

UZ 50 • 80mm

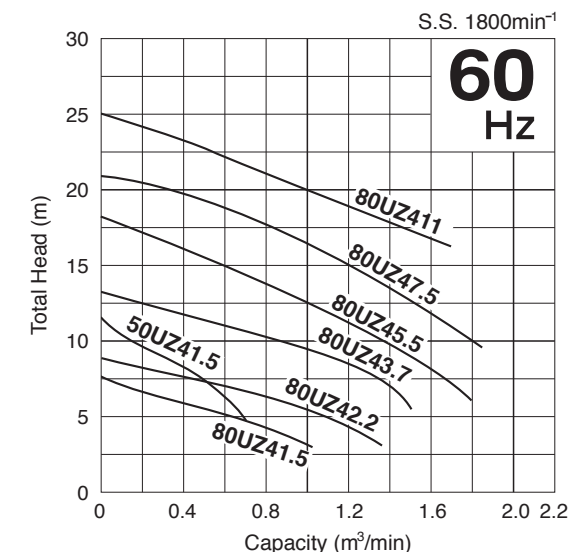
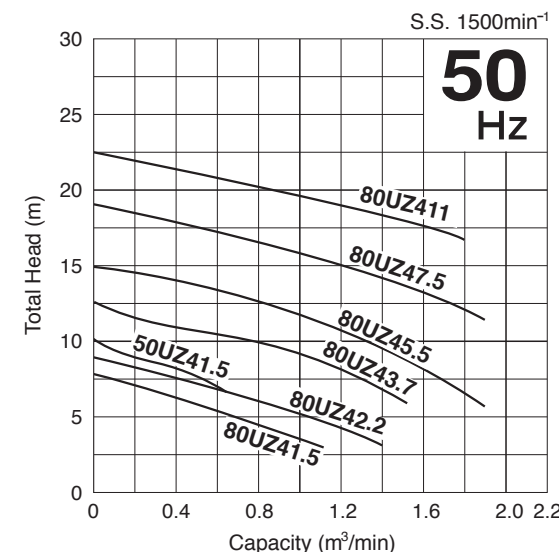
The UZ-series is a vortex pump driven by a 4-pole motor. It has a large solid passage that is equivalent to its discharge diameter and is excellent in the solid handling capability. It offers a practically choking-free operation in sewage pumping.



Major Standard Specifications

Discharge Bore		mm	50	80
Pumping Fluid	Type of Fluid	Wastewater, and Liquid carrying Waste and Solid Matters		
	Fluid Temperature	0 to 40°C		
Pump	Structure	Impeller	Vortex Impeller	
		Shaft Seal	Double Mechanical Seal with Oil Lifter	
		Bearing	Double-shielded Ball Bearing	
	Materials	Impeller	Gray Iron Casting	
		Shaft Seal	SiC	
Motor	Type, Pole	Dry Type Submersible Induction Motor 4-pole		
	Class of Insulation	Class E (3.7kW and below) Class F (5.5kW and above)		
	Phase	Three-phase		
	Starting Method	Direct on Line Star-delta (11kW only)		
	Protection Device (built-in)	Circle Thermal Protector (7.5kW and below) Miniature Thermal Protector (11kW 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)		
Discharge Connection		Screwed Flange (50UZ41.5 only) JIS 10K Flange		

