



# TBZ SUBMERSIBLE CONTRACTORS' DEWATERING PUMP



TBZ-series robust pumps are best suited for draining in civil engineering, but can be also used for general pumping purposes.

Motor and pump casing is made of rigid cast iron for long-lasting durability. Maximum submersion depth is greatly increased due to mechanical seal resistant to high pressure. Semi-open impeller made of high chrome alloy in combination with wear plate (ductile iron) achieves superior durability.

Effective motor cooling due to execution of discharge channel integrated into the motor housing. Space saving design due to a top outlet.

Discharge outlet from 50mm to 150mm, Motor from 1,5kW to 15kW. Hermetically sealed motors below 15kW are equipped with build-in thermal protection.

### **Technical Specifications**

Capacity: up to 160 m³/h

Head: up to 57 meters

Power: 1.5kW to 15kW

Power supply: Three phase 400 V ± 10%, 50 Hz

Insulation class: FProtection class: IP68Cable length: 8 m

Water temperature: up to 40°C

Max. water depth: 25 m

### **Application**

- Construction sites
- Mining and industrial sites
- Drainage and contaminated water
- General pumping purposes

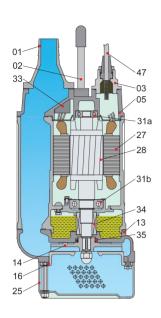
#### **Optional Features**

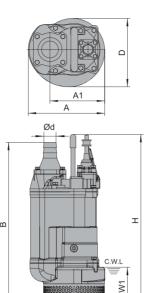
- Other voltages
- Other length of cable

### **Dimensions and Weight**

| Model     | d   | А   | A1  | В   | D   | Н   | W1  | N.W. | G.W. | Packing dimension |
|-----------|-----|-----|-----|-----|-----|-----|-----|------|------|-------------------|
| (50Hz)    | mm  | kg   | kg   | mm                |
| 50TBZ1.5  | 50  | 235 | 173 | 535 | 216 | 505 | 120 | 36   | 40   | 610x265x265       |
| 80TBZ1.5  | 80  | 235 | 173 | 535 | 216 | 505 | 120 | 36   | 40   | 610x265x265       |
| 50TBZ2.2  | 50  | 235 | 173 | 535 | 216 | 505 | 120 | 39   | 43   | 610x265x265       |
| 80TBZ2.2  | 80  | 235 | 173 | 535 | 216 | 505 | 120 | 39   | 43   | 610x265x265       |
| 50TBZ3.7  | 50  | 283 | 208 | 628 | 252 | 629 | 150 | 63   | 68   | 710x320x295       |
| 80TBZ3.7  | 80  | 283 | 208 | 628 | 252 | 629 | 150 | 63   | 68   | 710x320x295       |
| 100TBZ3.7 | 100 | 283 | 208 | 642 | 252 | 629 | 150 | 63   | 68   | 710x320x295       |
| 80TBZ5.5  | 80  | 283 | 208 | 671 | 252 | 590 | 150 | 77   | 84   | 750x320x295       |
| 100TBZ5.5 | 100 | 283 | 208 | 686 | 252 | 590 | 150 | 77   | 84   | 750x320x295       |
| 100TBZ7.5 | 100 | 330 | 240 | 764 | 314 | 676 | 190 | 106  | 116  | 835x365x385       |
| 150TBZ7.5 | 150 | 330 | 240 | 790 | 314 | 676 | 190 | 108  | 119  | 865x365x385       |
| 100TBZ11  | 100 | 373 | 255 | 807 | 350 | 695 | 190 | 136  | 148  | 885x415x435       |
| 150TBZ11  | 150 | 373 | 255 | 807 | 350 | 695 | 190 | 139  | 150  | 885x415x435       |
| 100TBZ15  | 100 | 373 | 255 | 842 | 350 | 755 | 190 | 144  | 158  | 935x415x435       |
| 150TBZ15  | 150 | 373 | 255 | 842 | 350 | 755 | 190 | 146  | 160  | 935x415x435       |





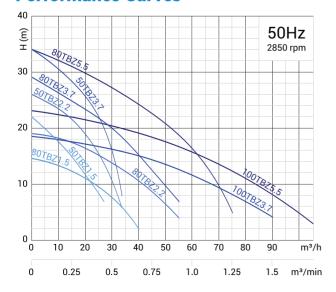


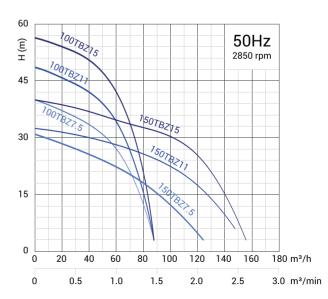
W1: Continuous running water level

| Item No. | Part name          | Material   |
|----------|--------------------|--|
| 01       | Hose coupling      | Cast iron  |
| 02       | Handle             | Rubber&steel   |
| 05       | Upper cover        | Cast iron  |
| 11       | Motor body         | Cast iron  |
| 13       | Pump body          | Cast iron  |
| 14       | <b>I</b> mpeller   | High chrome alloy  |
| 16       | Inlet plate        | Ductile iron   |
| 25       | Strainer           | Steel  |
| 27       | Stator             |  |
| 28       | Rotor              | Shaft: AISI420SS   |
| 31a      | Bearing            | Ball bearing   |
| 31b      | Bearing            | Ball bearing   |
| 33       | Motor protector    |  |
| 34       | Mechanical<br>seal | Sic-Sic/Carbon-Sic(2.2 kW);<br>Sic-Sic/Sic-Sic (≥3.7 kW) |
| 35       | Oil seal           |  |
| 47       | Cable              |  |

# **Performance Range**

| Model<br>(50Hz) | Outlet | Motor | power | Rated current (400V) | Rated | capacity | Rated<br>head | Мах с | apacity | Max<br>head | Impeller<br>passage |
|-----------------|--------|-------|-------|----------------------|-------|----------|---------------|-------|---------|-------------|---------------------|
| (33112)         | mm     | kW    | HP    | А                    | m³/h  | m³/min   | m             | m³/h  | m³/min  | m           | mm                  |
| 50TBZ1.5        | 50     | 1.5   | 2     | 3.5                  | 15    | 0.25     | 15            | 27    | 0.45    | 22          | 8.5                 |
| 80TBZ1.5        | 80     | 1.5   | 2     | 3.5                  | 30    | 0.50     | 8             | 40    | 0.67    | 14.5        | 8.5                 |
| 50TBZ2.2        | 50     | 2.2   | 3     | 5.0                  | 18    | 0.30     | 20            | 33    | 0.55    | 26          | 8.5                 |
| 80TBZ2.2        | 80     | 2.2   | 3     | 5.0                  | 36    | 0.60     | 11            | 55    | 0.92    | 19          | 8.5                 |
| 50TBZ3.7        | 50     | 3.7   | 5     | 7.7                  | 12    | 0.20     | 30            | 33    | 0.55    | 34          | 8.5                 |
| 80TBZ3.7        | 80     | 3.7   | 5     | 7.7                  | 30    | 0.50     | 20            | 55    | 0.92    | 29          | 8.5                 |
| 100TBZ3.7       | 100    | 3.7   | 5     | 7.7                  | 60    | 1.0      | 11.5          | 90    | 1.50    | 18.5        | 8.5                 |
| 80TBZ5.5        | 80     | 5.5   | 7.5   | 11.4                 | 36    | 0.60     | 25            | 75    | 1.25    | 34          | 8.5                 |
| 100TBZ5.5       | 100    | 5.5   | 7.5   | 11.4                 | 60    | 1.0      | 16            | 105   | 1.75    | 23          | 8.5                 |
| 100TBZ7.5       | 100    | 7.5   | 10    | 15                   | 48    | 0.80     | 30            | 84    | 1.40    | 40          | 11.5                |
| 150TBZ7.5       | 150    | 7.5   | 10    | 15                   | 90    | 1.60     | 15            | 124.8 | 2.08    | 31          | 19.5                |
| 100TBZ11        | 100    | 11    | 15    | 22                   | 60    | 1.0      | 35            | 84    | 1.40    | 48.5        | 11.5                |
| 150TBZ11        | 150    | 11    | 15    | 22                   | 102   | 1.70     | 22            | 147   | 2.45    | 32          | 19.5                |
| 100TBZ15        | 100    | 15    | 20    | 29.5                 | 60    | 1.0      | 42            | 84    | 1.40    | 56          | 11.5                |
| 150TBZ15        | 150    | 15    | 20    | 29.5                 | 102   | 1.70     | 30            | 156   | 2.60    | 40          | 19.5                |





# TBZE AUTOMATIC SUBMERSIBLE CONTRACTORS' DEWATERING PUMP



TBZE-series robust pumps are best suited for draining in civil engineering, but can be also used for general pumping purposes.

