

The **VANCS™ - OM, PU, PN, PSF and TM Series** submersible pump is designed for handling raw sewage, wastewater, industrial and commercial sump pump applications. The VANCS™ pumps have a proven track record for offering long lifecycles in both continuous and intermittent sump applications. With the pump made of complete molded resin material and all other parts coming in contact with the pump liquid in either 304 Stainless Steel or Titanium.

VANCS™



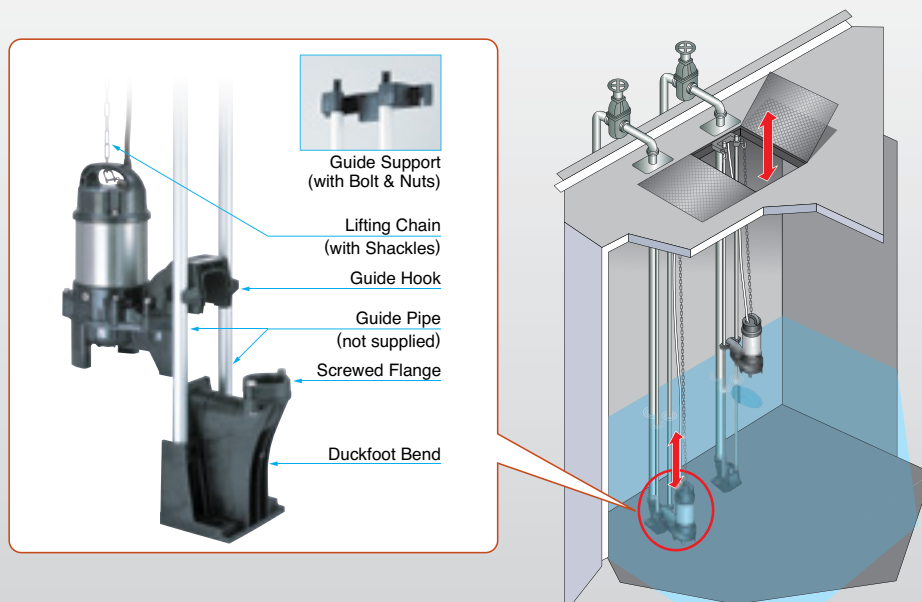
- Residential, commercial, industrial, effluent, wastewater and site drainage
- Chemical spill containment
- Raw water supply from rivers or lakes
- For TM Series: Titanium components increases corrosion resistance in a wide variety of applications. Ideal use for salt wastewater, site drainage and bilge pumps
- Automatic Operation (A) and Auto Alternating Operation (W) are available

✓ **VANCS™ Pumps: TOK Guide Rail Fitting System**

The TOK guide rail fitting system connects the pump to and from the piping easily just by lowering and hoisting the pump, allowing easy maintenance and inspection without the need to enter the sump.

Made of high-quality resin, the TOK is designed for lightweight, small to middle sized pumps. Rubber bellows attached to the guide hook are inverted to the duckfoot bend when the pump starts operating, and it seals by the pumping pressure. This eliminates leakage at the seal even if a lightweight pump is used in combination with the TOK.

The TOK is available in all motor output ranges of the PU, PN, and PSF Series.



Automatic & Auto-Alternation Models

The VANCS™ pumps are available with automatic duplexing capabilities eliminating the need for a duplexing control panel*. The auto-alternating model has three floats and can be identified by the suffix “W”. Refer to standard specifications for availability and model numbers. It is available in the same output range of the automatic pumps.

**Note: Must be installed in accordance with all National or Local Electrical or Building Codes.*



PNA: Automatic (A) Model PUW: Auto-alternation (W) Model

VANCS™ Pumps: Selection Table

Category	Series	Discharge Size inch	Impeller	Model	Motor Output HP							
					1/5	1/3	1/2	1	2	3	5	
Wastewater	OM	1.5	Vortex	Standard	Available							
				Automatic (A)	Available							
Wastewater	PN	2 – 3	Vortex	Standard		Available	Available	Available	Available	Available	Available	Available
				Automatic (A)		Available	Available	Available	Available	Available	Available	Available
				Auto-alternation (W)		Available	Available	Available	Available	Available	Available	Available
Wastewater -High Head-	PSF	2 – 3	Closed	Standard		Available	Available	Available	Available	Available	Available	Available
				Automatic (A)		Available	Available	Available	Available	Available	Available	Available
				Auto-alternation (W)		Available	Available	Available	Available	Available	Available	Available
Sewage	PU	2– 3	Vortex	Standard	Available	Available	Available	Available	Available	Available	Available	Available
				Automatic (A)	Available	Available	Available	Available	Available	Available	Available	Available
				Auto-alternation (W)	Available	Available	Available	Available	Available	Available	Available	Available
Seawater	TM	2 – 3	Vortex	Standard		Available	Available	Available	Available	Available	Available	
				Automatic (A)		Available	Available	Available	Available	Available	Available	Available

VANCS™ Pumps: Type of Impeller

Vortex



The vortex impeller is adopted in every series except for the PSF Series. Rotation of the impeller produces a whirling, centrifugal action between the impeller and the pump casing, and it moves the fluid through the pump. Being coupled with a wide pump casing, wastewater containing solid matters can be pumped out without obstruction.

