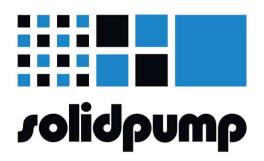


NORDIC GEO SUPPORT Dewatering Pumps

FOR MINING, TUNNELLING & CONSTRUCTION







Dewatering Solutions

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NORDIC GEO SUPPORT offers a comprehensive range of water management and dewatering/pumping solutions to mining, drilling, tunnelling, energy, construction and geotechnical applications. Working with leading certified suppliers in combination with experienced manufacturers that are employing leading edge design and innovative production facilities, we offer high quality, high performance solutions to your project challenges.

Nordic Geo Support Product Offer

Drilling Consumables

High Performance rock drilling tools and consumables:

- > DTH Hammers
- Bits
- Shanks
- > Rods **Drill Pipes**
- Adapters
- Augers, Accessories

Pumps & **Accessories**

Cement and resin mixing and pumping technologies:

- Resin Pumps
- Dataloggers
- Hoses, lances, packers

Injection Grouts

Leading edge resin injection technology for demanding cases:

- ➤ Water Stopping
- Sealing
- Ground Consolidation
- **Ground Stabilisation**
- Construction and structural repairs

Anchoring & Bolting Grouts

Grouting technologies offering ease of use, clean and fast setting:

- Capsules
- Cartridges
- > Pumpable grouts
- Additives

Anchoring & Bolting

A broad range of rock bolting and anchoring technologies:

- Double and single coated protected steel
- > Steel Self Drilling
- GFRP bolrs of all types
- Standard bolts and meshes

Cement-Based **Additives**

Cement based admixtures and additives:

- > Concrete Repair
- Admixtures
- Modifiers
- Waterproofing
- Joint Sealants

- Cement Pumps
- Transfer systems

Water control

Waterproofing, drainage and

- > TunnelDrain innovative strip drainage system
- Drainage pipes
- Waterproofing grouts, additives and sealants
- A broad range of dewatering pumps

Ventilation

Air quality, ventilation and safety solutions:

- Ventilation bags and systems, including Mecanicad's rigid ducts
- Fans & inline coolers
- Water atomisers

Re-usable Hangers

Developed in the Nordics, fast, easy to use & reuse:

- Services Hooks for ventilation systems, water and pneumatic lines, electrical cables and distribution boards
- Blasting hooks

Other products

A range of other products:

- Coatings & sealants
- Personal protective products
- Mining accessories



Water Management Systems

Nordic Geo Support offers a range of products to control water in tunnel and mine and construction projects:

Engineered Water cleaning and pumping systems:

- High Pressure multistage pumps
- Turbine pump technology
- Centrifugal pumps technology
- Open pit and shaft dewatering systems
- Corrosive water transfer
- Water cleaning systems

DTDS Drainage System – reducing project footprints.

- Comprehensive drainage an alternative to strip drains
- · Quick and easy to apply
- · A complementary product to systematic pre-grouting
- Permits sprayed concrete to bond continuously to the rock or previous concrete layers
- No risk of differential shrinkage cracking as seen with strip drains
- Compatible with Spray Applied Woterproofing Membranes
- Tunnel Drain can be embedded in the regulating layer which is

normally sprayed before applying the membrane

- This can serve as temporary drainage so the tunnel is dry enough to apply the membrane
- Additional permanent drainage behind the membrane for a more robust waterproofing solution
- Easy maintenance Scan to detect any blockages & then remove during maintenance
- · Underground spaces, mining, tunnels, basements and more

Injection Grout Technologies

- Nordic Geo Support offers specialist high-performance cement and resin and grouting solutions.
- Our cutting-edge technology in resin-based solutions place our customers at the forefront of sustainable bolting, sealing, consolidation and stabilisation of rock and soils.
- Our expertise in design and application as well as our understanding of the total solution from drilling to grouting and capital equipment means we offer the complete system to our customers.
- Ground water and drinking water certified







Dewatering Pumps

Nordic Geo Support offer of leading edge 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. 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. The range of submersible pumps are applicable in, but not limited to applications in general drainage, construction, mining and industrial sites, wastewater treatment, sludge and sand removal.

