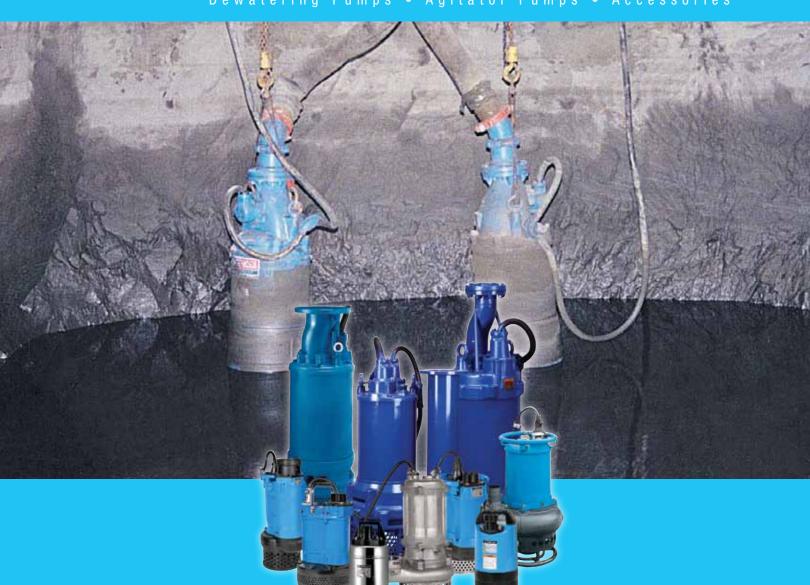


## CONTRACTOR / MINING PUMPS

# BUILT FOR WORK

Dewatering Pumps • Agitator Pumps • Accessories



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

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.

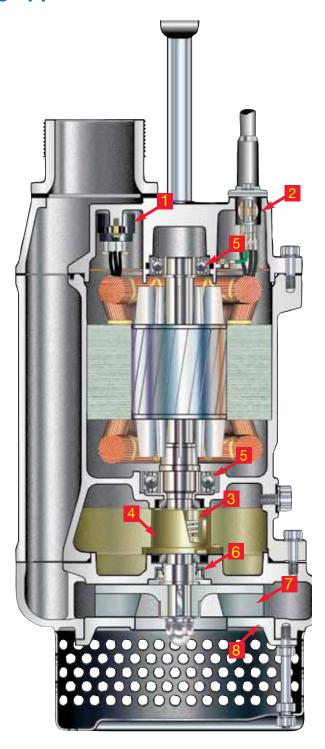
#### High Chrome Iron (Optional) Impeller:

Resists wear by abrasive particles.

### 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(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.

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

#### **LHW 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, 40 and 150 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 and 1200 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, 100 and 120 horsepower

#### **Agitator Pumps**



Heavy duty slurry pumping.

Abrasive resistant.

Single phase and three phase solutions.

2 - 10 inch discharge sizes 1/2 - 100 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

#### LB/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

# KTZ(E)

High head and high volume dewatering and self-contained automatic operation



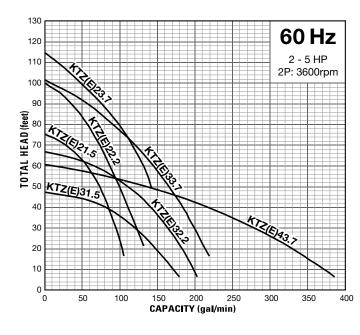
Field conversions from high volume to high head are quick and easy: simply change the impeller, suction cover, and discharge connection. KTZE: Allows a 3-phase

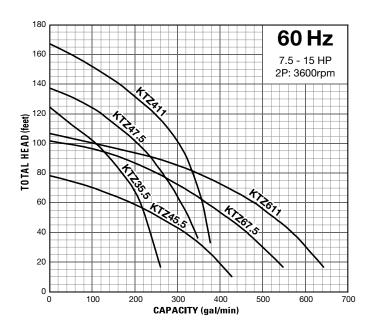
pump to operate automatically in a smaller casing or sump where traditional float switches don't fit. Mechanical Seal: Silicon Carbide

Motor Frame: Cast Iron

Shaft: 420 Stainless Steel 304 Stainless Steel Fasteners:

Cable: PVC, Chloroprene Sheath





#### KTZ(E) pumps convert quickly and easily between high head & 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
- Automatic Operation on KTZE Series





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.

