

PROFESSIONAL SUBMERSIBLE DRAINAGE, SAND AND SLURRY PUMPS



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 156 m³/h
- Head: up to 56 meters
- Power: 1.5kW to 15kW
- Power supply: Three phase 400V ± 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20m
- Water temperature: up to 40°C
- Max. water depth: 25m

Application

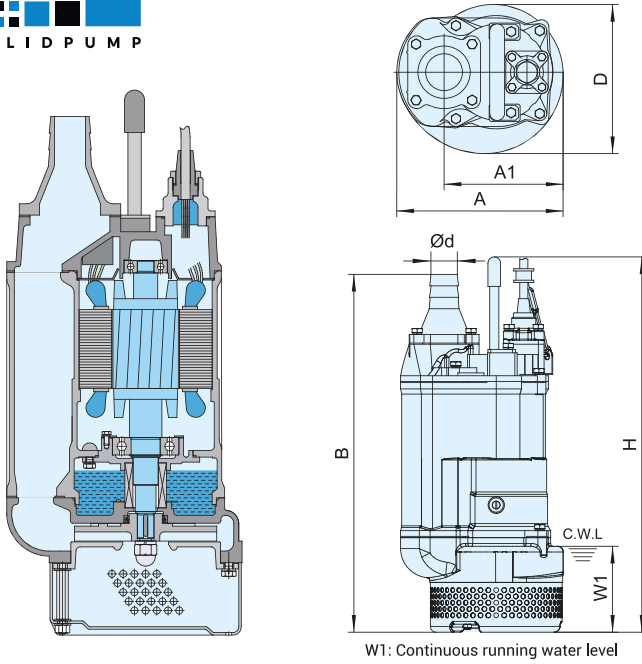
- Construction sites
- Mining and industrial sites
- Drainage and contaminated water
- General pumping purposes

Optional Features

- Other voltages
- Other length of cable
- [High temperature execution for operation in water up to 80°C \(Technical and performance data may vary for this execution\)](#)

Dimensions and Weight

Model (50Hz)	d	A	A1	B	D	H	W1	N.W.	G.W.	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	kg	kg	mm
50TBZ1.5	50	235	173	535	216	505	120	36	40	620x265x275
80TBZ1.5	80	235	173	535	216	505	120	36	40	620x265x275
50TBZ2.2	50	235	173	535	216	505	120	39	43	620x265x275
80TBZ2.2	80	235	173	535	216	505	120	39	43	620x265x275
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	329	240	671	300	590	150	77	84	750x350x335
100TBZ5.5	100	329	240	686	300	590	150	77	84	750x350x335
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	855x415x435
150TBZ11	150	373	255	807	350	695	190	139	150	855x415x435
100TBZ15	100	373	255	842	350	755	190	144	158	905x415x435
150TBZ15	150	373	255	842	350	755	190	146	160	905x415x435



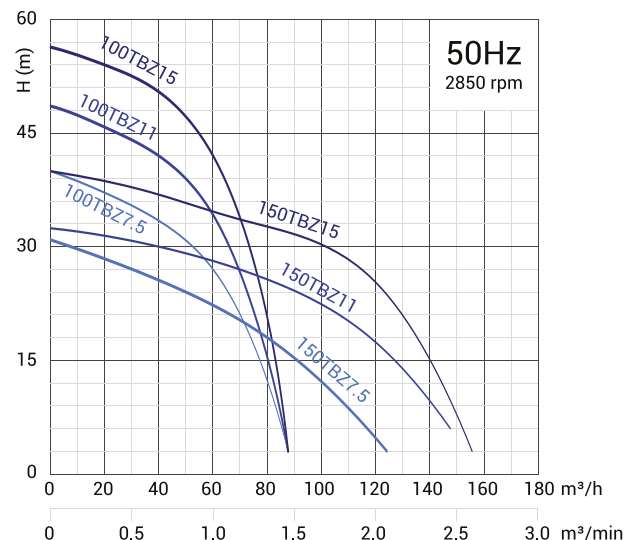
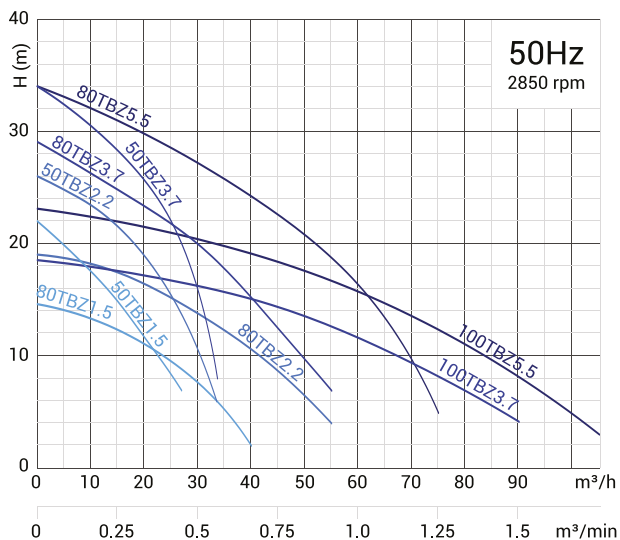
Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Rubber&steel
Upper cover	Cast iron
Motor body	Cast iron
Pump body	Cast iron
Impeller	High chrome alloy
Inlet plate	Ductile iron
Strainer	Steel
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Motor protector	
Mechanical seal	Sic-Sic/Carbon-Sic(2.2 kW); Sic-Sic/Sic-Sic (≥3.7 kW)
Oil seal	
Cable	

Performance Range

Model (50Hz)	Outlet	Motor power		Rated current (400V)	Rated capacity		Rated head	Max capacity		Max head	Impeller passage
	mm	kW	HP	A	m ³ /h	m ³ /min	m	m ³ /h	m ³ /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	1.50	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

Performance Curves



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 built-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 34 meters
- Power: 1.5 kW to 5,5 kW
- Power supply: Three phase 400V ± 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20m
- Water temperature: up to 40° C
- Max. water depth: 25m

Application

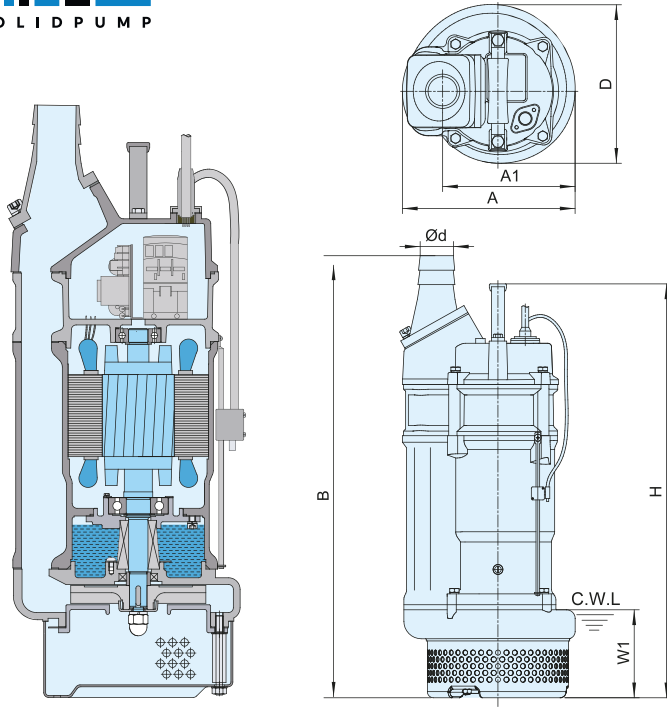
- Construction sites
- Mining and industrial sites
- Drainage and contaminated water
- General pumping purposes

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 60 seconds 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;
- Assessment of the pump's operation and malfunction history.



W1: Continuous running water level

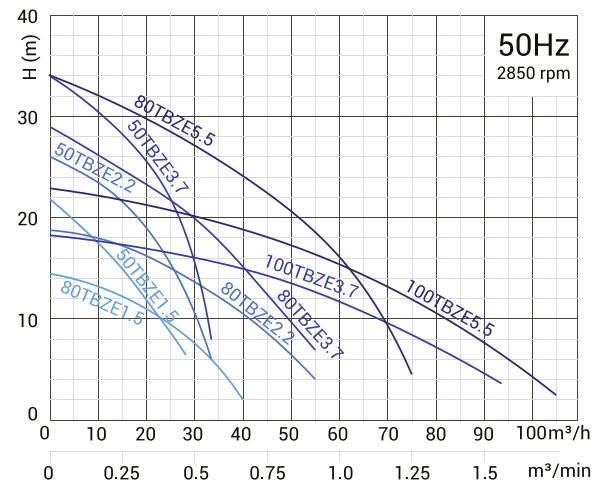
Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Rubber&steel
Upper cover	Cast iron
Upper support	Cast iron
Motor body	Cast iron
Pump body	Cast iron
Impeller	High chrome alloy
Inlet plate	Ductile iron
Strainer	Steel
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Mechanical seal	Sic-Sic/Carbon-Sic(≤2,2 kW); Sic-Sic/Sic-Sic (≥3,7 kW)
Oil seal	
Cable	
AC Contactor	
Water level sensor	
Controller block	

Performance Range

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

Performance Curves



Dimensions and Weight

Model (50Hz)	d	A	A1	B	D	H	W1	N.W.	G.W.	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	kg	kg	mm
50TBZE1.5	50	240	196	623	216	577	120	41	45	695x265x275
80TBZE1.5	80	240	204	631	216	577	120	41	45	695x265x275
50TBZE2.2	50	240	196	623	216	577	120	44	48	695x265x275
80TBZE2.2	80	240	204	631	216	577	120	44	48	695x265x275
50TBZE3.7	50	293	234	708	252	708	150	71	76	790x320x305
80TBZE3.7	80	293	240	716	252	708	150	71	76	790x320x305
100TBZE3.7	100	299	249	729	252	708	150	72	77	790x320x305
80TBZE5.5	80	329	259	769	300	663	150	85.5	92.5	845x355x375
100TBZE5.5	100	329	268	782	300	663	150	86.5	93.5	845x355x375

TBA SUBMERSIBLE LIGHTWEIGHT DEWATERING PUMP



The new Solidpump TBA series pumps offer the same robustness as the other Solidpump models while granting additional portability due to aluminium motor casing. Comparing to other lightweight pumps, the cast aluminium casings are still stronger than the ones fabricated from a sheet of metal.

The TBA series pumps are equally suitable for dewatering at construction sites, underground tunneling and mining works, rental and other demanding applications requiring light weight and robustness.

Technical Specifications

- Capacity: up to 54 m³/h
- Head: up to 35 meters
- Power: Single phase 1.5 kW
- Three phase 1.5kW to 5.5 kW
- Power supply: Single phase 230V ± 10%, 50Hz
Three phase 400V ± 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20 m
- Water temperature: up to 40°C
- PH: 6.5 to 8.5
- Max. water depth: 25 m

Application

- Construction sites
- Underground tunneling and mining works
- Rental

Optional Features

- Other voltages
- Other length of cable

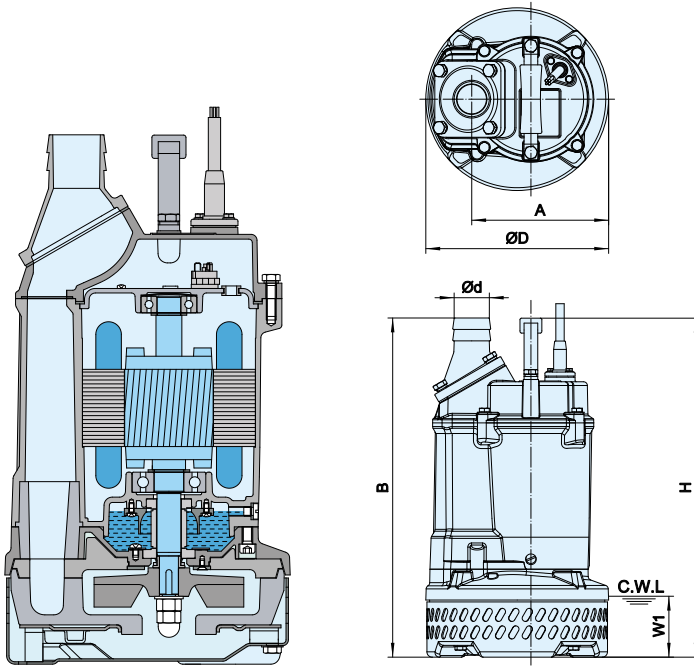
Dimensions and Weight

Model (50Hz)	d mm	A mm	B mm	D mm	H mm	W1 mm	N.W Kg	G.W Kg	Packing dimension mm
50TBAM1.5	50	180	515	240	515	80	25.5	29	600x270x285
80TBAM1.5	80	190	539	240	515	80	26	29.5	600x270x285
50TBA1.5	50	180	445	240	445	80	22.5	26	530x270x285
80TBA1.5	80	190	469	240	445	80	23	26.5	530x270x285
50TBA2.2	50	180	445	240	445	80	25	28.5	530x270x285
80TBA2.2	80	190	469	240	445	80	25.5	29	530x270x285
50TBA3.7	50	222	583	285	582	90	40.5	45.5	670x310x335
80TBA3.7	80	224	580	285	582	90	40.5	45.5	670x310x335
100TBA3.7	100	224	605	285	582	90	41.5	46.5	670x310x335
80TBA5.5	80	224	580	285	582	90	46.5	51.5	670x310x335
100TBA5.5	100	224	605	285	582	90	47.5	52.5	670x310x335

