

SPECIFICATIONS	Model	150B411	
		B-series	
		11kW, 3-phase	

**Type of Pump**

Submersible cast iron pump suitable for pumping sewage, wastewater, storm water, etc.

**Type of Fluid**

Sewage, wastewater, and water carrying solid matters

Temperature: 0 to 40°C

(High temperature model available on special request)

**Discharge Bore**

150mm

**Motor Output**

11kW

**Power Supply**

Three-phase

**Starting Method**

Star-Delta

**Motor**

Continuous-duty rated, dry-type induction motor

Insulation Class: F

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz	60Hz
380V – 24.4A	220V – 40.7A
400V – 23.8A	380V – 22.9A
415V – 23.5A	440V – 20.1A

**Power Cable**

Sheath: Chloroprene rubber

Standard Length: 8m

200 to 600V supply:

1 × 4 × 3.5mm<sup>2</sup>, O.D. 14.1mm

1 × 3 × 3.5mm<sup>2</sup>, O.D. 12.9mm

1 × 2 × 1.25mm<sup>2</sup>, O.D. 9.8mm

**Dry Weight (excluding cable)**

Free Standing Type: 250kg

Guide Rail Fitting Type: 220kg

**Impeller**

Shrouded two-channel impeller for solid-handling design, dynamically balanced

Solids Passage

50Hz –  $\phi$ 75mm

60Hz –  $\phi$ 75mm

**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.

**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), 4200ml

**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.

**Optional Accessories**
**Bend Set (Free Standing Type)**

- Discharge Bend
- JIS 10kg/cm<sup>2</sup> Screwed Flange

**Stand Set (Free Standing Type)**

- Stand

**TOS Set (Guide Rail Fitting Type)**

- Duckfoot Bend
- Guide Support
- Guide Hook
- Lifting Chain 5m (with Shackles)
- JIS 10kg/cm<sup>2</sup> Screwed Flange

