TSURUMI PUMP

# BUILT FOR WORK

## CONTRACTOR / MINING PUMPS

Dewatering Pumps • Accessories

# Rugged Tsurumi pumps are loaded top to bottom with features to withstand your toughest dewatering applications.

1 **Motor Protector:**
Protects against overheating and run-dry.

2 **Anti-Wicking Block:**
Prevents water incursion due to capillary wicking should the power cable be damaged or the end submerged.

3 **Double Inside Mechanical Seal with Silicon Carbide Faces:**
Provides the longest operational life of any available seal.

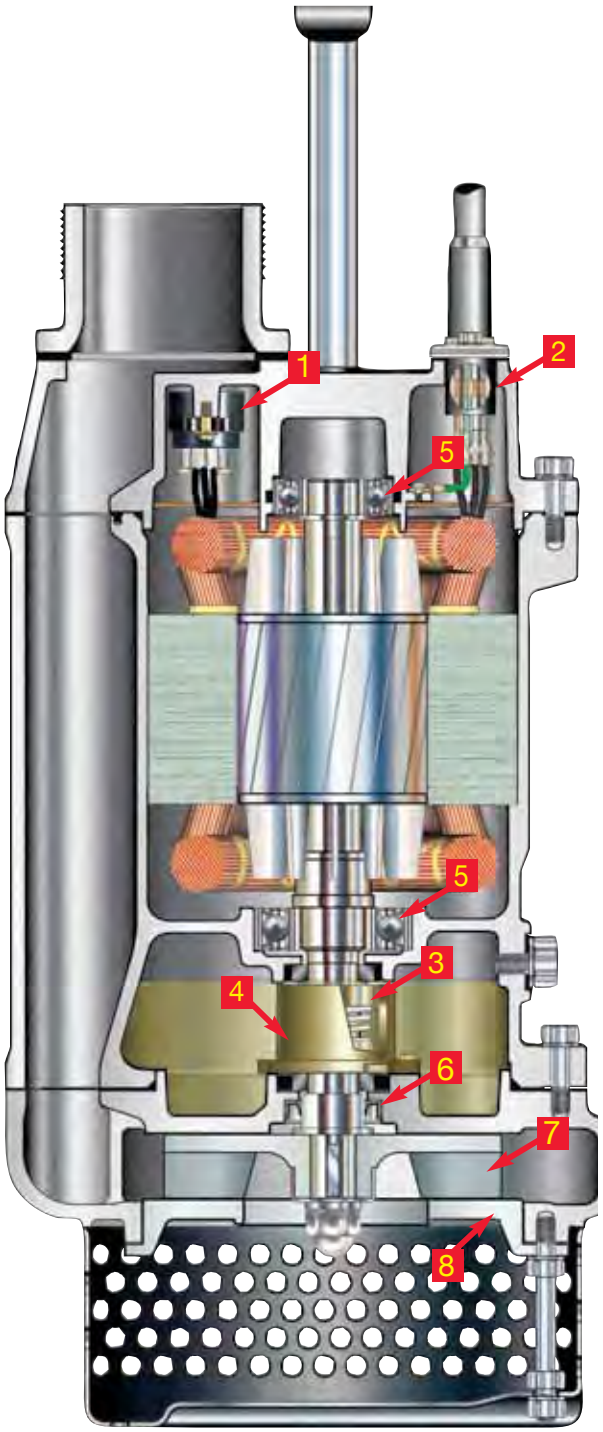
4 **Oil Lifter:**
Lubrication of the seal faces down to 1/3 of normal oil level and greatly extends the seal life - uses no additional power.

5 **Ball Bearings:**
Permanently lubricated, double-shielded, single row deep groove, high temperature C3 Ball bearings, Rated B-10 = 60,000 Hours.

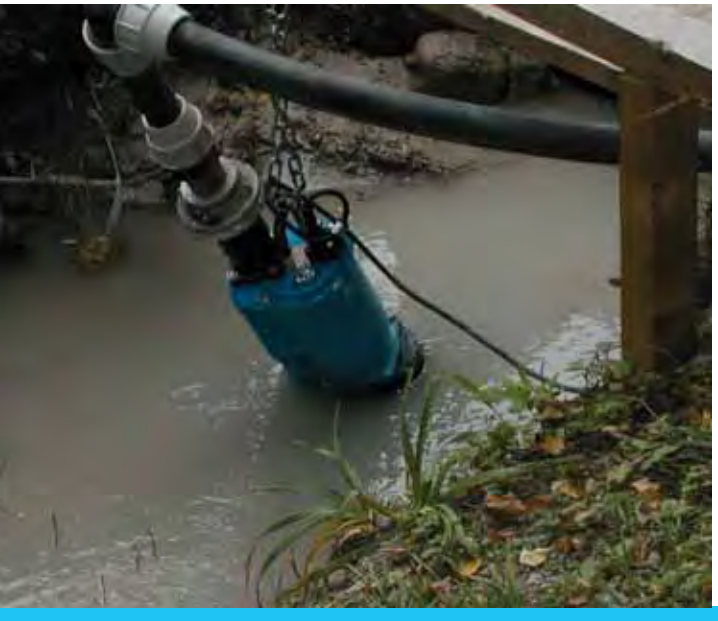
6 **Lip Seal Protector:**
Protects mechanical seal from abrasive particles.

7 **High Chrome Iron (Optional) Impeller:**
Resists wear by abrasive particles.

8 **Field Adjustable / Replaceable, Ductile Iron Suction Cover:**
Resists wear by abrasive particles, and is easily adjusted to maintain pump performance.




The cutaway view above is a KTZ series pump. This pump illustrates the common design features used in Tsurumi dewatering pumps. Other series may differ in shape and structure.



# Tsurumi Three-Phase Dewatering Pumps

## KTZ Series

High head and high volume dewatering.

Semi-open High Chrome Impeller.

Easy conversion between high head and high volume models in each motor size.

2, 3, 4 and 6 inch discharge sizes
2, 3, 5, 7.5, 10, and 15 horsepower

## LH-W Series

Extra high head pumping.

Dual staged, Closed High Chrome Impeller.

Pressure relief ports protect mechanical seal from excessive pressure and water hammer.

2, 3, and 4 inch discharge sizes
4, 7.5, 15, 30, and 40 horsepower

## LH Series

Medium to high volume at high heads.

Closed High Chrome Impeller.

Easy conversion between high head and high volume models in each motor size.

4, 6, and 8 inch discharge sizes
4, 20, 30, 35, 40, 50, 60, 75, 100, 120, and 150 horsepower

## KTV(E) Series

Portable job-site dewatering.

Semi-vortex Urethane Rubber or Ductile Iron Impellers.

KTVE pumps with built-in electrode for automatic operation without a control panel.

2 and 3 inch discharge sizes
1, 2, 3, 5, and 7.5 horsepower

## KRS Series

High volume dewatering.

Semi-open Ductile Iron and High Chrome Impellers.

1800 RPM motors reduce impeller wear.

3, 4, 6, 8, 10, 12, and 14 inch discharge sizes
3, 5, 7.5, 10, 15, 20, 25, 30, 40, and 50 horsepower

## GSZ Series

High volume dewatering and slurry pumping.

Closed High Chrome and Stainless Steel Impeller.

1800 RPM and 1200 RPM motors reduce impeller wear.

6, 8, and 10 inch discharge sizes
30, 50, 60, 75, and 100 horsepower

## LBT Series

8" Minimum casing dewatering.

Semi-Vortex Impeller.

Allows for jobsite dewatering utilizing smaller generators and smaller casings.

2 and 3 inch discharge sizes
1/2, 1 and 2 horsepower

## SFQ Series

Corrosive liquid dewatering.

Semi-open Stainless Steel Impeller.

All parts in contact with the liquid are 316 Stainless Steel.

All elastomers are Viton.

2, 3 and 4 inch discharge sizes
1, 2, 5, 7.5, 10 and 15 horsepower.

## SQ Series

Portable corrosive liquid dewatering.

Semi-open Stainless Steel Impeller.

All parts in contact with the liquid are 304 Stainless Steel.

2 inch discharge sizes
1/2 and 1 horsepower

# KTZ

## High head and high volume dewatering

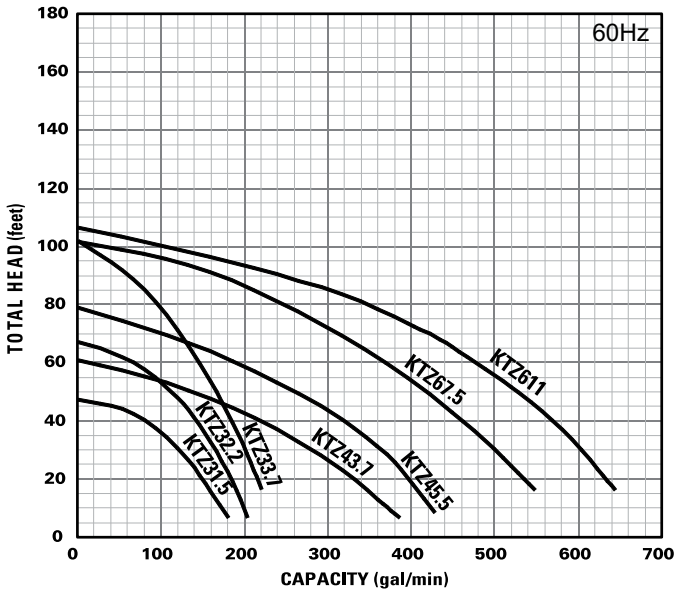
Field conversions from high volume to high head are quick and easy: simply change the impeller, suction cover, and discharge connection.

