

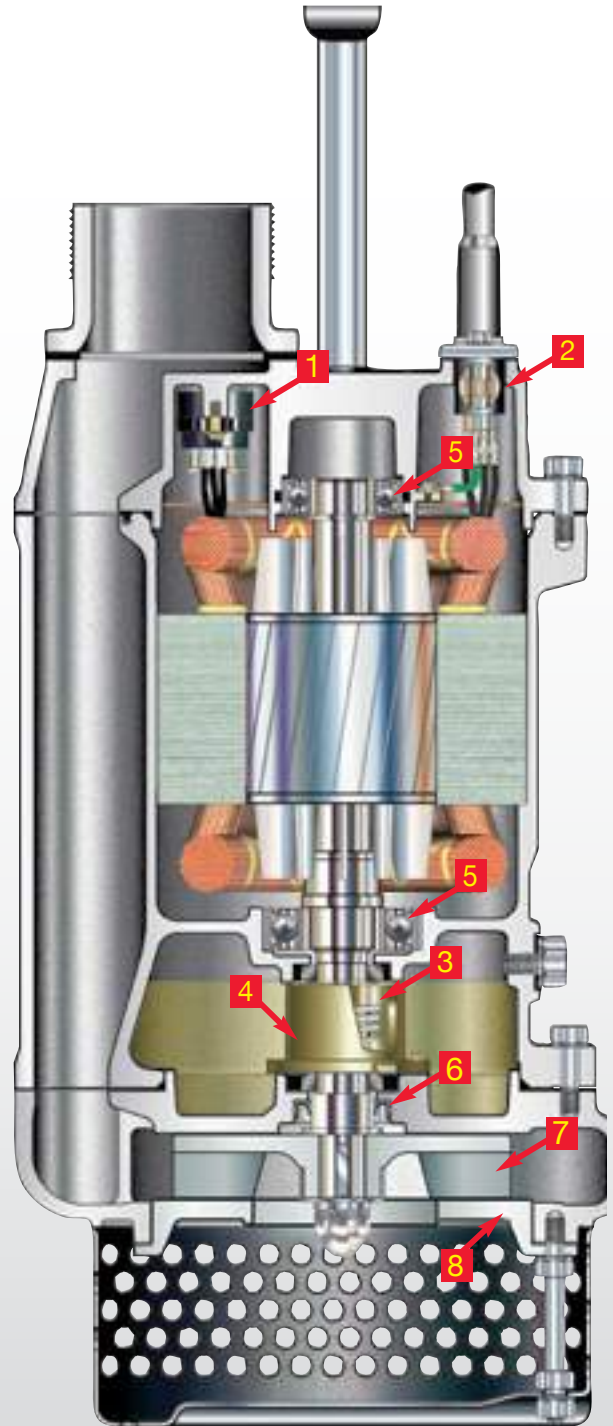


 **TSURUMI PUMP**™  
**BUILT FOR WORK**®  
THREE PHASE DEWATERING PUMPS



**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 / Ductile Iron Impeller:**  
Resists wear by abrasive particles.
- 8 Field Adjustable / Replaceable 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.

## Three Phase Dewatering Pump Lineup

### KTZ(E) 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.

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

Discharge Sizes:  
2, 3, 4 and 6 inch  
HP: 2, 3, 5, 7.5, 10, & 15

### 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.

Discharge Sizes:  
4, 6, and 8 inch  
HP: 4, 20, 30, 35, 40, 50, 60, 75, 100, 120, & 150

### LHW Series



Extra high head pumping.

Dual staged, Closed High Chrome Impeller.

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

Discharge Sizes:  
2, 3, and 4 inch  
HP: 4, 7.5, 15, 30, 40 & 150

### KTV(E) Series



Portable job-site dewatering.

Semi-vortex Urethane Rubber or Ductile Iron Impeller.

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

Discharge Sizes:  
2 and 3 inch  
HP: 1, 2, 3, 5, & 7.5

### KRS Series



High volume dewatering.

Semi-open Ductile Iron and High Chrome Impeller.

1800RPM and 1200 RPM motors reduce impeller wear.

Discharge Sizes  
3, 4, 6, 8, 10, 12, and 14 inch  
HP: 3, 5, 7.5, 10, 15, 20, 25, 30, 40, & 50

### GSZ Series



High volume dewatering pumping.

Closed High Chrome and Stainless Steel Impeller.

1800 RPM and 1200 RPM motors reduce impeller wear.

Discharge Size:  
6, 8, and 10 inch  
HP: 30, 50, 60, 75, 100 & 200

### Agitator Pumps



Heavy duty slurry pumping.

Abrasive resistant.

Single phase and three phase solutions.

