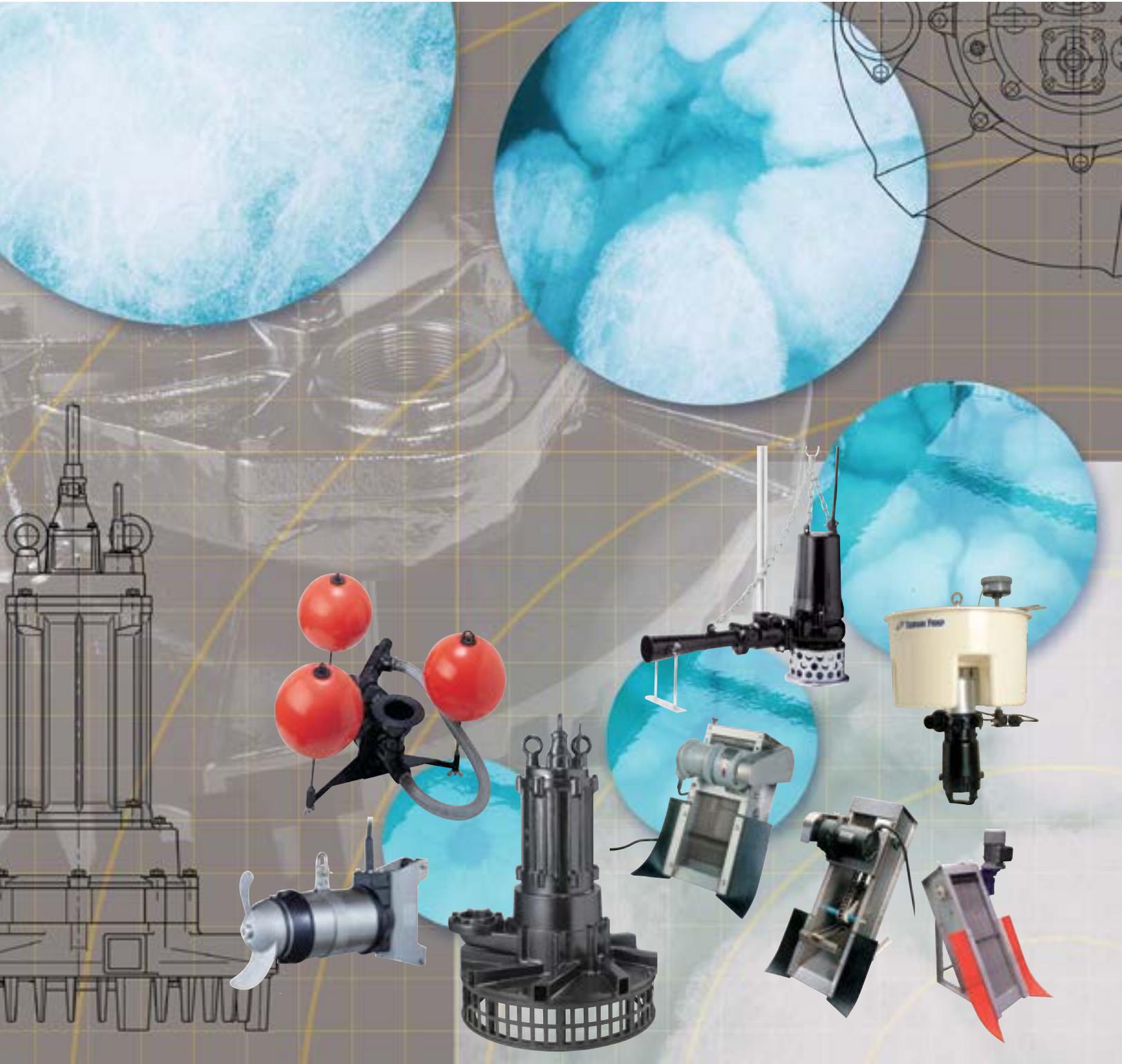




PROCESS EQUIPMENT

improve wastewater treatment efficiencies



Submersible Ejector / Mixer BER



The BER is designed for both very high oxygen transfer and excellent mixing. The BER is used in Sequence Batch Reactors (SBR) where high oxygen transfer is required during the aeration cycle and excellent mixing only during the anodic cycle.