## Material

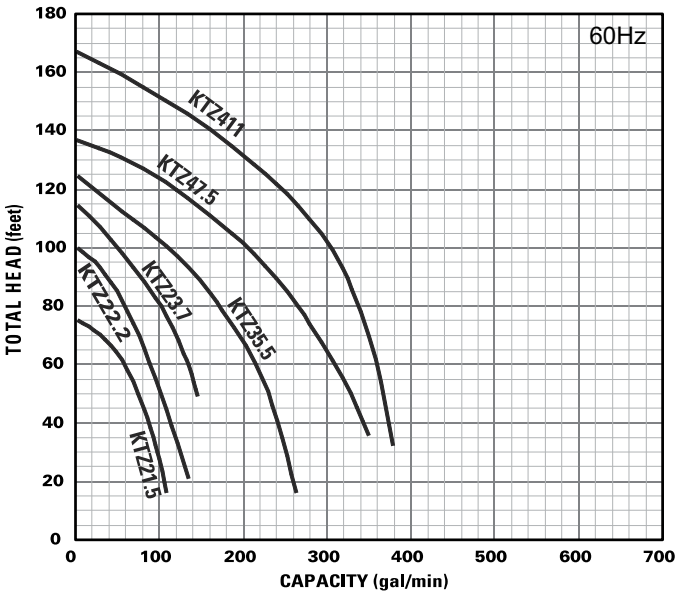
| | |
|---|---|
| Impeller: | High Chrome Iron |
| Casing: | Cast Iron |
| Mechanical Seal: | Silicon Carbide |
| Motor Frame: | Cast Iron |
| Shaft: | 420 Stainless Steel |
| Fasteners: | 304 Stainless Steel |
| Cable: | PVC, Chloroprene Rubber |

## Performance Curves

High Volume




High Head



# KTZ pumps convert quickly and easily between high head and high volume!

## Features

- High Pressure Capability
- Easily converted between high pressure and high volume configurations
- High Pressure Rated Mechanical Seals
- Rugged Iron Construction
- Anti-Wicking Cable Entrance
- Dual Silicon Carbide Mechanical Seals
- Tsurumi's Patented Oil Lifter
- Internal Thermal Motor Protection

The **KTZ series** is designed to withstand the most demanding conditions, including highly abrasive liquids found in construction, aggregate and mining applications. Versatility is increased as each pump model has the capability of being easily converted between high head and high volume performance with a simple change of impeller and wear plate. All KTZ series pumps incorporate high-chrome impellers for maximum wear life! Dual mechanical seals are isolated in the oil chamber to protect the seal faces from abrasion and corrosion. Silicon carbide mechanical seals are used to provide superior motor protection.

All KTZ series pumps come standard with high pressure mechanical seals. This exceeds the competition's standard design and offers longer mechanical seal life for a more reliable pump.

Tsurumi incorporates Pressure Relief Ports on the 10HP and 15HP models, exposing the mechanical seal only to the pressure developed by the sump submergence level. This has virtually eliminated the premature wear and failure of mechanical seals in higher pressure applications.

| | MOTOR SPECIFICATIONS | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL | Motor Output (HP) | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) Diameter | Dimension (in.) Height | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| KTZ21.5 | 2 | 208-230 / 460 / 575 | 6.2-6.0 /3.1 /2.3 | 3400 | 2 | 106 | 75 | 9 1/4 | 21 9/16 | 4 3/4 | 66 |
| KTZ31.5 | 2 | 208-230 / 460 / 575 | 6.2-6.0 /3.1 /2.3 | 3400 | 2 | 180 | 47 | 9 1/4 | 21 9/16 | 4 3/4 | 66 |
| KTZ22.2 | 3 | 208-230 / 460 / 575 | 9.4-9.0 / 4.5 / 3.5 | 3410 | 2 | 132 | 100 | 9 1/4 | 22 3/8 | 4 3/4 | 75 |
| KTZ32.2 | 3 | 208-230 / 460 / 575 | 9.4-9.0 / 4.5 / 3.5 | 3410 | 2 | 203 | 67 | 9 1/4 | 22 3/8 | 4 3/4 | 75 |
| KTZ23.7 | 5 | 208-230 / 460 / 575 | 15.0-13.6 / 6.8 / 5.3 | 3410 | 3 | 143 | 115 | 11 1/8 | 25 1/16 | 5 7/8 | 139 |
| KTZ33.7 | 5 | 208-230 / 460 / 575 | 15.0-13.6 / 6.8 / 5.3 | 3410 | 3 | 219 | 102 | 11 1/8 | 25 1/16 | 5 7/8 | 139 |
| KTZ43.7 | 5 | 208-230 / 460 / 575 | 15.0-13.6 / 6.8 / 5.3 | 3410 | 4 | 386 | 61 | 11 1/8 | 25 1/16 | 5 7/8 | 139 |
| KTZ35.5 | 7.5 | 208-230 / 460 / 575 | 21.0-20.0 /10.0 /7.9 | 3545 | 3 | 260 | 125 | 12 1/16 | 27 1/16 | 5 7/8 | 181 |
| KTZ45.5 | 7.5 | 208-230 / 460 / 575 | 21.0-20.0 /10.0 /7.9 | 3545 | 4 | 428 | 79 | 12 1/16 | 27 1/16 | 5 7/8 | 181 |
| KTZ47.5 | 10 | 208-230 / 460 / 575 | 28.8-26.6 / 13.3 /10.4 | 3545 | 4 | 349 | 137 | 13 | 28 1/8 | 7 1/2 | 236 |
| KTZ67.5 | 10 | 208-230 / 460 / 575 | 28.8-26.6 / 13.3 /10.4 | 3545 | 4 (6)* | 549 | 102 | 13 | 28 1/8 or (30 11/16)* | 7 1/2 | 236 |
| KTZ411 | 15 | 208-230 / 460 / 575 | 40.0-37.6 /18.6 / 14.9 | 3520 | 4 | 377 | 167 | 14 11/16 | 31 3/4 | 7 1/2 | 293 |
| KTZ611 | 15 | 208-230 / 460 / 575 | 40.0-37.6 /18.6 / 14.9 | 3520 | 4 (6)* | 645 | 107 | 14 11/16 | 31 3/4 or (30 3/16)* | 7 1/2 | 300 |

* 6inch is optional

# LH/W

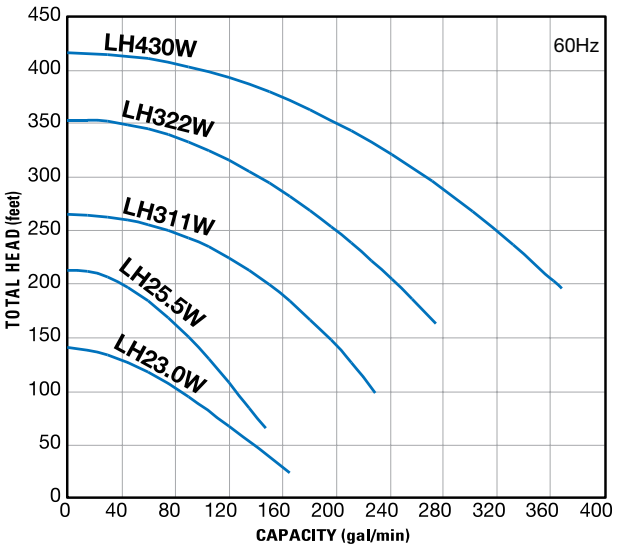
## Extreme high pressure pumping at high volumes!