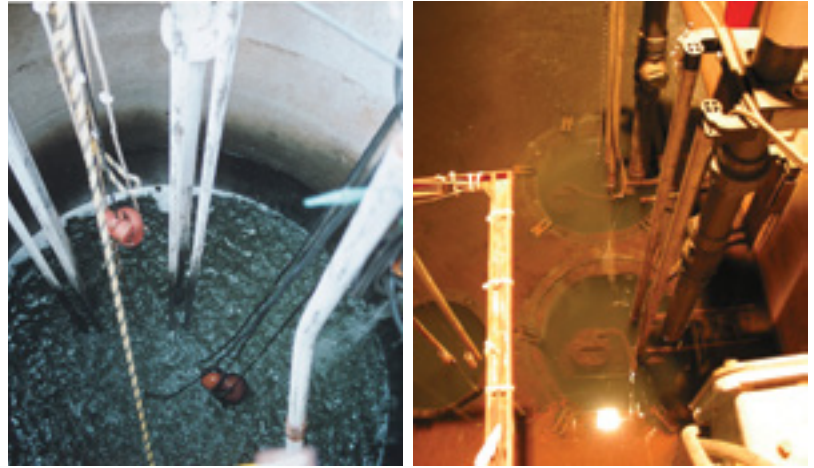
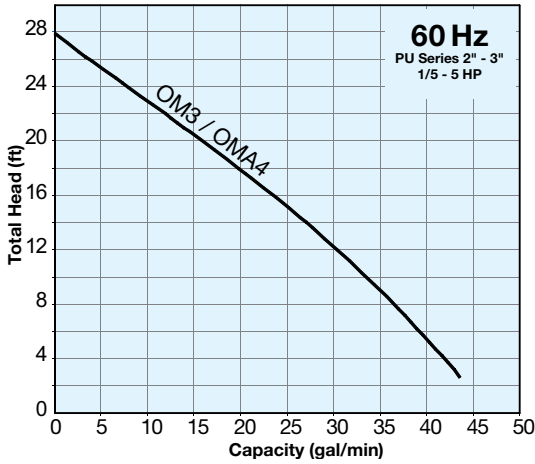
Closed



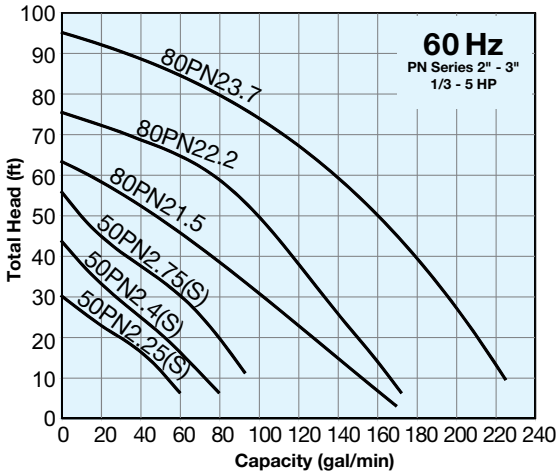
The closed impeller is adopted in the PSF Series. The impeller is also referred to as shrouded impeller, as it has circular shrouds at both sides of the impeller vanes. Although the pump has a limited solids passage capability, it can be used for higher pumping head applications.