- APPLICATION**
- Ideal for SBR treatment systems.
 - Superior oxygen transfer rate during aeration cycle.
 - Excellent mixing during the anodic cycle
 - Aspirating aerator eliminating the need for blowers and air piping
 - Self aspiration of oxygen eliminates need for compressed air.



BER Series: Wastewater Aerator / Mixer (Free Standing)

Model	Air Inlet Dia. (in.)	Output HP	Voltage	Phase	Cable Length (ft.)	* Weight (lbs.)
8-BER5S	1	1	115 or 230	1	32	77
8-BER4	1	1	208-230 or 460	3	32	62
15-BER3	1 1/4	2	208-230 or 460	3	32	95
22-BER5	2	3	208-230 or 460	3	32	165
37-BER5	2	5	208-230 or 460	3	32	201
55-BER7	2	7.5	208-230 or 460	3	32	328

* Excluding cable

BER Series: Wastewater Aerator / Mixer (With Slide Rail System)

Model	Air Inlet Dia. (in.)	Output HP	Voltage	Phase	Cable Length (ft.)	* Weight (lbs.)
TOS-8-BER5S	1	1	115 or 230	1	32	66
TOS-8-BER4	1	1	208-230 or 460	3	32	51
TOS-15-BER3	1 1/4	2	208-230 or 460	3	32	75
TOS-22-BER5	2	3	208-230 or 460	3	32	134
TOS-37-BER5	2	5	208-230 or 460	3	32	170
TOS-55-BER7	2	7.5	208-230 or 460	3	32	291

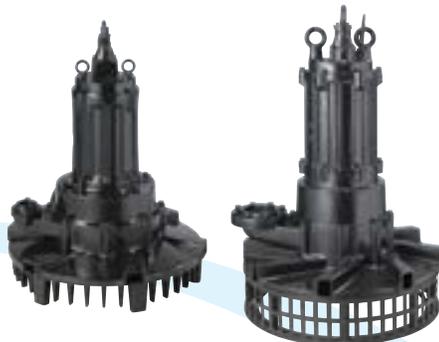
* Excluding cable & Slide Rail System

Submersible Aerator / Mixer TRN



Submersible aspirating aerators ranging in size from 1HP to 55HP. The TRN provides very high oxygen transfer efficiency and mixing.

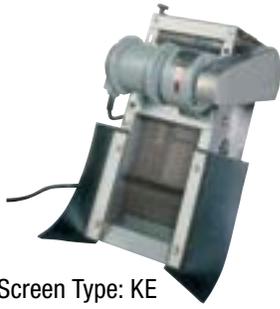
- APPLICATION**
- Aeration Tanks, Post Aeration Tanks, Lagoon aeration, Deep tank aeration with a blower.
 - Impeller is made with a Special Semi-Open 410 Stainless Steel.
 - Horsepower ranges from 1 hp to 54 hp.
 - Will operate in water depth of 32 feet with a supplemental blower excellent oxygen transfer and mixing.



TRN Series: Sewage & Wastewater Aerator / Mixer (Free Standing)

Model	Air Inlet Dia. (in.)	Output HP	Voltage	Phase	Cable Length (ft.)	* Weight (lbs.)
32TRN2.75	1 1/4	1	208-230 or 460	3	32	121
32TRN21.5	1 1/4	2	208-230 or 460	3	32	121
50TRN42.2	2	3	208-230 or 460	3	32	309
50TRN43.7	2	5	208-230 or 460	3	32	331
50TRN45.5	2	7.5	208-230 or 460	3	32	375
80TRN47.5	3	10	208-230 or 460	3	32	419
80TRN412	3	16	208-230 or 460	3	32	441
80TRN417	3	23	460	3	32	485
100TRN424	4	32	460	3	32	1014
150TRN440	6	54	460	3	32	1285

* Excluding cable



Front Screen Type: KE



Front Screen Type: KS

Front Screen Type: KW



Rear Screen Type: KM

Mechanically cleaned bar screens; designed for the small plant inflows to remove solids from the wastewater resulting in the eliminating solids from aeration tanks & clarifiers. The screens are fabricated of 304 stainless steel for corrosion resistance.