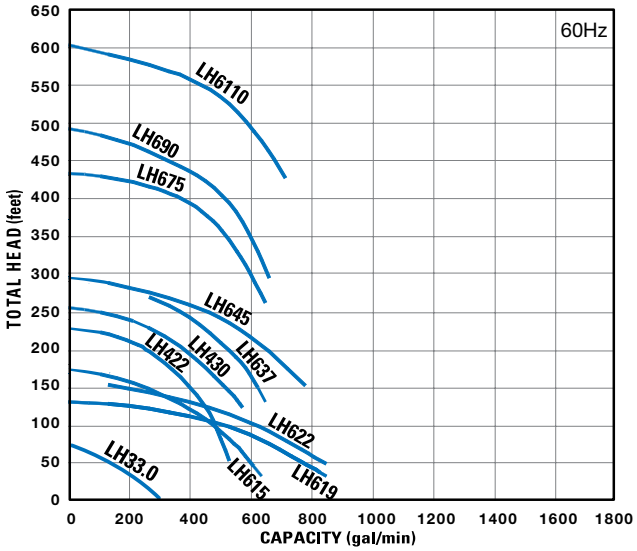
Slimline: LH33.0
- fits into 8" diameter pipes

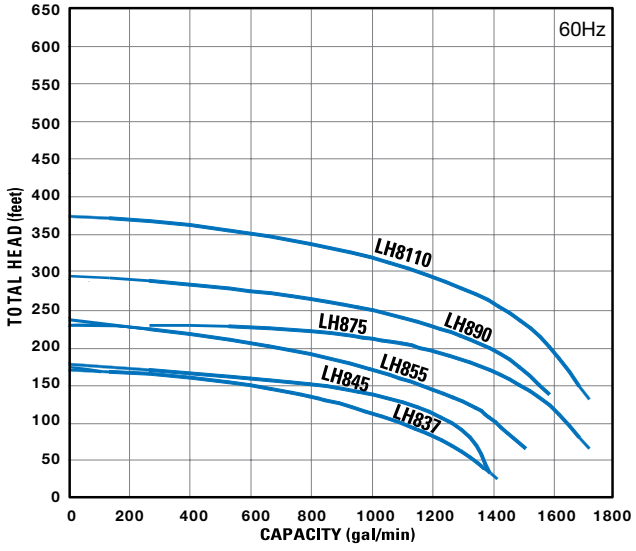
## Material

| | |
|---|---|
| Impeller: | High Chrome Cast Iron |
| Casing: | Ductile Cast Iron |
| Mechanical Seal: | Silicon Carbide |
| Motor Frame: | Cast Iron |
| Shaft: | 420 Stainless Steel |
| Fasteners: | 304 Stainless Steel |
| Cable: | Chloroprene Sheath |

## Performance Curves



# LH and LH-W pumps reach heights the competition only dreams of!

## Features

- High Pressure Capabilities
- High Pressure Rated Mechanical Seals
- Seal Pressure Relief Ports
- Rugged Iron Construction
- Anti-Wicking Cable Entrance
- Dual Silicon Carbide Mechanical Seals
- Tsurumi's Patented Oil Lifter
- Internal Thermal Motor Protection

The **LH-W series** offers extremely high heads by utilizing dual staged, closed high chrome impellers. The **LH series** handles medium to high flows at higher heads. The durable construction of these pumps make them ideally suited for dewatering of mines and quarries, deep well pumping and any high head or long distance water transfer application.

Dual mechanical seals are isolated in the oil chamber protecting the seal faces from abrasive liquids. High pressure seals, capable of operating depths of 328 ft., are used on all LH-W series pumps and on LH series pumps from 20 to 60 HP. Additional seal protection is provided by Tsurumi's exclusive Seal Pressure Relief Ports. The Pressure Relief Ports provide a flow path above the pump casing to allow a release for water to flow from the pump and away from the shaft. The mechanical seal remains isolated in an oil chamber above this flow path and is protected from any excessive pumping pressure or water hammer that may cause premature wear or failure of mechanical seals in high head pumping applications. Isolating the mechanical seals also protects against wear from abrasive materials in the pumping liquid.

| | | MOTOR SPECIFICATIONS | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MODEL | Motor Output (HP) | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) | | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| | | | | | | | | | Diameter | Height | | |
| LHW SERIES | LH23.0W | 4 | 208-230 / 460 / 575 | 12.3-12.0 / 6.0 /4.7 | 3430 | 2 | 145 | 140 | 7 5/16 | 24 13/16 | 7 7/8 | 101 |
| | LH25.5W | 7.5 | 208 / 230 / 460 / 575 | 22.0 /19.2 /9.6 /7.7 | 3385 | 2 | 129 | 213 | 9 5/8 | 29 1/2 | 6 3/4 | 176 |
| | LH311W | 15 | 208 / 230 / 460 / 575 | 42.0 /37.0 /18.5 14.5 | 3465 | 3 | 201 | 266 | 10 5/8 | 40 5/16 | 7 7/8 | 287 |
| | LH322W | 30 | 460 / 575 | 35.5 / 28.0 | 3490 | 3 | 240 | 354 | 13 | 48 5/8 | 11 3/4 | 670 |
| | LH430W | 40 | 460 / 575 | 48.0 / 38.5 | 3475 | 4 | 322 | 417 | 14 3/8 | 54 1/8 | 11 3/4 | 714 |
| LH SERIES | LH33.0 | 4 | 208-230 / 460 / 575 | 12.3-12.0 / 6.0 / 4.7 | 3430 | 3 | 290 | 73 | 7 5/16 | 25 3/8 | 5 7/8 | 93 |
| | LH615 | 20 | 208-230 / 460 / 575 | 53.0 /48.0 24.0 /19.0 | 3465 | 6 | 634 | 173 | 13 | 39 15/16 | 17 1/4 | 470 |
| | LH619 | 25 | 460 / 575 | 31.0 / 25.0 | 3490 | 6 | 845 | 131 | 16 9/16 | 56 | 10 5/8 | 770 |
| | LH422 | 30 | 460 / 575 | 36.0 / 28.5 | 3490 | 4 | 528 | 230 | 16 9/16 | 53 1/4 | 9 7/8 | 770 |
| | LH622 | 30 | 460 / 575 | 36.0 / 28.5 | 3490 | 6 | 845 | 164 | 16 9/16 | 56 | 10 5/8 | 790 |
| | LH430 | 40 | 460 / 575 | 51.0 / 38.5 | 3475 | 4 | 573 | 123 | 16 9/16 | 53 1/4 | 9 7/8 | 780 |
| | LH637 | 50 | 460 / 575 | 58 /46 | 3525 | 6 | 647 | 294 | 20 7/8 | 57 | 7 1/8 | 1090 |
| | LH837 | 50 | 460 / 575 | 58 /46 | 3525 | 8 | 1413 | 171 | 20 7/8 | 58 9/16 | 7 1/8 | 1090 |
| | LH645 | 60 | 460 / 575 | 67 / 53 | 3530 | 6 | 779 | 295 | 20 7/8 | 57 | 7 1/8 | 1120 |
| | LH845 | 60 | 460 / 575 | 67 / 53 | 3530 | 8 | 1387 | 177 | 20 7/8 | 58 9/16 | 7 1/8 | 1120 |
| | LH855 | 75 | 460 / 575 | 87 / 70 | 3530 | 8 | 1506 | 236 | 21 5/8 | 67 9/16 | 7 7/8 | 1810 |
| | LH675 | 100 | 460 / 575 | 113 / 91 | 3530 | 6 | 647 | 433 | 21 5/8 | 66 | 7 7/8 | 1910 |
| | LH875 | 100 | 460 / 575 | 113 / 91 | 3530 | 8 | 1717 | 230 | 21 5/8 | 67 9/16 | 7 7/8 | 1910 |
| | LH690 | 120 | 460 / 575 | 137 / 110 | 3500 | 6 | 660 | 492 | 23 5/16 | 70 3/8 | 7 7/8 | 2420 |
| | LH890 | 120 | 460 / 575 | 137 / 110 | 3500 | 8 | 1585 | 295 | 23 5/16 | 70 3/8 | 7 7/8 | 2530 |
| | LH6110 | 150 | 460 / 575 | 180 / 136 | 3530 | 6 | 713 | 604 | 23 5/16 | 74 5/16 | 7 7/8 | 2850 |
| | LH8110 | 150 | 460 / 575 | 180 / 136 | 3530 | 8 | 1717 | 374 | 23 5/16 | 74 5/16 | 7 7/8 | 2960 |

# KTV(E)

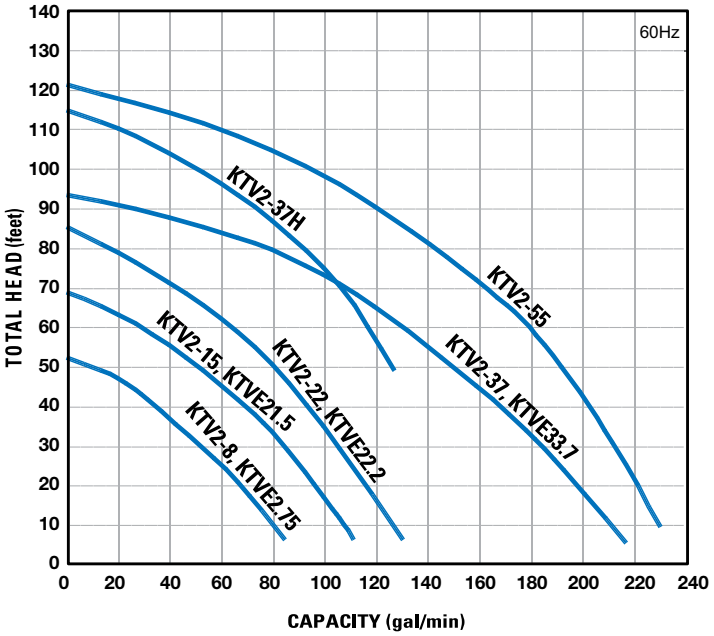
## Lightweight, compact, durable and self-contained automatic operation

**Built-in Automatic Operation KTVE:**
Allows a three phase pump to operate automatically in a smaller casing or sump where traditional float switches don't fit.