Market Segments	Pump Type	TBZ	TBZE	TBD	TPDE	TBS	TTZ	МН	TSM	TS
	Typical Applications							2		
Heavy	Slurry	-	-	XXX	XXX	XXX	XXX	-	XX	XXX
Construction Tunnels.	Sands	-	-	XXX	XXX	XXX	XXX	-	XX	XXX
Dams, Shafts	Gravels	-	-	XX	XX	XXX	XX	-	Х	Х
	Deep Well	-	-	-	-	-	-	XXX	Х	-
	General Use	XXX	XXX	XXX	XXX	XX	XXX	XXX	XX	XXX
Mining	Open Pit			XX	XX	XXX	XX	XX	-	Х
	Quarries	XX	XX	XXX	XXX	XXX	XXX	XX	Х	XX
	Underground	XX	XX	XX	XX	XXX	XX	XX	Х	XXX
	Tailings / Dams	X	Χ	XX	XX	XXX	XX		Х	XXX
	Deep Well	-	-	-	-	-	-	XXX	-	-
Drilling	Bentonite	-	-	XXX	XXX	X	X	-	-	XXX
	Dewatering	XXX	XXX	XXX	XXX	XXX	XXX	XX	XX	X
	Other	XX	XX	XX	XX	XX	XX	-	XX	X
Building	Pits	XX	XX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Construction	Slurry	-	-	XXX	XXX	XXX	XXX	-	XXX	XXX
	Sands	-	-	XXX	XXX	XXX	XXX	-	XXX	XXX
	General Use	XXX	XXX	XX	XX	XX	XX	-	X	X
	Deep Well	-	-	-	-	-	-	XXX	-	-
Restoration	Drainage	XXX	XXX	XX	XX	XX	XX	XXX	XX	XX
and Repair	Contaminated Water	-	-	XX	XX	XX	XX	-	XXX	XXX
	Industry	XX	XX	XX	XX	XX	XX	XXX	XXX	XXX
	Sedimentation Tanks	-	-	XXX	XXX	XXX	XXX	-	XXX	XXX
	Wastewater Treatment Plant	-	-	XXX	XXX	XXX	XXX	-	XXX	XXX
	Basements	XX	XX	X	X	XX	XX	XX	XX	XX

Legend:

X Limited Functionality
XX Suitable Functionality
XXX Best Functionality
- Not Recommended



TBZ-Series – Submersible Dewatering Pump

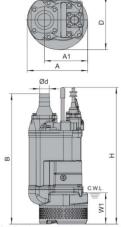


TBZ-series robust pumps are best suited for draining in civil engineering but can be also used for general pumping purposes. Motor and pump casing is made of rigid cast iron for long-lasting durability. Maximum submersion depth is greatly increased due to mechanical seal resistant to high pressure. Semi-open 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 1,5 kW to 15 kW. Hermetically sealed motors below 15 kW are equipped with build-in thermal protection.

- Mining
- Construction sites
- Tunnelling projects Industrial sites
- Drainage
- Contaminated water management
- Other general dewatering applications

Technical Information	TBZ
Capacity	Up to 160 m³/h
Head Lift	Up to 57 meters
Power Rating	1.5 to 15 kW
Power Supply	400/415V, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C
Maximum Water Depth	25 meters



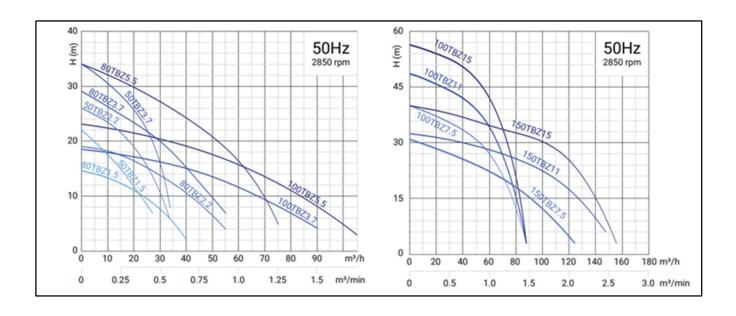
W1: Continuous running water level

Dimensio	Dimensions and Weights									
Model (50Hz)	D (mm)	A (mm)	A1 (mm)	B (mm)	D (mm)	H (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (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	750x350x360
100TBZ5.5	100	283	208	686	252	590	150	77	84	750x350x360
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



TBZ-Series - Submersible Dewatering Pump (Cont.)