* TBA - Three phase; TBAM - Single phase;

Material of Construction

Part name	Material
Hose coupling	Aluminum die casting
Handle	Rubber & AISI304SS
Upper cover	Aluminum die casting
Up-Bearing house	Cast iron
Seal house	Aluminum die casting
Motor body	Aluminum die casting
Pump body	NBR
Impeller	High chrome alloy
Plate	NBR
Oil riser	PA66+GF30
Sand guard	NBR
Stator	
Rotor	Shaft:Stainless steel
Bearing	Ball bearing
Bearing	Ball bearing
Motor protector	
Mechanical seal	Sic-Sic/Carbon-Sic
Shaft sleeve	
Clamping plate	Steel
Cable	



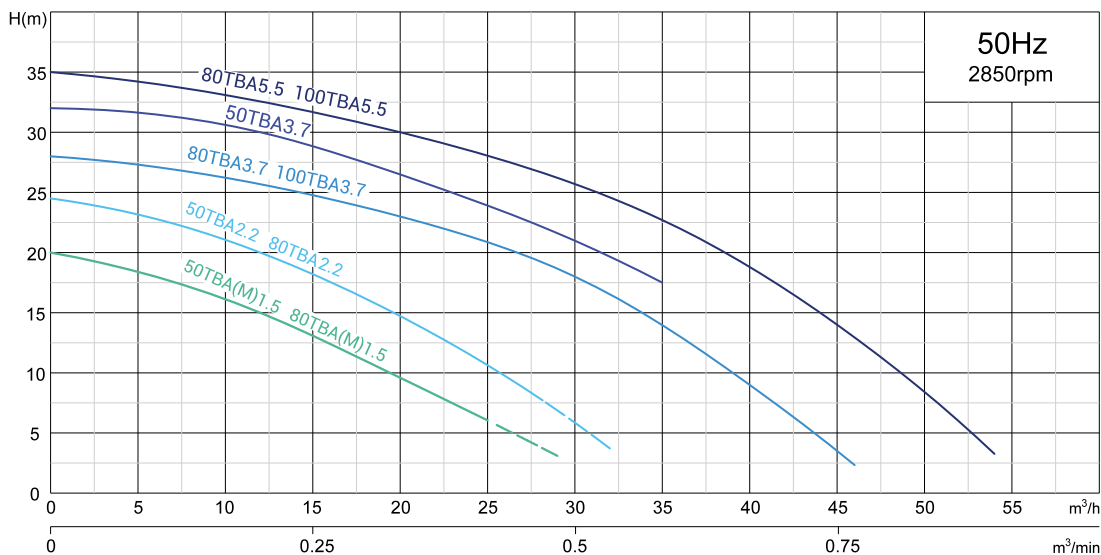
C.W.L:Continuous running water level

Performance Range

Model (50 Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max Head	Impeller Passage
	mm	kW	HP	V	A	m ³ /h	m ³ /min	m	m ³ /h	m ³ /min	m	mm
50TBAM1.5	50	1.5	2	230	10	12	0.20	15	25	0.42	20	8.5
80TBAM1.5	80	1.5	2	230	10	12	0.20	15	29	0.48	20	8.5
50TBA1.5	50	1.5	2	400	3.5	12	0.20	15	25	0.42	20	8.5
80TBA1.5	80	1.5	2	400	3.5	12	0.20	15	29	0.48	20	8.5
50TBA2.2	50	2.2	3	400	5.0	12	0.20	20	28	0.47	24	8.5
80TBA2.2	80	2.2	3	400	5.0	12	0.20	20	32	0.53	24	8.5
50TBA3.7	50	3.7	5	400	8.1	12	0.20	30	35	0.67	32	8.5
80TBA3.7	80	3.7	5	400	8.1	30	0.50	18	46	0.77	28	8.5
100TBA3.7	100	3.7	5	400	8.1	30	0.50	18	46	0.77	28	8.5
80TBA5.5	80	5.5	7.5	400	11.2	36	0.60	22	54	0.9	35	8.5
100TBA5.5	100	5.5	7.5	400	11.2	36	0.60	22	54	0.9	35	8.5

* TBA - Three phase; TBAM - Single phase;

Performance Curves



TBAE AUTOMATIC SUBMERSIBLE LIGHTWEIGHT DEWATERING PUMP



The new Solidpump TBAE series pumps offer the same robustness as the other Solidpump models while granting additional portability due to aluminium motor casing. Comparing to other lightweight pumps, the cast aluminium casings are still stronger than the ones fabricated from a sheet of metal.

The TBAE series pumps are equally suitable for dewatering at construction sites, underground tunneling and mining works, rental and other demanding applications requiring light weight and robustness.

TBAE series pumps operate automatically with the help of built-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 54 m³h
- Head: up to 35 meters
- Power: Single phase 1.5 kW
Three phase 1.5 kW to 5.5 kW
- Power supply: Single phase
220V ± 10%, 50Hz
Three phase 400V ± 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20 m
- Water temperature:
up to 40°C
- PH: 6.5 to 8.5
- Max.water depth: 25m

Application

- Construction sites
- Underground tunneling and mining works
- Rental

Optional Features

- Other voltages
- Other length of cable

Key features of TBAE intelligent control system

- Protects against reverse phase, ensuring correct impeller rotation (3 phase only);
- 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 60 seconds 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;
- Assessment of the pump's operation and malfunction history (3 phase only).

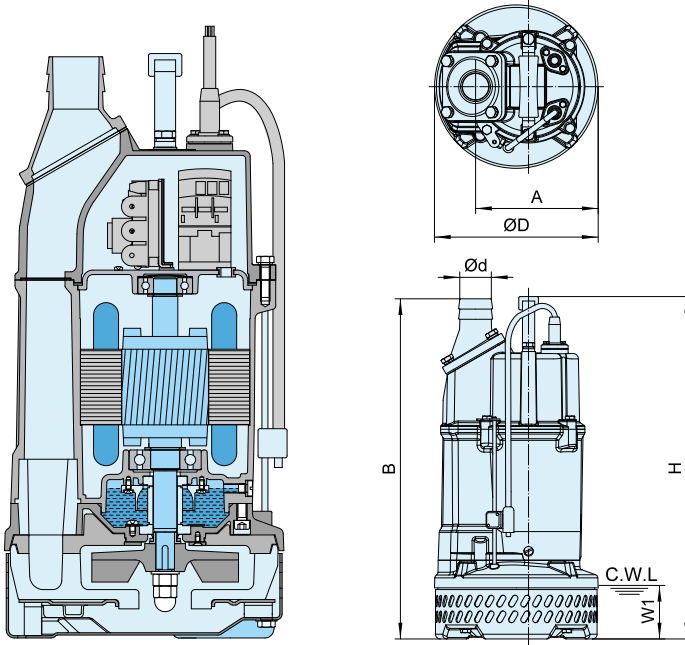
Dimensions and Weight

* TBAE - Three phase; TBAME - Single phase

Model (50Hz)	d	A	B	D	H	W1	N.W	G.W	Packing dimension
	mm	mm	mm	mm	mm	mm	Kg	Kg	mm
50TBAME1.5	50	178	515	240	515	80	26.5	31	600x270x285
80TBAME1.5	80	190	550	240	515	80	27	32	600x270x285
50TBAE1.5	50	178	515	240	515	80	24.5	29	600x270x285
80TBAE1.5	80	190	550	240	515	80	25	30	600x270x285
50TBAE2.2	50	178	515	240	515	80	27	31	600x270x285
80TBAE2.2	80	190	550	240	515	80	27.5	32.5	600x270x285
50TBAE3.7	50	222	628	285	658	90	42.5	48	745x310x335
80TBAE3.7	80	224	625	285	658	90	42.5	48	745x310x335
100TBAE3.7	100	224	650	285	658	90	43.5	49	745x310x335
80TBAE5.5	80	224	625	285	658	90	48.5	52	745x310x335
100TBAE5.5	100	224	650	285	658	90	49.5	53	745x310x335

Material of Construction

Part name	Material
Hose coupling	Aluminum die casting
Handle	Rubber & steel
Upper cover	Aluminum die casting
Up-Bearing house	Cast iron
Seal house	Aluminum die casting
Motor body	Aluminum die casting
Pump body	NBR
Impeller	High chrome alloy
Plate	NBR
Oil riser	NBR
Sand guard	PA66+GF30
Stator	
Rotor	Shaft:Stainless steel
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	Only single phase
Mechanical seal	Sic-Sic/Carbon-Sic
Shaft sleeve	
Clamping plate	Steel
Cable	
AC Contactor	Only three phase
Water level sensor	
Controller block	



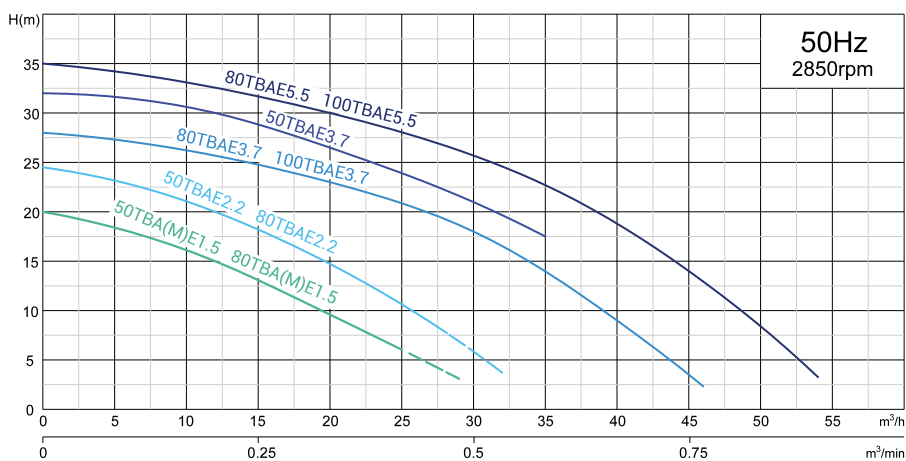
C.W.L: continuous running water level

Performance Range

Model (50 Hz)	Outlet	Motor power		Voltage V	Rated current A	Rated capacity		Rated head m	Max capacity		Max Head m	Impeller Passage mm
	mm	kW	HP			m ³ /h	m ³ /min		m ³ /h	m ³ /min		
50TBAME1.5	50	1.5	2	220	10	12	0.20	15	25	0.42	20	8.5
80TBAME1.5	80	1.5	2	220	10	12	0.20	15	29	0.48	20	8.5
50TBAE1.5	50	1.5	2	400	3.5	12	0.20	15	25	0.42	20	8.5
80TBAE1.5	80	1.5	2	400	3.5	12	0.20	15	29	0.48	20	8.5
50TBAE2.2	50	2.2	3	400	5.0	12	0.20	20	28	0.47	24	8.5
80TBAE2.2	80	2.2	3	400	5.0	12	0.20	20	32	0.53	24	8.5
50TBAE3.7	50	3.7	5	400	8.1	12	0.20	30	35	0.67	32	8.5
80TBAE3.7	80	3.7	5	400	8.1	25	0.42	21	46	0.77	28	8.5
100TBAE3.7	100	3.7	5	400	8.1	25	0.42	21	46	0.77	28	8.5
80TBAE5.5	80	5.5	7.5	400	11.2	30	0.50	25	54	0.9	35	8.5
100TBAE5.5	100	5.5	7.5	400	11.2	30	0.50	25	54	0.9	35	8.5