## Material

| | |
|---|---|
| Impeller: | Abrasion Resistant / Urethane Lined |
| Casing: | Aluminum |
| Mechanical Seal: | Silicon Carbide |
| Motor Frame: | Aluminum Alloy |
| Shaft: | 403 / 420 Stainless Steel |
| Fasteners: | 304 Stainless Steel |
| Cable: | PVC Sheath, Chloroprene Sheath |

## Performance Curves



# KTV(E) pumps are easily portable and highly resistant to wear!

## Features

- Lightweight, Compact Size
- Long Life and Low Maintenance
- Simple Construction for Easy Repair
- Anti-Wicking Cable Entrance
- Dual Silicon Carbide Mechanical Seals
- Tsurumi's Patented Oil Lifter
- Internal Thermal Motor Protection
- Automatic Operation on KTVE Series



The **KTV series** was developed with a die cast aluminum body and elastomer pump end to reduce weight and allow easy handling. The semi-vortex impeller allows for maximum particle passage size while offering increased parts life. In addition, the need for impeller efficiency adjustments has been completely eliminated.

The **KTVE series** offers the same features as the KTV series with the added benefit of an integrally mounted electrode probe for turning the pump on and off automatically. Unnecessary dry-run is prevented to save energy and reduce wear without the need for auto control panels and cumbersome float assemblies. The pump installs and handles like a standard pump yet operates automatically by simply connecting to a manual control panel.

| | | MOTOR SPECIFICATIONS | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MODEL | Motor Output (HP) | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) Diameter | Dimension (in.) Height | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| KTV SERIES | KTV2-8 | 1 | 208-230 / 460 / 575 | 3.4-3.2 / 1.6 /1.3 | 3320 | 2 | 85 | 53 | 7 7/8 | 14 1/2 | 2 1/2 | 25 |
| | KTV2-15 | 2 | 208 / 230 /460 / 575 | 6.0 / 5.4 /2.7 / 2.1 | 3440 | 2 | 111 | 69 | 9 7/16 | 15 9/16 | 3 1/8 | 46 |
| | KTV2-22 | 3 | 208 / 230 /460 / 575 | 8.2 /7.4 3.7 / 2.9 | 3440 | 2 | 130 | 85 | 9 7/16 | 16 3/8 | 3 1/8 | 51 |
| | KTV2-37H | 5 | 208 / 230 /460 / 575 | 14.2 / 12.6 / 6.3 / 5.0 | 3450 | 2 | 127 | 115 | 11 1/4 | 20 1/16 | 3 1/2 | 79 |
| | KTV2-37 | 5 | 208 / 230 /460 / 575 | 14.2 / 12.6 / 6.3 / 5.0 | 3450 | 3 | 217 | 94 | 11 1/4 | 20 1/16 | 3 1/2 | 79 |
| | KTV2-55 | 7.5 | 208 / 230 /460 / 575 | 21.5 / 19.0 / 9.5 / 7.5 | 3435 | 3 | 230 | 121 | 11 13/16 | 21 7/16 | 3 1/2 | 104 |

| | | MOTOR SPECIFICATIONS | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MODEL | Motor Output (HP) | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) Diameter | Dimension (in.) Height | Pump Starting Water Level (in.) | Pump Weight (lbs.) |
| KTVE SERIES | KTVE2.75 | 1 | 208-220 /440 / 575 | 3.4-3.2 / 1.7 / 1.3 | 3320 | 2 | 85 | 53 | 7 7/8 | 16 7/16 | 9 1/4 | 28 |
| | KTVE21.5 | 2 | 208 / 230 /460 / 575 | 6.0 / 5.4 / 2.7 / 2.1 | 3440 | 2 | 111 | 69 | 9 7/16 | 16 3/4 | 10 1/2 | 48 |
| | KTVE22.2 | 3 | 208 / 230 /460 / 575 | 8.2 / 7.4 / 3.7 / 2.9 | 3440 | 2 | 130 | 85 | 9 7/16 | 16 3/4 | 10 1/2 | 55 |
| | KTVE33.7 | 5 | 208 / 230 /460 / 575 | 14.2 / 12.6 / 6.3 / 5.0 | 3450 | 3 | 217 | 94 | 11 1/4 | 23 1/16 | 12 7/8 | 88 |

# KRS

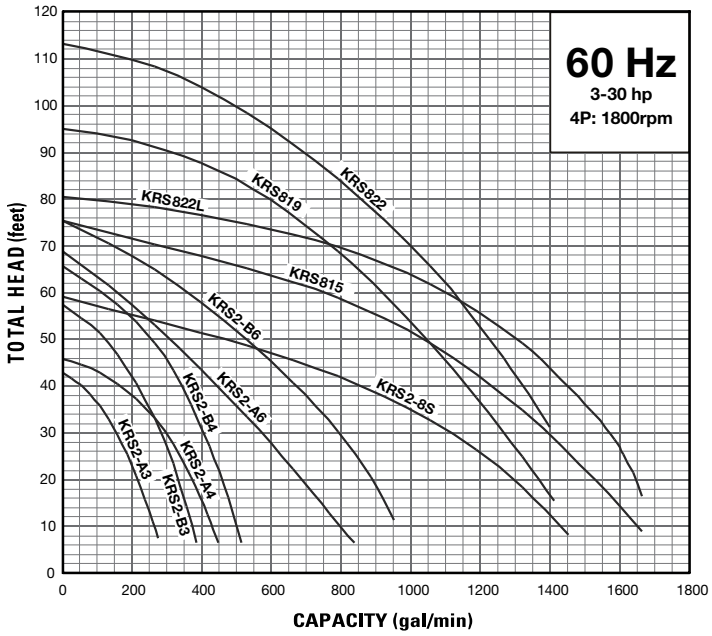
## High volume, extra durable pump available in a variety of sizes

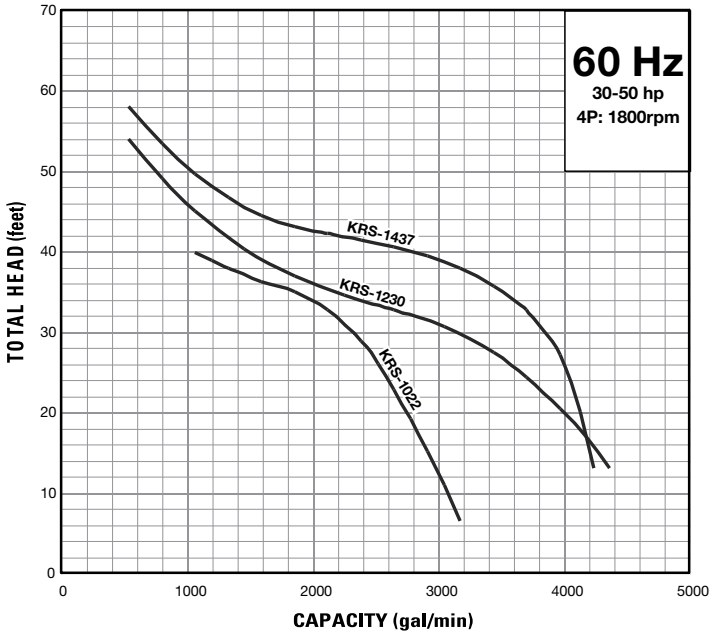


## Material

| | |
|---|---|
| Impeller: | Ductile or High Chrome |
| Casing: | Cast Iron |
| Mechanical Seal: | Silicon Carbide |
| Motor Frame: | Cast Iron |
| Shaft: | 420 Stainless Steel |
| Fasteners: | 304 Stainless Steel |
| Cable: | Chloroprene Sheath |

## Performance Curves



# KRS pumps provide high volume performance and extended pump life!

## Features

- High Pump Volume
- 4 Pole, 1800 RPM Motors • 6 Pole, 1200 RPM Motors
- Lower Impeller Tip Speeds for Longer Life
- Rugged Iron Construction
- Anti-Wicking Cable Entrance
- Dual Silicon Carbide Mechanical Seals
- Tsurumi's Patented Oil Lifter
- Internal Thermal Motor Protection

The **KRS series** offers longer wear life on parts due to the slower impeller tip speed provided by 4-pole, 1800 RPM / 6-pole, 1200 RPM motors. Reducing impeller speed by half will extend your parts wear life by at least 2 to 3 times.