VANCS™ Pumps Group Curves

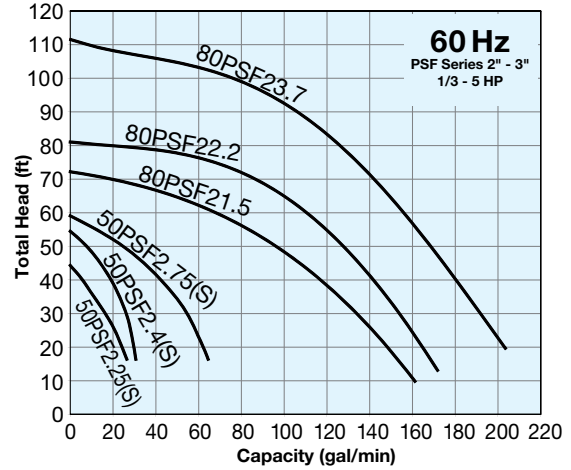
OM Series



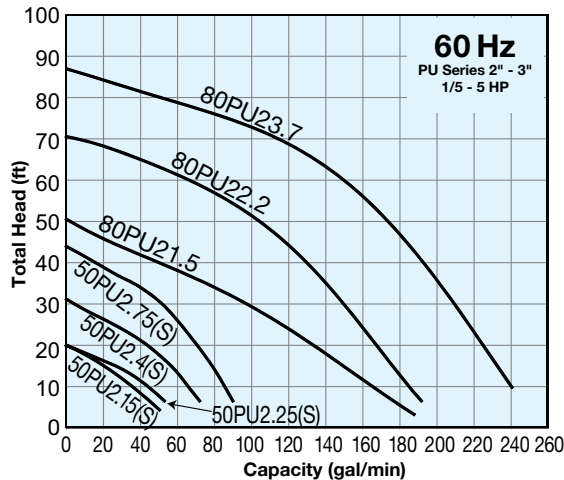
PN Series



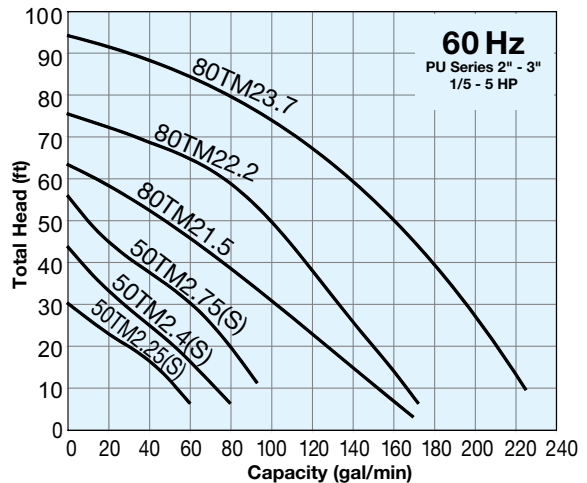
PSF Series



PU Series



TM Series



VANCS™ Pumps Specifications

* S.S. = Synchronous Speed

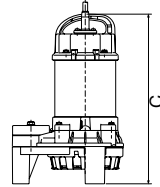
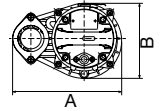
OM Series	Single Phase Model	Motor Output (HP)	Rated Current (A)		*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)			Max. Solids Dia. (in.)
			115V	230V			Free Standing Models			
			A	B			C			
OM3 ★	1/5	3.2	1.6	3600	1.5	8	5 1/2	12 7/16	0.394	
OMA4 ★	1/5	3.2	1.6	3600	1.5	8	7	12 5/8	0.394	

★ For VANCS™ pumps 1HP and smaller: These pumps should not be operated on a VFD. Contact factory for more information.

PN Series	Single Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			115V		230V				Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50PN2.25S ★	1/3	4.6	2.3	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	0.394			
50PN2.4S ★	1/2	5.8	2.9	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	0.394			
50PN2.75S ★	1	9.2	4.6	3600	2	9 5/16	6 3/8	14 15/16	17 3/16	6 3/8	16	0.394			
PN Series	Three Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			208V	220V	460V	575V			Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50PN2.25 ★	1/3	1.65	1.6	0.75	---	3600	2	9 5/16	6 3/8	13 3/4	17 3/16	6 3/8	14 3/4	0.394	
50PN2.4 ★	1/2	2.1	2.0	0.95	---	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	0.394	
50PN2.75 ★	1	3.2	3.2	1.5	---	3600	2	9 5/16	6 3/8	14 3/4	17 3/16	6 3/8	15 3/4	0.394	
80PN21.5	2	6.9	6.6	*3.6	---	3600	3	11 5/8	7 11/16	17 1/8	20 11/16	7 11/16	19 5/16	0.787	
80PN22.2	3	9.1	8.5	4.2	3.3	3600	3	12 1/4	8 3/8	22	21 5/16	8 3/8	23 3/8	0.787	
80PN23.7	5	14.4	13.4	6.5	5.0	3600	3	12 1/4	8 3/8	23 3/8	21 5/16	8 3/8	24 3/4	0.787	

*440V

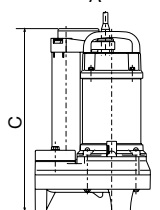
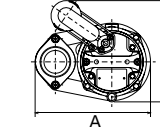
Dimension: Free Standing (PU, PN, PSF, TM, OM Series)