Motor and pump casing is made of rigid cast iron for long-lasting durability. Maximum submersion depth is greatly increased due to mechanical seal resistant to high pressure. Semi-open impeller made of high chrome alloy in combination with wear plate (ductile iron) achieves superior durability.

Effective motor cooling due to execution of discharge channel integrated into the motor housing. Space saving design due to a top outlet. Discharge outlet from 50mm to 100mm, Motor from 1,5kW to 5,5kW. TBZE series pumps operate automatically with the help of bulit-in intelligent control system. This system helps the end-user to achieve electricity cost reduction at the construction or industrial site.

# **Technical Specifications**

- Capacity: up to 105 m³/h
- Head: up to 38 meters
- Power: 1.5 kW to 5,5 kW
- Power supply: Three phase 400 V ± 10%, 50 Hz
- Insulation class: FProtection class: IP68
- Cable length: 8 m
- Water temperature: up to 40°C
- Max. water depth: 25 m

# **Application**

- Construction sites
- Mining and industrial sites
- Drainage and contaminated water
- General pumping purposes

#### **Optional Features**

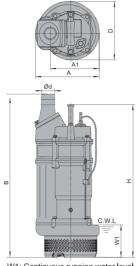
- Other voltages
- Other length of cable

### **Key features of TBZE intelligent control system**

- Protects against reverse phase, ensuring correct impeller rotation;
- Protects against open phase or impeller jam, thus prevents accidental damage;
- Automatically stops the pump in case of overload, abnormal voltage with the recovery after 5 minutes;
- The pump stops working at high temperature, and will automatically restart after cooling to the specified temperature;
- The water level sensor's height is adjustable to control pump operation;
- The pump stops working within 60seconds when water level is below the water level probe keeping downtime for 180 seconds, after the 180 seconds, meanwhile the water level is above the water level sensor, the pump works again;
- Rapid assessment of the pump's operation and malfunction history.



# 27-31b-



W1: Continuous running water level

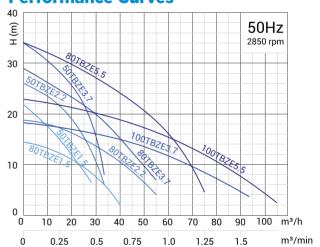
# **Material of Construction**

| Item No. | Part name          | Material  |
|----------|--------------------|---|
| 01       | Hose coupling      | Cast iron   |
| 02       | Handle             | Rubber&steel  |
| 05       | Upper cover        | Cast iron   |
| 06       | Upper support      | Cast iron   |
| 11       | Motor body         | Cast iron   |
| 13       | Pump body          | Cast iron   |
| 14       | Impeller           | High chrome alloy   |
| 16       | Inlet plate        | Ductile iron  |
| 25       | Strainer           | Steel   |
| 27       | Stator             |   |
| 28       | Rotor              | Shaft: AISI420SS  |
| 31a      | Bearing            | Ball bearing  |
| 31b      | Bearing            | Ball bearing  |
| 34       | Mechanical seal    | Sic-Sic/Carbon-Sic(≤2,2 kW);<br>Sic-Sic/Sic-Sic (≥3,7 kW) |
| 35       | Oil seal           |   |
| 47       | Cable              |   |
| 86       | AC Contactor       |   |
| 86a      | Water level sensor |   |
| 88       | Controller block   |   |

# **Performance Range**

| Model      | Outlet |     | otor<br>wer | Rated<br>current(400V) |      | ated<br>acity | Rated<br>head |      | lax<br>acity | Max<br>head | Impeller<br>passage |
|------------|--------|-----|-------------|------------------------|------|---------------|---------------|------|--------------|-------------|---------------------|
| (50Hz)     | mm     | kW  | HP          | A                      | m³/h | m³/min        | m             | m³/h | m³/min       | m           | mm                  |
| 50TBZE1.5  | 50     | 1.5 | 2           | 3.5                    | 15   | 0.25          | 15            | 27   | 0.45         | 22          | 8.5                 |
| 80TBZE1.5  | 80     | 1.5 | 2           | 3.5                    | 30   | 0.50          | 8             | 40   | 0.67         | 14.5        | 8.5                 |
| 50TBZE2.2  | 50     | 2.2 | 3           | 5.0                    | 18   | 0.30          | 20            | 33   | 0.55         | 26          | 8.5                 |
| 80TBZE2.2  | 80     | 2.2 | 3           | 5.0                    | 36   | 0.60          | 11            | 55   | 0.92         | 19          | 8.5                 |
| 50TBZE3.7  | 50     | 3.7 | 5           | 7.7                    | 12   | 0.20          | 30            | 33   | 0.55         | 34          | 8.5                 |
| 80TBZE3.7  | 80     | 3.7 | 5           | 7.7                    | 30   | 0.50          | 20            | 55   | 0.92         | 29          | 8.5                 |
| 100TBZE3.7 | 100    | 3.7 | 5           | 7.7                    | 60   | 1.0           | 11.5          | 90   | 1.50         | 18.5        | 8.5                 |
| 80TBZE5.5  | 80     | 5.5 | 7.5         | 11.4                   | 36   | 0.60          | 25            | 75   | 1.25         | 34          | 8.5                 |
| 100TBZE5.5 | 100    | 5.5 | 7.5         | 11.4                   | 60   | 1.0           | 16            | 105  | 1.75         | 23          | 8.5                 |

# **Performance Curves**



# **Dimensions and Weight**

| Model      | d   | А   | A1  | В   | D   | Н   | W1  | N.W. | G.W. | Packing dimension |  |  |
|------------|-----|-----|-----|-----|-----|-----|-----|------|------|-------------------|--|--|
| (50Hz)     | mm  | kg   | kg   | mm                |  |  |
| 50TBZE1.5  | 50  | 235 | 190 | 613 | 216 | 582 | 120 | 41   | 45   | 680x265x265       |  |  |
| 80TBZE1.5  | 80  | 235 | 190 | 620 | 216 | 582 | 120 | 41   | 45   | 680x265x265       |  |  |
| 50TBZE2.2  | 50  | 235 | 190 | 613 | 216 | 582 | 120 | 44   | 48   | 680x265x265       |  |  |
| 80TBZE2.2  | 80  | 235 | 190 | 620 | 216 | 582 | 120 | 44   | 48   | 680x265x265       |  |  |
| 50TBZE3.7  | 50  | 283 | 223 | 703 | 252 | 707 | 150 | 71   | 76   | 770x320x295       |  |  |
| 80TBZE3.7  | 80  | 283 | 223 | 703 | 252 | 707 | 150 | 71   | 76   | 770x320x295       |  |  |
| 100TBZE3.7 | 100 | 283 | 223 | 728 | 252 | 707 | 150 | 72   | 77   | 770x320x295       |  |  |
| 80TBZE5.5  | 80  | 283 | 223 | 755 | 252 | 668 | 150 | 85.5 | 92.5 | 840x350x370       |  |  |
| 100TBZE5.5 | 100 | 283 | 223 | 780 | 252 | 668 | 150 | 86.5 | 93.5 | 840x350x370       |  |  |

# TBD **SUBMERSIBLE AGITATOR PUMP**





Solidpump TBD agitator series are cast iron heavy-duty slurry / sand pumps using TBZ pumps as a base.

TBD pumps are equipped with agitators that assist smooth suction of the pumped media.

The side-flow, top-discharge design provide for motor cooling even in case the pump is operated continuously in semisubmerged condition.

TBD pumps are suitable for transferring of water with sand, bentonite slurry and are used for slurry drilling, draining of slurry contaminated water in civil engineering works, cleaning of sand pits, etc.

