

SPECIFICATIONS	Model	55-BER7	BER-series								
			5.5kW, 3-phase								
<p>Type of Equipment Submersible self-aspiration ejector suitable for pre-aeration and mixing in sewage and wastewater treatment</p> <p>Type of Fluid Sewage and wastewater</p> <p>Temperature: 0 to 40°C</p> <p>Air-inlet Bore 50mm</p> <p>Motor Output 5.5kW</p> <p>Power Supply Three-phase</p> <p>Starting Method Direct on Line (Star-Delta available on special request)</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><tr><td>50Hz</td><td>60Hz</td></tr><tr><td>380V – 12.4A</td><td>220V – 21.2A</td></tr><tr><td>400V – 12.1A</td><td>380V – 11.8A</td></tr><tr><td>415V – 12.1A</td><td>440V – 10.5A</td></tr></table> <p>Power Cable Sheath: Chloroprene rubber Standard Length: 8m 200 to 600V supply: 1 × 4 × 3.5mm², O.D. 14.1mm</p> <p>Dry Weight (excluding cable) Free Standing Type: 149kg Guide Rail Fitting Type: 132kg</p>		50Hz	60Hz	380V – 12.4A	220V – 21.2A	400V – 12.1A	380V – 11.8A	415V – 12.1A	440V – 10.5A	<p>Impeller Semi-open single-channel impeller for solid-handling design, dynamically balanced</p> <p>Solids Passage 50Hz – Ø35mm 60Hz – Ø35mm</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), 4300ml</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 – 12.4A	220V – 21.2A										
400V – 12.1A	380V – 11.8A										
415V – 12.1A	440V – 10.5A										
<p>Optional Accessories</p> <div><p>Ejector Set (Free Standing Type)</p><ul style="list-style-type: none">• Silencer & Valve Set• Lifting Chain 5m (with Shackles)• Suction Casing• Screwed Flange• Diffuser• Diffuser Base</div> <div><p>TOS-Ejector Set (Guide Rail Fitting Type)</p><ul style="list-style-type: none">• Silencer & Valve Set• Lifting Chain 5m (with Shackles)• Guide Support• Guide Hook• Suction Casing• Screwed Flange• Diffuser</div> <p>External Leakage Sensor</p>											
TSURUMI MANUFACTURING CO., LTD.											

NO.

A-20151-1

AERATOR PERFORMANCE CURVES

TYPE SUBMERSIBLE EJECTOR (AERATOR)

