TRN

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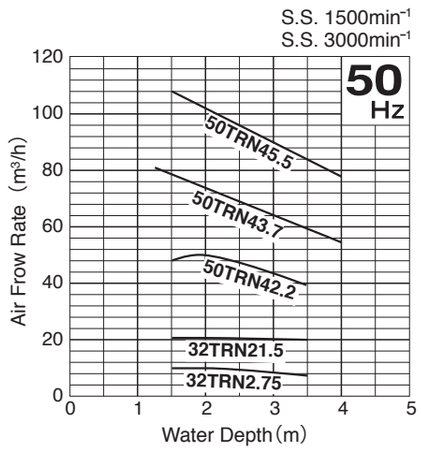
TSURUMI PUMP

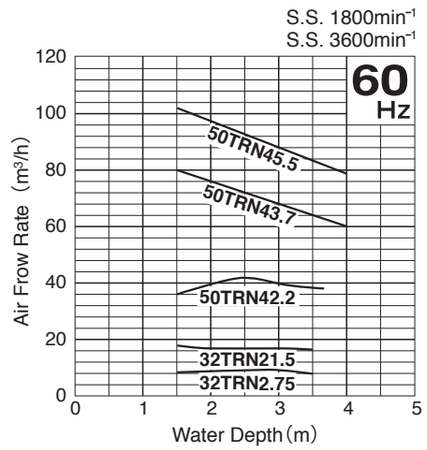
The TRN-series is a submersible aerator having a self-aspirating function. A built-in special semi-open impeller generates negative pressure, draws in air from above the water surface. The drawn air and liquid are mixed and discharged at a high pressure. This innovative mechanism contributes to highly efficient dissolution of oxygen.

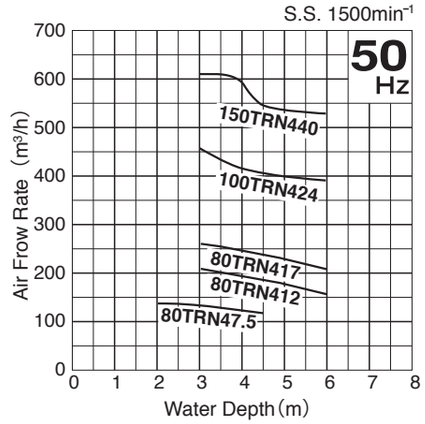


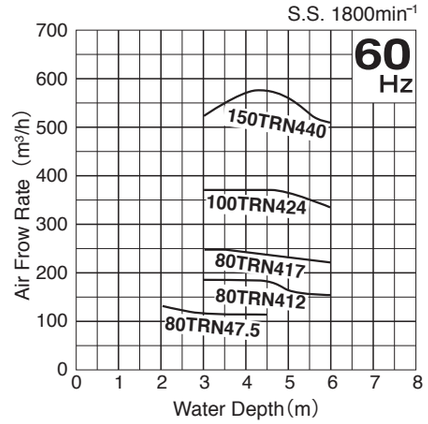
Air Flow Rate – Water Depth Curves

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









Major Standard Specifications

Air-inlet Bore mm			32	50	80	100	150
Treating Fluid	Type of Fluid		Wastewater and Sewage				
	Fluid Temperature		0 to 40℃				
Aerator	Structure	Impeller	Semi-open Impeller (special)				
		Shaft Seal	Double Mechanical Seal with Oil Lifter				
		Bearing	Double-shielded Ball Bearing				
	Materials	Impeller	410 Stainless Steel Casting				
		Air Passage	Gray Iron Casting				
		Guide Vane	Gray Iron Casting				
		Suction Cover	410 Stainless Steel Casting				
		Shaft Seal	SiC				
Motor	Type, Pole		Dry Type Submersible Induction Motor 2, 4-pole				
	Class of Insulation		Class F				
	Phase		Three-phase				
	Starting Method		Direct on Line (7.5kW and below) Star-delta (12kW and above)				
	Protection Device (built-in)		Circle Thermal Protector (7.5kW and below) Miniature Thermal Protector (12kW and above)				
	Lubricant		Turbine Oil (ISO VG32)				
	Materials	Frame	Gray Iron Casting				
		Shaft	420 Stainless Steel				
		Cable	PVC (3.7kW and below) Chloroprene Rubber (5.5kW and above)				
No. of Outlet			6 8 (24kW and 40kW only)				