**External Leakage Sensor**

NO. A-13997-1

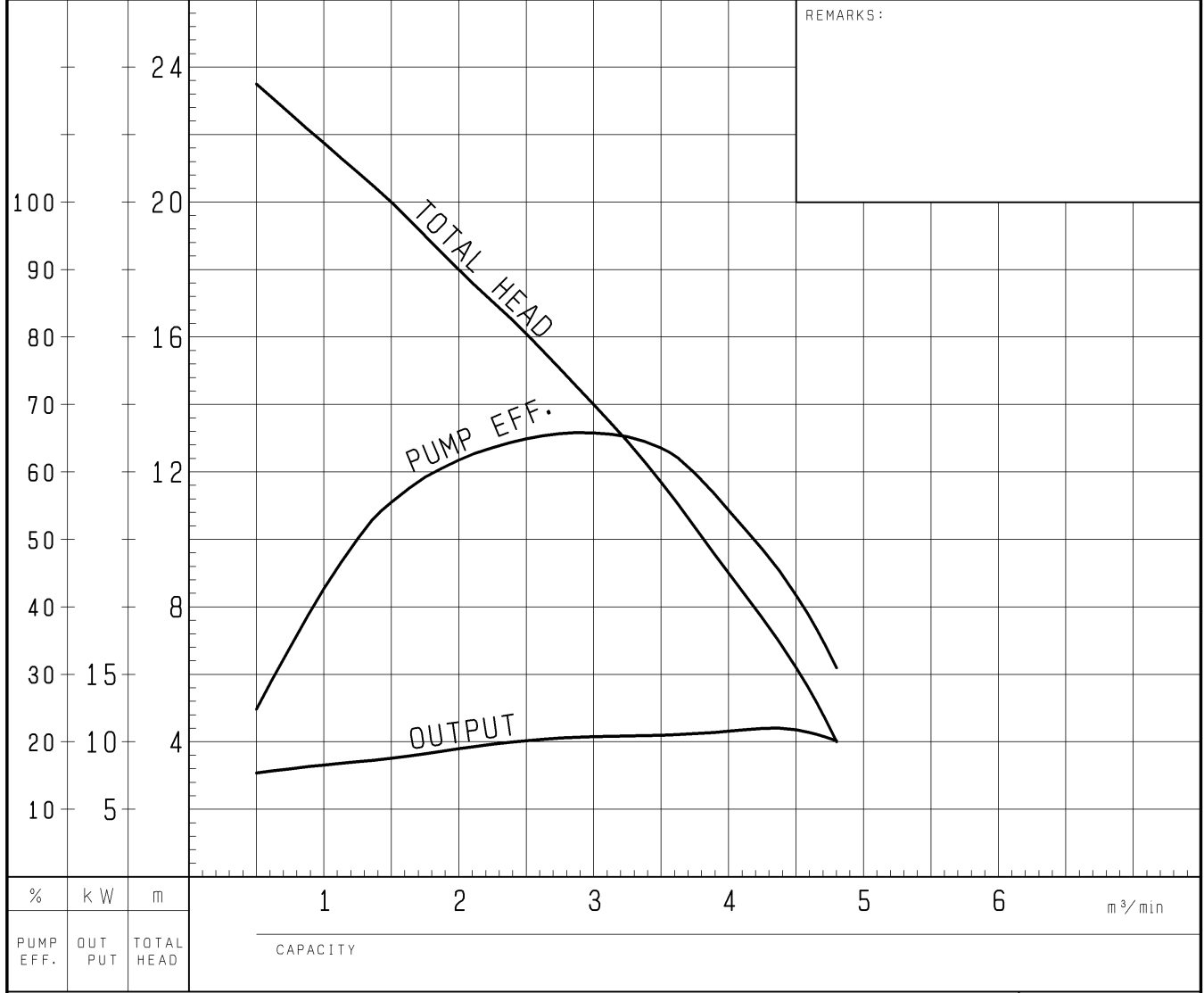
# PUMP PERFORMANCE CURVES

TYPE Sewage Submersible Channel Impeller Pump	MODEL 150B411 -53 TOS150B411 -53	FREQUENCY 50 Hz
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CUSTOMER'S NAME \_\_\_\_\_