* TBAE - Three phase; TBAME - Single phase

Performance Curves



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 100 m³/h
- Head: up to 32 meters
- Power: 1.5 kW to 5,5 kW
- Power supply: Three phase 400V ± 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20m
- Water temperature: up to 40° C
- Max. water depth: 25 m

Application

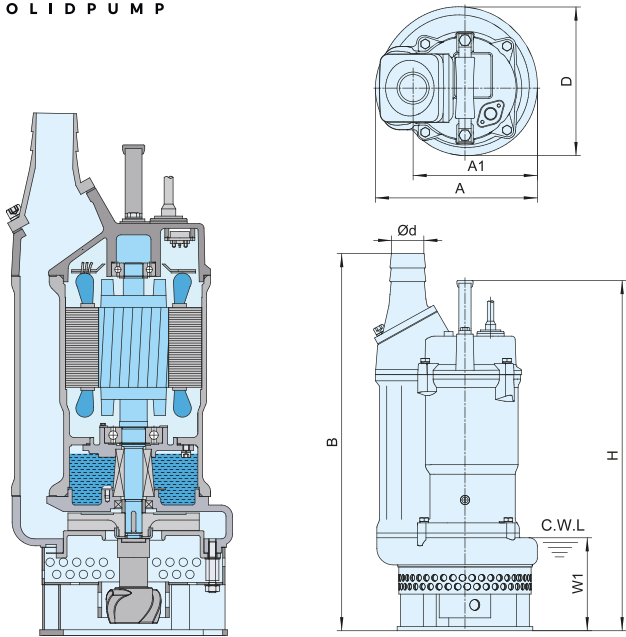
- Construction sites
- Mines and quarries
- Sand pits and sedimentation tanks at wastewater treatment plants
- Transfer of bentonite slurry and sandy sludge
- Transfer of water containing mud and sand

Optional Features

- Other voltages
- Other length of cable

Dimensions and Weight

Model (50Hz)	d mm	A mm	A1 mm	B mm	D mm	H mm	W1 mm	N.W. kg	G.W. kg	Packing dimension mm
50TBD1.5	50	240	196	568	216	522	135	37	41	640x265x275
80TBD1.5	80	240	204	576	216	522	135	37	41	640x265x275
50TBD2.2	50	240	196	568	216	522	135	40	44	640x265x275
80TBD2.2	80	240	204	576	216	522	135	40	44	640x265x275
80TBD3.7	80	293	240	650	252	642	165	64	69	725x320x295
100TBD3.7	100	293	249	663	252	642	165	65	70	725x320x295
80TBD5.5	80	329	259	712	300	606	165	78	85	790x350x335
100TBD5.5	100	329	268	725	300	606	165	79	86	790x350x335



W1: Continuous running water level

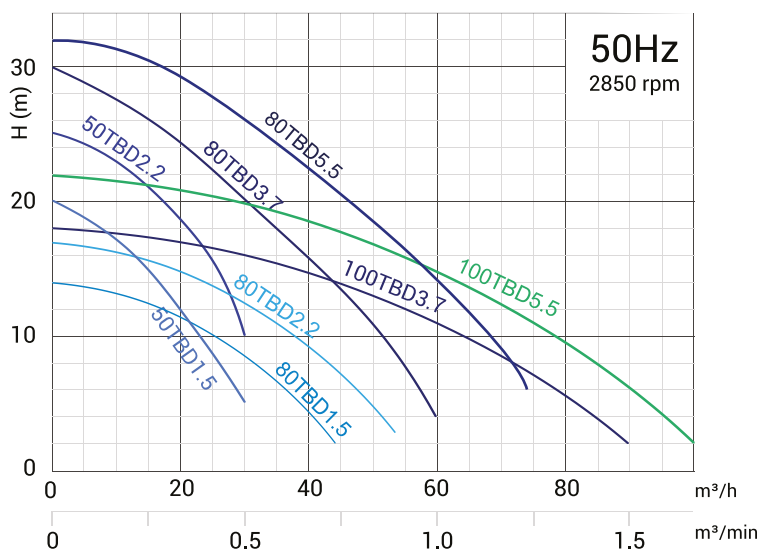
Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Rubber&steel
Upper cover	Cast iron
Motor body	Cast iron
Pump body	Cast iron
Impeller	High chrome alloy
Agitator	High chrome alloy
Inlet plate	Ductile iron
Strainer	Steel
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Motor protector	
Mechanical seal	Sic-Sic/Carbon-Sic ($\leq 2,2$ kW); Sic-Sic/Sic-Sic (3.7kW)
Oil seal	
Cable	

Performance Range

Model (50Hz)	Outlet	Motor power		Rated current A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
	mm	kW	HP		m ³ /h	m ³ /min		m ³ /h	m ³ /min		
50TBD1.5	50	1.5	2	3.5	15	0.25	15	30	0.50	20	10
80TBD1.5	80	1.5	2	3.5	30	0.5	7	42	0.7	14	10
50TBD2.2	50	2.2	3	5.0	18	0.3	19	30	0.50	25	10
80TBD2.2	80	2.2	3	5.0	36	0.6	11	52	0.88	17	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
80TBD5.5	80	5.5	7.5	11.4	36	0.6	24	74	1.23	32	10
100TBD5.5	100	5.5	7.5	11.4	60	1.0	14	100	1.67	22	10

Performance Curves



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 built-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 100 m³/h
- Head: up to 32 meters
- Power: 1.5kW to 5,5kW
- Supply voltage: Three phase 400V ± 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20m
- Water temperature: up to 40° C
- Max. water depth: 25m

Application

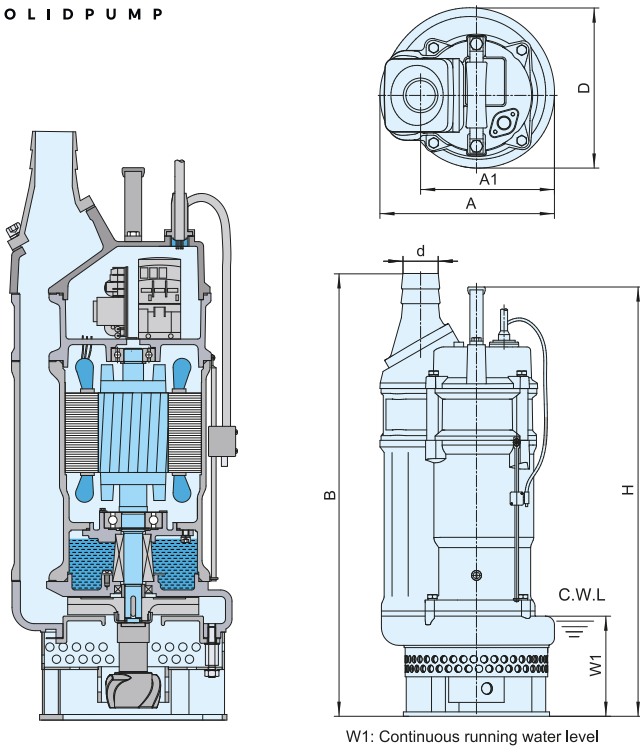
- Construction sites
- Mines and quarries
- Sand pits and sedimentation tanks at wastewater treatment plants
- Transfer of bentonite slurry and sandy sludge
- Transfer of water containing mud and sand

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 60 seconds 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;
- Assessment of the pump's operation and malfunction history.



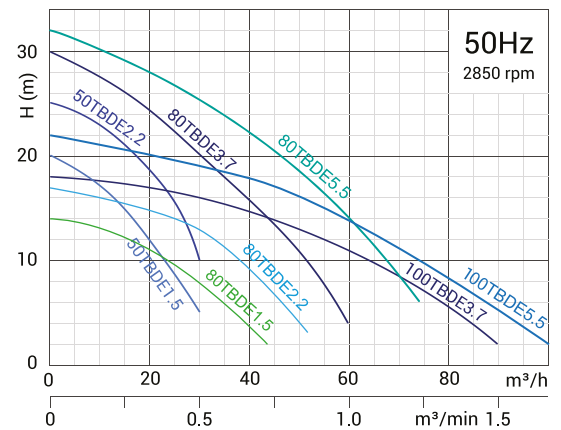
Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Rubber&steel
Upper cover	Cast iron
Upper support	Cast iron
Motor body	Cast iron
Pump body	Cast iron
Impeller	High chrome alloy
Agitator	High chrome alloy
Inlet plate	Ductile iron
Strainer	Steel
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Mechanical seal	Sic-Sic/Carbon-Sic (≤2,2kW); Sic-Sic/Sic-Sic (3.7kW)
Oil seal	
Cable	
AC Contactor	
Water level sensor	
Controller block	

Dimensions and Weight

Model (50Hz)	d	A	A1	B	D	H	W1	N.W.	G.W.	Packing dimension mm
	mm	mm	mm	mm	mm	mm	mm	kg	kg	
50TBDE1.5	50	240	196	640	216	594	135	43	47	710x265x275
80TBDE1.5	80	240	204	648	216	594	135	43	47	710x265x275
50TBDE2.2	50	240	196	640	216	594	135	46	50	710x265x275
80TBDE2.2	80	240	204	648	216	594	135	46	50	710x265x275
80TBDE3.7	80	293	240	729	252	721	165	72	77	805x320x295
100TBDE3.7	100	293	249	742	252	721	165	73	78	805x320x295
80TBDE5.5	80	329	259	782	300	676	165	86	93	825x355x375
100TBDE5.5	100	329	268	795	300	676	165	87	94	865x355x375

Performance Curves



Performance Range

Model (50Hz)	Outlet	Motor power		Rated current A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
	mm	kW	HP		m³/h	m³/min		m³/h	m³/min		
50TBDE1.5	50	1.5	2	3.5	15	0.25	15	30	0.50	20	10
80TBDE1.5	80	1.5	2	3.5	30	0.5	7	42	0.7	14	10
50TBDE2.2	50	2.2	3	5.0	18	0.3	19	30	0.50	25	10
80TBDE2.2	80	2.2	3	5.0	36	0.6	11	52	0.88	17	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
80TBDE5.5	80	5.5	7.5	11.4	36	0.6	24	74	1.23	32	10
100TBDE5.5	100	5.5	7.5	11.4	60	1.0	14	100	1.67	22	10

TBS SUBMERSIBLE SAND/SLURRY AGITATOR PUMP



Heavy duty TBS-series sand / slurry pumps with 4-pole motor ensure 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 390 m³/h
- Head: up to 39 meters
- Discharge: 80 mm to 200 mm
- Power: 4 kW to 37 kW
- Power supply: Three phase 380/400V ± 10%, 50 Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8 m or 20 m
- Water temperature: up to 40° C
- Max. water depth: 15 m

Application

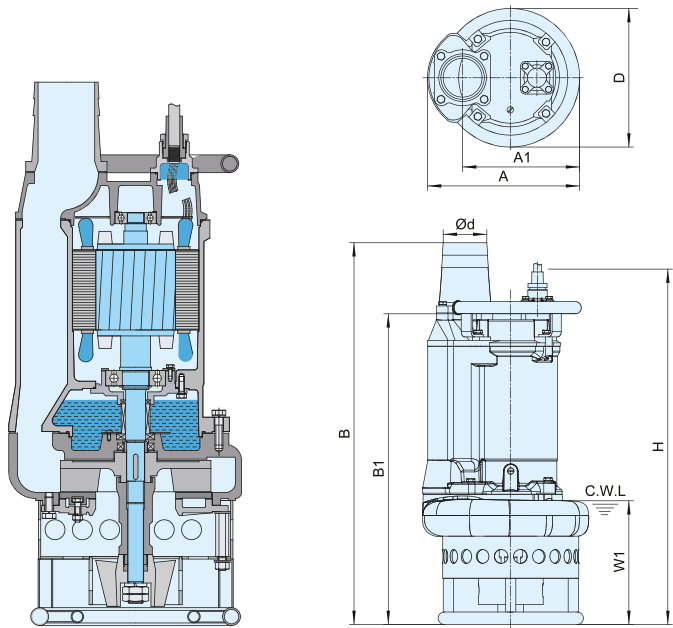
- Mines and quarries
- Construction sites
- Wastewater treatment plants
- Transfer of water high in slurry, sand and abrasive particles
- Bottom deepening
- Cleaning of sand pits, sludge tanks and tailings' ponds

