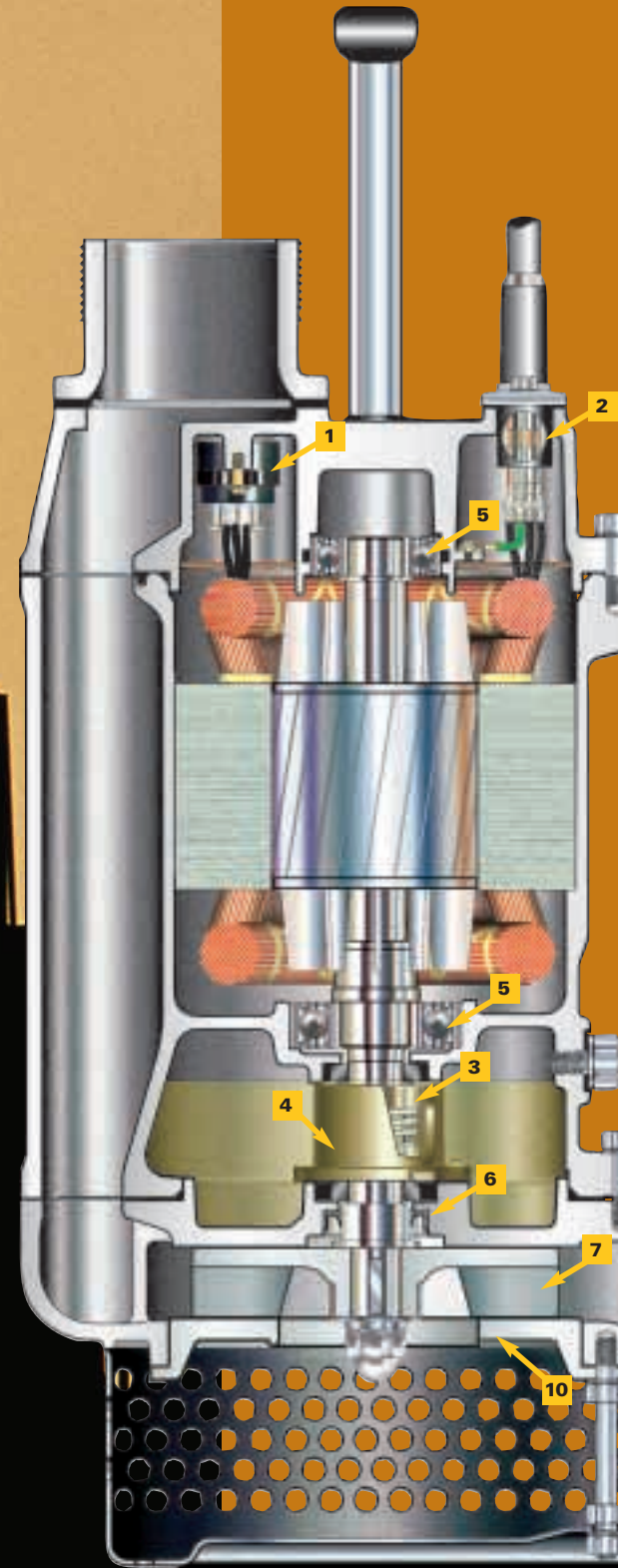


Built For Work.



THREE-PHASE PUMPS

Three-Phase Dewatering Pumps • Accessories



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.

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

1 Circle Thermal Motor Protector:
Protects against, overheating over amperage & 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 seal available.

4 Oil Lifter:
Lubrication of the seal faces down to 1/3 of normal oil level and extends seal life by ten times - 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 Hrs.

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

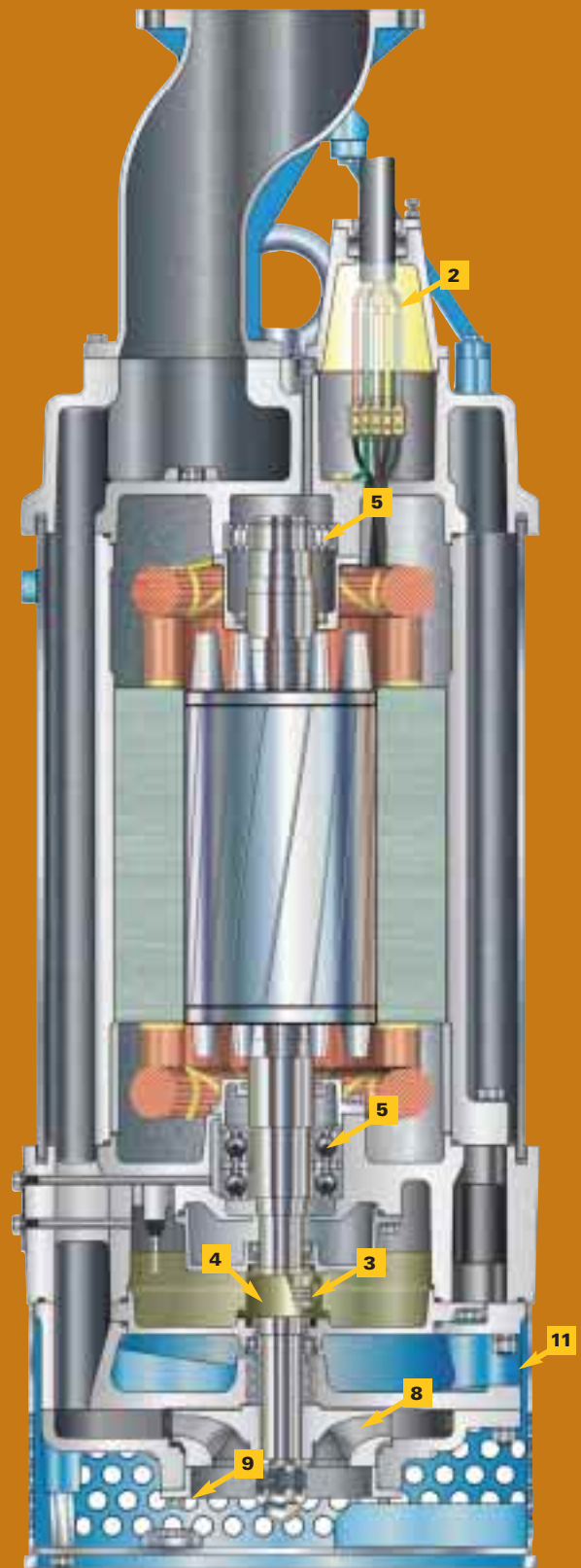
7 High Chrome Iron Semi-Open Impeller:
Resists wear by abrasive particles.

8 High Chrome Iron Enclosed Impeller:
Resists wear by abrasive particles.

9 Cast Iron/Ductile Iron (only 3.0 kw) Casing:
Resists wear and degradation of performance due to abrasive particles.

10 Field Adjustable/Replaceable, Ductile Iron Wear Plate:
Resists wear by abrasive particles, and is easily adjusted to maintain pump performance.

11 Pressure Relief Ports



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



KTZ Series

High head and high volume dewatering.

Semi-open High Chrome Impeller.

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

2, 3, 4, and 6 inch

2, 3, 5, 7.5, 10, and 15 horsepower

KTZ



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

4, 7.5, 15, 30, and 40 horsepower

LH-W



LH Series

Medium to high volume at high heads.

Closed High Chrome impeller.

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

4,6, and 8 inch

20, 30, 40, 50, 60, 75, 100, 125, and 150 horsepower

LH



KRS Series

High volume dewatering.

Semi-open Ductile Iron and High Chrome impeller.

4-Pole, 1800 rpm motors reduce impeller wear.

