

# BER

**TSURUMI PUMP**

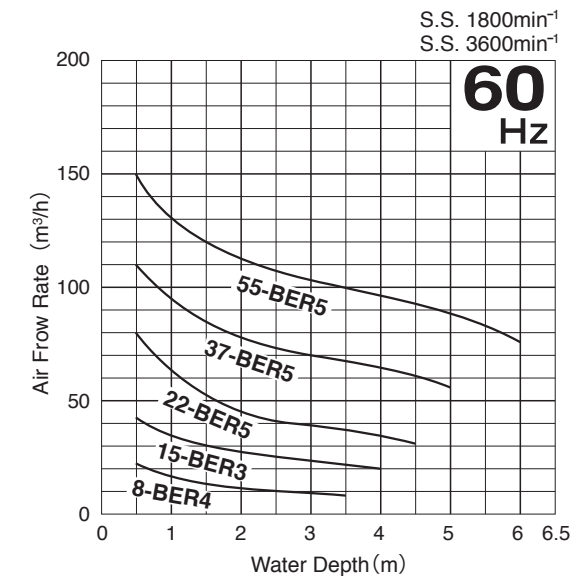
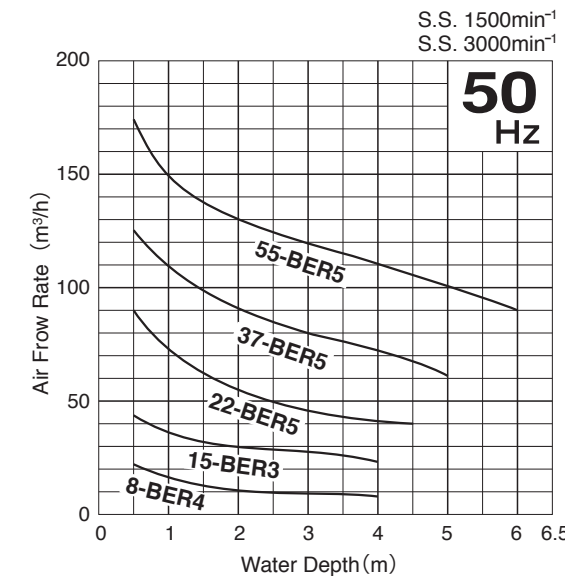
The BER-series is a submersible ejector comprising a B-series sewage pump and a venturi-jet pump. It draws in air by means of its self-aspirating mechanism and discharges the mixture of air and water through the diffuser. The powerful single jet current is unrivaled in vertical stirring convection.



- Applications
- Pre-aeration and mixing at wastewater treatment plant
  - Supplying oxygen to water in aquafarm

■ Air Flow Rate – Water Depth Curves

(The air flow rates are expressed at the standard condition, i.e. temperature of 20, 1 atm and may vary by up to approximately 5%.)



■ Major Standard Specifications

Air-inlet Bore		mm	25	32	50
Treating Fluid	Type of Fluid	Wastewater and Sewage			
	Fluid Temperature	0 to 40°C			
Pump	Structure	Impeller	Channel Impeller		
		Shaft Seal	Double Mechanical Seal with Oil Lifter		
		Bearing	Double-shielded Ball Bearing		
	Materials	Impeller	Gray Iron Casting		
		Diffuser*	Structure Steel + Nylon Coated		
		Casing	Gray Iron Casting		
		Suction Cover	Gray Iron Casting		
Shaft Seal	SiC				
Motor	Type, Pole	Dry Type Submersible Induction Motor 2, 4-pole			
	Class of Insulation	Class E Class F (1.5kW and 5.5kW only)			
	Phase	Three-phase			
	Starting Method	Direct on Line			
	Protection Device (built-in)	Circle Thermal Protector			
	Lubricant	Turbine Oil (ISO VG32)			
	Materials	Frame	Gray Iron Casting		
Shaft		403 Stainless Steel (0.75kW only) 420 Stainless Steel			
Cable		PVC Chloroprene Rubber (5.5kW only)			
Air-inlet Connection		Screwed Flange			

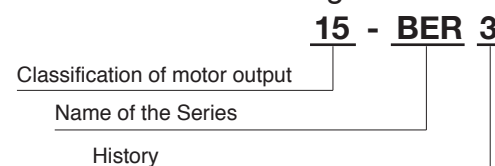
■ Standard Specifications

Air-inlet Bore mm	Model		Motor Output kW	Starting Method	Speed (S.S.) 50Hz/60Hz min <sup>-1</sup>	Air Flow Rate* <sup>1</sup> – Water Depth 50Hz/60Hz m <sup>3</sup> /h	Mixing Capacity 50Hz/60Hz m <sup>3</sup> /h	Max. Tank Dimension			Max. Water Depth m	Dry Weight* <sup>2</sup> kgs		Cabtyre Cable						
	Free Standing	Guide Rail Fitting						Length m	Width m	Depth m		Free Standing	Guide Rail Fitting	No. of Cables	200 ~ 240 V		380 ~ 575 V		Length m	Material
25	8-BER4	TOS-8BER4	0.75	D.O.L.	3000/3600	11/9–3	22/21	3	2	4	4/3.5	28	23		1	4 x 1.25	11.1	4 x 1.25		
32	15-BER3	TOS-15BER3	1.5	D.O.L.	3000/3600	28/24–3	41/40	4	3.5	4	4	43	34	1	4 x 1.25	11.1	4 x 1.25	11.1	6	PVC
50	22-BER5	TOS-22BER5	2.2	D.O.L.	1500/1800	45/38–3	63/60	5	5	4.5	4.5	75	61	1	4 x 2.0	11.8	4 x 2.0	11.8	6	PVC
50	37-BER5	TOS-37BER5	3.7	D.O.L.	1500/1800	80/70–3	94/90	6	6	5	5	91	77	1	4 x 3.5	13.9	4 x 2.0	11.8	6	PVC
50	55-BER5	TOS-55BER5	5.5	D.O.L.	1500/1800	120/105–3	126/120	7	7	6	6	149	132	1	4 x 3.5	14.1	4 x 3.5	14.1	8	Chloroprene Rubber

\*<sup>1</sup> The air flow rates are expressed at the standard condition. : Temperature 20°C , 1atm

\*<sup>2</sup> Dry weight  
All weights excluding cable  
Weights of guide rail fitting excluding duckfoot bend

■ Model Number Designation



■ Standard Accessories

Free Standing

- Silencer & Valve Set
- Lifting Chain 5m, (with Shackles)
- Suction Casing (with Nozzle Ring, Packing & Bolts)
- Screwed Flange
- Diffuser (with Packing & Bolts)
- Diffuser Base (with Nuts)

Guide Rail Fitting - TOS

- Silencer & Valve Set
- Lifting Chain 5m, (with Shackles)
- Guide Support (with Bolts & Nuts)
- Air-inlet Pipe Support (with U-bolt & Nuts)
- Guide Hook (with Bolts)

- Nozzle (with Nozzle Ring, Packing & Bolts)
- Suction Casing
- Guide Connector (with Bolts)
- Screwed Flange
- Diffuser (with Packing & Bolts)
- Foundation Bolts (with Nuts)

\*Available in stainless steel 304 upon request