

SPECIFICATIONS	Model	B-series							
	80B21.5	1.5kW, 3-phase							
<p>Type of Pump Submersible cast iron pump suitable for pumping sewage, wastewater, storm water, etc.</p> <p>Type of Fluid Sewage, wastewater, and water carrying 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 1.5kW</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 – 3.5A</td> <td>220V – 6.0A</td> </tr> <tr> <td>400V – 3.5A</td> <td>380V – 3.4A</td> </tr> <tr> <td>415V – 3.5A</td> <td>440V – 3.2A</td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 6m 200 to 600V supply: 1 × 4 × 1.25mm², O.D. 11.1mm</p> <p>Dry Weight (excluding cable) Free Standing Type: 36kg Guide Rail Fitting Type: 34kg</p>	50Hz	60Hz	380V – 3.5A	220V – 6.0A	400V – 3.5A	380V – 3.4A	415V – 3.5A	440V – 3.2A	<p>Impeller Semi-open single-channel impeller for solid-handling design, dynamically balanced</p> <p>Solids Passage 50Hz – 49 × 41mm 60Hz – 49 × 35mm</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), 900ml</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 – 3.5A	220V – 6.0A								
400V – 3.5A	380V – 3.4A								
415V – 3.5A	440V – 3.2A								
<p>Optional Accessories</p> <table border="0"> <tr> <td data-bbox="177 1789 564 1877"> <p>Bend Set (Free Standing Type)</p> <ul style="list-style-type: none"> • Discharge Bend • Screwed Flange </td> <td data-bbox="879 1789 1209 1821" rowspan="2"> <p>External Leakage Sensor</p> </td> </tr> <tr> <td data-bbox="177 1901 715 2074"> <p>TOS/TS Set (Guide Rail Fitting Type)</p> <ul style="list-style-type: none"> • Duckfoot Bend • Guide Support • Guide Hook • Lifting Chain 5m (with Shackles) • JIS 10kg/cm² Screwed Flange (TOS Set only) </td> </tr> </table>			<p>Bend Set (Free Standing Type)</p> <ul style="list-style-type: none"> • Discharge Bend • Screwed Flange 	<p>External Leakage Sensor</p>	<p>TOS/TS Set (Guide Rail Fitting Type)</p> <ul style="list-style-type: none"> • Duckfoot Bend • Guide Support • Guide Hook • Lifting Chain 5m (with Shackles) • JIS 10kg/cm² Screwed Flange (TOS Set only) 				
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TSURUMI MANUFACTURING CO., LTD.									