3, 4, 6, 8, 10, 12, and 14 inch

3, 5, 7.5, 10, 15, 20, 25, 30, 40, and 50 horsepower

KRS



GSZ Series

High volume dewatering and slurry pumping.

Closed High Chrome and Stainless Steel impeller.

4-Pole, 1800 rpm and 6-Pole, 1200 rpm motors reduce impeller wear.

6, 8, and 10 inch

30, 50, 60, 75, and 100 horsepower

GSZ

Ⓜ



KTV(E) Series

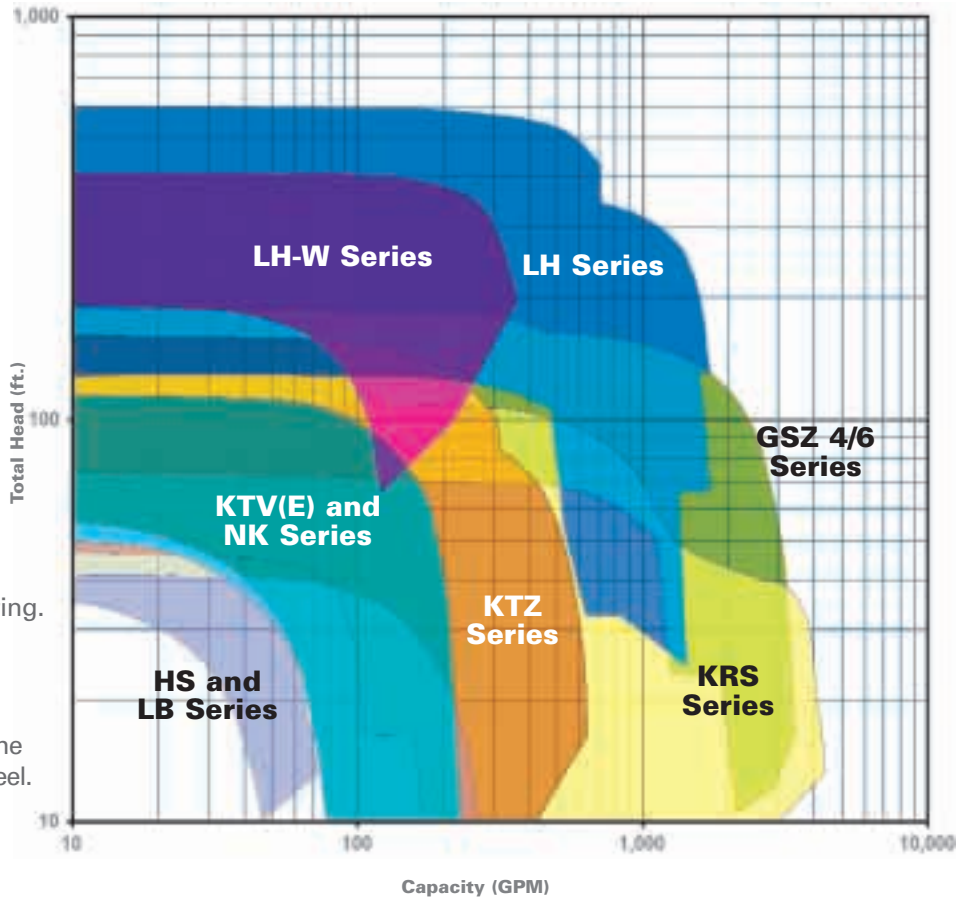
Portable job-site dewatering.

Semi-vortex Urethane Rubber and Ductile Iron impeller.

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

2,3, and 4 inch

1, 2, 3, 5, and 7.5 horsepower



SFO/SO

KTV(E)



SFQ Series

Corrosive liquid dewatering.

Semi-open Stainless Steel impeller.

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

2 and 3 inch

1/2, 1, 2, 5, 7.5, 10 and 15 horsepower

SQ Series

Portable corrosive liquid dewatering.

Vortex Stainless Steel impeller.

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

2 inch

1/2 and 1 horsepower



KTZ

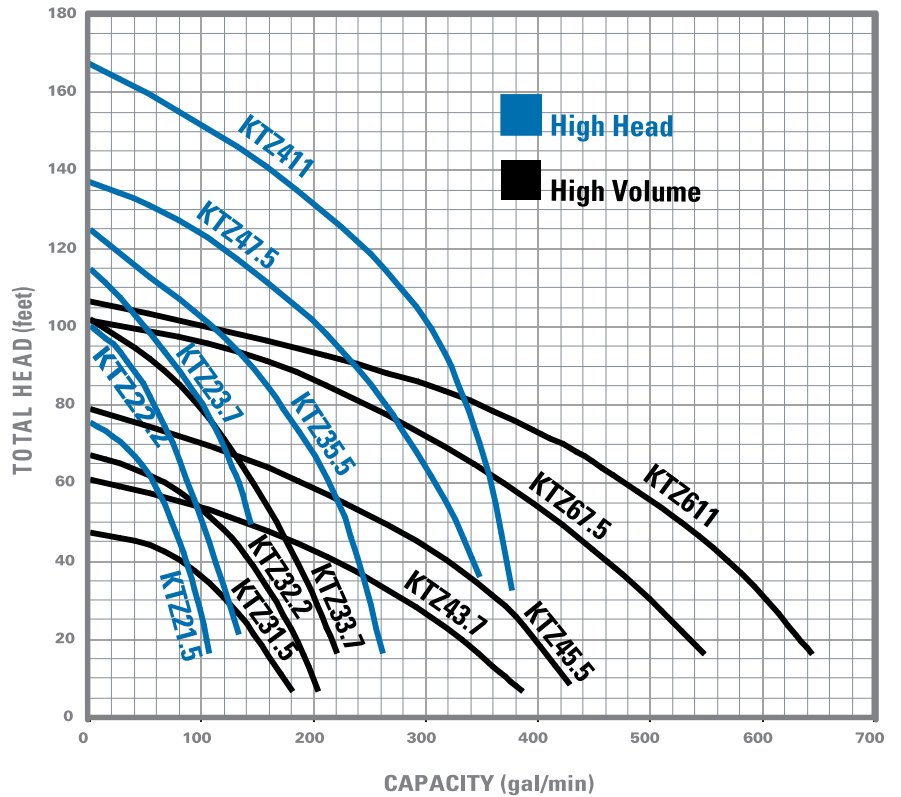
High head and
high volume dewatering



Material

- Impeller:** High Chrome Iron
- Wear Plate:** Ductile Cast 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





KTZ pumps convert between high head and high volume in minutes!

Features

- Higher Pumping Heads
- High Head versus High Volume Conversion Capabilities
- High Pressure Rated Mechanical Seals
- Rugged All Iron Construction
- Anti Wicking Cable Entrance
- Dual Silicon Carbide Mechanical Seals
- Tsurumi's Exclusive Oil Lifter
- Internal Thermal Motor Protection

The KTZ series is designed to withstand the most demanding conditions, including the highly abrasive waters found in the construction, aggregate and mining markets. Versatility is increased as each pump model has the capability of easily **converting between high head and high volume performance** with a simple change of impeller and wear plate. KTZ pumps utilize the speed of 2-pole, 3600 RPM motors to achieve higher heads. All **high chrome semi-open impellers** are a standard to resist wear. **Isolated dual silicon carbide mechanical seals** are used to provide superior motor protection.

All KTZ series pumps come standard with **high pressure mechanical seals**

capable of operating pressures of 71 PSI to allow operation at a combined submergence and discharge pressure of 164 ft. This exceeds our competition's standard design by a wide margin and offers longer mechanical seal life for a more reliable pump operating system.