# **Technical Specifications**

- Capacity: up to 90 m³/h
- Head: up to 30 meters
- Power: 1.5kW to 3.7kW
- Power supply: Three phase 400 V ± 10%, 50 Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8 m
- Water temperature: up to 40°C
- Max. water depth: 25 m

### **Application**

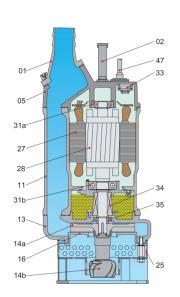
- Construction sites
- Mines and quarries
- Sand pits and sedimentation tanks at wastewater treatment plants
- Transfer of bentonite slurry and sandy sludge
- Transfer of water containing mud and sand

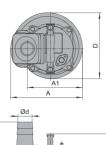
### **Optional Features**

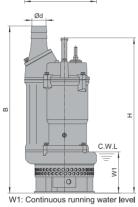
- Other voltages
- Other length of cable











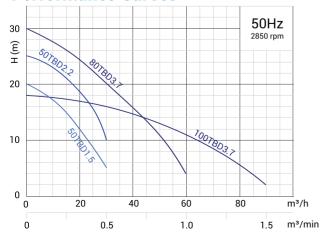
| Item No. | Part name       | Material  |
|----------|-----------------|---|
| 01       | Hose coupling   | Cast iron   |
| 02       | Handle          | Rubber&steel  |
| 05       | Upper cover     | Cast iron   |
| 11       | Motor body      | Cast iron   |
| 13       | Pump body       | Cast iron   |
| 14a      | Impeller        | High chrome alloy                                       |
| 14b      | Agitator        | High chrome alloy                                       |
| 16       | Inlet plate     | Ductile iron  |
| 25       | Strainer        | Steel   |
| 27       | Stator          |   |
| 28       | Rotor           | Shaft: AISI420SS  |
| 31a      | Bearing         | Ball bearing  |
| 31b      | Bearing         | Ball bearing  |
| 33       | Motor protector |   |
| 34       | Mechanical seal | Sic-Sic/Carbon-Sic (≤2,2kW);<br>Sic-Sic/Sic-Sic (3.7kW) |
| 35       | Oil seal        |   |
| 47       | Cable           |   |

# **Dimensions and Weight**

| Model     | d   | А   | A1  | В   | D   | Н   | W1  | N.W. | G.W. | Packing dimension |
|-----------|-----|-----|-----|-----|-----|-----|-----|------|------|-------------------|
| (50Hz)    | mm  | kg   | kg   | mm                |
| 50TBD1.5  | 50  | 235 | 173 | 557 | 216 | 522 | 135 | 37   | 41   | 610x265x265       |
| 50TBD2.2  | 50  | 235 | 173 | 557 | 216 | 522 | 135 | 40   | 44   | 610x265x265       |
| 80TBD3.7  | 80  | 283 | 208 | 636 | 252 | 642 | 165 | 64   | 69   | 710x320x295       |
| 100TBD3.7 | 100 | 283 | 208 | 661 | 252 | 642 | 165 | 65   | 70   | 710x320x295       |

# **Performance Range**

| Model<br>(50Hz) |     |     | Rated Rated capacity |     | Rated Max capacity |        |    | Max<br>head | Impeller<br>passage |    |    |
|-----------------|-----|-----|----------------------|-----|--------------------|--------|----|-------------|---------------------|----|----|
| (00112)         | mm  | kW  | HP                   | А   | m³/h               | m³/min | m  | m³/h        | m³/min              | m  | mm |
| 50TBD1.5        | 50  | 1.5 | 2                    | 3.5 | 15                 | 0.25   | 15 | 30          | 0.50                | 20 | 10 |
| 50TBD2.2        | 50  | 2.2 | 3                    | 5.0 | 18                 | 0.3    | 19 | 30          | 0.50                | 25 | 10 |
| 80TBD3.7        | 80  | 3.7 | 5                    | 7.7 | 30                 | 0.5    | 20 | 60          | 1.00                | 30 | 10 |
| 100TBD3.7       | 100 | 3.7 | 5                    | 7.7 | 60                 | 1.0    | 11 | 90          | 1.50                | 18 | 10 |



# TBDE AUTOMATIC SUBMERSIBLE AGITATOR PUMP



Solidpump TBD agitator series are cast iron heavy-duty slurry / sand pumps using TBZ pumps as a base. TBDE pumps are equipped with agitators that assist smooth suction of the pumped media.

The side-flow, top-discharge design provide for motor cooling even in case the pump is operated continuously in semisubmerged condition.

TBDE pumps are suitable for transferring of water with sand, bentonite slurry and are used for slurry drilling, draining of slurry-contaminated water in civil engineering works, cleaning of sand pits, etc.

TBDE series pumps operate automatically with the help of bulit-in intelligent control system. This system helps the end-user to achieve electricity cost reduction at the construction or industrial site.

### **Technical Specifications**

Capacity: up to 90 m³/h

Head: up to 30 meters

Power: 1.5kW to 3.7kW

Supply voltage: Three phase 400V ± 10%, 50Hz

Insulation class: FProtection class: IP68

Cable length: 8 m

■ Water temperature: up to 40°C

Max. water depth: 25 m

# **Application**

- Construction sites
- Mines and quarries
- Sand pits and sedimentation tanks at wastewater treatment plants
- Transfer of bentonite slurry and sandy sludge
- Transfer of water containing mud and sand

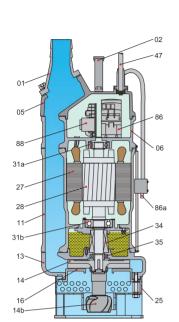
### **Optional Features**

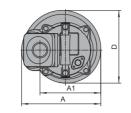
- Other voltages
- Other length of cable

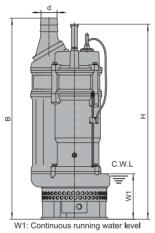
# **Key features of TBDE intelligent control system**

- Protects against reverse phase, ensuring correct impeller rotation;
- Protects against open phase or impeller jam, thus prevents accidental damage;
- Automatically stops the pump in case of overload, abnormal voltage with the recovery after 5 minutes;
- The pump stops working at high temperature, and will automatically restart after cooling to the specified temperature;
- The water level sensor's height is adjustable to control pump operation;
- The pump stops working within 60seconds when water level is below the water level probe keeping downtime for 180 seconds, after the 180 seconds, meanwhile the water level is above the water level sensor, the pump works again;
- Rapid assessment of the pump's operation and malfunction history.









**Material of Construction** 

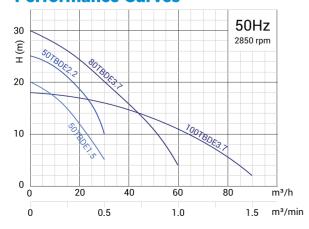
| Item No. | Part name          | Material  |
|----------|--------------------|---|
| 01       | Hose coupling      | Cast iron   |
| 02       | Handle             | Rubber&steel  |
| 05       | Upper cover        | Cast iron   |
| 06       | Upper support      | Cast iron   |
| 11       | Motor body         | Cast iron   |
| 13       | Pump body          | Cast iron   |
| 14a      | Impeller           | High chrome alloy                                       |
| 14b      | Agitator           | High chrome alloy                                       |
| 16       | Inlet plate        | Ductile iron  |
| 25       | Strainer           | Steel   |
| 27       | Stator             |   |
| 28       | Rotor              | Shaft: AISI420SS  |
| 31a      | Bearing            | Ball bearing  |
| 31b      | Bearing            | Ball bearing  |
| 34       | Mechanical seal    | Sic-Sic/Carbon-Sic (≤2,2kW);<br>Sic-Sic/Sic-Sic (3.7kW) |
| 35       | Oil seal           |   |
| 47       | Cable              |   |
| 86       | AC Contactor       |   |
| 86a      | Water level sensor |   |
| 88       | Controller block   |   |

# **Dimensions and Weight**

| Model      | d   | Α   | A1  | В   | D   | Н   | W1  | N.W. | G.W. | Packing dimension |
|------------|-----|-----|-----|-----|-----|-----|-----|------|------|-------------------|
| (50Hz)     | mm  | kg   | kg   | mm                |
| 50TBDE1.5  | 50  | 235 | 173 | 629 | 216 | 594 | 135 | 43   | 47   | 680x265x265       |
| 50TBDE2.2  | 50  | 235 | 173 | 629 | 216 | 594 | 135 | 46   | 50   | 680x265x265       |
| 80TBDE3.7  | 80  | 283 | 208 | 714 | 252 | 720 | 165 | 72   | 77   | 770x320x295       |
| 100TBDE3.7 | 100 | 283 | 208 | 739 | 252 | 720 | 165 | 73   | 78   | 770x320x295       |