The **KE/KS/KW-series** is a front screen type automatic bar screen designed for screening wastewater. It is fully constructed from 304 stainless steel. Two or more rakes travel behind the screen bars located at the front side of the unit. Since every rake tooth moves between the screen bars, it can remove solid matters even though they lodge between the screen bars. In addition, the use of a small output motor enables to save the electricity. The bar screen is suitable for use in a waterway with varying water levels.

KE / KS / KW - FRONT SCREEN TYPE for Application in situations with water level fluctuations

- During operation, the rakes always move through the slits of the screen, preventing the screen from being clogged with foreign object.
- The main parts are made of 304 stainless steel, which exhibits excellent durability even in harsh environments, e.g., outdoors, continuously operated day and night, etc.
- Maintenance is easy. Initial and running costs are low.
- The KS-series screens are equipped with an eccentric roll mechanism that prevents retraction and clogging of the screen bar front edge caused by residue.
- The KW-series screens incorporate a safety device that can stop the gear motor immediately in the event of abnormal operation.

The **KM-series** is a rear screen type automatic bar screen designed for screening wastewater. It is fully constructed from 304 stainless steel. One or two rakes move on the screen bars that are located at the rear side of the unit. It has an innovative dry chain mechanism by which the chain or sprocket does not get contact with the liquid. In addition, the use of a small output motor enables to save the electricity. It is suitable for use in a waterway where there is little change in the liquid level.

KM - REAR SCREEN TYPE for Application in situations without water level fluctuations

- Since the rake chain (dry chain) is not in contact with liquid, dirt and residue will not adhere to it. Therefore, it needs almost no maintenance.
- The main parts are made of 304 stainless steel, which exhibits excellent durability even in harsh environments, e.g., outdoors, continuously operated day and night, etc.
- The bar screen can be directly installed in a U-shaped ditch to eliminate dirt from the bottom of the ditch. It provides excellent treatment effect, and is advantageous both in terms of initial cost and running costs.



Bar Screen KE / KS / KW / KM

FRONT Fine Screen (Bar Spacing: 1.0 - 5.0mm)

Model	Motor Output HP	Bar Spacing mm				Overall Height in	Width of Waterway Min - Max in	Installation Angle	Dry Weight lbs
		Capacity GPM							
		1.0mm	2.0mm	2.5mm	5.0mm				
KE-200S	1/7	—	114	136	181	20 1/16	11 13/16 - 15 3/4	60°	71
KE-200M	1/7	—	159	203	255	26 15/16	11 13/16 - 15 3/4	60°	84
KE-200L	1/7	—	216	273	343	34 1/16	11 13/16 - 15 3/4	60°	93
KS-200Z	1/7	70	114	136	181	20 1/2	13 - 15 3/4	60°	73
KS-200Y	1/7	128	207	247	326	29 15/16	15 3/4 - 19 11/16	60°	108
KS-300Y	1/7	189	370	484	110	29 15/16	19 11/16 - 23 5/8	60°	119
KS-200S	1/7	75	123	136	207	31 1/2	13 - 15 3/4	45°	104
KS-200M	1/7	110	181	211	308	36 1/4	13 - 15 3/4	45°	115
KS-200L	1/7	141	242	277	409	41 5/16	13 - 15 3/4	45°	137
KW-4027	1/7	75	128	150	207	20	up to 15 3/4	60°	59
KW-4038	1/7	119	198	229	321	24 9/16	up to 15 3/4	60°	66
KW-4049	1/7	172	291	335	462	29 1/8	up to 15 3/4	60°	75
KW-5027	1/7	114	198	229	321	20	15 3/4 - 19 11/16	60°	66
KW-5038	1/7	181	304	357	498	24 9/16	15 3/4 - 19 11/16	60°	75
KW-5049	1/7	264	445	515	722	29 1/8	15 3/4 - 19 11/16	60°	84
KW-6027	1/7	159	269	308	431	20	19 11/16 - 23 5/8	60°	73
KW-6038	1/7	247	418	480	674	24 9/16	19 11/16 - 23 5/8	60°	84
KW-6049	1/7	357	608	696	982	29 1/8	19 11/16 - 23 5/8	60°	93