Because the highest pressures are experienced on the 10 and 15 horsepower KTZ models, Tsurumi has incorporated **Pressure Relief Ports** on these pumps allowing the mechanical seal to only see the pressure developed by the sump submergence level. This has virtually eliminated the premature wear and failure of mechanical seals in higher head pumping applications.

Model	PUMP SPECIFICATIONS			MOTOR SPECIFICATIONS				DIMENSIONS			
	Discharge Size (inch)	Maximum Capacity (gpm)	Maximum Head (feet)	Output (hp)	Pole (rpm)	Insulation Class	Voltages	Diameter (inch)	Height (inch)	C.W.L.* (inch)	Weight (lbs.)
KTZ 21.5-61	2	106	75	2	2 - 3600	F	208 / 230 / 460 / 575	9 1/4	21 9/16	4 3/4	66
KTZ 31.5-61	3	180	47	2	2 - 3600	F	208 / 230 / 460 / 575	9 1/4	21 9/16	4 3/4	66
KTZ 22.2-61	2	132	100	3	2 - 3600	F	208 / 230 / 460 / 575	9 1/4	22 3/8	4 3/4	75
KTZ 32.2-61	3	203	67	3	2 - 3600	F	208 / 230 / 460 / 575	9 1/4	22 3/8	4 3/4	75
KTZ 23.7-62	2	143	115	5	2 - 3600	F	208 / 230 / 460 / 575	9 1/4	25 1/16	5 7/8	139
KTZ 33.7-62	3	219	102	5	2 - 3600	F	208 / 230 / 460 / 575	11 1/8	25 1/16	5 7/8	139
KTZ 43.7-62	4	386	61	5	2 - 3600	F	208 / 230 / 460 / 575	11 1/8	25 1/16	5 7/8	139
KTZ 35.5-61	3	260	125	7.5	2 - 3600	F	208 / 230 / 460 / 575	11 1/8	27 1/16	5 7/8	181
KTZ 45.5-61	4	428	79	7.5	2 - 3600	F	208 / 230 / 460 / 575	12 1/16	27 1/16	5 7/8	181
KTZ 47.5-61	4	349	137	10	2 - 3600	F	208 / 230 / 460 / 575	12 1/16	27 1/16	7 1/2	231
KTZ 67.5-61	4 or 6	549	102	10	2 - 3600	F	208 / 230 / 460 / 575	13	27 1/16	7 1/2	236
KTZ 411-61	4	377	167	15	2 - 3600	F	208 / 230 / 460 / 575	14 11/16	29 1/8	7 1/2	293
KTZ 611-61	4 or 6	645	107	15	2 - 3600	F	208 / 230 / 460 / 575	14 11/16	29 1/8	7 1/2	300

LH/W

Extra high head pumping and high volume pumping at higher heads.



PERFORMANCE CURVES

Material

Impeller: High Chrome Cast Iron

Casing: Cast Iron, Ductile Cast Iron (only 3.0 kw)

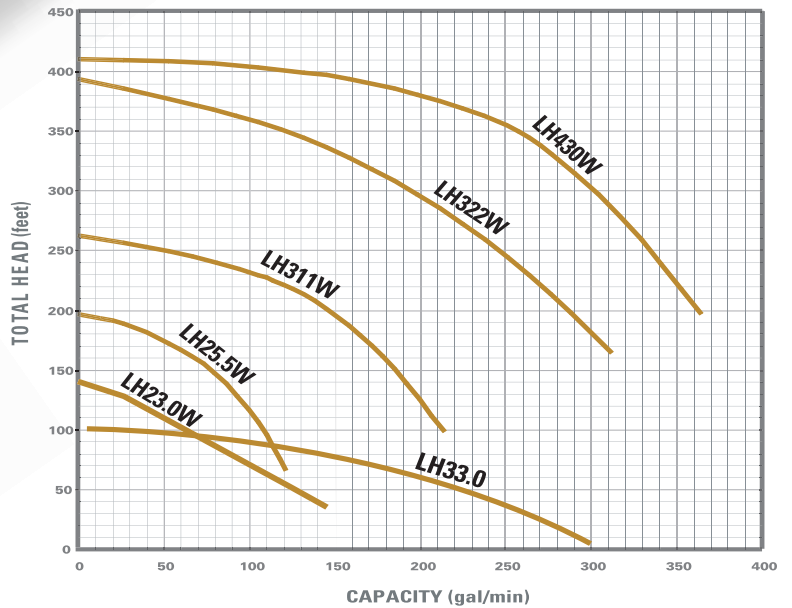
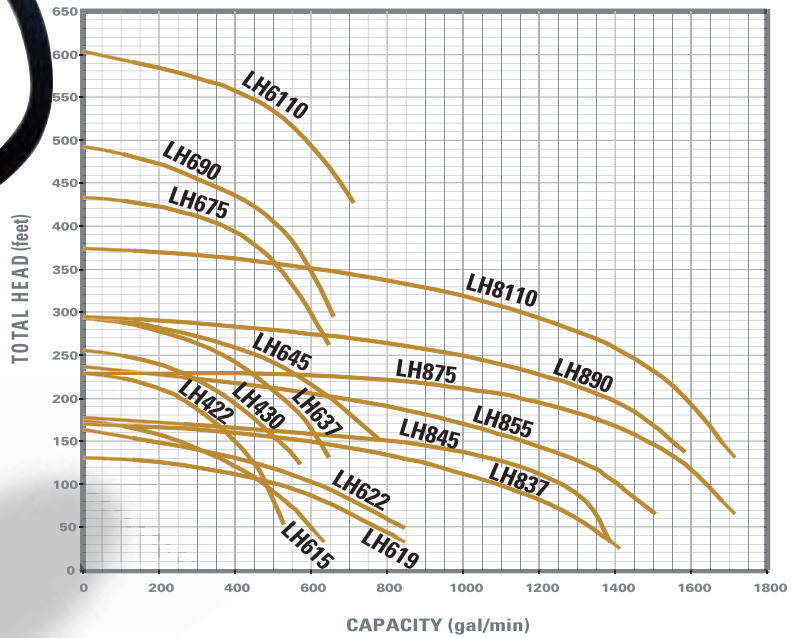
Mechanical Seal: Silicon Carbide

Motor Frame: Cast Iron

Shaft: 420 Stainless Steel

Fasteners: 304 Stainless Steel

Cable: Chloroprene Sheath



NEW
Slimline design
of 4 hp pumps.
Fits in an
8 inch pipe!

8 inch



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




Features

- Higher Pumping Heads
- High Pressure Rated Mechanical Seals
- Seal Pressure Relief Ports
- Rugged All Iron Construction
- Anti Wicking Cable Entrance
- Dual Silicon Carbide Mechanical Seals
- Tsurumi's Exclusive 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.

from 20 to 60 HP. Additional mechanical 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.

