

SPECIFICATIONS	Model	80SF211							
		SF-series							
		11kW, 3-phase							
<p>Type of Pump Submersible cast iron high-head pump suitable for pumping wastewater and storm water</p> <p>Type of Fluid Wastewater and water carrying small solid matters</p> <p>Temperature: 0 to 40°C (High temperature model available on special request)</p> <p>Discharge Bore 80mm</p> <p>Motor Output 11kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Star-Delta</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 – 23.6A</td> <td>220V – 39.7A</td> </tr> <tr> <td>400V – 23.0A</td> <td>380V – 22.1A</td> </tr> <tr> <td>415V – 22.8A</td> <td>440V – 19.9A</td> </tr> </table> <p>Power Cable Sheath: Chloroprene rubber Standard Length: 8m 200 to 600V supply: 1 × 4 × 3.5mm², O.D. 14.1mm 1 × 3 × 3.5mm², O.D. 12.9mm 1 × 2 × 1.25mm², O.D. 9.8mm</p> <p>Dry Weight (excluding cable) Free Standing Type: 147kg Guide Rail Fitting Type: 144kg</p>	50Hz	60Hz	380V – 23.6A	220V – 39.7A	400V – 23.0A	380V – 22.1A	415V – 22.8A	440V – 19.9A	<p>Impeller Semi-open multi-vane impeller made of cast iron, dynamically balanced</p> <p>Solids Passage 50Hz – ϕ22mm 60Hz – ϕ22mm</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>Pressure Relief Port Protects the mechanical seal from over rated limits, and also protects the seal faces from abrasive particles by drawing particles away.</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), 2250ml</p> <p>Motor Protection Device A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p>
50Hz	60Hz								
380V – 23.6A	220V – 39.7A								
400V – 23.0A	380V – 22.1A								
415V – 22.8A	440V – 19.9A								
<p>Optional Accessory</p> <p>External Leakage Sensor</p>									
TSURUMI MANUFACTURING CO., LTD.									

NO.