		MOT	OR SPE	CIFICATIO	NS		Discharge	DI	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V	230V	460V	575V	NEW	(inch)	Diameter	rieigiit	(inch)	Water Level (in.)	(lbs.)
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

\*208 & 230V same motor

()\* 6inch is optional

()\* 6inch is optional

		MOT	OR SPE	CIFICATIO	NS		Discharge	DII	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V	220V	460V	575V	INF IVI	(inch)	Diameter	ricigiit	(inch)	Water Level (in.)	(lbs.)
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

\* 208 & 220V same motor

\*Pump Starting Water Level



### **Extreme high pressure pumping at high volumes!**



#### **Material**

Impeller: High Chrome Cast Iron

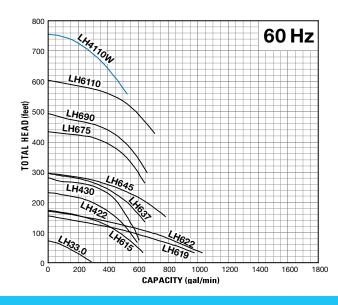
Casing: **Ductile Cast Iron** Mechanical Seal: Silicon Carbide

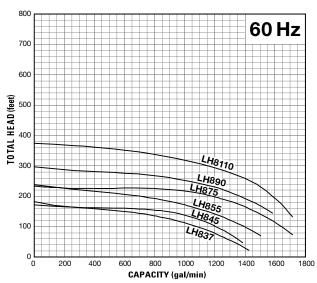
Motor Frame: Cast Iron

Shaft: 420 Stainless Steel Fasteners: 304 Stainless Steel Chloroprene Sheath Cable:

## LH430W 2P: 3600rpm 350 300 LH311W TOTAL HEAD (feet) 100 CAPACITY (gal/min)

60 Hz





#### 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 164 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.

		MOT	OR SPE	CIFICATIO	NS		Discharge	DII	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V	230V	460V	575V	LIFINI	(inch)	Diameter	ricigiit	(inch)	Water Level (in.)	(lbs.)
LH23.0W	4	12.3*	12	6.0	4.7	3430	2	7 5/16	24 13/16	0.236	7 7/8	101
LH25.5W	7.5	22	19.2	9.6	9.6 7.7 3		2	9 5/8	29 1/2	0.236	6 3/4	176
LH311W	15	42	37	18.5	14.5	3465	3	10 5/8	40 5/16	0.334	7 7/8	287
LH322W	30	_	_	35.5	28	3490	3	13	48 5/8	0.334	11 3/4	670
LH430W	40	_	_	48	38.5	3475	4	14 3/8	54 1/8	0.334	11 3/4	714
LH4110W	150	_	_	181	145	3570	4	24 1/2	71 7/8	0.315	15 3/4	2800