Isolated dual silicon carbide mechanical seals provide superior motor protection. **High pressure seals**, capable of operating depths of 328 ft., are used on all LH-W series pumps and on LH series pumps

		PUMP SPECIFICATIONS			MOTOR SPECIFICATIONS				DIMENSIONS			
Model	Discharge Size (inch)	Maximum Capacity (gpm)	Maximum Head (feet)	Output (hp)	Pole (rpm)	Insulation Class	Voltages		Diameter (inch)	Height (inch)	C.W.L.* (inch)	Weight (lbs.)
< 8 inches width! LH23.0W-60	2	145	140	4	2 - 3600	F	230 / 460 / 575		7 5/16	24 13/16	7 7/8	101
< 8 inches width! LH33.0-60	3	290	73	4	2 - 3600	F	230 / 460 / 575		7 5/16	25 3/8	5 7/8	93
< 10 inches width! LH25.5W-60		122	197	7.5	2 - 3600	B	208 / 230 / 460 / 575		9 5/8	29 1/2	6 3/4	176
LH311W-60		214	262	15	2 - 3600	B	208 / 230 / 460 / 575		10 5/8	40 5/16	7 7/8	286
LH322W-61	3	312	394	30	2 - 3600	B	208 / 230 / 460 / 575		13	48 5/8	11 3/4	670
LH430W-61	4	365	410	40	2 - 3600	F	208 / 230 / 460 / 575		14 3/8	54 1/8	11 3/4	714
LH422-60	4	528	230	30	2 - 3600	B	208 / 230 / 460 / 575		16 9/16	51 3/4	7 1/8	680
LH430-60	4	573	123	40	2 - 3600	F	208 / 230 / 460 / 575		16 9/16	53 3/8	7 1/8	730
LH615-60	6	634	173	20	2 - 3600	B	208 / 230 / 460 / 575		13 7/16	39	7 1/8	420
LH619-60	6	845	131	25	2 - 3600	B	208 / 230 / 460 / 575		16 9/16	52 1/4	7 1/8	610
LH622-60	6	845	164	30	2 - 3600	B	208 / 230 / 460 / 575		16 9/16	53 5/8	7 1/8	640
LH637-60	6	647	294	50	2 - 3600	F	208 / 230 / 460 / 575		20 7/8	57	7 1/8	1090
LH645-60	6	779	295	60	2 - 3600	F	460 / 575		20 7/8	57	7 1/8	1120
LH675-60	6	647	433	100	2 - 3600	F	460 / 575		21 5/8	66	7 7/8	1870
LH690-60	6	660	492	120	2 - 3600	F	460 / 575		23 5/16	70 3/8	7 7/8	2420
LH6110-60	6	713	604	150	2 - 3600	F	460 / 575		23 5/16	70 3/8	7 7/8	2640
LH837-60	8	1413	171	50	2 - 3600	F	208 / 230 / 460 / 575		20 7/8	58 9/16	7 1/8	1090
LH845-60	8	1387	177	60	2 - 3600	F	460 / 575		20 7/8	58 9/16	7 1/8	1120
LH855-60	8	1506	236	75	2 - 3600	F	460 / 575		21 5/8	67 9/16	7 7/8	1780
LH875-60	8	1717	230	100	2 - 3600	F	460 / 575		21 5/8	67 9/16	7 7/8	1870
LH890-60	8	1585	295	120	2 - 3600	F	460 / 575		23 5/16	70 3/8	7 7/8	2530
LH8110-60	8	1717	374	150	2 - 3600	F	460 / 575		23 5/16	70 3/8	7 7/8	2750

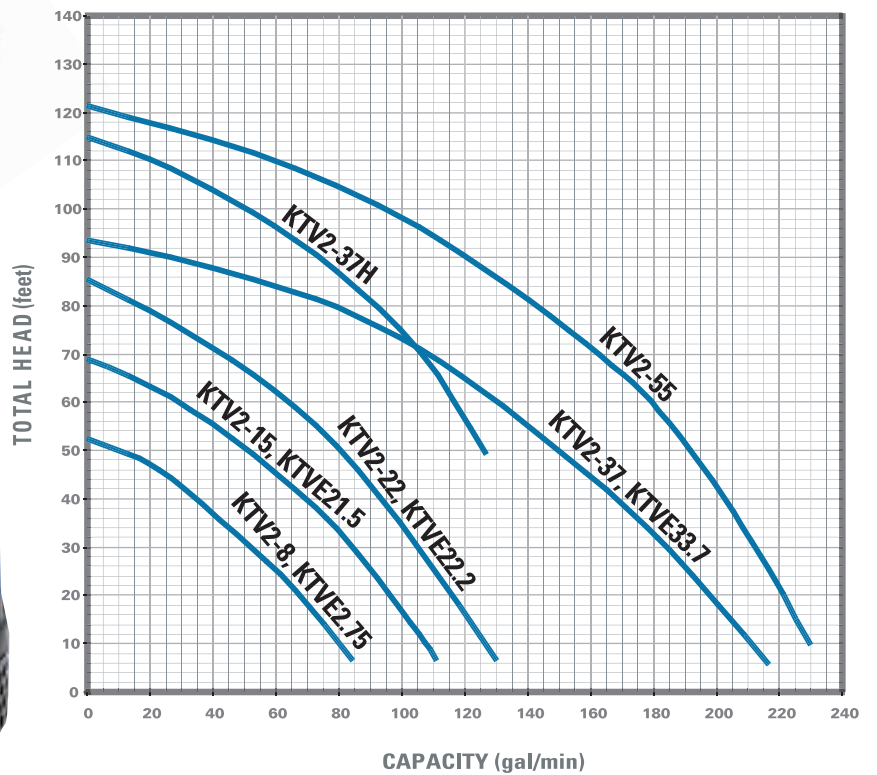
KTV(E)

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

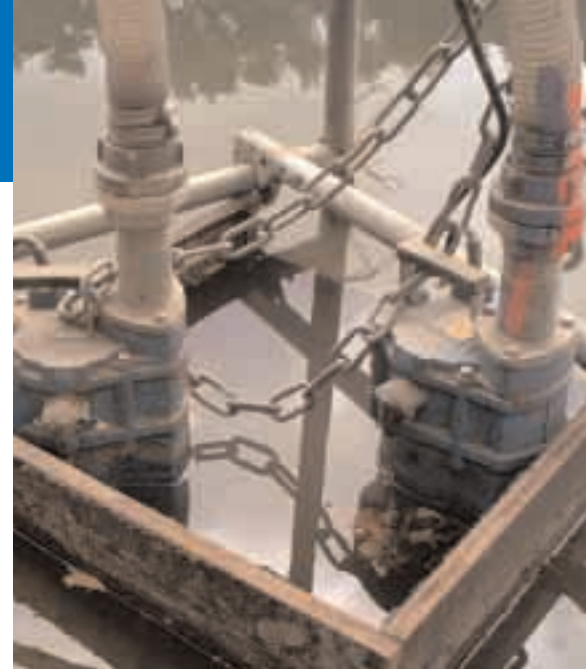


Built-in Automatic Operation:
Simply connect to power supply
No control panel or float switches required.

PERFORMANCE CURVES



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



Features

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

Material

- Impeller:** Ductile Cast Iron, Synthetic Rubber
- Casing:** Synthetic Rubber
- Mechanical Seal:** Silicon Carbide
- Motor Frame:** Aluminum Alloy
- Shaft:** 403/420 Stainless Steel
- Fasteners:** 304 Stainless Steel
- Cable:** PVC Sheath, Chloroprene Sheath

The KTV series was developed with a die cast aluminum body and elastomer pump end to reduce weight and allow **easy handling by 1 or 2 workers**. 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** and controls for turning the pump on and off automatically. Unnecessary dry run is prevented to save energy and reduce wear without the need for costly control panels and cumbersome float assemblies. The pump installs and handles like a standard pump yet operates automatically by simply connecting the power supply.