FRONT Coarse Screen (Bar Spacing: 20 - 50mm)

Model	Motor Output HP	Bar Spacing mm				Overall Height in	Width of Waterway Min - Max in	Installation Angle	Dry Weight lbs
		Capacity GPM							
		20mm	30mm	40mm	50mm				
KS-200S	1/7	308	330	352	374	31 1/2	13 - 15 3/4	45°	104
KS-200M	1/7	458	489	524	542	36 1/4	13 - 15 3/4	45°	115
KS-200L	1/7	603	647	691	726	41 5/16	13 - 15 3/4	45°	137

REAR Fine Screen (Bar Spacing: 2.0 - 5.0mm)

Model	Motor Output HP	Bar Spacing mm			Overall Height in	Width of Waterway Min - Max in	Installation Angle	Dry Weight lbs
		Capacity GPM						
		2.0mm	2.5mm	5.0mm				
KM-200S	1/7	110	123	172	28 3/8	11 13/16 - 15 3/4	55°	73
KM-200M	1/7	110	123	172	35 13/16	11 13/16 - 15 3/4	55°	82
KM-200L	1/7	110	123	172	43 11/16	11 13/16 - 15 3/4	55°	88
KM-250S	1/7	141	167	233	28 3/8	13 3/4 - 17 11/16	55°	75
KM-250M	1/7	141	167	233	35 13/16	13 3/4 - 17 11/16	55°	84
KM-250L	1/7	141	167	233	43 11/16	13 3/4 - 17 11/16	55°	90
KM-300S	1/7	176	203	282	28 3/8	15 3/4 - 19 11/16	55°	77
KM-300M	1/7	176	203	282	35 13/16	15 3/4 - 19 11/16	55°	86
KM-300L	1/7	176	203	282	43 11/16	15 3/4 - 19 11/16	55°	93
KMS-300S	1/7	—	—	277	34 1/4	15 3/4 - 19 11/16	60°	93
KMS-300M	1/7	—	—	277	47 13/16	15 3/4 - 19 11/16	60°	110
KMS-300L	1/7	—	—	277	61 7/16	15 3/4 - 19 11/16	60°	126

REAR Coarse Screen (Bar Spacing: 10 - 50mm)

Model	Motor Output HP	Bar Spacing mm					Overall Height in	Width of Waterway Min - Max in	Installation Angle	Dry Weight lbs
		Capacity GPM								
		10mm	20mm	30mm	40mm	50mm				
KMA-200S	1/7	167	198	207	216	220	28 3/8	11 13/16 - 15 3/4	55°	33
KMA-200M	1/7	167	198	207	216	220	35 13/16	11 13/16 - 15 3/4	55°	37
KMA-200L	1/7	167	198	207	216	220	43 11/16	11 13/16 - 15 3/4	55°	40
KMA-250S	0.1	211	247	260	269	62	28 3/8	13 3/4 - 17 11/16	55°	34
KMA-250M	1/7	211	247	260	269	62	35 13/16	13 3/4 - 17 11/16	55°	38
KMA-250L	1/7	211	247	260	269	62	43 11/16	13 3/4 - 17 11/16	55°	41
KMA-300S	1/7	255	295	313	326	348	28 3/8	15 3/4 - 19 11/16	55°	35
KMA-300M	1/7	255	295	313	326	348	35 13/16	15 3/4 - 19 11/16	55°	39
KMA-300L	1/7	255	295	313	326	348	43 11/16	15 3/4 - 19 11/16	55°	42
KMS-300S	1/7	330	392	392	418	440	34 1/4	15 3/4 - 19 11/16	60°	42
KMS-300M	1/7	330	392	392	418	440	47 13/16	15 3/4 - 19 11/16	60°	50
KMS-300L	1/7	330	392	392	418	440	61 7/16	15 3/4 - 19 11/16	60°	57