# **Performance Range**

| Model<br>(50Hz) | Model Outlet Motor powe |     | power | Rated Rated capacity |      | Rated<br>head | I Max Capacity |      |        | Impeller<br>passage |    |
|-----------------|-------------------------|-----|-------|----------------------|------|---------------|----------------|------|--------|---------------------|----|
| (00112)         | mm                      | kW  | HP    | А                    | m³/h | m³/min        | m              | m³/h | m³/min | m                   | mm |
| 50TBDE1.5       | 50                      | 1.5 | 2     | 3.5                  | 15   | 0.25          | 15             | 30   | 0.50   | 20                  | 10 |
| 50TBDE2.2       | 50                      | 2.2 | 3     | 5.0                  | 18   | 0.3           | 19             | 30   | 0.50   | 25                  | 10 |
| 80TBDE3.7       | 80                      | 3.7 | 5     | 7.7                  | 30   | 0.5           | 20             | 60   | 1.0    | 30                  | 10 |
| 100TBDE3.7      | 100                     | 3.7 | 5     | 7.7                  | 60   | 1.0           | 11             | 90   | 1.50   | 18                  | 10 |



# TBS SUBMERSIBLE SAND/SLURRY AGITATOR PUMP





Heavy duty TBS-series sand / slurry pumps with 4-pole motor insure reliable operation and extended working period under rough conditions.

TBS pumps equipped with high-chrome alloy impeller combined with agitator are suitable for transferring of water with sand and slurry and are used in mining, construction and municipal wastewater treatment applications for cleaning of sand pits, bottom deepening, pumping of water containing great amount of slurry, sand and abrasive particles.

# **Technical Specifications**

Capacity: up to 372 m³/h

Head: up to 32 meters

■ Discharge: 80 mm to 200 mm

Power: 4kW to 22kW

Power supply: Three phase 380V ± 10%, 50Hz

Insulation class: FProtection class: IP68Cable length: 8 m

Water temperature: up to 40°C

Max. water depth: 15 m

# **Application**

- Mines and quarries
- Construction sites
- Wastewater treatment plants
- Transfer of water high in slurry, sand and abrasive particles
- Bottom deepening
- Cleaning of sand pits, sludge tanks and tailings' ponds

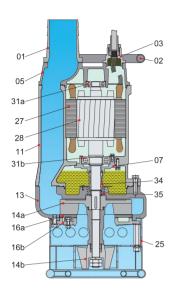
### **Optional Features**

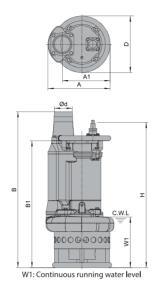
- Other voltages
- Other length of cable

### **Dimensions and Weight**

| Model    | d   | А   | A1  | В    | B1   | D   | Н    | W1  | N.W.  | G.W. | Packing dimension |
|----------|-----|-----|-----|------|------|-----|------|-----|-------|------|-------------------|
| (50Hz)   | mm  | mm  | mm  | mm   | mm   | mm  | mm   | mm  | kg    | kg   | mm                |
| 80TBS4   | 80  | 350 | 260 | 816  | 678  | 326 | 730  | 250 | 108.5 | 119  | 395x385x885       |
| 100TBS6  | 100 | 415 | 305 | 844  | 682  | 373 | 730  | 250 | 141   | 151  | 470x410x985       |
| 150TBS9  | 150 | 434 | 324 | 889  | 727  | 407 | 776  | 250 | 171   | 183  | 470x470x1045      |
| 200TBS15 | 200 | 484 | 352 | 1121 | 889  | 457 | 980  | 295 | 260   | 278  | 540x500x1220      |
| 200TBS22 | 200 | 578 | 442 | 1245 | 1015 | 528 | 1200 | 330 | 408   | 434  | 740x570x1460      |



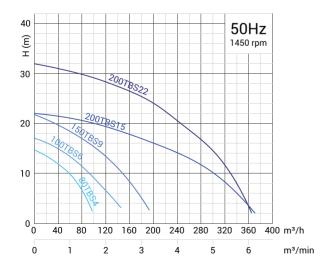




| Item No. | Part name       | Material                                   |
|----------|-----------------|--|
| 01       | Hose coupling   | Cast iron                                  |
| 02       | Handle          | Steel                                      |
| 05       | Upper cover     | Cast iron                                  |
| 07       | Bearing house   | Cast iron                                  |
| 11       | Motor body      | Cast iron                                  |
| 13       | Pump body       | Cast iron                                  |
| 14a      | Impeller        | High chrome alloy                          |
| 14b      | Agitator        | High chrome alloy                          |
| 16a      | Inlet plate     | High chrome alloy                          |
| 16b      | Inlet plate     | Cast iron                                  |
| 25       | Strainer        | Steel                                      |
| 27       | Stator          |  |
| 28       | Rotor           | Shaft: AISI420SS                           |
| 31a      | Bearing         | Ball bearing                               |
| 31b      | Bearing         | Ball bearing                               |
| 34       | Mechanical seal | Sic-Sic/Sic-Sic;<br>Tc-Sic/Sic-Sic (>15kW) |
| 35       | Oil seal        |  |
| 47       | Cable           |  |

# **Performance Range**

| Model<br>(50Hz) | Outlet | power |      | Starting<br>method | Rated current Rated capacity (380V) |        |      | Rated<br>head | Max c  | apacity | Max<br>head | Impeller<br>passage |
|-----------------|--------|-------|------|--------------------|-------------------------------------|--------|------|---------------|--------|---------|-------------|---------------------|
|                 | mm     | kW    | W HP | А                  | m³/h                                | m³/min | m    | m³/h          | m³/min | m       | mm          |                     |
| 80TBS4          | 80     | 4     | 5.5  | D.O.L.             | 10.2                                | 60     | 1.0  | 10            | 99     | 1.65    | 14.8        | 30                  |
| 100TBS6         | 100    | 6     | 8    | D.O.L.             | 13.8                                | 90     | 1.50 | 10            | 144    | 2.40    | 16.9        | 30                  |
| 150TBS9         | 150    | 9     | 12   | D.O.L.             | 19.5                                | 100    | 1.67 | 15            | 192    | 3.20    | 21.5        | 30                  |
| 200TBS15        | 200    | 15    | 20   | D.O.L.             | 30.1                                | 200    | 3.33 | 16            | 372    | 6.20    | 22          | 30                  |
| 200TBS22        | 200    | 22    | 30   | Star-Delta         | 42                                  | 200    | 3.33 | 24            | 360    | 6       | 32          | 30                  |



# TTZ SUBMERSIBLE AGITATOR PUMP



TTZ-series agitator pumps handle smooth passage of slime and sandy sludge.

TTZ pumps feature 4-pole motor, high-chrome alloy impeller combined with agitator, which ensure reliable operation and extended working period.

### **Technical Specifications**

- Capacity: up to 114 m³/h
- Head: up to 15 meters
- Discharge: from 80 mm to 100 mm
- Power: 2.2kW to 3.7kW
- Supply supply: Three phase 400 V ± 10%, 50 Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8 m
- Water temperature: up to 40°C
- Max. water depth: 20 m

# **Application**

- Industrial and construction sites
- Mines and quarries
- Wastewater treatment plants
- Transfer of sandy sludge and slime
- Transfer of water containing mud and sand