Model	PUMP SPECIFICATIONS			MOTOR SPECIFICATIONS				DIMENSIONS			
	Discharge Size (inch)	Maximum Capacity (gpm)	Maximum Head (feet)	Output (hp)	Pole (rpm)	Insulation Class	Voltages	Diameter (inch)	Height (inch)	C.W.L.* (inch)	Weight (lbs.)
KTV2-8	2	85	53	1	2 - 3600	E	208 / 230 / 460 / 575	7 7/8	14 1/2	2 1/2	25
KTV2-15	2	111	69	2	2 - 3600	E	208 / 230 / 460 / 575	9 7/16	15 9/16	3 1/8	43
KTV2-22	2	130	85	3	2 - 3600	E	208 / 230 / 460 / 575	9 7/16	16 3/8	3 1/8	51
KTV2-37H	2	127	115	5	2 - 3600	E	208 / 230 / 460 / 575	11 1/4	20 1/16	3 1/2	77
KTV2-37	3	217	94	5	2 - 3600	E	208 / 230 / 460 / 575	11 1/4	20 1/16	3 1/2	77
KTV2-55	3	230	121	7.5	2 - 3600	E	208 / 230 / 460 / 575	11 13/16	21 7/16	3 1/2	102
KTVE2.75-60	2	85	53	1	2 - 3600	E	208 / 230 / 460 / 575	7 7/8	16 7/16	8	28
KTVE21.5-61	2	111	69	2	2 - 3600	E	208 / 230 / 460 / 575	9 7/16	16 3/4	9 1/4	48
KTVE22.2-61	2	130	85	3	2 - 3600	E	208 / 230 / 460 / 575	9 7/16	16 3/4	9 1/4	55
KTVE33.7-60	3	217	94	5	2 - 3600	E	208 / 230 / 460 / 575	11 1/4	23 1/16	11 3/4	87

KRS

High volume, extra durable pump in a variety of sizes.



Material

Impeller: Ductile Cast Iron

Mechanical Seal: Silicon Carbide

Shaft: 420 Stainless Steel

Cable: Chloroprene Sheath

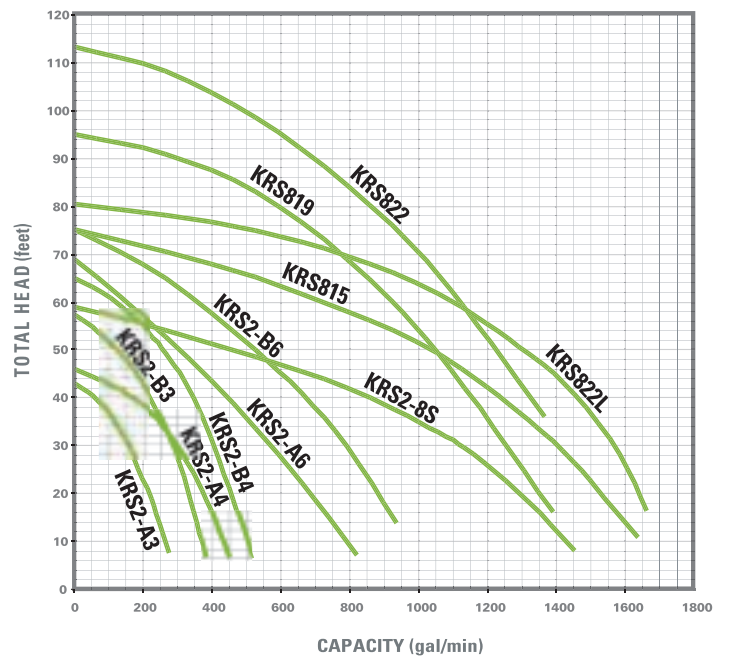
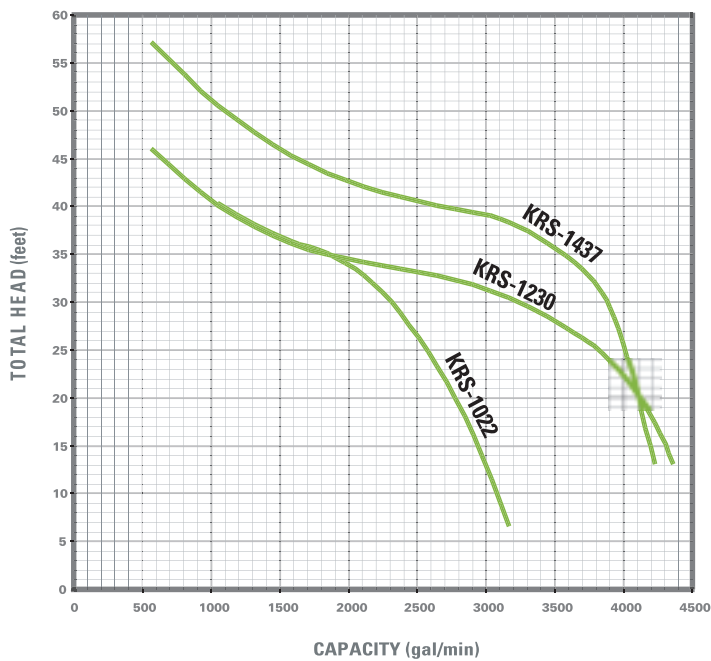
Casing: Cast Iron

Motor Frame: Cast Iron

Fasteners: 304 Stainless Steel



PERFORMANCE CURVES



KRS pumps provide high volume performance and extended pump life!



Features

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

The KRS series offers **longer wear** life on parts due to the slower impeller tip speed developed by 4 pole, 1800 RPM motors. It has been proven time and again in construction, civil engineering, quarry and mining applications that reducing impeller speed by half will extend your parts wear life by at least 2 to 3 times.

The **all iron construction** of the KRS series offers extended life of the

pump. To prevent premature wear and failure from abrasive materials, Tsurumi's **dual inside mechanical seals** are completely isolated from the pumping liquid in an oil chamber and extra lip seal to protect mechanical seals.

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

Model	PUMP SPECIFICATIONS			MOTOR SPECIFICATIONS				DIMENSIONS			
	Discharge Size (inch)	Maximum Capacity (gpm)	Maximum Head (feet)	Output (hp)	Pole (rpm)	Insulation Class	Voltages	Diameter (inch)	Height (inch)	C.W.L.* (inch)	Weight (lbs.)
KRS2-A3	3	276	43	3	4 - 1800	E	208 / 230 / 460 / 575	13 3/8	23 5/8	5 3/4	159
KRS2-B3	3	383	57	5	4 - 1800	E	208 / 230 / 460 / 575	13 3/4	26 15/16	6 1/8	196
KRS2-A4	4	450	46	5	4 - 1800	E	208 / 230 / 460 / 575	13 3/4	26 15/16	6 1/8	194
KRS2-B4	4	515	65	7.5	4 - 1800	E	208 / 230 / 460 / 575	13 3/4	26 9/16	6 1/8	209
KRS2-A6	6	819	69	10	4 - 1800	B	208 / 230 / 460 / 575	16 5/16	26 15/16	6 7/8	286
KRS2-B6	6	936	75	15	4 - 1800	B	208 / 230 / 460 / 575	16 5/16	29 3/16	6 7/8	330
KRS2-8S	8	1453	59	15	4 - 1800	B	208 / 230 / 460 / 575	18 9/16	32 1/16	11 3/4	383
KRS815-60	8	1638	75	20	4 - 1800	F	208 / 230 / 460 / 575	18 15/16	37 3/8	10 7/8	520
KRS819-60	8	1391	95	25	4 - 1800	F	208 / 230 / 460 / 575	22 1/2	45 1/2	13 5/8	850
KRS822-60	8	1365	113	30	4 - 1800	F	208 / 230 / 460 / 575	22 1/2	45 1/2	13 5/8	860
KRS822L-60	8	1664	80	30	4 - 1800	F	208 / 230 / 460 / 575	22 1/2	45 1/2	13 5/8	860
KRS1022-60	10	3170	40	30	4 - 1800	B	208 / 230 / 460 / 575	20 1/2	49 15/16	17 3/4	990
KRS1230-60	12	4360	46	40	4 - 1800	F	208 / 230 / 460 / 575	26 3/8	55 1/4	18 7/8	1540
KRS1437-60	14	4230	57	50	4 - 1800	F	208 / 230 / 460 / 575	26 3/8	55 1/4	18 7/8	1650

GSZ

High volume dewatering
and slurry pumps.



