL.48".----.14.T.60.L



TM062140

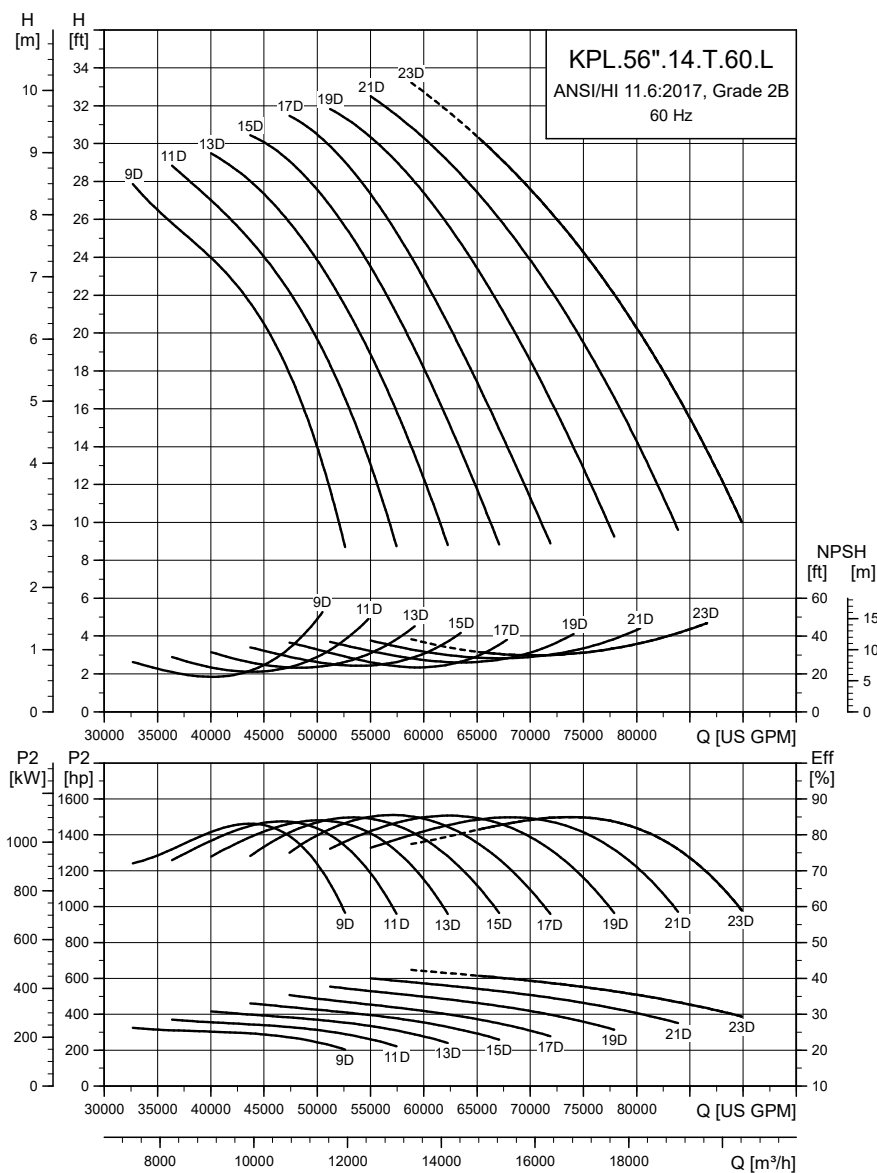
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.48.215.14.T.60.9.L.46	14	48	9	33.9	4	4.7	26958.8	2838.15	233.27
KPL.48.215.14.T.60.11.L.46	14	48	11	33.9	4	5.1	35971.4	2838.15	233.27
KPL.48.215.14.T.60.13.L.46	14	48	13	33.9	4	5.5	41976.9	2838.15	233.27
KPL.48.265.14.T.60.13.L.46	14	48	13	33.9	4	5.5	33968.1	3331.74	233.27
KPL.48.265.14.T.60.15.L.46	14	48	15	33.9	4	5.9	40000.0	3331.74	233.27
KPL.48.265.14.T.60.17.L.46	14	48	17	33.9	4	6.3	46296.1	3331.74	233.27
KPL.48.335.14.T.60.17.L.46	14	48	17	33.9	4	6.3	38401.8	3611.76	233.27
KPL.48.335.14.T.60.19.L.46	14	56	19	33.9	4	6.7	44380.9	3611.76	233.27

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.48.215.14.T.60.9.L.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL.48.215.14.T.60.11.L.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL.48.215.14.T.60.13.L.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL.48.265.14.T.60.13.L.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL.48.265.14.T.60.15.L.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL.48.265.14.T.60.17.L.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL.48.335.14.T.60.17.L.46	335	500	2289.29	457.86	91.40	91.50	91.50	60.50	69.90	74.90	F	7820.45
KPL.48.335.14.T.60.19.L.46	335	500	2289.29	457.86	91.40	91.50	91.50	60.50	69.90	74.90	F	7820.45

### 8.13 KPL.56".----.14.T.60.L



TM062141

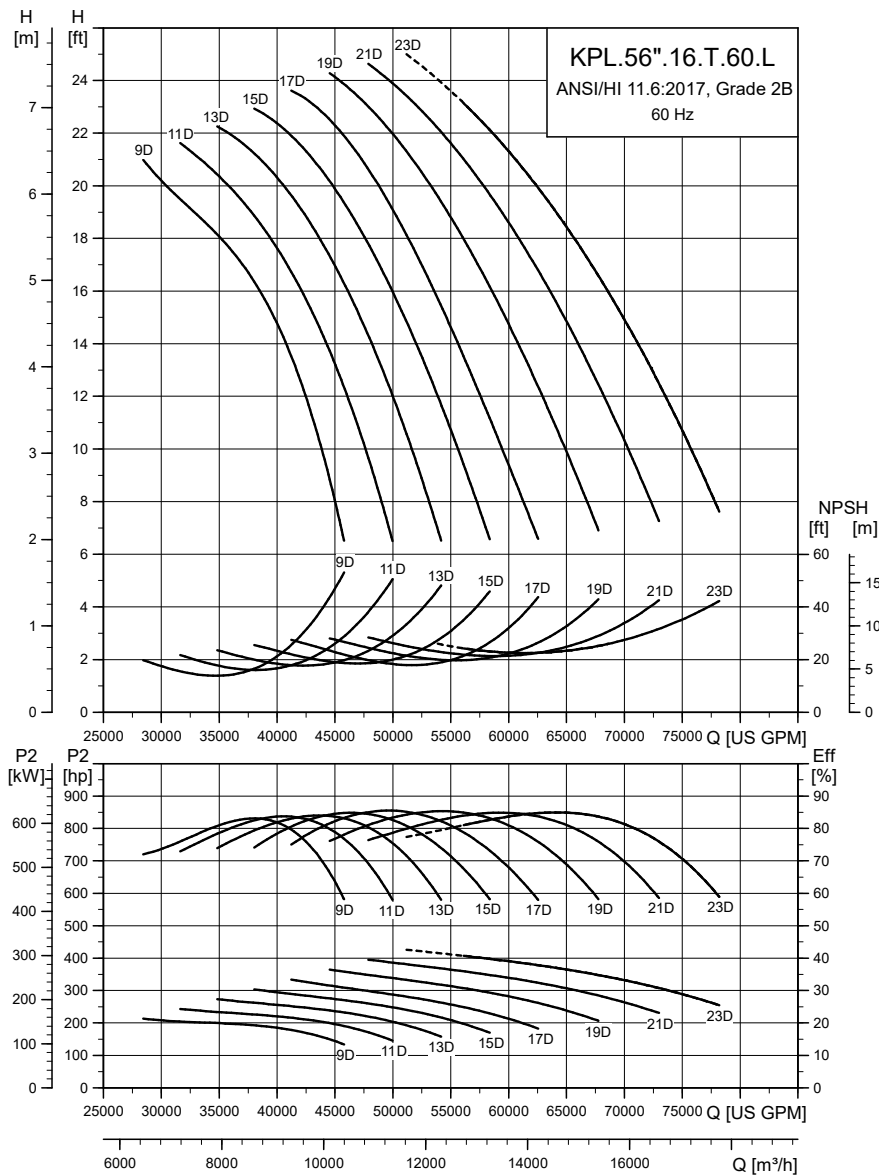
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.56.335.14.T.60.9.L.46	14	56	9	37.4	4	5.3	32682.50	3611.76	363.07
KPL.56.335.14.T.60.11.L.46	14	56	11	37.4	4	5.7	44218.00	3611.76	363.07
KPL.56.400.14.T.60.11.L.46	14	56	11	37.4	4	5.7	36358.90	5595.62	363.07
KPL.56.400.14.T.60.13.L.46	14	56	13	37.4	4	6.3	40035.30	5595.62	363.07
KPL.56.400.14.T.60.15.L.46	14	56	15	37.4	4	6.7	51883.40	5595.62	363.07
KPL.56.500.14.T.60.15.L.46	14	56	15	37.4	4	6.7	43711.70	6077.35	363.07
KPL.56.500.14.T.60.17.L.46	14	56	17	37.4	4	7.1	47269.20	6077.35	363.07
KPL.56.500.14.T.60.19.L.46	14	56	19	37.4	4	7.5	57726.00	6077.35	363.07
KPL.56.600.14.T.60.21.L.46	14	56	21	37.4	4	8.1	55013.80	11250.56	363.07
KPL.56.600.14.T.60.23.L.46	14	56	23	37.4	4	8.7	64532.80	11250.56	363.07

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.56.335.14.T.60.9.L.46	335	500	2289.29	457.86	91.40	91.50	91.50	60.50	69.90	74.90	F	7820.45
KPL.56.335.14.T.60.11.L.46	335	500	2289.29	457.86	91.40	91.50	91.50	60.50	69.90	74.90	F	7820.45
KPL.56.400.14.T.60.11.L.46	400	500	2655.39	531.08	92.00	92.10	92.20	59.40	70.60	76.90	F	10921.6375
KPL.56.400.14.T.60.13.L.46	400	500	2655.39	531.08	92.00	92.10	92.20	59.40	70.60	76.90	F	10921.6375
KPL.56.400.14.T.60.15.L.46	400	500	2655.39	531.08	92.00	92.10	92.20	59.40	70.60	76.90	F	10921.6375
KPL.56.500.14.T.60.15.L.46	500	500	3296.33	659.27	92.30	92.50	92.60	59.90	71.00	77.10	F	11343.4875
KPL.56.500.14.T.60.17.L.46	500	500	3296.33	659.27	92.30	92.50	92.60	59.90	71.00	77.10	F	11343.4875
KPL.56.500.14.T.60.19.L.46	500	500	3296.33	659.27	92.30	92.50	92.60	59.90	71.00	77.10	F	11343.4875
KPL.56.600.14.T.60.21.L.46	600	500	3920.00	784.00	92.50	92.60	92.60	59.80	71.70	77.80	F	14833.3375
KPL.56.600.14.T.60.23.L.46	600	500	3920.00	784.00	92.50	92.60	92.60	59.80	71.70	77.80	F	14833.3375

### 8.14 KPL.56".----.16.T.60.L



TM062142

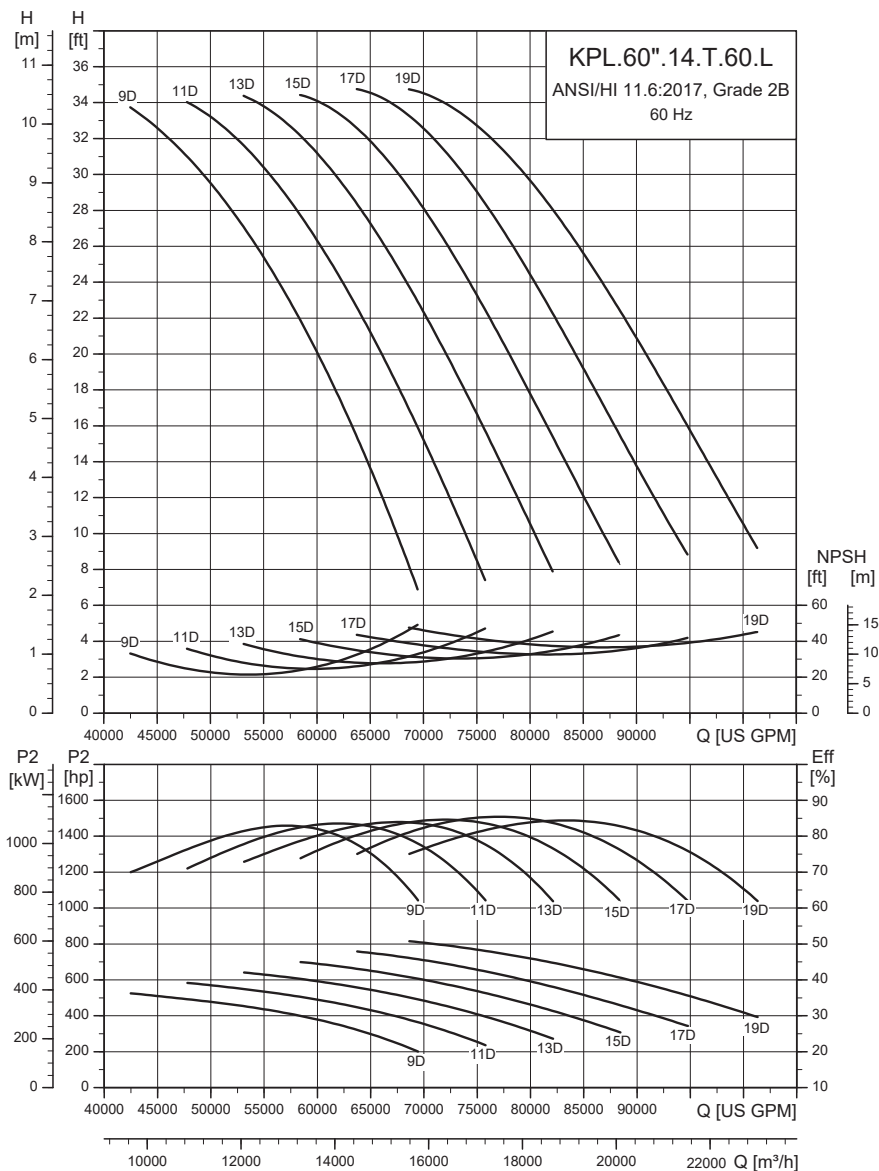
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft²]	
								Motor	Propeller
KPL.56.215.16.T.60.9.L.46	16	56	9	37.4	4	5.3	28433.70	3495.48	363.07
KPL.56.215.16.T.60.11.L.46	16	56	11	37.4	4	5.7	40154.10	3495.48	363.07
KPL.56.265.16.T.60.11.L.46	16	56	11	37.4	4	5.7	31630.20	3569.05	363.07
KPL.56.265.16.T.60.13.L.46	16	56	13	37.4	4	6.3	34831.10	3569.05	363.07
KPL.56.265.16.T.60.15.L.46	16	56	15	37.4	4	6.7	45129.40	3569.05	363.07
KPL.56.335.16.T.60.15.L.46	16	56	15	37.4	4	6.7	38027.60	5524.43	363.07
KPL.56.335.16.T.60.17.L.46	16	56	17	37.4	4	7.1	41228.40	5524.43	363.07
KPL.56.335.16.T.60.19.L.46	16	56	19	37.4	4	7.5	48563.60	5524.43	363.07
KPL.56.400.16.T.60.19.L.46	16	56	19	37.4	4	7.5	44543.80	5726.14	363.07
KPL.56.400.16.T.60.21.L.46	16	56	21	37.4	4	8.1	47863.60	5726.14	363.07
KPL.56.400.16.T.60.23.L.46	16	60	23	37.4	4	8.7	56141.00	5726.14	363.07

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.56.215.16.T.60.9.L.46	215	435	1532.98	306.60	89.90	91.00	91.10	51.70	65.00	71.90	G	6017.2625
KPL.56.215.16.T.60.11.L.46	215	435	1532.98	306.60	89.90	91.00	91.10	51.70	65.00	71.90	G	6017.2625
KPL.56.265.16.T.60.11.L.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL.56.265.16.T.60.13.L.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL.56.265.16.T.60.15.L.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL.56.335.16.T.60.15.L.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.56.335.16.T.60.17.L.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.56.335.16.T.60.19.L.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.56.400.16.T.60.19.L.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.56.400.16.T.60.21.L.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.56.400.16.T.60.23.L.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775

### 8.15 KPL.60".----.14.T.60.L



TM062143

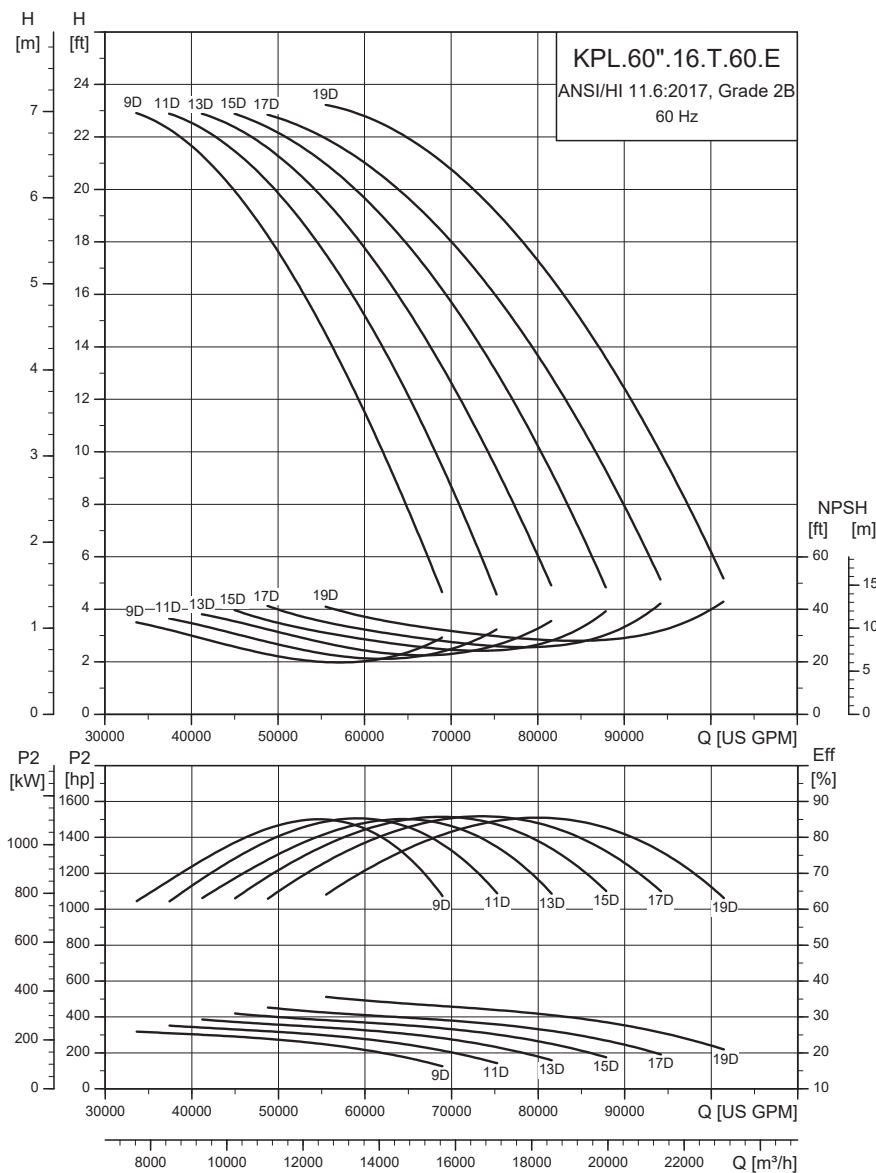
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.60.500.14.T.60.9.L.46	14	60	9	41.7	4	6.1	44469.00	6077.35	363.07
KPL.60.500.14.T.60.11.L.46	14	60	11	41.7	4	6.5	57809.60	6077.35	363.07
KPL.60.500.14.T.60.13.L.46	14	60	13	41.7	4	7.1	68244.40	6077.35	363.07
KPL.60.600.14.T.60.13.L.46	14	60	13	41.7	4	7.1	58078.20	11250.56	363.07
KPL.60.600.14.T.60.15.L.46	14	60	15	41.7	4	7.7	68821.20	11250.56	363.07
KPL.60.600.14.T.60.17.L.46	14	60	17	41.7	4	8.1	78261.00	11250.56	363.07
KPL.60.665.14.T.60.15.L.46	14	60	15	41.7	4	7.7	61111.80	12500.68	363.07
KPL.60.665.14.T.60.17.L.46	14	60	17	41.7	4	8.1	71898.80	12500.68	363.07
KPL.60.665.14.T.60.19.L.46	14	60	19	41.7	4	8.5	82003.40	12500.68	363.07
KPL.60.730.14.T.60.19.L.46	14	64	19	41.7	4	8.5	77688.60	13751.74	363.07

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.60.500.14.T.60.9.L.46	500	500	3296.33	659.27	92.30	92.50	92.60	59.90	71.00	77.10	F	11343.4875
KPL.60.500.14.T.60.11.L.46	500	500	3296.33	659.27	92.30	92.50	92.60	59.90	71.00	77.10	F	11343.4875
KPL.60.500.14.T.60.13.L.46	500	500	3296.33	659.27	92.30	92.50	92.60	59.90	71.00	77.10	F	11343.4875
KPL.60.600.14.T.60.13.L.46	600	500	3920.00	784.00	92.50	92.60	92.60	59.80	71.70	77.80	F	14833.3375
KPL.60.600.14.T.60.15.L.46	600	500	3920.00	784.00	92.50	92.60	92.60	59.80	71.70	77.80	F	14833.3375
KPL.60.600.14.T.60.17.L.46	600	500	3920.00	784.00	92.50	92.60	92.60	59.80	71.70	77.80	F	14833.3375
KPL.60.665.14.T.60.15.L.46	665	500	4359.38	871.88	92.30	92.40	92.40	60.00	71.80	77.90	F	16310.55
KPL.60.665.14.T.60.17.L.46	665	500	4359.38	871.88	92.30	92.40	92.40	60.00	71.80	77.90	F	16310.55
KPL.60.665.14.T.60.19.L.46	665	500	4359.38	871.88	92.30	92.40	92.40	60.00	71.80	77.90	F	16310.55
KPL.60.730.14.T.60.19.L.46	730	500	5358.07	956.80	92.40	92.50	92.50	60.20	71.90	78.00	G	17938.95

### 8.16 KPL.60".----.16.T.60.E



TM065183

#### Pump data

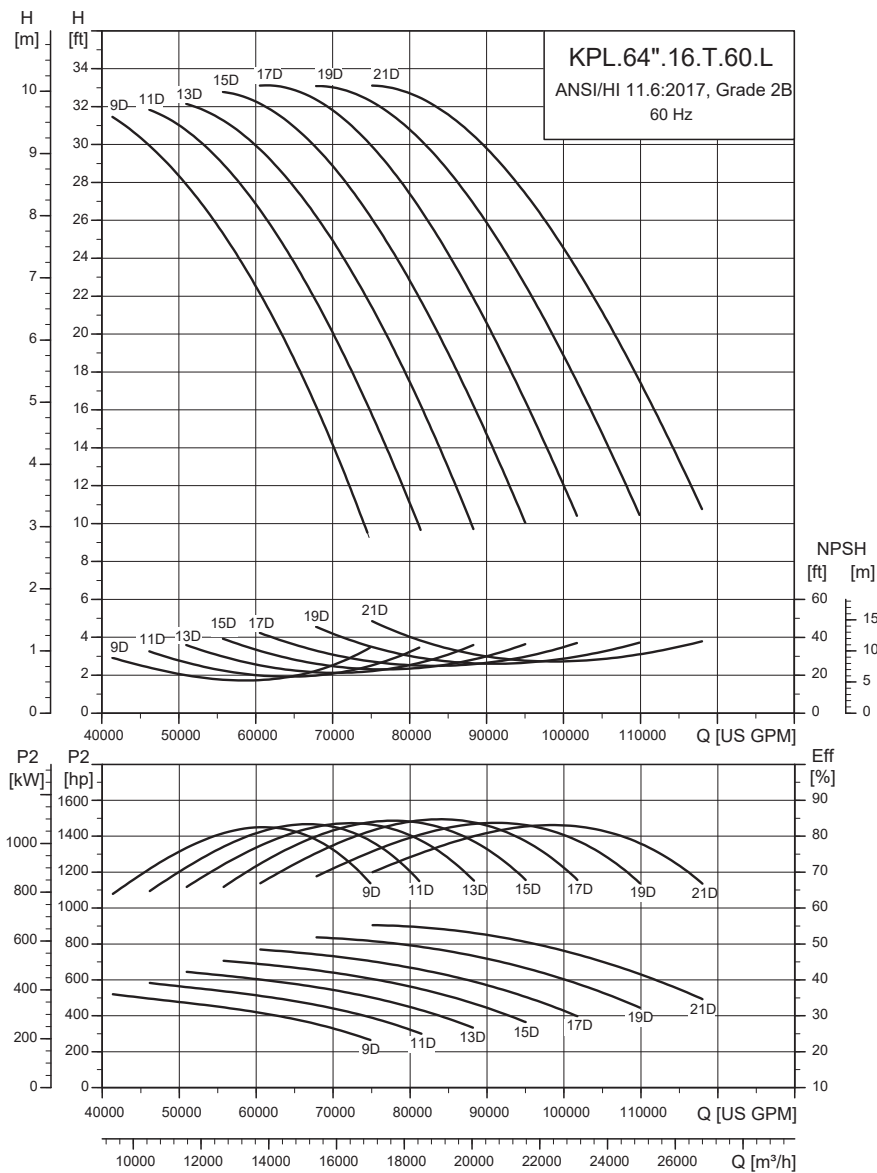
Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.60.265.16.T.60.9.E.46	16	60	9	41.7	3	6.5	47088.70	3569.05	299.00
KPL.60.265.16.T.60.11.E.46	16	60	11	41.7	3	6.9	58439.30	3569.05	299.00
KPL.60.335.16.T.60.9.E.46	16	60	9	41.7	3	6.5	33633.50	5524.43	299.00
KPL.60.335.16.T.60.11.E.46	16	60	11	41.7	3	6.9	44557.00	5524.43	299.00
KPL.60.335.16.T.60.13.E.46	16	60	13	41.7	3	7.5	56753.00	5524.43	299.00
KPL.60.335.16.T.60.15.E.46	16	60	15	41.7	3	8.1	67689.70	5524.43	299.00
KPL.60.335.16.T.60.17.E.46	16	60	17	41.7	3	8.7	77688.60	5524.43	299.00
KPL.60.400.16.T.60.11.E.46	16	60	11	41.7	3	6.9	37415.60	5726.14	299.00
KPL.60.400.16.T.60.13.E.46	16	60	13	41.7	3	7.5	41202.00	5726.14	299.00
KPL.60.400.16.T.60.15.E.46	16	60	15	41.7	3	8.1	44984.10	5726.14	299.00
KPL.60.400.16.T.60.17.E.46	16	60	17	41.7	3	8.7	66417.20	5726.14	299.00
KPL.60.400.16.T.60.19.E.46	16	60	19	41.7	3	9.3	79317.60	5726.14	299.00

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.60.470.16.T.60.15.E.46	16	60	15	41.7	3	8.1	44984.10	6680.57	299.00
KPL.60.470.16.T.60.17.E.46	16	60	17	41.7	3	8.7	48770.60	6680.57	299.00
KPL.60.470.16.T.60.19.E.46	16	60	19	41.7	3	9.3	63898.80	6680.57	299.00
KPL.60.540.16.T.60.19.E.46	16	64	19	41.7	3	9.3	55493.70	7634.77	299.00

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.60.265.16.T.60.9.E.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL.60.265.16.T.60.11.E.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL.60.335.16.T.60.9.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.60.335.16.T.60.11.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.60.335.16.T.60.13.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.60.335.16.T.60.15.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.60.335.16.T.60.17.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL.60.400.16.T.60.11.E.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.60.400.16.T.60.13.E.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.60.400.16.T.60.15.E.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.60.400.16.T.60.17.E.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.60.400.16.T.60.19.E.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.60.470.16.T.60.15.E.46	470	435	3497.49	635.91	91.30	91.50	91.50	62.60	72.00	75.50	G	13100.2125
KPL.60.470.16.T.60.17.E.46	470	435	3497.49	635.91	91.30	91.50	91.50	62.60	72.00	75.50	G	13100.2125
KPL.60.470.16.T.60.19.E.46	470	435	3497.49	635.91	91.30	91.50	91.50	62.60	72.00	75.50	G	13100.2125
KPL.60.540.16.T.60.19.E.46	540	435	3983.14	724.21	91.50	91.60	91.70	62.70	72.10	75.60	G	14814.1625

### 8.17 KPL.64".----.16.T.60.L



TM062144

#### Pump data

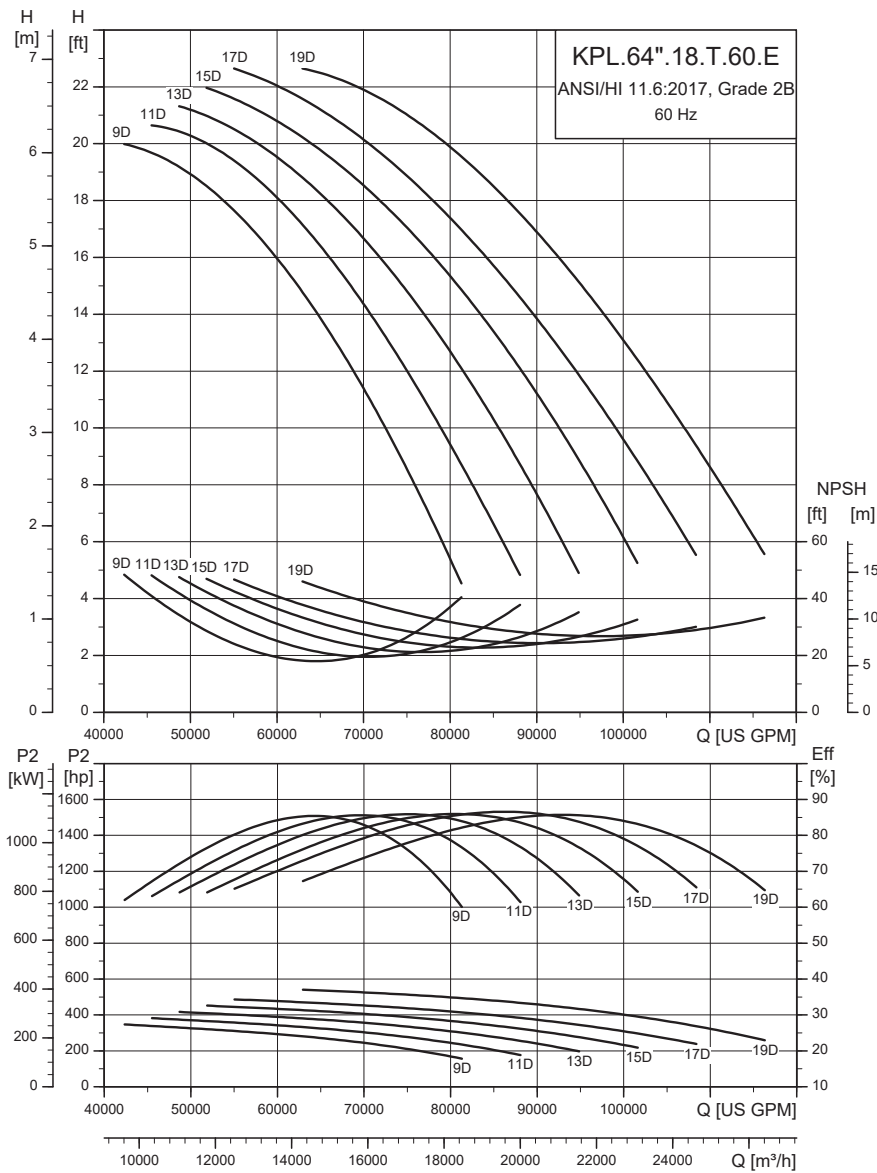
Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft²]	
								Motor	Propeller
KPL.64.400.16.T.60.9.L.46	16	64	9	45.3	4	6.5	60539.40	5726.14	881.11
KPL.64.400.16.T.60.11.L.46	16	64	11	45.3	4	7.1	72207.00	5726.14	881.11
KPL.64.470.16.T.60.9.L.46	16	64	9	45.3	4	6.5	49312.10	6680.57	881.11
KPL.64.470.16.T.60.11.L.46	16	64	11	45.3	4	7.1	66087.00	6680.57	881.11
KPL.64.470.16.T.60.13.L.46	16	64	13	45.3	4	7.7	76587.90	6680.57	881.11
KPL.64.540.16.T.60.9.L.46	16	64	9	45.3	4	6.5	41369.30	7634.77	881.11
KPL.64.540.16.T.60.11.L.46	16	64	11	45.3	4	7.1	53715.00	7634.77	881.11
KPL.64.540.16.T.60.13.L.46	16	64	13	45.3	4	7.7	66923.60	7634.77	881.11
KPL.64.540.16.T.60.15.L.46	16	64	15	45.3	4	8.3	82267.60	7634.77	881.11
KPL.64.600.16.T.60.11.L.46	16	64	11	45.3	4	7.1	46164.10	8589.20	881.11
KPL.64.600.16.T.60.13.L.46	16	64	13	45.3	4	7.7	58426.00	8589.20	881.11
KPL.64.600.16.T.60.15.L.46	16	64	15	45.3	4	8.3	73087.60	8589.20	881.11
KPL.64.600.16.T.60.17.L.46	16	64	17	45.3	4	8.9	85415.60	8589.20	881.11
KPL.64.665.16.T.60.13.L.46	16	64	13	45.3	4	7.7	50954.40	9543.64	881.11