Performance Curves and Range Data



Performa	nce Data	1									
Model (50Hz)	Outlet	Motor	Power	Current (400V)			Rated Head	Max C	apacity	Max Head	Impellor Passage
	(mm)	kW	HP	Α	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	1.00	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	1.00	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	1.00	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	1.00	42	84	1.40	56	11.5
150TBZ15	150	15	20	29.5	102	1.70	30	156	2.60	40	19.5





TBZE-Series – Automatic Submersible Dewatering Pump

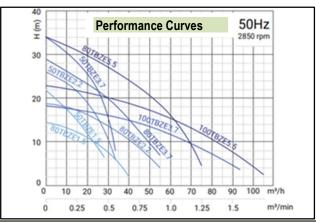


TBZE-series robust pumps are best suited for draining in operations requiring automatic stop applications. Motor and pump casing is made of rigid cast iron for long-lasting durability. Maximum submersion depth is greatly increased due to mechanical seal resistant to high pressure. Semi-open impeller 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.

Key Features of the TBZE Intelligent control system:

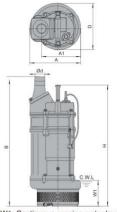
- Protects against open phase or impeller jam, thus prevents accidental damage
- Protects against reverse phase, ensuring correct impeller rotation
- Automatically stops the pump in case of overload, abnormal voltage with the recovery after 5 minutes
- The pump stops working at high temperature, and 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

Technical Information	TBZE
Capacity	Up to 105 m³/h
Head Lift	Up to 38 meters
Power Rating	1.5 to 5.5 kW
Power Supply	400/415V, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C
Maximum Water Depth	25 meters



Performance	Data										
Model (50Hz)	Outlet	Motor	Power	Current (400V)			Rated Max Capacity Head			Max Head	Impellor Passage
	(mm)	kW	HP	Α	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	1.00	11.5	90	1.50	18.5	8.5
80TBEZ5.5	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	1.00	16	105	1.75	23	8.5

Dimension	Dimensions and Weights									
Model (50Hz)	D (mm)	A (mm)	A1 (mm)	B (mm)	D (mm)	H (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (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
80TBEZ3.7	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



W1: Continuous running water leve

TBD - Agitator Pump

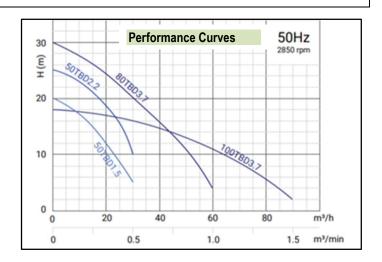




TBD agitator series are heavy-duty slurry / sand pumps using TBZ pumps as a base. TBD pumps are equipped with agitators that assist smooth suction of the pumped media. The side-flow, top-discharge design providse for motor cooling even in case the pump is operated continuously in semi-submerged condition. 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

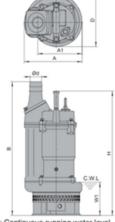
- Sand Pits and Sedimentation Tanks
- Mining and quarries
- Transfer of bentonite slurry and sandy sludge
- Transfer of water containing mud and sand
- Construction sites
- Tunnelling projects
- Industrial sites
- Drainage
- Contaminated water management
- Other general dewatering applications

Technical Information	TBD
Capacity	Up to 90 m³/h
Head Lift	Up to 30 meters
Power Rating	1.5 to 3.7 kW
Power Supply	400/415V, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C
Maximum Water Depth	25 meters



Performance	Data										
Model (50Hz)	Outlet	Motor	Power	Current (400V)	Rated Capacity		Rated Head	Max Capacity		Max Head	Impellor Passage
	(mm)	kW	HP	Α	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	0.30	19	30	0.50	25	10
80TBD3.7	80	3.7	5	7.7	30	0.50	20	60	1.00	30	10
100TBD3.7	100	3.7	5	7.7	60	1.00	11	90	1.50	18	10