- Powered by three-phase totally-enclosed geared motor.
- Capacity is given as the maximum amount of clean water.
- Consult your dealer if the screen is to be installed in a waterway of a width exceeding that listed on the table.
- When ordering, specify the desired bar spacing together with the model name.





MR - Stainless Steel



MR - Cast Iron



MRL - Low Water Type

Tsurumi submersible mixers are available in wide variations. Lineups include models without a guide ring to improve the mixing effect while increasing water flow, models with a guide ring that provides an excellent flow regulating effect, and low-water level models that are applicable with a minimum operating water level of 19 11/16" (500 mm). Stainless steel construction (MR-R) for corrosion resistance, cast iron construction (MR-F), and low water type (MRL-R, or -F) are available.

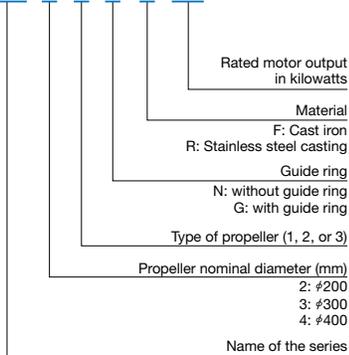
- APPLICATION**
- Industrial wastewater treatment and tap water/sewage treatment
 - Environmental conservation in ponds and rivers
 - Artificial water flow in amusement facilities
 - Mixing, stirring, dissolving, density equalization and aeration



Model Number Designation

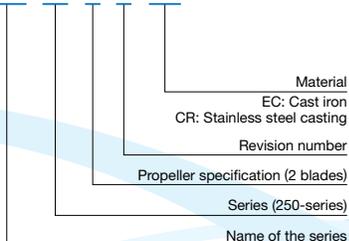
4-pole motor, 0.75kW and below
6-pole motor, 1.5kW and above

MR 3 1 N F 1.5



Model MR2521EC/CR

MR 25 2 1 EC



MR Series Submersible Mixer, without Guide Ring

Model	Motor Output HP	Speed RPM	Flowing Quantity GPM	Agitation output under clear water HP	Reaction Force N	Weight lbs.	Propeller Nominal Dia. Inch
MR21NF250	0.33	1700	370	0.11	40	53	5 11/16
MR21NF400	0.54	1700	476	0.17	60	53	6 1/8
MR21NF750	1	1690	845	0.24	110	53	7 5/16
MR2521EC/CR	1	1126	1162	0.91	160	62	9 7/16
MR31NF/R1.5	2	1085	2457	1.6	260	79	11 13/16
MR32NF/R1.5	2	1085	2536	1.7	285	79	11 13/16
MR31NF/R2.8	3.75	1090	3144	2.8	430	101	11 13/16
MR32NF/R2.8	3.75	1090	3461	3.5	535	101	11 13/16
MR41NF/R3.0	4	870	3725	3.5	485	247/270	15 3/4
MR42NF/R3.0	4	870	4332	3.7	665	247/270	15 3/4
MR41NF/R4.0	5.36	840	4914	5.0	795	247/270	15 3/4

MR Series Submersible Mixer, with Guide Ring

Model	Motor Output HP	Speed RPM	Flowing Quantity GPM	Agitation output under clear water HP	Reaction Force N	Weight lbs.	Propeller Nominal Dia. Inch
MR31GF/R1.5	2	1085	2378	1.5	245	101	11 13/16
MR32GF/R1.5	2	1085	2483	1.6	275	101	11 13/16
MR31GF/R2.8	3.75	1090	3038	2.7	420	123	11 13/16
MR32GF/R2.8	3.75	1090	3329	3.1	525	123	11 13/16
MR41GF/R3.0	4	870	3540	3.2	345	276/298	15 3/4
MR42GF/R3.0	4	870	4121	3.6	530	276/298	15 3/4
MR41GF/R4.0	5.36	840	4676	4.6	630	276/298	15 3/4