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.64.665.16.T.60.15.L.46	16	64	15	45.3	4	8.3	55749.10	9543.64	881.11
KPL.64.665.16.T.60.17.L.46	16	64	17	45.3	4	8.9	77930.70	9543.64	881.11
KPL.64.665.16.T.60.19.L.46	16	64	19	45.3	4	9.4	93781.10	9543.64	881.11
KPL.64.665.16.T.60.21.L.46	16	64	21	45.3	4	10	106549.40	9543.64	881.11

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.64.400.16.T.60.9.L.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.64.400.16.T.60.11.L.46	400	435	2787.29	557.46	91.80	91.90	91.90	52.60	66.10	73.50	F	11252.775
KPL.64.470.16.T.60.9.L.46	470	435	3497.49	635.91	91.30	91.50	91.50	62.60	72.00	75.50	G	13100.2125
KPL.64.470.16.T.60.11.L.46	470	435	3497.49	635.91	91.30	91.50	91.50	62.60	72.00	75.50	G	13100.2125
KPL.64.470.16.T.60.13.L.46	470	435	3497.49	635.91	91.30	91.50	91.50	62.60	72.00	75.50	G	13100.2125
KPL.64.540.16.T.60.9.L.46	540	435	3983.14	724.21	91.50	91.60	91.70	62.70	72.10	75.60	G	14814.1625
KPL.64.540.16.T.60.11.L.46	540	435	3983.14	724.21	91.50	91.60	91.70	62.70	72.10	75.60	G	14814.1625
KPL.64.540.16.T.60.13.L.46	540	435	3983.14	724.21	91.50	91.60	91.70	62.70	72.10	75.60	G	14814.1625
KPL.64.540.16.T.60.15.L.46	540	435	3983.14	724.21	91.50	91.60	91.70	62.70	72.10	75.60	G	14814.1625
KPL.64.600.16.T.60.11.L.46	600	435	4465.38	811.89	91.80	91.90	91.90	62.80	72.20	75.70	G	16674.875
KPL.64.600.16.T.60.13.L.46	600	435	4465.38	811.89	91.80	91.90	91.90	62.80	72.20	75.70	G	16674.875
KPL.64.600.16.T.60.15.L.46	600	435	4465.38	811.89	91.80	91.90	91.90	62.80	72.20	75.70	G	16674.875
KPL.64.600.16.T.60.17.L.46	600	435	4465.38	811.89	91.80	91.90	91.90	62.80	72.20	75.70	G	16674.875
KPL.64.665.16.T.60.13.L.46	665	435	4944.22	898.95	92.00	92.10	92.10	62.90	72.30	75.80	G	18461.8375
KPL.64.665.16.T.60.15.L.46	665	435	4944.22	898.95	92.00	92.10	92.10	62.90	72.30	75.80	G	18461.8375
KPL.64.665.16.T.60.17.L.46	665	435	4944.22	898.95	92.00	92.10	92.10	62.90	72.30	75.80	G	18461.8375
KPL.64.665.16.T.60.19.L.46	665	435	4944.22	898.95	92.00	92.10	92.10	62.90	72.30	75.80	G	18461.8375
KPL.64.665.16.T.60.21.L.46	665	435	4944.22	898.95	92.00	92.10	92.10	62.90	72.30	75.80	G	18461.8375

### 8.18 KPL.64".----.18.T.60.E



TM065182

#### Pump data

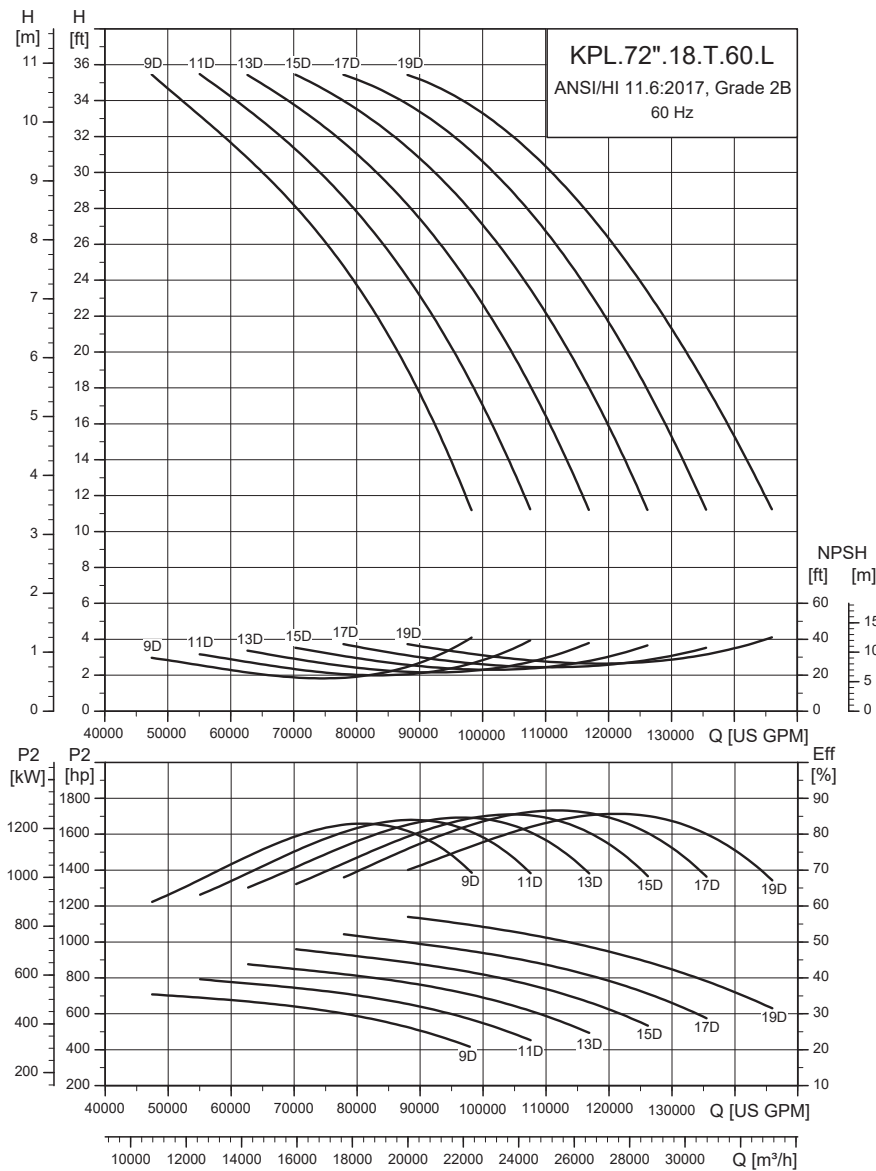
Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft²]	
								Motor	Propeller
KPL.64.335.18.T.60.9.E.46	18	64	9	45.3	3	7.1	42338.00	6169.89	621.74
KPL.64.335.18.T.60.11.E.46	18	64	11	45.3	3	7.7	62027.60	6169.89	621.74
KPL.64.335.18.T.60.13.E.46	18	64	13	45.3	3	8.3	48691.30	6169.89	621.74
KPL.64.400.18.T.60.9.E.46	18	64	9	45.3	3	7.1	42338.00	6478.39	621.74
KPL.64.400.18.T.60.11.E.46	18	64	11	45.3	3	7.7	45512.40	6478.39	621.74
KPL.64.400.18.T.60.13.E.46	18	64	13	45.3	3	8.3	48691.30	6478.39	621.74
KPL.64.400.18.T.60.15.E.46	18	64	15	45.3	3	8.9	70921.40	6478.39	621.74
KPL.64.400.18.T.60.17.E.46	18	64	17	45.3	3	9.4	82923.60	6478.39	621.74
KPL.64.470.18.T.60.13.E.46	18	64	13	45.3	3	8.3	48691.30	7558.12	621.74
KPL.64.470.18.T.60.15.E.46	18	64	15	45.3	3	8.9	63577.40	7558.12	621.74
KPL.64.470.18.T.60.17.E.46	18	64	17	45.3	3	9.4	55040.20	7558.12	621.74

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL.64.470.18.T.60.19.E.46	18	64	19	45.3	3	10	83267.00	7558.12	621.74
KPL.64.540.18.T.60.15.E.46	18	64	15	45.3	3	8.9	51865.80	8637.85	621.74
KPL.64.540.18.T.60.17.E.46	18	64	17	45.3	3	9.4	55040.20	8637.85	621.74
KPL.64.540.18.T.60.19.E.46	18	64	19	45.3	3	10	62943.40	8637.85	621.74

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.64.335.18.T.60.9.E.46	335	390	2592.98	471.45	91.20	91.30	91.30	60.00	69.70	72.90	G	10178.975
KPL.64.335.18.T.60.11.E.46	335	390	2592.98	471.45	91.20	91.30	91.30	60.00	69.70	72.90	G	10178.975
KPL.64.335.18.T.60.13.E.46	335	390	2592.98	471.45	91.20	91.30	91.30	60.00	69.70	72.90	G	10178.975
KPL.64.400.18.T.60.9.E.46	400	390	3381.45	563.58	91.30	91.40	91.40	60.30	69.80	73.10	H	12140.725
KPL.64.400.18.T.60.11.E.46	400	390	3381.45	563.58	91.30	91.40	91.40	60.30	69.80	73.10	H	12140.725
KPL.64.400.18.T.60.13.E.46	400	390	3381.45	563.58	91.30	91.40	91.40	60.30	69.80	73.10	H	12140.725
KPL.64.400.18.T.60.15.E.46	400	390	3381.45	563.58	91.30	91.40	91.40	60.30	69.80	73.10	H	12140.725
KPL.64.400.18.T.60.17.E.46	400	390	3381.45	563.58	91.30	91.40	91.40	60.30	69.80	73.10	H	12140.725
KPL.64.470.18.T.60.13.E.46	470	390	3682.03	657.50	91.30	91.40	91.40	60.30	69.80	73.10	G	14102.475
KPL.64.470.18.T.60.15.E.46	470	390	3682.03	657.50	91.30	91.40	91.40	60.30	69.80	73.10	G	14102.475
KPL.64.470.18.T.60.17.E.46	470	390	3682.03	657.50	91.30	91.40	91.40	60.30	69.80	73.10	G	14102.475
KPL.64.470.18.T.60.19.E.46	470	390	3682.03	657.50	91.30	91.40	91.40	60.30	69.80	73.10	G	14102.475
KPL.64.540.18.T.60.15.E.46	540	390	4197.69	749.59	91.30	91.40	91.50	60.40	69.90	73.20	G	16359.9625
KPL.64.540.18.T.60.17.E.46	540	390	4197.69	749.59	91.30	91.40	91.50	60.40	69.90	73.20	G	16359.9625
KPL.64.540.18.T.60.19.E.46	540	390	4197.69	749.59	91.30	91.40	91.50	60.40	69.90	73.20	G	16359.9625

### 8.19 KPL.72".---.18.T.60.L



TM062145

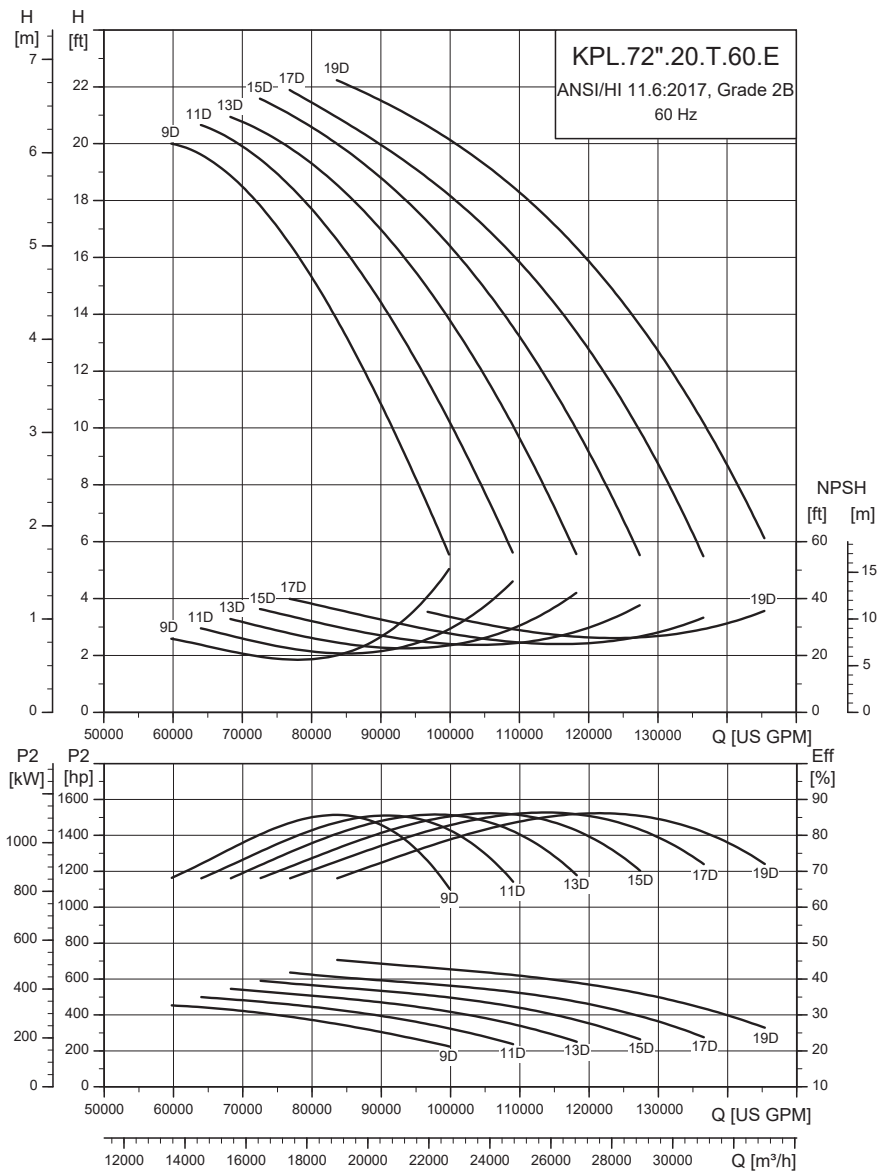
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf <sup>2</sup> ]	
								Motor	Propeller
KPL.72.665.18.T.60.9.L.46	18	72	9	45.3	4	7.1	57589.50	10797.31	1530.61
KPL.72.665.18.T.60.11.L.46	18	72	11	51.2	4	7.7	82553.80	10797.31	1530.61
KPL.72.665.18.T.60.13.L.46	18	72	13	51.2	4	8.3	101265.90	10797.31	1530.61
KPL.72.730.18.T.60.11.L.46	18	72	11	51.2	4	7.7	68244.40	11877.05	1530.61
KPL.72.730.18.T.60.13.L.46	18	72	13	51.2	4	8.3	90589.00	11877.05	1530.61
KPL.72.730.18.T.60.15.L.46	18	72	15	51.2	4	9.4	109191.10	11877.05	1530.61
KPL.72.800.18.T.60.13.L.46	18	72	13	51.2	4	8.3	74848.70	12956.78	1530.61
KPL.72.800.18.T.60.15.L.46	18	72	15	51.2	4	9.4	98633.00	12956.78	1530.61
KPL.72.800.18.T.60.17.L.46	18	72	17	51.2	4	9.8	116676.00	12956.78	1530.61
KPL.72.930.18.T.60.15.L.46	18	72	15	51.2	4	9.4	70283.00	15116.24	1530.61
KPL.72.930.18.T.60.17.L.46	18	72	17	51.2	4	9.8	98210.40	15116.24	1530.61
KPL.72.930.18.T.60.19.L.46	18	72	19	51.2	4	10.6	117345.20	15116.24	1530.61
KPL.72.1060.18.T.60.17.L.46	18	72	17	51.2	4	9.8	77904.30	17275.70	1530.61
KPL.72.1060.18.T.60.19.L.46	18	72	19	51.2	4	10.6	100473.40	17275.70	1530.61

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.72.665.18.T.60.9.L.46	665	390	5117.00	930.36	91.60	91.80	91.90	60.60	70.10	73.40	G	20431.7
KPL.72.665.18.T.60.11.L.46	665	390	5117.00	930.36	91.60	91.80	91.90	60.60	70.10	73.40	G	20431.7
KPL.72.665.18.T.60.13.L.46	665	390	5117.00	930.36	91.60	91.80	91.90	60.60	70.10	73.40	G	20431.7
KPL.72.730.18.T.60.11.L.46	730	390	5614.93	1020.90	91.90	92.00	92.00	60.70	70.20	73.50	G	22983.45
KPL.72.730.18.T.60.13.L.46	730	390	5614.93	1020.90	91.90	92.00	92.00	60.70	70.20	73.50	G	22983.45
KPL.72.730.18.T.60.15.L.46	730	390	5614.93	1020.90	91.90	92.00	92.00	60.70	70.20	73.50	G	22983.45
KPL.72.800.18.T.60.13.L.46	800	390	6102.13	1109.48	91.70	92.00	92.10	60.90	70.40	73.70	G	24502.7
KPL.72.800.18.T.60.15.L.46	800	390	6102.13	1109.48	91.70	92.00	92.10	60.90	70.40	73.70	G	24502.7
KPL.72.800.18.T.60.17.L.46	800	390	6102.13	1109.48	91.70	92.00	92.10	60.90	70.40	73.70	G	24502.7
KPL.72.930.18.T.60.15.L.46	930	390	7094.09	1289.84	92.20	92.30	92.30	61.00	70.50	73.80	G	28574.4375
KPL.72.930.18.T.60.17.L.46	930	390	7094.09	1289.84	92.20	92.30	92.30	61.00	70.50	73.80	G	28574.4375
KPL.72.930.18.T.60.19.L.46	930	390	7094.09	1289.84	92.20	92.30	92.30	61.00	70.50	73.80	G	28574.4375
KPL.72.1060.18.T.60.17.L.46	1060	390	8061.63	1465.75	92.40	92.60	92.70	61.10	70.60	73.90	G	32793.675
KPL.72.1060.18.T.60.19.L.46	1060	390	8061.63	1465.75	92.40	92.60	92.70	61.10	70.60	73.90	G	32793.675

### 8.20 KPL.72".----.20.T.60.E



TM065181

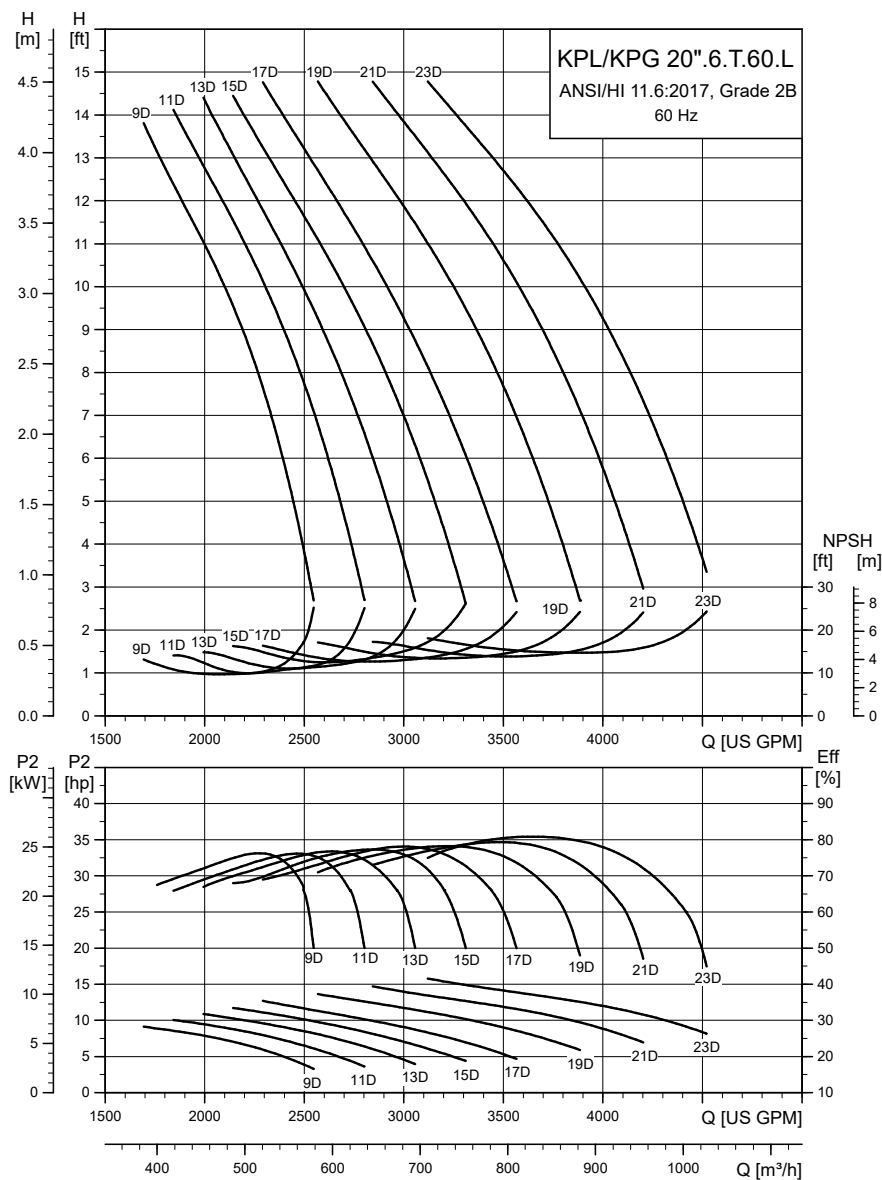
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft²]	
								Motor	Propeller
KPL.72.470.20.T.60.9.E.46	20	72	9	51.2	3	7.9	59742.50	8466.99	1003.79
KPL.72.470.20.T.60.11.E.46	20	72	11	51.2	3	8.5	72959.90	8466.99	1003.79
KPL.72.470.20.T.60.13.E.46	20	72	13	51.2	3	9.1	86613.20	8466.99	1003.79
KPL.72.470.20.T.60.15.E.46	20	72	15	51.2	3	9.6	101265.90	8466.99	1003.79
KPL.72.540.20.T.60.11.E.46	20	72	11	51.2	3	8.5	64008.90	9698.60	1003.79
KPL.72.540.20.T.60.13.E.46	20	72	13	51.2	3	9.1	68279.70	9698.60	1003.79
KPL.72.540.20.T.60.15.E.46	20	72	15	51.2	3	9.6	92372.10	9698.60	1003.79
KPL.72.540.20.T.60.17.E.46	20	72	17	51.2	3	10.2	105814.10	9698.60	1003.79
KPL.72.600.20.T.60.15.E.46	20	72	15	51.2	3	9.6	72546.00	10910.98	1003.79
KPL.72.600.20.T.60.17.E.46	20	72	17	51.2	3	10.2	89598.30	10910.98	1003.79
KPL.72.600.20.T.60.19.E.46	20	72	19	51.2	3	10.8	114351.30	10910.98	1003.79
KPL.72.665.20.T.60.19.E.46	20	72	19	51.2	3	10.8	96709.00	12123.84	1003.79
KPL.72.665.20.T.60.17.E.46	20	72	17	51.2	3	10.2	76812.40	12123.84	1003.79
KPL.72.730.20.T.60.19.E.46	20	72	19	51.2	3	10.8	83641.30	13335.75	1003.79

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL.72.470.20.T.60.9.E.46	470	350	3723.24	676.95	91.10	91.30	91.40	58.10	67.30	71.00	H	15952.125
KPL.72.470.20.T.60.11.E.46	470	350	3723.24	676.95	91.10	91.30	91.40	58.10	67.30	71.00	H	15952.125
KPL.72.470.20.T.60.13.E.46	470	350	3723.24	676.95	91.10	91.30	91.40	58.10	67.30	71.00	H	15952.125
KPL.72.470.20.T.60.15.E.46	470	350	3723.24	676.95	91.10	91.30	91.40	58.10	67.30	71.00	H	15952.125
KPL.72.540.20.T.60.11.E.46	540	350	4238.54	770.64	91.30	91.50	91.50	58.30	67.50	71.20	G	18188.9625
KPL.72.540.20.T.60.13.E.46	540	350	4238.54	770.64	91.30	91.50	91.50	58.30	67.50	71.20	G	18188.9625
KPL.72.540.20.T.60.15.E.46	540	350	4238.54	770.64	91.30	91.50	91.50	58.30	67.50	71.20	G	18188.9625
KPL.72.540.20.T.60.17.E.46	540	350	4238.54	770.64	91.30	91.50	91.50	58.30	67.50	71.20	G	18188.9625
KPL.72.600.20.T.60.15.E.46	600	350	4737.99	861.45	91.60	91.70	91.70	58.60	67.80	71.50	G	20278.3
KPL.72.600.20.T.60.17.E.46	600	350	4737.99	861.45	91.60	91.70	91.70	58.60	67.80	71.50	G	20278.3
KPL.72.600.20.T.60.19.E.46	600	350	4737.99	861.45	91.60	91.70	91.70	58.60	67.80	71.50	G	20278.3
KPL.72.665.20.T.60.19.E.46	665	350	5245.64	953.75	91.60	91.80	91.90	58.70	67.90	71.60	G	23105.1375
KPL.72.665.20.T.60.17.E.46	665	350	5245.64	953.75	91.60	91.80	91.90	58.70	67.90	71.60	G	23105.1375
KPL.72.730.20.T.60.19.E.46	730	350	5739.88	1043.61	91.90	92.00	92.00	58.90	68.20	71.90	G	25193.7375

### 8.21 KPL/KPG.20".----.6.T.60.L



TM077204

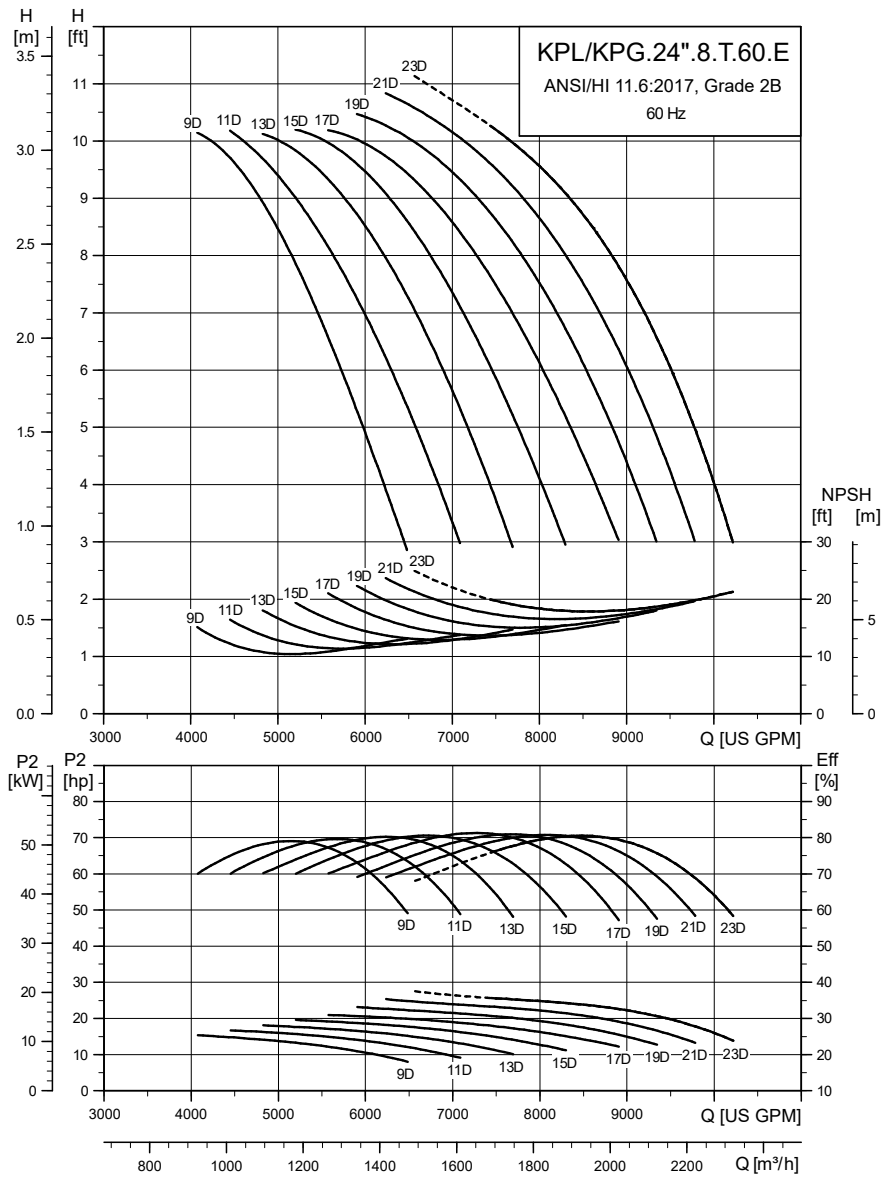
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.20.15.6.T.60.9.L.46	6	20	9	10.6	4	1.4	1695.10	14.71	0.90
KPL/KPG.20.15.6.T.60.11.L.46	6	20	11	10.6	4	1.6	1844.80	14.71	0.90
KPL/KPG.20.15.6.T.60.13.L.46	6	20	13	10.6	4	1.8	1994.50	14.71	0.90
KPL/KPG.20.15.6.T.60.15.L.46	6	20	15	10.6	4	1.9	2144.20	14.71	0.90
KPL/KPG.20.15.6.T.60.17.L.46	6	20	17	10.6	4	2	2293.90	14.71	0.90
KPL/KPG.20.15.6.T.60.19.L.46	6	20	19	10.6	4	2.2	2566.90	14.71	0.90
KPL/KPG.20.20.6.T.60.19.L.46	6	20	19	10.6	4	2.2	2566.90	17.80	0.90
KPL/KPG.20.20.6.T.60.21.L.46	6	20	21	10.6	4	2.4	2844.30	17.80	0.90
KPL/KPG.20.20.6.T.60.23.L.46	6	24	23	10.6	4	2.6	3121.60	17.80	0.90

