

SPECIFICATIONS	Model	50MG22.2	
		MG-series 2.2kW, 3-phase	

<p>Type of Pump Submersible cast iron pump with a grinding mechanism suitable for pumping sewage and wastewater</p> <p>Type of Fluid Sewage, wastewater, and water carrying solid matters</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore 50mm</p> <p>Motor Output 2.2kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Direct on Line</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: F Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>380V – 5.3A</td> <td>220V – 9.8A</td> </tr> <tr> <td>400V – 5.0A</td> <td>380V – 5.3A</td> </tr> <tr> <td>415V – 5.0A</td> <td>440V – 4.9A</td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 6m 200 to 600V supply: 1 × 4 × 2.0mm², O.D. 11.8mm</p> <p>Dry Weight (excluding cable) Free Standing Type: 77kg Guide Rail Fitting Type: 73kg</p>	50Hz	60Hz	380V – 5.3A	220V – 9.8A	400V – 5.0A	380V – 5.3A	415V – 5.0A	440V – 4.9A	<p>Impeller Vortex impeller designed for “high-gap structure”, dynamically balanced</p> <p>Cable Entry with Anti-Wicking Block Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p>Bearings Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p>Shaft 420 stainless steel</p> <p>Shaft Seal (Mechanical Seal) Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Faces: Ceramic + Carbon Lower Seal Faces: SiC + SiC</p> <p>Oil Seal (Lip Seal) Used as a “Dust Seal”, it protects the mechanical seal from abrasive particles.</p> <p>OIL LIFTER (Patented) Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 1350ml</p> <p>Motor Protection Device A circle thermal protector built in the motor housing. Directly cuts the motor circuit if excessive heat builds up or an overcurrent condition occurs in the motor.</p>
50Hz	60Hz								
380V – 5.3A	220V – 9.8A								
400V – 5.0A	380V – 5.3A								
415V – 5.0A	440V – 4.9A								

Optional Accessory
External Leakage Sensor

NO.

