



**TSURUMI PUMP**

**KTZ** 3-phase  
50Hz

Heavy duty dewatering pump  
- for professional use

Generally applicable high grade pump that can be used efficiently in draining in civil engineering. Maximum water depth 25m. Incorporating on the job requirements in the initial product design, Tsurumi has built a powerful new series of pumps to match the demands of tough drainage jobs.



## Top Discharge



Pumped water cools the motor and discharges as illustrated. The motor can be cooled even when pumping a small amount of water. The top discharge arrangement allows access into areas with space limitations.



## Rugged

By offering a cast iron pump body, our durability is increased over standard aluminium body pumps. With each motor size there is a choice between high head and high volume performance ranges.

## Efficient motor cooling

Slim line design with a top discharge offers economy of space. There is efficient motor cooling through a side flow channel.

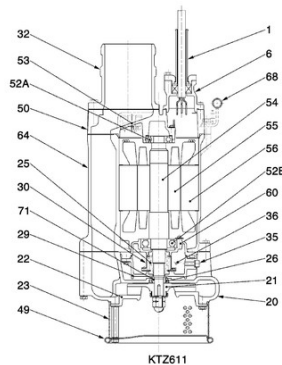


## Increased water-pressure resistance

An newly developed mechanical seal endures water pressure of up to 2,5 kgf/cm<sup>2</sup>. This makes the pumps usable at greater depth, such as in deep wells, to say nothing of use at general construction sites.

## Components:

|                     |                     |
|---------------------|---------------------|
| 001 Cable           | 036 Lubricant       |
| 006 Cable entrance  | 050 Motor cover     |
| 020 Pump casing     | 052A Upper bearing  |
| 021 Impeller        | 052B Lower bearing  |
| 022 Suction plate   | 053 Motor protector |
| 023 Strainer        | 054 Shaft           |
| 025 Mechanical seal | 055 Rotor           |
| 026 Oil sealing     | 056 Stator          |
| 030 Oil lifter      | 060 Bearing housing |
| 032 Hose coupling   | 064 Motor casing    |
| 035 Oil plug        | 068 Handle          |



## Cast Iron used:

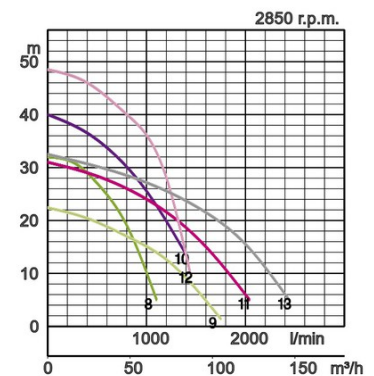
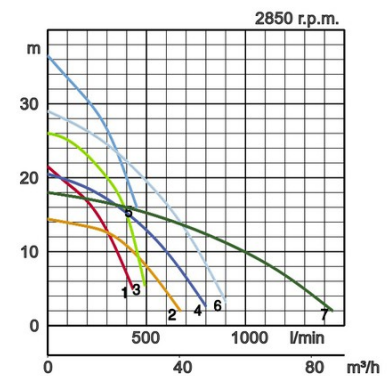
| Cast Iron used:                   | Brinell hardness: |
|-----------------------------------|-------------------|
| Chromium iron casting             | 415 - 425         |
| Grey iron casting EN-GJL-200      | 150 - 230         |
| Ductile iron casting EN-GJS-500-7 | 150 - 220         |

## Specifications:

| Model   | Colour code curve | Bore mm | Motor output kW | Rated current A | Head max. m | Capacity max. l/min | Dry weight kg w/o cable | Max. solid handling ø mm | Max. water depth m | Cable length m |
|---------|-------------------|---------|-----------------|-----------------|-------------|---------------------|-------------------------|--------------------------|--------------------|----------------|
| KTZ21.5 | 1                 | 50      | 1,5             | 3,5             | 21,5        | 430                 | 30,0                    | 8,5                      | 25                 | 20             |
| KTZ31.5 | 2                 | 80      | 1,5             | 3,5             | 14,4        | 670                 | 30,0                    | 8,5                      | 25                 | 20             |
| KTZ22.2 | 3                 | 50      | 2,2             | 5,0             | 26,0        | 500                 | 34,0                    | 8,5                      | 25                 | 20             |
| KTZ32.2 | 4                 | 80      | 2,2             | 5,0             | 20,5        | 800                 | 34,0                    | 8,5                      | 25                 | 20             |
| KTZ23.7 | 5                 | 50      | 3,7             | 7,7             | 36,5        | 450                 | 63,0                    | 8,5                      | 25                 | 20             |
| KTZ33.7 | 6                 | 80      | 3,7             | 7,7             | 29,0        | 900                 | 63,0                    | 8,5                      | 25                 | 20             |
| KTZ43.7 | 7                 | 100     | 3,7             | 7,7             | 18,0        | 1440                | 63,0                    | 8,5                      | 25                 | 20             |
| KTZ35.5 | 8                 | 80      | 5,5             | 11,4            | 32,0        | 1100                | 73,0                    | 8,5                      | 25                 | 20             |
| KTZ45.5 | 9                 | 100     | 5,5             | 11,4            | 22,5        | 1740                | 73,0                    | 8,5                      | 25                 | 20             |
| KTZ47.5 | 10                | 100     | 7,5             | 15,0            | 40,0        | 1400                | 100,0                   | 12                       | 25                 | 20             |
| KTZ67.5 | 11                | 150     | 7,5             | 15,0            | 31,0        | 2030                | 99,0                    | 20                       | 25                 | 20             |
| KTZ411  | 12                | 100     | 11,0            | 22,0            | 48,5        | 1440                | 130,0                   | 12                       | 25                 | 20             |
| KTZ611  | 13                | 150     | 11,0            | 22,0            | 32,5        | 2440                | 131,0                   | 20                       | 25                 | 20             |