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.20.15.6.T.60.9.L.46	15	1165	115.33	20.60	84.00	86.00	86.50	59.50	71.50	77.50	G	159.3
KPL/KPG.20.15.6.T.60.11.L.46	15	1165	115.33	20.60	84.00	86.00	86.50	59.50	71.50	77.50	G	159.3
KPL/KPG.20.15.6.T.60.13.L.46	15	1165	115.33	20.60	84.00	86.00	86.50	59.50	71.50	77.50	G	159.3
KPL/KPG.20.15.6.T.60.15.L.46	15	1165	115.33	20.60	84.00	86.00	86.50	59.50	71.50	77.50	G	159.3
KPL/KPG.20.15.6.T.60.17.L.46	15	1165	115.33	20.60	84.00	86.00	86.50	59.50	71.50	77.50	G	159.3
KPL/KPG.20.15.6.T.60.19.L.46	15	1165	115.33	20.60	84.00	86.00	86.50	59.50	71.50	77.50	G	159.3
KPL/KPG.20.20.6.T.60.19.L.46	20	1165	153.50	27.41	85.00	86.00	87.50	60.50	72.50	78.50	G	217.5625
KPL/KPG.20.20.6.T.60.21.L.46	20	1165	153.50	27.41	85.00	86.00	87.50	60.50	72.50	78.50	G	217.5625
KPL/KPG.20.20.6.T.60.23.L.46	20	1165	153.50	27.41	85.00	86.00	87.50	60.50	72.50	78.50	G	217.5625

### 8.22 KPL/KPG.24".----.8.T.60.E



TM065190

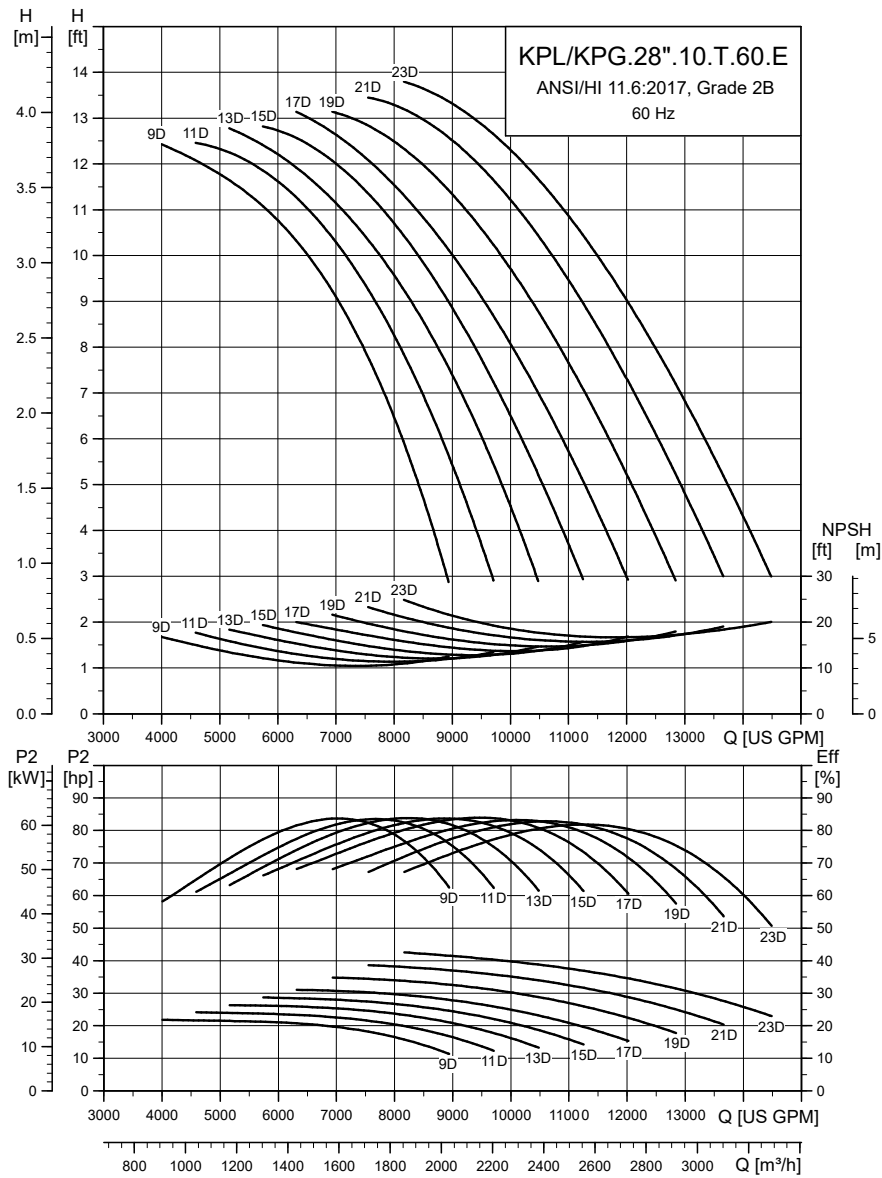
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.24.20.8.T.60.9.E.46	8	24	9	15	3	2	4077.10	49.83	3.32
KPL/KPG.24.20.8.T.60.11.E.46	8	24	11	15	3	2.2	4451.30	49.83	3.32
KPL/KPG.24.20.8.T.60.13.E.46	8	24	13	15	3	2.4	4825.50	49.83	3.32
KPL/KPG.24.20.8.T.60.15.E.46	8	24	15	15	3	2.6	5199.80	49.83	3.32
KPL/KPG.24.20.8.T.60.17.E.46	8	24	17	15	3	2.8	6208.00	49.83	3.32
KPL/KPG.24.25.8.T.60.15.E.46	8	24	15	15	3	2.6	5199.80	64.07	3.32
KPL/KPG.24.25.8.T.60.17.E.46	8	24	17	15	3	2.8	5574.00	64.07	3.32
KPL/KPG.24.25.8.T.60.19.E.46	8	24	19	15	3	3	5908.60	64.07	3.32
KPL/KPG.24.25.8.T.60.21.E.46	8	24	21	15	3	3.1	6238.90	64.07	3.32
KPL/KPG.24.25.8.T.60.23.E.46	8	28	23	15	3	3.3	6569.10	64.07	3.32

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.24.20.8.T.60.9.E.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL/KPG.24.20.8.T.60.11.E.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL/KPG.24.20.8.T.60.13.E.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL/KPG.24.20.8.T.60.15.E.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL/KPG.24.20.8.T.60.17.E.46	20	875	164.78	29.96	83.50	85.30	85.50	56.50	68.50	73.50	H	278.0375
KPL/KPG.24.25.8.T.60.15.E.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL/KPG.24.25.8.T.60.17.E.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL/KPG.24.25.8.T.60.19.E.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL/KPG.24.25.8.T.60.21.E.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875
KPL/KPG.24.25.8.T.60.23.E.46	25	875	185.03	37.01	84.50	86.00	86.50	57.50	69.60	74.50	G	351.7875

### 8.23 KPL/KPG.28".----.10.T.60.E



TM065189

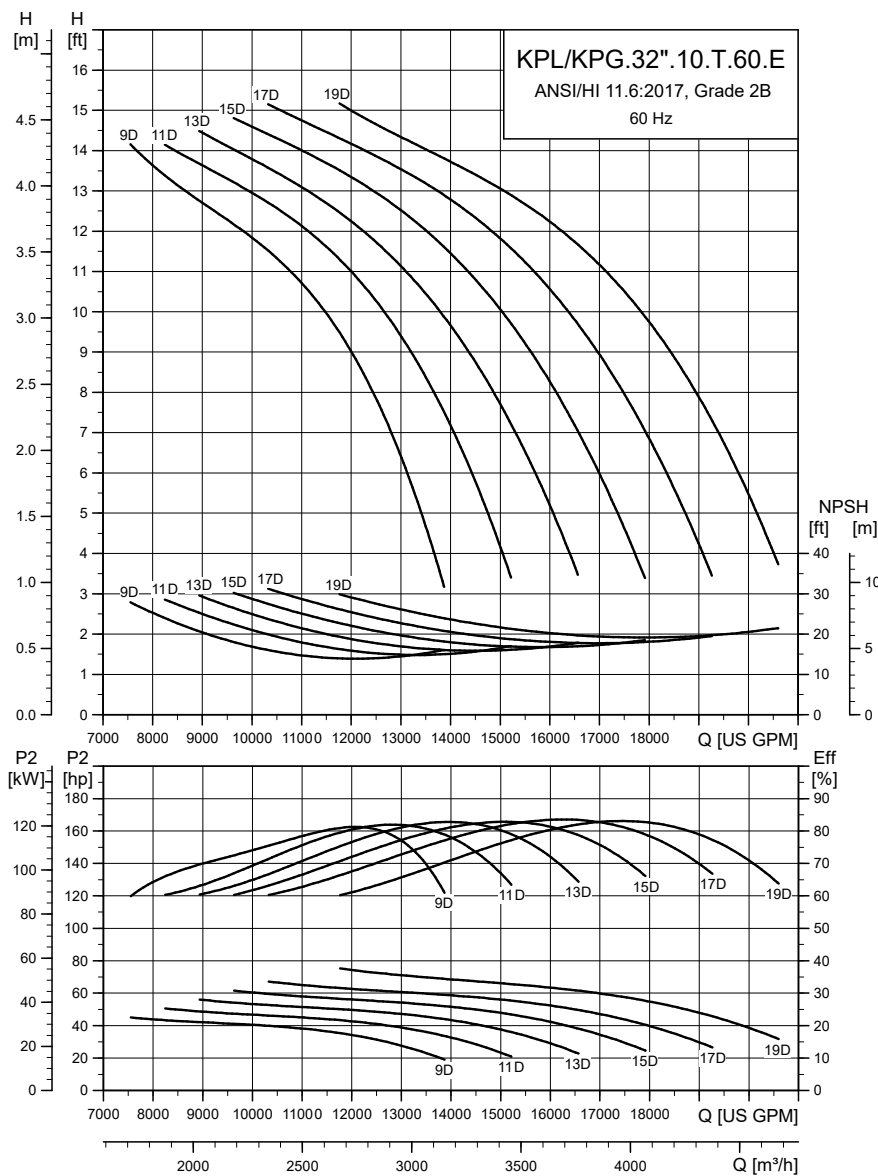
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.28.25.10.T.60.9.E.46	10	28	9	18.5	3	2.8	4006.60	116.28	11.39
KPL/KPG.28.25.10.T.60.11.E.46	10	28	11	18.5	3	3	4583.40	116.28	11.39
KPL/KPG.28.25.10.T.60.13.E.46	10	28	13	18.5	3	3.1	7286.70	116.28	11.39
KPL/KPG.28.30.10.T.60.13.E.46	10	28	13	18.5	3	3.1	5164.60	135.26	11.39
KPL/KPG.28.30.10.T.60.15.E.46	10	28	15	18.5	3	3.5	5741.30	135.26	11.39
KPL/KPG.28.30.10.T.60.17.E.46	10	28	17	18.5	3	3.9	8475.50	135.26	11.39
KPL/KPG.28.40.10.T.60.17.E.46	10	28	17	18.5	3	3.9	6318.10	161.37	11.39
KPL/KPG.28.40.10.T.60.19.E.46	10	28	19	18.5	3	4.3	6934.50	161.37	11.39
KPL/KPG.28.40.10.T.60.21.E.46	10	28	21	18.5	3	4.7	7550.90	161.37	11.39
KPL/KPG.28.50.10.T.60.21.E.46	10	28	21	18.5	3	4.7	7550.90	348.84	11.39
KPL/KPG.28.50.10.T.60.23.E.46	10	32	23	18.5	3	4.9	8167.30	348.84	11.39

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.28.25.10.T.60.9.E.46	25	700	195.0498988	39.01	83.20	85.30	85.50	56.50	68.50	71.50	G	420.375
KPL/KPG.28.25.10.T.60.11.E.46	25	700	195.0498988	39.01	83.20	85.30	85.50	56.50	68.50	71.50	G	420.375
KPL/KPG.28.25.10.T.60.13.E.46	25	700	195.0498988	39.01	83.20	85.30	85.50	56.50	68.50	71.50	G	420.375
KPL/KPG.28.30.10.T.60.13.E.46	30	700	217.1618432	43.43	84.20	86.00	86.50	58.50	68.50	73.50	G	486.75
KPL/KPG.28.30.10.T.60.15.E.46	30	700	217.1618432	43.43	84.20	86.00	86.50	58.50	68.50	73.50	G	486.75
KPL/KPG.28.30.10.T.60.17.E.46	30	700	217.1618432	43.43	84.20	86.00	86.50	58.50	68.50	73.50	G	486.75
KPL/KPG.28.40.10.T.60.17.E.46	40	700	292.4385133	58.49	84.70	86.00	87.00	59.00	69.00	74.00	G	663.75
KPL/KPG.28.40.10.T.60.19.E.46	40	700	292.4385133	58.49	84.70	86.00	87.00	59.00	69.00	74.00	G	663.75
KPL/KPG.28.40.10.T.60.21.E.46	40	700	292.4385133	58.49	84.70	86.00	87.00	59.00	69.00	74.00	G	663.75
KPL/KPG.28.50.10.T.60.21.E.46	50	700	358.6131711	71.72	85.20	86.00	87.50	59.00	69.00	74.00	G	781.0125
KPL/KPG.28.50.10.T.60.23.E.46	50	700	358.6131711	71.72	85.20	86.00	87.50	59.00	69.00	74.00	G	781.0125

### 8.24 KPL/KPG.32".----.10.T.60.E



TM065188

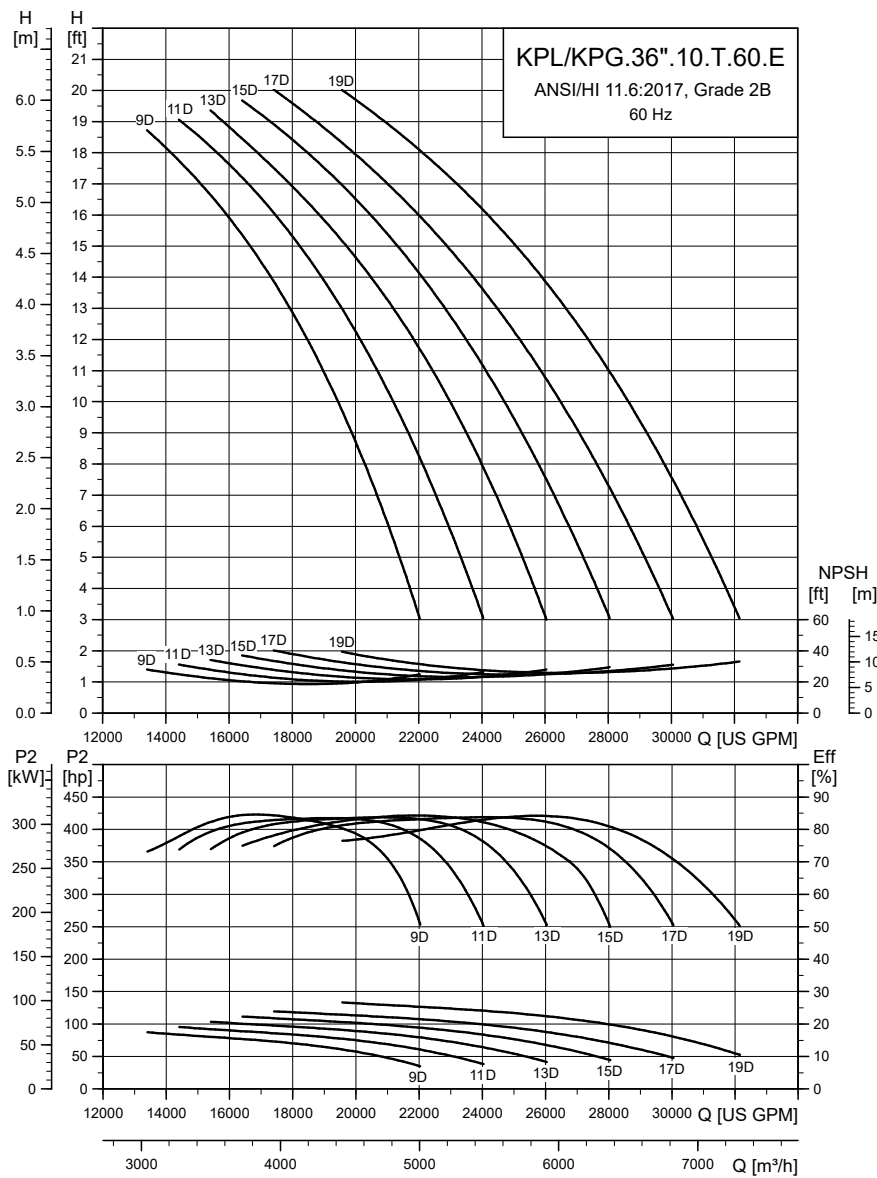
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.32.40.10.T.60.9.E.46	10	32	9	21.3	3	3.1	10324.70	161.37	20.17
KPL/KPG.32.40.10.T.60.11.E.46	10	32	11	21.3	3	3.3	12433.70	161.37	20.17
KPL/KPG.32.50.10.T.60.9.E.46	10	32	9	21.3	3	3.1	7550.90	348.84	20.17
KPL/KPG.32.50.10.T.60.11.E.46	10	32	11	21.3	3	3.3	8246.60	348.84	20.17
KPL/KPG.32.50.10.T.60.13.E.46	10	32	13	21.3	3	3.5	12248.80	348.84	20.17
KPL/KPG.32.50.10.T.60.15.E.46	10	32	15	21.3	3	3.9	14463.40	348.84	20.17
KPL/KPG.32.60.10.T.60.11.E.46	10	32	11	21.3	3	3.3	8246.60	401.04	20.17
KPL/KPG.32.60.10.T.60.13.E.46	10	32	13	21.3	3	3.5	8937.80	401.04	20.17
KPL/KPG.32.60.10.T.60.15.E.46	10	32	15	21.3	3	3.9	9633.50	401.04	20.17
KPL/KPG.32.60.10.T.60.17.E.46	10	32	17	21.3	3	4.3	12482.10	401.04	20.17
KPL/KPG.32.60.10.T.60.19.E.46	10	32	19	21.3	3	4.7	16876.20	401.04	20.17
KPL/KPG.32.75.10.T.60.15.E.46	10	32	15	21.3	3	3.9	9633.50	465.12	20.17
KPL/KPG.32.75.10.T.60.17.E.46	10	32	17	21.3	3	4.3	10324.70	465.12	20.17
KPL/KPG.32.75.10.T.60.19.E.46	10	36	19	21.3	3	4.7	11764.50	465.12	20.17

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.32.40.10.T.60.9.E.46	40	700	292.4385133	58.49	84.70	86.00	87.00	59.00	69.00	74.00	G	663.75
KPL/KPG.32.40.10.T.60.11.E.46	40	700	292.4385133	58.49	84.70	86.00	87.00	59.00	69.00	74.00	G	663.75
KPL/KPG.32.50.10.T.60.9.E.46	50	700	358.6131711	71.72	85.20	86.00	87.50	59.00	69.00	74.00	G	781.0125
KPL/KPG.32.50.10.T.60.11.E.46	50	700	358.6131711	71.72	85.20	86.00	87.50	59.00	69.00	74.00	G	781.0125
KPL/KPG.32.50.10.T.60.13.E.46	50	700	358.6131711	71.72	85.20	86.00	87.50	59.00	69.00	74.00	G	781.0125
KPL/KPG.32.50.10.T.60.15.E.46	50	700	358.6131711	71.72	85.20	86.00	87.50	59.00	69.00	74.00	G	781.0125
KPL/KPG.32.60.10.T.60.11.E.46	60	700	430.7624653	86.15	85.70	87.80	88.00	59.50	69.50	74.50	G	950.6375
KPL/KPG.32.60.10.T.60.13.E.46	60	700	430.7624653	86.15	85.70	87.80	88.00	59.50	69.50	74.50	G	950.6375
KPL/KPG.32.60.10.T.60.15.E.46	60	700	430.7624653	86.15	85.70	87.80	88.00	59.50	69.50	74.50	G	950.6375
KPL/KPG.32.60.10.T.60.17.E.46	60	700	430.7624653	86.15	85.70	87.80	88.00	59.50	69.50	74.50	G	950.6375
KPL/KPG.32.60.10.T.60.19.E.46	60	700	430.7624653	86.15	85.70	87.80	88.00	59.50	69.50	74.50	G	950.6375
KPL/KPG.32.75.10.T.60.15.E.46	75	700	516.5790058	103.32	86.20	88.30	88.50	60.50	70.50	75.50	F	1161.5625
KPL/KPG.32.75.10.T.60.17.E.46	75	700	516.5790058	103.32	86.20	88.30	88.50	60.50	70.50	75.50	F	1161.5625
KPL/KPG.32.75.10.T.60.19.E.46	75	700	516.5790058	103.32	86.20	88.30	88.50	60.50	70.50	75.50	F	1161.5625

### 8.25 KPL/KPG.36".----.10.T.60.E



TM065187

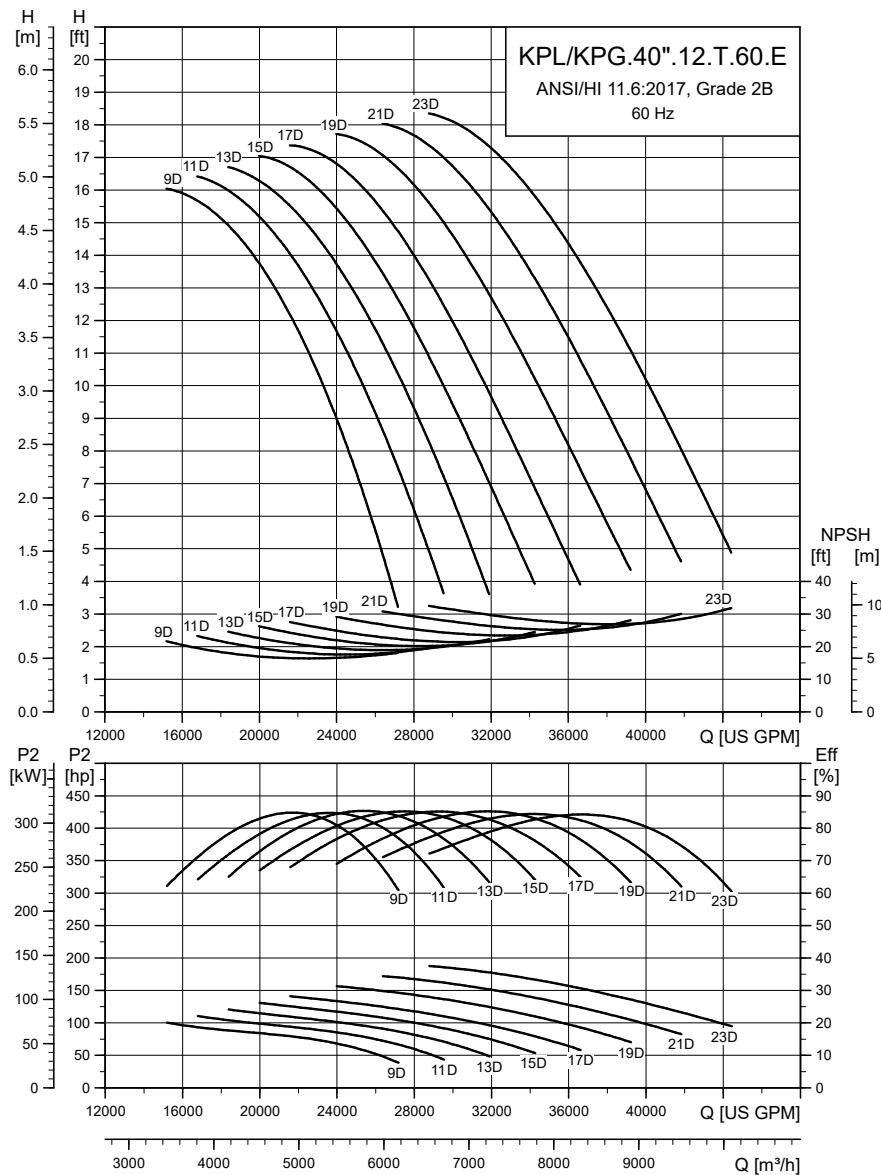
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.36.75.10.T.60.9.E.46	10	36	9	24.4	3	3.5	16334.60	465.12	45.80
KPL/KPG.36.100.10.T.60.9.E.46	10	36	9	24.4	3	3.5	13406.70	757.00	45.80
KPL/KPG.36.100.10.T.60.11.E.46	10	36	11	24.4	3	3.7	14410.60	757.00	45.80
KPL/KPG.36.100.10.T.60.13.E.46	10	36	13	24.4	3	4.1	16290.60	757.00	45.80
KPL/KPG.36.100.10.T.60.15.E.46	10	36	15	24.4	3	4.5	20495.30	757.00	45.80
KPL/KPG.36.100.10.T.60.17.E.46	10	36	17	24.4	3	4.9	24215.80	757.00	45.80
KPL/KPG.36.120.10.T.60.13.E.46	10	36	13	24.4	3	4.1	15410.00	849.55	45.80
KPL/KPG.36.120.10.T.60.15.E.46	10	36	15	24.4	3	4.5	16413.90	849.55	45.80
KPL/KPG.36.120.10.T.60.17.E.46	10	36	17	24.4	3	4.9	17413.30	849.55	45.80
KPL/KPG.36.120.10.T.60.19.E.46	10	36	19	24.4	3	5.3	23938.40	849.55	45.80
KPL/KPG.36.150.10.T.60.17.E.46	10	36	17	24.4	3	4.9	17413.30	968.20	45.80
KPL/KPG.36.150.10.T.60.19.E.46	10	40	19	24.4	3	5.3	19570.70	968.20	45.80

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.36.75.10.T.60.9.E.46	75	700	516.58	103.32	86.20	88.30	88.50	60.50	70.50	75.50	F	1161.5625
KPL/KPG.36.100.10.T.60.9.E.46	100	700	691.31	138.26	87.00	88.70	89.00	61.50	71.50	76.50	F	1508.1875
KPL/KPG.36.100.10.T.60.11.E.46	100	700	691.31	138.26	87.00	88.70	89.00	61.50	71.50	76.50	F	1508.1875
KPL/KPG.36.100.10.T.60.13.E.46	100	700	691.31	138.26	87.00	88.70	89.00	61.50	71.50	76.50	F	1508.1875
KPL/KPG.36.100.10.T.60.15.E.46	100	700	691.31	138.26	87.00	88.70	89.00	61.50	71.50	76.50	F	1508.1875
KPL/KPG.36.100.10.T.60.17.E.46	100	700	691.31	138.26	87.00	88.70	89.00	61.50	71.50	76.50	F	1508.1875
KPL/KPG.36.120.10.T.60.13.E.46	120	700	819.58	163.92	87.50	89.30	89.50	62.00	72.00	77.00	F	1809.825
KPL/KPG.36.120.10.T.60.15.E.46	120	700	819.58	163.92	87.50	89.30	89.50	62.00	72.00	77.00	F	1809.825
KPL/KPG.36.120.10.T.60.17.E.46	120	700	819.58	163.92	87.50	89.30	89.50	62.00	72.00	77.00	F	1809.825
KPL/KPG.36.120.10.T.60.19.E.46	120	700	819.58	163.92	87.50	89.30	89.50	62.00	72.00	77.00	F	1809.825
KPL/KPG.36.150.10.T.60.17.E.46	150	700	974.95	194.99	91.40	91.50	91.60	59.00	71.20	77.30	F	2559.8625
KPL/KPG.36.150.10.T.60.19.E.46	150	700	974.95	194.99	91.40	91.50	91.60	59.00	71.20	77.30	F	2559.8625

### 8.26 KPL/KPG.40".----.12.T.60.E



TM065186

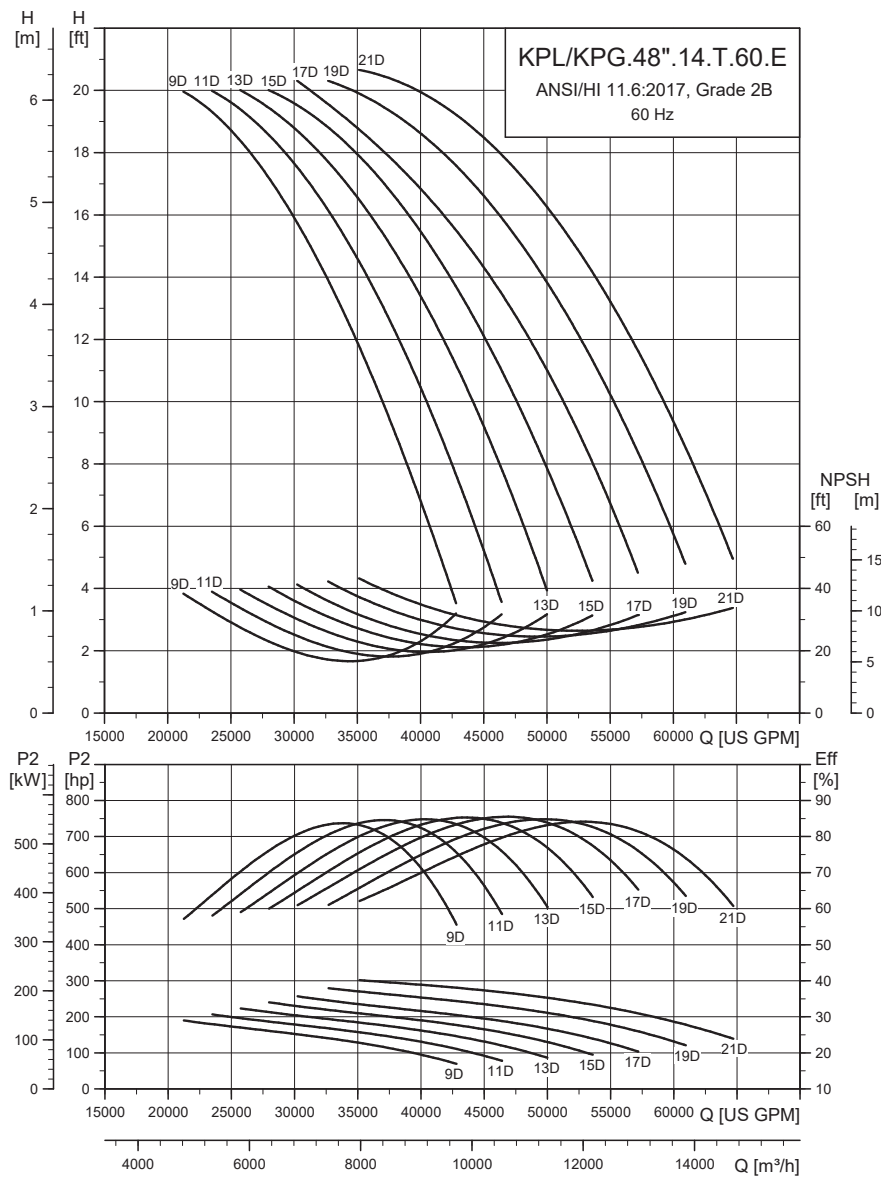
#### Pump data

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.40.100.12.T.60.9.E.46	12	40	9	27.6	3	3.9	15185.50	678.69	74.75
KPL/KPG.40.100.12.T.60.11.E.46	12	40	11	27.6	3	4.3	19746.90	678.69	74.75
KPL/KPG.40.100.12.T.60.13.E.46	12	40	13	27.6	3	4.7	23577.40	678.69	74.75
KPL/KPG.40.100.12.T.60.15.E.46	12	40	15	27.6	3	5.1	27676.40	678.69	74.75
KPL/KPG.40.120.12.T.60.11.E.46	12	40	11	27.6	3	4.3	16788.10	1034.64	74.75
KPL/KPG.40.120.12.T.60.13.E.46	12	40	13	27.6	3	4.7	18386.40	1034.64	74.75
KPL/KPG.40.120.12.T.60.15.E.46	12	40	15	27.6	3	5.1	23423.30	1034.64	74.75
KPL/KPG.40.120.12.T.60.17.E.46	12	40	17	27.6	3	5.5	27174.50	1034.64	74.75
KPL/KPG.40.120.12.T.60.19.E.46	12	40	19	27.6	3	5.9	31815.10	1034.64	74.75
KPL/KPG.40.175.12.T.60.15.E.46	12	40	15	27.6	3	5.1	19984.60	1214.99	74.75
KPL/KPG.40.175.12.T.60.17.E.46	12	40	17	27.6	3	5.5	21582.90	1214.99	74.75
KPL/KPG.40.175.12.T.60.19.E.46	12	40	19	27.6	3	5.9	23982.40	1214.99	74.75
KPL/KPG.40.175.12.T.60.21.E.46	12	40	21	27.6	3	6.3	26377.60	1214.99	74.75
KPL/KPG.40.175.12.T.60.23.E.46	12	48	23	27.6	3	6.7	28777.10	1214.99	74.75