Performance Curves



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

Standard Specifications

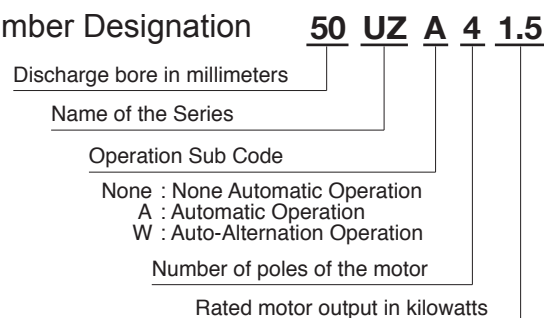
Discharge Bore mm	Standard Model			Automatic Model			Auto-Alternation Model			Motor Output kW	Starting Method	Speed (S.S.) 50Hz/60Hz min ⁻¹	Impeller Passage 50Hz/60Hz mm	Dry Weight * kgs				Cabletyre Cable						
	Free Standing	Guide Rail Fitting		Free Standing	Guide Rail Fitting		Free Standing	Guide Rail Fitting						Standard Model		Automatic & Auto-Alternation Model		No. of Cables	200 ~ 240 V		380 ~ 575 V		Length m	Material
		TOS	TS		TOS	TS		TOS	TS					Free Standing	Guide Rail Fitting	Free Standing	Guide Rail Fitting		Cores × mm ²	Outer Dia. mm	Cores × mm ²	Outer Dia. mm		
50	50UZ41.5	TOS50UZ41.5	TS50UZ41.5	50UZA41.5	TOS50UZA41.5	TS50UZA41.5	50UZW41.5	TOS50UZW41.5	TS50UZW41.5	1.5	D.O.L.	1500/1800	50	52.0	50.0	58.0	56.0	1	4 × 1.25	11.1	4 × 1.25	11.1	6	PVC
80	80UZ41.5	TOS80UZ41.5	TS80UZ41.5	80UZA41.5	TOS80UZA41.5	TS80UZA41.5	80UZW41.5	TOS80UZW41.5	TS80UZW41.5	1.5	D.O.L.	1500/1800	80	66.0	56.0	73.0	63.0	1	4 × 1.25	11.1	4 × 1.25	11.1	6	PVC
80	80UZ42.2	TOS80UZ42.2	TS80UZ42.2	80UZA42.2	TOS80UZA42.2	TS80UZA42.2	80UZW42.2	TOS80UZW42.2	TS80UZW42.2	2.2	D.O.L.	1500/1800	80	66.0	57.0	73.0	64.0	1	4 × 2.0	11.8	4 × 2.0	11.8	6	PVC
80	80UZ43.7	TOS80UZ43.7	TS80UZ43.7	80UZA43.7	TOS80UZA43.7	TS80UZA43.7	80UZW43.7	TOS80UZW43.7	TS80UZW43.7	3.7	D.O.L.	1500/1800	80	72.0	63.0	79.0	70.0	1	4 × 3.5	13.9	4 × 2.0	11.8	6	PVC
80	80UZ45.5	TOS80UZ45.5	TS80UZ45.5	—	—	—	—	—	—	5.5	D.O.L.	1500/1800	80	131.0	126.5	—	—	1	4 × 3.5	14.1	4 × 3.5	14.1	8	Chloroprene Rubber
80	80UZ47.5	TOS80UZ47.5	TS80UZ47.5	—	—	—	—	—	—	7.5	D.O.L.	1500/1800	80	138.0	133.5	—	—	1	4 × 5.5	16.8	4 × 5.5	16.8	8	Chloroprene Rubber
80	80UZ411	TOS80UZ411	TS80UZ411	—	—	—	—	—	—	11	Star-Delta	1500/1800	80	171.5	167.0	—	—	3	4 × 3.5 3 × 3.5 2 × 1.25	14.1 12.9 9.8	4 × 3.5 3 × 3.5 2 × 1.25	14.1 12.9 9.8	8	Chloroprene Rubber

* Dry weight
All weights excluding cable
Weights of guide rail fitting excluding duckfoot bend

Applications

- Transferring sewage and wastewater to wastewater treatment plant
- Draining wastewater from industrial plant
- Draining effluent from residence, hotel, commercial complex, etc

Model Number Designation



Standard Accessories

Free Standing

- Discharge Bend (with Packing & Bolts)
- Screwed Flange -50UZ41.5 only
- JIS 10kg/cm² Flange (with Packing, Bolts & Nuts)

Guide Rail Fitting - TOS

- Lifting Chain 5m, (with Shackles)
- Guide Support (with Bolts & Nuts)
- Guide Hook (with Bolts)
- Duckfoot Bend
- Guide Connector (with Bolts)
- JIS 10kg/cm² Flange (with Packing, Bolts & Nuts)
- Foundation Bolts (with Nuts)

Guide Rail Fitting - TS

- Lifting Chain 5m, (with Shackles)
- Guide Support (with Bolts & Nuts)
- Guide Hook (with Bolts)
- Duckfoot Bend
- Guide Connector (with Bolts)

UZ 100mm

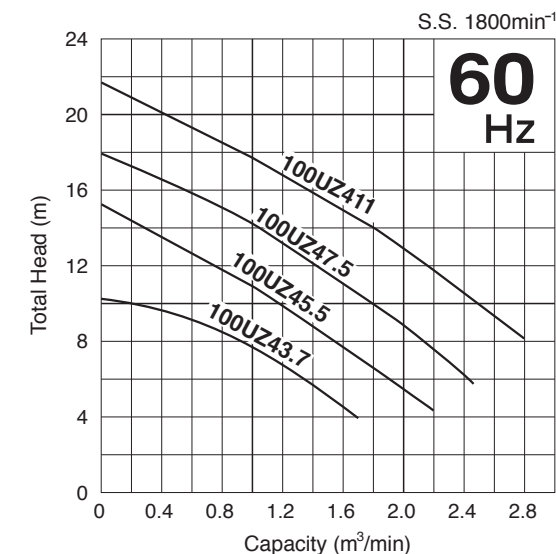
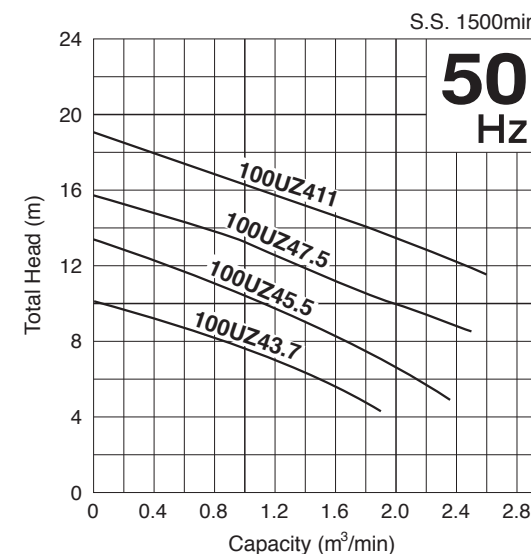
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Major Standard Specifications