NO. A-11450-1

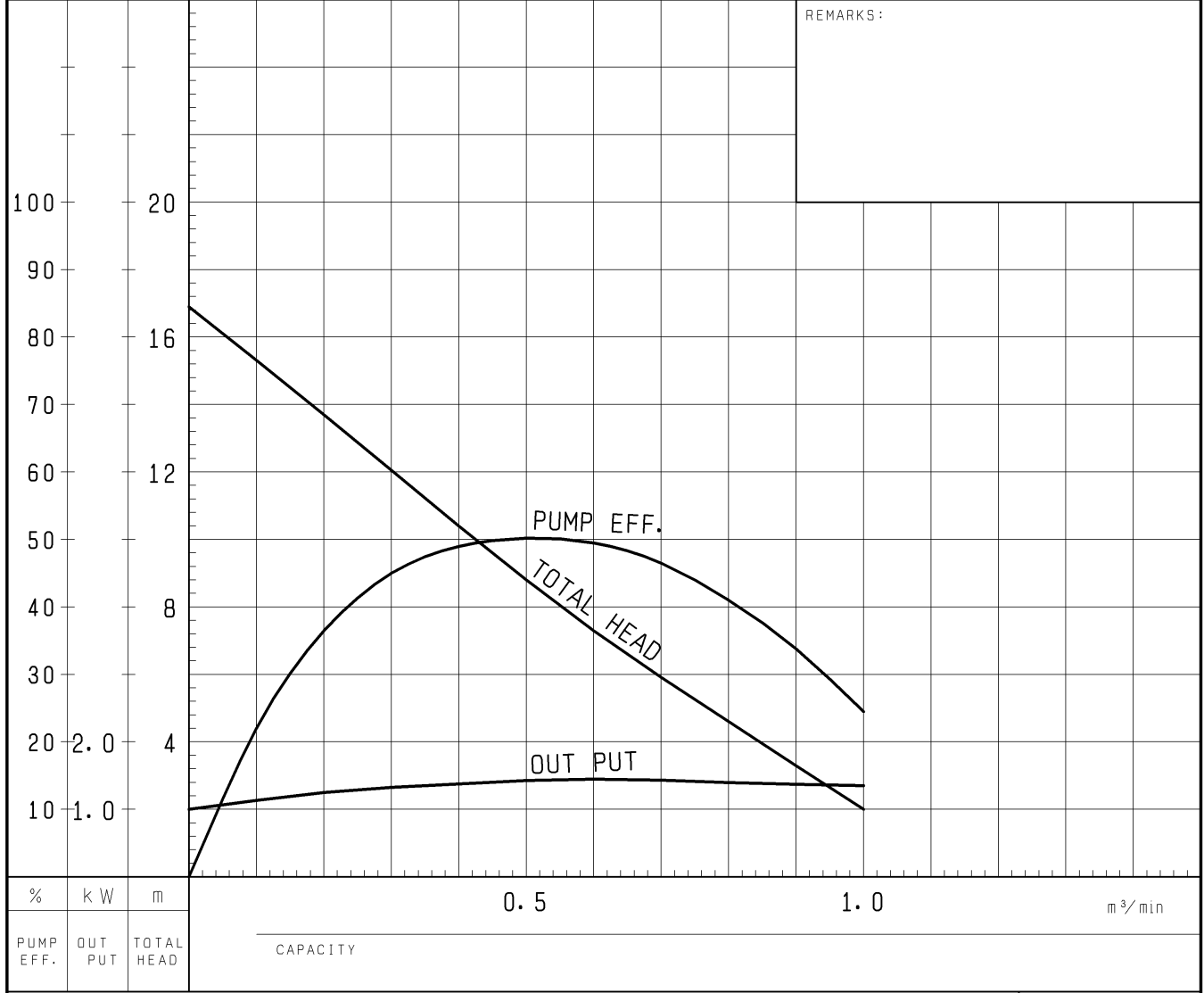
PUMP PERFORMANCE CURVES

TYPE Sewage Submersible Channel Impeller Pump	MODEL 80B (A/W) 21.5 -52 TOS80B (A/W) 21.5 -52	FREQUENCY 50 Hz
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CUSTOMER'S NAME _____

EQUIPMENT TITLE _____ NO. _____

	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	80 mm	mm
TOTAL HEAD	8 m	m
CAPACITY	0.55 m ³ /min	m ³ /min
MOTOR OUTPUT	1.5 kW	kW
PHASE x VOLTAGE	3 ϕ x	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	