Material

Impeller: High Chrome Iron, Stainless Steel

Casing: Cast Iron

Mechanical Seal: Silicon Carbide

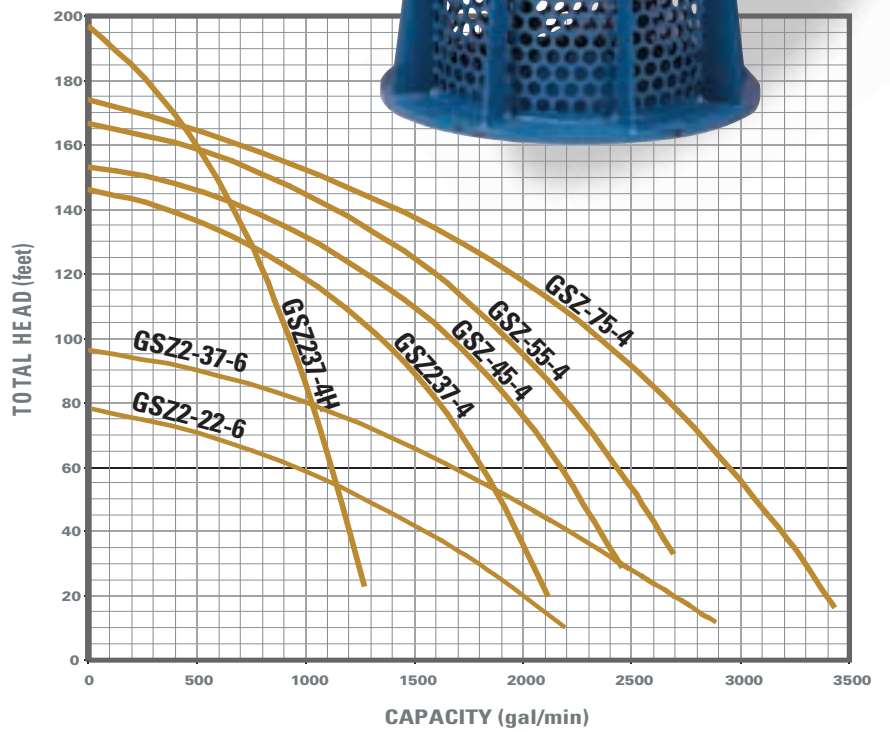
Motor Frame: Cast Iron / Steel Jacket

Shaft: 420 Stainless Steel

Fasteners: 304 Stainless Steel

Cable: Chloroprene Rubber

PERFORMANCE CURVES





GSZ dewatering pumps are designed to last in aggressive dewatering applications.

Features

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

The GSZ series offers **longer wear life** on parts due to the slower impeller tip speed developed by 4 pole, 1800 RPM and 6 pole,

1200 RPM motors. It has been proven time and again in construction, civil engineering, quarry and mine applications that 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, along with a side discharge design for smooth discharge of foreign materials, the GSZ series is one of the most formidable high volume submersible dewatering pumps offered.

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 head pumping 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.

Model	PUMP SPECIFICATIONS			MOTOR SPECIFICATIONS				DIMENSIONS			
	Discharge Size (inch)	Maximum Capacity (gpm)	Maximum Head (feet)	Output (hp)	Pole (rpm)	Insulation Class	Voltages	Diameter (inch)	Height (inch)	C.W.L.* (inch)	Weight (lbs.)
GSZ2-37-4H	6	1268	197	50	4 - 1800	F	208 / 230 / 460 / 575	35 7/16	56 11/16	17 3/8	1870
GSZ2-37-4	8	2113	146	50	4 - 1800	F	208 / 230 / 460 / 575	36	57 7/8	18 7/8	1870
GSZ-45-4	8	2457	153	60	4 - 1800	E	460 / 575	36	59 13/16	18 1/8	2420
GSZ-55-4	10	2695	167	75	4 - 1800	E	460 / 575	41 5/16	68 5/16	20 1/8	2530
GSZ-75-4	10	3434	174	100	4 - 1800	E	460 / 575	41 5/16	68 5/16	20 1/8	2640
GSZ2-22-6	8	2113	79	30	6 - 1200	F	208 / 230 / 460 / 575	38	51 3/8	13 3/4	1540
GSZ2-37-6	8	2906	90	50	6 - 1200	F	208 / 230 / 460 / 575	39 15/16	52 15/16	14 5/8	2200

SFQ/SQ

Stainless Steel pumps.



Material

Impeller: 316/304 Stainless Steel Casting

Casing: 316/304 Stainless Steel Casting

Mechanical Seal: Silicon Carbide

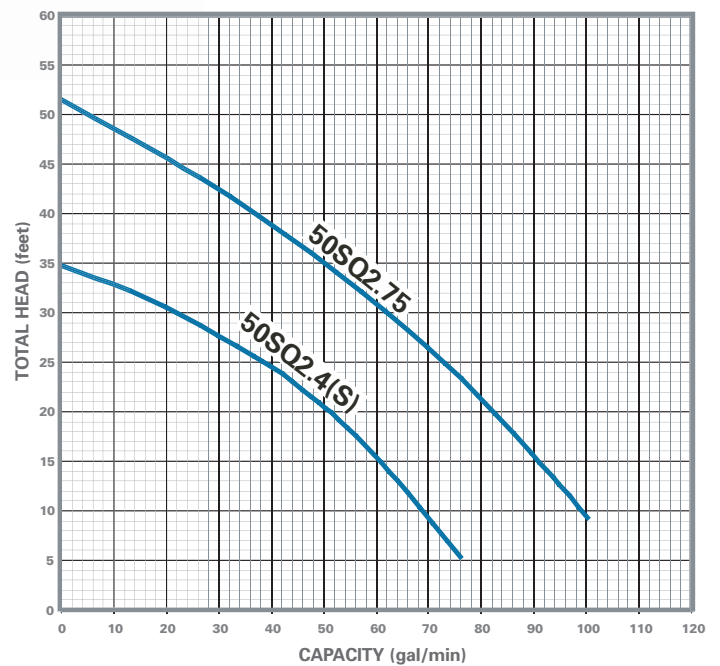
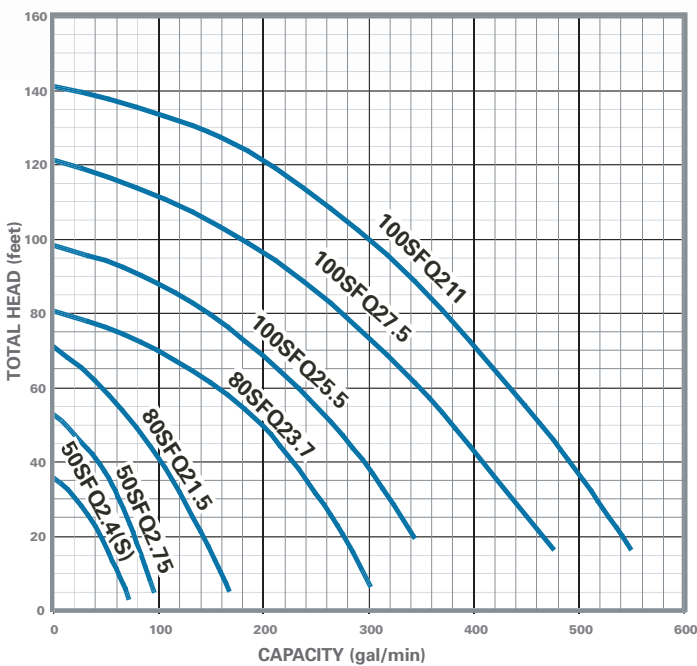
Motor Frame: 316/304 Stainless Steel Casting