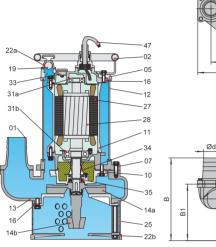
### **Optional Features**

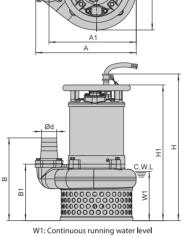
- Other voltages
- Other length of cable





| Item No. | Part name        | Material          |
|----------|------------------|-------------------|
| 01       | Hose coupling    | Cast iron         |
| 02       | Handle           | Steel             |
| 05       | Upper cover      | Cast iron         |
| 06       | Up-bearing house | Cast iron         |
| 07       | Bearing house    | Cast iron         |
| 10       | Seal house       | Cast iron         |
| 11       | Motor body       | Cast iron         |
| 12       | Outer casing     | Steel             |
| 13       | Pump body        | Cast iron         |
| 14a      | Impeller         | High chrome alloy |
| 14b      | Agitator         | High chrome alloy |
| 16       | Inlet plate      | Ductile iron      |
| 19       | Check value      | NBR               |
| 22a      | Valve seat       | Cast iron         |
| 22b      | Seat assembly    | Cast iron         |
| 25       | Strainer         | Steel             |
| 27       | Stator           |                   |
| 28       | Rotor            | Shaft: AISI420SS  |
| 31a      | Bearing          | Ball bearing      |
| 31b      | Bearing          | Ball bearing      |
| 33       | Motor protector  |                   |
| 34       | Mechanical seal  |                   |
| 35       | Oil seal         |                   |
| 47       | Cable            |                   |



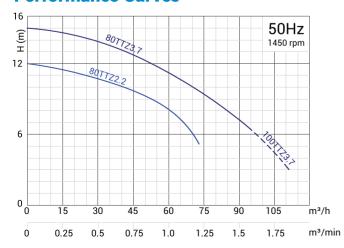


# **Dimensions and Weight**

|     | odel   | d   | А   | A1  | В   | B1  | D   | Н   | H1  | W1  | N.W. | G.W. | Packing dimension |
|-----|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-------------------|
| (50 | OHz)   | mm  | kg   | kg   | mm                |
| 80T | TZ2.2  | 80  | 469 | 408 | 378 | 257 | 371 | 685 | 625 | 230 | 92   | 99   | 765x405x495       |
| 80T | TZ3.7  | 80  | 469 | 408 | 378 | 257 | 371 | 750 | 690 | 230 | 108  | 116  | 830x405x495       |
| 100 | TTZ3.7 | 100 | 469 | 408 | 392 | 257 | 371 | 750 | 690 | 230 | 108  | 116  | 830x405x495       |

# **Performance Range**

| Model<br>(50Hz) | Outlet | utlet Motor power F |    | Rated current (400V) Rated capacity |      | Rated<br>head | Max c | apacity | Max<br>head | Impeller<br>passage |    |
|-----------------|--------|---------------------|----|-------------------------------------|------|---------------|-------|---------|-------------|---------------------|----|
| (00112)         | mm     | kW                  | HP | Α                                   | m³/h | m³/min        | m     | m³/h    | m³/min      | m                   | mm |
| 80TTZ2.2        | 80     | 2.2                 | 3  | 5.5                                 | 36   | 0.6           | 10    | 72      | 1.2         | 12                  | 20 |
| 80TTZ3.7        | 80     | 3.7                 | 5  | 8.1                                 | 36   | 0.6           | 13.5  | 86.4    | 1.44        | 15                  | 20 |
| 100TTZ3.7       | 100    | 3.7                 | 5  | 8.1                                 | 60   | 1.0           | 11    | 114     | 1.9         | 15                  | 20 |



# MH 22-45 kW **HIGH HEAD DEWATERING PUMP**



MH-series submersible pumps with a strong construction are designed to withstand the high pressure during deep well dewatering.

Motor and pump casing is made of rigid cast iron for long-lasting durability.

Maximum submersion depth is greatly increased due to special mechanical seal resistant to high pressure.

Motor is cooled by the pumped water for safe operation even in case the pump is operated continuously in semisubmerged condition.

Space saving design due to a top outlet.

Discharge from 100mm to 200mm, motor 22kW to 45kW. Pumps are equipped with dry type submersible induction motors (2 poles).

### **Technical Specifications**

Capacity: up to 372 m³/hHead: up to 90 meters

■ Power: 22kW to 45kW

Power supply: Three phase 400 V ± 10%, 50 Hz

Insulation class: FProtection class: IP68Cable length: 20 m

Water temperature: up to 40°C

Max. water depth: 30 m

# **Application**

- Mining and industrial sites
- Construction sites
- Deep-well and high-head dewatering
- Drainage and contaminated water
- General pumping purposes

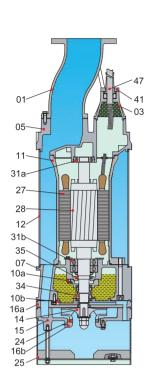
# **Optional Features**

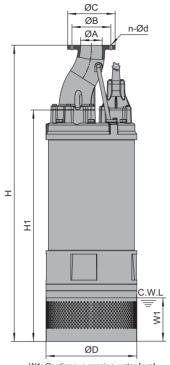
- Other voltages
- Other length of cable

### **Dimensions and Weight**

| Model   | А   | В   | С   | n <b>-</b> Ød | D   | Н    | H1   | W1  | N.W. | G.W. | Packing dimension |
|---------|-----|-----|-----|---------------|-----|------|------|-----|------|------|-------------------|
| (50Hz)  | mm  | mm  | mm  | mm            | mm  | mm   | mm   | mm  | kg   | kg   | mm                |
| 100MH22 | 100 | 180 | 220 | 8-Ø17.5       | 420 | 1374 | 1072 | 240 | 370  | 410  | 620x740x1540      |
| 100MH30 | 100 | 180 | 220 | 8-Ø17.5       | 420 | 1374 | 1072 | 240 | 375  | 415  | 620x740x1540      |
| 150MH22 | 150 | 240 | 285 | 8-Ø22         | 420 | 1434 | 1082 | 250 | 385  | 425  | 620x740x1600      |
| 150MH30 | 150 | 240 | 285 | 8-Ø22         | 420 | 1434 | 1082 | 250 | 390  | 430  | 620x740x1600      |
| 150MH37 | 150 | 240 | 285 | 8-Ø22         | 530 | 1424 | 1072 | 180 | 570  | 615  | 680x740x1650      |
| 150MH45 | 150 | 240 | 285 | 8-Ø22         | 530 | 1424 | 1072 | 180 | 575  | 620  | 680x740x1650      |
| 200MH37 | 200 | 295 | 340 | 12-Ø22        | 530 | 1474 | 1072 | 180 | 575  | 625  | 680x740x1700      |
| 200MH45 | 200 | 295 | 340 | 12-Ø22        | 530 | 1474 | 1072 | 180 | 580  | 630  | 680x740x1700      |







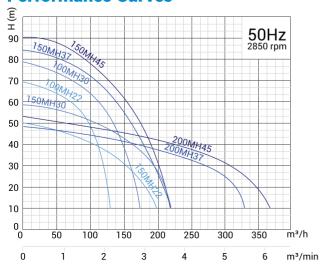
W1: Continuous running water level

| Item No. | Part name       | Material          |
|----------|-----------------|-------------------|
| 01       | Hose coupling   | Ductile iron      |
| 03       | Terminal box    | Cast iron         |
| 05       | Upper cover     | Cast iron         |
| 07       | Bearing house   | Cast iron         |
| 10a      | Seal bracket    | Cast iron         |
| 10b      | Seal bracket    | Cast iron         |
| 11       | Motor body      | Cast iron         |
| 12       | Outer casing    | Steel             |
| 14       | Impeller        | High chrome alloy |
| 15       | Diffuser        | Ductile iron      |
| 16a      | Inlet plate     | Ductile iron      |
| 16b      | Inlet plate     |                   |
| 24       | Neck ring       | High chrome alloy |
| 25       | Strainer        | AISI304SS         |
| 27       | Stator          |                   |
| 28       | Rotor           | Shaft: AISI420SS  |
| 31a      | Bearing         | Ball bearing      |
| 31b      | Bearing         | Ball bearing      |
| 34       | Mechanical seal | Tc-Sic/Sic-Sic    |
| 35       | Oil seal        |                   |
| 41       | Shim            | Cast iron         |
| 47       | Cable           |                   |

