

Electric submersible sewage pump for wastewater containing solids of up to 50 mm.  
 EKKI LINUS 50M series pumps are suitable for pumping textile, chemical and fibrous wastewater.  
 With their large free passage of 50 mm, they are particularly used for industrial, public & private wastewater.

■ **Mode of operation:**

The LINUS 50M model is capable of permanent & portable operations. Automatic float switch option is available for automatic pumping operation. This float control option is provided depending on the level of liquid in the sump.

■ **Design & Construction:**

The LINUS 50M is a sturdy & fully submersible integrated motor-pump unit consisting of the following.

■ **Pump:**

Single stage centrifugal pump with outlet size of 50mm (2.0") & 65mm (2.5")

■ **Impeller:**

M type - Closed single channel impeller for wastewater containing impurities and sludge with solid particles with solid handling capacity of 50mm.

■ **Motor:**

Thermal sensors are embedded with the winding.

■ **Cable:**

The cable connection chamber is completely isolated from the motor housing  
 Cable used - HO7RN-8F | Cable Length - 10m

■ **Shaft / Bearing:**

Large diameter stainless steel shaft, pre-lubricated bearings.

■ **Seals:**

Combination of mechanical seals are used in a separated oil chamber (models above 1.8 kW). Models up to 1.6 kW, combination of mechanical seal and lip seals is used. Oil inspection from outside.



■ **Technical data:**

- Motor power : 1.0 - 6.0 HP
- Voltage : 1 Phase (220V - 240V),  
3 Phase (380V - 415V)
- Frequency : 50 Hz
- Insulation : H Class
- Motor protection : IP68
- Max. Liquid temp. : 40°C

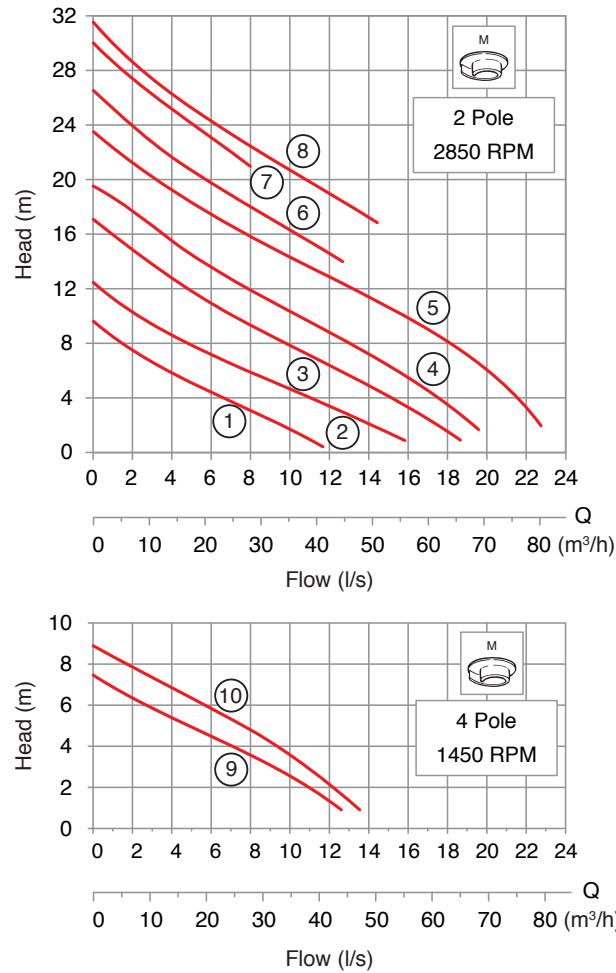
■ **Material of Construction:**

Component	Material
Motor & Pump housing, Impeller	Cast iron FG 260
Wear ring	LTB series
Mechanical seal / Lip seal	SiC-SiC / NBR
Rotor shaft	SS 431
Fasteners	SS 304, NBR

■ **Applications:**

- ▶ Hotel wastewater
- ▶ Chemical Industries
- ▶ Fish ponds
- ▶ STP & ETP
- ▶ Pharma Industries
- ▶ Water with long fibres
- ▶ Building services
- ▶ Cow dung wastewater
- ▶ Poultry waste water

■ Performance curve:

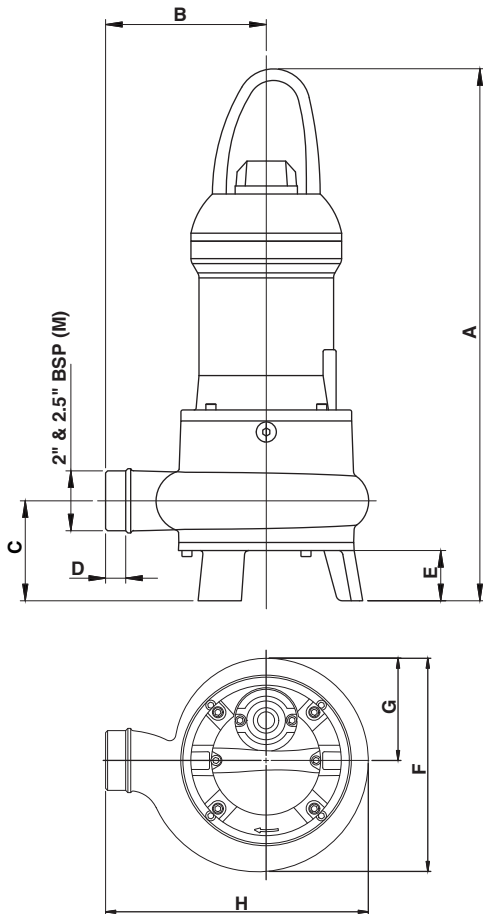


■ Technical table:

Curve no.	Pump model	Motor Power			Nominal Current (A)	Capacitor (µF)	Speed (rpm)	Solid Handling Capacity (mm)	Weight (kgs)
		P1 (kW)	P2 (kW)	HP					
1	ES50M 10/2 M (F)	1.1	0.8	1.0	4.8	25	2900	50	28
1	ES50M 10/2 T (F)	1.1	0.8	1.0	1.9	-	2900	50	28
2	ES50M 15/2 T (F)	1.3	1.0	1.5	2.5	-	2900	50	29
9	ES50M 15/4 M (F)	1.2	0.9	1.5	5.8	40	1450	50	42
10	ES50M 15/4 T (F)	1.3	1.0	1.5	2.6	-	1450	50	42
2	ES50M 20/2 M (F)	1.6	1.2	2.0	7.6	30	2900	50	29
3	ES50M 20/2 T (F)	1.2	1.8	2.0	3.8	-	2900	50	42
4	ES50M 30/2 T (F)	2.6	2.1	3.0	4.5	-	2900	50	42
5	ES50M 50/2 TL (F)	3.7	3.2	5.0	6.5	-	2900	50	47
6	ES50M 50/2 T (F)	4.0	3.4	5.0	6.6	-	2900	50	47
7	ES50M 50/2 TH (F)	3.7	3.2	5.0	6.5	-	2900	50	47
8	ES50M 60/2 T	5.2	4.4	6.0	8.7	-	2840	50	58

\* ES50M - ES50 - Pump model, M - Impeller type | XX/X - Motor power/No. of poles | M - 230-240 V/1 Ph | T - 400-415V/3 Ph  
 F - Optional float switch | Capacitor - Capacitor for applicable models is installed in the pump

■ Dimensional drawing:



MODEL	A	B	C	D	E	F	G	H
ES50M 10/2, ES50M 15/2 ES50M 20/2	548	160	110	22	50	231	111	271
ES50M 15/4	616	177	101	25	50	232	110	287
ES50M 20/2, ES50M 30/2	626	160	110	22	50	231	111	271
ES50M 50/2, ES50M 60/2	672	177	101	25	50	232	110	287

■ Pump accessories drawing:

Balloon no.	Item Description	Specification
1	Auto Coupling kit	2.5"
2	Guide rail (G.I or SS)	Ø1"
3	Pump Chain	-
4	Flanged Pipe	2.5"
5	Swing check valve (Flanged)	2.5"
6	Swing check valve (Threaded)	BSP 2.5"
7	G.I Male Coupling	BSP 2.5"
8	Cast Iron Gate Valve (Flanged)	2.5"
9	Bronze gate valve (Threaded)	BSP 2.5"
10	90° Flanged elbow	2.5"
11, 12	90° Threaded elbow	BSP 2.5"
13	STORZ coupling	BSP 2.5"
14	Synthetic pressure hose with coupling	Ø65 mm

