

SPECIFICATIONS

Model

80BZ41.5

BZ-series

1.5kW, 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

80mm

Motor Output

1.5kW

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)

4-pole, 1500/1800min⁻¹ (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 380V - 4.2A 400V - 4.0A 415V - 4.1A 60Hz 220V - 8.0A 380V - 4.2A 440V - 4.0A

Power Cable

Sheath: PVC

Standard Length: 10m 200 to 600V supply:

 $1 \times 4 \times 1.25$ mm², O.D. 11.1mm $1 \times 4 \times 1.25$ mm², O.D. 11.1mm

Dry Weight (excluding cable)

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

Impeller

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

Solids Passage 50Hz – ∮80mm 60Hz – ∮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: Ceramic + Carbon 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), 1300ml

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

TOS/TS Set (Guide Rail Fitting Type)

- Duckfoot Bend
- Guide Support
- Guide Hook

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- · Lifting Chain 5m (with Shackles)
- JIS 10kg/cm² Screwed Flange (TOS Set only)

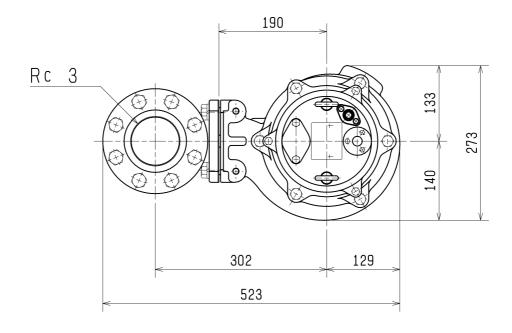
External Leakage Sensor

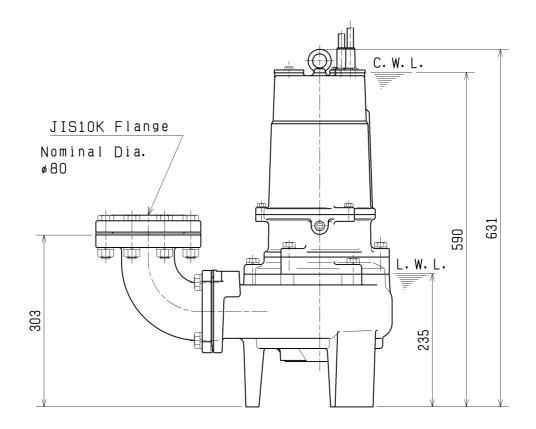
NO. A-05468-4 PUMP PERFORMANCE CURVES TYPE Sewage Submersible MODEL FREQUENCY 80BZ41.5 -51 TOS80BZ41.5 -51 50 Channel Impeller Pump Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS DISCHARGE BORE 80 5. 2 TOTAL HEAD m M 0.8 CAPACITY m³∕ min m³/min 1.5 MOTOR OUTPUT k W ΚW 3 PHASE × VOLTAGE φ× ٧ φX CURRENT Α min^{-1} 4 P/ S. S. 1500 POLES / REVOLUTION P/ STARTING METHOD DIRECT ON LINE INSULATION CLASS F REMARKS: NO CONTINUOUS OPERATION 12 ALONG DASHED CURVE 100 ++ 10 90+ 8 +0870 +6 60 +PUMP EFF. TOTAL 50 +HEAD 40 ++ 4 30 +1.5+ OUTPUT 20 + 1.0 +10+0.5+ k W % m 0.2 0.4 0.6 0.8 1.0 1. 2 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.



DIMENSION	DRAWING	No.	1	No. A-05481-4
TYPE Submersible C Impeller Sew		DEL	80BZ41.5	5-51/61

Approximate Weight(*)
78kg
*excluding cable

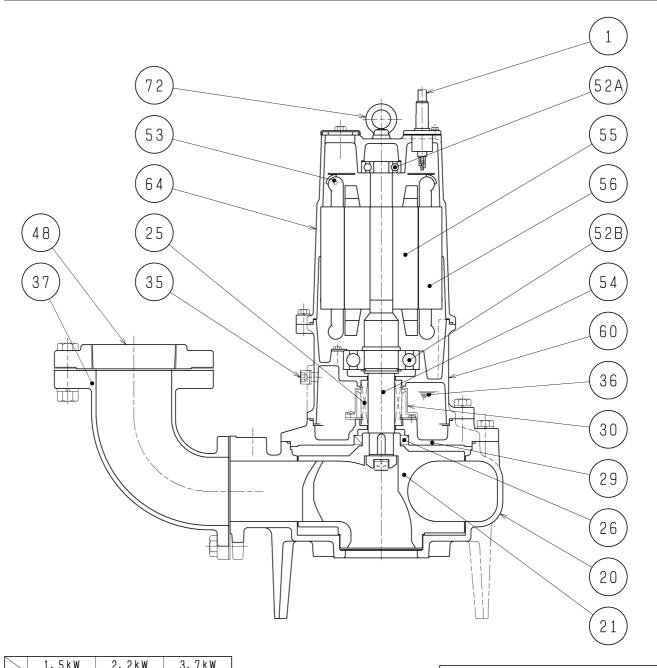




C. W. L. :Continuous running Water Level L. W. L. :Lowest running Water Level



SECTIONAL DRAWING	No. No. A-05497-4
TYPE Sewage Submersible Channel Impeller Pump	MODEL 80BZ41.5 -51/61 100BZ42.2 -51/61 100BZ43.7 -51/61



	1.5KW 2.2KW		3. /KW			1			
* 1	H-30A H-30A		H-35A				REQ. SPECIFICATIONS		
* 2	TC456812 TC45681	2 T	2507212						
* 3	6307ZZC3 6307ZZC	3 63	309ZZC3						
* 4	*4 For the Power and For the Control *5 the wetted part								
No.	DESCRIPTION	Q' TY	MATER	RIAL / NOTE	No.	DESCRIPT	ION	Q' TY	MATERIAL / NOTE
1	Cabtyre Cable	2	PVC Shea	ath *4	52A	Upper Bearin	פר	1	6304ZZC3
20	Pump Casing	1	Gray Iro	on Casting	52B	Lower Bearing		1	*3
21	Impeller	1	Gray Iro	on Casting	53	Motor Proteo	ctor	3	
25	Mechanical Seal	1	*1		54	Shaft 1		1	Stainless Steel 420J2(*5)
26	Oil Seal	1	*2		55	Rotor 1		1	
29	Oil Casing	1	Gray Iro	on Casting	56	Stator		1	
30	Oil Lifter	1	Plastic		60	Bearing Hous	sing	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	Eyebolts		2	Stainless Steel 304
37	Discharge Bend	1	Gray Iro	on Casting					
48	Screwed Flange	1	Gray Iro	on Casting					