\* 208 & 230V same motor

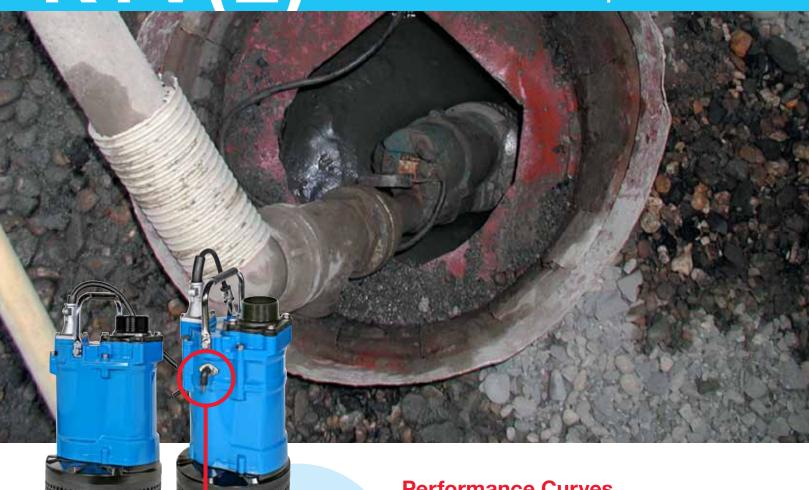
		МОТ	OR SPEC	CIFICATIO	NS		Discharge	DII	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V	230V	460V	575V	NEW	(inch)	Diameter	Height	(inch)	Water Level (in.)	(lbs.)
LH33.0	4	12.3*	12	6.0	4.7	3430	3	7 5/16	25 3/8	0.236	5 7/8	93
LH615	20	53.8	48	24	19	3465	6	13	39 15/16	0.334	7 1/4	470
LH619	25	_	_	31	25	3490	6	16 9/16	56	0.472	10 5/8	770
LH422	30	-	_	36	28.5	3490	4	16 9/16	53 1/4	0.236	9 7/8	770
LH622	30	_	_	36	28.5	3490	6	16 9/16	56	0.472	10 5/8	790
LH430	40	_	_	51	38.5	3475	4	16 9/16	53 1/4	0.236	9 7/8	780
LH637	50	_	_	58	46	3525	6	20 7/8	57	0.236	7 1/8	1090
LH837	50	_	_	58	46	3525	8	20 7/8	58 9/16	0.787	7 1/8	1090
LH645	60	_	_	67	53	3530	6	20 7/8	57	0.236	7 1/8	1120
LH845	60	_	_	67	53	3530	8	20 7/8	58 9/16	0.787	7 1/8	1120
LH855	75	_	_	87	70	3530	8	21 5/8	67 9/16	0.787	7 7/8	1810
LH675	100	_	_	113	91	3530	6	21 5/8	66	0.315	7 7/8	1910
LH875	100	_	_	113	91	3530	8	21 5/8	67 9/16	0.787	7 7/8	1910
LH690	120	_	_	137	110	3500	6	23 5/16	70 3/8	0.394	7 7/8	2420
LH890	120	_	-	137	110	3500	8	23 5/16	70 3/8	0.787	7 7/8	2530
LH6110	150	_	-	181	145	3570	6	24 1/2	74 5/16	0.394	7 7/8	2670
LH8110	150	_	l	181	145	3570	8	24 1/2	74 5/16	0.787	7 7/8	2670

\* 208 & 230V same motor



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**

Abrasion Resistant / Impeller:

**Urethane Lined** 

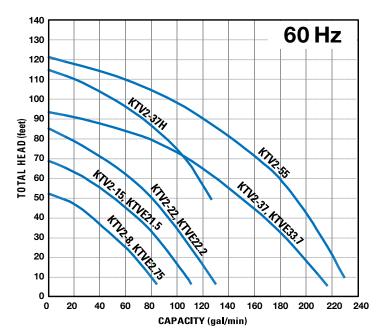
Casing: Aluminum

Mechanical Seal: Silicon Carbide Motor Frame: Aluminum Alloy

Shaft: 403 / 420 Stainless Steel

Fasteners: 304 Stainless Steel

Cable: PVC Sheath, Chloroprene Sheath



### 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.

		MOT	OR SPE	CIFICATIO	NS		Discharge	DII	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V	230V	460V	575V	INFIVI	(inch)	Diameter	rieignt	(inch)	Water Level (in.)	(lbs.)
KTV2-8	1	3.4*	3.2	1.6	1.3	3320	2	7 7/8	14 1/2	0.334	2 1/2	25
KTV2-15	2	6.0	5.4	2.7	2.1	3440	2	9 7/16	15 9/16	0.334	3 1/8	46
KTV2-22	3	8.2	7.4	3.7	2.9	3440	2	9 7/16	16 3/8	0.334	3 1/8	51
KTV2-37H	5	14.2	12.6	6.3	5.0	3450	2	11 1/4	20 1/16	0.334	3 1/2	79
KTV2-37	5	14.2	12.6	6.3	5.0	3450	3	11 1/4	20 1/16	0.334	3 1/2	79
KTV2-55	7.5	21.5	19	9.5	7.5	3435	3	11 13/16	21 7/16	0.334	3 1/2	104

<sup>\* 208 &</sup>amp; 230V same motor

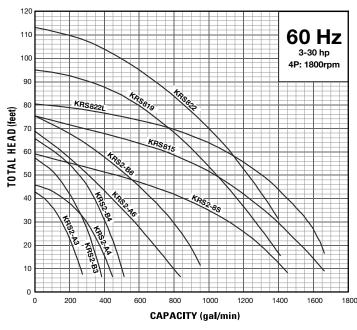
		MO	TOR SPEC	CIFICATIO	NS		Discharge	DII	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V 230V 460V 575V		575V	INFIVI	(inch)	Diameter	rieigitt	(inch)	Water Level (in.)	(lbs.)	
KTVE2.75	1	3.4 * <sup>1</sup>	3.2 * <sup>2</sup>	1.7 *3	1.3	3320	2	7 7/8	16 7/16	0.334	*9 1/4	28
KTVE21.5	2	6.0	5.4	2.7	2.1	3440	2	9 7/16	16 3/4	0.334	*10 1/2	48
KTVE22.2	3	8.2	7.4	3.7	2.9	3440	2	9 7/16	16 3/4	0.334	*10 1/2	55
KTVE33.7	5	14.2	12.6	6.3	5.0	3450	3	11 1/4	23 1/16	0.334	*12 7/8	88