The iron construction of the KRS series extends the life of the pump. To prevent premature wear and failure from abrasive materials, Tsurumi's dual inside mechanical seals are completely isolated in an oil chamber with an extra lip seal to protect mechanical seals from the pumped liquid.

The KRS series exemplifies Tsurumi's design for multi-purpose pumps to fit a wide variety of applications due to their simple construction, superb durability and high efficiency.

KRS SERIES

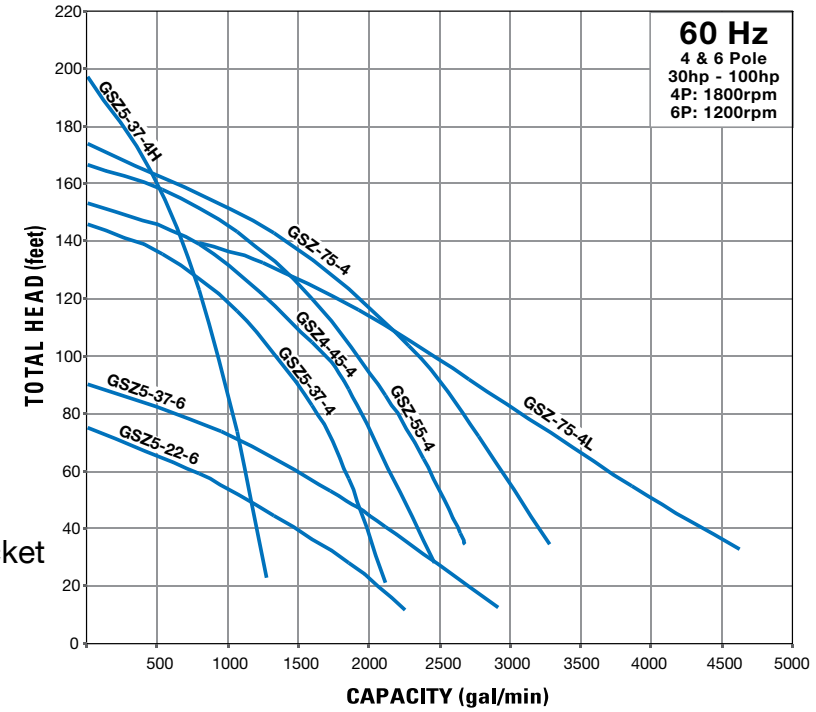
| MODEL | MOTOR SPECIFICATIONS | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Motor Output (HP) | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) | | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| | | | | | | | | Diameter | Height | | |
| KRS2-A3 | 3 | 208-230 /460 / 575 | 9.4-8.6 / 4.3 / 3.4 | 1700 | 3 | 276 | 43 | 13 3/8 | 23 5/8 | 5 3/4 | 159 |
| KRS2-B3 | 5 | 208-230 /460 / 575 | 15.0-13.8 / 6.9 / 5.5 | 1690 | 3 | 383 | 57 | 13 3/4 | 26 15/16 | 6 1/8 | 196 |
| KRS2-A4 | 5 | 208-230 /460 / 575 | 15.0-13.8 / 6.9 / 5.5 | 1690 | 4 | 450 | 46 | 13 3/4 | 26 15/16 | 6 1/8 | 194 |
| KRS2-B4 | 7.5 | 208-230 /460 / 575 | 21.4-19.6 / 9.8 / 7.6 | 1720 | 4 | 515 | 65 | 13 3/4 | 26 9/16 | 6 1/8 | 209 |
| KRS2-A6 | 10 | 208-230 /460 / 575 | 29.0-26.0 / 13.0 / 10.5 | 1730 | 6 | 819 | 69 | 16 5/16 | 27 13/16 | 6 7/8 | 286 |
| KRS2-B6 | 15 | 208-230 /460 / 575 | 42.0-39.0 / 19.5 / 14.5 | 1735 | 6 | 936 | 75 | 16 5/16 | 29 5/8 | 6 7/8 | 330 |
| KRS2-8S | 15 | 208-230 /460 / 575 | 42.0-39.0 / 19.5 / 14.5 | 1735 | 8 | 1453 | 59 | 18 9/16 | 33 3/8 | 11 3/4 | 383 |
| KRS815 | 20 | 208-230 /460 / 575 | 57.0-50.0 / 25.0 / 20.0 | 1742 | 8 | 1638 | 75 | 18 15/16 | 38 12/16 | 10 7/8 | 520 |
| KRS819 | 25 | 460 / 575 | 30.0 / 24.0 | 1758 | 8 | 1391 | 95 | 22 1/2 | 45 3/8 | 13 5/8 | 850 |
| KRS822 | 30 | 460 / 575 | 35.5 / 29.0 | 1761 | 8 | 1365 | 113 | 22 1/2 | 45 3/8 | 13 5/8 | 860 |
| KRS822L | 30 | 460 / 575 | 35.5 / 29.0 | 1761 | 8 | 1664 | 80 | 22 1/2 | 45 3/8 | 13 5/8 | 860 |
| KRS1022 | 30 | 460 / 575 | 38 / 31 | 1745 | 10 | 3170 | 40 | 20 1/2 | 49 15/16 | 17 3/4 | 990 |
| KRS1230 | 40 | 460 / 575 | 53 / 43 | 1165 | 12 | 4359 | 54 | 26 3/8 | 55 1/4 | 18 7/8 | 1540 |
| KRS1437 | 50 | 460 / 575 | 65 / 52 | 1165 | 14 | 4227 | 58 | 26 3/8 | 55 1/4 | 18 7/8 | 1650 |

# GSZ

## High volume dewatering and slurry pumps



## Performance Curves




## Material

| | |
|---|---|
| Impeller: | High Chrome or Stainless Steel |
| Casing: | Cast Iron |
| Mechanical Seal: | Silicon Carbide |
| Motor Frame: | Cast Iron / Cooling Jacket |
| Shaft: | 420 Stainless Steel |
| Fasteners: | 304 Stainless Steel |
| Cable: | Chloroprene Rubber |

# GSZ dewatering pumps are designed to last in aggressive dewatering applications!

## Features

- High Pumping Volume
- 4 Pole, 1800 RPM Motors
  6 Pole, 1200 RPM Motors
- Lower Impeller Tip Speeds for Longer Life
- Rugged Iron Construction
- Anti-Wicking Cable Entrance
- Dual Silicon Carbide Mechanical Seals
- Tsurumi's Patented  Oil Lifter
- Internal Thermal Motor Protection

The **GSZ series** is one of the most formidable high volume submersible dewatering pumps available. Reducing impeller speed by half will extend your parts wear life by at least 2-3 times. With impeller materials of High Chrome and Stainless Steel, the GSZ series tackles the most aggressive dewatering applications.  The side discharge design allows a smooth passage of abrasive materials.

Tsurumi's exclusive Seal Pressure Relief Ports further protect the mechanical seals on the 4-pole, 1800 RPM models by providing a flow path above the pump casing to allow a release of water to flow from the pump and away from the shaft.  The mechanical seals remain isolated in the oil chamber above this flow path and are protected from any excessive pumping pressure or water hammer that may cause premature wear or failure of the mechanical seals in high pressure applications.

Extended operation at low water levels is made possible by utilizing a water jacket that surrounds the motor housing. A portion of the water is allowed to flow completely around the motor on its way to the side discharge. Air lock is prevented by an air-release valve at the top of the water jacket to allow air in the pump casing and water jacket to be displaced by water when the pump begins operation.



| | MOTOR SPECIFICATIONS | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL | Motor Output (HP) | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) | | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| | | | | | | | | Diameter | Height | | |
| GSZ5-22-6 | 30 | 460 / 575 | 41 / 33 | 1160 | 8 | 2113 | 79 | 38 | 53 9/16 | 13 3/4 | 1670 |
| GSZ5-37-4H | 50 | 460 / 575 | 63 / 49 | 1750 | 6 | 1268 | 197 | 35 7/16 | 61 1/8 | 17 3/8 | 1380 |
| GSZ5-37-4 | 50 | 460 / 575 | 63 / 49 | 1750 | 8 | 2113 | 143 | 36 | 62 5/16 | 18 7/8 | 1330 |
| GSZ5-37-6 | 50 | 460 / 575 | 64 / 52 | 1160 | 8 | 2906 | 90 | 41 1/4 | 55 15/16 | 14 5/8 | 1590 |
| GSZ4-45-4 | 60 | 460 / 575 | 76 / 63 | 1745 | 8 | 2457 | 153 | 36 | 62 5/8 | 18 1/8 | 1370 |
| GSZ-55-4 | 75 | 460 / 575 | 92 / 74 | 1760 | 10 | 2695 | 167 | 41 5/16 | 68 1/4 | 20 1/8 | 2530 |
| GSZ-75-4 | 100 | 460 / 575 | 128 / 103 | 1770 | 10 | 3434 | 174 | 41 5/16 | 68 1/4 | 20 1/8 | 2640 |
| GSZ-75-4L | 100 | 460 / 575 | 128 / 103 | 1770 | *10 | 4621 | 139 | 41 5/16 | 70 | 28 3/4 | 2800 |