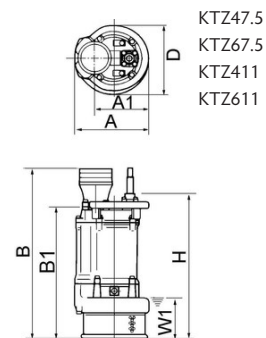
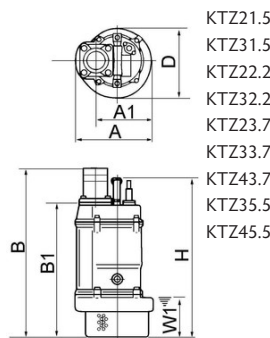


|                      |                               |   |                                   |
|----------------------|-------------------------------|---|-----------------------------------|
| ø Discharge bore mm  |                               | 50, 80, 100, 150  |                                   |
| Pumping Fluid        | Temperature                   | 0-40°C  |                                   |
|                      | Type of Fluid                 | Spring water, Rain water, Ground water, Sand carrying water |                                   |
| Pump                 | Components                    | Impeller  | Semi-open type impeller           |
|                      |                               | Shaft Seal  | Double mechanical seal            |
|                      |                               | Bearings  | Shielded ball bearings            |
|                      | Material                      | Impeller  | Chromium iron casting             |
|                      |                               | Casing  | Grey iron casting EN-GJL-200      |
|                      |                               | Suction Plate   | Ductile iron casting EN-GJS-500-7 |
|                      | Shaft Seal                    | Silicon carbide in oil bath                                 |                                   |
| Motor                | Type, Poles                   | Induction motor, 2 poles, IP68                              |                                   |
|                      | Lubrication                   | Turbine oil (ISO VG32)                                      |                                   |
|                      | Motor Protector (built-in)    | Circle thermal cut-out                                      |                                   |
|                      | Insulation                    | Insulation class F  |                                   |
|                      | Phase / Voltage               | 3-phase / 400V / 50Hz / d.o.l.                              |                                   |
|                      | Material                      | Casing  | Grey iron casting EN-GJL-200      |
|                      |                               | Shaft   | Stainless steel EN-X30Cr13        |
| Cable                |                               | Rubber, H07RN-F   |                                   |
| Discharge Connection | Threaded flange/Hose coupling |   |                                   |



## Dimensions in mm:

| Model   | A   | A1  | B   | B1  | D   | H   | W1  |
|---------|-----|-----|-----|-----|-----|-----|-----|
| KTZ21.5 | 235 | 173 | 509 | 401 | 216 | 478 | 120 |
| KTZ31.5 | 235 | 173 | 509 | 401 | 216 | 478 | 120 |
| KTZ22.2 | 235 | 173 | 529 | 421 | 216 | 498 | 120 |
| KTZ32.2 | 235 | 173 | 529 | 421 | 216 | 498 | 120 |
| KTZ23.7 | 283 | 208 | 627 | 504 | 252 | 637 | 150 |
| KTZ33.7 | 283 | 208 | 627 | 504 | 252 | 637 | 150 |
| KTZ43.7 | 283 | 208 | 642 | 504 | 252 | 637 | 150 |
| KTZ35.5 | 306 | 218 | 671 | 548 | 259 | 688 | 150 |
| KTZ45.5 | 306 | 218 | 686 | 548 | 259 | 688 | 150 |
| KTZ47.5 | 330 | 240 | 764 | 626 | 314 | 687 | 190 |
| KTZ67.5 | 330 | 240 | 799 | 626 | 314 | 687 | 190 |
| KTZ411  | 373 | 260 | 806 | 645 | 350 | 740 | 190 |
| KTZ611  | 373 | 260 | 826 | 645 | 350 | 740 | 190 |



W1: lowest running water level

In the event of abrasive and corrosive utilization, stronger wear and tear will take place naturally in certain components. In this regard, please pay attention to our website [www.tsurumi.eu/english/applications.htm](http://www.tsurumi.eu/english/applications.htm).



Contributing to World-wide Prosperity and Understanding through Worker- and Environment-friendly Production.

Designed for increased productivity through fully integrated streamlined production systems, Tsurumi's factory in Kyoto (Japan) features a production capacity of a full 1 million pumps per year. Large-scale modern R&D facilities offer optimum conditions for experimenting and testing of even super-large pumps and for developing new products to expand the possibilities and applications of pumps. To provide optimum conditions for our main asset, our workers, as well as for the environment, special emphasis is placed on optimized working conditions with airconditioning, minimized dust and exhaust gas emission, comprehensive recycling and waste recovery.

We reserve the right to change specifications and designs herein for improvement without prior notice. Our pumps are for professional use only. In the event that Tsurumi (Europe) GmbH have, in exceptional cases taken over, a manufacturer's warranty, this entitles the enduser to assert remedy free of charge against Tsurumi (Europe) GmbH due to any defect to the product occurring during the guarantee period (see below), also then when the warranty claims against the seller do not or no longer exist. In the event of malfunction, which is attributable to the improper handling by the enduser, no guarantee claim shall arise. Further claims shall not result from the warranty, unless if something to the contrary has explicitly been determined. The decision as to whether remedy is effected by way of replacement or repair shall be at the choice of Tsurumi (Europe) GmbH. The claims shall be time barred after a period of three months after expiry of the guarantee period, however, not before expiry of the warranty period which is valid towards the seller. In the event of doubt, the warranty period shall correspond with the warranty period which is valid between the end-user and his seller.



con-KTZ-EN