<sup>\* 1 208 &</sup>amp; 220V same motor \*2 220V

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

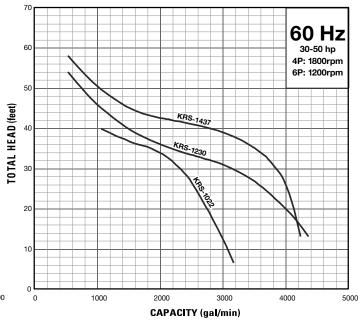


### **Performance Curves**



Motor Frame: Cast Iron

Shaft: 420 Stainless Steel Fasteners: 304 Stainless Steel Cable: Chloroprene Sheath



### 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.

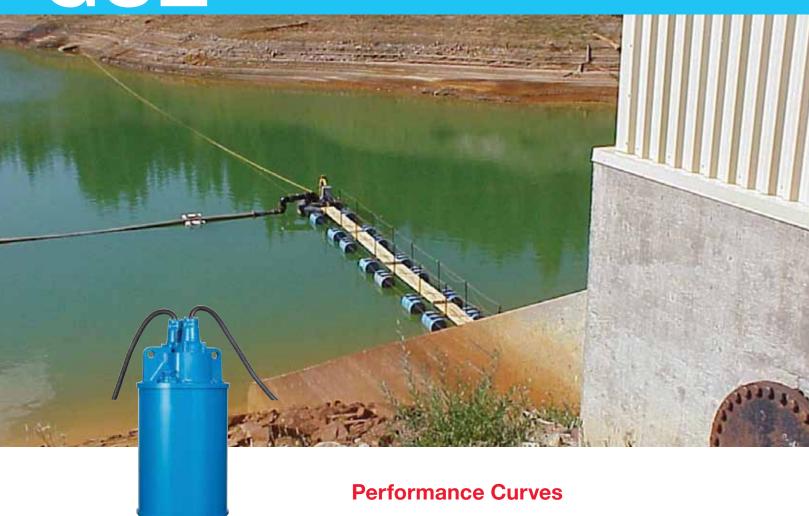
The iron construction of the KRS series extends the life of the pump. To prevent premature wear and failure from abrasive materials, Tsurumi's dual inside mechanical seals are completely isolated in an oil chamber with an extra lip seal to protect mechanical seals from the pumped liquid.

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.

		МОТ	OR SPE	CIFICATIO	NS		Discharge	DII	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V	230V	460V	575V	INFIVI	(inch)	Diameter	Height	(inch)	Water Level (in.)	(lbs.)
KRS2-A3	3	9.4*	8.6	4.3	3.4	1700	3	13 3/8	23 5/8	0.472	5 3/4	159
KRS2-B3	5	15.0*	13.8	6.9	5.5	1690	3	13 3/4	26 15/16	0.472	6 1/8	196
KRS2-A4	5	15.0*	13.8	6.9	5.5	1690	4	13 3/4	26 15/16	0.472	6 1/8	194
KRS2-B4	7.5	21.4*	19.6	9.8	7.6	1720	4	13 3/4	26 9/16	0.472	6 1/8	209
KRS2-A6	10	29*	26	13	10.5	1730	6	16 5/16	27 13/16	0.787	6 7/8	286
KRS2-B6	15	42*	39	19.5	14.5	1735	6	16 5/16	29 5/8	0.787	6 7/8	330
KRS2-8S	15	42*	39	19.5	14.5	1735	8	18 9/16	33 3/8	1.18	11 3/4	383
KRS815	20	57.9*	55.7	27.9	22.2	1735	8	18 15/16	38 9/16	0.984	10 7/8	530
KRS819	25	1	_	33.0	26.4	1750	8	22 11/16	47 1/4	0.984	13 5/8	790
KRS822	30	1	_	38.5	30.8	1745	8	22 11/16	47 1/4	0.984	13 5/8	840
KRS822L	30	1	_	38.5	30.8	1745	8	22 11/16	47 1/4	0.984	13 5/8	840
KRS1022	30	1	_	39.6	31.5	1730	10	20 5/8	49 1/8	0.984	17 3/4	860
KRS1230	40	_	_	53.0	43.0	1165	12	26 3/8	55 1/4	1.97	18 7/8	1540
KRS1437	50	-	_	65.0	52.0	1165	14	26 3/8	55 1/4	1.97	18 7/8	1650