# **Performance Range**

#### \* Starting method: Star-Delta

|                 | _      |             |    |                      |      |               |       |         |             |                     |    |
|-----------------|--------|-------------|----|----------------------|------|---------------|-------|---------|-------------|---------------------|----|
| Model<br>(50Hz) | Outlet | Motor power |    | Rated Rated capacity |      | Rated<br>head | Max c | apacity | Max<br>head | Impeller<br>passage |    |
| (30112)         | mm     | kW          | HP | А                    | m³/h | m³/min        | m     | m³/ч    | m³/min      | m                   | mm |
| 100MH22         | 100    | 22          | 30 | 41.5                 | 66   | 1.1           | 60    | 130     | 2.17        | 68                  | 6  |
| 100MH30         | 100    | 30          | 40 | 54                   | 72   | 1.2           | 70    | 170     | 2.83        | 78                  | 6  |
| 150MH22         | 150    | 22          | 30 | 41.5                 | 120  | 2.0           | 37    | 200     | 3.33        | 50                  | 15 |
| 150MH30         | 150    | 30          | 40 | 54                   | 140  | 2.33          | 45    | 220     | 3.37        | 58                  | 15 |
| 150MH37         | 150    | 37          | 50 | 66                   | 60   | 1.0           | 80    | 220     | 3.67        | 83                  | 6  |
| 150MH45         | 150    | 45          | 60 | 80                   | 84   | 1.4           | 80    | 220     | 3.67        | 90                  | 6  |
| 200MH37         | 200    | 37          | 50 | 66                   | 216  | 3.6           | 35    | 330     | 5.5         | 48                  | 20 |
| 200MH45         | 200    | 45          | 60 | 80                   | 270  | 4.5           | 35    | 372     | 6.2         | 53                  | 20 |



# MH 55-110 kW **HIGH HEAD DEWATERING PUMP**



MH-series submersible pumps with a strong construction are designed to withstand the high pressure during deep well dewatering.

Motor and pump casing is made of rigid cast iron for long-lasting durability.

Maximum submersion depth is greatly increased due to special mechanical seal resistant to high pressure.

Motor is cooled by the pumped water for safe operation even in case the pump is operated continuously in semisubmerged condition. Space saving design due to a top outlet.

Discharge from 150mm to 200mm, motor 55kW to 110kW. Pump is equipped with dry type submersible induction motor (2 poles).

### **Technical Specifications**

Capacity: up to 408 m³/h
 Head: up to 184 meters
 Power: 55kW to 110kW

Supply voltage: Three Phase 400V± 10%,50Hz

Insulation class: FProtection class: IP68Cable length: 8 m

■ Water temperature: up to 40°C

Max. water depth: 20 m

# **Application**

- Mining and industrial sites
- Construction sites
- Deep-well and high-head dewatering
- Drainage and contaminated water
- General pumping purposes

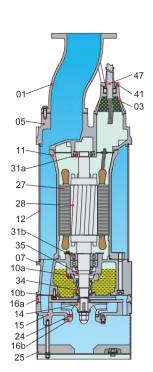
# **Optional Features**

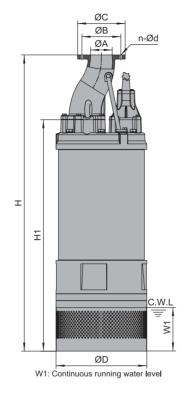
- Other voltages
- Other length of cable

### **Dimensions and weight**

| Model    | А   | В   | С   | n <b>-</b> Ød | D   | Н    | H1   | W1  | N.W. | G.W. | Packing dimension |
|----------|-----|-----|-----|---------------|-----|------|------|-----|------|------|-------------------|
| (50Hz)   | mm  | mm  | mm  | mm            | mm  | mm   | mm   | mm  | kg   | kg   | mm                |
| 150MH55  | 150 | 240 | 285 | 8-Ø22         | 550 | 1630 | 1280 | 200 | 830  | 880  | 1760x620x940      |
| 150MH75  | 150 | 240 | 285 | 8-Ø22         | 550 | 1630 | 1280 | 200 | 830  | 880  | 1760x620x940      |
| 150MH90  | 150 | 250 | 300 | 8-Ø26         | 592 | 1687 | 1282 | 200 | 1100 | 1160 | 1825x665x965      |
| 150MH110 | 150 | 250 | 300 | 8-Ø26         | 592 | 1687 | 1282 | 200 | 1130 | 1190 | 1825x665x965      |
| 200MH55  | 200 | 295 | 340 | 12-Ø22        | 550 | 1680 | 1280 | 200 | 880  | 930  | 1810x620x940      |
| 200MH75  | 200 | 295 | 340 | 12-Ø22        | 550 | 1680 | 1280 | 200 | 880  | 930  | 1810x620x940      |
| 200MH90  | 200 | 295 | 340 | 12-Ø22        | 592 | 1687 | 1282 | 200 | 1120 | 1160 | 1825x665x965      |
| 200MH110 | 200 | 295 | 340 | 12-Ø22        | 592 | 1687 | 1282 | 200 | 1150 | 1210 | 1825x665x965      |





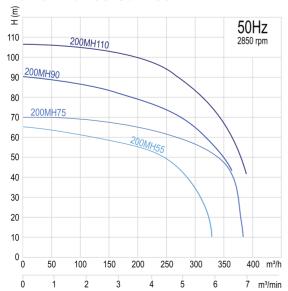


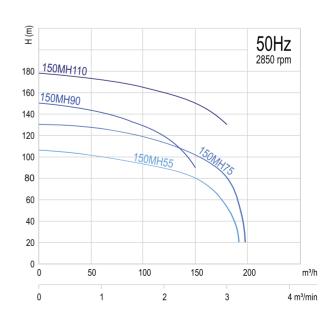
| Item No. | Part name       | Material          |
|----------|-----------------|-------------------|
| 01       | Hose coupling   | Ductile iron      |
| 03       | Terminal box    | Cast iron         |
| 05       | Upper cover     | Cast iron         |
| 07       | Bearing house   | Cast iron         |
| 10a      | Seal bracket    | Cast iron         |
| 10b      | Seal bracket    | Cast iron         |
| 11       | Motor body      | Cast iron         |
| 12       | Outer casing    | Steel             |
| 14       | Impeller        | High chrome alloy |
| 15       | Diffuser        | Ductile iron      |
| 16a      | Inlet plate     | Ductile iron      |
| 16b      | Inlet plate     |                   |
| 24       | Neck ring       | High chrome alloy |
| 25       | Strainer        | AISI304SS         |
| 27       | Stator          |                   |
| 28       | Rotor           | Shaft: AISI420SS  |
| 31a      | Bearing         | Ball bearing      |
| 31b      | Bearing         | Ball bearing      |
| 34       | Mechanical seal | Tc-Sic/Sic-Sic    |
| 35       | Oil seal        |                   |
| 41       | Shim            | Cast iron         |
| 47       | Cable           |                   |

# **Performance Range**

#### \* Starting method: Star-Delta

| Model<br>(50Hz) |     |     | Rated Rated capacity |     | Rated<br>head | Max ca | apacity | Max<br>head | Impeller<br>passage |     |    |
|-----------------|-----|-----|----------------------|-----|---------------|--------|---------|-------------|---------------------|-----|----|
|                 | mm  | kW  | HP                   | А   | m³/h          | m³/min | m       | m³/h        | m³/min              | m   | mm |
| 150MH55         | 150 | 55  | 75                   | 98  | 90            | 1.5    | 95      | 192         | 3.2                 | 105 | 8  |
| 150MH75         | 150 | 75  | 100                  | 132 | 90            | 1.5    | 120     | 198         | 3.3                 | 130 | 8  |
| 150MH90         | 150 | 90  | 120                  | 162 | 120           | 2.0    | 120     | 150         | 2.5                 | 155 | 10 |
| 150MH110        | 150 | 110 | 150                  | 198 | 120           | 2.0    | 150     | 180         | 3.0                 | 177 | 10 |
| 200MH55         | 200 | 55  | 75                   | 98  | 240           | 4.0    | 50      | 330         | 5.5                 | 65  | 20 |
| 200MH75         | 200 | 75  | 100                  | 132 | 270           | 4.5    | 60      | 390         | 6.5                 | 70  | 20 |
| 200MH90         | 200 | 90  | 120                  | 162 | 270           | 4.5    | 70      | 360         | 6.0                 | 90  | 20 |
| 200MH110        | 200 | 110 | 150                  | 198 | 270           | 4.5    | 90      | 390         | 6.5                 | 107 | 20 |





# TSM SUBMERSIBLE DRAINAGE PUMP



TSM series Solidpump are compact, high-performance durable 1-phase submersible pumps used for handling abrasive and/or corrosive liquids at the tough job sites, including mines, industries, public utilities and construction sites.

The pump body and parts in contact with water are built of cast iron or stainless steel (at the customer's option). Depending on application, pumps are equipped with semi-open impeller made of high-chrome alloy or stainless steel.