A-11552-1

PUMP PERFORMANCE CURVES

TYPE Waste Water Submersible
Centrifugal Pump

MODEL 80SF211 -52
TOS80SF211 -52

FREQUENCY 50 Hz

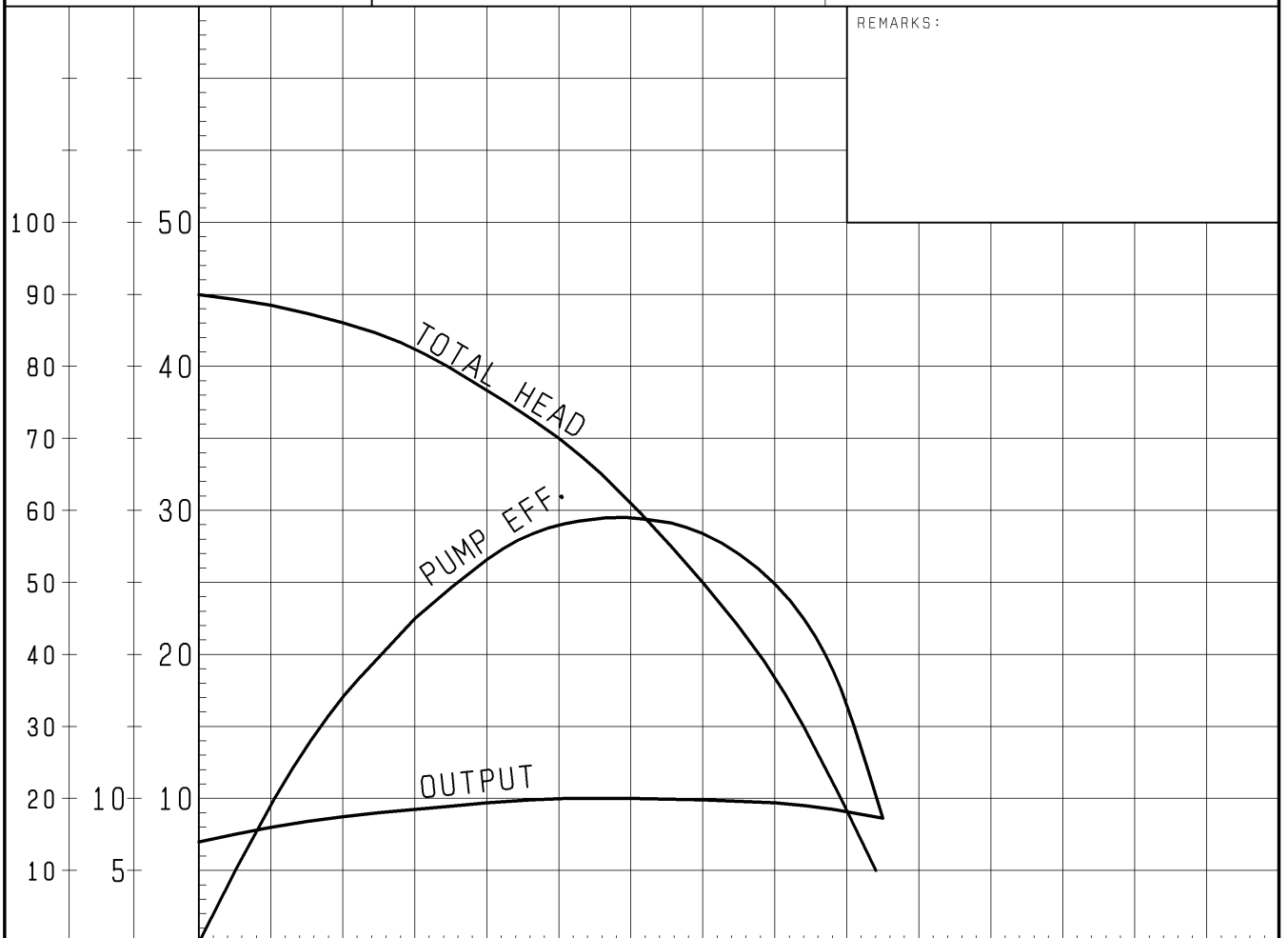
CUSTOMER'S NAME

EQUIPMENT TITLE

NO.

	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	80 mm	mm
TOTAL HEAD	38 m	m
CAPACITY	0.8 m ³ /min	m ³ /min
MOTOR OUTPUT	11 kW	kW
PHASE x VOLTAGE	3 φ × V	φ × V
CURRENT	A	A
POLES / REVOLUTION	2 P / s. s. 3000 min ⁻¹	P / min ⁻¹
STARTING METHOD	STAR DELTA	
INSULATION CLASS	F	

REMARKS:

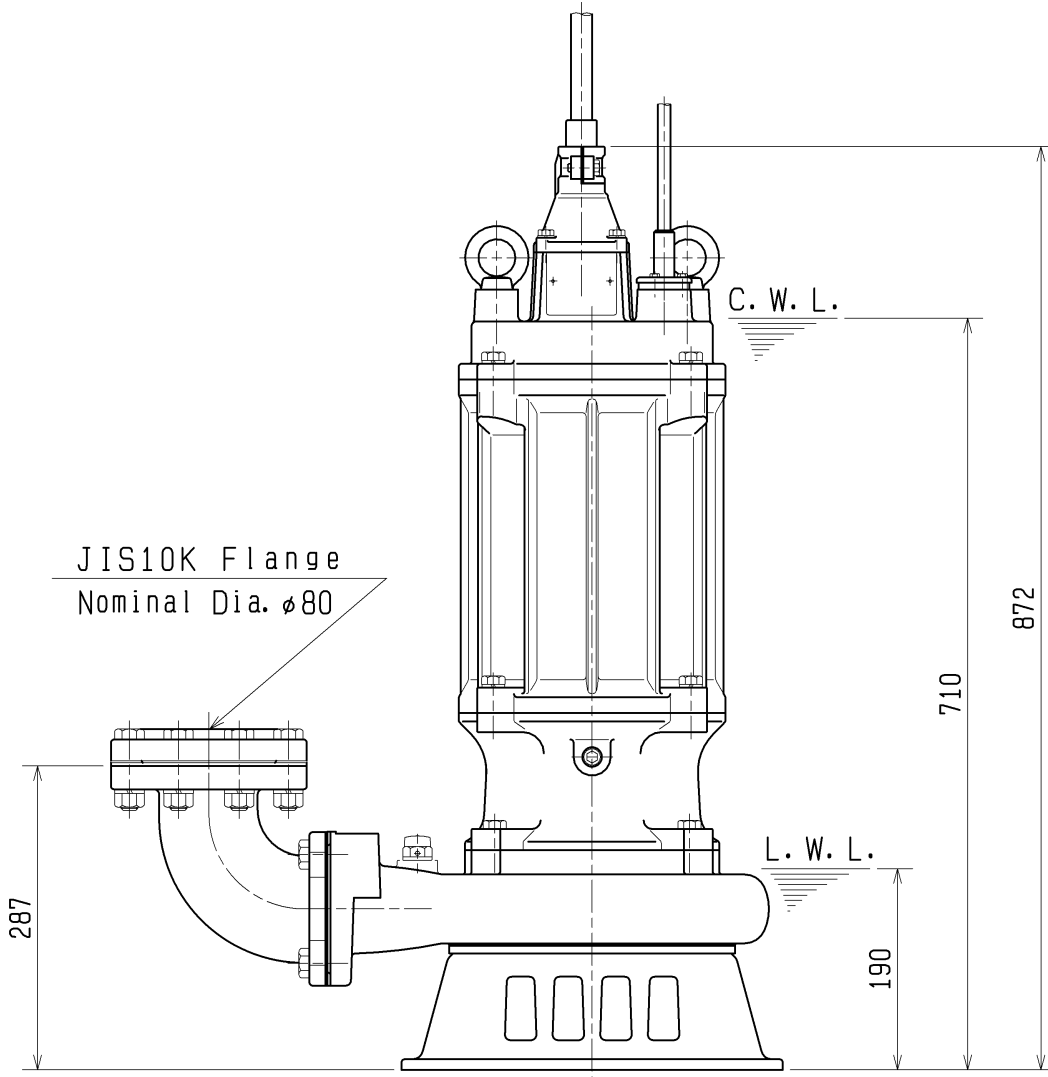
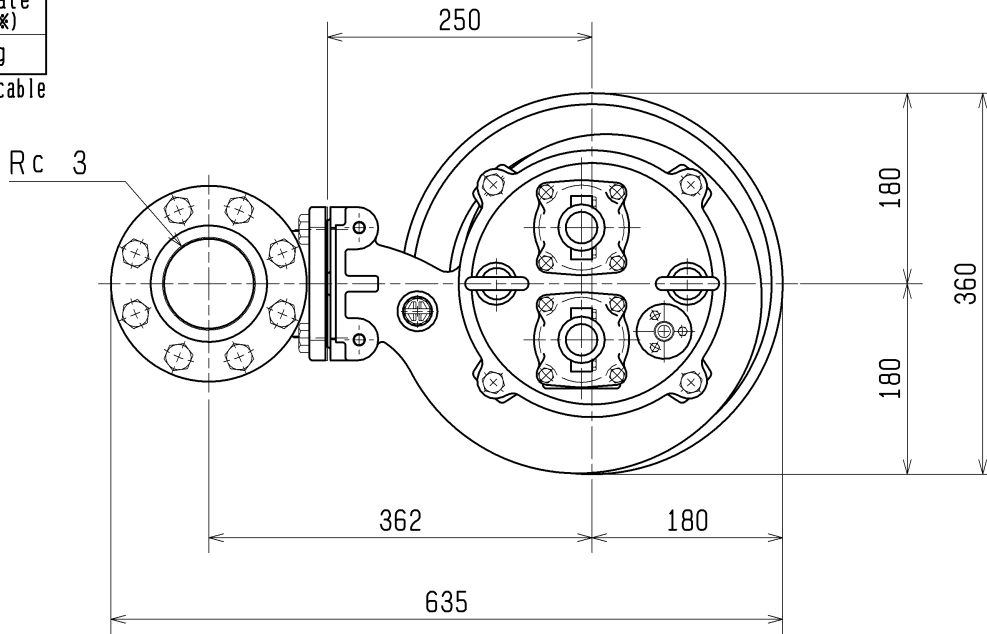