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.40.100.12.T.60.9.E.46	100	585	759.59	138.11	90.20	90.30	90.40	56.20	68.80	75.40	G	2065
KPL/KPG.40.100.12.T.60.11.E.46	100	585	759.59	138.11	90.20	90.30	90.40	56.20	68.80	75.40	G	2065
KPL/KPG.40.100.12.T.60.13.E.46	100	585	759.59	138.11	90.20	90.30	90.40	56.20	68.80	75.40	G	2065
KPL/KPG.40.100.12.T.60.15.E.46	100	585	759.59	138.11	90.20	90.30	90.40	56.20	68.80	75.40	G	2065
KPL/KPG.40.120.12.T.60.11.E.46	120	585	900.72	163.77	89.80	89.90	91.00	56.00	69.00	75.80	G	2455.875
KPL/KPG.40.120.12.T.60.13.E.46	120	585	900.72	163.77	89.80	89.90	91.00	56.00	69.00	75.80	G	2455.875
KPL/KPG.40.120.12.T.60.15.E.46	120	585	900.72	163.77	89.80	89.90	91.00	56.00	69.00	75.80	G	2455.875
KPL/KPG.40.120.12.T.60.17.E.46	120	585	900.72	163.77	89.80	89.90	91.00	56.00	69.00	75.80	G	2455.875
KPL/KPG.40.120.12.T.60.19.E.46	120	585	900.72	163.77	89.80	89.90	91.00	56.00	69.00	75.80	G	2455.875
KPL/KPG.40.175.12.T.60.15.E.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL/KPG.40.175.12.T.60.17.E.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL/KPG.40.175.12.T.60.19.E.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL/KPG.40.175.12.T.60.21.E.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125
KPL/KPG.40.175.12.T.60.23.E.46	175	585	1566.81	241.05	91.30	91.40	91.40	60.30	70.30	75.20	J	2993.5125

### 8.27 KPL/KPG.48".----.14.T.60.E



TM065185

#### Pump data

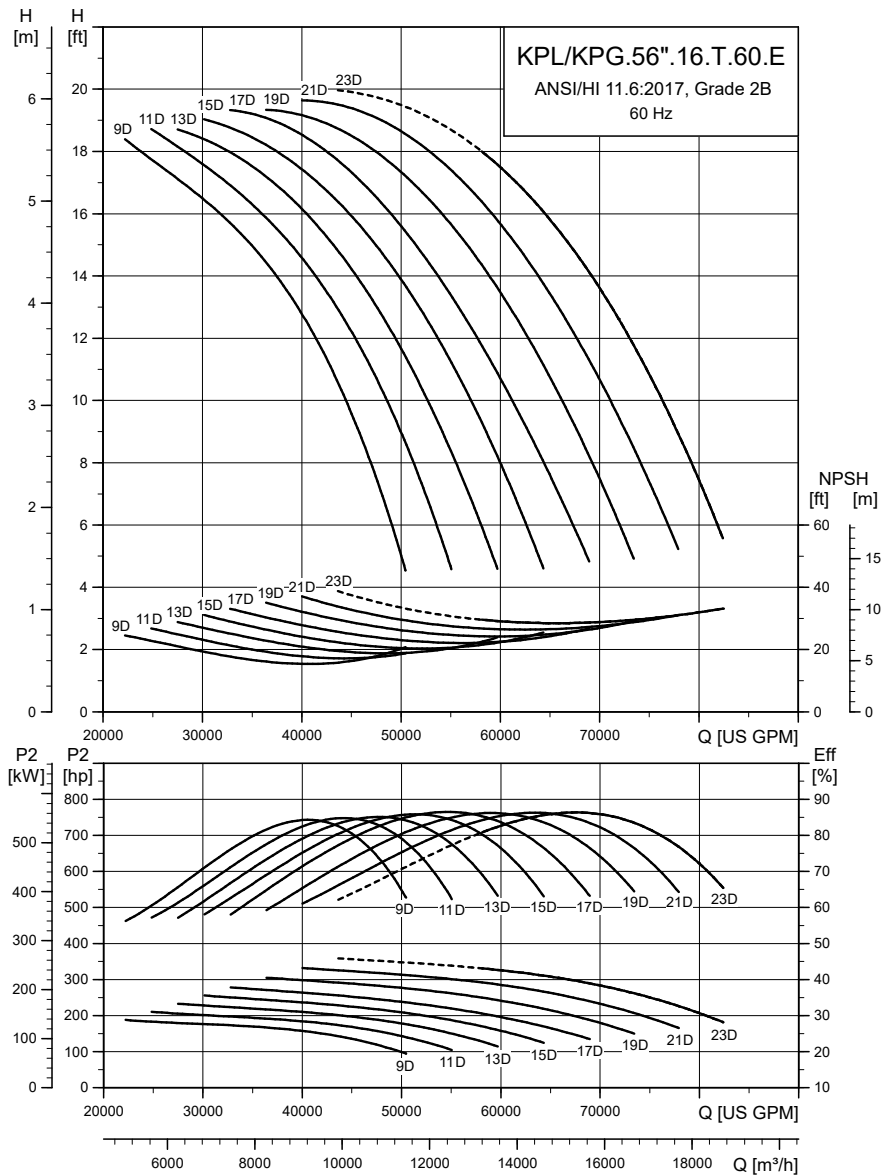
Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.48.175.14.T.60.9.E.46	14	48	9	33.9	3	4.3	21243.80	1786.90	189.37
KPL/KPG.48.175.14.T.60.11.E.46	14	48	11	33.9	3	4.7	28618.60	1786.90	189.37
KPL/KPG.48.175.14.T.60.13.E.46	14	48	13	33.9	3	5.3	35707.30	1786.90	189.37
KPL/KPG.48.175.14.T.60.15.E.46	14	48	15	33.9	3	5.9	42483.30	1786.90	189.37
KPL/KPG.48.215.14.T.60.9.E.46	14	48	9	33.9	3	4.3	21243.80	2838.15	189.37
KPL/KPG.48.215.14.T.60.11.E.46	14	48	11	33.9	3	4.7	23489.30	2838.15	189.37
KPL/KPG.48.215.14.T.60.13.E.46	14	48	13	33.9	3	5.3	25734.80	2838.15	189.37
KPL/KPG.48.215.14.T.60.15.E.46	14	48	15	33.9	3	5.9	33946.10	2838.15	189.37
KPL/KPG.48.215.14.T.60.17.E.46	14	48	17	33.9	3	6.5	41673.10	2838.15	189.37
KPL/KPG.48.215.14.T.60.19.E.46	14	48	19	33.9	3	7.1	48739.70	2838.15	189.37
KPL/KPG.48.265.14.T.60.13.E.46	14	48	13	33.9	3	5.3	25734.80	3331.74	189.37
KPL/KPG.48.265.14.T.60.15.E.46	14	48	15	33.9	3	5.9	27984.60	3331.74	189.37
KPL/KPG.48.265.14.T.60.17.E.46	14	48	17	33.9	3	6.5	30230.10	3331.74	189.37

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.48.265.14.T.60.19.E.46	14	48	19	33.9	3	7.1	32682.50	3331.74	189.37
KPL/KPG.48.265.14.T.60.21.E.46	14	48	21	33.9	3	7.7	42223.50	3331.74	189.37
KPL/KPG.48.335.14.T.60.19.E.46	14	48	19	33.9	3	7.1	32682.50	3611.76	189.37
KPL/KPG.48.335.14.T.60.21.E.46	14	56	21	33.9	3	7.7	35130.50	3611.76	189.37

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.48.175.14.T.60.9.E.46	175	500	1596.54	245.62	91.20	91.30	91.40	52.90	66.30	73.80	J	5249.525
KPL/KPG.48.175.14.T.60.11.E.46	175	500	1596.54	245.62	91.20	91.30	91.40	52.90	66.30	73.80	J	5249.525
KPL/KPG.48.175.14.T.60.13.E.46	175	500	1596.54	245.62	91.20	91.30	91.40	52.90	66.30	73.80	J	5249.525
KPL/KPG.48.175.14.T.60.15.E.46	175	500	1596.54	245.62	91.20	91.30	91.40	52.90	66.30	73.80	J	5249.525
KPL/KPG.48.215.14.T.60.9.E.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL/KPG.48.215.14.T.60.11.E.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL/KPG.48.215.14.T.60.13.E.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL/KPG.48.215.14.T.60.15.E.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL/KPG.48.215.14.T.60.17.E.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL/KPG.48.215.14.T.60.19.E.46	215	500	1662.49	296.87	89.50	90.50	90.80	58.70	70.90	74.50	G	6327.0125
KPL/KPG.48.265.14.T.60.13.E.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL/KPG.48.265.14.T.60.15.E.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL/KPG.48.265.14.T.60.17.E.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL/KPG.48.265.14.T.60.19.E.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL/KPG.48.265.14.T.60.21.E.46	265	500	2026.13	368.39	90.90	91.00	91.10	58.90	71.20	74.80	G	7734.1625
KPL/KPG.48.335.14.T.60.19.E.46	335	500	2289.29	457.86	91.40	91.50	91.50	60.50	69.90	74.90	F	7820.45
KPL/KPG.48.335.14.T.60.21.E.46	335	500	2289.29	457.86	91.40	91.50	91.50	60.50	69.90	74.90	F	7820.45

### 8.28 KPL/KPG.56".----.16.T.60.E



TM065184

#### Pump data

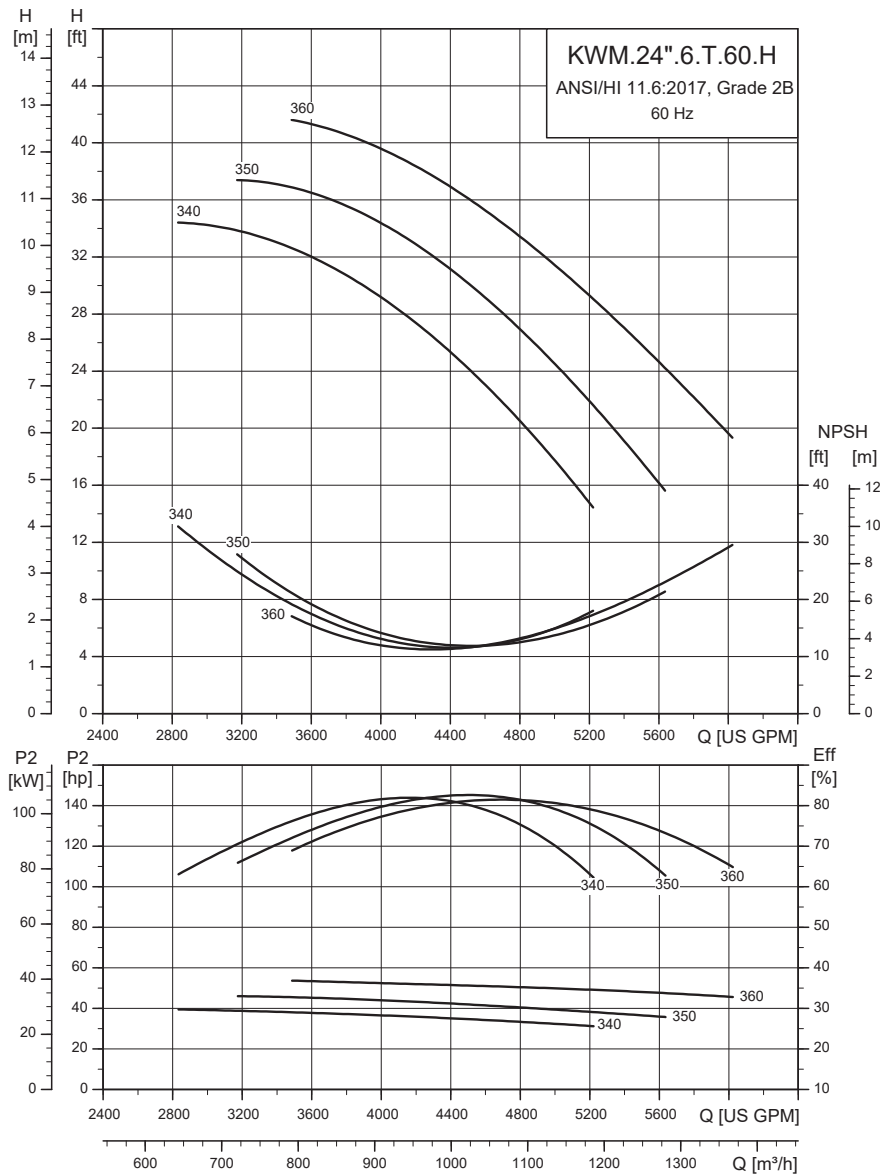
Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.56.175.16.T.60.9.E.46	16	56	9	37.4	3	5.7	22199.30	3348.35	298.05
KPL/KPG.56.175.16.T.60.11.E.46	16	56	11	37.4	3	6.1	41783.20	3348.35	298.05
KPL/KPG.56.215.16.T.60.9.E.46	16	56	9	37.4	3	5.7	22199.30	3495.48	298.05
KPL/KPG.56.215.16.T.60.11.E.46	16	56	11	37.4	3	6.1	24845.40	3495.48	298.05
KPL/KPG.56.215.16.T.60.13.E.46	16	56	13	37.4	3	6.5	34307.10	3495.48	298.05
KPL/KPG.56.215.16.T.60.15.E.46	16	56	15	37.4	3	6.9	48682.50	3495.48	298.05
KPL/KPG.56.265.16.T.60.13.E.46	16	56	13	37.4	3	6.5	27495.90	3569.05	298.05
KPL/KPG.56.265.16.T.60.15.E.46	16	56	15	37.4	3	6.9	38067.20	3569.05	298.05
KPL/KPG.56.265.16.T.60.17.E.46	16	56	17	37.4	3	7.3	32792.60	3569.05	298.05
KPL/KPG.56.265.16.T.60.19.E.46	16	56	19	37.4	3	7.7	50721.00	3569.05	298.05
KPL/KPG.56.265.16.T.60.21.E.46	16	56	21	37.4	3	8.1	59975.90	3569.05	298.05

Model	No. of poles	Discharge column size [in.]	Propeller nr.	Propeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf·ft <sup>2</sup> ]	
								Motor	Propeller
KPL/KPG.56.335.16.T.60.17.E.46	16	56	17	37.4	3	7.3	32792.60	5524.43	298.05
KPL/KPG.56.335.16.T.60.19.E.46	16	56	19	37.4	3	7.7	36407.30	5524.43	298.05
KPL/KPG.56.335.16.T.60.21.E.46	16	56	21	37.4	3	8.1	40022.10	5524.43	298.05
KPL/KPG.56.335.16.T.60.23.E.46	16	60	23	37.4	3	9.1	43641.20	5524.43	298.05

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf·ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KPL/KPG.56.175.16.T.60.9.E.46	175	435	1267.86	253.57	90.80	90.90	91.00	50.30	63.70	71.80	G	5134.475
KPL/KPG.56.175.16.T.60.11.E.46	175	435	1267.86	253.57	90.80	90.90	91.00	50.30	63.70	71.80	G	5134.475
KPL/KPG.56.215.16.T.60.9.E.46	215	435	1532.98	306.60	89.90	91.00	91.10	51.70	65.00	71.90	G	6017.2625
KPL/KPG.56.215.16.T.60.11.E.46	215	435	1532.98	306.60	89.90	91.00	91.10	51.70	65.00	71.90	G	6017.2625
KPL/KPG.56.215.16.T.60.13.E.46	215	435	1532.98	306.60	89.90	91.00	91.10	51.70	65.00	71.90	G	6017.2625
KPL/KPG.56.215.16.T.60.15.E.46	215	435	1532.98	306.60	89.90	91.00	91.10	51.70	65.00	71.90	G	6017.2625
KPL/KPG.56.265.16.T.60.13.E.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL/KPG.56.265.16.T.60.15.E.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL/KPG.56.265.16.T.60.17.E.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL/KPG.56.265.16.T.60.19.E.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL/KPG.56.265.16.T.60.21.E.46	265	435	1899.37	379.87	91.20	91.30	91.40	51.70	65.20	72.30	G	7495.95
KPL/KPG.56.335.16.T.60.17.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL/KPG.56.335.16.T.60.19.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL/KPG.56.335.16.T.60.21.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125
KPL/KPG.56.335.16.T.60.23.E.46	335	435	2350.19	470.04	91.50	91.60	91.70	51.80	65.30	72.80	F	9282.9125

### 8.29 KWM.24".----.6.T.60.H



TM062146

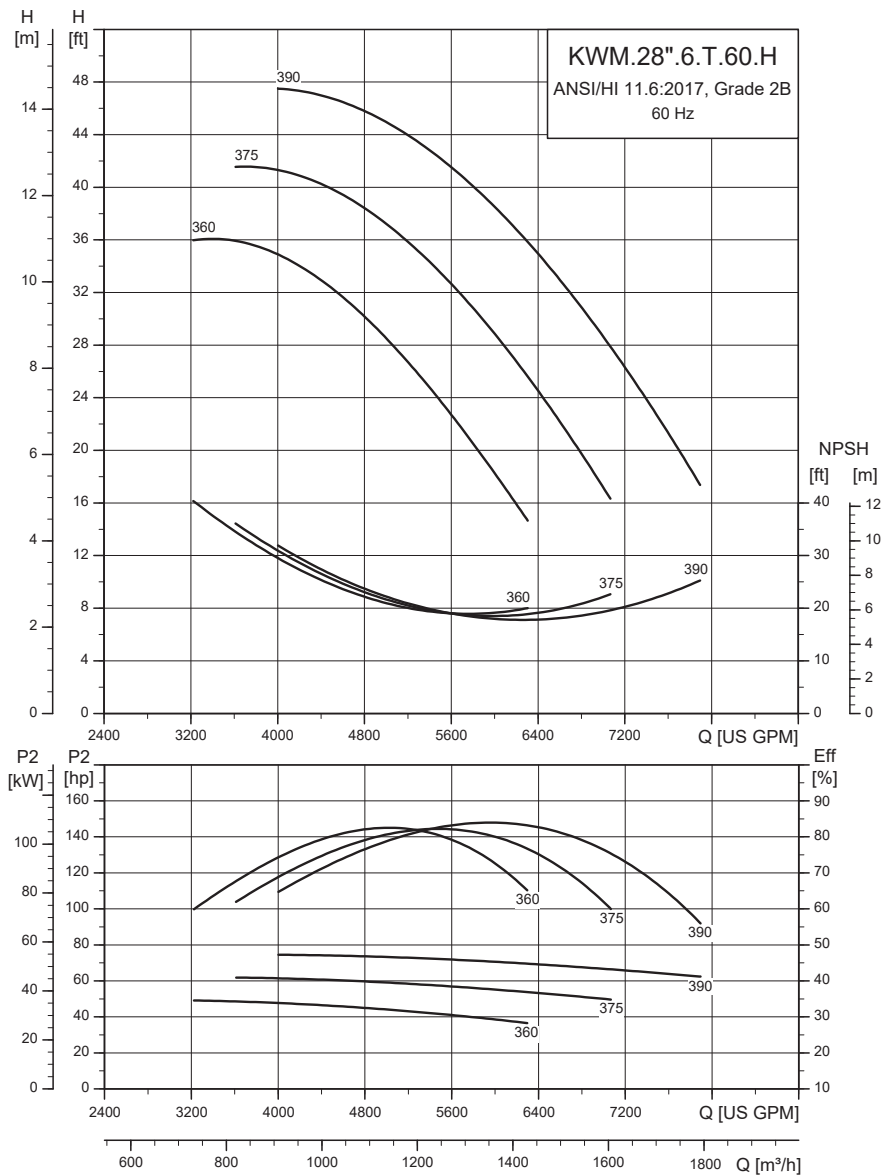
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf·ft²]	
							Motor	Impeller
KWM.24.40.6.T.60.340.H.46	6	24	13.4	4	1.6	2835.40	121.02	7.36
KWM.24.50.6.T.60.350.H.46	6	24	13.8	4	1.6	3174.50	147.13	7.59
KWM.24.60.6.T.60.360.H.46	6	28	14.2	4	1.6	4279.60	168.49	7.83

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf·ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.24.40.6.T.60.340.H.46	40	1165	294.32	52.56	86.50	88.50	89.00	62.50	74.50	80.50	G	441.025
KWM.24.50.6.T.60.350.H.46	50	1165	358.74	64.06	87.00	89.00	89.50	63.00	75.00	81.00	G	543.5375
KWM.24.60.6.T.60.360.H.46	60	1165	430.98	76.96	87.00	89.00	89.50	64.50	76.00	82.00	G	662.275

## 8.30 KWM.28".----.6.T.60.H



TM062148

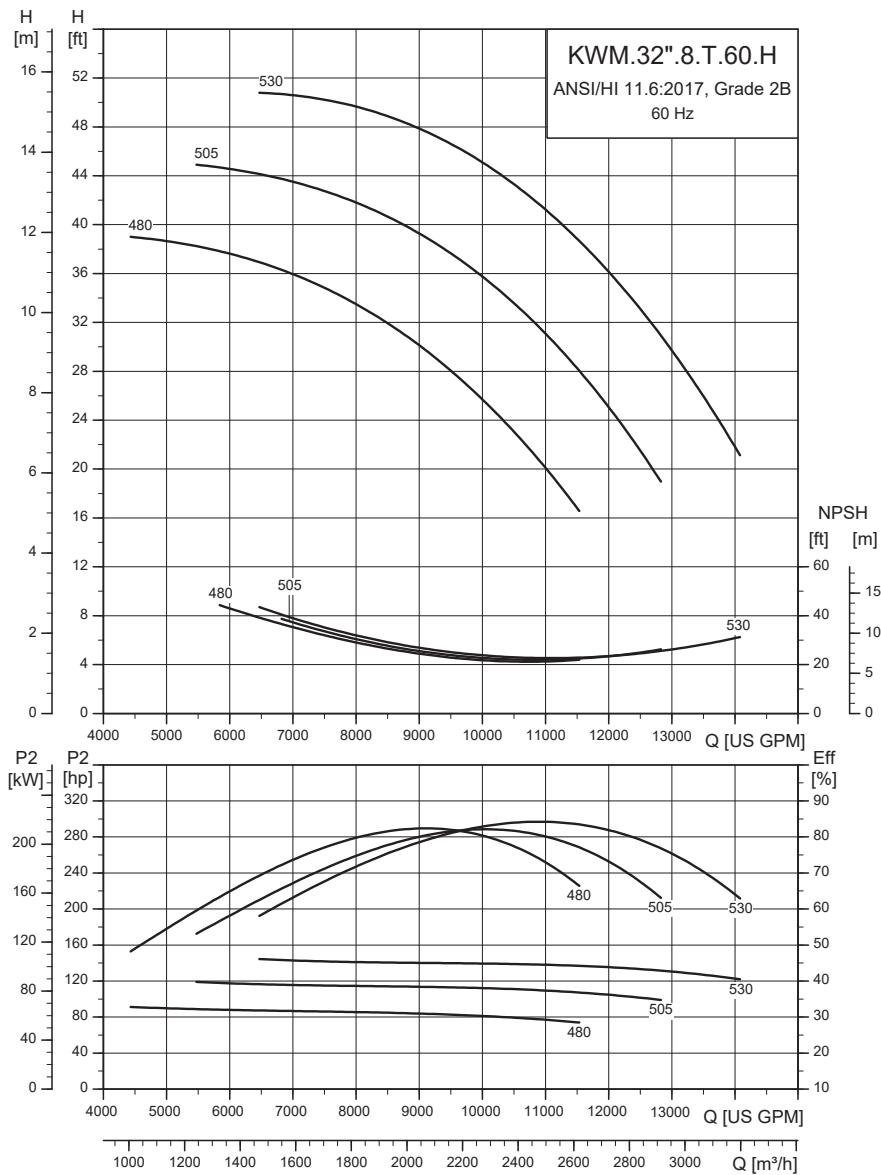
## Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf·ft²]	
							Motor	Impeller
KWM.28.50.6.T.60.360.H.46	6	28	14.2	4	2	3222.90	147.13	13.53
KWM.28.60.6.T.60.375.H.46	6	28	14.8	4	2	3610.40	168.49	13.76
KWM.28.75.6.T.60.390.H.46	6	32	15.4	4	2	4002.20	194.59	14.00

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf·ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.28.50.6.T.60.360.H.46	50	875	358.74	68.15	86.50	86.00	88.50	60.00	72.00	77.00	G	543.5375
KWM.28.60.6.T.60.375.H.46	60	875	430.98	81.89	87.00	86.00	89.00	60.50	72.50	77.50	G	662.275
KWM.28.75.6.T.60.390.H.46	75	875	517.52	98.26	87.50	86.00	89.50	61.50	73.50	78.50	F	775.1125

### 8.31 KWM.32".----.8.T.60.H



TM062150

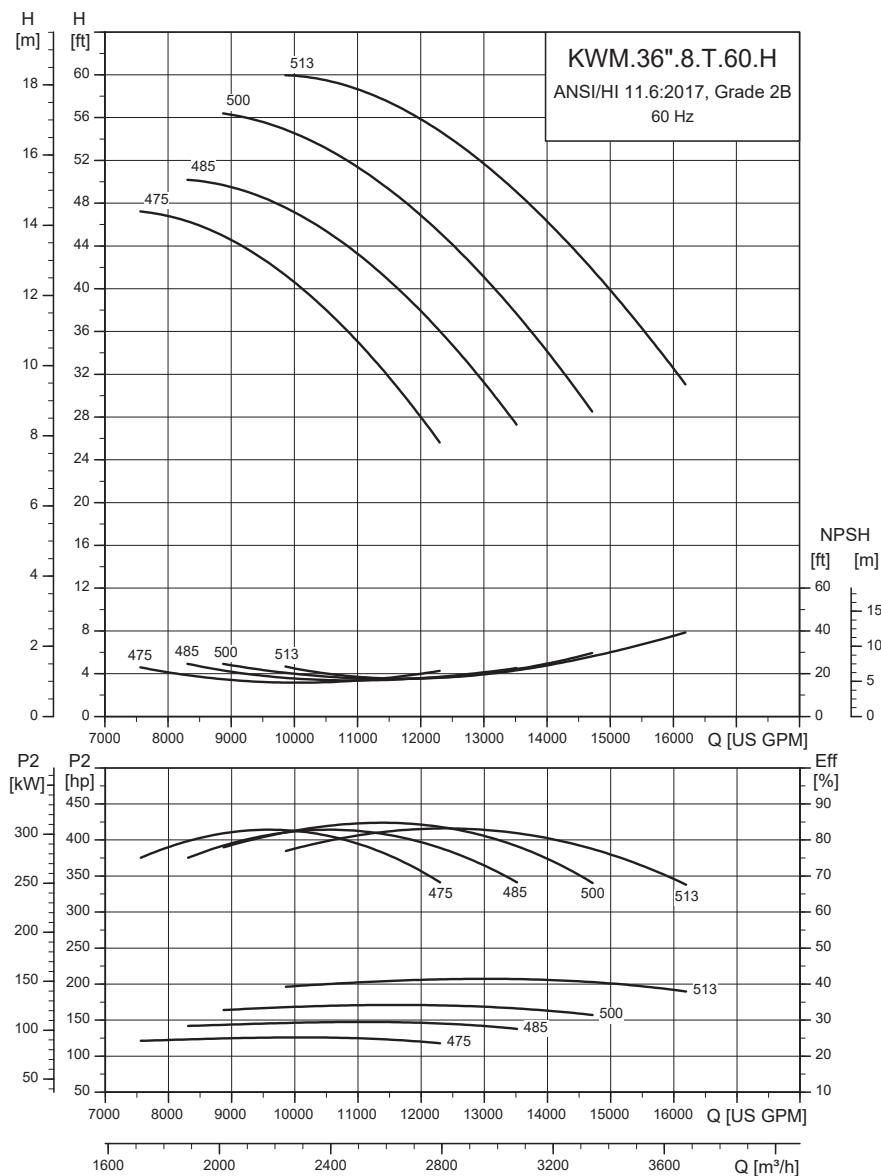
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf·ft²]	
							Motor	Impeller
KWM.32.100.8.T.60.480.H.46	8	32	18.9	4	2.2	4429.30	405.79	59.33
KWM.32.120.8.T.60.505.H.46	8	32	19.9	4	2.2	5468.40	500.71	61.70
KWM.32.150.8.T.60.530.H.46	8	36	20.9	4	2.2	6467.80	500.71	64.07

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbf·ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.32.100.8.T.60.480.H.46	100	875	728.20	132.40	88.00	86.00	90.00	62.50	74.00	79.00	G	1288.4125
KWM.32.120.8.T.60.505.H.46	120	875	866.41	157.53	88.20	86.00	90.20	64.00	74.50	79.50	G	1473.525
KWM.32.150.8.T.60.530.H.46	150	875	1036.60	188.47	89.00	86.00	91.00	65.50	75.50	80.50	F	1654.95

## 8.32 KWM.36".----.8.T.60.H



TM065494

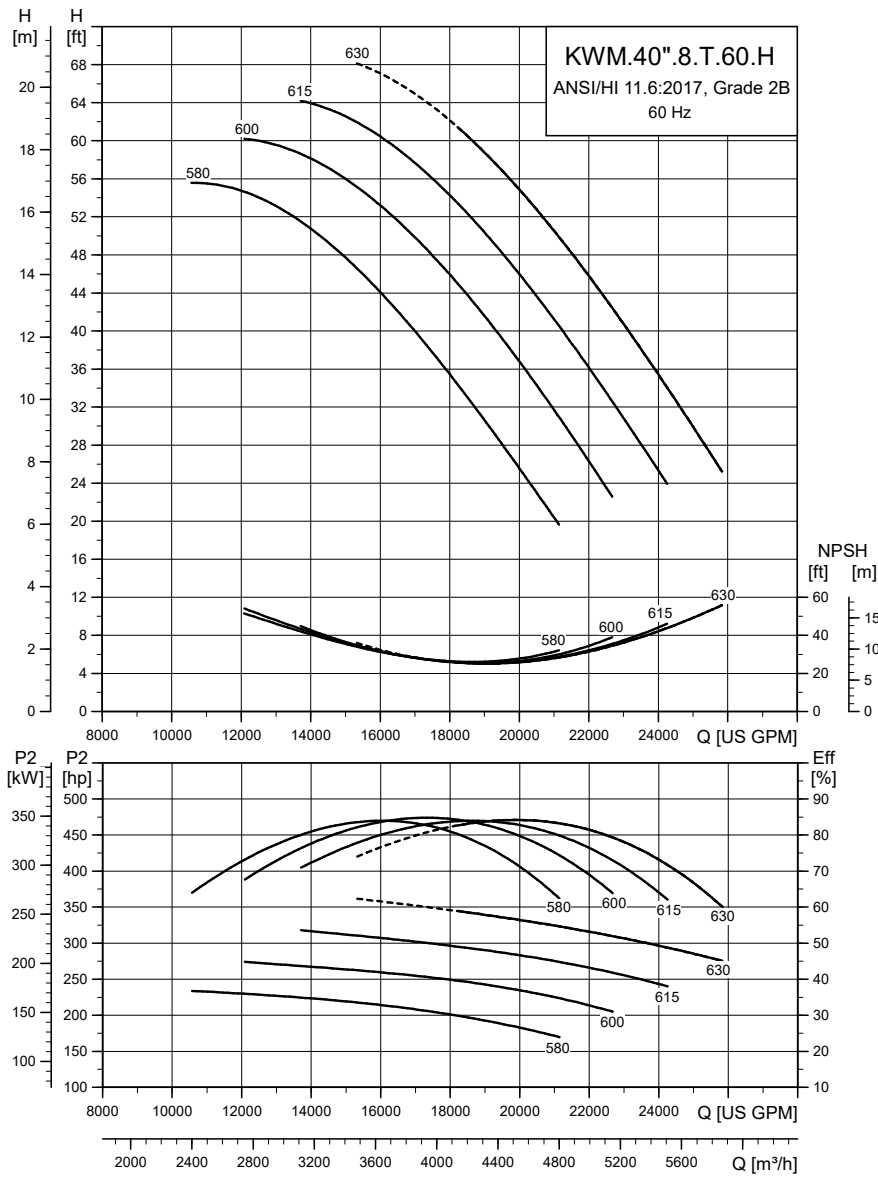
## Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.36.150.8.T.60.475.H.46	8	36	18.7	4	2.4	7559.70	844.80	66.45
KWM.36.175.8.T.60.485.H.46	8	36	19.1	4	2.4	8308.20	837.68	67.63
KWM.36.175.8.T.60.500.H.46	8	36	19.7	4	2.4	8871.80	837.68	55.05
KWM.36.215.8.T.60.513.H.46	8	40	20.2	4	2.4	9858.00	887.52	56.95