Optional Features

- Other voltages
- Other length of cable

Dimensions and Weight

Model (50Hz)	d mm	A mm	A1 mm	B mm	B1 mm	D mm	H mm	W1 mm	N.W. kg	G.W. kg	Packing dimension mm
80TBS4	80	366	270	802	680	340	765	250	108.5	119	855x385x395
100TBS6	100	420	308	844	683	378	768	250	141	151	880x450x455
150TBS9	150	434	324	889	727	407	813	250	171	183	940x470x475
150TBS11	150	434	324	926	765	407	850	250	197	210	980x465x465
200TBS15	200	484	352	1121	890	457	1025	295	260	290	1285x570x705
200TBS22	200	575	442	1243	1011	528	1200	330	408	458	1455x660x765
200TBS30	200	622	469	1378	1147	543	1345	432	510	560	1565x700x775
200TBS37	200	622	469	1378	1147	543	1345	432	535	585	1565x700x775



W1: Continuous running water level

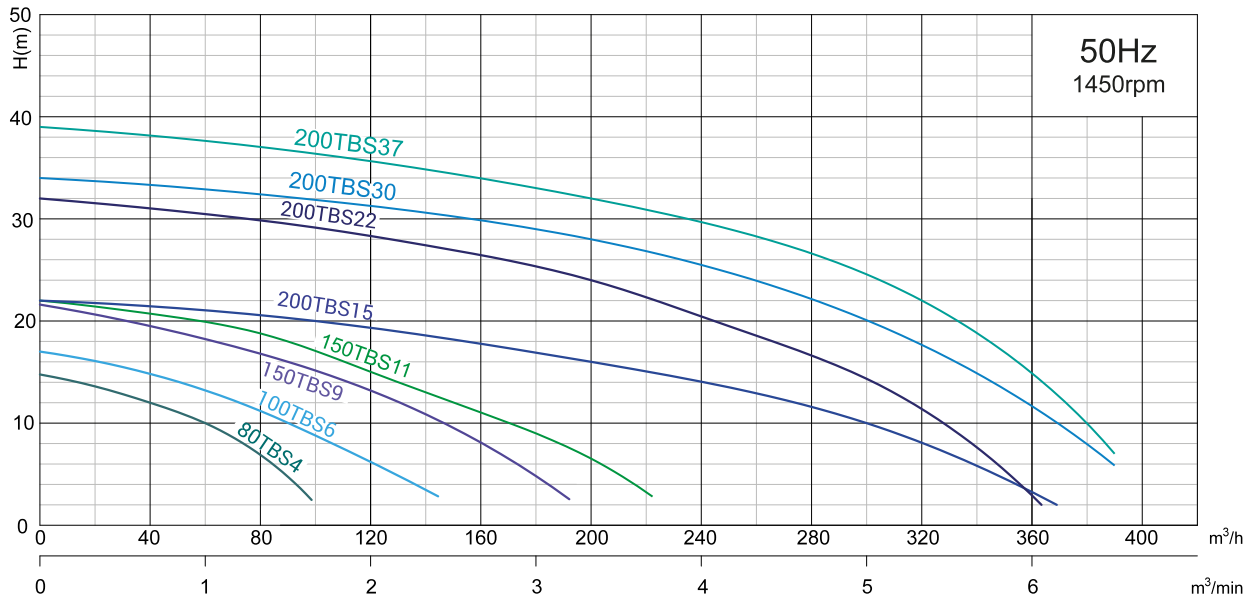
Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Steel
Upper cover	Cast iron
Bearing house	Cast iron
Motor body	Cast iron
Pump body	Cast iron
Impeller	High chrome alloy
Agitator	High chrome alloy
Inlet plate	High chrome alloy
Inlet plate	Cast iron
Strainer	Steel
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Mechanical seal	Sic-Sic/Sic-Sic; Tc-Sic/Sic-Sic (>15kW)
Oil seal	
Cable	

Performance Range

Model (50Hz)	Outlet	Motor power		Starting method	Rated current (380V)	Rated capacity		Rated head	Max capacity		Max head	Impeller passage
	mm	kW	HP			A	m ³ /h		m ³ /min	m ³ /h		
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
150TBS11	150	11	15	D.O.L.	22	120	2.0	15	234	3.90	22	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
200TBS30	200	30	40	Star-Delta	57.6	200	3.33	28	390	6.5	34	30
200TBS37	200	37	50	Star-Delta	69.8	200	3.33	32	390	6.5	39	30

Performance Curves



TBL HIGH FLOW SUBMERSIBLE DEWATERING PUMP



Solidpump TBL series are 4-pole submersible pumps designed for dewatering high volumes of dirty water with solids at construction sites, quarries, flood control applications and other various industrial facilities.

Low speed motor combines with top discharge efficient cooling design ensure reliable operation and extended working period under demanding conditions.

Technical Specifications

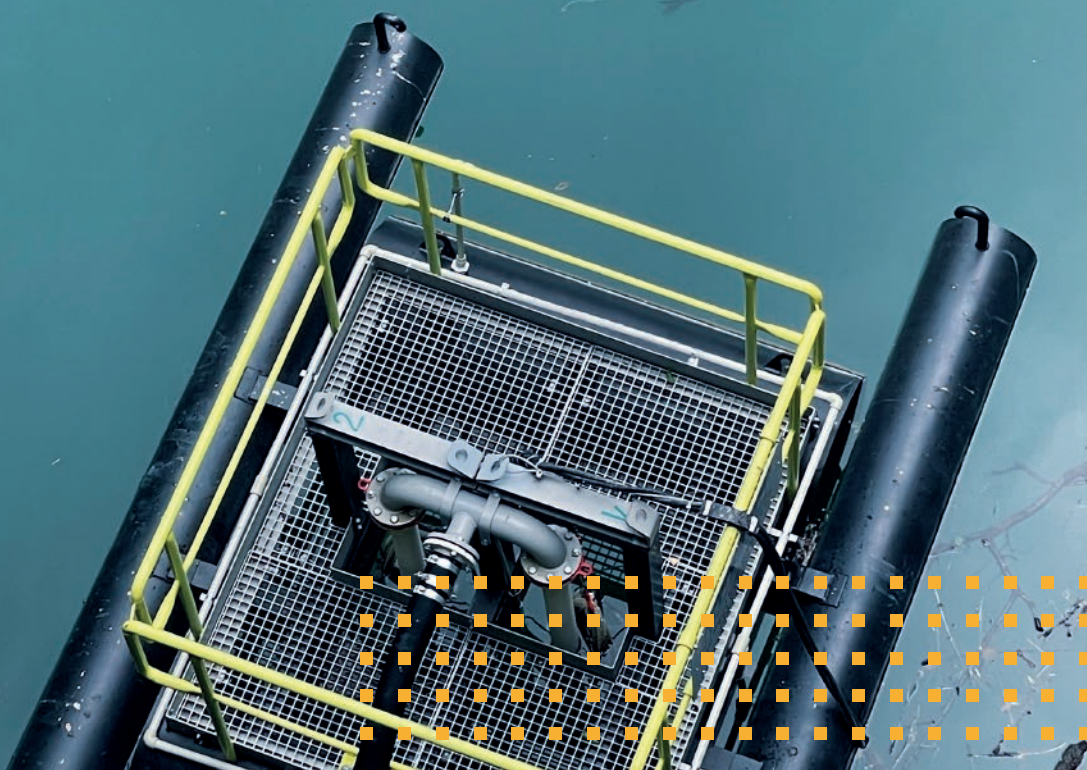
- Capacity: up to 330 m³/h
- Head: up to 15 meters
- Power: 3 kW to 9 kW
- Power supply: three phase 400V ±10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 20 m
- Water temperature: up to 40°C
- Max. water depth: 15 m

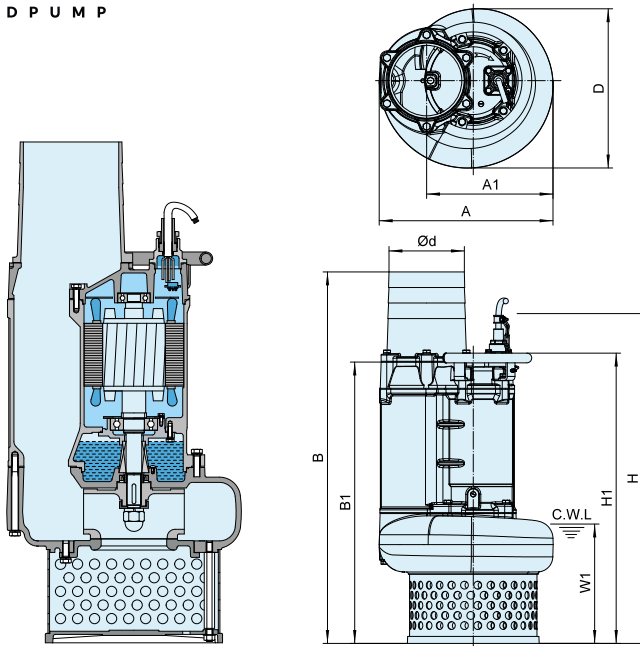
Application

- Construction sites
- Quarries
- Flood control

Optional Features

- Other voltages
- Other length of cable





C.W.L: continuous running water level

Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Steel
Terminal box	Cast iron
Upper cover	Cast iron
Bearing house	Cast iron
Motor body	Cast iron
Pump body	Cast iron
Impeller	Ductile iron
Inlet plate	Ductile iron
Seat assembly	Cast iron
Strainer	Steel
Stator	
Rotor	Shaft:AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Motor protector	
Mechanical seal	Sic-Sic/Sic-Sic
Oil seal	
Cable	

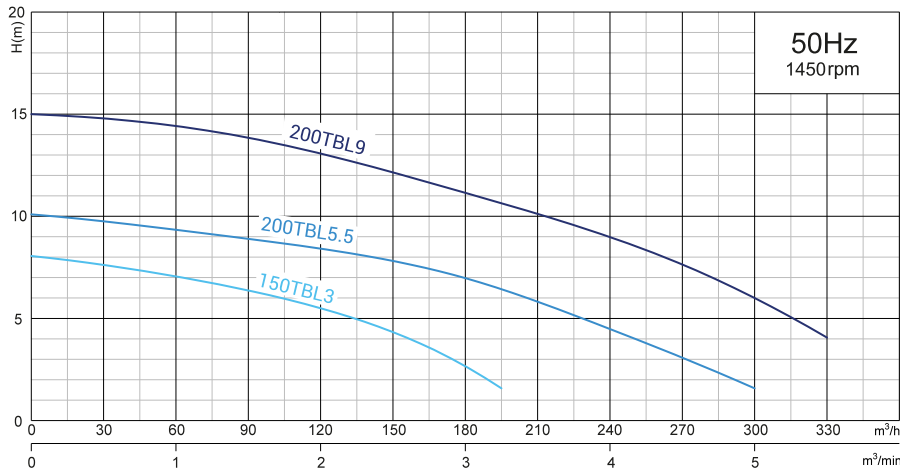
Dimensions and Weight

Model (50Hz)	d	A	A1	B	B1	D	H	H1	W1	N.W	G.W	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg	Kg	mm
150TBL3	150	386	290	864	702	368	787	725	285	101	113	905x420x500
200TBL5.5	200	447	325	957	725	410	809	748	295	131	147	995x485x540
200TBL9	200	479	358	938	706	413	789	714	250	175	192	985x515x545

Performance Range

Model (50 Hz)	Outlet	Motor power		Rated current	Rated capacity		Rated head	Max capacity		Max Head	Impeller Passage
	mm	kW	HP	A	m ³ /h	m ³ /min	m	m ³ /h	m ³ /min	m	mm
150TBL3	150	3	4	6.7	120	2.0	5.5	195	3.25	8	15
200TBL5.5	200	5.5	7.5	11.7	180	3.0	7	300	5.0	10	20
200TBL9	200	9	12	19.5	180	3.0	11	330	5.5	15	30

Performance Curves



MH 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.