A-11492-1

PUMP PERFORMANCE CURVES

 TYPE Sewage Submersible
Grinder Pump

 MODEL 50MG22.2 -53
TOS50MG22.2 -53

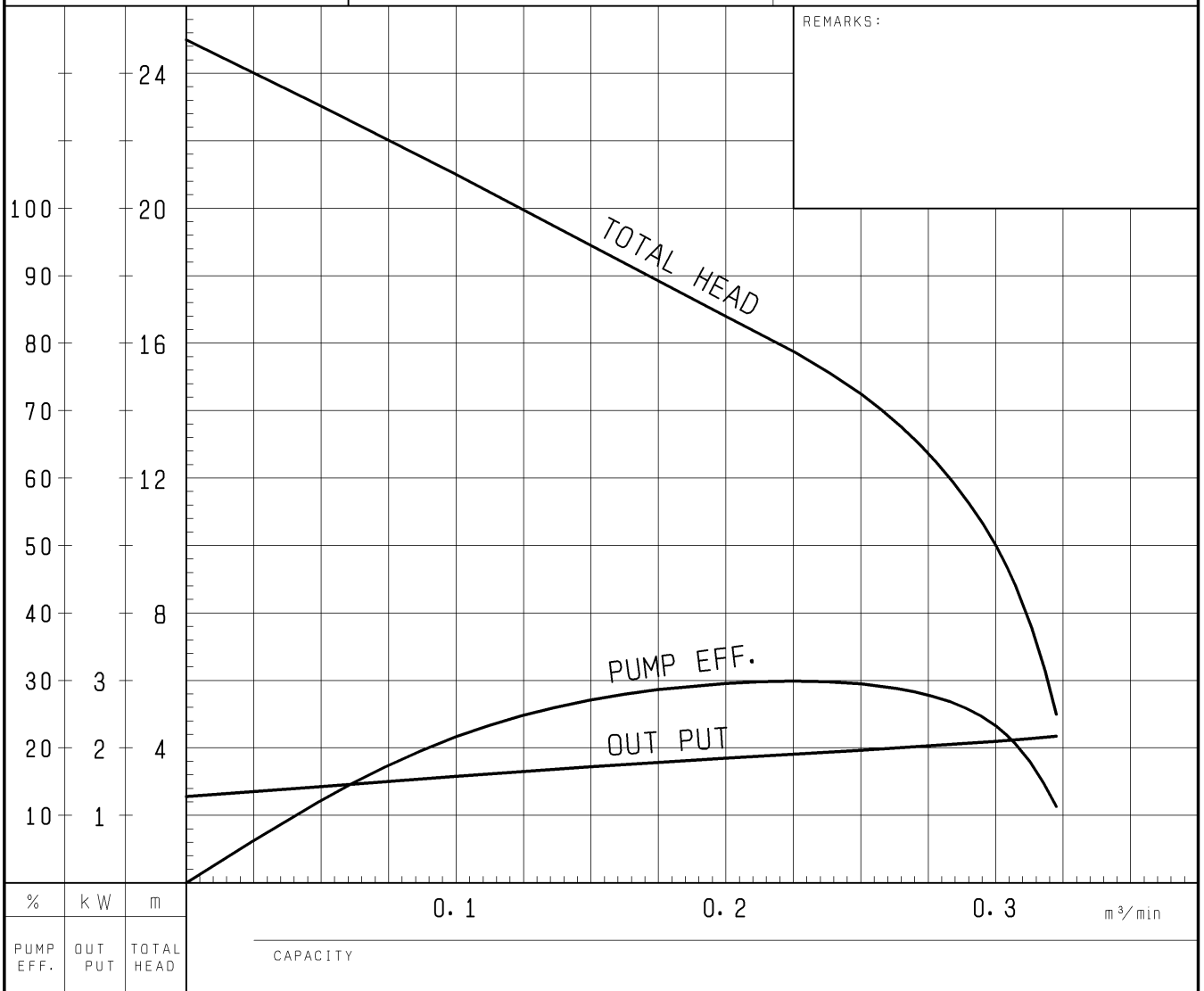
FREQUENCY 50 Hz

CUSTOMER'S NAME

EQUIPMENT TITLE

NO.

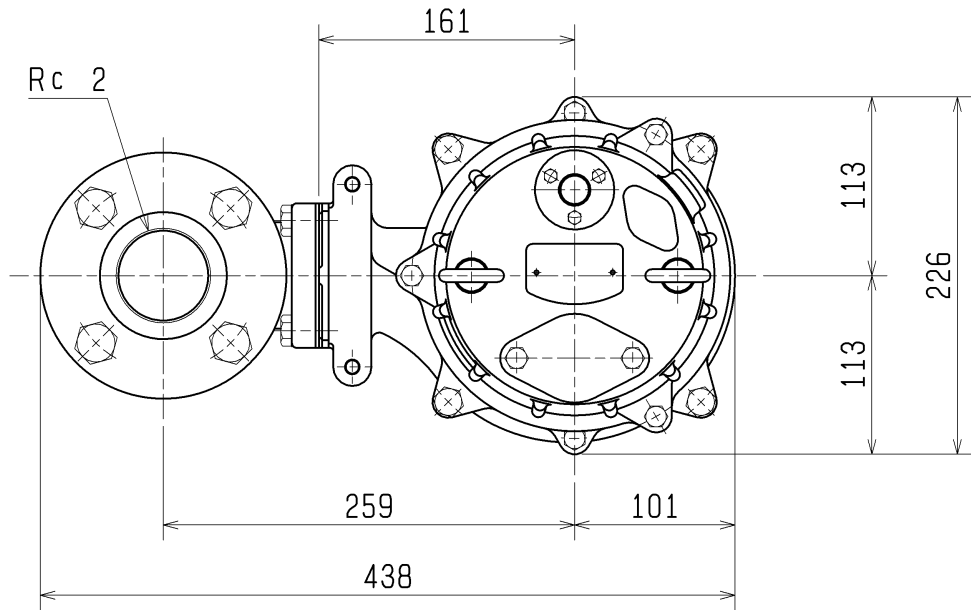
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	50 mm	mm
TOTAL HEAD	20 m	m
CAPACITY	0.12 m ³ /min	m ³ /min
MOTOR OUTPUT	2.2 kW	kW
PHASE x VOLTAGE	3 ϕ x V	ϕ x V
CURRENT	A	A
POLES / REVOLUTION	2 P / S. S. 3000 min ⁻¹	P / min ⁻¹
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	F	