Dimension	Dimensions and Weights									
Model (50Hz)	D (mm)	A (mm)	A1 (mm)	B (mm)	D (mm)	H (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (mm)
50TBD1.5	50	235	173	613	557	522	135	37	41	610X265X265
50TBD2.2	50	235	173	620	557	522	135	40	44	610X265X265
80TBD3.7	80	283	208	613	636	642	165	64	69	710X320X295
100TBD3.7	100	283	208	620	661	642	165	65	70	710X320X295



W1: Continuous running water level



TBDE – Automatic Agitator Pump

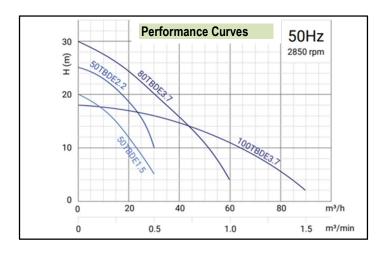


TBDE agitator series are heavy-duty slurry / sand pumps using TBZ pumps as a base. TBD pumps are equipped with agitators that assist smooth suction of the pumped media. The side-flow, top-discharge design providse for motor cooling even in case the pump is operated continuously in semi-submerged condition. 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. The 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.

Key Features of the TBDE Intelligent control system: Protects against reverse phase, ensuring correct impeller rotation

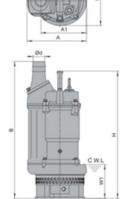
- Protects against open phase or impeller jam, thus prevents accidental damage
- Automatically stops the pump in case of overload, abnormal voltage with the recovery after 5 minutes
- The pump stops working at high temperature, and will automatically restart after cooling to the specified temperature
- 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

Technical Information	TBDE
Capacity	Up to 90 m³/h
Head Lift	Up to 30 meters
Power Rating	1.5 to 3.7 kW
Power Supply	400/415V, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C
Maximum Water Depth	25 meters



Performance Data											
Model (50Hz)	Outlet	Motor Power		Current (400V)	Rated Capacity		Rated Head	Max Capacity		Max Head	Impellor Passage
	(mm)	kW	HP	Α	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	0.30	19	30	0.50	25	10
80TBDE3.7	80	3.7	5	7.7	30	0.50	20	60	1.00	30	10
100TBDE3.7	100	3.7	5	7.7	60	1.00	11	90	1.50	18	10

Dimensions and Weights										
Model (50Hz)	D (mm)	A (mm)	A1 (mm)	B (mm)	D (mm)	H (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (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



W1: Continuous running water level



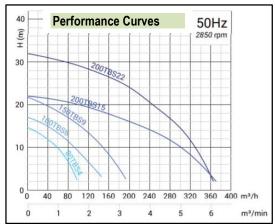
TBS - Sand/Slurry Agitator Pump



Heavy duty, higher capacity 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. Discharge 80mm to 200mm.

- Sand Pits and Sedimentation Tanks
- Mining and quarries
- Transfer of bentonite slurry and sandy sludge
- Transfer of water containing mud, sand and abrasive materials
- Construction sites
- Tunnelling projects
- Industrial sites
- Bottom Deepening
- Tailings dams and ponds

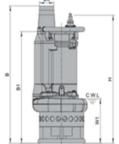
Technical Information	TBS
Capacity	Up to 372 m³/h
Head Lift	Up to 32 meters
Power Rating	4 to 22 kW
Power Supply	380V <u>+</u> 10%, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C
Maximum Water Depth	15 meters



Performance Data												
Model (50Hz)	Outlet	Motor Power		Starter	Current (400V)	Rated Capacity		Rated Head	Max Capacity		Max Head	Impellor Passage
	(mm)	kW	HP		Α	m³/h	m³/min	m	m³/h	m³/min	m	mm
80TBS4	80	4	5.5	D.O.L.	10.2	60	1.00	10	99	1.65	14.8	30
100TBS6	100	6	38	D.O.L.	13.8	90	1.50	10	144	2.40	16.9	30
150TBS9	150	9	512	D.O.L.	19.5	100	1,67	15	192	3.20	21.5	30
200TBS15	200	20	520	D.O.L.	30.1	200	3.33	16	372	6.20	22	30
200TBS22	200	30	20	Star/Delta	42	200	3.33	24	360	6.00	32	30