%	kW	m	CAPACITY
PUMP EFF.	OUTPUT	TOTAL HEAD	
			1.0
			2.0
			m ³ /min

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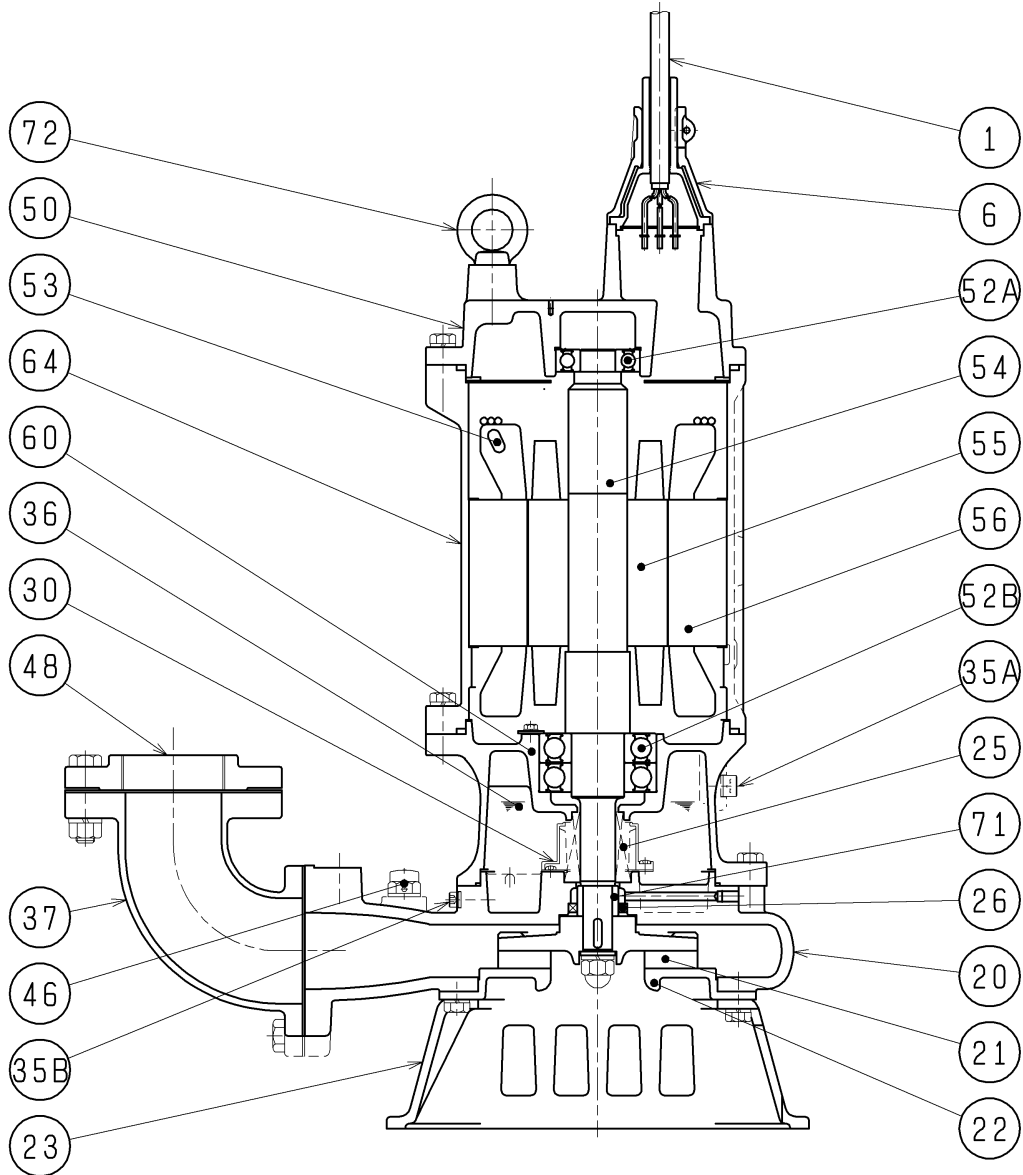
DIMENSION DRAWING		No.	No. A-11561-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	80SF211 -52/62

Approximate Weight (※)
147kg
※excluding cable



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

SECTIONAL DRAWING		No.	No. A-11570-2
TYPE	Waste Water Submersible Centrifugal Pump	MODEL	80SF211 -52/62



REQ. SPECIFICATION

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cable	3	Chloroprene Sheath	48	Screwed Flange	1	Gray Iron Casting
6	Stuffing Box	2	Gray Iron Casting	50	Motor Bracket	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6306ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6309ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	3	
23	Strainer Stand	1	Ductile Iron Casting	54	Shaft	1	Stainless Steel 420J2
25	Mechanical Seal	1	H-30A	55	Rotor	1	
26	Oil Seal	1	TC35508	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35A	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
35B	Oil Plug	1	Stainless Steel 304	71	Shaft Sleeve	1	Stainless Steel 403
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	2	Structure Steel
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				