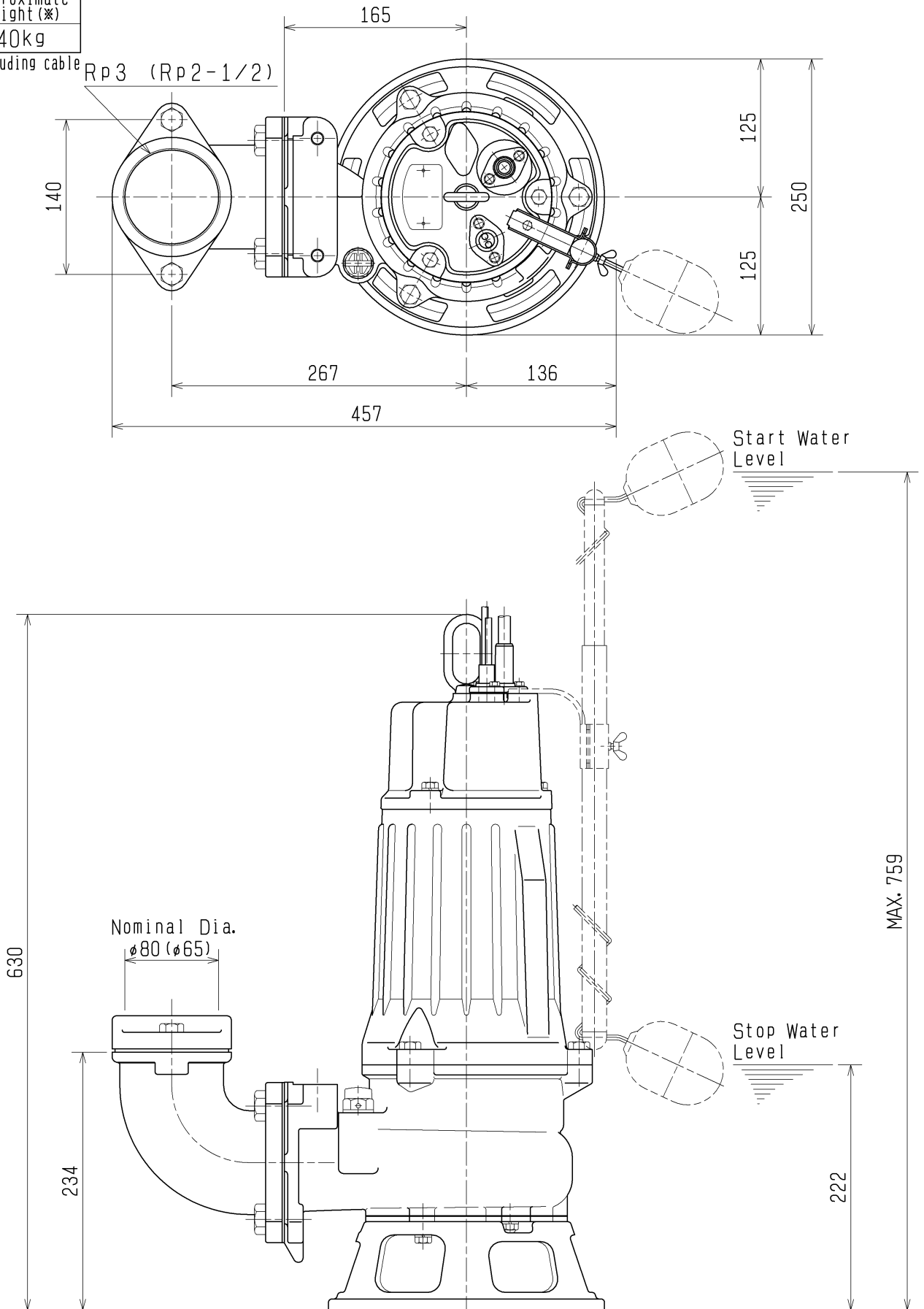


TSURUMI MFG. CO., LTD.

DIMENSION DRAWING		No.	No. A-11453-3
TYPE	Sewage Submersible Channel Impeller Pump (Automatic)	MODEL	80BA21.5 -52/62