Dimensio	Dimensions and Weights										
Model (50Hz)	D (mm)	A (mm)	A1 (mm)	B (mm)	B1	D (mm)	H (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (mm)
80TBS4	80	350	260	816	678	326	730	250	108.5	119	885x385x395
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





W1: Continuous running water level



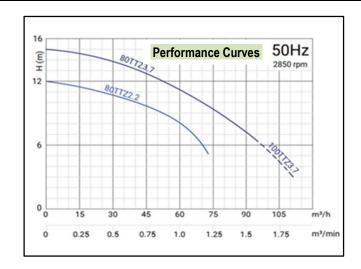
TTZ - Submersible Agitator Pump



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. Discharge sizes 80 to 100mm.

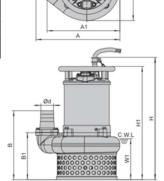
- Sand Pits and Sedimentation Tanks
- Mining and quarries
- Transfer of bentonite slurry and sandy sludge Transfer of water containing mud and sand
- Construction sites
- Tunnelling projects
- Industrial sites
- Drainage
- Other general dewatering applications

Technical Information	ттг
Capacity	Up to 114 m³/h
Head Lift	Up to 15 meters
Power Rating	2.2 to 3.7 kW
Power Supply	400/415V, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C
Maximum Water Depth	20 meters



Performance Data											
Model (50Hz)	Outlet	Motor	Motor Power Current (400V)		Rated Capacity		Rated Head			Max Head	Impellor Passage
	(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	8.1	0.6	13.5	86.4	1.44	15	20
100TTZ3.7	100	3.7	5	8.1	8.1	1.0	111	114	1.9	15	20

Dimensions and Weights											
Model (50Hz)	D (mm)	A (mm)	A1 (mm)	B (mm)	B1 (mm)	D (mm)	H (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (mm)
80TTZ2.2	80	469	408	378	257	371	685	230	92	99	765x405x495
80TTZ3.7	80	469	408	378	257	371	750	230	108	116	830x405x405
100TTZ3.7	100	469	408	392	257	371	750	230	108	116	830x405x405





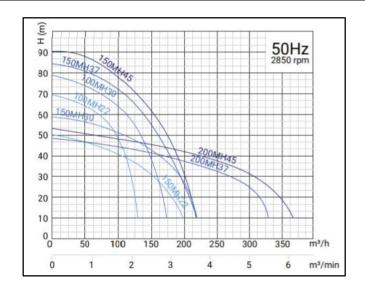
MH-Series – High Head Dewatering Pump (22 to 45 kW)



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 semi-submerged 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)

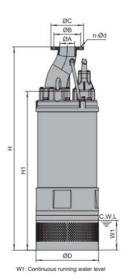
- Deep well and high head applications Mining and quarries
- Construction sites
- Tunnelling projects
- Industrial sites
- Drainage
- Contaminated water
- Other general dewatering applications

Technical Information	MH Series 22 to 45kW
Capacity	Up to 372 m³/h
Head Lift	Up to 90 meters
Power Rating	22 to 45 kW
Power Supply	400/415V, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	20 meters
Water Temperature	Up to 40°C
Maximum Water Depth	30 meters



Performar	nce Data										
Model (50Hz)	Outlet	Motor Power		Notor Power Current (400V)		Rated Capacity		Max C	apacity	Max Head	Impellor Passage
	(mm)	kW	HP	Α	m³/h	m³/min	m	m³/h	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	80	1.4	80	220	3.67	90	6
200MH37	200	37	50	66	66	3.6	35	330	5.5	48	20
200MH45	200	45	60	80	80	4.5	35	372	6.2	53	20

Dimension	Dimensions and Weights										
Model (50Hz)	A (mm)	B (mm)	C (mm)	n-Ød (mm)	D (mm)	H (mm)	H1 (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (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	680x740x1700
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