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.36.150.8.T.60.475.H.46	150	875	1036.60	188.47	89.00	86.00	91.00	65.50	75.50	80.50	F	1654.95
KWM.36.175.8.T.60.485.H.46	175	875	1211.54	220.28	90.40	91.40	91.50	68.30	77.50	82.20	F	2771.525
KWM.36.175.8.T.60.500.H.46	175	875	1211.54	220.28	90.40	91.40	91.50	68.30	77.50	82.20	F	2771.525
KWM.36.215.8.T.60.513.H.46	215	875	1456.65	264.84	90.90	91.70	91.80	67.40	77.70	82.60	F	3282.6125

### 8.33 KWM.40".----.8.T.60.H



TM062154

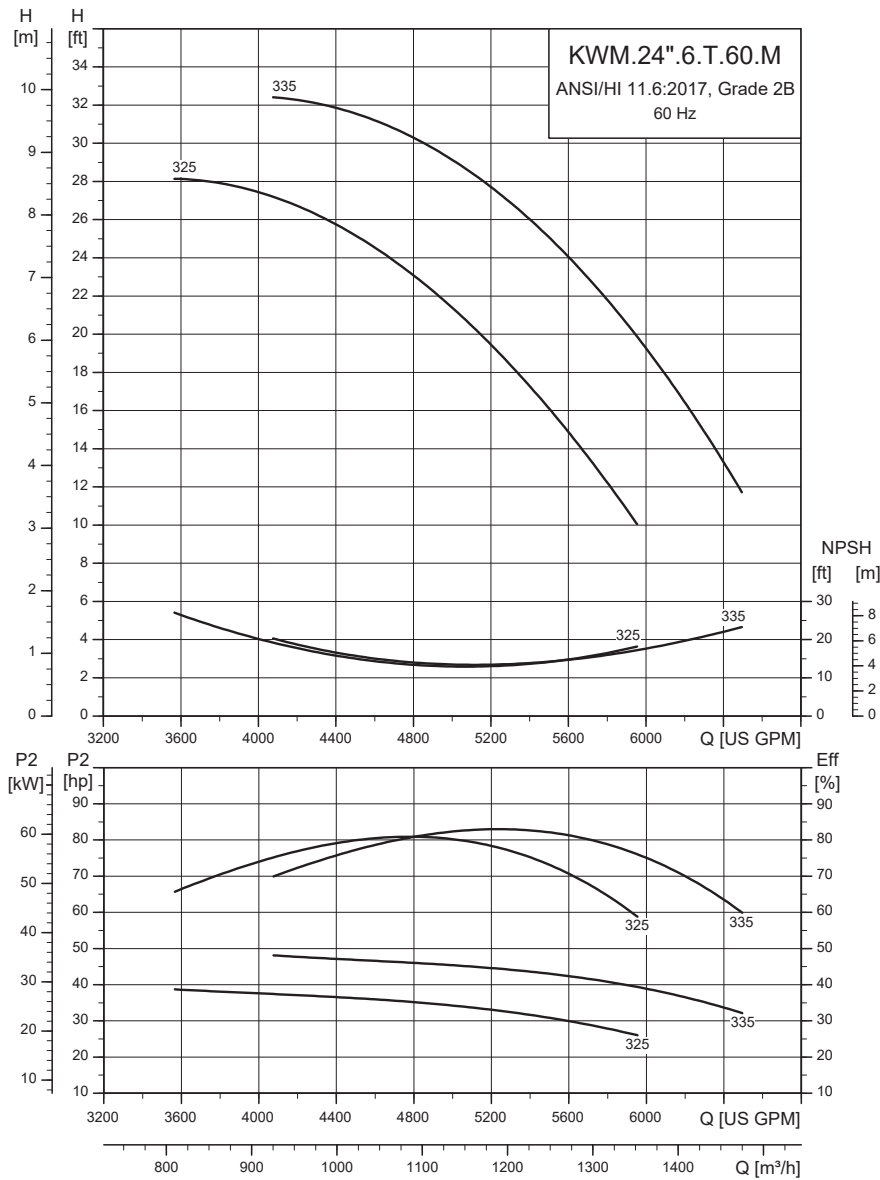
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbf <sup>2</sup> ]	
							Motor	Impeller
KWM.40.265.8.T.60.580.H.46	8	40	22.8	4	3.1	10571.30	1053.63	218.32
KWM.40.265.8.T.60.600.H.46	8	40	23.6	4	3.1	12090.30	1053.63	221.88
KWM.40.300.8.T.60.600.H.46	8	40	23.6	4	3.1	12090.30	1321.78	221.88
KWM.40.300.8.T.60.615.H.46	8	40	24.2	4	3.1	16686.90	1321.78	226.62
KWM.40.335.8.T.60.615.H.46	8	40	24.2	4	3.1	13710.50	1383.48	226.62
KWM.40.335.8.T.60.630.H.46	8	20	24.8	4	3.1	15330.80	1383.48	230.18

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.40.265.8.T.60.580.H.46	265	875	1807.68	328.67	89.70	91.60	91.80	68.40	78.40	83.20	F	4193.425
KWM.40.265.8.T.60.600.H.46	265	875	1807.68	328.67	89.70	91.60	91.80	68.40	78.40	83.20	F	4193.425
KWM.40.300.8.T.60.600.H.46	300	875	1979.59	359.93	90.30	92.00	92.10	68.50	78.60	83.30	F	4503.9125
KWM.40.300.8.T.60.615.H.46	300	875	1979.59	359.93	90.30	92.00	92.10	68.50	78.60	83.30	F	4503.9125
KWM.40.335.8.T.60.615.H.46	335	875	2437.02	406.17	91.10	92.10	92.30	69.20	79.90	83.70	G	5082.1125
KWM.40.335.8.T.60.630.H.46	335	875	2437.02	406.17	91.10	92.10	92.30	69.20	79.90	83.70	G	5082.1125

### 8.34 KWM.24".----.6.T.60.M



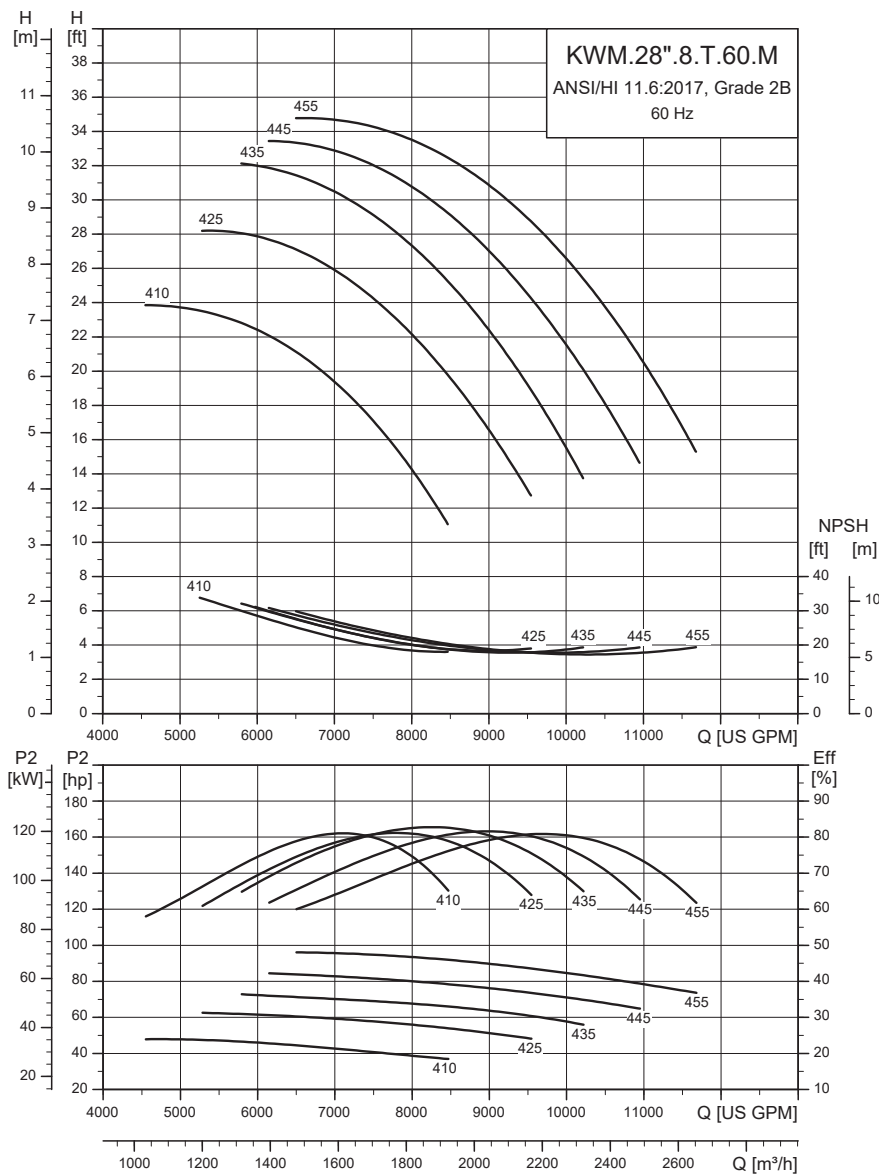
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft²]	
							Motor	Impeller
KWM.24.40.6.T.60.325.M.46	6	24	12.8	3	2	3566.30	121.02	3.61
KWM.24.50.6.T.60.335.M.46	6	28	13.2	3	2	4077.10	147.13	3.80

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]				Cos φ		LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.24.40.6.T.60.325.M.46	40	1165	294.32	52.56	86.50	88.50	89.00	62.50	74.50	80.50	G	441.025
KWM.24.50.6.T.60.335.M.46	50	1165	358.74	64.06	87.00	89.00	89.50	63.00	75.00	81.00	G	543.5375

## 8.35 KWM.28".----.8.T.60.M



TM062149

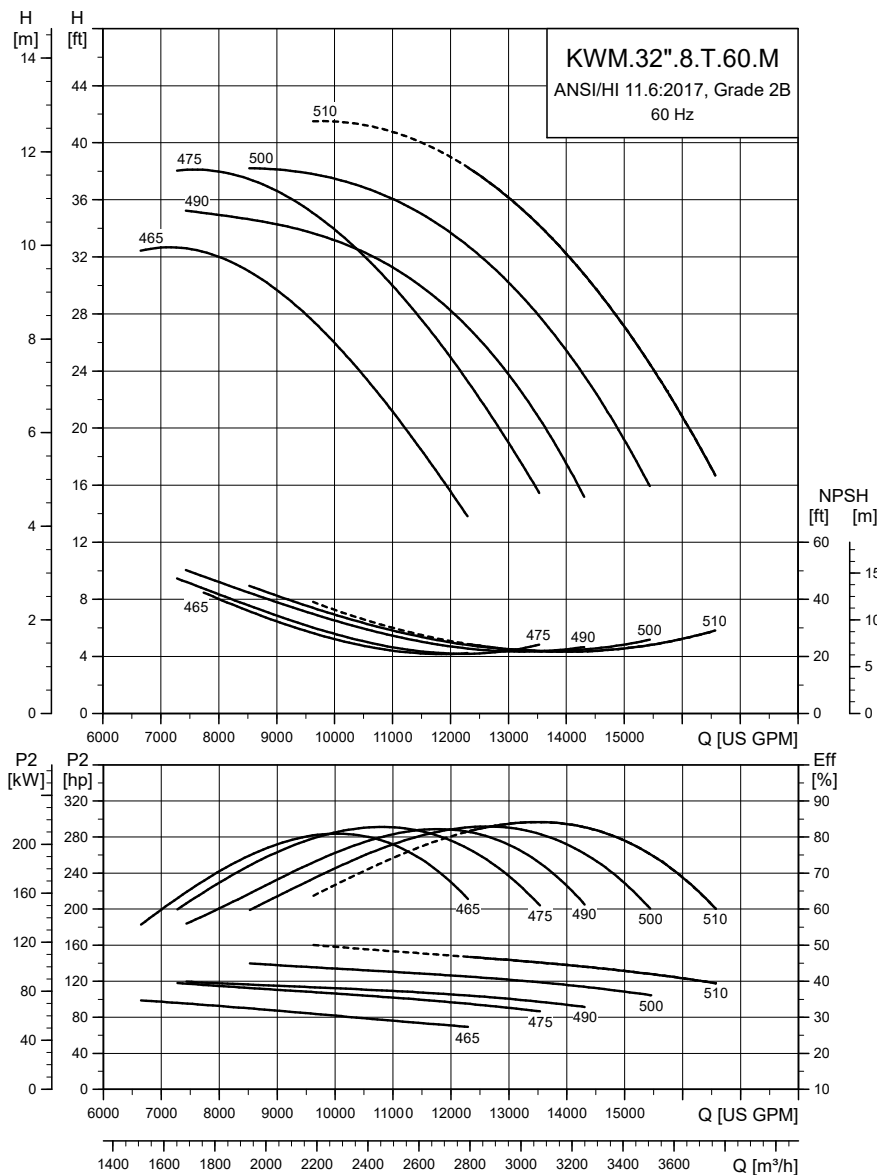
## Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.28.50.8.T.60.410.M.46	8	28	16.1	3	2.4	4552.60	144.76	12.34
KWM.28.60.8.T.60.425.M.46	8	28	16.7	3	2.4	5283.40	163.74	12.58
KWM.28.75.8.T.60.435.M.46	8	28	17.1	3	2.4	5794.20	339.34	12.81
KWM.28.100.8.T.60.445.M.46	8	28	17.5	3	2.4	6150.80	405.79	13.05
KWM.28.100.8.T.60.455.M.46	8	32	17.9	3	2.4	6503.00	405.79	13.29

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>n</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.28.50.8.T.60.410.M.46	50	875	374.82	68.15	86.50	86.00	88.50	60.00	72.00	77.00	G	665.225
KWM.28.60.8.T.60.425.M.46	60	875	450.38	81.89	87.00	86.00	89.00	60.50	72.50	77.50	G	774.375
KWM.28.75.8.T.60.435.M.46	75	875	491.29	98.26	87.50	86.00	89.50	61.50	73.50	78.50	F	946.2125
KWM.28.100.8.T.60.445.M.46	100	875	728.20	132.40	88.00	86.00	90.00	62.50	74.00	79.00	G	1288.4125
KWM.28.100.8.T.60.455.M.46	100	875	728.20	132.40	88.00	86.00	90.00	62.50	74.00	79.00	G	1288.4125

### 8.36 KWM.32".----.8.T.60.M



TM062151

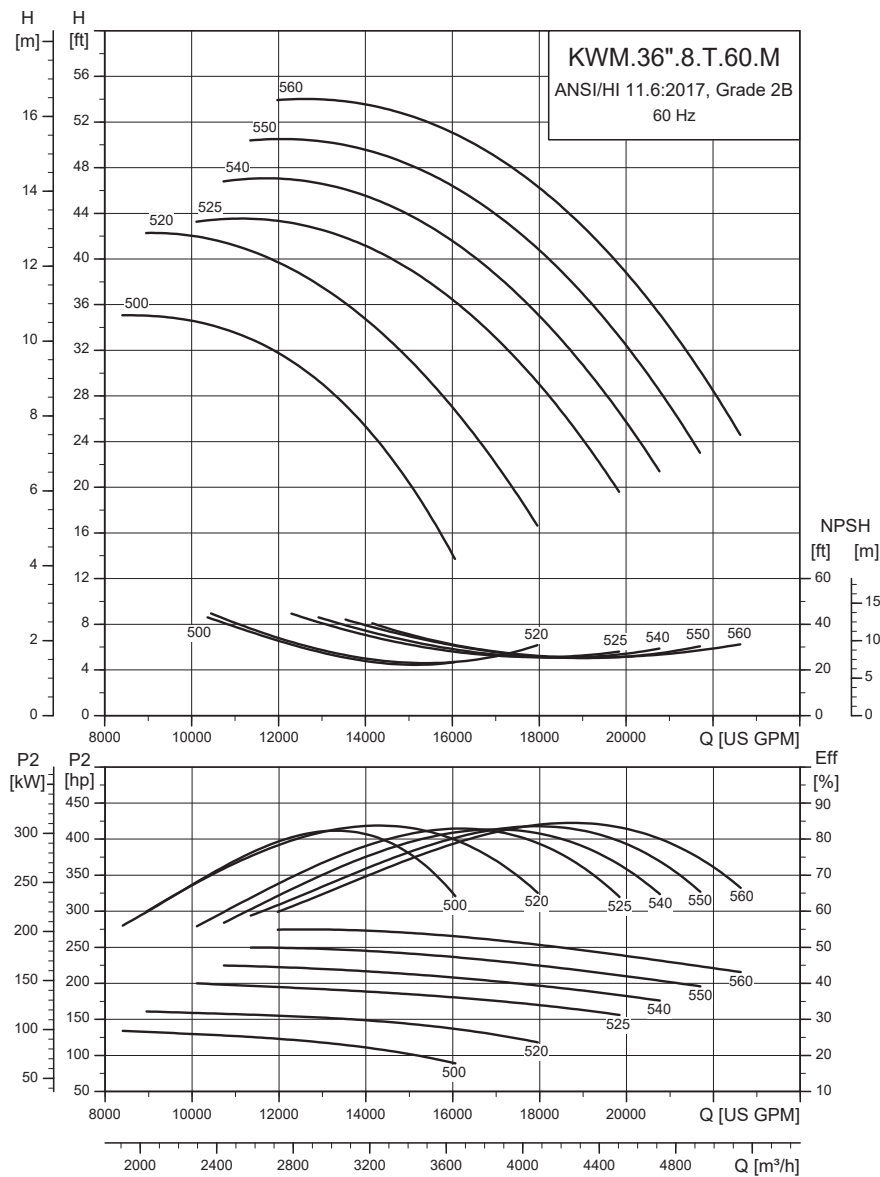
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.32.100.8.T.60.465.M.46	8	32	18.3	3	2.2	6652.70	405.79	21.36
KWM.32.120.8.T.60.475.M.46	8	32	18.7	3	2.2	7277.90	500.71	23.73
KWM.32.120.8.T.60.490.M.46	8	32	19.3	3	2.2	7432.00	500.71	26.34
KWM.32.150.8.T.60.500.M.46	8	32	19.7	3	2.2	8528.40	844.80	26.58
KWM.32.150.8.T.60.510.M.46	8	36	20.1	3	2.2	9624.70	844.80	26.82

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>n</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.32.100.8.T.60.465.M.46	100	875	728.20	132.40	88.00	86.00	90.00	62.50	74.00	79.00	G	1288.4125
KWM.32.120.8.T.60.475.M.46	120	875	866.41	157.53	88.20	86.00	90.20	64.00	74.50	79.50	G	1473.525
KWM.32.120.8.T.60.490.M.46	120	875	866.41	157.53	88.20	86.00	90.20	64.00	74.50	79.50	G	1473.525
KWM.32.150.8.T.60.500.M.46	150	875	1036.60	188.47	89.00	86.00	91.00	65.50	75.50	80.50	F	1654.95
KWM.32.150.8.T.60.510.M.46	150	875	1036.60	188.47	89.00	86.00	91.00	65.50	75.50	80.50	F	1654.95

## 8.37 KWM.36".----.8.T.60.M



TM062152

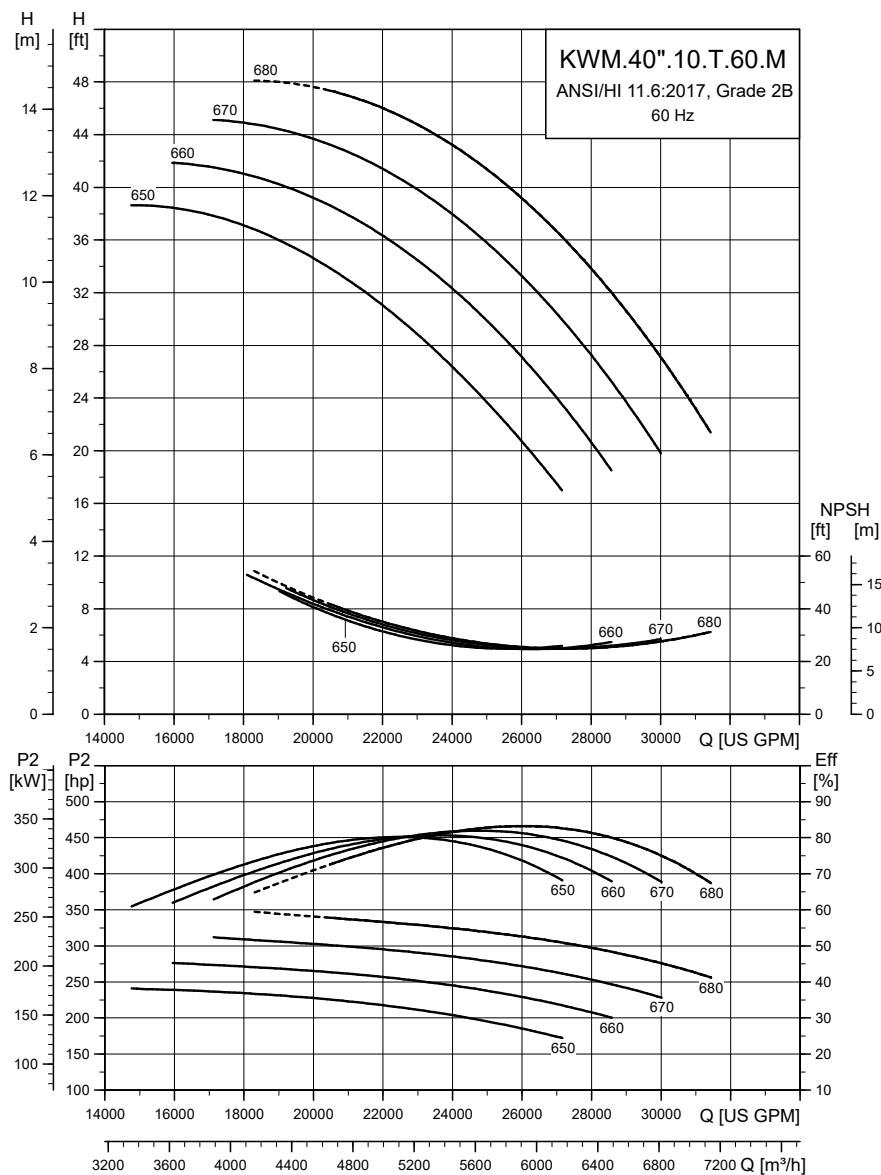
## Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.36.150.8.T.60.500.M.46	8	36	19.7	3	2.8	8400.70	844.80	34.41
KWM.36.150.8.T.60.520.M.46	8	36	20.5	3	2.8	13869.00	844.80	35.60
KWM.36.175.8.T.60.520.M.46	8	36	20.5	3	2.8	8951.00	837.68	35.60
KWM.36.175.8.T.60.525.M.46	8	36	20.7	3	2.8	15841.50	837.68	36.78
KWM.36.215.8.T.60.525.M.46	8	36	20.7	3	2.8	10109.00	887.52	36.78
KWM.36.215.8.T.60.540.M.46	8	36	21.3	3	2.8	10729.80	887.52	37.97
KWM.36.265.8.T.60.550.M.46	8	36	21.7	3	2.8	11350.60	1053.63	39.39
KWM.36.300.8.T.60.550.M.46	8	36	21.7	3	2.8	11350.60	1321.78	39.39
KWM.36.300.8.T.60.560.M.46	8	40	22	3	2.8	11971.40	1321.78	40.82

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.36.150.8.T.60.500.M.46	150	875	1036.60	188.47	89.00	86.00	91.00	65.50	75.50	80.50	F	1654.95
KWM.36.150.8.T.60.520.M.46	150	875	1036.60	188.47	89.00	86.00	91.00	65.50	75.50	80.50	F	1654.95
KWM.36.175.8.T.60.520.M.46	175	875	1211.54	220.28	90.40	91.40	91.50	68.30	77.50	82.20	F	2771.525
KWM.36.175.8.T.60.525.M.46	175	875	1211.54	220.28	90.40	91.40	91.50	68.30	77.50	82.20	F	2771.525
KWM.36.215.8.T.60.525.M.46	215	875	1456.65	264.84	90.90	91.70	91.80	67.40	77.70	82.60	F	3282.6125
KWM.36.215.8.T.60.540.M.46	215	875	1456.65	264.84	90.90	91.70	91.80	67.40	77.70	82.60	F	3282.6125
KWM.36.265.8.T.60.550.M.46	265	875	1807.68	328.67	89.70	91.60	91.80	68.40	78.40	83.20	F	4193.425
KWM.36.300.8.T.60.550.M.46	300	875	1979.59	359.93	90.30	92.00	92.10	68.50	78.60	83.30	F	4503.9125
KWM.36.300.8.T.60.560.M.46	300	875	1979.59	359.93	90.30	92.00	92.10	68.50	78.60	83.30	F	4503.9125

## 8.38 KWM.40".----.10.T.60.M



TM062153

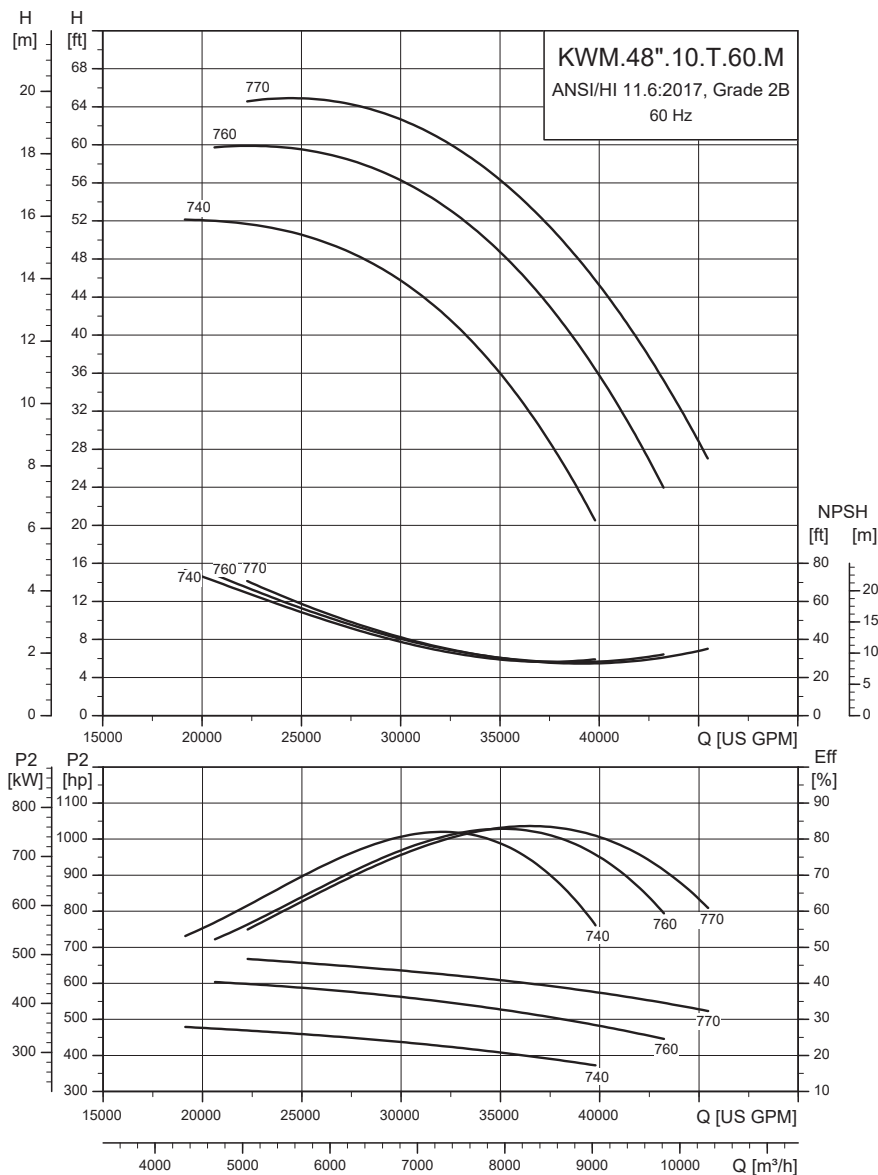
## Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.40.215.10.T.60.650.M.46	10	40	25.6	3	3.9	14771.60	1416.70	140.01
KWM.40.265.10.T.60.660.M.46	10	40	26	3	3.9	15951.60	1542.47	142.38
KWM.40.300.10.T.60.670.M.46	10	40	26.4	3	3.9	21353.90	1670.62	144.76
KWM.40.335.10.T.60.670.M.46	10	40	26.4	3	3.9	17127.20	1815.37	144.76
KWM.40.335.10.T.60.680.M.46	10	48	26.8	3	3.9	18307.10	1815.37	147.13

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.40.215.10.T.60.650.M.46	215	875	1498.84	272.52	90.90	91.90	92.00	64.50	75.50	80.10	F	3812.875
KWM.40.265.10.T.60.660.M.46	265	875	1678.58	335.72	90.90	92.10	92.20	66.00	76.20	81.10	F	4543.7375
KWM.40.300.10.T.60.670.M.46	300	875	1860.80	372.16	91.10	92.30	92.40	65.30	75.30	80.30	E	5144.8
KWM.40.335.10.T.60.670.M.46	335	875	2091.74	418.35	91.20	92.40	92.60	66.40	76.40	81.00	E	6023.1625
KWM.40.335.10.T.60.680.M.46	335	875	2091.74	418.35	91.20	92.40	92.60	66.40	76.40	81.00	E	6023.1625