EQUIPMENT TITLE \_\_\_\_\_ NO. \_\_\_\_\_

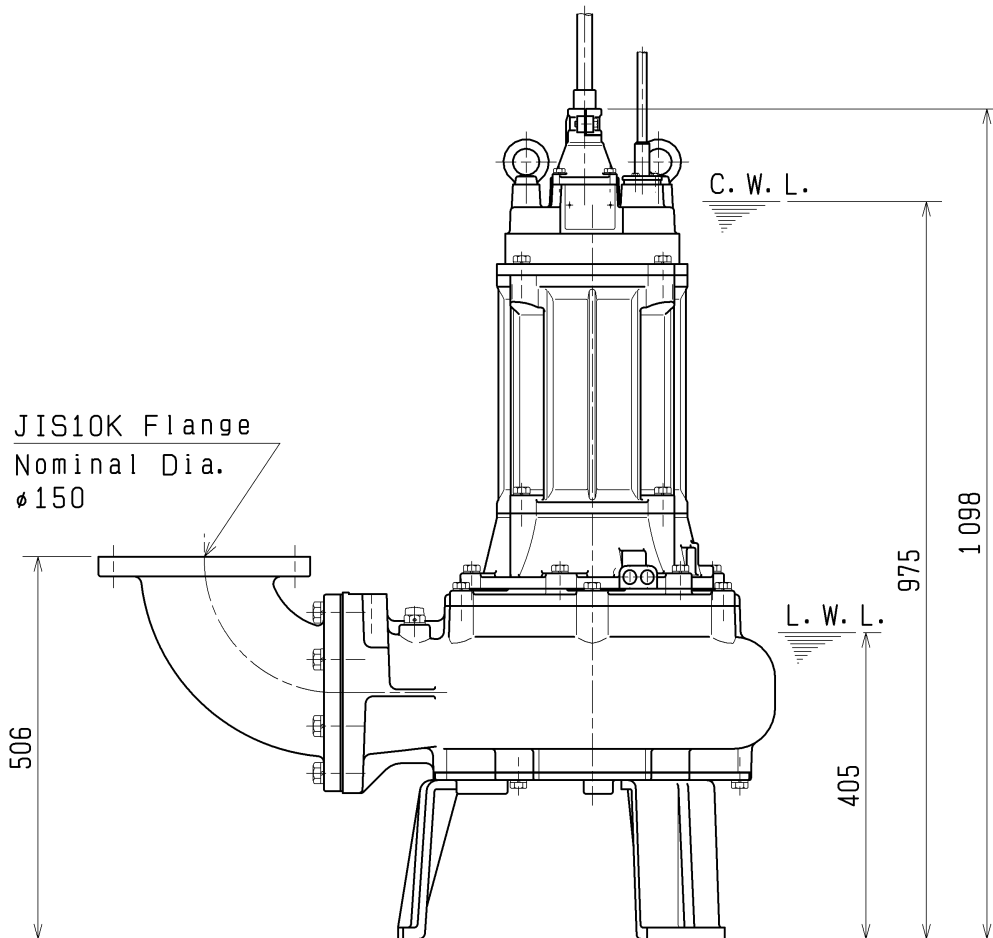
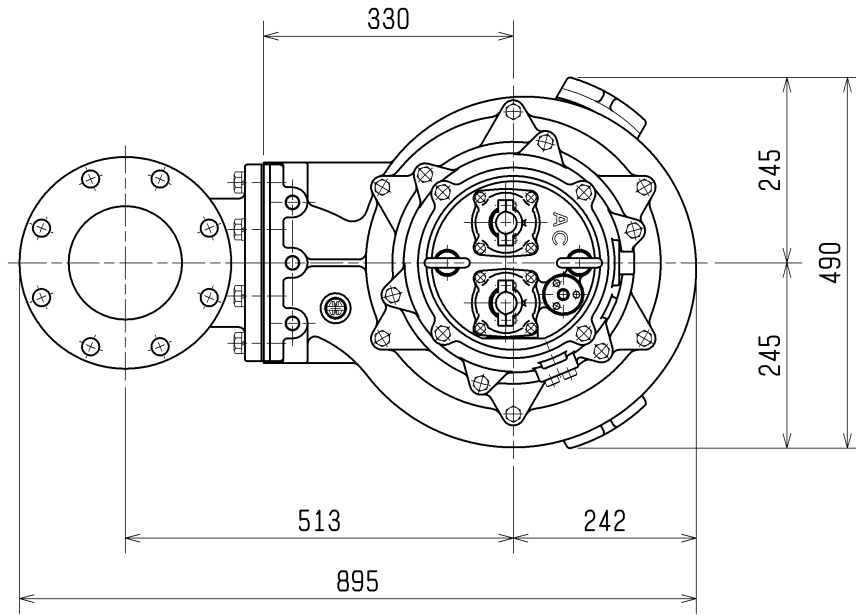
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	150 mm	mm
TOTAL HEAD	15.5 m	m
CAPACITY	2.5 m <sup>3</sup> /min	m <sup>3</sup> /min
MOTOR OUTPUT	11 kW	kW
PHASE x VOLTAGE	3 $\phi$ x V	$\phi$ x V
CURRENT	A	A
POLES / REVOLUTION	4 P / s. s. 1500 min <sup>-1</sup>	P / min <sup>-1</sup>
STARTING METHOD	STAR-DELTA	
INSULATION CLASS	F	



TSURUMI MFG. CO., LTD.