Technical Specifications

- Capacity: up to 408 m³/h
- Head: up to 140 meters
- Power: 22 kW to 110 kW
- Power supply: three phase 400V ± 10%, 50Hz
- Insulation class: F/H
- Protection class: IP68
- Cable length: 20 m
- Water temperature: up to 40°C
- Max. water depth: 30 m

Application

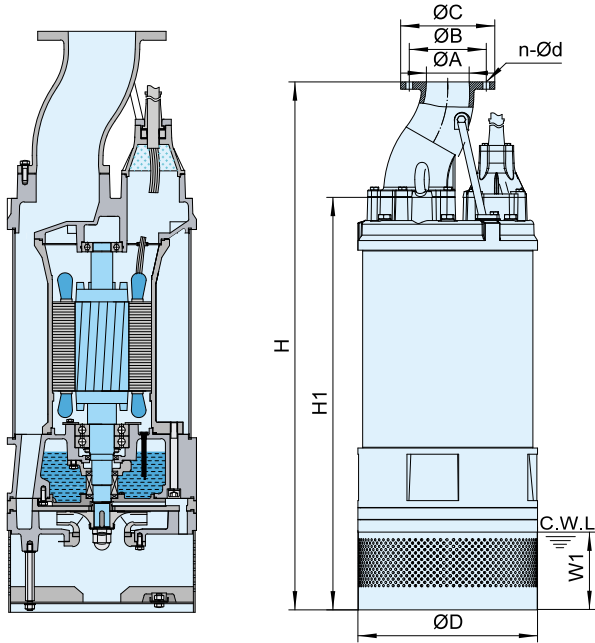
- Mining and industrial sites
- Construction sites
- Deep-well and high-head dewatering
- Drainage of contaminated water
- General pumping purposes

Optional Features

- Other voltages
- Other length of cable

Dimensions and Weight

Model (50Hz)	A mm	B mm	C mm	n-Ød mm	D mm	H mm	H1 mm	W1 mm	N.W. kg	G.W. kg	Packing dimension mm
100MH22	100	180	220	8-Ø18	420	1374	1072	240	370	410	1495x490x705
100MH30	100	180	220	8-Ø18	420	1374	1072	240	375	415	1495x490x705
150MH22	150	240	285	8-Ø22	420	1434	1082	250	385	425	1565x490x705
150MH30	150	240	285	8-Ø22	420	1434	1082	250	390	430	1565x490x705
150MH37	150	240	285	8-Ø22	530	1424	1072	180	570	615	1605x600x860
150MH45	150	240	285	8-Ø22	530	1424	1072	180	575	620	1605x600x860
200MH37	200	295	340	12-Ø22	530	1474	1072	180	575	625	1605x600x860
200MH45	200	295	340	12-Ø22	530	1474	1072	180	580	630	1605x600x860
150MH55	150	240	285	8-Ø22	550	1630	1280	200	840	890	1815x620x920
150MH75	150	240	285	8-Ø22	550	1630	1280	200	888	938	1815x620x920
200MH55	200	295	340	12-Ø22	550	1680	1280	200	850	900	1815x620x920
200MH75	200	295	340	12-Ø22	550	1680	1280	200	898	948	1815x620x920
150MH90	150	250	300	8-Ø26	592	1687	1282	200	1110	1166	1825x665x965
200MH90	200	295	340	12-Ø22	592	1687	1282	200	1120	1176	1825x665x965
200MH110	200	295	340	12-Ø22	592	1687	1282	200	1150	1206	1825x665x965



C.W.L.: continuous running water level

Material of Construction

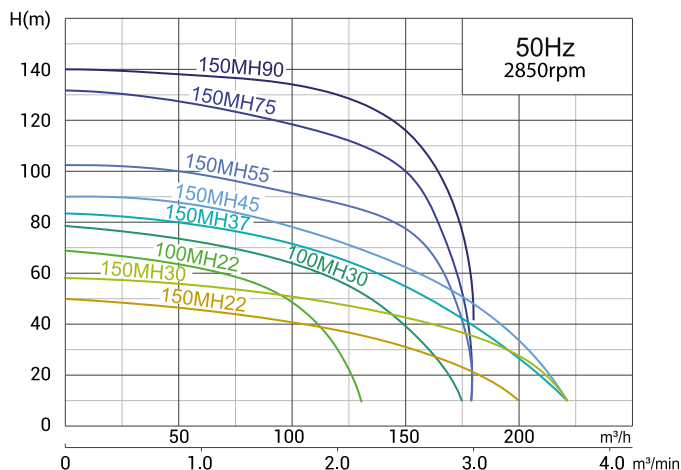
Part name	Material
Discharge connection	Ductile iron
Terminal box	Cast iron
Upper cover	Cast iron
Bearing house	Cast iron
Seal bracket	Cast iron
Seal bracket	Cast iron
Motor body	Cast iron
Outer casing	Steel
Impeller	High chrome alloy
Diffuser	Ductile iron
Inlet plate	Ductile iron
Inlet plate	Cast iron
Neck ring	High chrome alloy
Strainer	AISI201SS
Stator	
Rotor	Shaft:AISI420SS
Bearing	
Bearing	
Mechanical seal	Tc-Sic/Sic-Sic
Oil seal	
Shim	Cast iron
Cable	

Overheat protector
Oil water leakage probe: 55~150kW (22~45kW: on option)

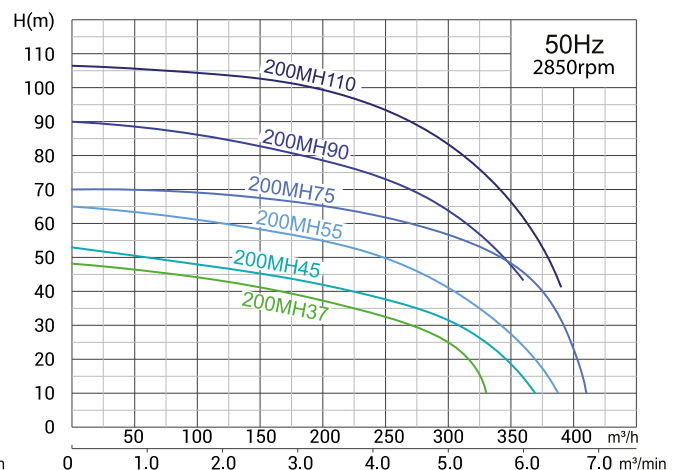
Performance Range

Model (50Hz)	Outlet mm	Motor power		Rated current A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
		kW	HP		m ³ /h	m ³ /min		m ³ /h	m ³ /min		
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	3.67	58	15
150MH37	150	37	50	66	120	2.0	65	220	3.67	83	6
150MH45	150	45	60	80	120	2.0	75	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
150MH55	150	55	75	100	90	1.5	90	180	3.0	102	8
150MH75	150	75	100	134	90	1.5	120	180	3.0	132	8
200MH55	200	55	75	100	240	4.0	50	390	6.5	65	20
200MH75	200	75	100	134	270	4.5	60	408	6.8	70	20
150MH90	150	90	120	162	120	2.0	128	180	3.0	140	10
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

Performance Curves



* Starting method: D.O.L. (11kW) or Star-Delta (>22kW)



MH EXTRA 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.

All pumps of this series are equipped with double impellers for extra high head performance.

Technical Specifications

- Capacity: up to 192 m³/h
- Head: up to 200 meters
- Power: 3.0 kW to 110 kW
- Power supply: three phase 400V ± 10%, 50Hz
- Insulation class: F/H
- Protection class: IP68
- Cable 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 of contaminated water
- General pumping purposes

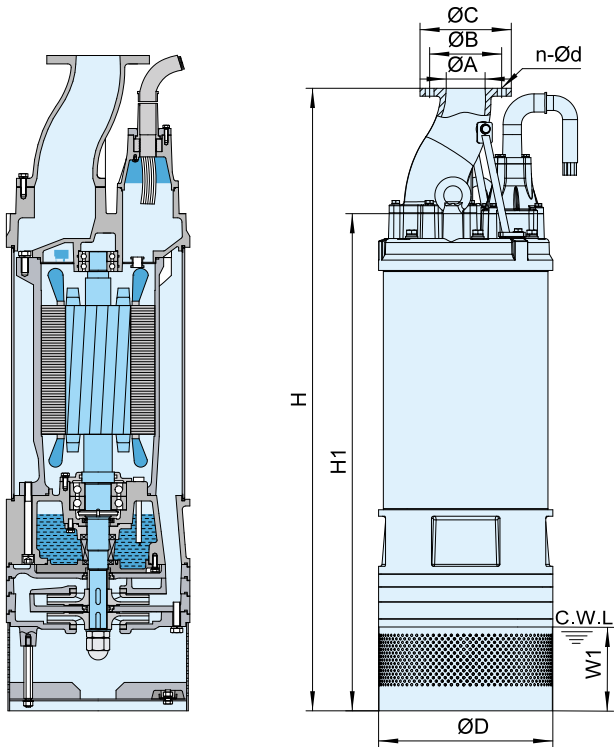
Optional Features

- Other voltages
- Other length of cable

Dimensions and weight

Model (50Hz)	A mm	B mm	C mm	n-Ød mm	D mm	H mm	H1 mm	W1 mm	N.W. kg	G.W. kg	Packing dimension mm
50MH3	50	-	-	-	185	685	570	146	52	57	740x220x295
50MH5.5	50	125	165	4-Ø18	243	788	616	170	100	107	840x280x385
80MH11	80	160	200	8-Ø18	275	1036	824	210	160	172	1085x310x415
80MH22	80	160	200	8-Ø18	330	1174	914	260	278	308	1225x375x545
100MH37	100	180	220	8-Ø18	420	1500	1198	227	500	540	1625x465x705
150MH110	150	250	300	8-Ø26	592	1793	1388	370	1245	1301	1935x665x965

Material of Construction



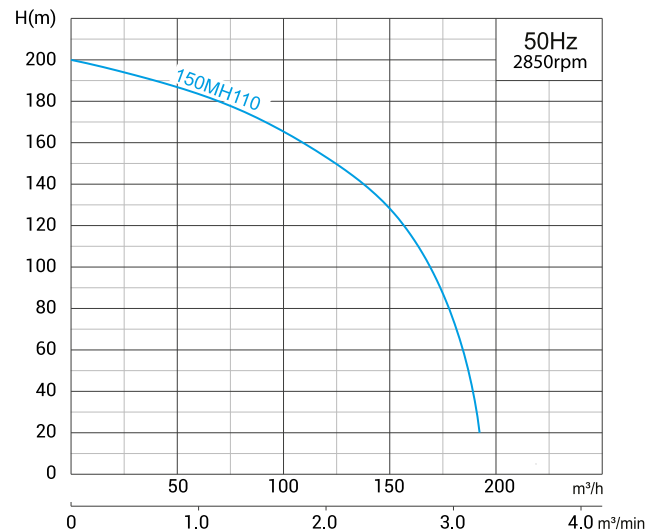
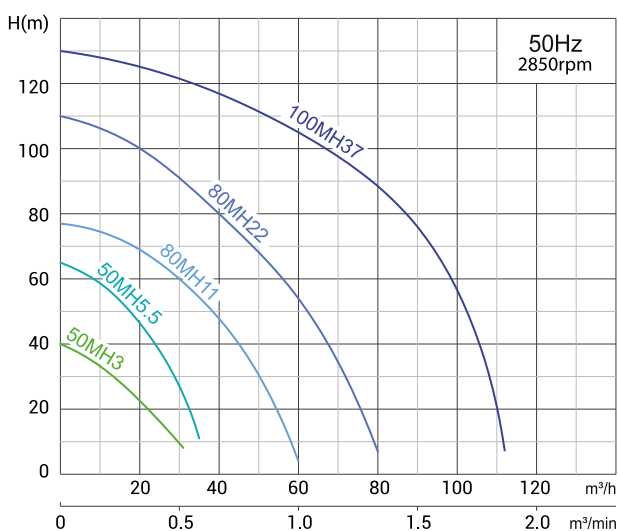
C.W.L: continuous running water level

Part name	Material
Discharge connection	Ductile iron
Terminal box	Cast iron
Upper cover	Cast iron
Bearing house	Cast iron
Seal bracket	Cast iron
Seal bracket	Cast iron
Motor body	Cast iron
Outer casing	Steel
Impeller	High chrome alloy
Impeller	High chrome alloy
Diffuser & Casing	Ductile iron
Diffuser & Casing	Ductile iron
Diffuser & Casing	Ductile iron
Inlet plate	Ductile iron
Neck ring	High chrome alloy
Strainer	Stainless steel
Stator	
Rotor	Shaft: AISI420SS
Bearing	
Bearing	
Motor protector	3~11kW
Mechanical seal	
Oil seal	
Cable fixing plate	Cast iron
Bearing fixing plate	Cast iron
Cable	
Overheat protector: 22~110kW	
Oil water leakage probe: 37~110kW (22kW: on option)	

Performance Range

Model (50Hz)	Outlet mm	Motor power		Starting method	Rated current A	Rated capacity		Rated head m	Max capacity		Max head m	Impeller passage mm
		kW	HP			m ³ /h	m ³ /min		m ³ /h	m ³ /min		
50MH3	50	3.0	4.0	D.O.L.	6.2	18	0.3	26	30	0.5	39	6
50MH5.5	50	5.5	7.5	D.O.L.	11.4	18	0.3	48	35	0.59	65	6
80MH11	80	11	15	D.O.L.	22	30	0.5	60	60	1.0	78	8.5
80MH22	80	22	30	Star-Delta	41.5	40	0.67	80	78	1.30	110	8.5
100MH37	100	37	50	Star-Delta	66	60	1.0	105	112	1.87	130	6
150MH110	150	110	150	Star-Delta	198	120	2.0	150	192	3.2	200	8

Performance Curves



PS(M) PORTABLE DRAINAGE PUMP



PSM series portable drainage pumps are equipped with semi-vortex impellers and built-in agitators mounted on the shaft. These features provide for effective pumping of contaminated water and reduce risks of clogging during operation.