*With 1ft ANSI Flange

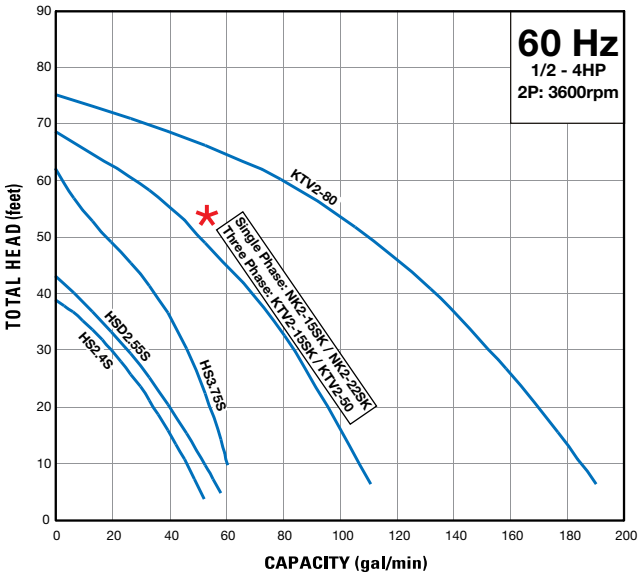
# Agitator Pumps

**Available in: HS(D), NK, KTV, and KRS Series**

**Tsurumi's agitator pumps** are ideal for quarry and gravel pit drainage. Abrasive resistant three-phase and single-phase pumps are available with either cast iron or synthetic rubber casings, and come complete with high chrome agitators, impellers, and suction covers.

## Performance Curves

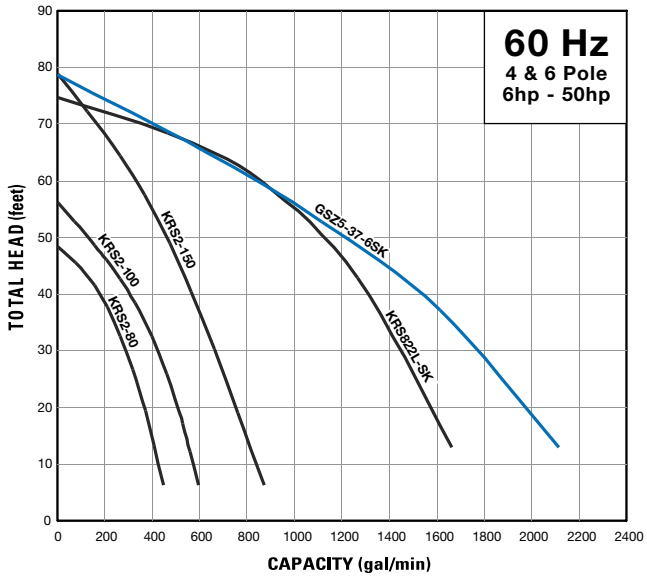
### HS(D), NK and KTV Series




| * | Standard | High Torque |
|---|---|---|
| Single Phase | NK2-15SK 2HP (1.5kW) | NK2-22SK 3HP (2.2kW) |
| Three Phase | KTV2-15SK 2HP (1.5kW) | KTV2-50 2.7HP (2.0kW) |

High Torque models further suitable for heavy duty application.

### KRS, GSZ Series




| MODEL | MOTOR SPECIFICATIONS | | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Motor Output (HP) | Phase | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) Diameter | Dimension (in.) Height | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| HS2.4S | 1/2 | Single | 110 / 220 | 5.4 / 2.7 | 3320 | 2 | 53 | 39 | 10 1/16 | 12 15/16 | 3 1/2 | 25 |
| HS3.75S | 1 | Single | 115 / 230 | 9.6 / 4.6 | 3408 | 3 | 74 | 59 | 12 7/16 | 15 1/4 | 3 1/2 | 42 |
| HSD2.55S | 3/4 | Single | 115 / 230 | 7.5 / 4.0 | 3410 | 2 | 58 | 43 | 9 3/4 | 15 3/8 | 4 1/8 | 33 |
| NK2-15SK | 2 | Single | *110 & *220 | 23.0 / 11.5 | 3440 | 3 | 111 | 69 | 9 13/16 | 26 | 4 3/4 | 71 |
| NK2-22SK | 3 | Single | 220 | 13.0 | 3465 | 3 | 111 | 69 | 9 13/16 | 26 | 4 3/4 | 71 |
| KTV2-15SK | 2 | Three | 208 / 230 /460 / 575 | 6.0 / 5.4 / 2.7 / 2.1 | 3440 | 2 | 111 | 69 | 9 13/16 | 17 7/8 | 4 3/4 | 51 |
| KTV2-50 | 2.7 | Three | 208 / 230 /460 / 575 | 7.0 / 6.4 / 3.2 / 2.6 | 3440 | 2 | 111 | 69 | 9 13/16 | 17 7/8 | 4 3/4 | 55 |
| KTV2-80 | 4 | Three | 208 / 230 /460 / 575 | 11.6 / 10.6 / 5.3 / 4.2 | 3450 | 3 | 190 | 75 | 11 5/8 | 21 5/8 | 5 1/8 | 84 |
| KRS2-80 | 6 | Three | 208-230 /460 / 575 | 18.0-16.5 / 8.5 / 6.6 | 1720 | 3 | 449 | 49 | 13 3/4 | 30 3/16 | 9 7/8 | 231 |
| KRS2-100 | 8 | Three | 208-230 /460 / 575 | 25.0-23.0 / 11.5 / 9.2 | 1730 | 4 | 594 | 56 | 16 3/8 | 30 3/16 | 9 7/8 | 315 |
| KRS-150 | 12 | Three | 208-230 /460 / 575 | 36.0-33.0 / 16.5 / 13.2 | 1735 | 6 | 872 | 79 | 16 3/8 | 31 15/16 | 9 7/8 | 357 |
| KRS822L-SK | 30 | Three | 460 / 575 | 35.5 / 29.0 | 1761 | 8 | 1664 | 75 | 22 1/2 | 45 1/16 | 13 1/4 | 870 |
| GSZ5-37-6SK | 50 | Three | 460 / 575 | 64.0 / 51.5 | 1160 | 8 | 2114 | 79 | 29 1/2 | 63 1/4 | 21 7/8 | 1780 |

* Dual Voltage

# LB/LBT

## Portable slimline dewatering pump

Fits in **8-inch Pipe!**


## Material

| | |
|---|---|
| Impeller Type: | Semi-Vortex (LB-480/LB(T)-800)<br>Semi-Open (LB(T)-1500) |
| Impeller Material: | Urethane Rubber (LB-480/LB(T)-800)<br>High Chrome (LB(T)-1500) |
| Volute Casing Material: | Etylene Propylene Rubber (LB-480)<br>Butadiene Rubber and Natural Rubber (LB(T)-800/1500) |
| Wear Plate Material: | Urethane Rubber (LB-480/LB(T)-800)<br>Butadiene Rubber and Natural Rubber (LB(T)-1500) |
| Shaft Seal: | Double inside mechanical seal with Silicone Carbide (All three series) |

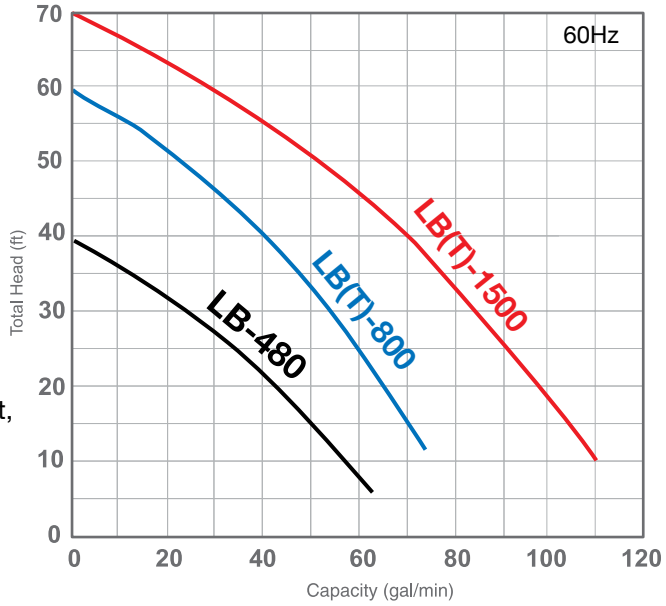
## Features: LB-480, LB-800/LBT-800

- Built with durable materials and light weight for easy handling.
- Motor protector protects against overheating, over-current, and run-dry conditions.
- Double Inside Mechanical Seal with Silicon Carbide faces provides the longest operational life.
- Oil Lifter provides lubrication of the seal faces.
- Single-phase is available in automatic operation.