MRL Series Submersible Mixer, Low Water Level Type

Model	Motor Output HP	Speed RPM	Flowing Quantity GPM	Agitation output under clear water HP	Reaction Force N	Weight lbs.	Propeller Nominal Dia. Inch
MRL21GF250	0.33	1700	349	0.08	37	60	5 11/16
MRL21GF400	0.54	1700	449	0.13	55	60	6 1/8
MRL21GF750	1	1690	798	0.3	101	60	7 5/16
MRL2541EC/CR	1	1126	1110	0.9	150	86	9 7/16
MRL31GF/R1.5	2	1085	2034	1.5	160	110	11 13/16
MRL32GF/R1.5	2	1085	2113	1.6	180	110	11 13/16
MRL31GF/R2.8	3.75	1090	2747	2.7	275	134	11 13/16
MRL32GF/R2.8	3.75	1090	2985	3.1	310	134	11 13/16

Scum Skimmer FSP



The unique FSP scum skimmer removes floating oils and grease solids. The scum is pumped from the skimmer to the concentration tank for processing.

- APPLICATION**
- Can be adjusted from 0.39" — 2.36" below the water surface.
 - Designed with a jet injector suction mechanism to collect scum efficiently.

FSP Series: Scum Skimmer

Model	Discharge Dia. (in.)	Output HP	Voltage	Phase	Cable Length (ft.)	* Weight (lbs.)
4-FSPS2	2	1/2	115 or 230	1	32	84
4-FSP2	2	1/2	208-230 or 460	3	32	79
8-FSPS3	2	1	115 or 230	1	32	99
8-FSP3	2	1	208-230 or 460	3	32	84

* Excluding cable

Decanting Unit FHP



SBR and Digester decanting pump is equipped with a suspended solids sensor that allows the decanter pump to operate independently. When the suspended solids rise above the set value, the sensor will activate shutting down the decanter, ensuring that only supernatant water is discharged without any entrapment of sediment.

- APPLICATION**
- Unique floating ball valve seals out solids from the pump inlet.
 - Compact design.
 - Decants treated wastewater without using additional large scale batch facilities.

FHP Series: Decanting Unit

Model	Discharge Dia. (in.)	Output HP	Voltage	Phase	Cable Length (ft.)	* Weight (lbs.)
FHP3-3	1 1/2	1/3	115 or 230	1	32	64
FHP3-3T	1 1/2	1/3	208-230 or 460	3	32	60
FHP2-4	2	1/2	115 or 230	1	32	64
FHP2-4T	2	1/2	208-230 or 460	3	32	60
FHP4-8	2	1	115 or 230	1	32	106
FHP4-8T	2	1	208-230 or 460	3	32	62
FHP2-15T	3	2	208-230 or 460	3	32	132

* Excluding cable

FHP Series: Decanting Unit (With Slide Rail System)

Model	Discharge Dia. (in.)	Output HP	Voltage	Phase	Cable Length (ft.)	* Weight (lbs.)
FHP3-3K	1 1/2	1/3	115 or 230	1	32	64
FHP3-3TK	1 1/2	1/3	208-230 or 460	3	32	60
FHP2-4K	2	1/2	115 or 230	1	32	64
FHP2-4TK	2	1/2	208-230 or 460	3	32	60
FHP4-8K	2	1	115 or 230	1	32	112
FHP4-8TK	2	1	208-230 or 460	3	32	62
FHP2-15TK	3	2	208-230 or 460	3	32	139

* Excluding cable & Slide Rail System

We reserve the right to change the specifications and designs for improvement without prior notice.