

SUBMERSIBLE DEWATERING PUMPS



APPLICATIONS

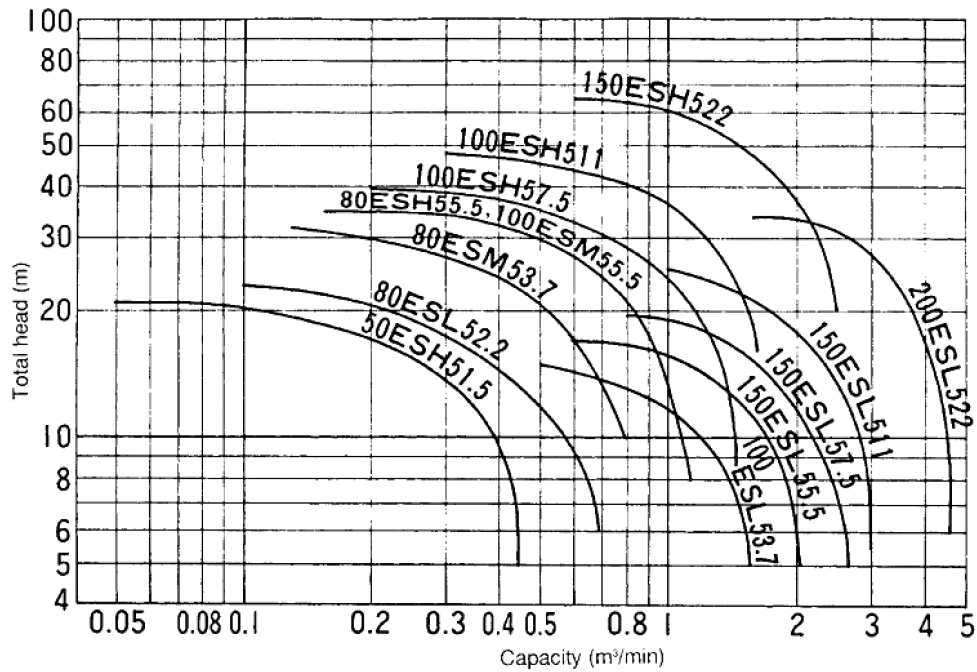
- Water drainage at civil engineering and building
- Water intakes from rivers
- Artesian wells
- Drainage of secondary process water in raw concrete plants
- Drainage of spring water and water at bottom of various kinds of pits
- Drainage of cutting and grinding water at stone cutting plants

FEATURES

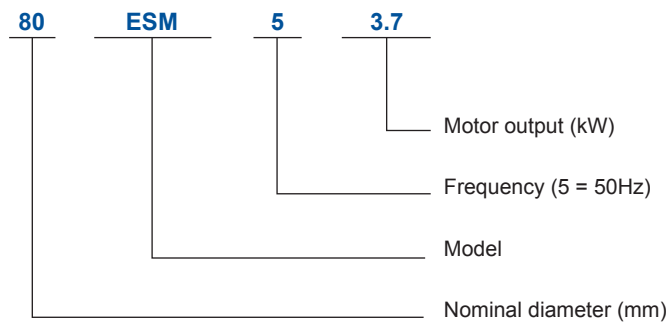
- Motor and pump unit can be disassembled separately, increasing efficiency of assembly/disassembly operations
- Double mechanical seals made of silicon carbide and pressure-bleed design.
- Stator windings can be replaced without removing stator from frame.
- Special steel is used for the impeller, ceramic are used for the liner ring, and the casing, suction cover and intermediate casing are of special molded rubber (in certain pump types). Result: excellent resistance to water.
- The pump base is of special design, thus resistant to shock.
- Cooling of entire outer surface of motor by flowing water keeps motor uniformly cooled and improves durability.
- Unique design of impeller nut prevents air lock during unsteady operation.
- Motor protection prevents damage of motor due to overload, or open phase.

STANDARD ACCESSORIES

- Hose coupling : Pre-installed to pump unit
- Submersible cable : Pre-installed to pump unit