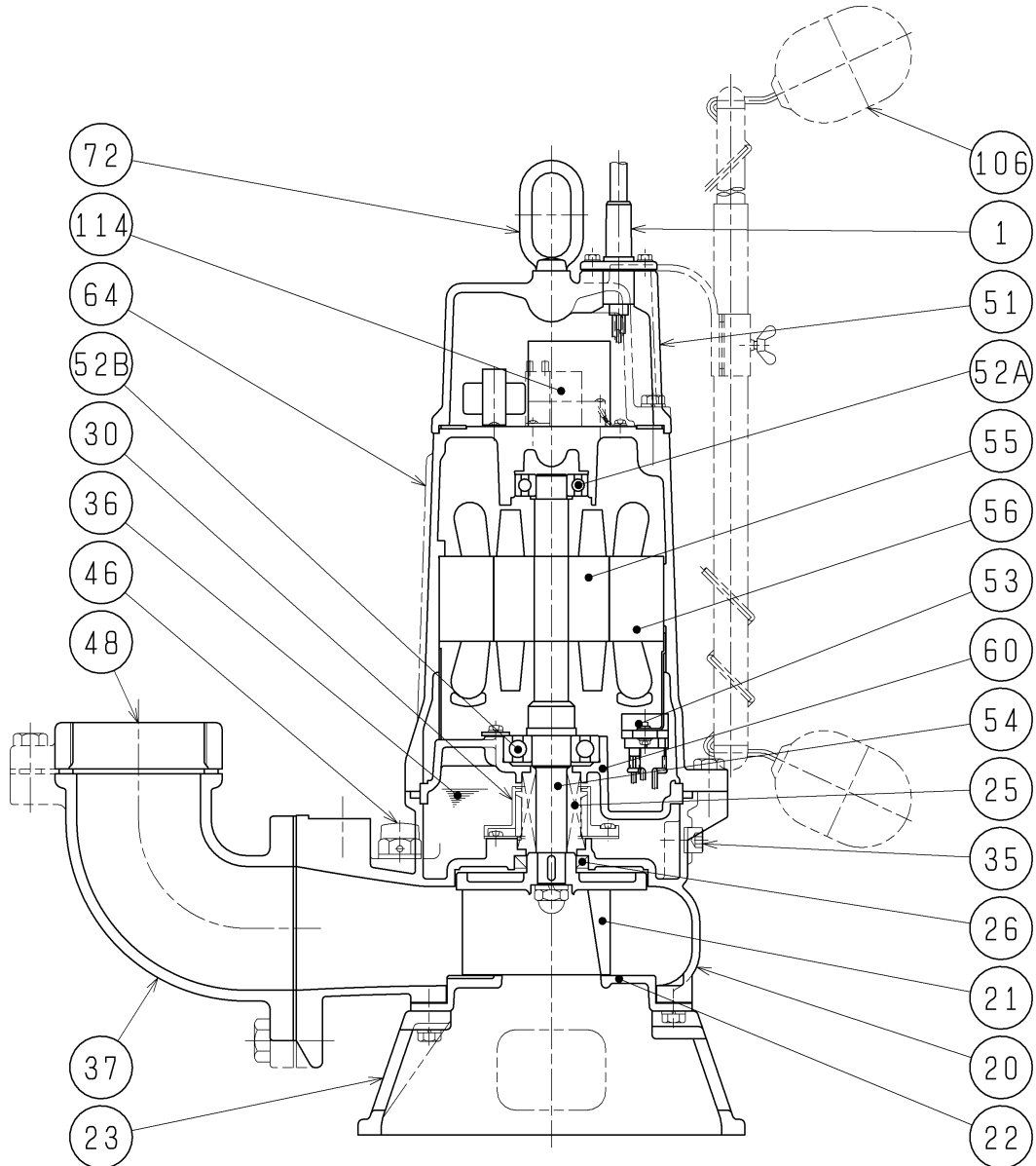
Approximate Weight (※)
40kg

※excluding cable



The Figure in () shows the dimensions of discharge Bore at Nominal $\phi 65$.

SECTIONAL DRAWING		No.	No. A-11456-5
TYPE	Sewage Submersible Channel Impeller Pump (Automatic)	MODEL	80BA21.5 -52/62



REQ. SPECIFICATION

※ the wetted part

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	51	Head Cover	1	Gray Iron Casting
20	Pump Casing	1	Gray Iron Casting	52A	Upper Bearing	1	6204ZCC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6305ZCC3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	1	
23	Strainer Stand	1	Gray Iron Casting	54	Shaft	1	Stainless Steel 420J2(※)
25	Mechanical Seal	1	H-20A	55	Rotor	1	
26	Oil Seal	1	TC32488	56	Stator	1	
30	Oil Lifter	1	Plastic	60	Bearing Housing	1	Gray Iron Casting
35	Oil Plug	1	Stainless Steel 304	64	Motor Frame	1	Gray Iron Casting
36	Lubricant		Turbine Oil (ISO VG32)	72	Eye Bolt	1	Stainless Steel 304
37	Discharge Bend	1	Gray Iron Casting	106	Float	2	Plastic
46	Air Release Valve	1	Nylon	114	Relay Unit	1	
48	Screwed Flange	1	Gray Iron Casting				