Standard Specifications

Air-inlet Bore mm	Model	Motor Output kW	Starting Method	Speed (S.S.) 50Hz/60Hz min⁻¹	Impeller Passage 50Hz/60Hz mm	Max. Water Depth m	Air Flow Rate – *1 Max.Water Depth 50/60Hz m³/h	No. of Outlets	Dry *2 Weight kgs	Cabtyre Cable						
										No. of Cables	200 ~ 240 V		380 ~ 575 V		Length m	Material
											Cores × mm²	Outer Dia. mm	Cores × mm²	Outer Dia. mm		
32	32TRN2.75	0.75	D.O.L.	3000/3600	10	3.5	7/8	6	55	1	4 × 1.25	11.1	4 × 1.25	11.1	6	PVC
32	32TRN21.5	1.5	D.O.L.	3000/3600	12	3.5	20/17	6	55	1	4 × 1.25	11.1	4 × 1.25	11.1	6	PVC
50	50TRN42.2	2.2	D.O.L.	1500/1800	12	3.6	39/38	6	140	1	4 × 2.0	11.8	4 × 2.0	11.8	6	PVC
50	50TRN43.7	3.7	D.O.L.	1500/1800	12	4.0	55/60	6	150	1	4 × 3.5	13.9	4 × 2.0	11.8	6	PVC
50	50TRN45.5	5.5	D.O.L.	1500/1800	15	4.0	78/79	6	170	1	4 × 3.5	14.1	4 × 3.5	14.1	8	Chloroprene Rubber
80	80TRN47.5	7.5	D.O.L.	1500/1800	15	4.5	124/112	6	190	1	4 × 5.5	16.8	4 × 5.5	16.8	8	Chloroprene Rubber
80	80TRN412	12	Star-Delta	1500/1800	15	6.0	157/155	6	200	3	4 × 3.5	14.1	4 × 3.5	14.1	8	Chloroprene Rubber
											3 × 3.5	12.9	3 × 3.5	12.9		
											2 × 1.25	9.8	2 × 1.25	9.8		
80	80TRN417	17	Star-Delta	1500/1800	15	6.0	202/220	6	220	3	4 × 5.5	16.8	4 × 5.5	16.8	8	Chloroprene Rubber
											3 × 5.5	15.2	3 × 5.5	15.2		
											2 × 1.25	9.8	2 × 1.25	9.8		
100	100TRN424	24	Star-Delta	1500/1800	22	6.0	388/342	8	460	3	4 × 14	21.7	4 × 14	21.7	10	Chloroprene Rubber
											3 × 14	19.7	3 × 14	19.7		
											2 × 1.25	9.8	2 × 1.25	9.8		
150	150TRN440	40	Star-Delta	1500/1800	25	6.0	528/506	8	635	3	4 × 22	28.8	4 × 14	21.7	10	Chloroprene Rubber
											3 × 22	26.1	3 × 14	19.7		
											2 × 1.25	9.8	2 × 1.25	9.8		

*1 The air flow rates are expressed at the standard condition. : Temperature 20℃ , 1atm
*2 Weights excluding cable

Applications

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

Model Number Designation

32 TRN 2 .75

- 32 — Air-inlet bore in millimeters
- TRN — Name of the Series
- 2 — Number of poles of the motor
- .75 — Rated motor output in kilowatts

Standard Accessories

- Silencer & Valve Set
- Screwed Flange
  -17kW and below
- JIS 10kg/cm² Flange (with Packing & Bolts)
  -24kW and above