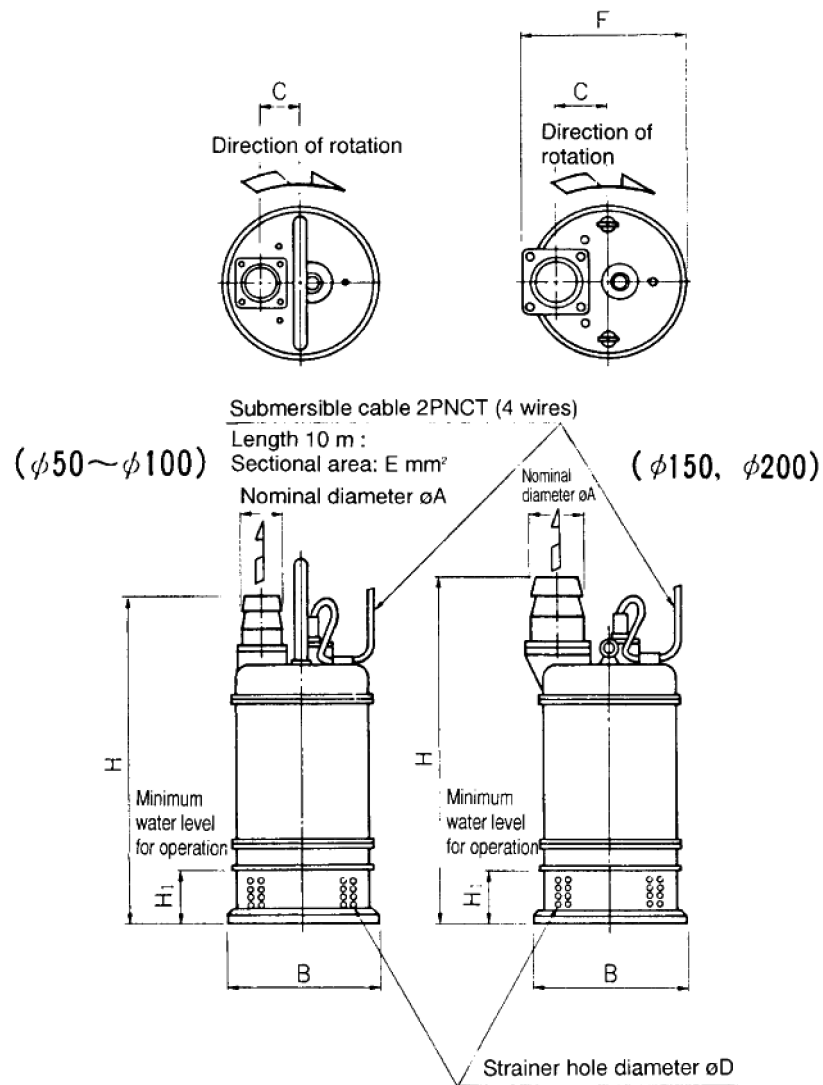
PERFORMANCE CURVE
3000 min⁻¹


Model	Nominal diameter (mm)	Output (kW)	Total head (m)	Capacity (m ³ /m)	Outer dimensions		Weight (kg)
					Max. diameter	Height	
50ESH51.5	50	1.5	18.4	0.2	260	511	25
80ESL52.2	80	2.2	12.8	0.5	266	619	32
80ESM53.7	80	3.7	20.0	0.5	266	672	41
80ESH55.5	80	5.5	30.0	0.5	266	672	45
100ESL53.7	100	3.7	12.0	1.0	266	694	41
100ESM55.5	100	5.5	13.0	1.0	266	694	45
100ESH57.5	100	7.5	25.0	1.0	370	880	88
100ESH511	100	11.0	37.0	1.0	370	880	98
150ESL55.5	150	5.5	10.2	1.7	434	847	69
150ESL57.5	150	7.5	10.8	2.1	434	957	88
150ESL511	150	11.0	10.0	2.7	434	957	98
150ESH522	150	22.0	37.5	2.0	479	1237	175
200ESL522	200	22.0	18.0	4.0	485	1335	185

SYMBOLS


SPECIFICATIONS

Item		Output	1.5kW	2.2kW	3.7kW	5.5kW	7.5kW	11kW	22kW	
Liquid	Type	Spring water, water with mud or sand								
	Max. diameter of solids	5mm								
	Concentration of mud/sand	Max. 2% (by volume)								
	Temperature	0 - 40°C								
	PH	6.5 - 8.0								
Max. pump submergence		8m								
Pump	Construction	Impeller	Vortex							
		Shaft seal	Single coil, double mechanical seal							
		Bearing	Sealed ball bearings						***	
	Material (JIS)	Impeller	High chrome cast iron							
		Casing	AC/molded rubber	SUS/rubber	FC200 (SUS/rubber for 5.5 kW ESM/ESH models)					
		Intermediate casing	AC/molded rubber							
		Intermediate casing	AC/molded rubber					High chrome cast iron (HCrFC) (AC/molded rubber for model ESL)		
		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, 2 pole, type E							
	Phase, voltage		3 phase. 200V							
	Internal protection		Auto cut						**	
	Material (JIS)	Frame	AC							
		Shaft	SUS403							
		Cable	VCT	2PNCT						
Cooling		Internal (cooling of entire outer surface)								
Connection		Hose coupling								

DIMENSION


Nominal diameter ØA	Model	Output kW	Pump and Motor							Weight kW
			B	C	D	E	F	H1	H2	
50	50ESH51.5	1.5	260	72	8	1.25		60	511	25
80	80ESL52.2	2.2	266	62	11	3.5		80	619	32
	80ESM53.7	3.7	266	62	11	3.5		80	672	41
	80ESH55.5	5.5	266	62	11	3.5		80	672	45
100	100ESL53.7	3.7	266	62	11	3.5		80	694	41
	100ESM55.5	5.5	266	62	11	3.5		80	694	45
	100ESH57.5	7.5	370	95	13	8		110	880	88
	100ESH511	11	370	95	13	3		110	880	98
150	150ESL55.5	5.5	370	155	13	3.5	434	110	847	69
	150ESL57.5	7.5	370	155	13	8	434	110	957	88
	150ESL511	11	370	155	13	8	434	110	957	98
	150ESL522	22	443	155	15	22	479	150	1237	175
200	200ESL53.7	22	443	155	15	22	485	150	1335	185