MODEL 55-BER7, TOS-55BER7

FREQUENCY 50 Hz

CUSTOMER'S NAME

EQUIPMENT TITLE

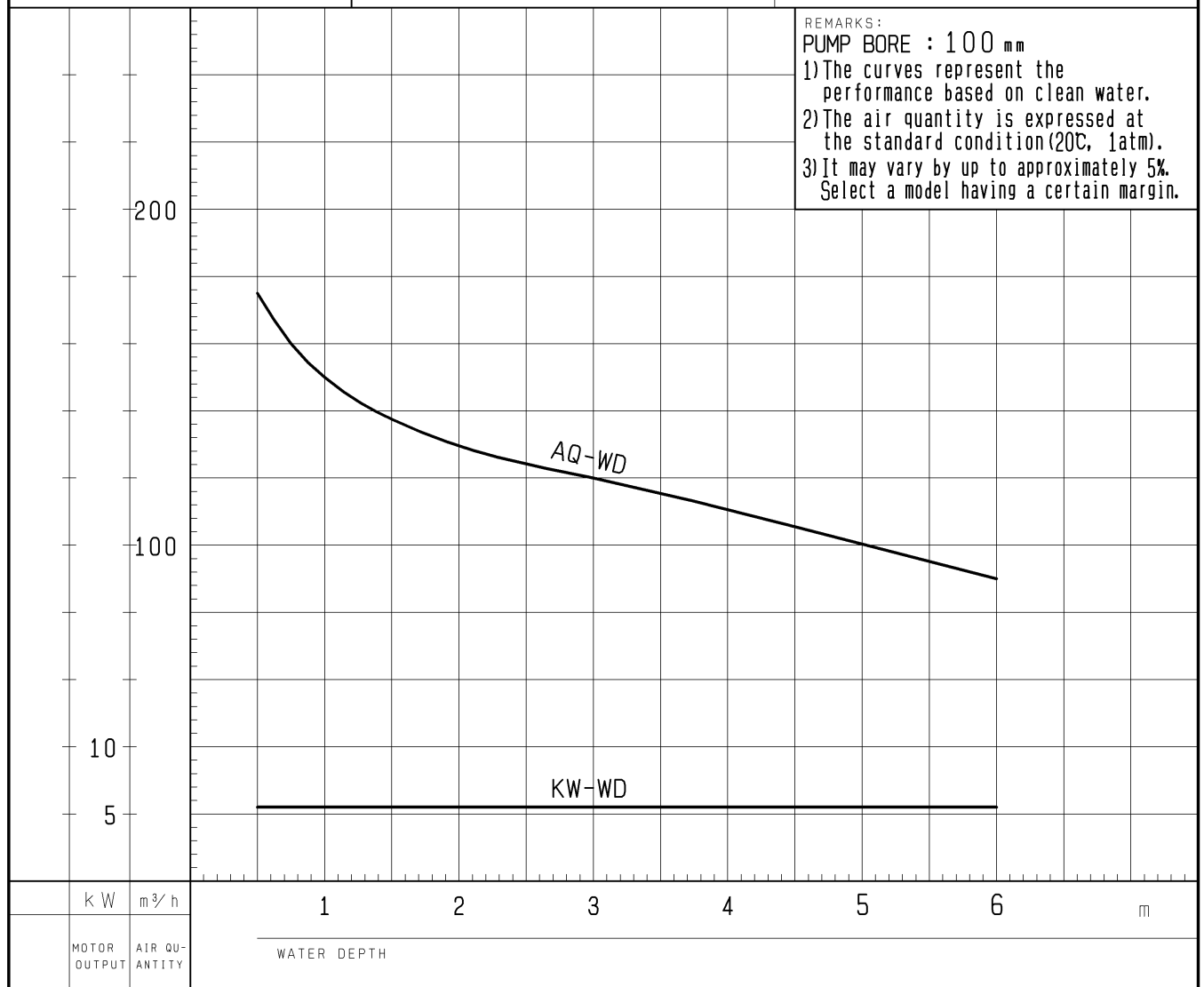
NO.

	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
AIR INLET BORE	50 mm	mm
AIR QUANTITY	at 6 m 90 m ³ /h	at m m ³ /h
WATER DEPTH	Max. 6 m	Max. m
MOTOR OUTPUT	5.5 kW	kW
PHASE × VOLTAGE	3 φ × V	φ × V
CURRENT	A	A
POLES / REVOLUTION	4 P / s. s. 1500 min ⁻¹	P / min ⁻¹
STARTING METHOD	DIRECT ON LINE	
INSULATION CLASS	F	

REMARKS:

PUMP BORE : 100 mm

- 1) The curves represent the performance based on clean water.
- 2) The air quantity is expressed at the standard condition (20°C, 1atm).
- 3) It may vary by up to approximately 5%. Select a model having a certain margin.