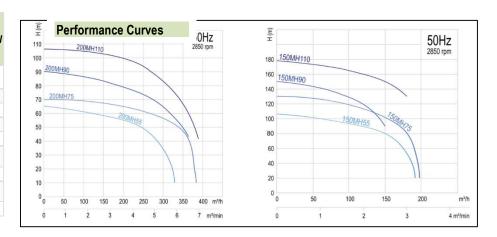
MH-Series - High Head Dewatering Pump (55 to 110 kW)



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 semi-submerged condition. Space saving design due to a top outlet. Discharge from 150mm to 200mm, motor 55kW to 75kW. Pumps are equipped with dry type submersible induction motors (2 poles)

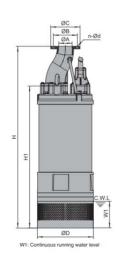
- Deep well and high head applications
- Mining and quarries
- Construction sites
- · Tunnelling projects
- Industrial sites
- Drainage
- Contaminated water
- Other general dewatering applications

Technical Information	MH Series 55 to 110kW
Capacity	Up to 408 m³/h
Head Lift	Up to 184 meters
Power Rating	55 to 110 kW
Power Supply	400/415V, 3 phases, 50Hz
Insulation Class	F
Protection Class	IP68
Cable Length	20 meters
Water Temperature	Up to 40°C
Maximum Water Depth	20 meters



Performance Data												
Model (50Hz)	Outlet	t Motor Power		Current (400V)	Rated Capacity		Rated Head			Max Head	Impellor Passage	
	(mm)	kW	HP	Α	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	98	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	6.6	107	20	

Dimensions and Weights												
Model (50Hz)	A (mm)	B (mm)	C (mm)	n-Ød (mm)	D (mm)	H (mm)	H1 (mm)	W1 (mm)	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (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-Ø26	592	1687	1282	200	1120	1160	1825x665x965	
200MH110	200	295	340	12-Ø26	592	1687	1282	200	1150	1210	1825x665x965	





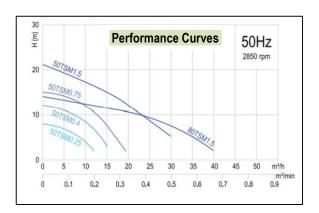
TSM - Drainage Pumps for abrasive and corrosive liquids



TSM Series from Solidpump are compact, high-performance, durable single-phase submersible pumps used for handling abrasive and/or corrosive liquids at job sites. The pump body and part are cast iron or in stainless steel options with high-chrome alloy or stainless steel. Effective motor cooling due to the integrated discharge channel. Discharge outlet from 50mm to 80mm. Motor sizes range from 0.25kW to 1.5kW. The hermetically sealed motors are also equipped with built-in thermal protection.

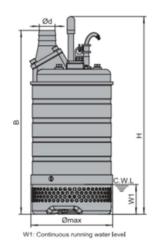
- Contaminated water
- Abrasive substances
- Corrosive liquids
- Pits
- Mud water transfer
- Rainwater transfer

Technical Information	TSM
Power Supply	220/240V single phase, 50Hz 0.25kW to 1.5kW
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C
Maximum Water Depth	TSM 0.25 to TSM 0.75kW - 10 meters TSM1,5kW 25 meters
Capacity	Up to 42m³/H
Head	Up to 21 meters



Performance Data												
Model (50Hz)	Outlet	Motor Power		Single Phase Voltage/Current		Rated Capacity		Rated Head	Max Capacity		Max Head	Impellor Passage
	(mm)	kW	HP	Voltage	Current	m³/h	m³/min	m	m³/h	m³/min	m	mm
50TSM0.25(F)	50	0.25	0.35	220/240	2	6	0.1	7	12	0	8	6
50TSM0.4(F)	50	0.4	0.55	220/240	3	8	0.13	10	14.5	0.24	12	6
50TSM0.75(F)	50	0.75	1	220/240	5	10	0.17	12	19.5	0.32	15	6
50TSM1.5(F)	50	1.5	2	220/240	10	15	0.25	15	30	0.5	21	8.5
80TSM1.5(F)	50	1.5	2	220/240	10	27	0.45	9	42	0.7	14	8.5