<sup>\* 208 &</sup>amp; 230V same motor

# GSZ High volume dewatering and slurry pumps



#### **Material**

Impeller: High Chrome or

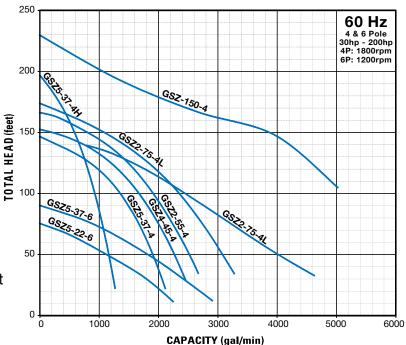
Stainless Steel

Casing: Cast Iron

Mechanical Seal: Silicon Carbide

Motor Frame: Cast Iron / Cooling Jacket

Shaft: 420 Stainless Steel Fasteners: 304 Stainless Steel Chloroprene Sheath Cable:



### 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.

		МОТ	OR SPEC	CIFICATIO	NS		Discharge	DII	MENSION	Max.	Continuous	Pump
MODEL	Output		Rated C	urrent (A)		RPM	Size	Diameter	Height	Solids Dia.	Running	Weight
	(HP)	208V	230V	460V	575V	RPIVI	(inch)	Diameter	Height	(inch)	Water Level (in.)	(lbs.)
GSZ5-22-6	30	_	_	41	33	1160	8	38	53 9/16	1.97	13 3/4	1610
GSZ5-37-4H	50	1	-	63	49.5	1750	6	35 7/16	61 1/8	0.394	17 3/8	1310
GSZ5-37-4	50	_	_	63	49.5	1750	8	36	62 5/16	0.984	18 7/8	1240
GSZ5-37-6	50	1	-	64	52	1160	8	41 1/4	55 15/16	1.97	14 5/8	1500
GSZ4-45-4	60	1	_	76	63	1745	8	36	62 5/8	0.984	18 1/8	1300
GSZ2-55-4	75	1	-	97	76	1775	10	41 5/16	75 7/8	0.984	20 1/8	2430
GSZ2-75-4	100	1	_	128	101	1775	10	41 5/16	75 7/8	0.984	20 1/8	2680
GSZ2-75-4L	100	1	-	128	101	1775	10	41 5/16	77 5/8	0.984	28 3/4	2730
GSZ-150-4	200	_	_	265	-	1775	10	47 15/16	95 1/4	0.984	30 3/4	5140

# Agitator Pumps Available in: HS, HSD, NK, KTV, KTD, KRS, GPN & GSD Series

Available in:





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.

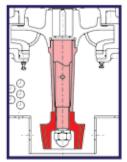
#### **FEATURED** Agitator Pump

### High-powered neavy-day only high head and high volume discharge High-powered heavy-duty slurry pump that delivers strong agitation,



The GSD Series pump is a heavy-duty slurry pump that delivers high head and high volume discharge. It is designed and built for continuous operation under the rough conditions often found at mega-construction sites and mines.

The GSD Series is a submersible three-phase high power, high head and high volume heavyduty slurry pump driven by a 4-pole motor. It is equipped with a high-chromium cast iron agitator that assists smooth suction of the settled matters. The pump parts such as the impeller and the suction cover are made of wear-resistant materials. The side discharge, spiral design allows smoother passage of the sucked solid matters. The motor is cooled by a water jacket that assures efficient motor cooling even when it operates with its motor exposed to air. The pump incorporates seal pressure relief ports that prevent the pumping pressure from applying to the shaft seal.



Suction Plate

Agitator

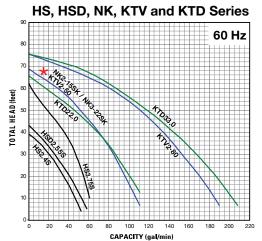
#### Agitator

The agitator mounted on the motor shaft-end facilitates efficient suction of the settled slurry, sand, or mud.

#### **Suction Plate**

Field adjustable components on the GPN622 and GSD series allow for quick and easy adjustment of impeller to suction plate/ring so that dropped performance can be restored.