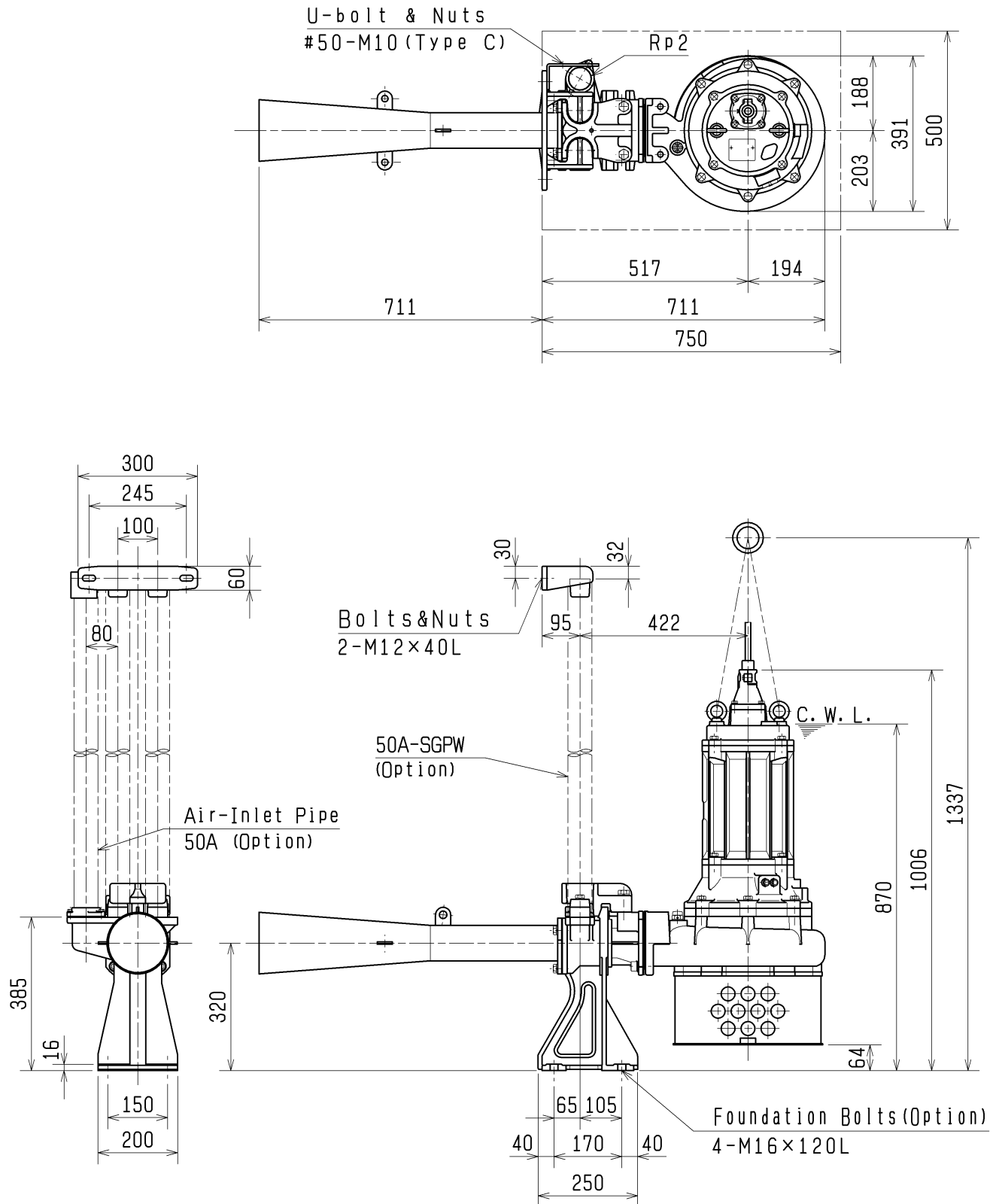


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DIMENSION DRAWING			No.	No.	A-20155-2
TYPE	SUBMERSIBLE EJECTOR (AERATOR)		MODEL	TOS-55BER7	