Effective motor cooling due to execution of discharge channel integrated into the motor housing. Discharge outlet from 50mm to 80mm, Motor from 0,25kW to 1,5kW. Hermetically sealed motors are equipped with build-in thermal protection.

### **Technical Specifications**

Capacity: up to 42 m³/h

■ Head: up to 21 m

Power: 0.25 kW to 1,5kW

■ Power supply: single phase 220 V ± 10%, 50 Hz

Insulation class: FProtection class: IP68

■ Water temperature: up to 40° C

Max. water depth:

TSM  $0.25 \sim 0.75$  kW: 10 m; TSM 1.5 kW: 25 m

# **Application**

- Construction sites
- Mining and industrial sites
- Drainage and contaminated water
- General pumping purposes

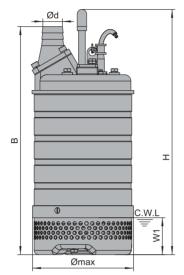
# **Optional Features**

- Other voltages
- The length of cable is optional





# 01 05a 05b 05b 12 31a 11 27 28 31b 07 34 10 35



W1: Continuous running water level

# **Material of Construction**

| Item No. | Part name        | Material  |  |  |  |  |
|----------|------------------|---|--|--|--|--|
| 01*      | Hose coupling    | Cast iron   |  |  |  |  |
| 02*      | Handle           | Rubber&steel  |  |  |  |  |
| 05a*     | Upper cover      | Cast iron   |  |  |  |  |
| 05b*     | Upper cover      | Cast iron   |  |  |  |  |
| 06       | Up-bearing house | Cast iron   |  |  |  |  |
| 07*      | Bearing house    | Cast iron   |  |  |  |  |
| 10*      | Seal bracket     | Cast iron   |  |  |  |  |
| 11       | Motor casing     | Stainless steel   |  |  |  |  |
| 12       | Outer casing     | AISI304SS   |  |  |  |  |
| 14*      | <b>I</b> mpeller | High chrome alloy   |  |  |  |  |
| 15*      | Diffuser         | Ductile iron  |  |  |  |  |
| 25*      | Strainer         | Steel   |  |  |  |  |
| 27       | Stator           |   |  |  |  |  |
| 28       | Rotor            | Shaft: AISI420SS  |  |  |  |  |
| 31a      | Bearing          | Ball bearing  |  |  |  |  |
| 31b      | Bearing          | Ball bearing  |  |  |  |  |
| 32       | Capacitor        | (Single phase only)   |  |  |  |  |
| 33       | Motor protector  |   |  |  |  |  |
| 34       | Mechanical seal  | Sic-Sic/Carbon-Sic (≤2.2kW);<br>Sic-Sic/Sic-Sic (3.7-5.5kW) |  |  |  |  |
| 35       | Oil seal         |   |  |  |  |  |
| 47       | Cable            | Length 15 m H07RN-F   |  |  |  |  |

<sup>\*</sup> Optional: AIS304SS

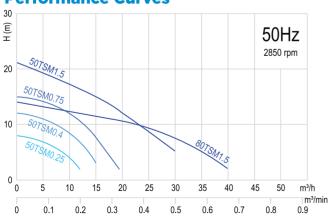
# **Performance Range**

1.5-5.5kW

| Model        | Outlet | Motor | power | Voltage | Rated current | Rated | capacity | Rated<br>head | Мах с | apacity | Max<br>head | Impeller<br>passage | N.W | G.W | Packing<br>dimension |
|--------------|--------|-------|-------|---------|---------------|-------|----------|---------------|-------|---------|-------------|---------------------|-----|-----|----------------------|
| (50Hz)       | mm     | kW    | HP    | V       | Α             | m³/h  | m³/min   | m             | m³/h  | m³/min  | m           | mm                  | kg  | kg  | mm                   |
| 50TSM0.25(F) | 50     | 0.25  | 0.35  | 220     | 2.0           | 6     | 0.1      | 7             | 12    | 0.2     | 8           | 6                   | 14  | 15  | 385x225x250          |
| 50TSM0.4(F)  | 50     | 0.4   | 0.55  | 220     | 3.0           | 8     | 0.13     | 10            | 14.5  | 0.24    | 12          | 6                   | 15  | 16  | 385x225x250          |
| 50TSM0.75(F) | 50     | 0.75  | 1     | 220     | 5.0           | 10    | 0.17     | 12            | 19.5  | 0.32    | 15          | 6                   | 17  | 18  | 405x225x250          |
| 50TSM1.5(F)  | 50     | 1.5   | 2     | 220     | 10            | 15    | 0.25     | 15            | 30    | 0.5     | 21          | 8.5                 | 37  | 41  | 660x270x315          |
| 80TSM1.5(F)  | 80     | 1.5   | 2     | 220     | 10            | 27    | 0.45     | 9             | 42    | 0.7     | 14          | 8.5                 | 37  | 41  | 660x270x315          |

F: With float switch

### **Performance Curves**



# **Dimensions**

| Model        | н   | В   | Ømax | W1 |
|--------------|-----|-----|------|----|
| 50TSM0.25(F) | 345 | 342 | 184  | 50 |
| 50TSM0.4(F)  | 345 | 342 | 184  | 50 |
| 50TSM0.75(F) | 365 | 362 | 184  | 50 |
| 50TSM1.5(F)  | 582 | 560 | 240  | 87 |
| 80TSM1.5(F)  | 582 | 567 | 240  | 87 |

B: The height from pump's bottom to outlet H: The height from pump's bottom to handle's top

# TS STAINLESS STEEL DRAINAGE PUMP



Submersible stainless steel TS series pumps are used for transportation of chemically aggressive and abrasive liquids at mining and industrial sites. All parts of pumps in contact with water are made of stainless steel.

Effective motor cooling due to execution of discharge channel integrated into the motor housing.

Discharge outlet from 50mm to 150mm, Motor from 1,5kW to 11kW. Hermetically sealed motors are equipped with build-in thermal protection.

### **Technical Specifications**

Capacity: up to 150 m³/h

■ Head: up to 50 m

Power: 1.5 kW to 11kW

Power supply: three phase 400 V ± 10%, 50 Hz

Insulation class: FProtection class: IP68

Water temperature: up to 40° C

Max. water depth: 25 m

# **Application**

- Industrial sites
- Mining sites and guarries
- Drainage and contaminated water
- Wastewater treatment plants

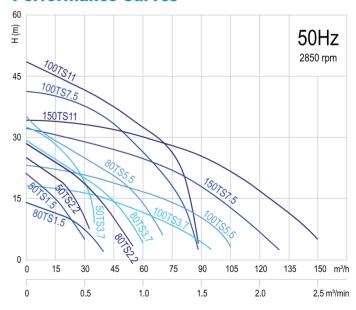
### **Optional Features**

- Other voltages
- The length of cable is optional

#### **Dimensions**

| Model       | н   | В   | Ømax | W1  |
|-------------|-----|-----|------|-----|
| 50TS1.5     | 563 | 540 | 240  | 87  |
| 50TS1.5(F)  | 563 | 547 | 240  | 87  |
| 80TS1.5     | 563 | 540 | 240  | 87  |
| 80TS1.5(F)  | 563 | 547 | 240  | 87  |
| 50TS2.2     | 613 | 590 | 240  | 87  |
| 50TS2.2(F)  | 613 | 597 | 240  | 87  |
| 80TS2.2     | 613 | 590 | 240  | 87  |
| 80TS2.2(F)  | 613 | 597 | 240  | 87  |
| 50TS3.7     | 515 | 591 | 300  | 76  |
| 50TS3.7(F)  | 515 | 591 | 300  | 76  |
| 80TS3.7     | 515 | 616 | 300  | 76  |
| 80TS3.7(F)  | 555 | 631 | 300  | 76  |
| 100TS3.7    | 555 | 656 | 300  | 76  |
| 100TS3.7(F) | 565 | 641 | 300  | 76  |
| 80TS5.5     | 565 | 641 | 300  | 76  |
| 80TS5.5(F)  | 565 | 666 | 300  | 76  |
| 100TS5.5    | 605 | 681 | 300  | 76  |
| 100TS5.5(F) | 605 | 706 | 300  | 76  |
| 100TS7.5    | 700 | 810 | 355  | 142 |
| 150TS7.5    | 700 | 810 | 355  | 142 |
| 100TS11     | 745 | 855 | 355  | 142 |
| 150TS11     | 745 | 855 | 355  | 142 |