#### **Performance Curves**

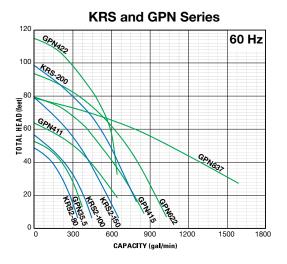


Standard High Torque NK2-15SK NK3-22SK

High Torque models further suitable for heavy duty application.







		GSD Se	eries	
200				60 Hz
180				
160				
140	G	SO. 75.		
120	90	iso.75.4 D.55.4		
100	GSD.3>			
120 120 100 100 80	N N			
60				
40				
20		<b> </b>		
0 3	00 600 900	1200 1500 1	800 2100 2400	2700 3000 3
- 0		CAPACITY (g		0000 0

				MOTOR S	PECIFIC	ATIONS				D'a alaassa	DIME	NSION		0	D
	Motor				Rated Cu	ırrent (A)				Discharge Size	Diameter	Height	Max. Solids	Continuous Running	Pump Weight
MODEL	Output	Phase	Single	e phase		Three	phase		RPM	(inch)	(in.)	(in.)	Dia. (inch)	Water Level (in.)	_
	(HP)		115V	230V	208V	230V	460V	575V		(,	()	(,		Water Zever (iiii)	(,
HS2.4S	1/2	Single	5.2	2.7	_		_	_	3320	2	10 1/16	12 15/16	0.276	3 1/2	25
HS3.75S	1	Single	9.7	4.9	_		_	_	3411	3	12 7/16	15 5/16	0.276	3 1/2	43
HSD2.55S	3/4	Single	7.3	3.7		_	_	_	3390	2	10 3/8	15 3/8	0.394	4 1/8	34
NK2-15SK	2	Single	23.0 *1	11.5 * <sup>1&amp;2</sup>	-	_	_	_	3440	3	9 13/16	26	0.334	4 3/4	71
NK3-22SK	3	Single	_	13 * <sup>2</sup>		_	_	_	3465	3	9 13/16	26	0.334	4 3/4	71
KTV2-50	2.7	Three	_	_	7	6.4	3.2	2.6	3440	2	9 13/16	17 7/8	0.334	4 3/4	55
KTV2-80	4	Three	_	_	11.6	10.6	5.3	4.2	3450	3	11 5/8	21 5/8	0.334	5 1/8	84
KTD22.0	2.7	Three	_	_	8.7 * <sup>3</sup>	8.2	4.1	3.3	3410	2	9 1/4	23 3/16	0.394	5 1/2	86
KTD33.0	4	Three	_	_	12 * <sup>3</sup>	11.4	5.9	4.5	3410	3	11 11/16	25 3/4	0.394	6 1/4	145
KRS2-80	5.4	Three	_	_	18 * <sup>3</sup>	16.5	8.5	6.6	1720	3	13 3/4	30 11/16	1.18	9 7/8	231
KRS2-100	8	Three	_	_	25 * <sup>3</sup>	23	11.5	9.2	1730	4	16 3/8	30 7/8	1.18	10 5/8	315
KRS2-150	12	Three	_	_	36 * <sup>3</sup>	33	16.5	13.2	1735	6	16 3/8	33	1.18	10 5/8	357
KRS-200	24	Three	_	_		_	30	24	1750	8	22 11/16	44 7/8	1.18	11 1/4	840
GPN35.5	7.5	Three	_	_	21.4	20 *4	9.8	7.6	1720	3	19 3/16	31 5/16	1.18	11 3/8	319
GPN411	15	Three	_	_	42	39 * <sup>4</sup>	19.5	14.5	1735	4	24 5/16	34 5/8	1.18	12 3/8	478
GPN415	22	Three	_	_	55	52 * <sup>4</sup>	24	20	1735	4	24 5/16	34 5/8	1.18	12 3/8	485
GPN422	30	Three	_	_	_	_	36.5	29.5	1750	4	28 9/16	43 3/8	1.18	11 3/4	910
GPN622	30	Three	_	_	-	_	36.5	29.5	1750	6	28 9/16	43 3/8	1.18	11 3/4	910
GPN837	50	Three	_	_	_	_	**	**	1160	8	39 15/16	63 1/4	1.81	22	1760
GSD-37-4	50	Three	_	_	_	_	63	49.5	1740	8	36	62 5/16	0.984	18 7/8	1290
GSD-55-4	75	Three	_	_	_	_	97	76	1775	10	41 5/16	75 7/8	0.984	20 1/8	2440
GSD-75-4	100	Three		_	_		128	101	1775	10	41 5/16	75 7/8	0.984	20 1/8	2690

