

HEAVY DUTY SUBMERSIBLE SAND PUMPS

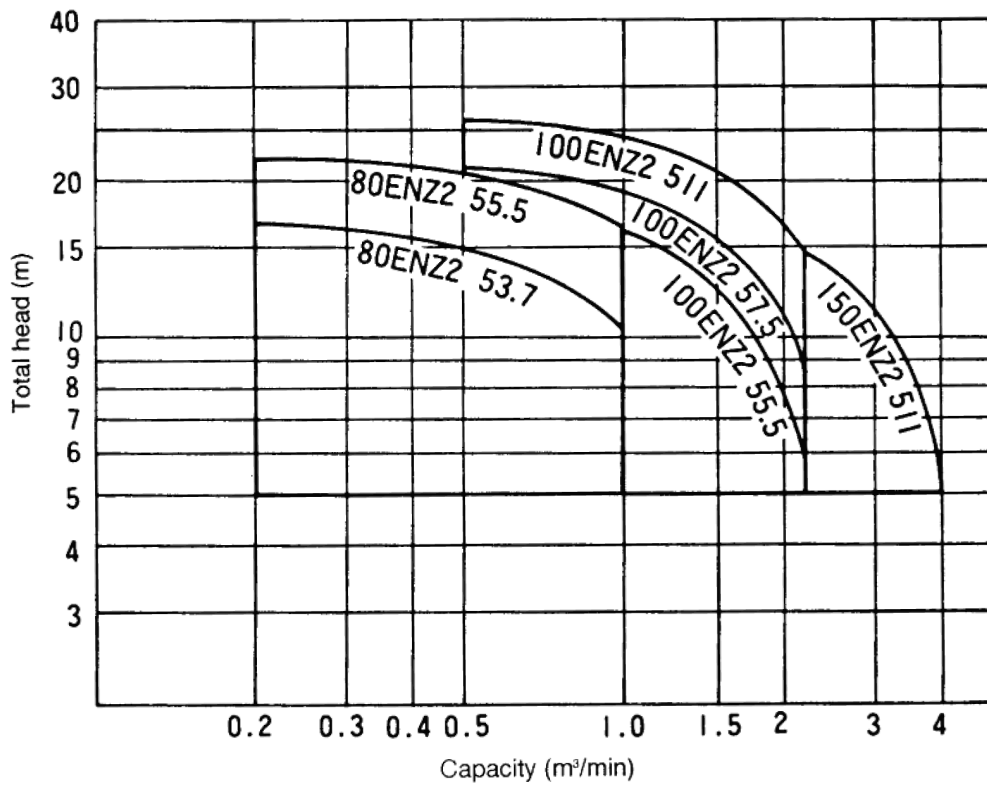


APPLICATIONS

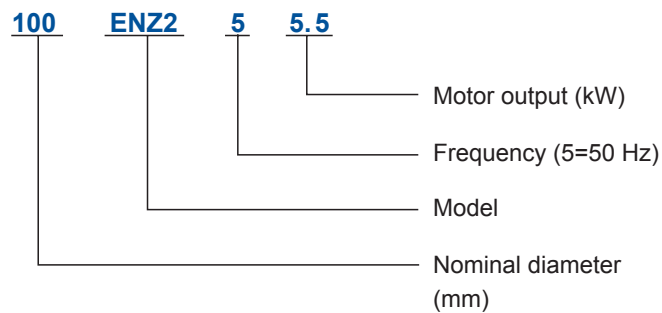
- Drainage in raw concrete plants
- Drainage in quarries
- Drainage in grinding plants
- Drainage at civil engineering sites
- Water intake from rivers
- Drainage in areas with sand sedimentation
- Drainage in sand utilization plants

FEATURES

- Load limiting characteristics prevent overload if cover current occurs.
- If optional water jacket is fitted, motor can operate exposed to the air.
- Vortex type mixing blade provides outstanding mixing performance.
- Mixing blade, suction cover and impeller are made of high chrome cast iron, which has excellent resistance to pumping liquid.
- Pump and motor can be disassembled separately, facilitating disassembly and inspection work.
- A balance hole is used for pressure bleed of the mechanical seal. Combined with the liner ring (of special rubber), this makes it difficult for slurry to enter the seal, which greatly improves durability.
- Both the upper and lower parts of the mechanical seal are made of silicon carbide, which are durable.
- Quick discharge connector can be provided.
- Mixing nozzle, permitting mixing and pumping of sediment water, can be provided as an option.
- When a special strainer (optional) is fitted, water containing accumulated mud and sand deposits can be force-drained.

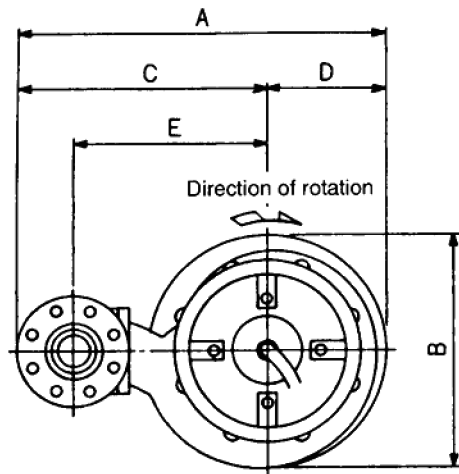
PERFORMANCE CHART
1500 min⁻¹


Model	Nominal diameter (mm)	Output (kW)	Total head (m)	Capacity ℓ/min	Outer dimension (mm)		Weight (kg)
					Max. diameter	Height	
80ENZ2 53.7	80	3.7	10.5	1.0	594	778	97
80ENZ2 55.5	80	5.5	16.3	1.0	594	871	122
100ENZ2 55.5	100	5.5	10.5	1.7	657	881	127
100ENZ2 57.5	100	7.5	13.8	1.7	686	912	147
100ENZ2 511	100	11	19.0	1.7	711	963	200
150ENZ2 511	150	11	10.0	3.2	843	988	210