Technical Specifications

- Water temperature: up to 40°C
- PH: 6.5 to 8.5
- Power supply: single phase 220V \pm 10%, 50Hz
three phase 380/400V \pm 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 10 m
- Max water depth: 10 m

Application

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

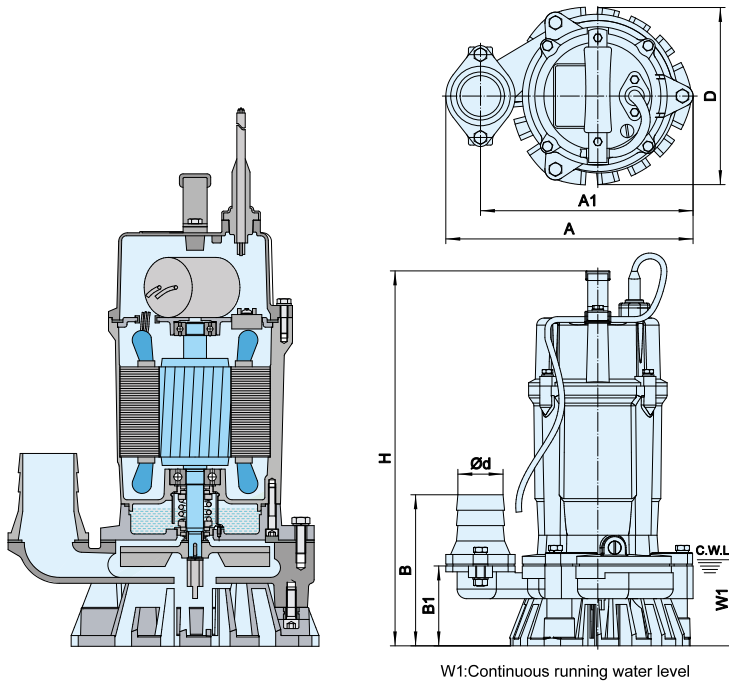
Optional Features

- Other voltages
- The length of cable is optional



Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Rubber&steel
Upper cover	Aluminum die casting
Up-Bearing house	Cast iron
Seal house	Cast iron
Motor body	Aluminum die casting
Pump body	Cast iron
Impeller	Ductile iron
Agitator	Stainless steel
Sand guard	NBR
Oil riser	LDPE
Seat assembly	PU
Stator	
Rotor	Shaft:AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	
Motor protector	
Mechanical seal	Ceramic-Sic/Carbon-Ceramic
Gasket	NBR
Gasket	NBR
Gasket	NBR
Shaft sleeve	AISI420SS
Cable	H07RN-F



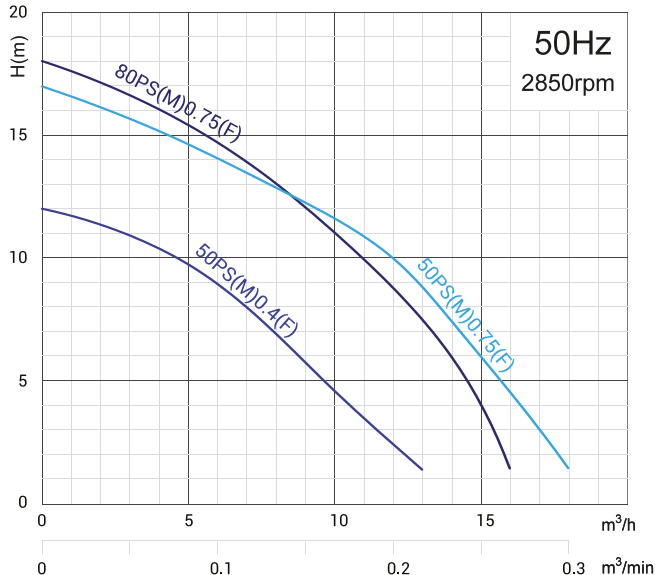
Dimensions and Weight

Model (50Hz)	d	A	A1	B	B1	D	H	W1	N.W.	G.W.	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg	mm
50PS(M)0.4(F)	50	243	207	157	84	185	350	85	13.5	15	405x255x255
50PS(M)0.75(F)	50	257	221	157	84	185	390	85	16.5	18	445x265x255
80PS(M)0.75(F)	80	284	234	225	109	185	390	85	18	19.5	445x295x255

Performance Range

Model (50Hz)	Outlet mm	Motor power		Rated current (A)		Rated capacity		Rated head m	Max capacity		Max Head m	Impeller Passage mm
		kW	HP	1~	3~	m³/h	m³/min		m³/h	m³/min		
50PS(M)0.4(F)	50	0.4	0.55	3.0	1.3	7	0.12	8	12.6	0.21	12	6
50PS(M)0.75(F)	50	0.75	1	5.0	2.0	10	0.17	11	16	0.27	18	6
80PS(M)0.75(F)	80	0.75	1	5.0	2.0	12	0.20	10	18	0.3	17	6

Performance Curves



* PS:Three phase; PSM:Single phase;
PSM...F:Single phase with Float switch

PD(M) PORTABLE SLURRY PUMP



PDM series portable drainage pumps are equipped with semi-vortex impellers and built-in agitators made of high chrome alloy. These pumps are designed to operate in media contaminated with mud and sand.

Technical Specifications

- Water temperature: up to 40°C
- PH: 6.5 to 8.5
- Power supply: single phase 220V \pm 10%, 50Hz
three phase 380/400V \pm 10%, 50 Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 10 m
- Max water depth: 10 m

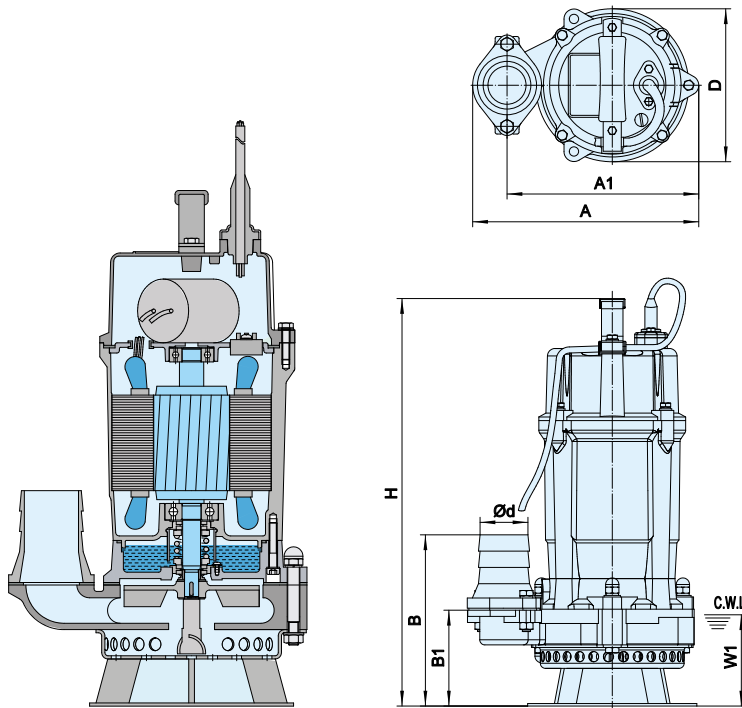
Application

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

Optional Features

- Other voltages
- The length of cable is optional





W1:Continuous running water level

Material of Construction

Part name	Material
Hose coupling	Cast iron
Handle	Rubber&steel
Upper cover	Aluminum die casting
Up-Bearing house	Cast iron
Seal house	Cast iron
Motor body	Aluminum die casting
Pump body	Cast iron
Impeller	High chrome alloy
Agitator	High chrome alloy
Oil riser	NBR
Sand guard	LDPE
Strainer	Steel
Stator	
Rotor	Shaft:AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	
Motor protector	
Mechanical seal	Ceramic-Sic/Carbon-Ceramic
Gasket	NBR
Gasket	NBR
Gasket	NBR
Shaft sleeve	AISI420SS
Cable	H07RN-F

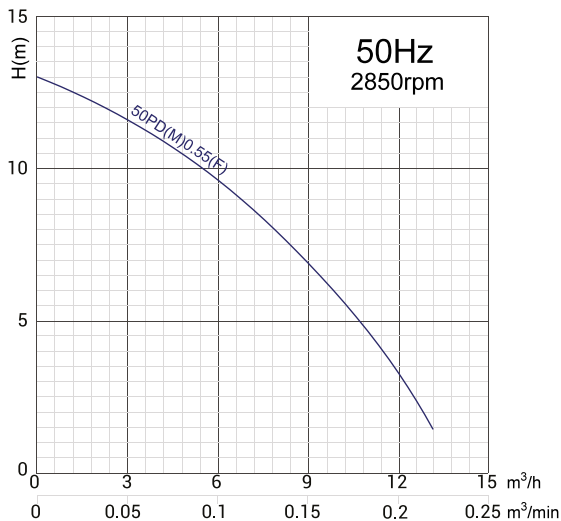
Dimensions and Weight

Model (50Hz)	d	A	A1	B	B1	D	H	W1	N.W.	G.W.	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg	mm
50PDM0.55(F)	50	237	201	168	95	160	401	95	15.5	17	455x255x230
50PD0.55	50	237	201	168	95	160	401	95	14	15.5	455x255x230

Performance Range

Model (50Hz)	Outlet	Motor power		Rated current (A)		Rated capacity		Rated head	Max capacity		Max Head	Impeller Passage
	mm	kW	HP	1~	3~	m ³ /h	m ³ /min	m	m ³ /h	m ³ /min	m	mm
50PD(M)0.55(F)	50	0.55	0.75	4.0	1.7	8	0.13	8	13.2	0.22	13	9

Performance Curves



* PD:Three phase; PDM:Single phase;
PDM...F:Single phase with Float switch

TSA PORTABLE DRAINAGE PUMP



Solidpump TSA series portable drainage pumps with top discharge effective cooling and space saving design. This compact and robust pump can be used for different construction dewatering and other general drainage applications.

Technical Specifications

- Power supply: single phase 230V±10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 10 m
- Water temperature: up to 40°C
- PH: 6.5 to 8.5
- Max. water depth: 10 m

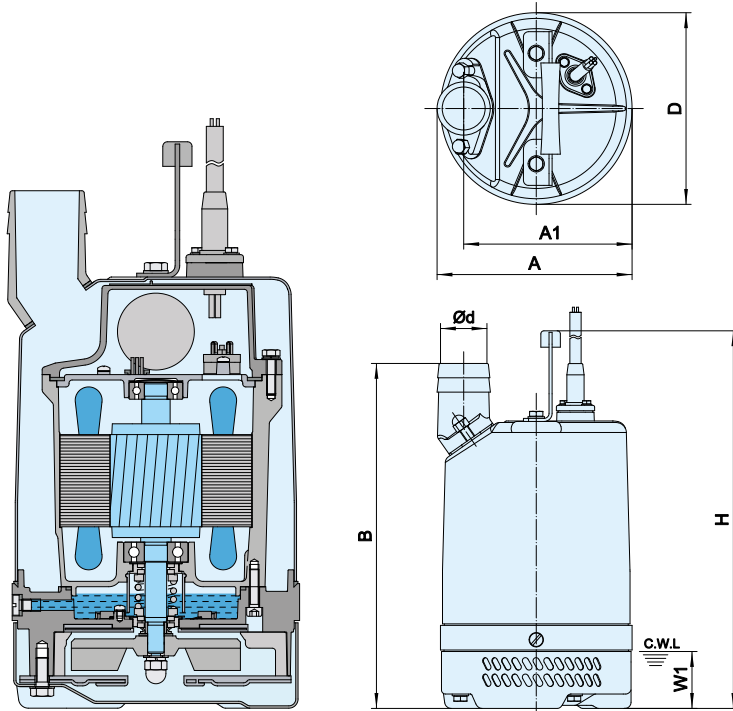
Application

- Construction sites
- Underground tunneling and mining works
- Drainage of contaminated water