 $<sup>^{\</sup>star1}$  Dual Voltage  $\,^{\star2}$  220V  $\,^{\star3}$  208 & 230V same motor  $\,^{\star4}$  220V (same motor 208 & 220V)

<sup>\*\*</sup> Consult Factory



# SFQ/SQ Stainless Steel pumps



**Material** 

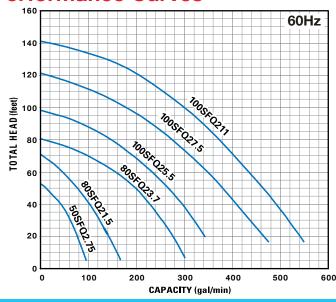
Impeller: 316 Stainless Steel Casing: 316 Stainless Steel Mechanical Seal: Silicon Carbide Motor Frame: 316 Stainless Steel Shaft: 316 Stainless Steel Fasteners: 316 Stainless Steel

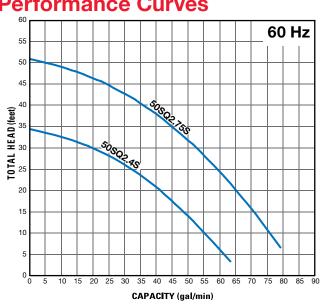
Cable: PVC Sheath, Chloroprene Sheath

Impeller: 304 Stainless Steel 304 Stainless Steel Casing: Mechanical Seal: Silicon Carbide Motor Frame: 304 Stainless Steel Shaft: 304 Stainless Steel Fasteners: 304 Stainless Steel

Cable: PVC Sheath, Chloroprene Sheath

#### Performance Curves





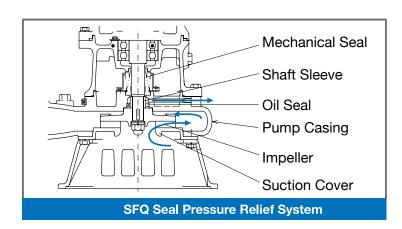
#### Stainless steel pumps are rust free and corrosive resistant!

#### 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.





				MOTOR S	PECIFIC	ATIONS	1			Disabassa	DIME	NSION		0	D
	Motor				Rated Cu	ırrent (A)				Discharge Size	Diameter	Height	Max. Solids	Continuous Running	Pump Weight
MODEL	Output	Phase	Single	e phase		Three	phase		RPM	(inch)	(in.)	(in.)	Dia. (inch)	Water Level (in.)	
	(HP)	(HP) Three	115V	230V	208V	230V	460V	575V		(IIIOII)	(111.)	(111.)		Water Lever (iii.)	(103.)
50SFQ2.75	1	Three	_	_	3.5	3.1	1.6	1.4	3430	2	9 15/16	15 11/16	0.236	14 1/8	49
80SFQ21.5	2	Three		_	6.9*	6.7	3.4	2.7	3450	3	12 15/16	19 1/16	0.236	16 3/8	79
80SFQ23.7	5	Three	_	-	13.8*	12.8	6.4	5	3410	3	14 1/8	21 5/16	0.591	19 1/2	115
100SFQ25.5	7.5	Three	_	-	19.3*	18.2	9.4	7.5	3545	4	25 3/8	33 1/4	0.787	27 1/8	278
100SFQ27.5	10	Three	_	-	26.0*	24.4	12.2	9.5	3545	4	25 3/8	33 1/4	0.787	27 1/8	276
100SFQ211	15	Three	_	_	37.0*	35.2	17.6	13.9	3525	4	25 3/8	35 1/8	0.906	28	320

\* 208 & 230V same motor

,				MOTOR S	SPECIFIC	ATIONS				Diseless	DIME	NSION		0	D
	Motor				Rated Cu	ırrent (A)	)			Discharge Size	Diameter	Unight	Max. Solids	Continuous Runnina	Pump Weight
MODEL Output		Phase	Single	e phase		Three	phase		RPM	(inch)	Diameter (in.)	Height (in.)	Dia. (inch)	Water Level (in.)	
	(HP)		115V	230V	208V	230V	460V	575V		(IIIOII)	(111.)	(111.)		Water Lever (III.)	(103.)
50SQ2.4S	1/2	Single	6.5	3.4	_	_	_	_	3376	2	7 1/16	14 5/16	0.236	2 3/8	28
50SQ2.75	1	Three	_	_	3.5*	3.4	1.6	1.3	3349	2	7 1/16	15 1/8	0.236	2 3/8	31