## Features: LB-1500/LBT-1500

- Motor protector protects against overheating, over-current, and run-dry conditions.
- Double Inside Mechanical Seal with Silicon Carbide faces provide the longest operational life.
- Oil Lifter provides lubrication of the seal faces.
- High Chrome Iron Semi-Open Impeller resists wear from abrasive particles.
- Synthetic Rubber Pump Casing provides wear resistance and easy maintenance.
- Optional 2 inch discharge available for LB(T)-1500 series.

## Performance Curves




| MODEL | MOTOR SPECIFICATIONS | | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Motor Output (HP) | Phase | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) | | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| | | | | | | | | | Diameter | Height | | |
| LB-480 | 1/2 | Single | 110 / 220 | 6.1 / 3.05 | 3525 | 2 | 62.4 | 39.5 | 7 11/16 | 11 1/4 | 2 | 21 |
| LB-800 | 1 | Single | 115 / 230 | 9.6 / 5.1 | 3300 | 2 | 73 | 59 | 7 9/16 | 13 7/16 | 2 | 29 |
| LBT-800 | 1 | Three | 208-230 /460 / 575 | 3.4-3.2 / 1.6 / 1.2 | 3388 | 2 | 73 | 59 | 7 9/16 | 13 7/16 | 2 | 28 |
| LB-1500 | 2 | Single | 115 / 230 | 26.2 / 13.2 | 3480 | 3 | 111 | 69 | 7 3/8 | 23 5/16 | 3 1/8 | 72 |
| LBT-1500 | 2 | Three | 208-230 /460 / 575 | 7.2-8.0 / 4.0 / 2.9 | 3515 | 3 | 111 | 69 | 7 3/8 | 23 5/16 | 3 1/8 | 70 |

# SFQ/SQ

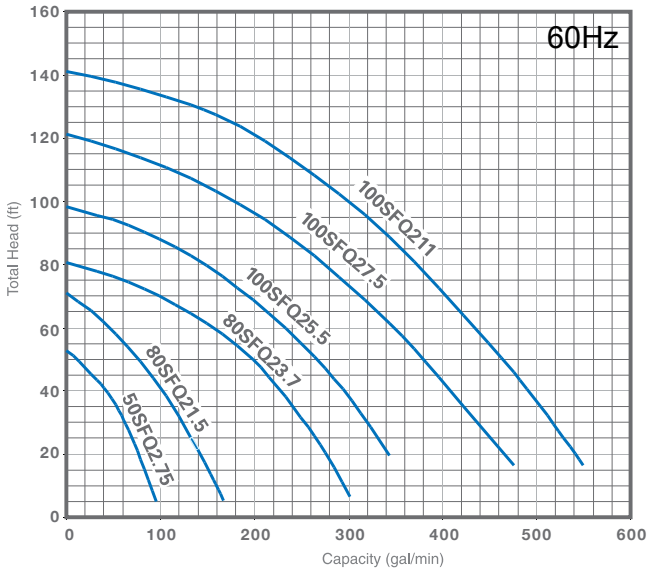
## Stainless Steel pumps

## SFQ

### Material

| | |
|---|---|
| Impeller: | 316 Stainless Steel |
| Casing: | 316 Stainless Steel |
| Mechanical Seal: | Silicon Carbide |
| Motor Frame: | 316 Stainless Steel |
| Shaft: | 316 Stainless Steel |
| Fasteners: | 316 Stainless Steel |
| Cable: | PVC Sheath, Chloroprene Sheath |

### Performance Curves

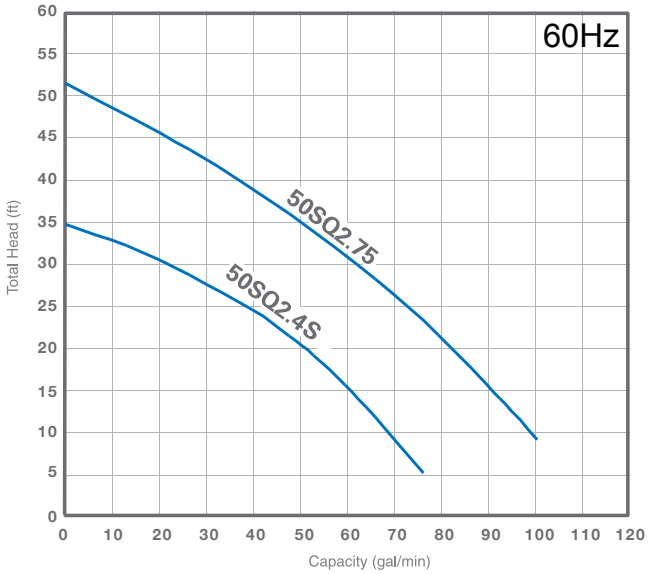



## SQ

### Material

| | |
|---|---|
| Impeller: | 304 Stainless Steel |
| Casing: | 304 Stainless Steel |
| Mechanical Seal: | Silicon Carbide |
| Motor Frame: | 304 Stainless Steel |
| Shaft: | 304 Stainless Steel |
| Fasteners: | 304 Stainless Steel |
| Cable: | PVC Sheath, Chloroprene Sheath |

### Performance Curves



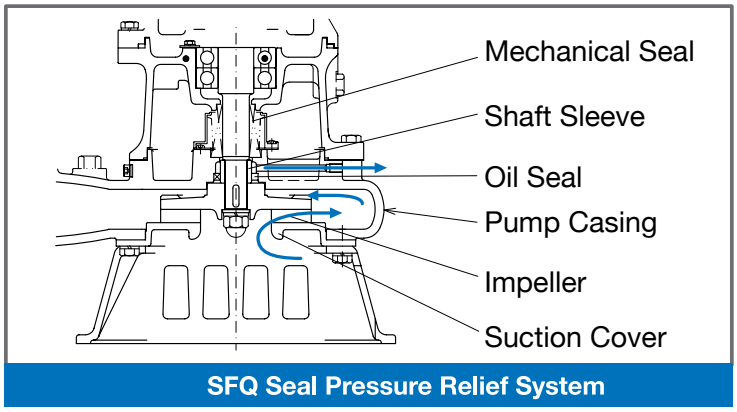
# Stainless steel pumps are rust free and corrosive resistant!

## Features: SFQ Series

- All wetted components are 316 Stainless Steel
- Viton elastomers
- Dual inside mechanical seals with Silicon Carbide faces, operate in an oil filled chamber and are protected by an exclusionary lip seal, providing the most durable seal available.
- Optional 316 SS Guide rail system is available for models from 7.5 - 15hp.
- Built in motor protector senses excess heat and amperage draw built up in the motor.
- Seal pressure relief system features an independent chamber separate from the oil casing in which the mechanical seal is housed. (From 7.5 - 15hp)

## Features: SQ Series

- All components including motor frame are made of SS 304 Stainless Steel.
- Non-toxic white mineral oil is used as the lubricant.
- The flow-through design and heat resistant Silicon Carbide Mechanical Seals assist in cooling in the event of run-dry situations.
- Built in motor protector senses excess heat and amperage draw built up in the motor.
- Semi-vortex, stainless steel impeller passes solids and stringy material without clogging and increases wear resistance when pumping abrasive particles.




SFQ Seal Pressure Relief System

| | MODEL | MOTOR SPECIFICATIONS | | | | | PUMP SPECIFICATIONS | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Motor Output (HP) | Phase | Voltages (V) | Rated Current (A) | RPM | Discharge Size (in.) | Maximum Capacity (GPM) | Maximum Head (ft.) | Dimension (in.) Diameter | Dimension (in.) Height | Continuous Running Water Level (in.) | Pump Weight (lbs.) |
| SFQ SERIES | 50SFQ2.75 | 1 | Three | 208-230 / 460 / 575 | 3.5-3.1 / 1.6 / 1.3 | 3430 | 2 | 95 | 53 | 9 15/16 | 15 11/16 | 14 1/8 | 49 |
| | 80SFQ21.5 | 2 | Three | 208-230 / 460 / 575 | 6.9-6.7 / 3.4 / 2.7 | 3450 | 3 | 165 | 71 | 12 15/16 | 19 1/16 | 16 3/8 | 79 |
| | 80SFQ23.7 | 5 | Three | 208-230 / 460 / 575 | 13.8-12.8 / 6.4 / 5.0 | 3410 | 3 | 301 | 81 | 14 1/8 | 21 5/16 | 19 1/2 | 115 |
| | 100SFQ25.5 | 7.5 | Three | 208-230 / 460 / 575 | 19.3-18.2 / 9.4 / 7.5 | 3545 | 4 | 343 | 98 | 25 3/8 | 33 1/4 | 27 1/8 | 278 |
| | 100SFQ27.5 | 10 | Three | 208-230 / 460 / 575 | 26.0-24.4 / 12.2 / 9.5 | 3545 | 4 | 476 | 122 | 25 3/8 | 33 1/4 | 27 1/8 | 276 |
| | 100SFQ211 | 15 | Three | 208-230 / 460 / 575 | 37.0-35.2 / 17.6 /1 3.9 | 3525 | 4 | 550 | 141 | 25 3/8 | 35 1/8 | 28 | 320 |
| SQ SERIES | 50SQ2.4S | 1/2 | Single | 115 / 230 | 6.5 / 3.4 | 3376 | 2 | 76 | 35 | 7 1/16 | 14 5/16 | 2 3/8 | 28 |
| | 50SQ2.75 | 1 | Three | 208-220 / 460 | 3.5-3.4 / 1.6 | 3349 | 2 | 100 | 51 | 7 1/16 | 15 1/8 | 2 3/8 | 33 |