Discharge Size:  
2 - 10 inch  
HP: 1/2 - 100

### 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.

Discharge Size:  
2, 3 and 4 inch  
HP: 1, 2, 5, 7.5, 10 & 15

### SQ Series



Portable corrosive liquid dewatering.

Semi-open Stainless Steel Impeller.

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

Discharge Size:  
2 inch  
HP: 1/2 & 1

### LB / LBT Series



For well dewatering: Fits n 8" casing.

Semi-Vortex Impeller.

Allows for jobsite dewatering utilizing smaller generators and smaller well casings.

Discharge Size:  
2 and 3 inch  
HP: 1/2, 1 & 2



**KTZ(E) SERIES | High volume, extra durable pump available in variety of sizes**



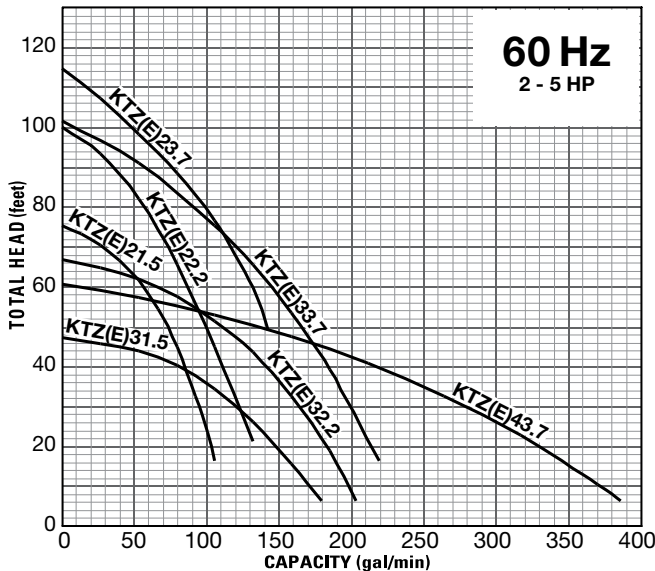
**Material**

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 Sheath

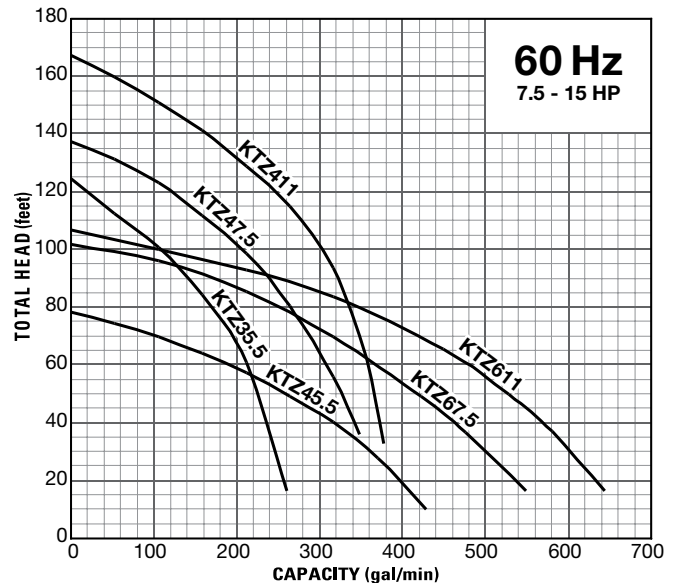
**Features**

- 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
- Oil Lifter
- Internal Thermal Motor Protection
- Automatic Operation on KTZE Series

**Group Performance Curves: KTZE 2 - 5 HP**

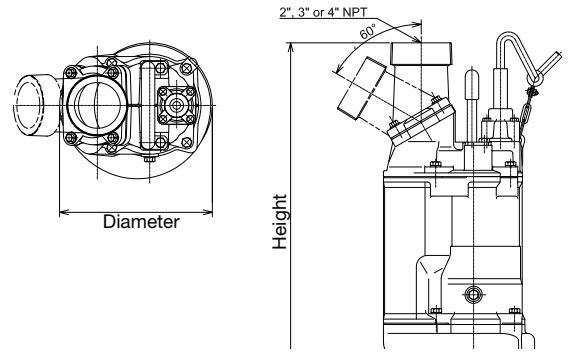


**Group Performance Curves: KTZ 7.5 - 15 HP**



The **KTZ series** is designed with high-chrome impellers 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. Dual high-pressure silicon carbide mechanical seals are isolated in the oil chamber to protect the seal faces from abrasion and corrosion. 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.

The **KTZE series** offers the same features as the KTZ 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.