SYMBOLS


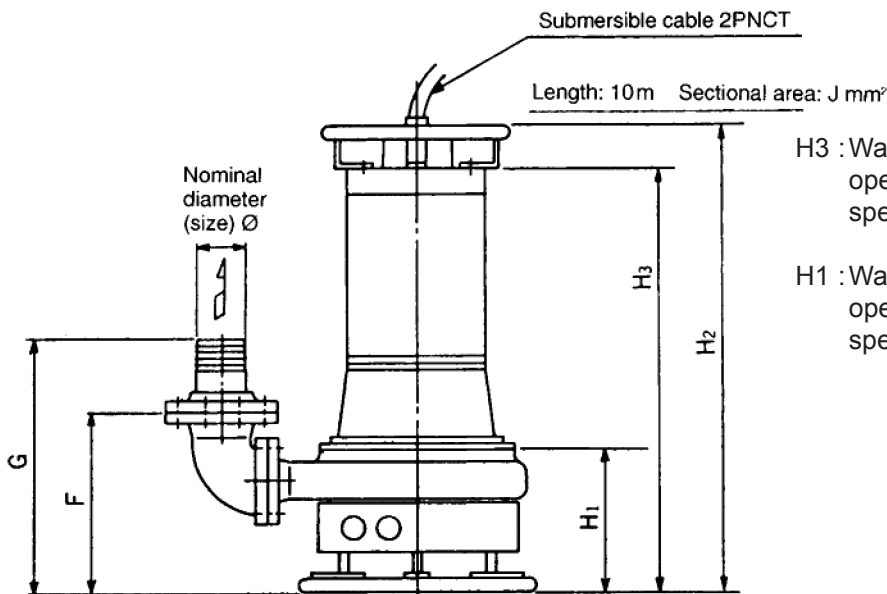
SPECIFICATIONS

Item	Output	0.4kW	5.5kW	7.5kW	11kW
Liquid	Type	Water with mud or sand, various liquids containing solids			
	Max. diameter of solids	20mm			
	Concentration of mud/sand	Max. 5% (by volume)			
	Temperature	0 - 40°C			
	PH	6.5 - 8.0			
Max. pump submergence		8m			
Pump	Construction	Impeller	Semi open (2 blades)		
		Shaft seal	Single coil double mechanical seal		
		Bearing	Sealed ball bearings		
		Mechanical seal pressure bleed	Balance hole type		
		Mixing method	Vortex type mixing blade		
	Material (JIS)	Impeller	High chrome cast iron (HCrFC)		
		Casing	FC200		
		Intermediate casing	FC200		
		Suction cover	High chrome cast iron (HCrFC)		
		Mixing blade	High chrome cast iron (HCrFC)		
		Shaft seal (Mechanical seal)	Motor side	SiC/SiC	
Liquid contact side			SiC/SiC		
Rubber	NBR				
Shaft sealant fluid		Turbine oil ISO VG32			
Motor*	Type, No. of poles, insulation		Dry submersible, 4 pole, type E		
	Phase, voltage		3 phase, 200V		
	Internal protection		Auto cut		
	Material (JIS)	Frame	FC200		
		Shaft	SUS 403		
		Cable	2PNCT		
Cooling		Externally installed (internally installed optional)			
Connection		Hose coupling			

DIMENSION


3rd. ANGLE PROJECTION
UNIT : mm

Motor spec.
Three-phase induction motor
Type : Dry type
Poles : 4
Protector installed internally



H3 : Water level at which continuous operation is possible for standard spec. (without water-cooled jacket)

H1 : Water level at which continuous operation is possible for optional spec. (with water-cooled jacket)

Notes:

1. The water-cooled jacket is an optional specification.
2. Weight in parentheses are for the optional specification (with water-cooled jacket).
3. In the case of the standard specification (without water-cooled jacket) operation with the motor exposed to the air must not exceed 30 minutes.

Nominal diameter ØA	Model	Output (kW)	Pump and Motor											Ball bearings		Vol. of lubricant (turbine oil 32) sealed in bearing	Weight kg
			A	B	C	D	E	F	G	J	H1	H2	H3	Pump side	Motor side		
80	80ENZ2 53.7	3.7	594	381	404	190	311	294	424	3.5	232	712	615	6308ZZ	6305ZZ	1600	87 (97)
	80ENZ2 55.5	5.5	594	392	404	190	311	299	429	3.5	232	767	670	6309ZZ	6306ZZ	2200	107 (122)
100	100ENZ2 55.5	5.5	657	406	461	196	356	319	479	3.5	242	777	680	6309ZZ	6306ZZ	2200	112 (127)
	100ENZ2 57.5	7.5	686	450	461	225	356	344	503	5.5	270	807	710	6309ZZ	6306ZZ	2200	132 (147)
	100ENZ2 511	11	711	453	486	225	381	349	508	8	276	974	756	6313ZZ	6308ZZ	4000	180 (200)
150	150ENZ2 511	11	843	502	596	247	456	399	604	8	301	999	781	6313ZZ	6308ZZ	4000	190 (210)