

SPECIFICATIONS

Model

50MG23.7

MG-series

3.7kW, 3-phase

Type of Pump

Submersible cast iron pump with a grinding mechanism suitable for pumping sewage and wastewater

Type of Fluid

Sewage, wastewater, and water carrying solid matters

Temperature: 0 to 40°C

Discharge Bore

50mm

Motor Output

3.7kW

Power Supply

Three-phase

Starting Method

Direct on Line

Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

2-pole, 3000/3600min-1 (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 8.0A 220V - 13.8A 400V - 7.7A 380V - 7.9A 415V - 7.5A 440V - 6.9A

Power Cable

Sheath: PVC

Standard Length: 6m 380 to 600V supply:

 $1 \times 4 \times 2.0$ mm², O.D. 11.8mm

200 to 240V supply:

 $1\times4\times3.5mm^2,\,O.D.\,13.9mm$

Dry Weight (excluding cable)

Free Standing Type: 78kg Guide Rail Fitting Type: 74kg

Impeller

Vortex impeller designed for "high-gap structure", dynamically balanced

Cable Entry with Anti-Wicking Block

Watertight cable entry with strain-relief device. The antiwicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

Bearings

Permanently lubricated, deep-groove, double-shielded C3 ball bearings

Shaft

420 stainless steel

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.

Upper Seal Faces: SiC + SiC Lower Seal Faces: SiC + SiC

Oil Seal (Lip Seal)

Used as a "Dust Seal", it protects the mechanical seal from abrasive particles.

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.

Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 1350ml

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.

Optional Accessory

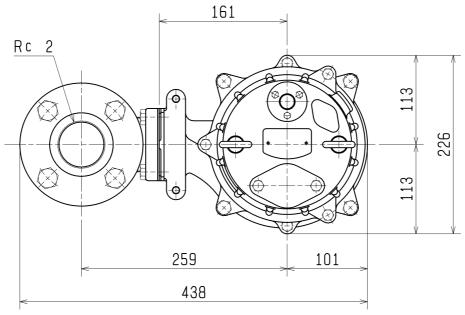
External Leakage Sensor

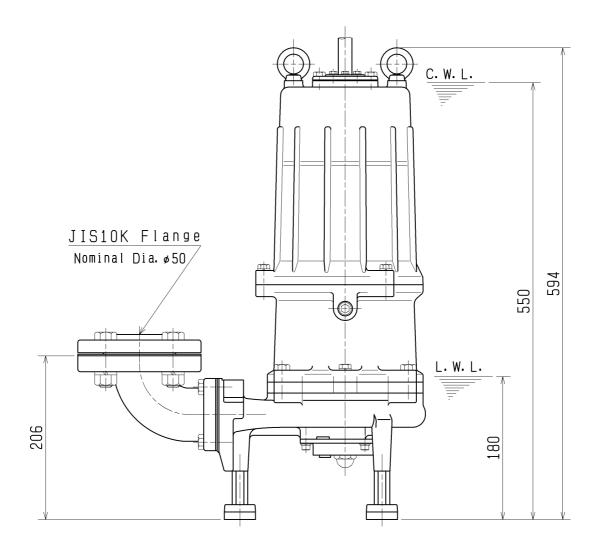
NO. A-12159-1 PUMP PERFORMANCE CURVES TYPE Sewage MODEL 50MG23.7 -53 FREQUENCY Submersible Grinder Pump TOS50MG23.7 -53 50 Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS DISCHARGE BORE 50 TOTAL HEAD 30 m m m³∕min m³/min CAPACITY 0.12 3.7 MOTOR OUTPUT k W k W PHASE × VOLTAGE 3 Ø× φX CURRENT Α Α min⁻¹ POLES / REVOLUTION 2 P/ S. S. 3000 P/ STARTING METHOD DIRECT ON LINE F INSULATION CLASS REMARKS: +60|100++50|90+ 80+ +4070 +TOTAL HEAD 60+ +3050 +40+ +20PUMP EFF. 30 + 6 + 20 + 4 + 10**NUT PUT** 10 + 2 + % kW m 0.1 0.2 0.3 m³/min PUMP OUT TOTAL EFF. PUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



	DIMENSION	DRAWING	No.	No. A-12161-3
TYPE	Sewage Submersible	Grinder Pump	MODEL	50MG23.7 -53/63

Approximate Weight (*)
78kg
*excluding cable



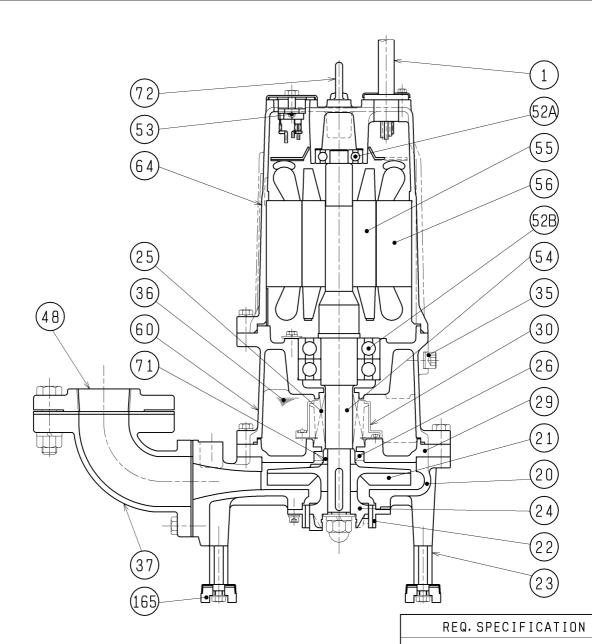


C. W. L. :Continuous running Water Level L. W. L. :Lowest running Water Level



SECTIONAL DRAWING No. No. A-12162-5

TYPE Sewage Submersible Grinder Pump MODEL 50MG23.7 -53/63



* the wetted part

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No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTIO	DN Q'TY	MATERIAL / NOTE	
1	Cabtyre Cable	1	PVC Sheath	52A	Upper Bearing	1	6304ZZC3	
20	Pump Casing	1	Gray Iron Casting	52B	Lower Bearing	1	6308ZZD2C3	
21	Impeller	1	Gray Iron Casting	53	Motor Protecto	or <u>1</u>		
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-30T	60	Bearing Housin	ng 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					