MODEL	MOTOR SPECIFICATIONS						Discharge Size (inch)	DIMENSION		Max. Solids Dia. (inch)	Continuous Running Water Level (in.)	Pump Weight (lbs.)
	Output (HP)	Rated Current (A)				RPM		Diameter	Height			
		208V	230V	460V	575V							
KTZ21.5	2	6.2	6.0	3.1	2.3	3400	2	9 1/4	25 1/2	0.334	4 3/4	77
KTZ31.5	2	6.2	6.0	3.1	2.3	3400	3	9 1/4	25 1/2	0.334	4 3/4	75
KTZ22.2	3	9.4	9.0	4.5	3.5	3410	2	9 1/4	26 5/16	0.334	4 3/4	79
KTZ32.2	3	9.4	9.0	4.5	3.5	3410	3	9 1/4	26 5/16	0.334	4 3/4	77
KTZ23.7	5	15	13.6	6.8	5.3	3410	2	11 1/8	26 1/4	0.334	5 7/8	137
KTZ33.7	5	15	13.6	6.8	5.3	3410	3	11 1/8	26 5/8	0.334	5 7/8	137
KTZ43.7	5	15	13.6	6.8	5.3	3410	4	11 1/8	27 1/16	0.334	5 7/8	137
KTZ35.5	7.5	21	19.7	10	7.9	3545	3	12 1/16	28 3/8	0.334	5 7/8	167
KTZ45.5	7.5	21	19.7	10	7.9	3545	4	12 1/16	28 3/4	0.334	5 7/8	170
KTZ47.5	10	29.8	27.3	13.3	10.4	3545	4	13	31 13/16	0.472	7 1/2	225
KTZ67.5	10	29.8	27.3	13.3	10.4	3545	4 (6)*	13 (14 9/16)*	31 13/16 (31 7/8)*	0.787	7 1/2	225 (222)*
KTZ411	15	39.8	37.4	18.6	14.9	3520	4	14 3/4	32 15/16	0.472	7 1/2	293
KTZ611	15	39.8	37.4	18.6	14.9	3520	4 (6)*	14 3/4	32 15/16 (33 11/16)*	0.787	7 1/2	295

(\* 6inch is optional)

MODEL	MOTOR SPECIFICATIONS						Discharge Size (inch)	DIMENSION		Max. Solids Dia. (inch)	Pump Starting Water Level (in.)	Pump Weight (lbs.)
	Output (HP)	Rated Current (A)				RPM		Diameter	Height			
		208V	220V	460V	575V							
KTZE21.5	2	6.2	6.0	3.1	2.3	3400	2	9 1/4	28 11/16	0.334	13 5/8*	81
KTZE31.5	2	6.2	6.0	3.1	2.3	3400	3	9 1/4	28 11/16	0.334	13 5/8*	79
KTZE22.2	3	9.4	9.0	4.5	3.5	3410	2	9 1/4	29 7/16	0.334	14*	88
KTZE32.2	3	9.4	9.0	4.5	3.5	3410	3	9 1/4	29 7/16	0.334	14*	86
KTZE23.7	5	15	13.8	6.8	5.3	3410	2	11 1/8	29 7/16	0.334	17 1/8*	163
KTZE33.7	5	15	13.8	6.8	5.3	3410	3	11 1/8	29 13/16	0.334	17 1/8*	163
KTZE43.7	5	15	13.8	6.8	5.3	3410	4	11 1/8	30 3/16	0.334	17 1/8*	163

**FOR SPECIAL PUMPING | Submersible Seawater-Resistant Dewatering Pumps**

**Seawater Resistant Kit**

Tsurumi's standard pumps can be combined with a seawater-resistant kit (optional) that adds a galvanic anode and seawater-resistant special cast iron impeller, and enables about two years of service. (The service period depends on operating conditions.)

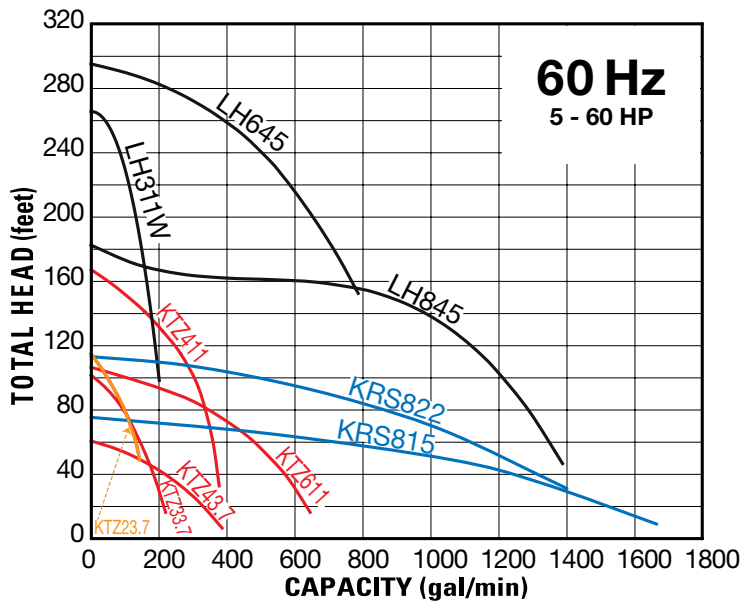
- ✓ Galvanic Anodes (with Fittings, Seal Putty)
- ✓ Seawater-Resistant Special Cast Iron Impeller
- ✓ 304 Stainless Steel Eye Bolts\*  
\* Applicable only with models having steel eye bolts



