

Submersible Sewage Pumps

PU

The PU-series is a vortex pump designed for handling raw sewage, wastewater, Industrial and commercial sump pump applications. The solid handling design provides practically unchokable operation in sewage pumping. Since the pump is made of special resin and stainless steel, it is corrosion-resistant and lightweight.



Major Components & Specifications

Discharge Bore	mm	40	50	80	
Pumping Fluid	Type of Fluid	Sewage, Wastewater, and Water carrying Solid Matters			
	Fluid Temperature	0 to 40°C			
Pump	Impeller	Vortex			
	Shaft Seal	Double Mechanical Seal (with Oil Lifter)			
	Bearing	Double-shielded Ball Bearing			
	Impeller	Glass-fiber Reinforced Resin			
	Casing	Glass-fiber Reinforced Resin			
Motor	Type, Pole	Dry-type Submersible Induction Motor, 2-pole			
	Insulation	Class E			
Motor	Phase	Single-phase (suffix "S") Three-phase			
	Starting Method	Capacitor Run (single-phase only) Direct on Line			
	Protection Device (Built-in)	Circle Thermal Protector Miniature Thermal Protector (40PU2.15S, 40PU2.25S & 50PU2.4S only)			
	Lubricant	Liquid Paraffin (ISO VG32)			
	Materials	Frame	304 Stainless Steel		
		Shaft	420 Stainless Steel (0.15kW only) 304 Stainless Steel		
Discharge Connection	Screwed Flange				

Guide Rail Fitting

TOK Application Table

Model	Applicable Motor Output
TOK4-P	0.15 to 0.75kW
TOK2-65	1.5kW
TOK2-65T	2.2 to 3.7kW

Accessories

- Duckfoot Bend
- Guide Hook
- Guide Support with Bolts & Nuts
- Lifting Chain with Shackles (4m for TOK4-P, 5m for TOK2-65 / 65T)

Applications

- Draining sewage from factory, residence, hotel, restaurant, etc.
- Pumping rainwater and springwater at a place where foreign objects are likely to run into the water
- Transferring wastewater between the tanks at small-scale treatment facility

Cable Cables

Single-phase

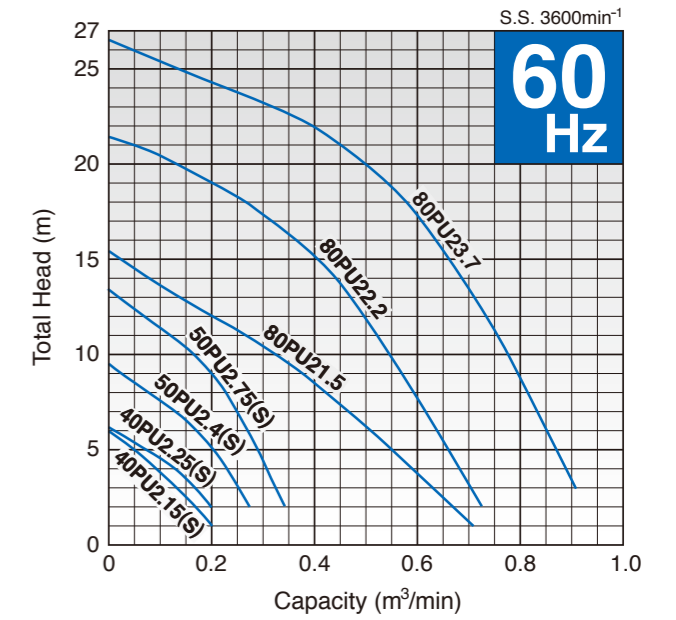
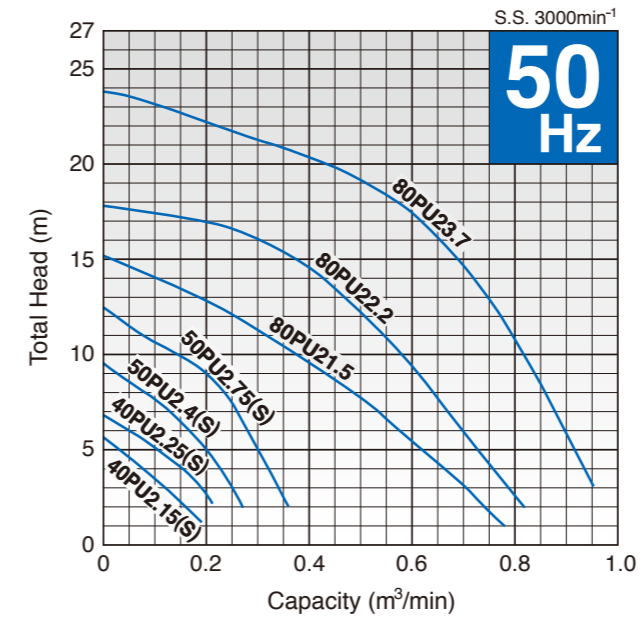
Model	100-120V		200-240V		Length m	Material
	Cores x mm ²	Outer Dia. mm	Cores x mm ²	Outer Dia. mm		
40PU2.15S	3 x 1.25	10.1	3 x 1.25	10.1	5	PVC
40PU2.25S	3 x 1.25	10.1	3 x 1.25	10.1		
50PU2.4S	3 x 1.25	10.1	3 x 1.25	10.1		
50PU2.75S	3 x 2.0	10.9	3 x 1.25	10.1		