### 8.39 KWM.48".----.10.T.60.M



TM062155

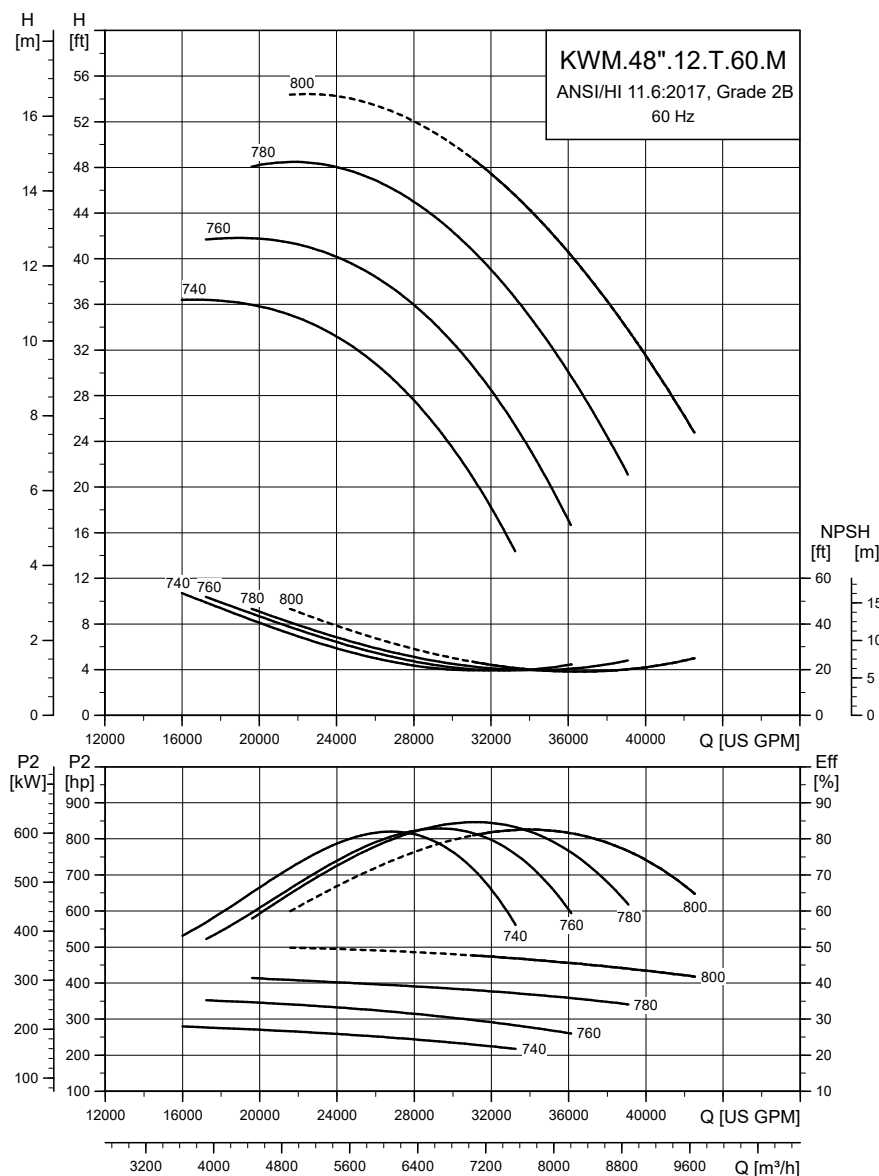
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.48.470.10.T.60.740.M.46	10	48	29.1	3	4.9	19130.50	3362.59	249.17
KWM.48.540.10.T.60.760.M.46	10	48	29.9	3	4.9	31700.60	3894.15	253.91
KWM.48.600.10.T.60.760.M.46	10	48	29.9	3	4.9	20623.00	3962.97	253.91
KWM.48.600.10.T.60.770.M.46	10	48	30.3	3	4.9	34826.70	3962.97	256.29
KWM.48.665.10.T.60.770.M.46	10	48	30.3	3	4.9	22265.30	5802.07	256.29

#### Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.48.470.10.T.60.740.M.46	470	875	2814.73	562.95	92.10	92.80	92.90	71.20	80.20	84.00	E	8245.25
KWM.48.540.10.T.60.760.M.46	540	875	3232.62	646.52	92.80	93.00	93.00	71.20	79.30	83.50	E	9112.55
KWM.48.600.10.T.60.760.M.46	600	875	3598.32	719.66	92.70	93.10	93.10	72.50	81.90	84.30	E	10631.8
KWM.48.600.10.T.60.770.M.46	600	875	3598.32	719.66	92.70	93.10	93.10	72.50	81.90	84.30	E	10631.8
KWM.48.665.10.T.60.770.M.46	665	875	3979.25	795.85	92.70	93.00	93.10	72.90	81.30	84.70	E	11716.6625

## 8.40 KWM.48".----.12.T.60.M



TM062156

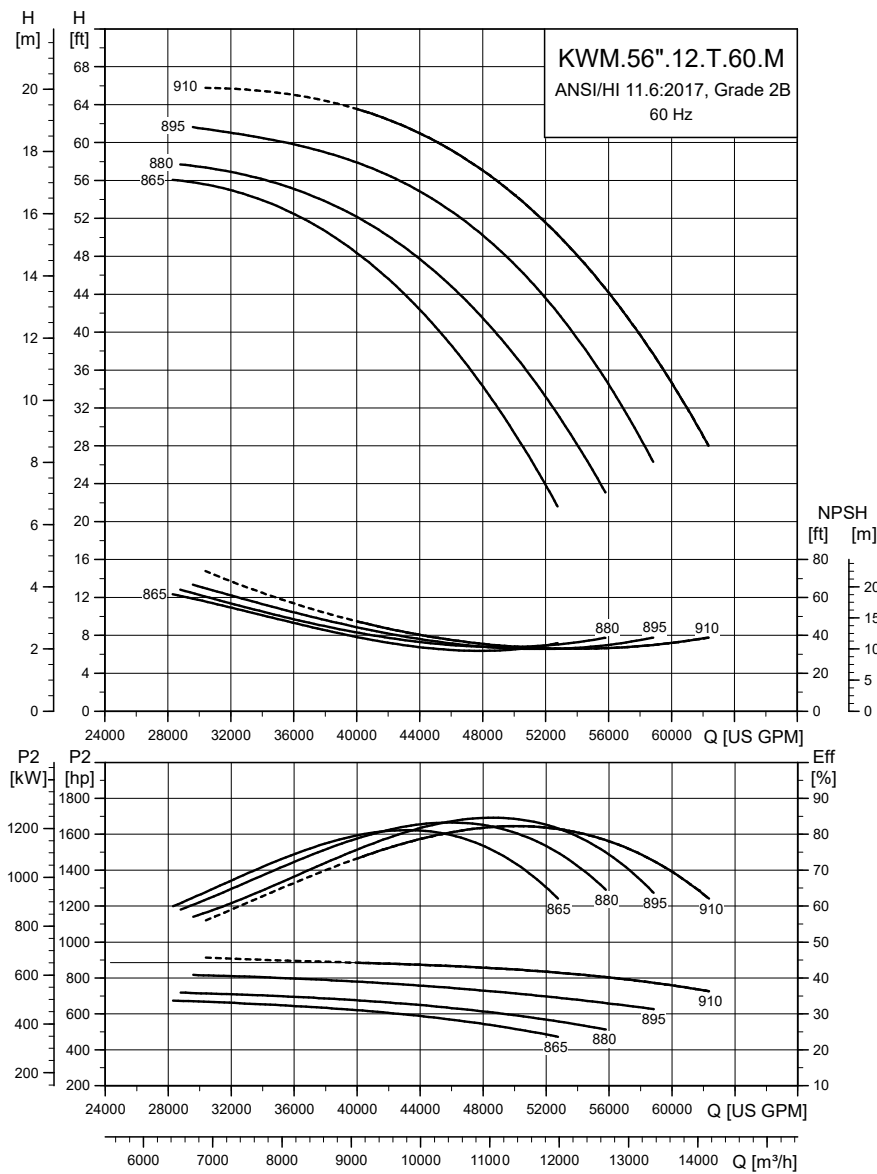
## Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.48.265.12.T.60.740.M.46	12	48	29.1	3	4.9	15986.80	2728.99	249.17
KWM.48.300.12.T.60.740.M.46	12	48	29.1	3	4.9	15986.80	2966.30	249.17
KWM.48.335.12.T.60.760.M.46	12	48	29.9	3	4.9	17232.80	3331.74	253.91
KWM.48.400.12.T.60.780.M.46	12	48	30.7	3	4.9	19601.60	3395.81	258.66
KWM.48.470.12.T.60.800.M.46	12	56	31.5	3	4.9	21582.90	3775.50	261.03

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.48.265.12.T.60.740.M.46	265	875	1740.16	348.03	91.80	91.90	92.00	60.70	72.60	78.40	F	5785.6875
KWM.48.300.12.T.60.740.M.46	300	875	1905.17	381.03	92.00	92.10	92.20	60.10	77.10	78.60	F	6473.0375
KWM.48.335.12.T.60.760.M.46	335	875	2152.87	430.57	92.50	92.60	92.60	61.80	73.60	78.70	F	7189.15
KWM.48.400.12.T.60.780.M.46	400	875	2539.61	507.92	92.40	92.80	92.90	62.90	74.20	79.80	F	8317.525
KWM.48.470.12.T.60.800.M.46	470	875	2952.29	590.46	92.50	92.90	93.00	63.80	74.00	80.00	F	9590.45

### 8.41 KWM.56".----.12.T.60.M



TM062157

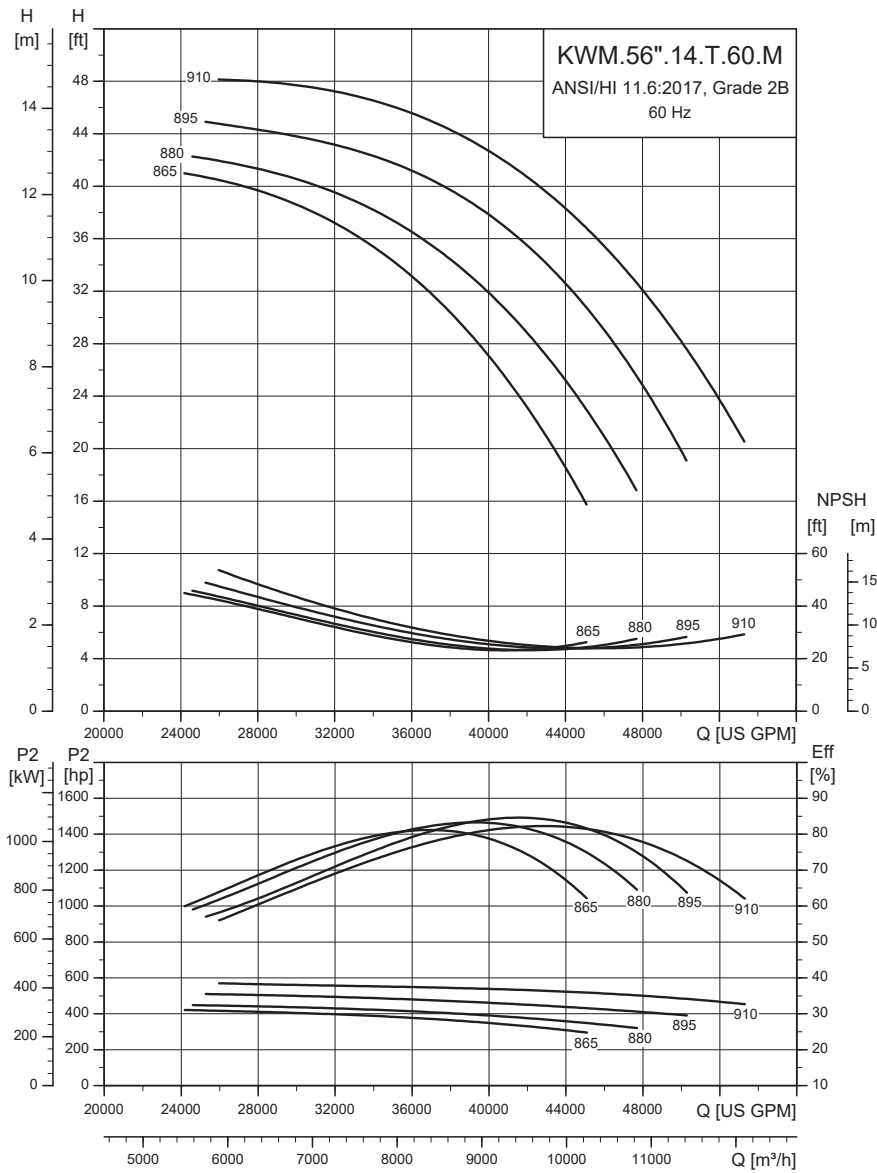
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.56.600.12.T.60.865.M.46	12	56	34.1	3	4.5	39322.00	5802.07	344.09
KWM.56.665.12.T.60.865.M.46	12	56	34.1	3	4.5	28297.20	6423.81	344.09
KWM.56.665.12.T.60.880.M.46	12	56	34.6	3	4.5	39643.40	6423.81	346.46
KWM.56.730.12.T.60.880.M.46	12	56	34.6	3	4.5	28777.10	11122.42	346.46
KWM.56.730.12.T.60.895.M.46	12	56	35.2	3	4.5	45525.60	11122.42	351.21
KWM.56.800.12.T.60.895.M.46	12	56	35.2	3	4.5	29574.10	11888.91	351.21
KWM.56.865.12.T.60.910.M.46	12	56	35.8	3	4.5	30375.40	12081.13	355.96

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.56.600.12.T.60.865.M.46	600	875	3789.77	757.95	92.00	92.70	92.80	63.80	77.80	80.30	F	11933.4875
KWM.56.665.12.T.60.865.M.46	665	875	4200.40	840.08	92.00	92.70	92.80	64.80	75.60	80.50	F	14667.4
KWM.56.665.12.T.60.880.M.46	665	875	4200.40	840.08	92.00	92.70	92.80	64.80	75.60	80.50	F	14667.4
KWM.56.730.12.T.60.880.M.46	730	875	4575.68	915.14	92.80	92.90	92.90	65.20	75.80	81.20	E	15188.075
KWM.56.730.12.T.60.895.M.46	730	875	4575.68	915.14	92.80	92.90	92.90	65.20	75.80	81.20	E	15188.075
KWM.56.800.12.T.60.895.M.46	800	875	4961.10	992.22	92.80	92.90	92.90	66.70	76.90	81.70	E	16077.5
KWM.56.865.12.T.60.910.M.46	865	875	5361.40	1072.28	92.80	92.90	92.90	66.90	78.00	81.90	E	17582

### 8.42 KWM.56".----.14.T.60.M



TM062158

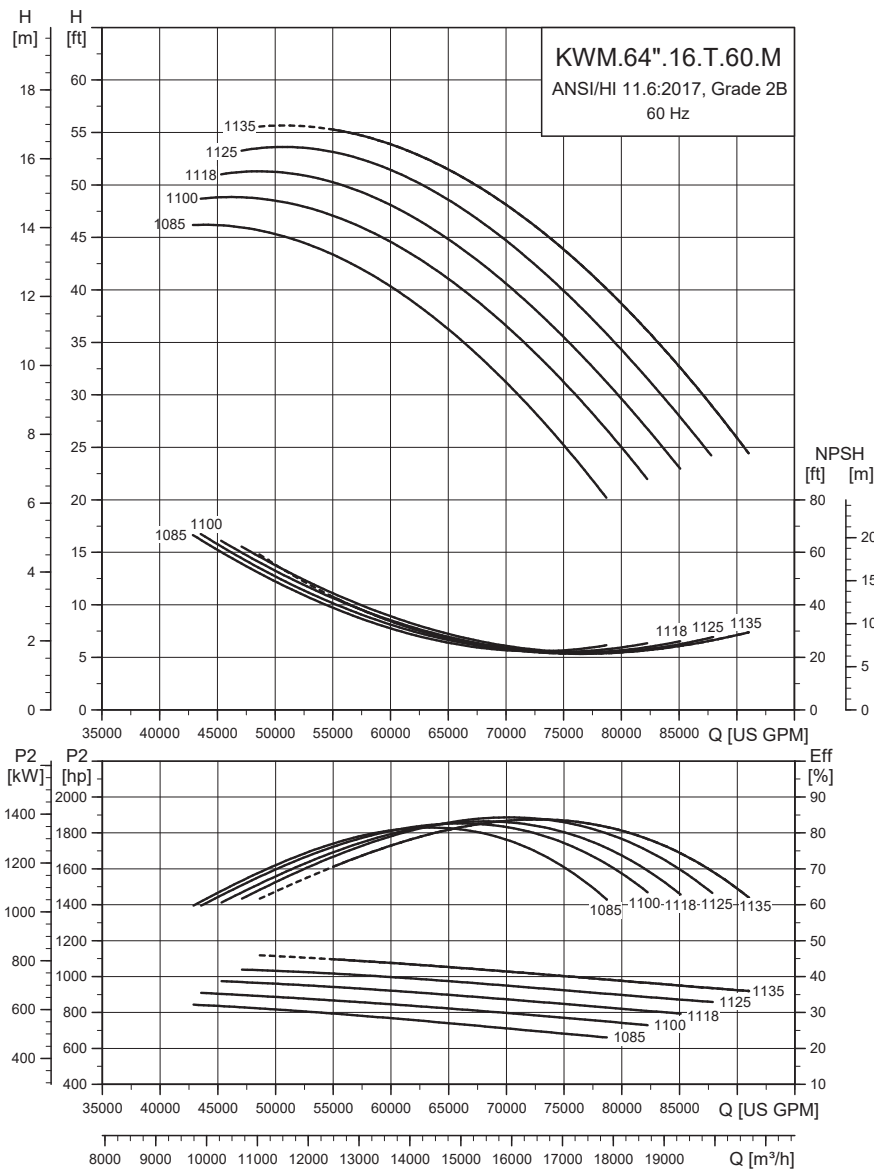
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.56.400.14.T.60.865.M.46	14	56	34.1	3	4.5	28618.60	5595.62	344.09
KWM.56.400.14.T.60.880.M.46	14	56	34.6	3	4.5	36984.10	5595.62	346.46
KWM.56.470.14.T.60.865.M.46	14	56	34.1	3	4.5	24184.90	5697.66	344.09
KWM.56.470.14.T.60.880.M.46	14	56	34.6	3	4.5	24594.40	5697.66	346.46
KWM.56.470.14.T.60.895.M.46	14	56	35.2	3	4.5	35517.90	5697.66	351.21
KWM.56.540.14.T.60.895.M.46	14	56	35.2	3	4.5	25276.90	10486.45	351.21
KWM.56.540.14.T.60.910.M.46	14	56	35.8	3	4.5	34342.40	10486.45	355.96
KWM.56.600.14.T.60.910.M.46	14	64	35.8	3	4.5	25963.70	11250.56	355.96

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.56.400.14.T.60.865.M.46	400	875	2655.39	531.08	92.00	92.10	92.20	59.40	70.60	76.90	F	10921.6375
KWM.56.400.14.T.60.880.M.46	400	875	2655.39	531.08	92.00	92.10	92.20	59.40	70.60	76.90	F	10921.6375
KWM.56.470.14.T.60.865.M.46	470	875	3087.23	617.45	92.20	92.30	92.40	58.40	71.30	77.00	F	11072.825
KWM.56.470.14.T.60.880.M.46	470	875	3087.23	617.45	92.20	92.30	92.40	58.40	71.30	77.00	F	11072.825
KWM.56.470.14.T.60.895.M.46	470	875	3087.23	617.45	92.20	92.30	92.40	58.40	71.30	77.00	F	11072.825
KWM.56.540.14.T.60.895.M.46	540	875	3497.20	699.44	92.40	92.50	92.50	59.80	71.70	77.60	F	13307.45
KWM.56.540.14.T.60.910.M.46	540	875	3497.20	699.44	92.40	92.50	92.50	59.80	71.70	77.60	F	13307.45
KWM.56.600.14.T.60.910.M.46	600	875	3920.00	784.00	92.50	92.60	92.60	59.80	71.70	77.80	F	14833.3375

### 8.43 KWM.64".----.16.T.60.M



TM062159

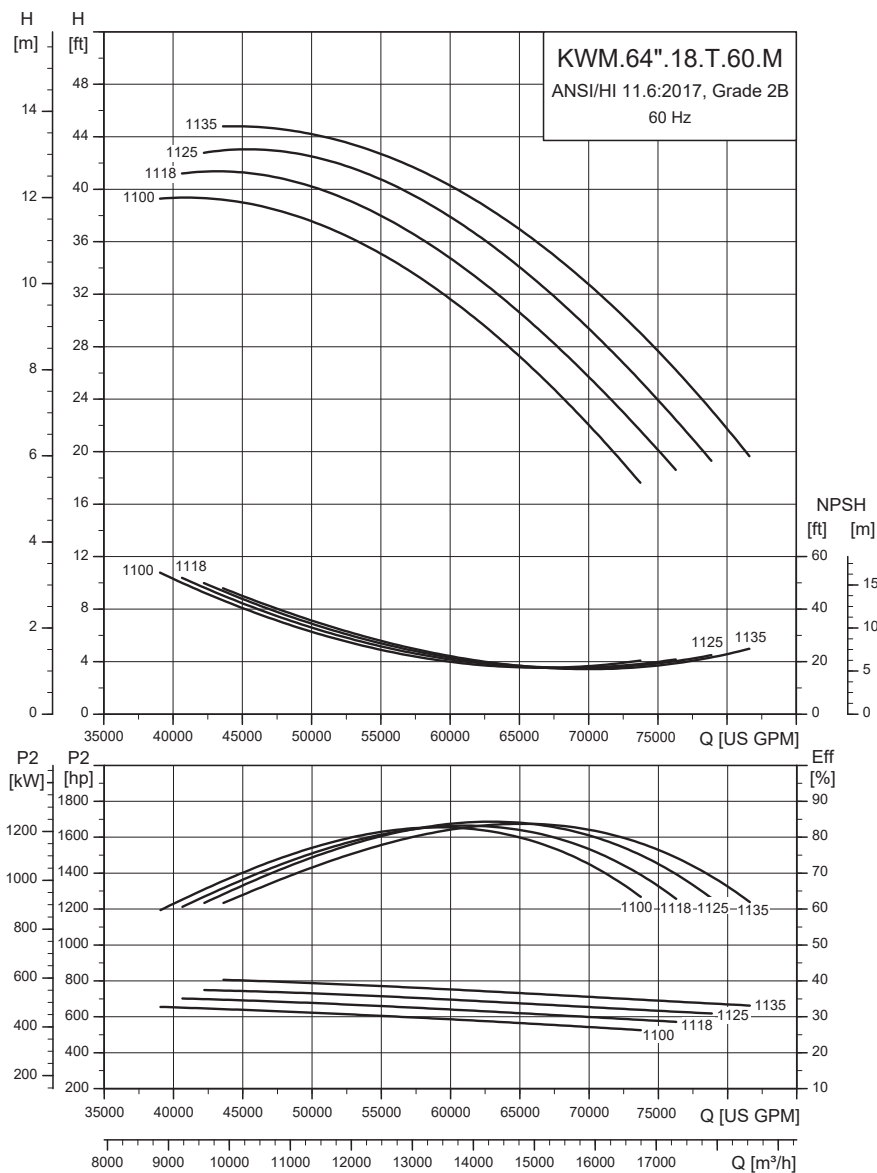
#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.64.800.16.T.60.1085.M.46	16	64	42.7	3	5.9	50443.60	11452.27	749.88
KWM.64.800.16.T.60.1100.M.46	16	64	43.3	3	5.9	63176.70	11452.27	752.25
KWM.64.865.16.T.60.1085.M.46	16	64	42.7	3	5.9	42883.90	12406.71	749.88
KWM.64.865.16.T.60.1100.M.46	16	64	43.3	3	5.9	50531.70	12406.71	752.25
KWM.64.865.16.T.60.1118.M.46	16	64	44	3	5.9	65968.20	12406.71	754.63
KWM.64.930.16.T.60.1100.M.46	16	64	43.3	3	5.9	43557.60	13360.90	752.25
KWM.64.930.16.T.60.1118.M.46	16	64	44	3	5.9	52169.60	13360.90	754.63
KWM.64.930.16.T.60.1125.M.46	16	64	44.3	3	5.9	68781.60	13360.90	757.00
KWM.64.1000.16.T.60.1118.M.46	16	64	44	3	5.9	45318.70	14315.34	754.63
KWM.64.1000.16.T.60.1125.M.46	16	64	44.3	3	5.9	53803.00	14315.34	757.00
KWM.64.1000.16.T.60.1135.M.46	16	64	44.7	3	5.9	70208.10	14315.34	759.37
KWM.64.1060.16.T.60.1125.M.46	16	64	44.3	3	5.9	47088.70	15269.78	757.00
KWM.64.1060.16.T.60.1135.M.46	16	64	44.7	3	5.9	48634.10	15269.78	759.37

## Electrical data for 460 V motors

Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.64.800.16.T.60.1085.M.46	800	875	5918.83	1076.15	92.00	92.10	92.20	63.00	72.40	75.90	G	22184
KWM.64.800.16.T.60.1100.M.46	800	875	5918.83	1076.15	92.00	92.10	92.20	63.00	72.40	75.90	G	22184
KWM.64.865.16.T.60.1085.M.46	865	875	6396.69	1163.03	92.10	92.30	92.30	63.00	72.40	76.00	G	24044.7125
KWM.64.865.16.T.60.1100.M.46	865	875	6396.69	1163.03	92.10	92.30	92.30	63.00	72.40	76.00	G	24044.7125
KWM.64.865.16.T.60.1118.M.46	865	875	6396.69	1163.03	92.10	92.30	92.30	63.00	72.40	76.00	G	24044.7125
KWM.64.930.16.T.60.1100.M.46	930	875	6881.28	1251.14	92.10	92.30	92.40	63.00	72.40	76.00	G	25316.1625
KWM.64.930.16.T.60.1118.M.46	930	875	6881.28	1251.14	92.10	92.30	92.40	63.00	72.40	76.00	G	25316.1625
KWM.64.930.16.T.60.1125.M.46	930	875	6881.28	1251.14	92.10	92.30	92.40	63.00	72.40	76.00	G	25316.1625
KWM.64.1000.16.T.60.1118.M.46	1000	875	7321.76	1331.23	92.70	92.80	92.80	63.20	72.60	76.20	G	27693.125
KWM.64.1000.16.T.60.1125.M.46	1000	875	7321.76	1331.23	92.70	92.80	92.80	63.20	72.60	76.20	G	27693.125
KWM.64.1000.16.T.60.1135.M.46	1000	875	7321.76	1331.23	92.70	92.80	92.80	63.20	72.60	76.20	G	27693.125
KWM.64.1060.16.T.60.1125.M.46	1060	875	7772.68	1413.21	92.90	93.00	93.00	63.40	72.80	76.40	G	29553.8375
KWM.64.1060.16.T.60.1135.M.46	1060	875	7772.68	1413.21	92.90	93.00	93.00	63.40	72.80	76.40	G	29553.8375

### 8.44 KWM.64".----.18.T.60.M



TM062160

#### Pump data

Model	No. of poles	Discharge column size [in.]	Impeller diam. [in.]	No. of blades	Free passage [in.]	Min. flow rate [gpm]	Moment of inertia [lbft <sup>2</sup> ]	
							Motor	Impeller
KWM.64.665.18.T.60.1100.M.46	18	64	43.3	3	5.9	39049.00	10797.31	752.25
KWM.64.665.18.T.60.1118.M.46	18	64	44	3	5.9	40634.10	10797.31	752.25
KWM.64.665.18.T.60.1125.M.46	18	64	44.3	3	5.9	61666.60	10797.31	754.63
KWM.64.730.18.T.60.1118.M.46	18	64	44	3	5.9	46771.70	11877.05	757.00
KWM.64.730.18.T.60.1125.M.46	18	64	44.3	3	5.9	42214.70	11877.05	754.63
KWM.64.730.18.T.60.1135.M.46	18	64	44.7	3	5.9	61640.10	11877.05	757.00
KWM.64.800.18.T.60.1125.M.46	18	64	44.3	3	5.9	42214.70	12956.78	759.37
KWM.64.800.18.T.60.1135.M.46	18	24	44.7	3	5.9	39639.00	12956.78	757.00

## Electrical data for 460 V motors

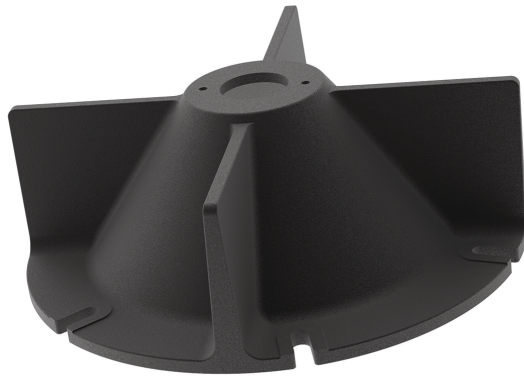
Model	P2 [hp]	min <sup>-1</sup>	I <sub>start</sub> [A]	I <sub>N</sub> [A]	η <sub>motor</sub> [%]			Cos φ			LR code	Break-down torque [lbs-ft]
					1/2	3/4	1/1	1/2	3/4	1/1		
KWM.64.665.18.T.60.1100.M.46	665	875	5117.00	930.36	91.60	91.80	91.90	60.60	70.10	73.40	G	20431.7
KWM.64.665.18.T.60.1118.M.46	665	875	5117.00	930.36	91.60	91.80	91.90	60.60	70.10	73.40	G	20431.7
KWM.64.665.18.T.60.1125.M.46	665	875	5117.00	930.36	91.60	91.80	91.90	60.60	70.10	73.40	G	20431.7
KWM.64.730.18.T.60.1118.M.46	730	875	5614.93	1020.90	91.90	92.00	92.00	60.70	70.20	73.50	G	22983.45
KWM.64.730.18.T.60.1125.M.46	730	875	5614.93	1020.90	91.90	92.00	92.00	60.70	70.20	73.50	G	22983.45
KWM.64.730.18.T.60.1135.M.46	730	875	5614.93	1020.90	91.90	92.00	92.00	60.70	70.20	73.50	G	22983.45
KWM.64.800.18.T.60.1125.M.46	800	875	6102.13	1109.48	91.70	92.00	92.10	60.90	70.40	73.70	G	24502.7
KWM.64.800.18.T.60.1135.M.46	800	875	6102.13	1109.48	91.70	92.00	92.10	60.90	70.40	73.70	G	24502.7

## 9. Accessories

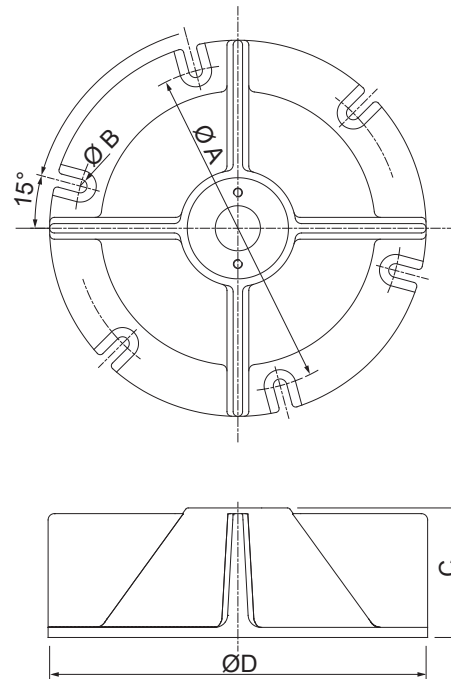
Accessories must be ordered separately. Contact Grundfos.

### 9.1 Anti-cavitation cone

The anti-cavitation cone (ACC) provides an optimal inlet flow to a vertically installed KPL axial flow or KWM mixed-flow pump. The ACC prevents cavitation, pre-swirls, fluid separation and reduces vortices.