KTZ33.7

LH311W

KRS815



The **galvanic anode** is an electrolytic protective measure used with metals of differing corrosive potentials. Metals of a potential lower (aluminium and zinc) than the pump body (cast iron and steel) are brought into contact with the body via the galvanic anodes and allowed to corrode in order to protect the body. However, the full effect cannot be obtained unless the anodes are installed in the proper positions.

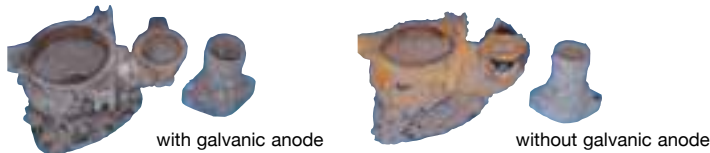
Tsurumi mainly utilizes aluminium because of its superior anticorrosive performance per unit weight, while utilizing zinc for only the strainer stand that is liable to be worn by water current. Since the galvanic anodes are worn by corrosion, they need to be replaced every two years. They can be replaced easily and used immediately after replacement.



Aluminium

Zinc

**Corrosion Test (in seawater, 1 year)**



with galvanic anode

without galvanic anode

MODEL	Output (HP)	MOTOR SPECIFICATIONS				RPM	Discharge Size (inch)	DIMENSION		Max. Solids Dia. (inch)	Continuous Running Water Level (in.)	Pump Weight (lbs.)
		Rated Current (A)						Diameter	Height			
		208V	230V	460V	575V							
KTZ23.7	5	15	13.6	6.8	5.3	3410	2	11 1/8	26 1/4	0.334	5 7/8	137
KTZ43.7	5	15	13.6	6.8	5.3	3410	4	11 1/8	27 1/16	0.334	5 7/8	137
KTZ411	15	39.8	37.4	18.6	14.9	3520	4	14 3/4	32 15/16	0.472	7 1/2	293
KTZ611	15	39.8	37.4	18.6	14.9	3520	4	14 3/4	32 15/16	0.787	7 1/2	295
LH645	60	—	—	67	53	3530	6	20 7/8	57	0.236	9 7/8	780
LH845	60	—	—	67	53	3530	8	20 7/8	58 9/16	0.787	7 1/8	1120
LH311W	15	42	37	18.5	14.5	3465	3	10 5/8	40 5/16	0.334	7 7/8	287
KRS815	20	57.9	55.7	27.9	22.2	1735	8	18 15/16	38 9/16	0.984	10 7/8	530
KRS822	30	—	—	38.5	30.8	1745	8	22 11/16	47 1/4	0.984	13 5/8	840

# **TSURUMI PUMP**™ ACCESSORIES

## CONTROL PANELS - Automatic / Manual, VFD & Soft Start 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



### ■ VFD and Soft Start Control Panels

- Constant Pressure
- Constant Level
- Pace FLOW
- UL Listed
- Field Adjustable Overload Protection

#### Available Options Include:

- Line Reactor
- Load Reactor
- Seal Leak Protection
- Lightning Protection
- Ground-Ground Check Protection
- Elapsed Time meter
- Mechanical Floats
- Liquid Level Probes
- SCADA monitoring



## **TSURUMI PUMP**™

**BUILT FOR WORK**®

TSURUMI (AMERICA), INC.

Headquarters: 1625 Fullerton Ct, Glendale Heights, IL 60139

Utah Office: 6216 West 9790 South, West Jordan, UT 84081

Tel: 1-888-878-7864 (Toll-Free) • 1-630-793-0127

Fax: 1-630-793-0146 • [www.tsurumipump.com](http://www.tsurumipump.com)



#### Your Dealer

**TSURUMI** Canada

149 J.A. Bombardier, Suite 10  
Boucherville QC J4B 8P1

+14504496484

[info@tsurumicanada.com](mailto:info@tsurumicanada.com)  
[tsurumicanada.com](http://tsurumicanada.com)



Find us @tsurumiamerica