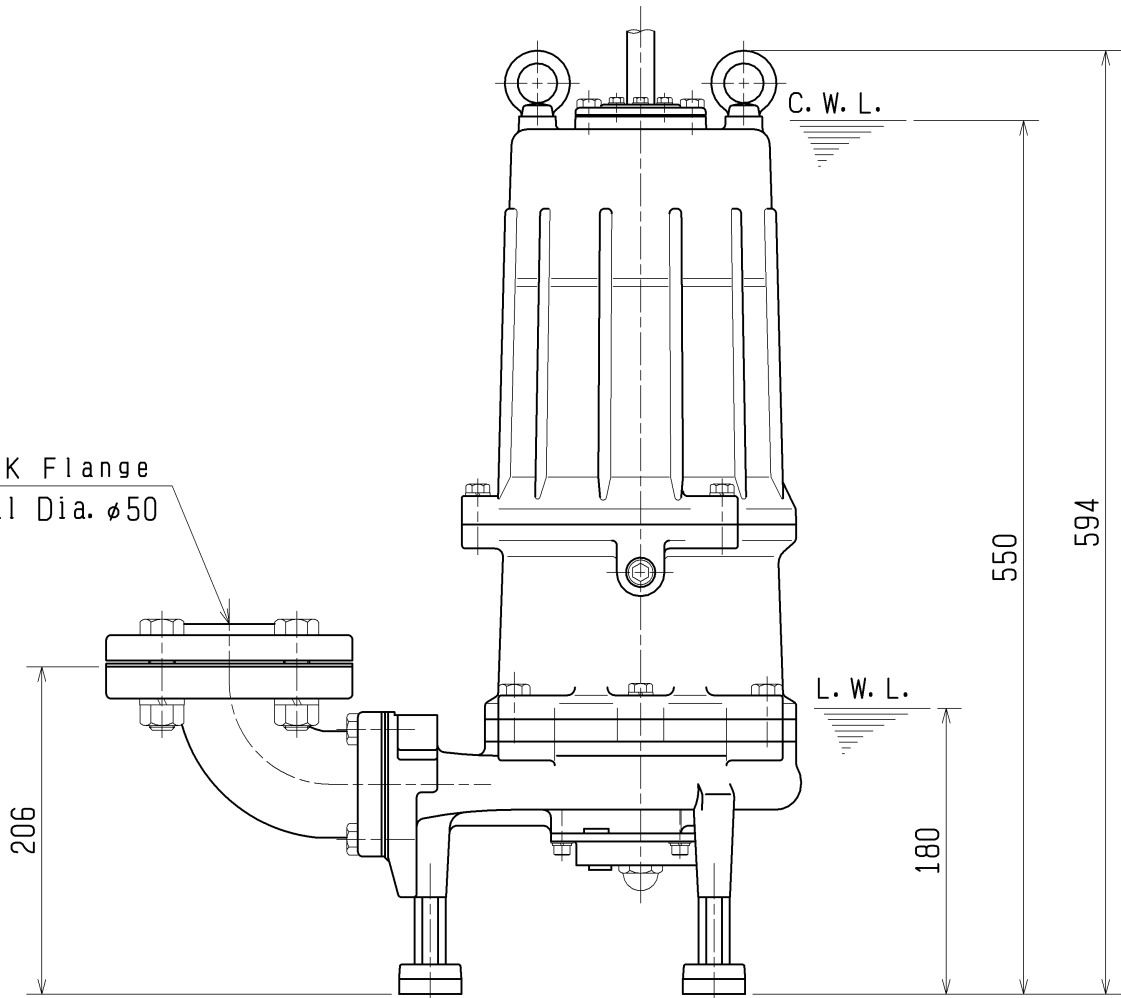
TSURUMI MFG. CO., LTD.

DIMENSION DRAWING		No.	No. A-11495-3
TYPE	Sewage Submersible Grinder Pump	MODEL	50MG22.2 -53/63