TM073849



TM073694

Anti-cavitation cone

#### Dimensions

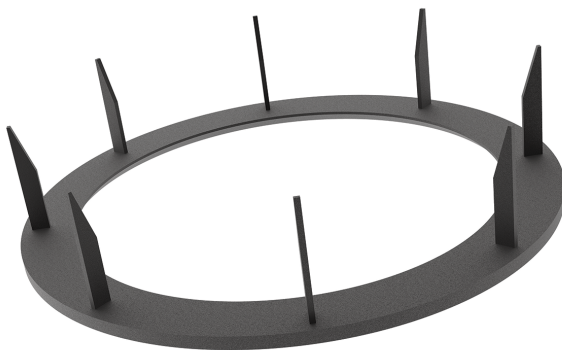
ACC	ØA [in]	ØB [in]	C [in]	ØD [in]	Weight [lbs]	Foundation bolt	Pipe diameter [in]
60 ACC	20.47	0.79	8.07	23.62	143.3	M16 x 250L-6ea	20-32
100 ACC	34.25	1.42	12.99	39.37	507	M30 x 400L-6ea	36-44
120 ACC	1040	1.65	15.75	47.24	837.75	M36 x 500L-6ea	48-56
150 ACC	1300	1.89	520.47	15.06	1477.10	M42 x 630L-6ea	50-70

The ACC is designed and patented by Grundfos.

#### Order data

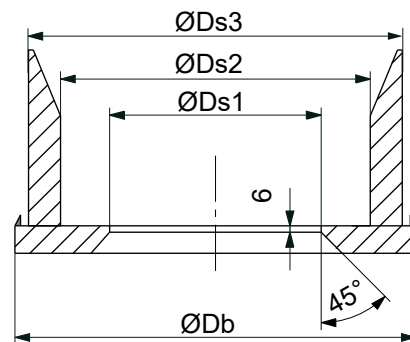
Description	Product number
Anti-cavitation cone (column 20-32")	99250895
Anti-cavitation cone (column 36-42")	99339166
Anti-cavitation cone (column 48-56")	99258997
Anti-cavitation cone (column 60-72")	99414878

### 9.2 Seat ring



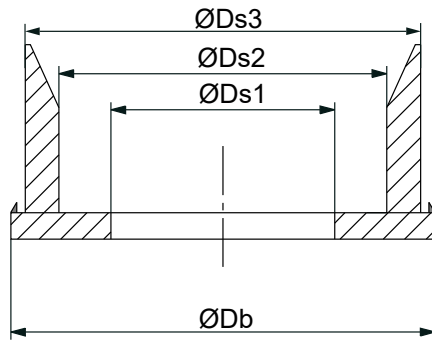
TM073848

A seat ring is designed to be welded to the vertical column pipe, in which the axial-flow pump is installed. The seat ring keeps the pump in the optimum position during operation.

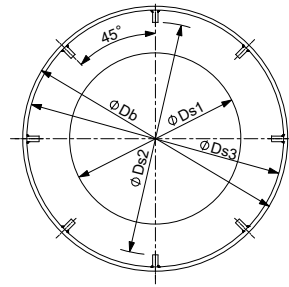


TM073705

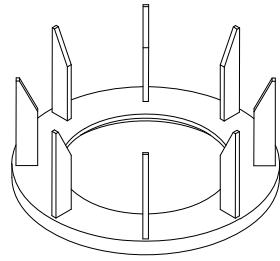
Seat ring for KPL



TM073707



TM073708



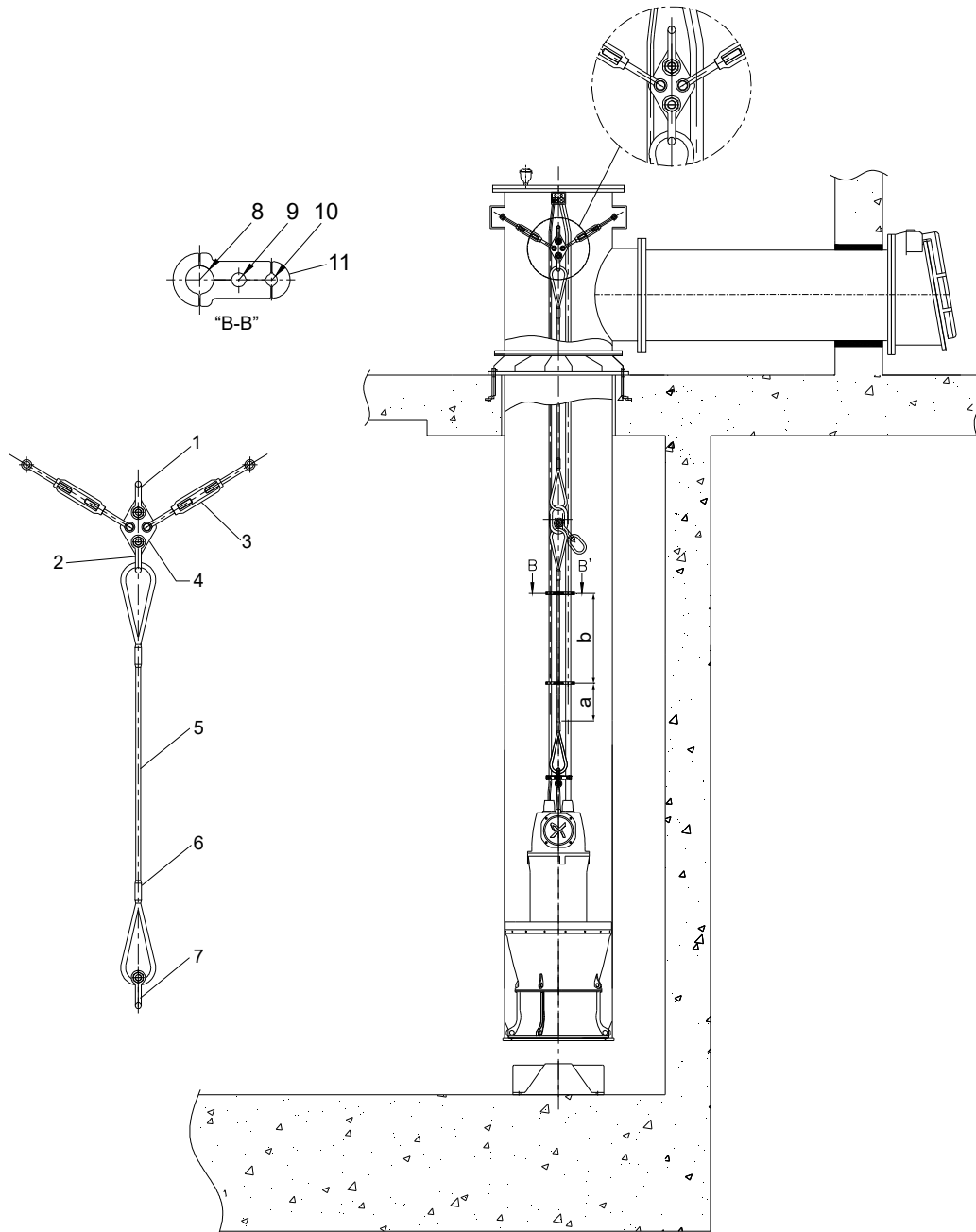
## Seat ring for KWM

## Dimensions

Pipe DN	Model	ØDb [in]	ØDs1 [in]	ØDs2 [in]	ØDs3 [in]	Product number
20	KPL	20.63	12.77	15.72	19.09	99414931
24		24.76	17.69	20.83	23.07	99414934
26		26.72	17.69	20.83	25.04	99414936
28		28.89	21.62	24.76	27.09	99250880
32		32.82	25.55	28.69	30.98	99356016
36 (L)		36.94	25.55	28.69	35	99414937
36 (E)		36.94	29.48	32.62	35	99448030
40		40.87	32.62	36.55	39.02	99339151
48		48.93	39.30	44.02	46.93	99414938
56		56.99	47.16	51.48	54.92	99247437
60		61	50.3	55.9	58.78	99414940
64		64.9	55.1	59.8	70.59	99414942
24		KWM	24.76	17.69	20.83	23.03
28	28.89		21.62	24.76	27	99414974
32	32.82		25.55	28.69	30.94	99414975
36	36.94		29.48	32.62	34.80	99414976
40	40.87		32.62	36.55	38.82	99225235
48	48.93		39.30	44.02	46.81	99414977
56	56.99		47.16	51.48	54.60	99414978
64	64.96		55.12	59.84	62.36	99414980

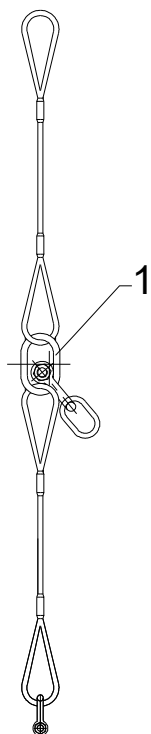
### 9.3 Cable suspension system

You must have a cable suspension system installed in column installed KPL, KPG and KWM pumps to fixate the cables in the flow. If there is no cable suspension system installed, the cable damage will occur, wire will break in the sensor cable and water will enter the motor.



TM055940

Pos.	Description	Pos.	Description
1	Shackle 1	10	Sensor cable
2	Shackle 2	11	Cable clamp
3	Turnbuckle	a	11.8 in
4	Wire holder	b	19.7 in
5	Wire rope		
6	Wire clamp		
7	Shackle 3		
8	Power cable		
9	Wire rope		



TM077742

intermediate lifting ring (optional)

1	Master link
---	-------------

The standard cable suspension system is not approved as lifting equipment. If it is to be used as lifting equipment the wire rope, the master links and the shackles must be purchased locally with the right certificates and rated for the weight of the pump and the cables.

**Related information**

[7.1.8 Cable suspension system](#)

**9.3.1 Lifting chains**



TM073749

Lifting chain with shackle, DoC, certificate and work instructions	Stainless steel (AISI 316L) Product number
Lifting chain 1102.31 lbs 6.56 ft cert. cpl.	98538174
Lifting chain 1102.31 lbs 9.84 ft cert. cpl.	98538175
Lifting chain 1102.31 lbs 13.12 ft cert. cpl.	98538176
Lifting chain 1102.31 lbs 19.68 ft cert. cpl.	98538177
Lifting chain 1102.31 lbs 26.24 ft cert. cpl.	98538178
Lifting chain 1102.31 lbs 32.80 ft cert. cpl.	98538179



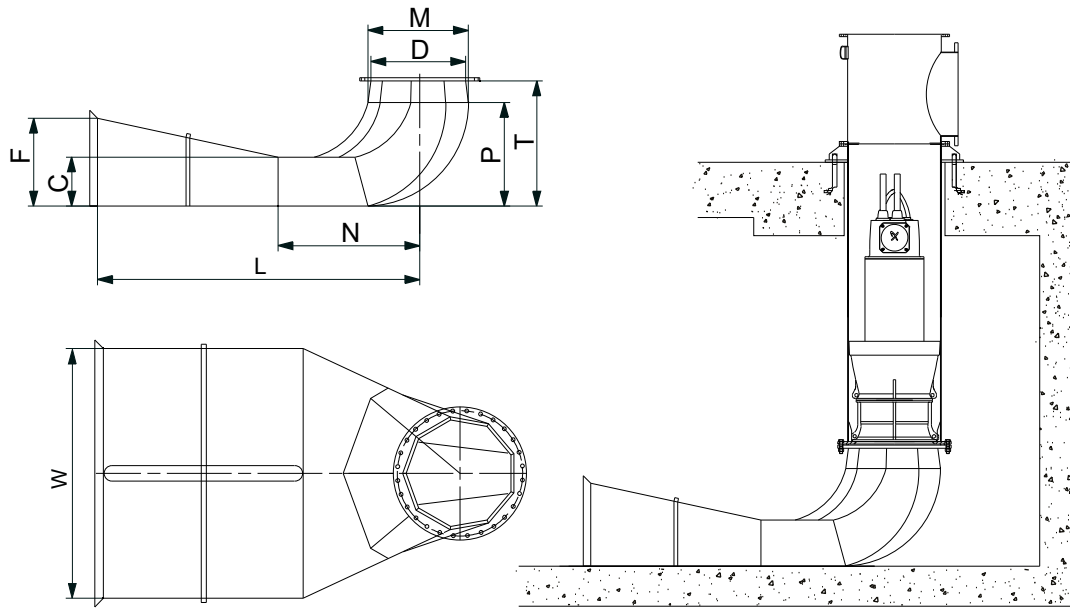
TM073748

Lifting chain with hook, DoC, certificate and work instructions	Stainless steel (AISI 316Ti) Product number	Stainless steel (AISI 316L) Product number
Lifting chain 17636.98 lbs 6.56 ft cert. cpl.	N/A	98425796
Lifting chain 17636.98 lbs 13.12 ft cert. cpl.	N/A	98425797
Lifting chain 17636.98 lbs 19.68 ft cert. cpl.	N/A	98425798
Lifting chain 17636.98 lbs 26.24 ft cert. cpl.	N/A	98425799
Lifting chain 17636.98 lbs 32.80 ft cert. cpl.	N/A	98425800
Lifting chain 4409.24 lbs 13.12 ft cert. cpl.	N/A	98425801
Lifting chain 4409.24 lbs 19.68 ft cert. cpl.	N/A	98425802
Lifting chain 4409.24 lbs 26.24 ft cert. cpl.	N/A	98425803
Lifting chain 4409.24 lbs 32.80 ft cert. cpl.	N/A	98425804
Lifting chain 7054.79 lbs 13.12 ft cert. cpl.	N/A	98425805
Lifting chain 7054.79 lbs 19.68 ft cert. cpl.	N/A	98425806
Lifting chain 7054.79 lbs 26.24 ft cert. cpl.	N/A	98425807
Lifting chain 7054.79 lbs 32.80 ft cert. cpl.	N/A	98425808
Lifting chain 17636.98 lbs 13.12 ft cert. cpl.	98425809	N/A
Lifting chain 17636.98 lbs 19.68 ft cert. cpl.	98425810	N/A
Lifting chain 17636.98 lbs 26.24 ft cert. cpl.	98425811	N/A
Lifting chain 17636.98 lbs 32.80 ft cert. cpl.	98425812	N/A

## 9.4 Formed Suction Intake (FSI)

The FSI is designed to improve the inlet flow conditions to the pump and to enable a lower minimum water level.

**Note:** The formed suction intake is an accessory item and can be adapted to the specific pump.



TM073709

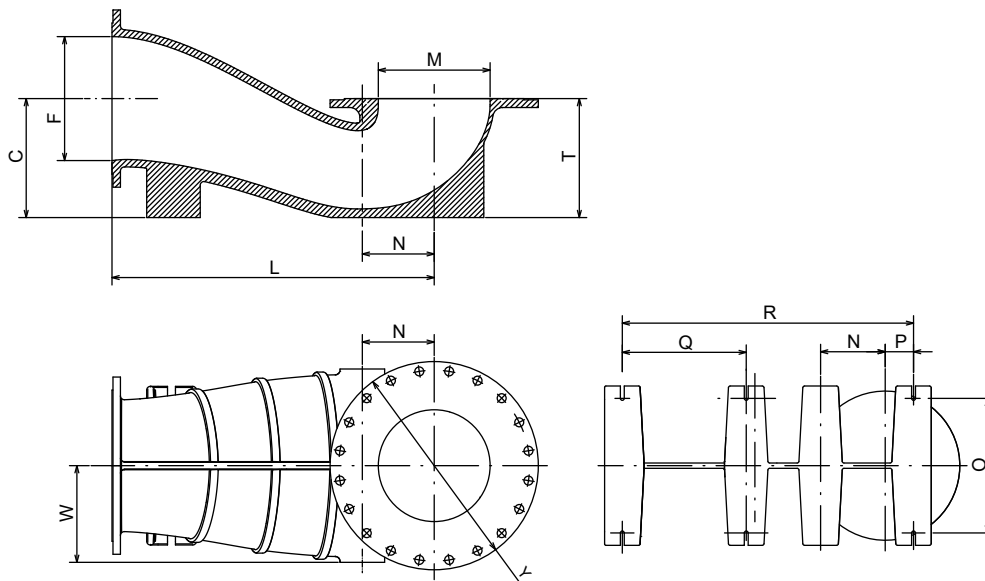
Left: Dimensional drawings. Right: installation example with Formed Suction intake (FSI).

Nominal column diameter		Formed suction intake (FSI) steel version						
D [in]	C [in]	F [in]	L [in]	M [in]	N [in]	P [in]	T [in]	W [in]
20	9.75	17.16	64.35	20.67	28.28	20.67	24.96	45.05
24	11.70	20.59	77.22	24.80	33.93	24.80	29.95	54.05
28	13.65	24.02	90.09	28.94	39.59	28.94	34.94	63.06
32	15.60	27.46	102.96	33.07	45.24	33.07	39.94	72.07
36	17.55	30.89	115.83	37.21	50.90	37.21	44.93	81.08
40	19.50	34.32	128.70	41.34	56.55	41.34	49.92	90.09
48	23.40	41.18	154.44	79.17	67.86	49.61	59.90	108.11
56	27.30	48.05	180.18	57.88	79.17	57.88	69.89	126.13
60	29.25	51.48	193.05	62.01	84.83	62.01	74.88	135.14
64	31.20	54.91	205.92	66.14	90.48	66.14	79.87	144.14
72	35.10	61.78	231.66	74.41	101.79	74.41	89.86	162.16

### 9.5 Compact Suction Intake (CSI)

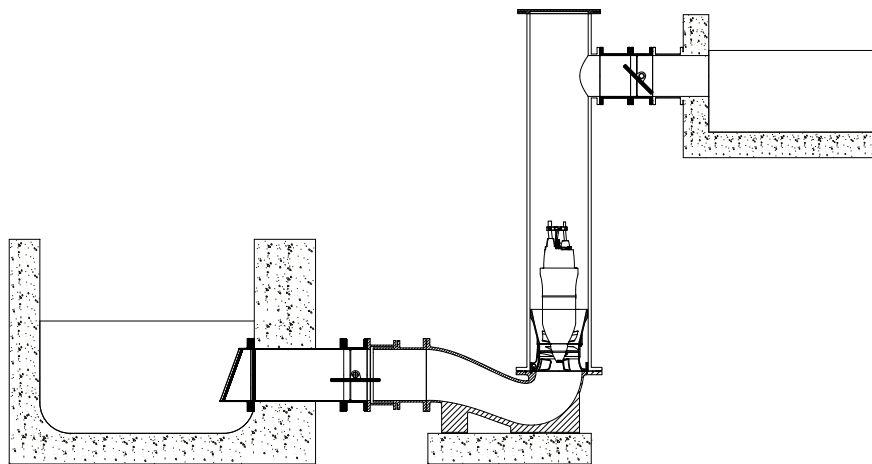
The CSI is designed to improve the inlet flow conditions to the pump and to enable a lower minimum water level.

**Note:** The formed suction intake is an accessory item and can be adapted to the specific pump.



TM073843

Nominal diameter	C [in]	F [in]	L [in]	M [in]	N [in]	T [in]	W [in]	O [in]	P [in]	Q [in]	R [in]	Y [in]	Weight [lbs]	Anchor bolt [in]	Low water level [in]
20	14.17	15.75	43.31	12.80	8.27	14.57	10.63	14.57	2.95	-	44.69	28.15	661		34.25
24	18.90	19.69	51.18	17.76	11.42	18.90	15.35	20.08	3.94	-	53.54	33.07	1323		42.52
26	18.90	19.69	51.18	17.76	11.42	18.90	15.35	20.08	3.94	-	53.54	33.27	1323		42.52
28	22.05	23.62	62.99	21.65	14.17	21.26	17.72	26.38	5.31	-	67.32	35.83	1764		48.82
32	24.80	27.56	74.80	25.59	16.54	22.60	20.87	31.50	5.51	-	79.53	40.35	2205		55.91
36	24.80	27.56	74.80	25.59	16.54	22.60	20.87	31.50	5.51	-	79.53	44.29	2866		61.81
40	31.10	35.43	90.55	32.76	20.87	29.92	25.98	39.76	8.66	-	82.28	49.41	4409		69.29
48	38.19	47.24	110.24	39.37	24.41	37.01	31.50	53.94	9.06	-	99.61	58.46	8818		84.25
56	44.09	55.12	137.80	47.24	28.35	41.34	39.37	61.81	12.60	55.12	129.53	66.34	14330		96.46
60	46.85	55.12	141.73	50.39	31.50	44.09	39.37	61.81	13.78	55.91	134.65	70.67	16535		103.15
64	53.54	62.99	149.61	55.12	33.46	50.39	41.73	65.75	13.78	59.45	143.70	75.98	19842		113.39
72	60.63	70.87	173.23	62.99	39.37	58.66	46.46	69.69	17.72	70.47	168.90	83.86	22046		129.53



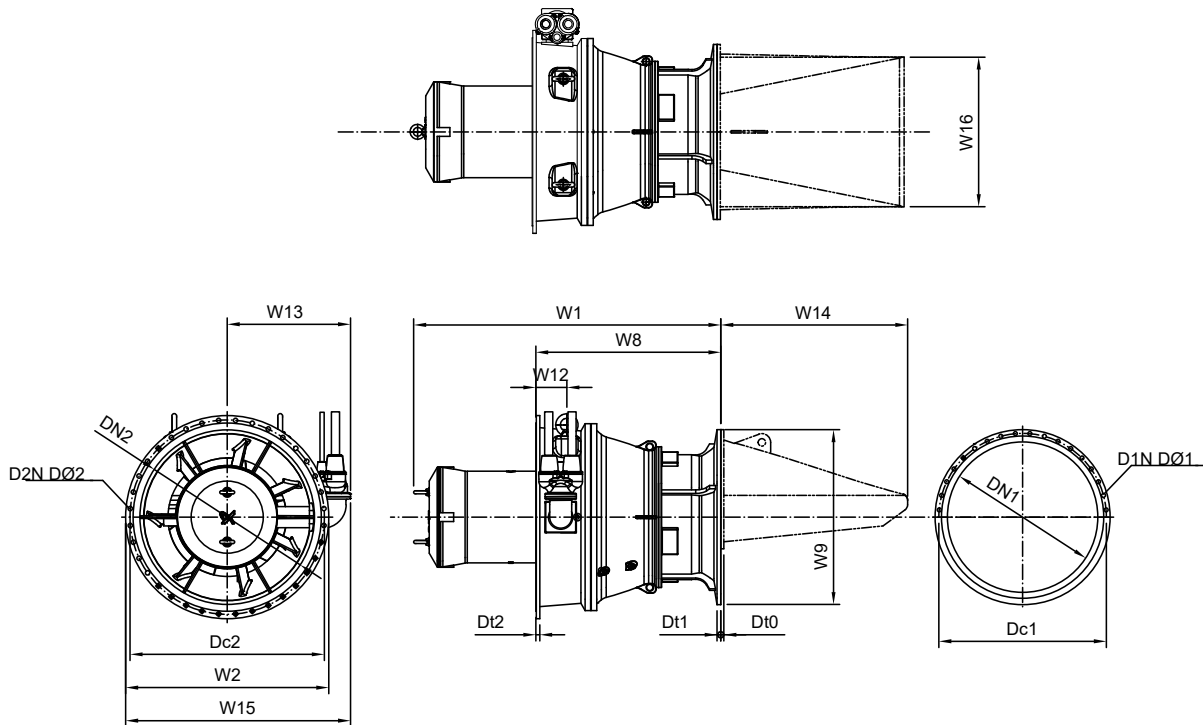
TM073844

Installation example with Compact Suction Intake (CSI)

## 9.6 KPG with vortex breaker

The vortex breaker is designed to:

- prevent pre-swirl at the inlet of the pump
- protect the intake from unexpected matter
- allow operation at lower water levels.

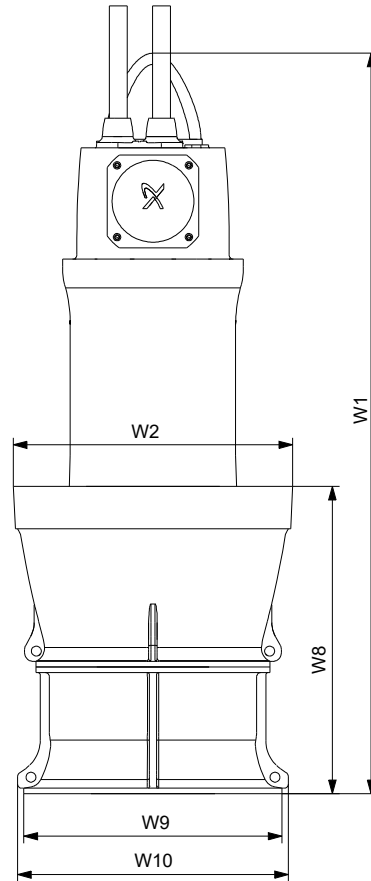


TM073750

DN size [in]	W9 [in]	W14 [in]	W16 [in]	Dc1 [in]	Dt0 [in]	D1N [in]	DØ1 [in]
19.69	17.72	18.90	12.99	15.94	0.79	0.24	0.87
23.62	22.44	24.02	17.72	20.67	0.79	0.31	0.87
27.56	25.59	27.17	20.87	23.82	0.94	0.39	0.87
31.50	29.13	31.10	23.62	27.17	0.94	0.39	1.02
35.43	31.50	33.46	25.98	29.53	0.94	0.47	1.02
39.37	39.37	42.13	32.68	37.20	0.94	0.47	1.02
47.24	43.31	43.70	36.22	40.94	1.10	0.55	1.02
55.12	55.12	59.06	47.24	52.56	1.26	0.55	1.18

## 10. Pump dimensions

### 10.1 KPL dimensions



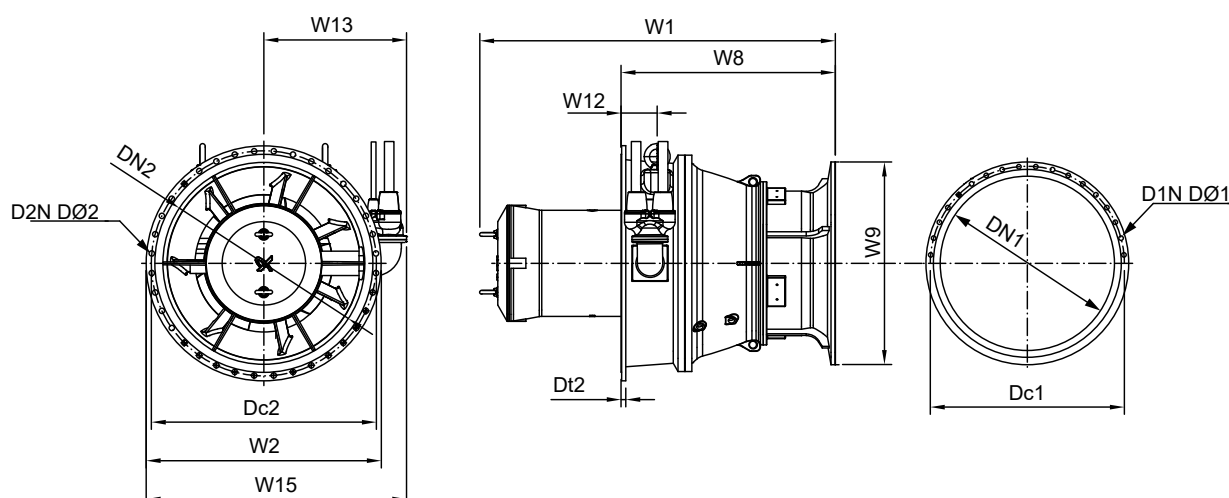
TM055941

Pump type	Weight [lbs]	W1 [in]	W8 [in]	W2 [in]	W9 [in]	W10 [in]
KPL.20.15.6.T.60.9.L.46	749.0	46.60	20.20	19.20	15.30	16.90
KPL.20.20.6.T.60.19.L.46	815.0	49.60	20.20	19.20	15.30	16.90
KPL.24.20.8.T.60.9.L.46	1.146.0	55.70	25.70	23.20	20.40	22.0
KPL.24.25.8.T.60.13.L.46	540.0	55.70	25.70	23.20	20.40	22.0
KPL.28.50.8.T.60.9.L.46	1.984.0	76.10	27.50	27.20	24.40	25.90
KPL.28.60.8.T.60.11.L.46	2.138.0	82.20	27.50	27.20	24.40	25.90
KPL.28.75.8.T.60.15.L.46	2.182.0	82.20	27.50	27.20	24.40	25.90
KPL.28.10.8.T.60.19.L.46	2.292.0	82.20	27.50	27.20	24.40	25.90
KPL.28.30.10.T.60.9.L.46	1.829.0	76.10	27.50	27.20	24.40	25.90
KPL.28.40.10.T.60.13.L.46	1.895.0	76.10	27.50	27.20	24.40	25.90
KPL.28.50.10.T.60.17.L.46	2.182.0	82.20	27.50	27.20	24.40	25.90
KPL.32.10.8.T.60.9.L.46	2.425.0	84.60	36.40	31.10	28.30	30.50
KPL.32.120.8.T.60.11.L.46	2.711.0	90.50	36.40	31.10	28.30	30.50
KPL.36.150.8.T.60.13.L.46	4.717.0	98.40	37.40	35.10	28.30	30.50
KPL.36.175.8.T.60.19.L.46	5.269.0	10.30	37.40	35.10	28.30	30.50
KPL.36.215.8.T.60.21.L.46	5.357.0	10.30	37.40	35.10	28.30	30.50
KPL.36.60.10.T.60.9.L.46	3.417.0	93.30	37.40	35.10	28.30	30.50
KPL.36.75.10.T.60.13.L.46	3.615.0	93.30	37.40	35.10	28.30	30.50
KPL.36.10.10.T.60.17.L.46	4.607.0	98.40	37.40	35.10	28.30	30.50