Discharge Bore	mm	100	
Pumping Fluid	Type of Fluid	Wastewater, and Liquid carrying Waste and Solid Matters	
	Fluid Temperature	0 to 40°C	
Pump	Structure	Impeller	Vortex Impeller
		Shaft Seal	Double Mechanical Seal with Oil Lifter
		Bearing	Double-shielded Ball Bearing
	Materials	Impeller	Gray Iron Casting
		Shaft Seal	SiC
Motor	Type, Pole	Dry Type Submersible Induction Motor 4-pole	
	Class of Insulation	Class E (3.7kW only) Class F	
	Phase	Three-phase	
	Starting Method	Direct on Line Star-delta (11kW only)	
	Protection Device (built-in)	Circle Thermal Protector (7.5kW and below) Miniature Thermal Protector (11kW and above)	
	Lubricant	Turbine Oil (ISO VG32)	
	Materials	Frame	Gray Iron Casting
		Shaft	420 Stainless Steel
		Cable	PVC (3.7kW only) Chloroprene Rubber
	Discharge Connection	JIS 10K Flange	

Performance Curves



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

Standard Specifications

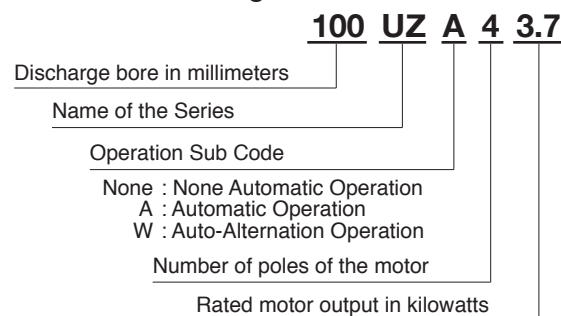
Discharge Bore mm	Standard Model			Automatic Model			Auto-Alternation Model			Motor Output kW	Starting Method	Speed (S.S.) 50Hz/60Hz min ⁻¹	Impeller Passage 50Hz/60Hz mm	Dry Weight * kgs				Cabtyre Cable						
	Free Standing	Guide Rail Fitting		Free Standing	Guide Rail Fitting		Free Standing	Guide Rail Fitting						Standard Model	Automatic & Auto-Alternation Model		No. of Cables	200 ~ 240 V		380 ~ 575 V		Length m	Material	
		TOS	TS		TOS	TS		TOS	TS						Free Standing	Guide Rail Fitting		Free Standing	Guide Rail Fitting	Cores × mm ²	Outer Dia. mm			Cores × mm ²
100	100UZ43.7	TOS100UZ43.7	TS100UZ43.7	100UZA43.7	TOS100UZA43.7	TS100UZA43.7	100UZW43.7	TOS100UZW43.7	TS100UZW43.7	3.7	D.O.L.	1500/1800	100	79.0	70.0	86.0	77.0	1	4 × 3.5	13.9	4 × 2.0	11.8	6	PVC
100	100UZ45.5	TOS100UZ45.5	TS100UZ45.5	—	—	—	—	—	—	5.5	D.O.L.	1500/1800	100	147.0	136.0	—	—	1	4 × 3.5	14.1	4 × 3.5	14.1	8	Chloroprene Rubber
100	100UZ47.5	TOS100UZ47.5	TS100UZ47.5	—	—	—	—	—	—	7.5	D.O.L.	1500/1800	100	154.5	143.5	—	—	1	4 × 5.5	16.8	4 × 5.5	16.8	8	Chloroprene Rubber
100	100UZ411	TOS100UZ411	TS100UZ411	—	—	—	—	—	—	11	Star-Delta	1500/1800	100	184.5	173.5	—	—	3	4 × 3.5 3 × 3.5 2 × 1.25	14.1 12.9 9.8	4 × 3.5 3 × 3.5 2 × 1.25	14.1 12.9 9.8	8	Chloroprene Rubber

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Weights of guide rail fitting excluding duckfoot bend

Applications

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Model Number Designation



Standard Accessories

Free Standing

- Discharge Bend (with Packing & Bolts)
- JIS 10kg/cm² Flange (with Packing, Bolts & Nuts)

Guide Rail Fitting - TOS

- Lifting Chain 5m, (with Shackles)
- Guide Support (with Bolts & Nuts)
- Guide Hook (with Bolts)
- Duckfoot Bend
- Guide Connector (with Bolts)
- JIS 10kg/cm² Flange (with Packing, Bolts & Nuts)
- Foundation Bolts (with Nuts)

Guide Rail Fitting - TS

- Lifting Chain 5m, (with Shackles)
- Guide Support (with Bolts & Nuts)
- Guide Hook (with Bolts)
- Duckfoot Bend
- Guide Connector (with Bolts)