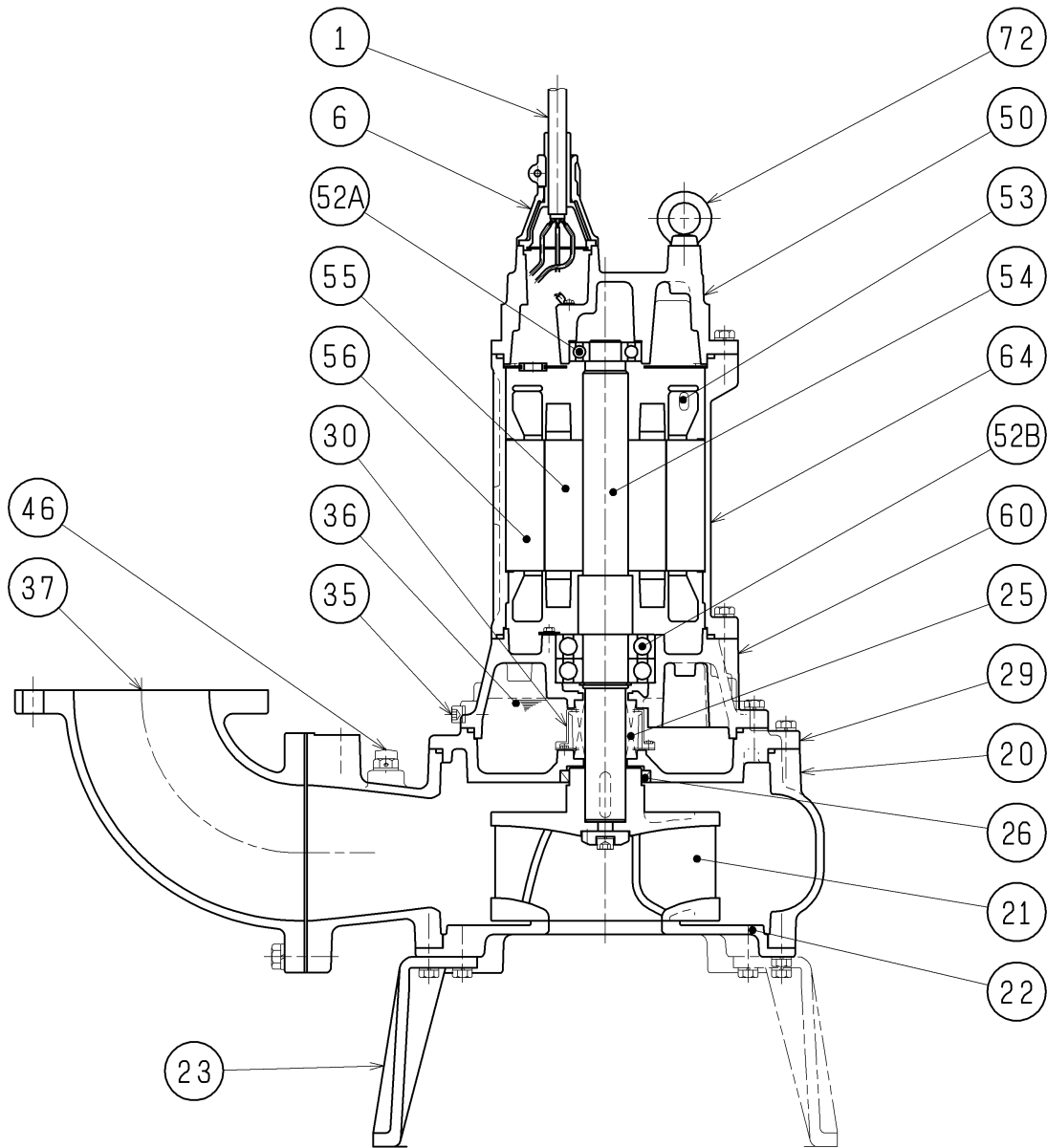
DIMENSION DRAWING		No.	No. A-14010-1
TYPE	Sewage Submersible Channel Impeller Pump	MODEL	150B411 -53/63

Approximate  
Weight(\*)  
250kg  
\*excluding cable



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

<b>SECTIONAL DRAWING</b>		No.	No. A-14017-1
TYPE	Sewage Submersible Channel Impeller Pump	MODEL	150B411 -53/63



REQ. SPECIFICATION

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cable	3	Chloroprene Sheath	46	Air Release Valve	1	Nylon
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	6307ZZC3
21	Impeller	1	Gray Iron Casting	52B	Lower Bearing	1	6310ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	3	
23	Stand	3	Ductile Iron Casting	54	Shaft	1	Stainless Steel 420J2
25	Mechanical Seal	1	H-45	55	Rotor	1	
26	Oil Seal	1	TC8010013	56	Stator	1	
29	Oil Casing	1	Gray Iron Casting	60	Bearing Housing	1	Gray Iron Casting
30	Oil Lifter	1	Plastic	64	Motor Frame	1	Gray Iron Casting
35	Oil Plug	2	Stainless Steel 304	72	Eye Bolt	2	Structure Steel
36	Lubricant		Turbine Oil (ISO VG32)				
37	Discharge Bend	1	Gray Iron Casting				