# EPT4 Heavy Duty Prime Assisted Trash Pump



**EPT4-150DPJD:** Priming assisted

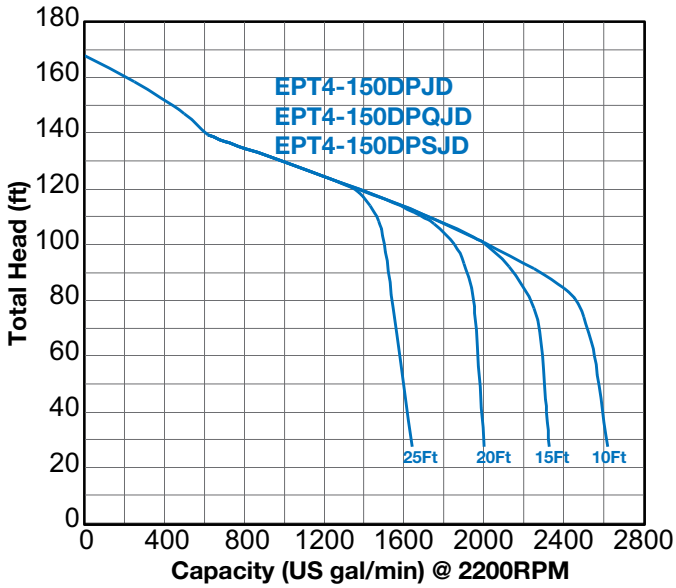
**EPT4-150DPQJD:** Sound attenuated priming assisted

**EPT4-150DPSJD:** Skid mount priming assisted

## Material

| | |
|---|---|
| Impeller Type: | Fully Enclosed |
| Impeller Material: | Cast Iron |
| Volute Casing Material: | Cast Iron |
| Wear Plate / Ring Material: | Cast Iron |
| Pump Casing Material: | Cast Iron |
| Shaft Seal: | Tungsten Carbide |
| | Silicone Carbide |

## Performance Curve




## EPT4-150DP(Q)(S)JD Features

- Prime assisted pump utilizes venturi system for priming.
- John Deere diesel engine, and water cooled.
- Passes 3 inch spherical solids.
- Mechanical seal is tungsten and silicon carbide seal faces, viton elastomers, 303 stainless steel hardware and spring. Seal system designed for dry running.
- Heavy duty road trailer.
- EPT4-150DPQJD: Capable of quiet operation.

| | PUMP SPECIFICATIONS | | | | ENGINE SPECIFICATIONS | | | | DIMENSIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Model** | Discharge Size (inch) | Maximum Capacity (gpm) | Maximum Head (feet) | Engine | Output (hp) | Fuel | Fuel Tank Capacity (gal) | Starting Method | Length (inch) | Width (inch) | Height (inch) | Weight (lbs.) |
| **EPT4-150DPJD** Standard | 6 | 2400 | 160 | John Deere 4045TF290 | 74 | Diesel | 60 | Electric, 12V | 136 1/2 | 67 | 67 7/8 | 3360 |
| **EPT4-150DPQJD** Sound Attenuated | | | | | | | 130 | | 161 1/2 | 76 1/8 | 79 13/16 | 4800 |
| **EPT4-150DPSJD** Skid Mount | | | | | | | 120 | | 100 | 42 | 49 1/2 | 2900 |

# Accessories



## CONTROL PANELS

### Automatic Control Panels

- UL Listed Nema 4X Fiberglass Enclosure
- HOA Selector Switch
- IEC Rated Magnetic Contactor
- Field Adjustable Overload Protection
- Includes (2) 50" Mechanical Floats

### Manual Control Panels

- UL Listed
- Hand/Off Lockable Selector Switch
- IEC Rated Magnetic Contactor
- Field Adjustable Overload Protection
- Nema 4X Fiberglass Enclosure

## MOISTURE DETECTOR

*The* **TSMP SEAL MOISTURE PROBE** *is designed to detect moisture in the mechanical seal chamber, alerting customers of potential motor failure. The* **TSMP SEAL MOISTURE PROBE** *can be field installed on new or existing Tsurumi pump models and connected to the control panel for the appropriate alarm or notification.*


### Principle of Operation:

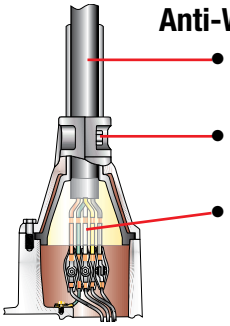
Sensor is installed through the oil port and directly into the mechanical seal chamber which contains an electrically non-conductive oil. The presence of water changes the chamber fluid mixture to a conductive condition and therefore completes the circuit which will result in a leakage indication on the control panel.

### Electrical Specification

| | |
|---|---|
| Sensor Type: | Conductive |
| Suggested Seal Fail Relay Voltage: | 24VAC |
| Required Wiring: | Single wire in separate sensor cable to be connected to seal leak relay in control panel by customer. |

# TSURUMI PUMP

## SUPERIOR DESIGN & TECHNOLOGY

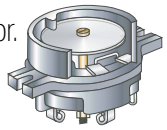


**Anti-Wicking Cable Entrance** Maximum protection against water incursion through the cable entry.

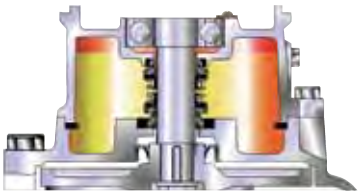
- Molded Cable Boot or Cable Protection Tube - extends cable bending radius, prevents abrading, and reduces fatigue.
- Cable Gland - provides 360 degree compression of cable boot, protection tube or cable bush for a water tight fit.
- Anti-Wicking Block - window cuts on conductor insulation expose strands to molded rubber or epoxy to prevent water wicking through the strands and entering the motor providing protection even if the cable insulation is cut.

**Internal Thermal Motor Protection** Built-in motor protection reacts to ambient temperatures the motor is actually experiencing - unlike external overloads that react to ambient conditions in the control panel.

*Circle Thermal Protector (CTP) - for pumps with 1-30HP*: 3-Pole protector connects to each winding of the motor and reacts to excessive heat and amperage. Automatic reset at safe temperature to restart the motor. No motor protection circuit required in starter or control panel.

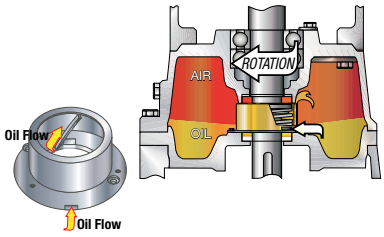


*Miniature Thermal Protector (MTP) - for pumps with 40HP and over:* One MTP per winding, reacts to excessive heat. Connected in series, if one winding overheats power is cut-off to all windings. Wire in series with motor control circuit for auto-restart or to independent relay for manual reset.



**Dual Inside, Silicon Carbide Mechanical Seals**
Isolation of mechanical seals in an oil chamber provides a clean, non-corrosive and abrasion free lubricating environment to prevent spring failure due to corrosion or abrasion and bottom seal failure due to loss of cooling during dry-run conditions.

**Oil Lifter (Patented)** Tsurumi's exclusive Oil Lifter encloses the mechanical seal and uses the centrifugal force generated by the rotating shaft and seal to pump oil to the upper seal faces. Upper and lower seal faces are positively lubricated even when extremely low oil levels exist, as experienced after long periods of extended operation.




**Pressure Relief Ports** Tsurumi's exclusive Seal Pressure Relief Ports protect the mechanical seal on our high head pumps. A flow path above the pump casing allows a release of water to flow from the pump and away from the shaft. The mechanical seals remain isolated in the oil chamber above this flow path and therefore are exposed only to the sump submergence pressure. The seals are protected from any excessive pumping pressure or water hammer that may cause premature wear of failure of the mechanical seals in high head pumping applications.


TSURUMI PUMP

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