Pump type	Weight [lbs]	W1 [in]	W8 [in]	W2 [in]	W9 [in]	W10 [in]
KPL.36.120.10.T.60.21.L.46	4.806.0	98.40	37.40	35.10	28.30	30.50
KPL.40.175.10.T.60.9.L.46	5.996.0	113.10	44.0	38.90	35.80	37.70
KPL.40.215.10.T.60.11.L.46	6.591.0	122.60	44.0	38.90	35.80	37.70
KPL.40.265.10.T.60.13.L.46	7.098.0	122.60	44.0	38.90	35.80	37.70
KPL.40.335.10.T.60.17.L.46	7.495.0	122.60	44.0	38.90	35.80	37.70
KPL.40.120.12.T.60.9.L.46	5.599.0	103.30	44.0	38.90	35.80	37.70
KPL.40.175.12.T.60.11.L.46	6.459.0	122.60	44.0	38.90	35.80	37.70
KPL.40.215.12.T.60.19.L.46	7.187.0	122.60	44.0	38.90	35.80	37.70
KPL.48.215.14.T.60.9.L.46	9.832.0	127.50	52.50	47.0	43.30	45.60
KPL.48.265.14.T.60.13.L.46	9.832.0	127.50	52.50	47.0	43.30	45.60
KPL.48.335.14.T.60.17.L.46	11.419.0	127.50	52.50	47.0	43.30	45.60
KPL.56.335.14.T.60.9.L.46	12.367.0	135.80	59.80	55.0	50.70	53.50
KPL.56.40.14.T.60.11.L.46	12.632.0	152.30	59.80	55.0	50.70	53.50
KPL.56.50.14.T.60.15.L.46	13.624.0	152.30	59.80	55.0	50.70	53.50
KPL.56.60.14.T.60.21.L.46	14.219.0	152.30	59.80	55.0	50.70	53.50
KPL.56.215.16.T.60.9.L.46	11.772.0	135.80	59.80	55.0	50.70	53.50
KPL.56.265.16.T.60.11.L.46	12.169.0	135.80	59.80	55.0	50.70	53.50
KPL.56.335.16.T.60.17.L.46	13.029.0	152.30	59.80	55.0	50.70	53.50
KPL.56.40.16.T.60.19.L.46	14.021.0	152.30	59.80	55.0	50.70	53.50
KPL.60.50.14.T.60.9.L.46	6.680.0	159.0	66.10	58.90	55.10	57.40
KPL.60.60.14.T.60.13.L.46	6.950.0	159.0	66.10	58.90	55.10	57.40
KPL.60.665.14.T.60.15.L.46	8.010.0	161.20	66.10	58.90	55.10	57.40
KPL.60.730.14.T.60.19.L.46	8.190.0	161.20	66.10	58.90	55.10	57.40
KPL.64.40.16.T.60.9.L.46	7.130.0	159.60	68.70	62.50	59.0	61.40
KPL.64.470.16.T.60.9.L.46	7.490.0	159.60	68.70	62.50	59.0	61.40
KPL.64.540.16.T.60.9.L.46	8.460.0	161.80	68.70	62.50	59.0	61.40
KPL.64.60.16.T.60.11.L.46	8.640.0	161.80	68.70	62.50	59.0	61.40
KPL.64.665.16.T.60.13.L.46	9.280.0	161.80	68.70	62.50	59.0	61.40
KPL.72.665.18.T.60.9.L.46	9.860.0	168.70	75.90	70.0	66.90	69.20
KPL.72.730.18.T.60.11.L.46	10.720.0	172.60	75.90	70.0	66.90	69.20
KPL.72.80.18.T.60.13.L.46	11.170.0	172.60	75.90	70.0	66.90	69.20
KPL.72.930.18.T.60.15.L.46	12.040.0	172.60	75.90	70.0	66.90	69.20
KPL.72.1060.18.T.60.17.L.46	12.310.0	172.60	75.90	70.0	66.90	69.20
KPL.24.20.8.T.60.9.E.46	520.0	55.70	24.20	23.20	20.40	22.0
KPL.24.25.8.T.60.15.E.46	540.0	55.70	24.20	23.20	20.40	22.0
KPL.28.25.10.T.60.9.E.46	1.829.0	76.10	25.90	27.20	24.40	25.90
KPL.28.30.10.T.60.13.E.46	1.829.0	76.10	25.90	27.20	24.40	25.90
KPL.28.40.10.T.60.17.E.46	1.895.0	76.10	25.90	27.20	24.40	25.90
KPL.28.50.10.T.60.21.E.46	2.182.0	82.20	25.90	27.20	24.40	25.90
KPL.32.40.10.T.60.9.E.46	2.028.0	78.50	29.50	31.10	28.30	30.50
KPL.32.50.10.T.60.9.E.46	2.314.0	84.60	29.50	31.10	28.30	30.50
KPL.32.60.10.T.60.11.E.46	3.020.0	88.50	29.50	31.10	28.30	30.50
KPL.32.75.10.T.60.15.E.46	3.218.0	90.50	29.50	31.10	28.30	30.50
KPL.36.75.10.T.60.9.E.46	3.615.0	90.50	30.40	35.10	28.30	30.50
KPL.36.10.10.T.60.9.E.46	4.607.0	95.60	30.40	35.10	28.30	30.50
KPL.36.120.10.T.60.13.E.46	4.806.0	95.60	30.40	35.10	28.30	30.50
KPL.36.150.10.T.60.17.E.46	4.497.0	105.50	30.40	35.10	28.30	30.50
KPL.40.10.12.T.60.9.E.46	5.313.0	103.30	38.90	38.90	35.80	37.70
KPL.40.120.12.T.60.11.E.46	5.599.0	103.30	38.90	38.90	35.80	37.70
KPL.40.175.12.T.60.15.E.46	6.459.0	122.60	38.90	38.90	35.80	37.70
KPL.48.175.14.T.60.9.E.46	8.686.0	123.60	46.20	47.0	43.30	45.60
KPL.48.215.14.T.60.9.E.46	9.832.0	127.50	46.20	47.0	43.30	45.60
KPL.48.265.14.T.60.13.E.46	9.832.0	127.50	46.20	47.0	43.30	45.60
KPL.48.335.14.T.60.19.E.46	11.419.0	127.50	46.20	47.0	43.30	45.60
KPL.56.175.16.T.60.9.E.46	11.375.0	135.80	51.90	55.0	50.70	53.50

Pump type	Weight [lbs]	W1 [in]	W8 [in]	W2 [in]	W9 [in]	W10 [in]
KPL.56.215.16.T.60.9.E.46	11.772.0	135.80	51.90	55.0	50.70	53.50
KPL.56.265.16.T.60.13.E.46	12.169.0	135.80	51.90	55.0	50.70	53.50
KPL.56.335.16.T.60.17.E.46	13.029.0	152.30	51.90	55.0	50.70	53.50
KPL.60.265.16.T.60.9.E.46	5.940.0	146.40	57.0	58.90	55.10	57.40
KPL.60.335.16.T.60.9.E.46	6.410.0	159.0	57.0	58.90	55.10	57.40
KPL.60.40.16.T.60.11.E.46	6.860.0	159.0	57.0	58.90	55.10	57.40
KPL.60.470.16.T.60.15.E.46	7.220.0	159.0	57.0	58.90	55.10	57.40
KPL.60.540.16.T.60.19.E.46	8.190.0	161.20	57.0	58.90	55.10	57.40
KPL.64.335.18.T.60.9.E.46	7.650.0	161.80	59.0	62.50	59.0	61.40
KPL.64.40.18.T.60.9.E.46	8.010.0	161.80	59.0	62.50	59.0	61.40
KPL.64.470.18.T.60.13.E.46	8.370.0	161.80	59.0	62.50	59.0	61.40
KPL.64.540.18.T.60.15.E.46	8.640.0	161.80	59.0	62.50	59.0	61.40
KPL.72.470.20.T.60.9.E.46	9.680.0	168.70	64.10	70.0	66.90	69.20
KPL.72.540.20.T.60.11.E.46	10.040.0	168.70	64.10	70.0	66.90	69.20
KPL.72.60.20.T.60.15.E.46	10.220.0	168.70	64.10	70.0	66.90	69.20
KPL.72.665.20.T.60.17.E.46	10.40.0	168.70	64.10	70.0	66.90	69.20
KPL.72.730.20.T.60.19.E.46	10.580.0	168.70	64.10	70.0	66.90	69.20

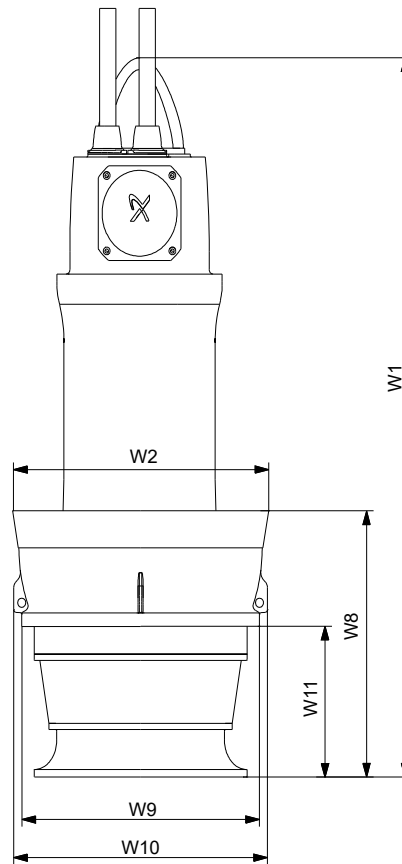
## 10.2 KPG dimensions



TM073735

Pump Type	Weight [lbs]	W1 [in]	W2 [in]	W8 [in]	W9 [in]	W12 [in]	W13 [in]	W15 [in]	DN2 [in]	Dc2 [in]	Dt2 [in]	D2N (ea)	DØ2 [in]	DN1 [in]	Dc1 [in]	D1N (ea)	DØ1 [in]
KPG.20".15.6.T.60.L	859.8	39.4	25.4	24.4	17.7	5.1	19.5	32.2	20"	23.6	1.0	20	0.9	13.0	15.9	6	0.9
KPG.20".20.6.T.60.L	970.0	40.6	25.4	24.4	17.7	5.1	19.5	32.2	20"	23.6	1.0	20	0.9	13.0	15.9	6	0.9
KPG.24".20.8.T.60.E	1256.6	43.5	29.7	26.4	22.4	5.5	21.7	36.5	24"	27.8	1.0	20	1.0	17.7	20.7	8	0.9
KPG.24".25.8.T.60.E	1300.7	43.5	29.7	26.4	22.4	5.5	21.7	36.5	24"	27.8	1.0	20	1.0	17.7	20.7	8	0.9
KPG.28".25.10.T.60.E	2116.4	57.3	33.9	34.6	25.6	5.9	23.8	40.7	28"	31.9	1.0	24	1.0	20.9	23.8	10	0.9
KPG.28".30.10.T.60.E	2138.5	57.3	33.9	34.6	25.6	5.9	23.8	40.7	28"	31.9	1.0	24	1.0	20.9	23.8	10	0.9
KPG.28".40.10.T.60.E	2204.6	57.3	33.9	34.6	25.6	5.9	23.8	40.7	28"	31.9	1.0	24	1.0	20.9	23.8	10	0.9
KPG.28".50.10.T.60.E	2557.4	61.0	33.9	34.6	25.6	5.9	23.8	40.7	28"	31.9	1.0	24	1.0	20.9	23.8	10	0.9
KPG.32".40.10.T.60.E	2358.9	54.1	38.4	32.7	29.1	8.1	25.8	45.0	32"	36.2	1.0	24	1.2	23.6	27.2	10	1.0
KPG.32".50.10.T.60.E	2645.5	60.0	38.4	32.7	29.1	8.1	25.8	45.0	32"	36.2	1.0	24	1.2	23.6	27.2	10	1.0
KPG.32".60.10.T.60.E	3262.8	60.0	38.4	32.7	29.1	8.1	25.8	45.0	32"	36.2	1.0	24	1.2	23.6	27.2	10	1.0
KPG.32".75.10.T.60.E	3461.3	60.0	38.4	32.7	29.1	8.1	25.8	45.0	32"	36.2	1.0	24	1.2	23.6	27.2	10	1.0
KPG.36".75.10.T.60.E	4100.6	65.0	42.3	38.6	31.5	9.1	27.8	48.9	36"	40.2	1.2	24	1.2	26.0	29.5	12	1.0
KPG.36".100.10.T.60.E	4695.8	70.7	42.3	38.6	31.5	9.1	27.8	48.9	36"	40.2	1.2	24	1.2	26.0	29.5	12	1.0
KPG.36".120.10.T.60.E	4894.3	70.7	42.3	38.6	31.5	9.1	27.8	48.9	36"	40.2	1.2	24	1.2	26.0	29.5	12	1.0
KPG.36".150.10.T.60.E	5225.0	70.7	42.3	38.6	31.5	9.1	27.8	48.9	36"	40.2	1.2	24	1.2	26.0	29.5	12	1.0
KPG.40".100.12.T.60.E	5798.2	74.9	46.3	45.3	39.4	9.4	31.1	54.2	40"	44.1	1.2	28	1.2	32.7	37.2	12	1.0
KPG.40".120.12.T.60.E	6084.8	74.9	46.3	45.3	39.4	9.4	31.1	54.2	40"	44.1	1.2	28	1.2	32.7	37.2	12	1.0
KPG.40".175.12.T.60.E	6680.0	79.6	46.3	45.3	39.4	9.4	31.1	54.2	40"	44.1	1.2	28	1.2	32.7	37.2	12	1.0
KPG.48".175.14.T.60.E	8950.8	87.7	55.3	51.2	43.3	9.4	34.6	62.3	48"	52.8	1.2	32	1.3	36.2	40.9	14	1.0
KPG.48".215.14.T.60.E	9898.8	95.2	55.3	51.2	43.3	9.4	34.6	62.3	48"	52.8	1.2	32	1.3	36.2	40.9	14	1.0
KPG.48".265.14.T.60.E	9898.8	95.2	55.3	51.2	43.3	9.4	34.6	62.3	48"	52.8	1.2	32	1.3	36.2	40.9	14	1.0
KPG.48".335.14.T.60.E	11530.2	95.2	55.3	51.2	43.3	9.4	34.6	62.3	48"	52.8	1.2	32	1.3	36.2	40.9	14	1.0
KPG.56".175.16.T.60.E	12059.3	100.7	64.2	58.5	55.1	9.8	39.0	71.1	56"	61.4	1.3	36	1.4	47.2	52.6	14	1.2
KPG.56".215.16.T.60.E	12720.7	101.7	64.2	58.5	55.1	9.8	39.0	71.1	56"	61.4	1.3	36	1.4	47.2	52.6	14	1.2
KPG.56".265.16.T.60.E	13117.5	101.7	64.2	58.5	55.1	9.8	39.0	71.1	56"	61.4	1.3	36	1.4	47.2	52.6	14	1.2
KPG.56".335.16.T.60.E	13514.3	101.7	64.2	58.5	55.1	9.8	39.0	71.1	56"	61.4	1.3	36	1.4	47.2	52.6	14	1.2

## 10.3 KWM dimensions



TM058751

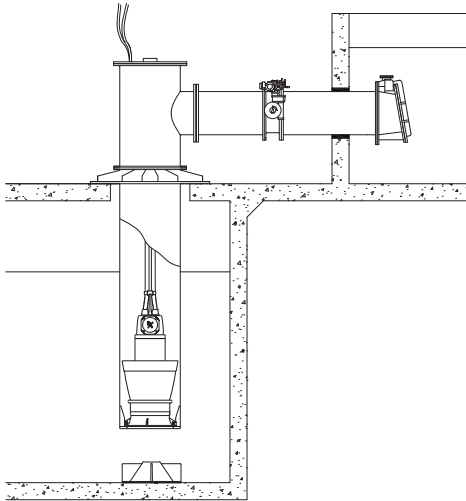
Pump Type	Weight [lb.]	W1 [in.]	W8 [in.]	W11 [in.]	W2 [in.]	W9 [in.]	W10 [in.]
KWM.24".40.6.T.60.H	1609.4	68.7	26.4	10.6	23.2	20.5	22.0
KWM.24".50.6.T.60.H	1675.5	68.7	26.4	10.6	23.2	20.5	22.0
KWM.24".60.6.T.60.H	1719.6	68.7	26.4	10.6	23.2	20.5	22.0
KWM.24".40.6.T.60.M	1587.3	69.9	25.2	11.0	23.2	20.5	22.0
KWM.24".50.6.T.60.M	1653.5	69.9	25.2	11.0	23.2	20.5	22.0
KWM.28".50.6.T.60.H	2028.3	78.5	33.1	15.7	27.2	24.4	26.0
KWM.28".60.6.T.60.H	2072.3	78.5	33.1	15.7	27.2	24.4	26.0
KWM.28".75.6.T.60.H	2204.6	78.5	33.1	15.7	27.2	24.4	26.0
KWM.28".50.8.T.60.M	2094.4	79.3	31.9	15.0	27.2	24.4	26.0
KWM.28".60.8.T.60.M	2270.8	85.4	31.9	15.0	27.2	24.4	26.0
KWM.28".75.8.T.60.M	2314.9	85.4	31.9	15.0	27.2	24.4	26.0
KWM.28".100.8.T.60.M	2425.1	85.4	31.9	15.0	27.2	24.4	26.0
KWM.32".100.8.T.60.H	2976.2	97.2	38.0	16.7	31.1	28.3	30.5
KWM.32".120.8.T.60.H	3196.7	97.2	38.0	16.7	31.1	28.3	30.5
KWM.32".150.8.T.60.H	4960.4	101.0	38.0	16.7	31.1	28.3	30.5
KWM.32".100.8.T.60.M	2866.0	99.0	37.8	17.3	31.1	28.3	30.5
KWM.32".120.8.T.60.M	3086.5	99.0	37.8	17.3	31.1	28.3	30.5
KWM.32".150.8.T.60.M	4850.2	102.8	37.8	17.3	31.1	28.3	30.5
KWM.36".150.8.T.60.H	5335.2	102.4	43.3	18.1	35.0	32.3	33.9
KWM.36".175.8.T.60.H	5798.2	104.3	43.3	18.1	35.0	32.3	33.9
KWM.36".215.8.T.60.H	5886.3	104.3	43.3	18.1	35.0	32.3	33.9
KWM.36".150.8.T.60.M	5379.3	104.3	42.7	22.6	35.0	32.3	33.9
KWM.36".175.8.T.60.M	5842.3	106.3	42.7	22.6	35.0	32.3	33.9
KWM.36".215.8.T.60.M	5930.4	106.3	42.7	22.6	35.0	32.3	33.9
KWM.36".265.8.T.60.M	6217.0	114.2	42.7	22.6	35.0	32.3	33.9

Pump Type	Weight [lb.]	W1 [in.]	W8 [in.]	W11 [in.]	W2 [in.]	W9 [in.]	W10 [in.]
KWM.36".300.8.T.60.M	6283.2	114.2	42.7	22.6	35.0	32.3	33.9
KWM.40".265.8.T.60.H	6834.3	117.1	47.8	22.6	39.0	35.8	37.8
KWM.40".300.8.T.60.H	6900.5	117.1	47.8	22.6	39.0	35.8	37.8
KWM.40".335.8.T.60.H	7473.7	122.6	47.8	22.6	39.0	35.8	37.8
KWM.40".215.10.T.60.M	7628.0	127.6	52.8	25.6	39.0	35.8	37.8
KWM.40".265.10.T.60.M	8157.1	127.6	52.8	25.6	39.0	35.8	37.8
KWM.40".300.10.T.60.M	8355.5	127.6	52.8	25.6	39.0	35.8	37.8
KWM.40".335.10.T.60.M	8576.0	127.6	52.8	25.6	39.0	35.8	37.8
KWM.48".470.10.T.60.M	10670.4	133.3	60.6	29.1	46.9	43.3	45.7
KWM.48".540.10.T.60.M	11089.3	133.3	60.6	29.1	46.9	43.3	45.7
KWM.48".600.10.T.60.M	11662.5	141.1	60.6	29.1	46.9	43.3	45.7
KWM.48".665.10.T.60.M	11882.9	141.1	60.6	29.1	46.9	43.3	45.7
KWM.48".265.12.T.60.M	9347.6	129.3	60.6	29.1	46.9	43.3	45.7
KWM.48".300.12.T.60.M	10075.1	133.3	60.6	29.1	46.9	43.3	45.7
KWM.48".335.12.T.60.M	10670.4	133.3	60.6	29.1	46.9	43.3	45.7
KWM.48".400.12.T.60.M	10868.8	133.3	60.6	29.1	46.9	43.3	45.7
KWM.48".470.12.T.60.M	11287.7	133.3	60.6	29.1	46.9	43.3	45.7
KWM.56".600.12.T.60.M	14572.6	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".665.12.T.60.M	15167.8	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".730.12.T.60.M	15586.7	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".800.12.T.60.M	16181.9	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".865.12.T.60.M	16997.6	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".400.14.T.60.M	14572.6	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".470.14.T.60.M	14969.4	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".540.14.T.60.M	15785.1	160.4	68.3	32.9	54.7	50.8	53.5
KWM.56".600.14.T.60.M	16181.9	160.4	68.3	32.9	54.7	50.8	53.5
KWM.64".800.16.T.60.M	23699.7	169.3	75.6	37.0	62.2	59.1	61.4
KWM.64".865.16.T.60.M	24493.4	169.3	75.6	37.0	62.2	59.1	61.4
KWM.64".930.16.T.60.M	25000.4	173.2	75.6	37.0	62.2	59.1	61.4
KWM.64".1000.16.T.60.M	25397.3	173.2	75.6	37.0	62.2	59.1	61.4
KWM.64".1060.16.T.60.M	25794.1	173.2	75.6	37.0	62.2	59.1	61.4
KWM.64".665.18.T.60.M	22310.8	169.3	75.6	37.0	62.2	59.1	61.4
KWM.64".730.18.T.60.M	24096.5	169.3	75.6	37.0	62.2	59.1	61.4
KWM.64".800.18.T.60.M	25198.8	173.2	75.6	37.0	62.2	59.1	61.4

## 11. Installation types

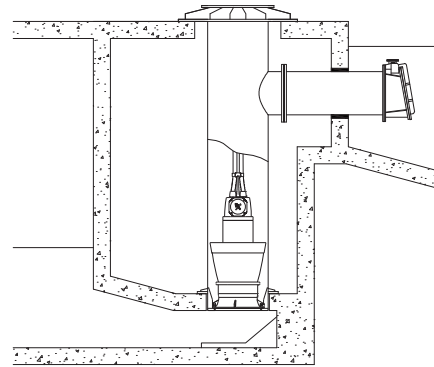
The installation types indicated here are only examples. For more information on installation types, contact Grundfos.

**Outlet above floor and with outlet pipe valve, non-return valve and anti-cavitation cone (ACC)**



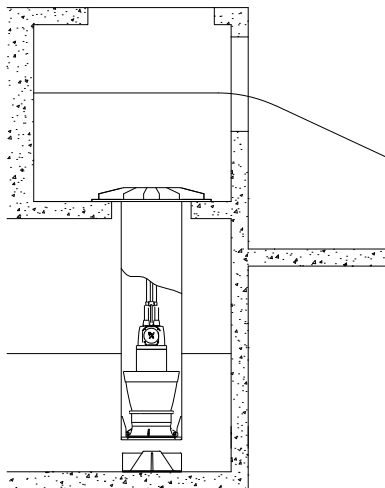
TM055317

**Outlet to an open channel for low inlet water levels and Formed Suction Intake (FSI)**



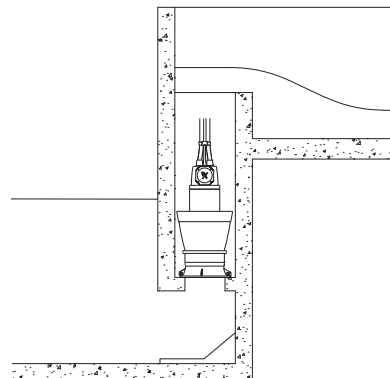
TM055316

**Outlet above floor and with anti-cavitation cone (ACC)**



TM055318

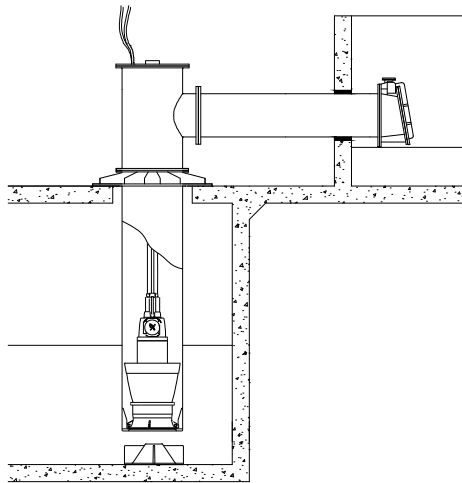
**Outlet to an open channel and with outlet column (reinforced concrete)**



TM055314

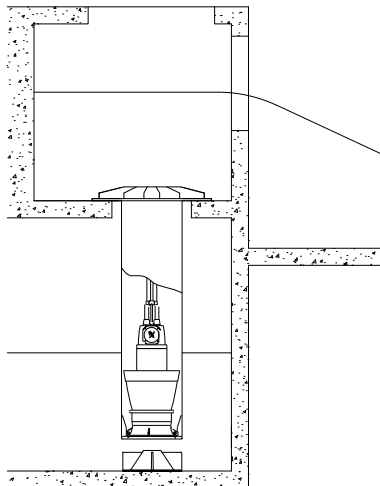
## 11.1 KPL and KWM installation types

Outlet above floor and with outlet pipe valve, non-return valve and anti-cavitation cone (ACC)



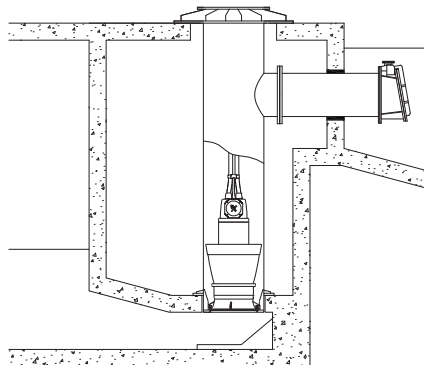
TM055317

Outlet above floor and with anti-cavitation cone (ACC)



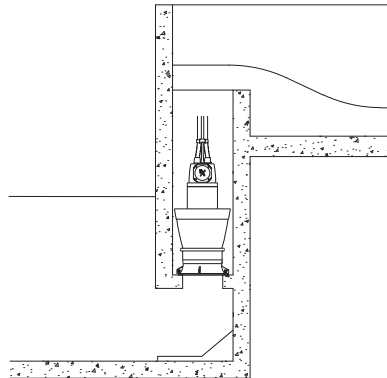
TM055318

Outlet to an open channel for low inlet water levels and Formed Suction Intake (FSI)



TM055316

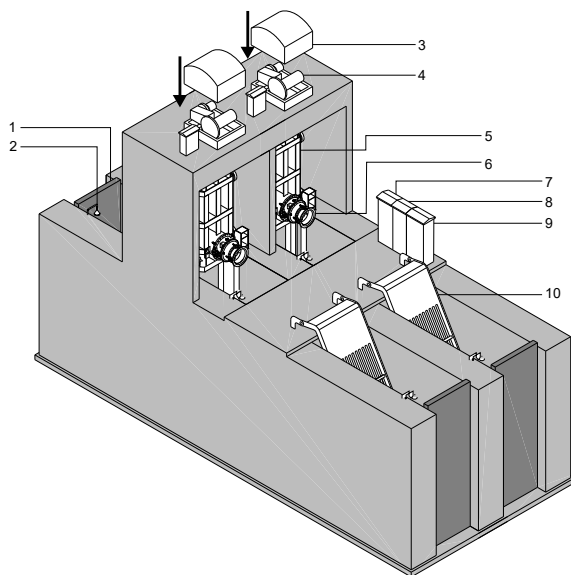
Outlet to an open channel and with outlet column (reinforced concrete)



TM055314

### 11.2 KPG installation types

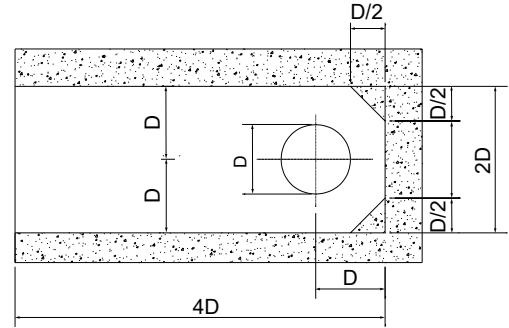
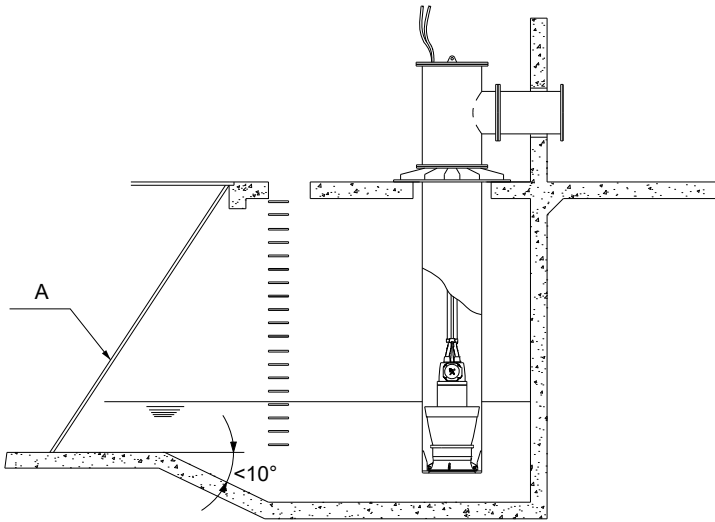
Installation example of a KPG gate pump



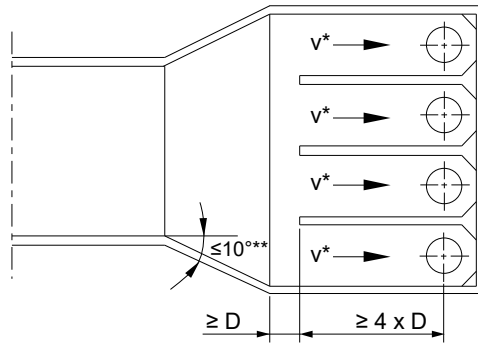
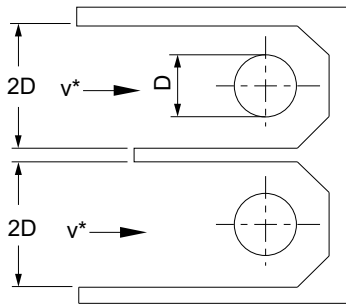
Position	Description
1	Stop log
2	Water-level sensor
3	Cover for hoist
4	Hoist
5	Gate
6	Pump
7*	Hoist control cabinet
8*	Main station cabinet
9*	Motor control cabinet
10	Screen

\*The locations of hoist control cabinet, main station cabinet and motor control cabinet are based on the actual on-site installation.

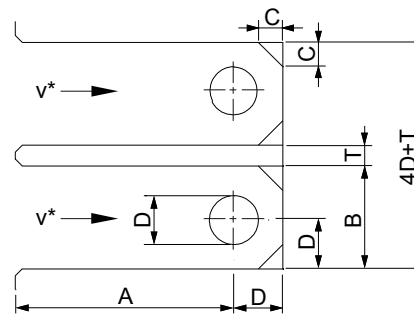
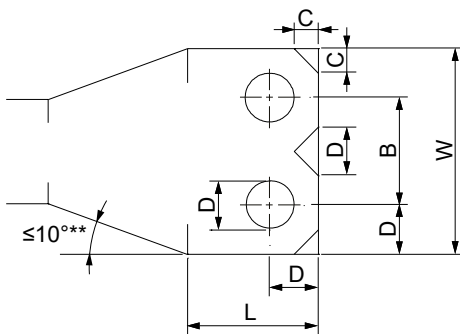
### 11.3 Pit construction



TM074055



TM073747



TM073746

V\*: 2.297 ft/s for stormwater and wastewater containing particles. 0.984 ft/s for screened stormwater and wastewater without particles.

\*\* : Recommended value. The angle can change depending on pump size. For more information, contact Grundfos.

**Dimensions**

D (pipe diameter) [in.]	A [in.]	B [in.]	C [in.]	W [in.]	T	L [in.]
20	79	39	10	79	Depending on construction, contact Grundfos.	79
24	94	47	12	94		94
28	110	55	14	110		110
32	126	63	16	126		126
36	142	71	18	142		142
40	157	79	20	157		157
44	173	87	22	173		173
48	189	94	24	189		189
56	220	110	28	220		220
60	236	118	30	236		236
64	252	126	32	252		252
72	285	142	35	285		285

## 12. Grundfos Product Center

Online search and sizing tool to help you make the right choice.

From the international view, you can select your specific country to view the product range available to you.

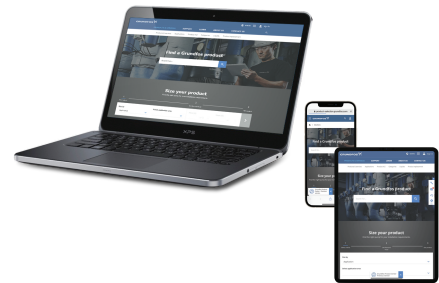
International view: <http://product-selection.grundfos.com>

### All the information you need in one place

Performance curves, technical specifications, pictures, dimensional drawings, motor curves, wiring diagrams, spare parts, service kits, 3D drawings, documents, system parts. The Product Center displays any recent and saved items - including complete projects - right on the main page.

### Downloads

On the product pages, you can download installation and operating instructions, data booklets, service instructions, etc., in PDF format.



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When you select your country, you will see the menus below. Note that some menus may not be available depending on the country.

Example: <https://product-selection.grundfos.com/uk>

Pos.	Description
1	<b>Products &amp; services</b> enables you to find products and documents by typing a product number or name into the search field.
2	<b>Applications</b> enables you to choose an application to see how Grundfos can help you design and optimise your system.
3	<b>Products A-Z</b> enables you to look through a list of all the Grundfos products.
4	<b>Categories</b> enables you to look for a product category.
5	<b>Liquids</b> enables you to find pumps designed for aggressive, flammable or other special liquids.
6	<b>Product replacement</b> enables you to find a suitable replacement.
7	<b>WWW</b> enables you to select the country, which changes the language, the available product range and the structure of the website.
8	<b>Sizing</b> enables you to size a product based on your application and operating conditions.

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