Dimensions and Weights												
Model (50Hz)	B (mm	H (mm)	W1 (mm)	Ømax	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (mm)					
50TSM0.25(F)	342	345	50	184	14	15	385x255x250					
50TSM0.4(F)	342	345	50	184	15	16	385x255x250					
50TSM0.75(F)	362	365	50	184	17	18	405x255x250					
50TSM1.5(F)	560	582	87	240	37	41	660x270x315					
80TSM1.5(F)	567	582	87	240	37	41	660x270x315					





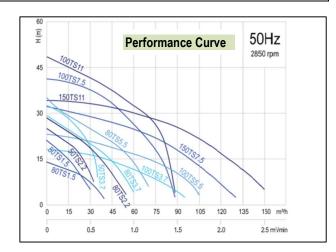
TS - Stainless Steel Drainage Pump



Submersible TS Solidpump series of pumps are used for transfer of chemically aggressive and abrasive liquids at mining and industrial sites.

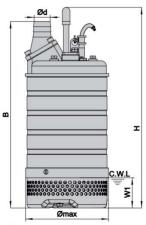
- Industrial sites
- Mining sites
 Drainage of contaminated water
- Transfer of water containing mud and sand Wastewater treatment plants

Technical Information	TS
Capacity	150m³/h
Head	Up to 50 meters
Power Supply	400/415V
Power	1.5kW to 11kW
Insulation Class	F
Protection Class	IP68
Cable Length	8 meters
Water Temperature	Up to 40°C PH: 6.5 to 8.5
Maximum Water Depth	25 meters



Performance Data												
Model (50Hz)	Outlet	Outlet Motor Power			Phase /Current	Rated Capacity		Rated Head	Max Capacity		Max Head	Impellor Passage
	(mm)	kW	HP	Voltage	Current	m³/h	m³/min	m	m³/h	m³/min	m	mm
50TS1.5	50	1.5	2	400	3.5	15	0.25	15	30	0.5	21	8.5
80TS1.5	80	1.5	2	400	3.5	27	0.45	9	42	0.7	14	8.5
50TS2.2	50	2.2	3	400	5	20	0.33	18	32	0.53	25	8.5
80TS2.2	80	2.2	3	400	5	36	0.6	11	55	0.92	18.5	8.5
50TS3.7	50	3.7	5	400	7.7	18	0.3	26	36	0.6	32	8.5
80TS3.7	80	3.7	5	400	7.7	35	0.58	18.5	60	1.0	29	8.5
100TS3.7	100	3.7	5	400	7.7	60	1.0	11.5	95	1.58	18	8.5
80TS5.5	80	5.5	7.5	400	11.4	45	0.75	22	72	1.2	35	8.5
100TS5.5	100	5.5	7.5	400	11.4	60	1.0	16	105	1.75	23	8.5
100TS7.5	100	7.5	10	400	15	60	1.0	26	88	1.47	41	11.5
150TS7.5	150	7.5	10	400	15	80	1.33	20.5	130	2.17	32	19.5
100TS11	100	11	15	400	22	60	1.0	32	86.4	1.44	48.5	11.5
150TS11	150	11	15	400	22	90	1.5	25	150	2.5	34	19.5

Dimensions	Dimensions and Weights												
Model (50Hz)	B (mm	H (mm)	W1 (mm)	Ømax	Nett Weight (Kg)	Gross Weight (Kg)	Packing Dimensions (mm)						
50TS1.5	540	563	87	240	37	41	620x270x315						
80TS1.5	540	563	87	240	37	41	620x270x315						
50TS2.2	590	613	87	240	40	44	620x270x315						
80TS2.2	590	613	87	240	40	44	620x270x315						
50TS3.7	591	515	76	300	56	64	670x320x345						
80TS3.7	616	515	76	300	58	64	670x320x345						
100TS3.7	656	565	76	300	59	65	670x320x345						
80TS5.5	641	565	76	300	66	72	710x320x345						
100TS5.5	681	605	76	300	67	73	710x320x345						
100TS7.5	810	700	142	355	108	120	894x394x455						
150TS7.5	810	700	142	355	110	122	894x394x455						
100TS11	745	745	142	355	123	135	954x394x455						
150TS11	745	745	142	355	125	137	954x394x455						



W1: Continuous running water level