Optional Features

- Other voltages
- Other length of cable





W1:Continuous running water level

Material of Construction

Part name	Material
Hose coupling	Aluminum die casting
Handle	Rubber & steel
Upper cover	Aluminum die casting
Up-Bearing house	Cast iron
Seal house	Aluminum die casting
Motor body	Aluminum die casting
Outer casing	Steel
Impeller	Ductile iron
Diffuser	NBR
Plate	NBR & Steel
Intel plate	NBR & Steel
Oil riser	NBR
Sand guard	LDPE
Strainer	Steel
Stator	
Rotor	Shaft:AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	
Motor protector	
Mechanical seal	Ceramic-Sic/Carbon-Ceramic
Cable	H07RN-F

Dimensions and Weight

Model (50Hz)	d	A	A1	B	D	H	W1	N.W	G.W	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	Kg	Kg	mm
50TSA0.48(F)	50	190	163	296	187	328	50	11.6	13.1	365x225x255
50TSA0.75(F)	50	190	163	336	187	368	50	13.8	15.3	405x225x255

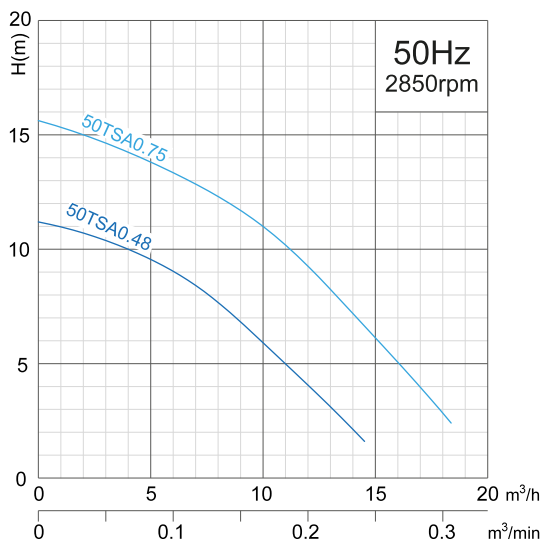
* TSA: Single phase; TSA...F: Single phase with Float switch

Performance Range

Model (50Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max Head	Impeller Passage
	mm	kW	HP	V	A	m ³ /h	m ³ /min	m	m ³ /h	m ³ /min	m	mm
50TSA0.48(F)	50	0.48	0.65	230	3.0	7	0.12	8	13.5	0.23	11.5	6
50TSA0.75(F)	50	0.75	1	230	5.0	10	0.17	11	18	0.3	15	6

* TSA: Single phase; TSA...F: Single phase with Float switch

Performance Curves



TSAE PORTABLE DRAINAGE PUMP



Solidpump TSAE series portable drainage pumps with top discharge effective cooling and space saving design. This compact and robust pump can be used for different construction dewatering and other general drainage applications.

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

Technical Specifications

- Power supply: single phase 230V \pm 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 10 m
- Water temperature: up to 40°C
- PH: 6.5 to 8.5
- Max. water depth: 10 m

Application

- Construction sites
- Underground tunneling and mining works
- Drainage of contaminated water

Optional Features

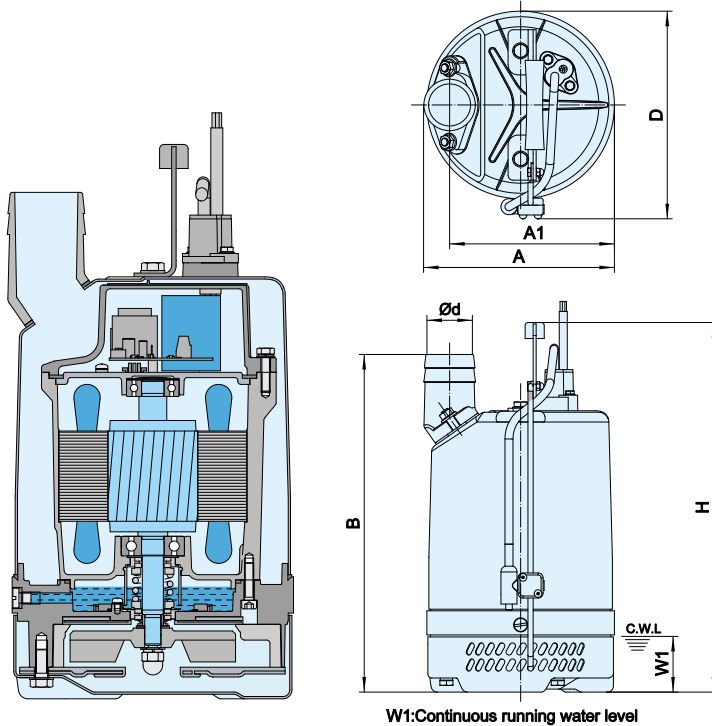
- Other voltages
- Other length of cable

Key features of TSAE intelligent control system

- 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 60 seconds 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;
- Protects against impeller jam, thus prevents accidental damage;
- Assessment of the pump's operation and malfunction history.

Material of Construction

Part name	Material
Hose coupling	Aluminum die casting
Handle	Rubber & steel
Upper cover	Aluminum die casting
Up-Bearing house	Cast iron
Seal house	Aluminum die casting
Motor body	Aluminum die casting
Outer casing	Steel
Impeller	Ductile iron
Diffuser	NBR
Plate	NBR & Steel
Intel plate	NBR & Steel
Oil riser	NBR
Sand guard	LDPE
Strainer	Steel
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	
Mechanical seal	Ceramic-Sic/Carbon-Ceramic
Cable	H07RN-F
Controller block	



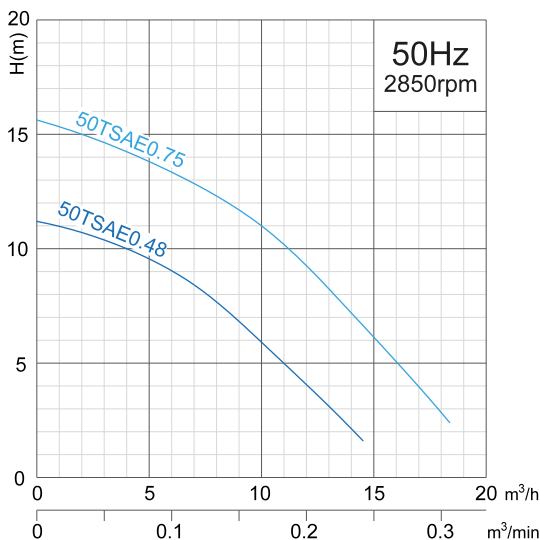
Dimensions and Weight

Model (50 Hz)	d	A	A1	B	D	H	W1	N.W	G.W	Packing dimension
	mm	mm	mm	mm	mm	mm	mm	Kg	Kg	mm
50TSAE0.48	50	190	164	296	207	328	50	11.8	13.3	385x230x270
50TSAE0.75	50	190	164	336	207	368	50	14.0	15.5	405x230x270

Performance Range

Model (50 Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max Head	Impeller Passage
	mm	kW	HP	V	A	m ³ /h	m ³ /min	m	m ³ /h	m ³ /min	m	mm
50TSAE0.48	50	0.48	0.65	230	3.0	7	0.12	8	13.5	0.23	11.5	6
50TSAE0.75	50	0.75	1	230	5.0	10	0.17	11	18	0.3	15	6

Performance Curves



TS(M) SUBMERSIBLE DRAINAGE PUMP



TSM series Solidpump are compact, high-performance durable 1-phase submersible pumps used for handling abrasive 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. Depending on size, pumps are equipped with semi-open impeller made of high-chrome alloy or ductile iron.

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: F
- Protection class: IP68
- Water temperature: up to 40° C
- Max. water depth:
TSM 0.25 ~ 0.75 kW: 10 m; TSM 1.5 kW: 25 m

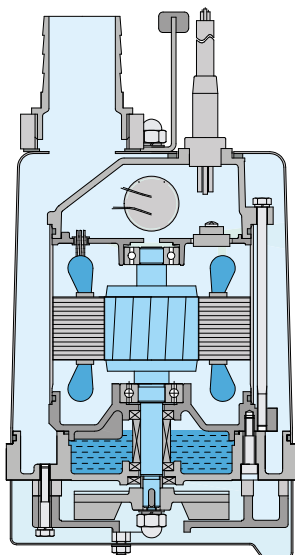
Application

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

Optional Features

- Other voltages
- The length of cable is optional

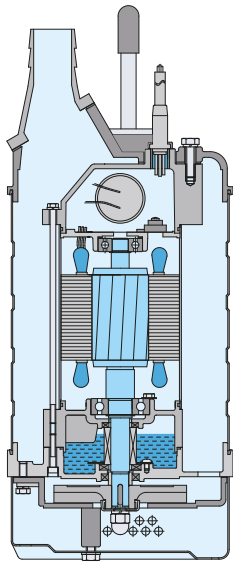
Material of Construction



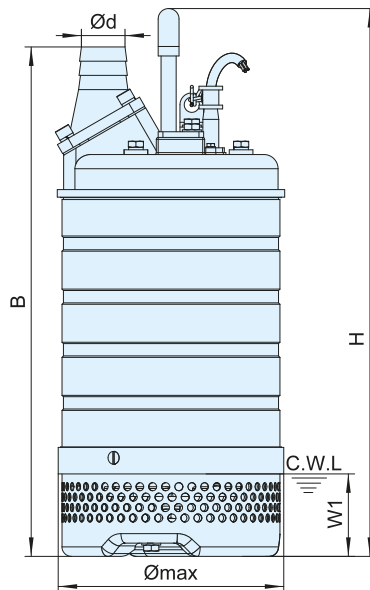
0.25-0.75kW

*Optional: AISI304SS

Part name	Material
Hose coupling	ABS
Hose coupling	PA66
Handle	Rubber&AISI304SS
Upper cover	Cast iron*
Up-Bearing house	Aluminum die casting
Bearing house	Cast iron*
Seal house	Cast iron*
Motor casing	AISI304SS
Outer casing	AISI304SS
Impeller	Ductile iron*
Diffuser	Cast iron*
Strainer	AISI304SS
Stator	
Rotor	Shaft:AISI304SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	
Motor protector	
Mechanical seal	Ceramic-Sic/Carbon-Ceramic
Oil seal	
Gasket	NBR
Cable	H07RN-F



1.5 kW



W1: Continuous running water level

Material of Construction

Part name	Material
Hose coupling	Cast iron*
Handle	Rubber&steel*
Upper cover	Cast iron*
Upper cover	Cast iron*
Up-bearing house	Cast iron
Bearing house	Cast iron*
Seal bracket	Cast iron*
Motor casing	Stainless steel
Outer casing	AISI304SS
Impeller	High chrome alloy*
Diffuser	Ductile iron*
Strainer	Steel*
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	(Single phase only)
Motor protector	
Mechanical seal	Sic-Sic/Carbon-Sic
Oil seal	
Cable	H07RN-F

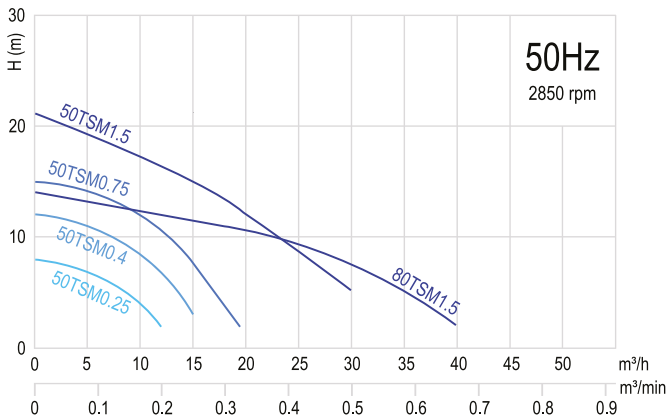
*Optional:AISI304SS

Performance Range

Model (50Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max head	Impeller passage	N.W	G.W	Packing dimension
	mm	kW	HP			m ³ /h	m ³ /min		m ³ /h	m ³ /min					
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

* TS: Three phase; TSM: Single phase; TSM...F: Single phase with Float switch

Performance Curves



Dimensions

Model	H	B	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

TSM(G) PORTABLE RESIDUE DEWATERING PUMP



TSM(G) series are portable residue dewatering pumps, able to pump down to the floor, so that even the smallest puddle can be pumped dry. TSM(G) pumps are the best for complete drainage of flat surfaces where a sump is not available: basements, parking lots, roads, swimming pools, etc. These pumps are capable of pumping water continuously at 1 mm and are equipped with a swing valve that prevents reverse flow of the sucked water when the pump stops its operation.