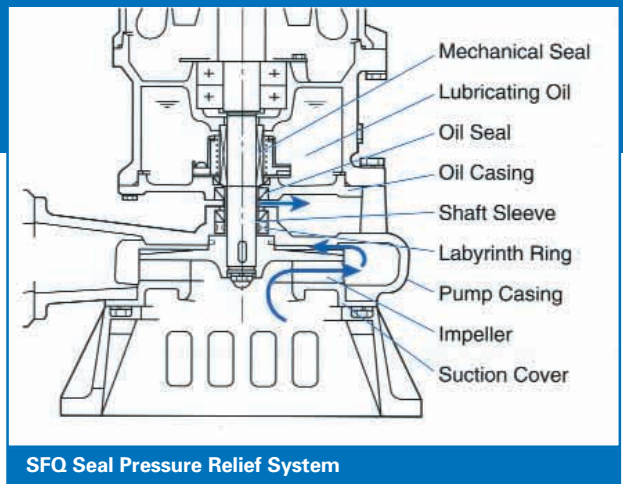
Shaft: 316/304 Stainless Steel Casting

Fasteners: 316/304 Stainless Steel Casting

Cable: PVC Sheath, Chloropren Sheath

PERFORMANCE CURVES





Stainless Steel Pumps are Rust Free and Corrossive Resistant

SFQ Features

- SS 316 Stainless Steel for wet parts.
- All the metal components that come in contact with liquid are made SS 316 Stainless Steel.
- Double inside mechanical seals with Silicon Carbide faces, (both Top and Bottom) and viton elastomers, running in an oil filled chamber and further protected by an exclusionary lip seal, providing the most durable seal available.
- Optional TOS all 316 SS Slide rail system is available for models from 7 1/2-15 HP.
- The SFQ pumps have a seal pressure relief system. This system features an independent pump casing separate from the oil casing in which the mechanical seal is housed. Installed between these two components is an intermediate chamber which is opened to the outside. Thanks to this system, the mechanical seal is only subject to static pressure (submergence pressure) with no pumping pressure operating on the mechanical seal.

SQ Features

- All components including motor frame are made of SS 304 Stainless Steel.
- Environmental friendly.
- Non toxic white mineral oil is used as the lubricant.
- Extended life and extra durability.
- The flow-through design and heat resistant Silicon Carbide Mecanical Seal allow extra resistance of dry running and protect pump from the damage.
- CTP 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 increase wear resistance when pumpage contains abrasive particles.

Model	PUMP SPECIFICATIONS			MOTOR SPECIFICATIONS					DIMENSIONS			
	Discharge Size (inch)	Maximum Capacity (gpm)	Maximum Head (feet)	Phase	Output (hp)	Pole (rpm)	Insulation Class	Voltages	Diameter (inch)	Height (inch)	C.W.L.* (inch)	Weight (lbs.)
50SFQ2.4S-61	2"	72	37	Single	1/2	2 - 3600	E	115/230	9 15/16	16 3/4	3 1/2	49
50SFQ2.4-61	2"	72	36	Three	1/2	2 - 3600	E	208/230/460/575	9 15/16	15 5/8	3 1/2	44
50SFQ2.75-61	2"	95	53	Three	1	2 - 3600	E	208/230/460/575	9 15/16	15 5/8	3 1/2	49
80SFQ21.5-62	3"	167	71	Three	2	2 - 3600	E	208/230/460/575	12 15/16	17 1/8	15 1/8	84
80SFQ23.7-62	3"	301	81	Three	5	2 - 3600	E	208/230/460/575	14 1/8	21 3/4	19 5/8	115
100SFQ25.5-62	4"	343	98	Three	7.5	2 - 3600	F	208/230/460/575	23 3/8	30	25 1/4	243
100SFQ27.5-62	4"	476	122	Three	10	2 - 3600	F	208/230/460/575	23 3/8	31 3/8	26 5/8	298
100SFQ211-62	4"	550	141	Three	15	2 - 3600	F	208/230/460/575	23 3/8	33 3/8	28 3/8	331
50SQ2.4S-62	2"	76	35	Single	1/2	2 - 3600	E	115/230	7 3/16	16 5/8	2 3/4	29
50SQ2.4-62	2"	71	34	Three	1/2	2 - 3600	E	208/230/460/575	7 3/16	15 7/8	2 3/4	26
50SQ2.75-62	2"	100	51	Three	1	2 - 3600	E	208/230/460/575	7 9/16	17 7/16	3 1/2	32

Control Panels



Automatic Control Panel Includes:

- Automatic or Manual Simplex Operation.
- Nema 4X, Lockable Fiberglass Enclosure.
- IEC Rated Magnetic Contactor.
- Hand/Off Auto Selector Switch.
- UL Listed.
- Includes (3) 20 Ft. Mechanical Float Switches.
- Cable Grips In Control Panel.

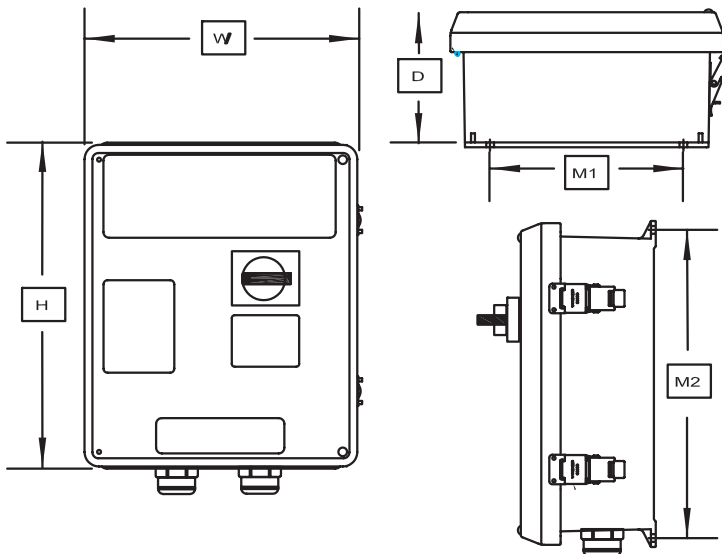
Inverter Panels are available for LHW and KTZ series Single Phase operation.



Manual Control Panel Includes:

- Manual Simplex Operation.
- Nema 4X, Lockable Fiberglass Enclosure.
- IEC Contactor
- Hand/Off Selector Switch.
- UL Listed.
- Cable Grips In Control Panel.

DIMENSIONS



		Dimensions (inches)				
		Overall			Mounting	
208/230/460 VAC		W	H	D	M1	M2
Model	Amps					
9000	2.5-4.0 A	9.31	11.31	5.43	8.01	12.75
9001	4.0-6.3 A	9.31	11.31	5.43	8.01	12.75
9002	6.3-10 A	9.31	11.31	5.43	8.01	12.75
9003	10-16 A	9.31	11.31	5.43	8.01	12.75
9004	18-25 A	9.31	11.31	5.43	8.01	12.75
9005	23-32 A	13.30	15.32	8.19	10.00	14.75
9006	30-50 A	13.30	15.32	8.19	10.00	14.75
9007	63-90 A	13.30	15.32	8.19	10.00	14.75
9008	48-80 A	13.30	15.32	8.19	10.00	14.75