\* 208 & 220V same motor



# LB/LBT

### Portable slimline dewatering pump

#### Fits in 8-inch Pipe!



#### **Material**

Impeller Type: Semi-Vortex (LB-480/LB(T)-800)

Semi-Open (LB(T)-1500)

Impeller Material: Urethane Rubber (LB-480/LB(T)-800)

High Chrome (LB(T)-1500)

Volute Casing Material: Etylene Propylene Rubber (LB-480)

Butadiene Rubber and Natural Rubber

(LB(T)-800/1500)

Wear Plate Material: Urethane Rubber (LB-480/LB(T)-800)

Butadiene Rubber and Natural Rubber

(LB(T)-1500)

Shaft Seal: Double inside mechanical seal with

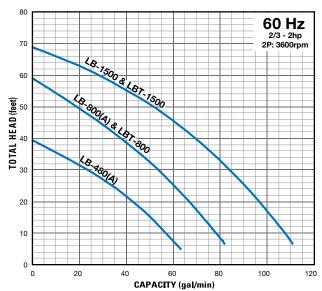
Silicone Carbide (All three series)

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

- Built with durable materials and light weight for easy handling.
- Motor protector protects against overheating, overcurrent, 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.



				MOTOR S	PECIFIC	CATIONS				Disabausa	DIMENSION			Combinuous	Duman
MODEL	Motor Output (HP)	Phase	Rated Current (A)							Discharge Size	Diameter	Halmba	Max. Solids	Continuous Running	Pump
			Single phase		Three phase				RPM	(inch)	(in.)	Height (in.)	Dia. (inch)	Water Level (in.)	Weight (lbs.)
			115V	230V	208V	230V	460V	575V		(IIIOII)	(111.)	(111.)		Water Lever (III.)	(103.)
LB-480	1/2	Single	5.9	3	_	_	_	_	3525	2	7 11/16	11 1/4	0.236	2	21
LB-800	1	Single	10.5	5.2	_	_	_	_	3316	2	7 9/16	13 7/16	0.236	2	29
LBT-800	1	Three	_	_	3.6*	3.7	1.7	1.4	3404	2	7 9/16	13 7/16	0.236	2	28
LB-1500	2	Single	26.2	13.2	_	_	_	_	3480	3	7 3/8	23 5/16	0.236	3 1/8	72
LBT-1500	2	Three	_		7.2*	8.0	4.0	3.0	3515	3	7 3/8	23 5/16	0.236	3 1/8	70

<sup>\* 208 &</sup>amp; 230V same motor



# EPT4

## **Heavy Duty Prime Assisted Trash Pump**







EPT4-150: Priming assisted

EPT4-150Q: Sound attenuated priming assisted

EPT4-150S: Skid mount priming assisted

#### **Material**

Impeller Type: Fully Enclosed

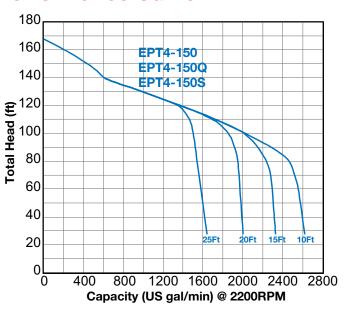
Impeller Material: Cast Iron
Volute Casing Material: Cast Iron
Wear Plate / Ring Material: Cast Iron
Pump Casing Material: Cast Iron

Shaft Seal: Tungsten Carbide

Silicone Carbide

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

- · Prime assisted pump utilizes venturi system for priming.
- Diesel engine (manufacturer; consult factory), 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.
- · EPT4-150Q: 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 (Ibs.)
EPT4-150 Standard	6"ANSI Consult Flange Factory		0 !!			60		136 1/2	67	67 7/8	0 !!	
EPT4-150Q Sound Attenuated		1 1	1 1	Consult Factory	Consult Factory	Diesel	130	Electric, 12V	161 1/2	76 1/8	79 13/16	Consult Factory
EPT4-150S Skind Mount							120		100	42	49 1/2	

# TSURUMI PUMP 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.