PSF Series	Single Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			115V		230V				Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50PSF2.25S ★	1/3	4.6	2.3	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	0.315			
50PSF2.4S ★	1/2	5.8	2.9	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	0.315			
50PSF2.75S ★	1	9.2	4.6	3600	2	9 5/16	6 3/8	14 15/16	17 3/16	6 3/8	16	0.315			
PSF Series	Three Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			208V	220V	460V	575V			Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50PSF2.25 ★	1/3	1.65	1.6	0.75	---	3600	2	9 5/16	6 3/8	13 3/4	17 3/16	6 3/8	14 3/4	0.315	
50PSF2.4 ★	1/2	2.1	2.0	0.95	---	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	0.315	
50PSF2.75 ★	1	3.2	3.2	1.5	---	3600	2	9 5/16	6 3/8	14 3/4	17 3/16	6 3/8	15 3/4	0.315	
80PSF21.5	2	6.9	6.6	*3.6	---	3600	3	11 5/8	7 11/16	17 1/8	20 11/16	7 11/16	19 5/16	0.512	
80PSF22.2	3	9.1	8.5	4.2	3.3	3600	3	12 1/4	8 3/8	22	21 5/16	8 3/8	23 3/8	0.512	
80PSF23.7	5	14.4	13.4	6.5	5.0	3600	3	12 1/4	8 3/8	23 3/8	21 5/16	8 3/8	24 3/4	0.512	

*440V

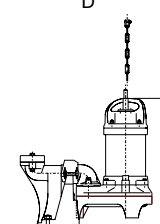
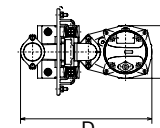
Dimension: Free Standing (PUF2.15S, OMA4)



PU Series	Single Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			115V		230V				Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50PU2.15S ★	1/5	3.2	1.6	3600	2	8 7/8	6 1/16	14 13/16	16 13/16	6 1/16	16 1/8	1.38			
50PU2.25S ★	1/3	4.6	2.3	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	1.38			
50PU2.4S ★	1/2	5.8	2.9	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	1.38			
50PU2.75S ★	1	9.2	4.6	3600	2	9 5/16	6 3/8	14 15/16	17 3/16	6 3/8	16	1.38			
PU Series	Three Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			208V	220V	460V	575V			Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50PU2.25 ★	1/3	1.65	1.6	0.75	---	3600	2	9 5/16	6 3/8	13 3/4	17 3/16	6 3/8	14 3/4	1.38	
50PU2.4 ★	1/2	2.1	2.0	0.95	---	3600	2	9 5/16	6 3/8	14 3/16	17 3/16	6 3/8	15 3/16	1.38	
50PU2.75 ★	1	3.2	3.2	1.5	---	3600	2	9 5/16	6 3/8	14 3/4	17 3/16	6 3/8	15 3/4	1.38	
80PU21.5	2	6.9	6.6	*3.6	---	3600	3	11 5/8	7 11/16	18 11/16	20 11/16	7 11/16	19 5/16	1.81	
80PU22.2	3	9.1	8.5	4.2	3.3	3600	3	12 1/4	8 3/8	22 15/16	21 5/16	8 3/8	23 3/8	1.81	
80PU23.7	5	14.4	13.4	6.5	5.0	3600	3	12 1/4	8 3/8	24 5/16	21 5/16	8 3/8	24 3/4	1.81	

*440V

Dimension: Guide Rail Fitting TOK (PU, PN, PSF, TM Series)



TM Series	Single Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			115V		230V				Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50TM2.25S ★	1/3	4.6	2.3	3600	2	9 5/16	6 3/8	14 3/16	N/A	N/A	N/A	0.394			
50TM2.4S ★	1/2	5.8	2.9	3600	2	9 5/16	6 3/8	14 3/16	N/A	N/A	N/A	0.394			
50TM2.75S ★	1	9.2	4.6	3600	2	9 5/16	6 3/8	14 15/16	N/A	N/A	N/A	0.394			
TM Series	Three Phase Model	Motor Output (HP)	Rated Current (A)				*S.S. (RPM)	Discharge Size (in.)	Dimensions (in.)						Max. Solids Dia. (in.)
			208V	220V	460V	575V			Free Standing Models			TOK Guide Rail Models			
			A	B	C	D			E	F					
50TM2.25 ★	1/3	1.65	1.6	0.75	---	3600	2	9 5/16	6 3/8	13 3/4	N/A	N/A	N/A	0.394	
50TM2.4 ★	1/2	2.1	2.0	0.95	---	3600	2	9 5/16	6 3/8	14 3/16	N/A	N/A	N/A	0.394	
50TM2.75 ★	1	3.2	3.2	1.5	---	3600	2	9 5/16	6 3/8	14 3/4	N/A	N/A	N/A	0.394	
80TM21.5	2	6.9	6.6	*3.6	---	3600	3	11 5/8	7 11/16	17 1/8	N/A	N/A	N/A	0.787	
80TM22.2	3	9.1	8.5	4.2	3.3	3600	3	12 1/4	8 3/8	22	N/A	N/A	N/A	0.787	
80TM23.7	5	14.4	13.4	6.5	5.0	3600	3	12 1/4	8 3/8	23 3/8	N/A	N/A	N/A	0.787	

*440V