Manual Control Panel

		Dimensions (inches)				
		Overall			Mounting	
208/230/460 VAC		W	H	D	M1	M2
Model	Amps					
9200	2.5-4.0 A	11.29	15.32	5.58	8.01	12.75
9201	4.0-6.3 A	11.29	15.32	5.58	8.01	12.75
9202	6.3-10 A	11.29	15.32	5.58	8.01	12.75
9203	10-16 A	11.29	15.32	5.58	8.01	12.75
9204	18-25 A	11.29	15.32	5.58	8.01	12.75
9205	23-32 A	15.30	17.31	6.70	12.00	16.73
9206	30-50 A	15.30	17.31	6.70	12.00	16.73
9207	63-90 A	15.30	17.31	6.70	12.00	16.73
9208	48-80 A	15.30	17.31	6.70	12.00	16.73

Automatic Control Panel

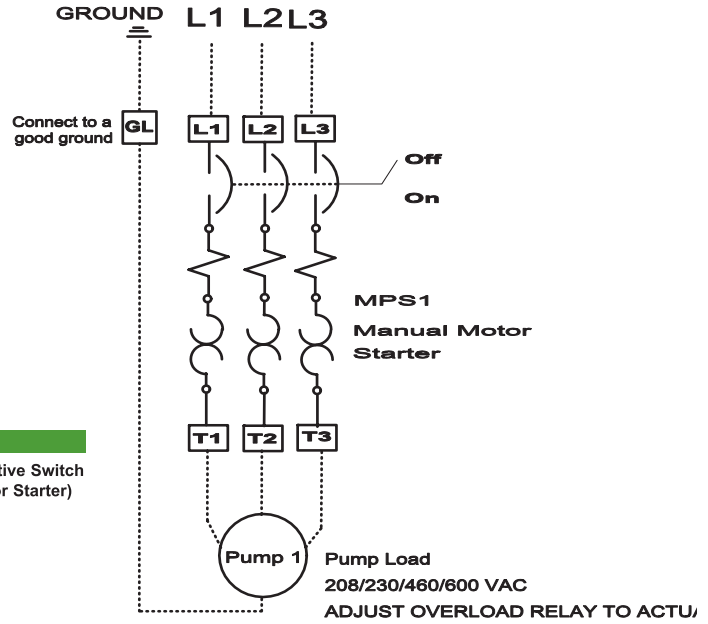
MANUAL MOTOR CONTROL 1-30 HP

AWG. OR CIRCULAR MILL SIZE	TIGHTENING TORQUE IN INCH POUNDS	
	SCREW DRIVER	EXTERNAL DRIVE WRENCH
14	35	75
12	35	75
10	35	75
8	40	75
6	45	110
4	45	110
2	50	150
1	50	150
1/0	50	180
2/0	50	180

LINE VOLTAGE: 208/230/460/600

PHASE: 3

HERTZ: 60



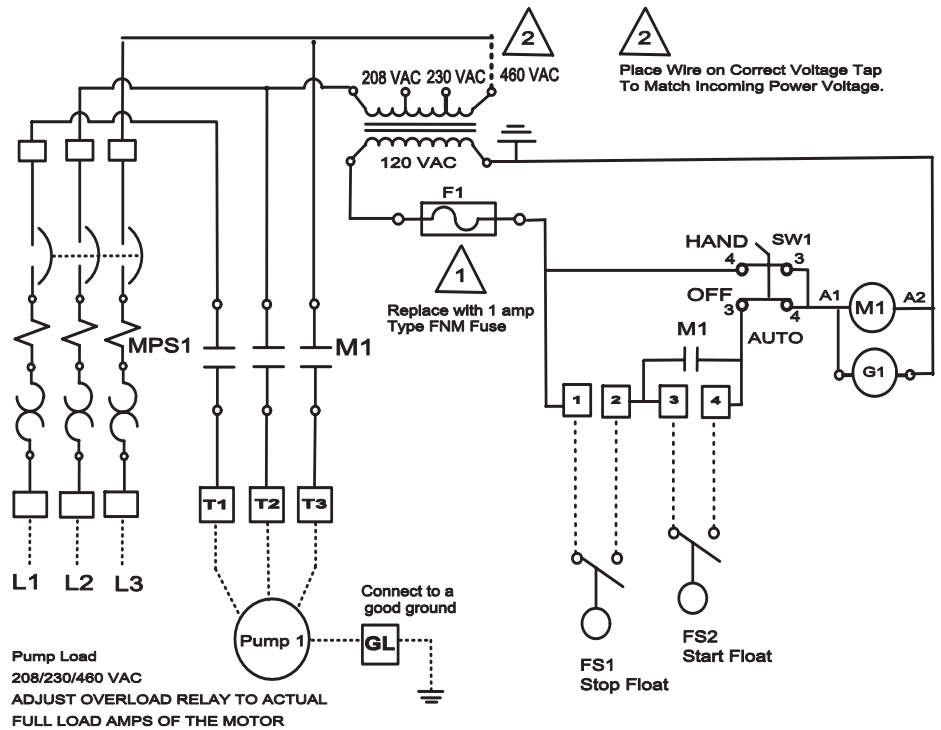
AUTOMATIC MOTOR CONTROL 0-30 HP

AWG. OR CIRCULAR MILL SIZE	TIGHTENING TORQUE IN INCH POUNDS	
	SCREW DRIVER	EXTERNAL DRIVE WRENCH
14	35	75
12	35	75
10	35	75
8	40	75
6	45	110
4	45	110
2	50	150
1	50	150
1/0	50	180
2/0	50	180

LINE VOLTAGE: 208/230/460

PHASE: 3

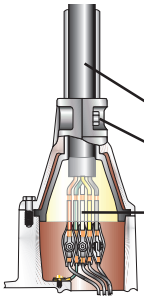
HERTZ: 60



Notes:

- WARNING! Electrical Shock Hazard!** Disconnect power before servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.
- Install in accordance with National Electric Code, NFPA 70, Seal all boxes, fittings and conduit with appropriate seal devices to prevent moisture and gases from entering enclosure.
- Connect all grounds to a good ground.
- Dashed lines represent field wiring.

Established in 1924, Tsurumi Manufacturing Co., Ltd. is one of the world's most experienced pump manufacturers. Since producing our first submersible pumps in 1953 our ongoing product development programs and extensive research have produced many innovations in our submersible pumps. Some of them are illustrated below.



Anti-Wicking Cable Entrance

Maximum protection against water incursion through the cable entry.

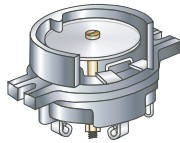
- Molded Cable Boot or Cable Protection Tube: extends cable bending radius, prevents abrading, and reduces fatigue.
- Cable Gland: provides 360 degree compression of cable boot, protection tube or cable bush for a water tight fit.
- Anti-Wicking Block: window cuts on conductor insulation expose strands 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.

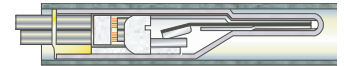
Circle Thermal Protector (CTP) :

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. (1 - 30 HP)



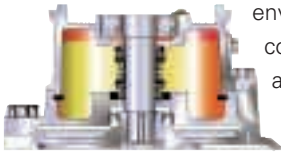
Miniature Thermal Protector (MTP) :

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 independent relay for manual reset. (40 HP and over)

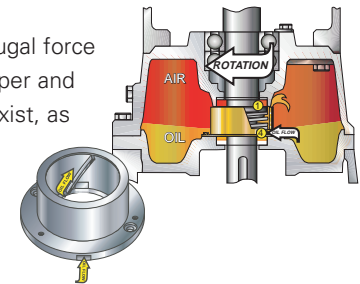


Dual Inside, Silicon Carbide Mechanical Seals with Oil Lifter

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. Silicon Carbide out lasts other seal face materials by a wide margin due to a low coefficient of friction and greater resistance to abrasion, corrosion, thermal shock and heat checking.



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. (2 HP and over)



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 or failure of the mechanical seals in high head pumping applications.