Three-phase

Model	200-240V		380-600V		Length m	Material
	Cores x mm ²	Outer Dia. mm	Cores x mm ²	Outer Dia. mm		
40PU2.15	4 x 1.25	11.1	4 x 1.25	11.1	6	PVC
40PU2.25	4 x 1.25	11.1	4 x 1.25	11.1		
50PU2.4	4 x 1.25	11.1	4 x 1.25	11.1		
50PU2.75	4 x 1.25	11.1	4 x 1.25	11.1		
80PU21.5	4 x 1.25	11.1	4 x 1.25	11.1		
80PU22.2	4 x 2.0	11.8	4 x 1.25	11.1		
80PU23.7	4 x 3.5	13.9	4 x 2.0	11.8		

Performance Curves

Standard, Automatic and Auto-alternation models have the identical performance.



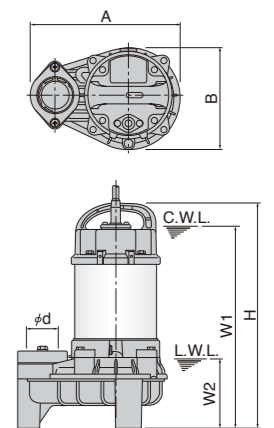
Model Selection

Discharge Bore mm	Model			Motor Output kW	Phase	Starting Method	Solids Passage mm	Dry Weight kg	
	Standard	Automatic	Auto-alternation					Standard	Auto & Auto-alternation
40	40PU2.15S	40PUA2.15S	40PUW2.15S	0.15	Single	Capacitor Run	35	6.1	6.7
40	40PU2.15	40PUA2.15	40PUW2.15	0.15	Three	D.O.L.	35	5.6	6.3
40	40PU2.25S	40PUA2.25S	40PUW2.25S	0.25	Single	Capacitor Run	35	7.1	7.8
40	40PU2.25	40PUA2.25	40PUW2.25	0.25	Three	D.O.L.	35	6.1	6.8
50	50PU2.4S	50PUA2.4S	50PUW2.4S	0.4	Single	Capacitor Run	35	7.1	7.8
50	50PU2.4	50PUA2.4	50PUW2.4	0.4	Three	D.O.L.	35	7.0	7.7
50	50PU2.75S	50PUA2.75S	—	0.75	Single	Capacitor Run	35	8.9	9.5
50	50PU2.75	50PUA2.75	50PUW2.75	0.75	Three	D.O.L.	35	8.3	9.0
80	80PU21.5	80PUA21.5	80PUW21.5	1.5	Three	D.O.L.	46	16.0	16.9
80	80PU22.2	80PUA22.2	80PUW22.2	2.2	Three	D.O.L.	46	22.0	23.0
80	80PU23.7	80PUA23.7	80PUW23.7	3.7	Three	D.O.L.	46	27.0	28.0

• Weights excluding cable

Dimensions

Model	d	A	B	H	Unit: mm	
					W1	W2
40PU2.15S	40	225	154	377	340	105
40PU2.15	40	225	154	377	340	105
40PU2.25S	40	236	162	360	325	110
40PU2.25	40	236	162	349	310	110
50PU2.4S	50	236	162	360	325	110
50PU2.4	50	236	162	360	325	110
50PU2.75S	50	236	162	380	345	110
50PU2.75	50	236	162	374	335	110
80PU21.5	80	295	196	475	430	150
80PU22.2	80	311	212	583	520	155
80PU23.7	80	311	212	618	555	155



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