

SPECIFICATIONS

Model

100BZ411H

BZ-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

100mm

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, 1500min⁻¹ (50Hz)

Power Supply Voltages & Rated Currents

50Hz

380V - 24.4A

400V - 23.8A

415V - 23.5A

Power Cable

Sheath: Chloroprene rubber Standard Length: 10m 200 to 600V supply:

 $1 \times 4 \times 3.5$ mm², O.D. 14.1mm

 $1\times3\times3.5 mm^2,\,O.D.\,12.9 mm$

 $1 \times 2 \times 1.25$ mm², O.D. 9.8mm

Dry Weight (excluding cable)

Free Standing Type: 222kg Guide Rail Fitting Type: 217kg

Impeller

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

Solids Passage 50Hz – ϕ 80mm

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), 6400ml

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/cm² Screwed Flange

Stand Set (Free Standing Type)

Stand

TOS/TS Set (Guide Rail Fitting Type)

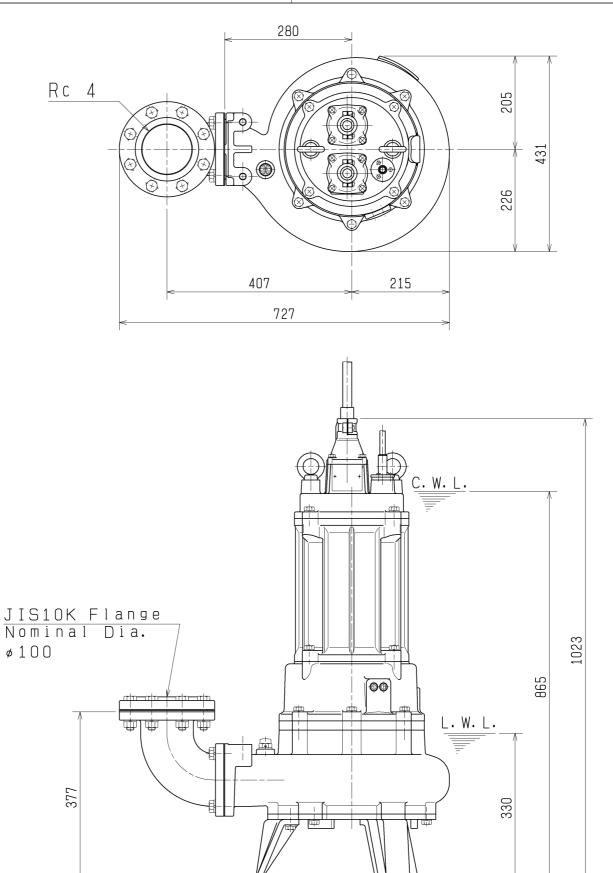
- Duckfoot Bend
- Guide Support
- Guide Hook
- Lifting Chain 5m (with Shackles)
- JIS 10kg/cm² Screwed Flange (TOS Set only)

External Leakage Sensor

NO. A-19403-2 PUMP PERFORMANCE CURVES TYPE Sewage Submersible MODEL 100BZ411H -53 FREQUENCY TOS100BZ411H -53 50 Channel Impeller Pump Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS DISCHARGE BORE 100 18.8 TOTAL HEAD m Ш 1.8 CAPACITY m³∕ min m³/min 11 MOTOR OUTPUT k W ΚW 3 Ø× PHASE × VOLTAGE φX CURRENT Α min^{-1} 4 P/ S. S. 1500 min^{-1} POLES / REVOLUTION STARTING METHOD STAR DELTA F INSULATION CLASS REMARKS: NO CONTINUOUS OPERATION 30 ALONG DASHED CURVE +25100 +TOTAL HEAD 90+ + 20 +0870 +60+ + 1550 +40+ + 1030 + 15 +20 + 10 + 5NUTPUT 10 + 5 +% ΚW 0.5 1.0 1.5 2.0 2.5 3.0 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



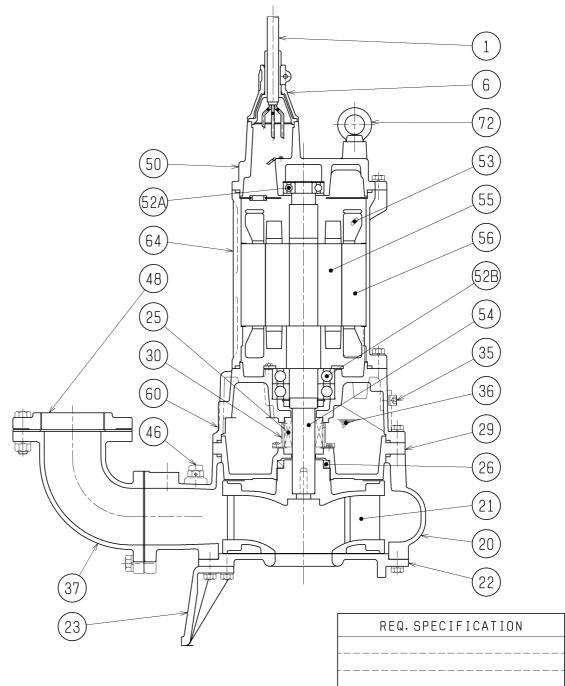
DIMENSION DRAWING	No.	No. A-19405-1
TYPE Sewage Submersible	MODEL	100BZ411H -53
Channel Impeller Pump		100BZ411 -53/63



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



SECTIONAL DRAWING	No.	No. A-19407-1
TYPE Sewage Submersible	MODEL	100BZ411H -53
Channel Impeller Pump		100BZ411 -53/63



No.	DESCRIPTION	Q' TY	MATERIAL / NOTE	No.	DESCRIPTION	Q' TY	MATERIAL / NOTE
1	Cabtyre 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	6310ZZD2C3
22	Suction Cover	1	Gray Iron Casting	53	Motor Protector	3	
23	Stand	3	Gray Iron Casting	54	Shaft	1	Stainless Steel 420J2
25	Mechanical Seal	1	H-40	55	Rotor	1	
26	Oil Seal	1	TC709212	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	Eyebolt	2	Structure Steel
36	Lubricant		Turbine Oil(ISO VG32)				
37	Discharge Bend	1	Gray Iron Casting				
46	Air Release Valve	1	Nylon				