Technical Specifications

- PH: 6.5 to 8.5
- Power supply: single phase 230V \pm 10%, 50Hz
- Insulation class: F
- Protection class: IP68
- Cable length: 8 or 10 m
- Water temperature: up to 40° C
- Max. water depth: 10 m

Application

- Civil engineering
- Building sites
- Basements or other utility pits
- Rainwater and mud water

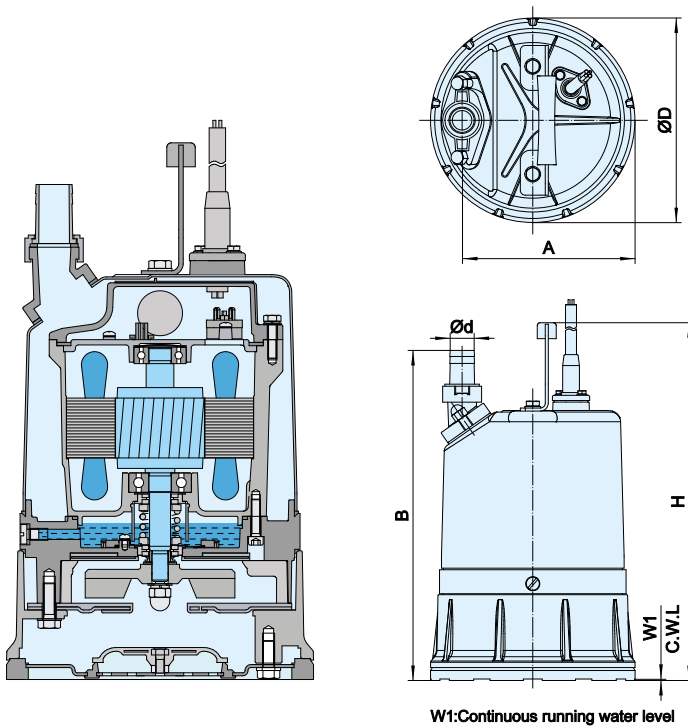
Optional Features

- Other voltages
- Other length of cable



Material of Construction

Part name	Material
Hose coupling	Aluminum die casting
Hose coupling	Aluminum die casting
Handle	Rubber & steel
Upper cover	Aluminum die casting
Up-Bearing house	Cast iron
Seal house	Aluminum die casting
Motor body	Aluminum die casting
Outer casing	Steel
Impeller	Ductile iron
Diffuser	NBR
Plate	NBR & Steel
Intel plate	NBR & Steel
Check value	NBR & Steel
Oil riser	NBR
Sand guard	LDPE
Strainer	Aluminum die casting
Strainer	NBR & Steel
Stator	
Rotor	Shaft:AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	
Motor protector	
Mechanical seal	Ceramic-Sic/Carbon-Ceramic
Cable	H07RN-F



Dimensions and Weight

Model (50Hz)	d	A	B	D	H	W1	N.W.	G.W.	Packing dimension
	mm	mm	mm	mm	mm	mm	Kg	Kg	mm
25TSM0.48(G)	25	173	325	205	358	1	12.6	14.1	425x230x280
25TSM0.48(G)E	25	173	345	205	378	1	13	14.5	445x230x280
50TSM0.75(G)	50	173	365	205	398	1	14.8	16.3	465x230x280
50TSM0.75(G)E	50	173	365	205	398	1	15	16.5	465x230x280

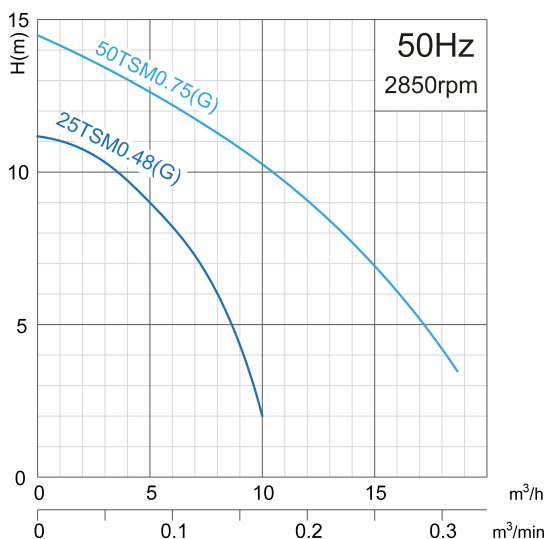
** E: modification with electrode automatic control system

Performance Range

Model (50 Hz)	Outlet	Motor power		Voltage	Rated current	Max Head	Impeller Passage
	mm	kW	HP	V	A	m	mm
25TSM0.48(G)	25	0.48	0.65	230	3.0	11	6
50TSM0.75(G)	50	0.75	1.0	230	5.0	14.5	6

* Please pour 2.5L water into the pump before operation

Performance Curves



TSS STAINLESS STEEL DRAINAGE PUMP



Submersible stainless steel TSS 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 48.5 m
- Power: 1.5 kW to 11kW
- Power supply: three phase 400 V ± 10%, 50 Hz
- Insulation class: F
- Protection class: IP68
- Water temperature: up to 40° C
- Max. water depth: 25 m

Application

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

Optional Features

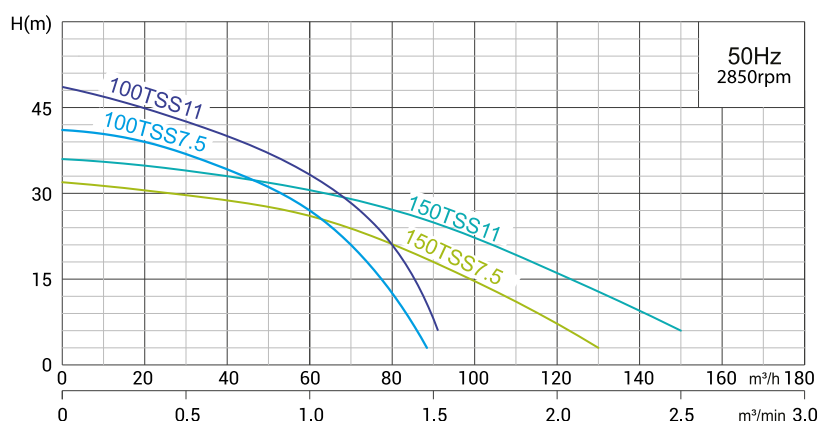
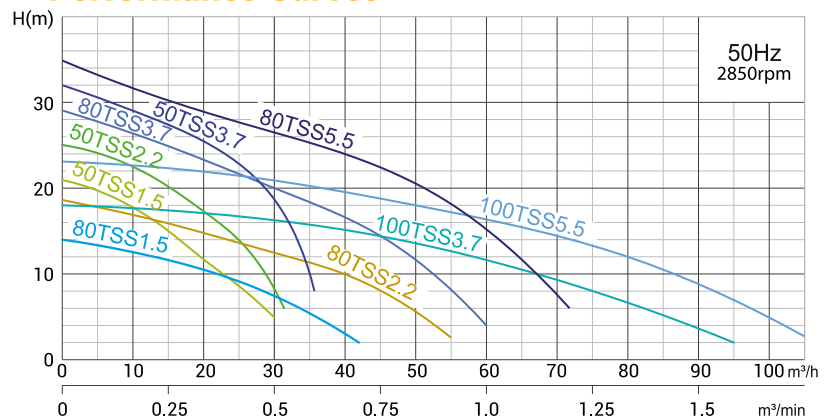
- Other voltages
- The length of cable is optional

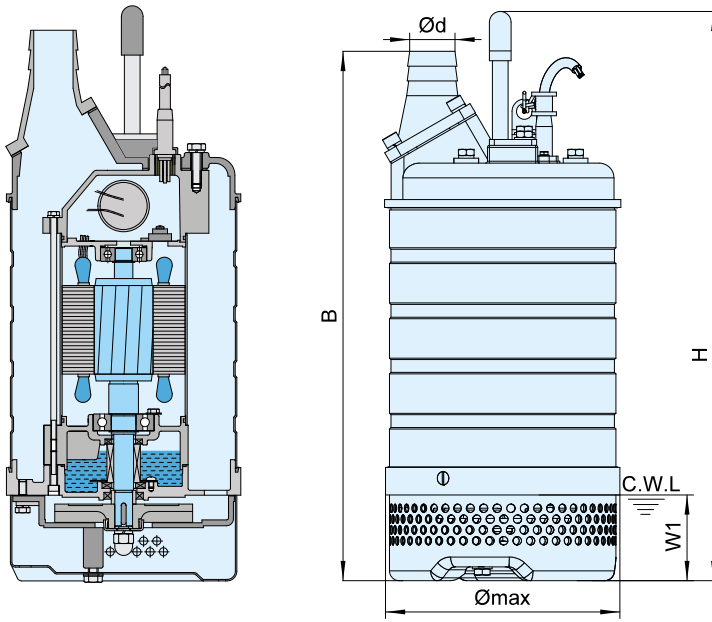
Dimensions

Model	H	B	Ømax	W1
50TSS1.5	563	540	240	87
80TSS1.5	563	540	240	87
50TSS2.2	613	590	240	87
80TSS2.2	613	590	240	87
50TSS3.7	515	591	300	76
80TSS3.7	515	616	300	76
100TSS3.7	555	656	300	76
80TSS5.5	565	641	300	76
100TSS5.5	605	681	300	76
100TSS7.5	700	810	355	142
150TSS7.5	700	810	355	142
100TSS11	745	855	355	142
150TSS11	745	855	355	142

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

Performance Curves





W1: Continuous running water level

Material of Construction

Part name	Material
Hose coupling	AISI304SS
Handle	Rubber&steel
Upper cover	AISI304SS
Upper cover	AISI304SS
Up-bearing house	AISI304SS
Bearing house	AISI304SS
Seal bracket	AISI304SS
Motor casing	Stainless steel
Outer casing	AISI304SS
Impeller	AISI304SS
Diffuser	AISI304SS
Strainer	AISI304SS
Stator	
Rotor	Shaft: AISI420SS
Bearing	Ball bearing
Bearing	Ball bearing
Capacitor	(Single phase only)*
Motor protector	
Mechanical seal	Sic-Sic/ Carbon-Sic (≤2.2 kW); Sic-Sic/Sic-Sic (3.7-5.5 kW)
Oil seal	
Cable	H07RN-F

*- 1.5 kW pumps can be manufactured 220V on request

Performance Range

Model (50Hz)	Outlet	Motor power		Voltage	Rated current	Rated capacity		Rated head	Max capacity		Max head	Impeller passage	N.W	G.W	Packing dimension
	mm	kW	HP			m ³ /h	m ³ /min		m ³ /h	m ³ /min					
50TSS1.5	50	1.5	2	400	3.5	15	0.25	15	30	0.5	21	8.5	37	41	620x270x315
80TSS1.5	80	1.5	2	400	3.5	27	0.45	9	42	0.7	14	8.5	37	41	620x270x315
50TSS2.2	50	2.2	3	400	5.0	20	0.33	18	32	0.53	25	8.5	40	44	620x270x315
80TSS2.2	80	2.2	3	400	5.0	36	0.6	11	55	0.92	18.5	8.5	40	44	620x270x315
50TSS3.7	50	3.7	5	400	7.7	18	0.3	26	36	0.6	32	8.5	58	64	670x320x345
80TSS3.7	80	3.7	5	400	7.7	35	0.58	18.5	60	1.0	29	8.5	58	64	670x320x345
100TSS3.7	100	3.7	5	400	7.7	60	1.0	11.5	95	1.58	18	8.5	59	65	670x320x345
80TSS5.5	80	5.5	7.5	400	11.4	45	0.75	22	72	1.2	35	8.5	66	72	710x320x345
100TSS5.5	100	5.5	7.5	400	11.4	60	1.0	16	105	1.75	23	8.5	67	73	710x320x345
100TSS7.5	100	7.5	10	400	15	60	1.0	26	88	1.47	41	11.5	108	120	894x394x455
150TSS7.5	150	7.5	10	400	15	80	1.33	20.5	130	2.17	32	19.5	110	122	894x394x455
100TSS11	100	11	15	400	22	60	1.0	32	86.4	1.44	48.5	11.5	123	135	954x394x455
150TSS11	150	11	15	400	22	90	1.5	25	150	2.5	34	19.5	125	137	954x394x455



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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