Approximate Weight (※)
77kg
※excluding cable

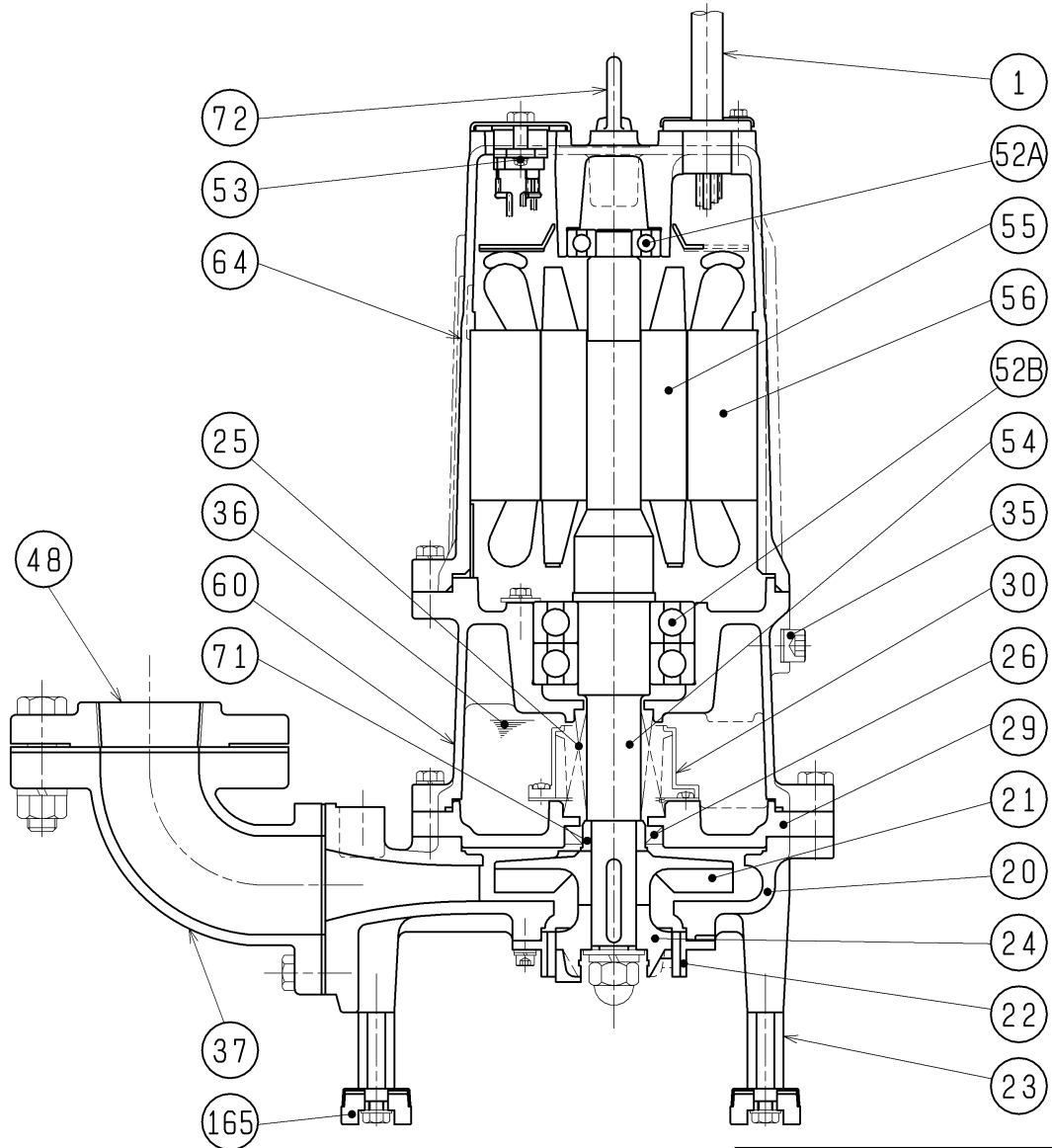


JIS10K Flange
Nominal Dia. $\phi 50$



C. W. L. :Continuous Running Water Level
L. W. L. :Lowest Running Water Level

SECTIONAL DRAWING		No.	No. A-11497-4
TYPE	Sewage Submersible Grinder Pump	MODEL	50MG22.2 -53/63



REQ. SPECIFICATION

※ the wetted part

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	52A	Upper Bearing	1	6304ZC3
20	Pump Casing	1	Gray Iron Casting	52B	Lower Bearing	1	6308ZZD2C3
21	Impeller	1	Gray Iron Casting	53	Motor Protector	1	
22	Stationary Cutter	1	Chromium Iron Casting	54	Shaft	1	Stainless Steel 420J2(※)
23	Stand	3	Stainless Steel 410	55	Rotor	1	
24	Rotating Cutter	1	Chromium Iron Casting	56	Stator	1	
25	Mechanical Seal	1	H-30A	60	Bearing Housing	1	Gray Iron Casting
26	Oil Seal	1	TC355511	64	Motor Frame	1	Gray Iron Casting
29	Oil Casing	1	Gray Iron Casting	71	Shaft Sleeve	1	Stainless Steel 403
30	Oil Lifter	1	Plastic	72	Eye Bolt	2	Stainless Steel 304
35	Oil Plug	1	Stainless Steel 304	165	Rubber Foot	3	Nitrile Butadien Rubber
36	Lubricant		Turbine Oil (ISO VG32)				
37	Discharge Bend	1	Gray Iron Casting				
48	Screwed Flange	1	Gray Iron Casting				