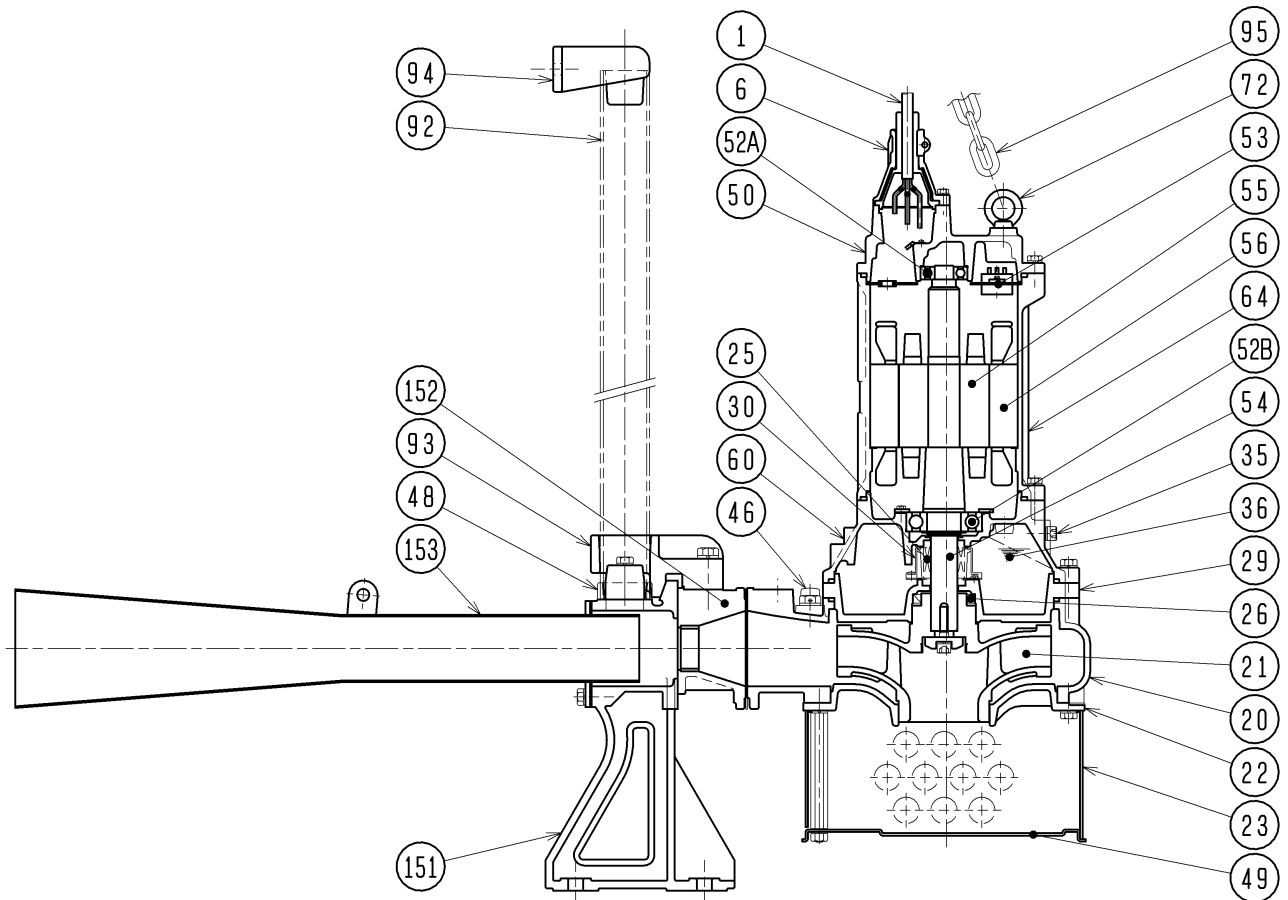
Approximate Weight(※)	
Duckfoot Bend	Pump
40kg	132kg

※excluding cable



C. W. L. :Continuous running Water Level

SECTIONAL DRAWING			No.	No.	A-20156-1
TYPE	SUBMERSIBLE EJECTOR (AERATOR)		MODEL TOS-55BER7		



REQ. SPECIFICATION

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cabtyre Cable	1	Chloroprene Sheath	53	Motor Protector	1	
6	Stuffing Box	1	Gray Iron Casting	54	Shaft	1	Stainless Steel 420J2
20	Pump Casing	1	Gray Iron Casting	55	Rotor	1	
21	Impeller	1	Gray Iron Casting	56	Stator	1	
22	Suction Cover	1	Gray Iron Casting	60	Bearing Housing	1	Gray Iron Casting
23	Strainer	1	Steel Plate	64	Motor Frame	1	Gray Iron Casting
25	Mechanical Seal	1	H-35A	72	Eye Bolt	2	Structure Steel
26	Oil Seal	1	TC608212	92	Guide Pipe	2	Galvanized Steel Pipe (Option)
29	Oil Casing	1	Gray Iron Casting	93	Guide Hook	1	Ductile Iron Casting
30	Oil Lifter	1	Plastic	94	Guide Support	1	Ductile Iron Casting
35	Oil Plug	2	Stainless Steel 304	95	Chain	1	Structure Steel, 5m
36	Lubricant		Turbine Oil (ISO VG32)	151	Air-Inlet Casing	1	Gray Iron Casting
46	Air Release Valve	1	Nylon	152	Nozzle	1	Gray Iron Casting
48	Screwed Flange	1	Gray Iron Casting	153	Diffuser	1	Structure Steel (Nylon Coated)
49	Bottom Plate	1	Steel Plate				
50	Motor Bracket	1	Gray Iron Casting				
52A	Upper Bearing	1	6305ZZC3				
52B	Lower Bearing	1	6309ZZC3				