#### **Performance Curves**



B: The height from pumps bottom to outlet H: The height from pumps bottom to handles top



# -02 01-33 05a 05b 06 12~ 31a-11**m** 27 28-31b-07-I 34 10\ 35-

Ømax
W1: Continuous running water level

# **Material of Construction**

| Item No. | Part name        | Material   |
|----------|------------------|--|
| 01       | Hose coupling    | AISI304SS  |
| 02       | Handle           | Rubber&steel   |
| 05a      | Upper cover      | AISI304SS  |
| 05b      | Upper cover      | AISI304SS  |
| 06       | Up-bearing house | AISI304SS  |
| 07       | Bearing house    | AISI304SS  |
| 10       | Seal bracket     | AISI304SS  |
| 11       | Motor casing     | Stainless steel  |
| 12       | Outer casing     | AISI304SS  |
| 14       | Impeller         | AISI304SS  |
| 15       | Diffuser         | AISI304SS  |
| 25       | Strainer         | AISI304SS  |
| 27       | Stator           |  |
| 28       | Rotor            | Shaft: AISI420SS   |
| 31a      | Bearing          | Ball bearing   |
| 31b      | Bearing          | Ball bearing   |
| 32       | Capacitor        | (Single phase only)*   |
| 33       | Motor protector  |  |
| 34       | Mechanical seal  | Sic-Sic/ Carbon-Sic (≤2.2 kW);<br>Sic-Sic/Sic-Sic (3.7-5.5 kW) |
| 35       | Oil seal         |  |
| 47       | Cable            | Length 15 m H07RN-F  |

\*- 1,5 kW pumps can be manufactured 220V on request

# **Performance Range**

|                 |        |       | _     |         |               |       |          |               |       |         |             |                     |     |     |                      |
|-----------------|--------|-------|-------|---------|---------------|-------|----------|---------------|-------|---------|-------------|---------------------|-----|-----|----------------------|
| Model<br>(50Hz) | Outlet | Motor | power | Voltage | Rated current | Rated | capacity | Rated<br>head | Мах с | apacity | Max<br>head | Impeller<br>passage | N.W | G.W | Packing<br>dimension |
| (30HZ)          | mm     | kW    | HP    | V       | А             | m³/h  | m³/min   | m             | m³/h  | m³/min  | m           | mm                  | kg  | kg  | mm                   |
| 50TS1.5         | 50     | 1.5   | 2     | 400     | 3.5           | 15    | 0.25     | 15            | 30    | 0.5     | 21          | 8.5                 | 37  | 41  | 620x270x315          |
| 50TS1.5(F)      | 50     | 1.5   | 2     | 400     | 3.5           | 15    | 0.25     | 15            | 30    | 0.5     | 21          | 8.5                 | 39  | 43  | 690x270x315          |
| 80TS1.5         | 80     | 1.5   | 2     | 400     | 3.5           | 27    | 0.45     | 9             | 42    | 0.7     | 14          | 8.5                 | 37  | 41  | 620x270x315          |
| 80TS1.5(F)      | 80     | 1.5   | 2     | 400     | 3.5           | 27    | 0.45     | 9             | 42    | 0.7     | 14          | 8.5                 | 39  | 43  | 690x270x315          |
| 50TS2.2         | 50     | 2.2   | 3     | 400     | 5.0           | 20    | 0.33     | 18            | 32    | 0.53    | 25          | 8.5                 | 40  | 44  | 620x270x315          |
| 50TS2.2(F)      | 50     | 2.2   | 3     | 400     | 5.0           | 20    | 0.33     | 18            | 32    | 0.53    | 25          | 8.5                 | 42  | 46  | 690x270x315          |
| 80TS2.2         | 80     | 2.2   | 3     | 400     | 5.0           | 36    | 0.6      | 11            | 55    | 0.92    | 18.5        | 8.5                 | 40  | 44  | 620x270x315          |
| 80TS2.2(F)      | 80     | 2.2   | 3     | 400     | 5.0           | 36    | 0.6      | 11            | 55    | 0.92    | 18.5        | 8.5                 | 42  | 46  | 690x270x315          |
| 50TS3.7         | 50     | 3.7   | 5     | 400     | 7.7           | 18    | 0.3      | 26            | 36    | 0.6     | 32          | 8.5                 | 58  | 64  | 670x320x345          |
| 50TS3.7(F)      | 50     | 3.7   | 5     | 400     | 7.7           | 18    | 0.3      | 26            | 36    | 0.6     | 32          | 8.5                 | 60  | 66  | 730x320x345          |
| 80TS3.7         | 80     | 3.7   | 5     | 400     | 7.7           | 35    | 0.58     | 18.5          | 60    | 1.0     | 29          | 8.5                 | 58  | 64  | 670x320x345          |
| 80TS3.7(F)      | 80     | 3.7   | 5     | 400     | 7.7           | 35    | 0.58     | 18.5          | 60    | 1.0     | 29          | 8.5                 | 60  | 66  | 730x320x345          |
| 100TS3.7        | 100    | 3.7   | 5     | 400     | 7.7           | 60    | 1.0      | 11.5          | 95    | 1.58    | 18          | 8.5                 | 59  | 65  | 670x320x345          |
| 100TS3.7(F)     | 100    | 3.7   | 5     | 400     | 7.7           | 60    | 1.0      | 11.5          | 95    | 1.58    | 18          | 8.5                 | 61  | 67  | 730x320x345          |
| 80TS5.5         | 80     | 5.5   | 7.5   | 400     | 11.4          | 45    | 0.75     | 22            | 72    | 1.2     | 35          | 8.5                 | 66  | 72  | 710x320x345          |
| 80TS5.5(F)      | 80     | 5.5   | 7.5   | 400     | 11.4          | 45    | 0.75     | 22            | 72    | 1.2     | 35          | 8.5                 | 68  | 74  | 770x320x345          |
| 100TS5.5        | 100    | 5.5   | 7.5   | 400     | 11.4          | 60    | 1.0      | 16            | 105   | 1.75    | 23          | 8.5                 | 67  | 73  | 710x320x345          |
| 100TS5.5(F)     | 100    | 5.5   | 7.5   | 400     | 11.4          | 60    | 1.0      | 16            | 105   | 1.75    | 23          | 8.5                 | 69  | 75  | 770x320x345          |
| 100TS7.5        | 100    | 7.5   | 10    | 400     | 15            | 60    | 1.0      | 26            | 88    | 1.47    | 41          | 11.5                | 108 | 120 | 894x394x455          |
| 150TS7.5        | 150    | 7.5   | 10    | 400     | 15            | 80    | 1.33     | 20.5          | 130   | 2.17    | 32          | 19.5                | 110 | 122 | 894x394x455          |
| 100TS11         | 100    | 11    | 15    | 400     | 22            | 60    | 1.0      | 32            | 86.4  | 1.44    | 48.5        | 11.5                | 123 | 135 | 954x394x455          |
| 150TS11         | 150    | 11    | 15    | 400     | 22            | 90    | 1.5      | 25            | 150   | 2.5     | 34          | 19.5                | 125 | 137 | 954x394x455          |

F: With float switch

# **NOTES**

# Solidpump. Solid reliability.

For years, for contractors and mechanical engineers, Solidpump brand has been a sign of high reliability and excellent relation of quality and price, when a submersible pump is needed for the most demanding job.

Solidpump products are manufactured with the use of high-tech materials and have the advantage of know-how and the technical competence applied to achieve the lowest LCC (Life Cycle Costs) together with extended operational life and efficiency.

Constant improvement of design and performance capabilities of pumps is carried out owing to continuous feedback received from end-users and distributors. We perform close quality control and provide engineering services for the clients, starting from the consulting during the choice of the best unit, up to the after-sales service support.

Today, key Solidpump products are submersible contractors' dewatering pumps, submersible sand and slurry pumps and portable professional drainage pumps. Solidpump submersible pumps are applicable in general drainage, construction, mining and industrial sites, wastewater treatment, sludge and sand removal, etc.

Solidpump Europe, located in Latvia, conducts European distribution of Solidpump products, providing an extensive stock of pumps and parts along with qualified technical support to our customers.





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