

Sewage Pumps

Speciality

- Dry type submersible induction motor
- Shaft and fasteners are in stainless steel to enhance life
- Impeller and casing are coated with chemical resistance coating to improve life and performance
- Solid handling size upto 20 mm
- Cable connectors filled with resin to prevent water leakage into the motor through the cable wire
- Dual mechanical seal prevents water entry into the dry motor portion at two interfaces, one at pump portion to oil chamber and another at oil chamber to dry motor portion
- Compact in construction
- High Efficiency
- Long Durability



VSWS-F25US



VSWS-TW55US

PERFORMANCE DETAILS

Models	Power		Pipe size (cm)	Total head in metres Vs Discharge in LPH					
	HP	kW	Delivery	m	3	6	9	12	15
VSWS-F25US	1	0.75	5.0	LPH	24800	19000	7500		
VSWS-FH45US	1.5	1.1	5.0		26000	20500	14000	6000	
VSWS-TW55US	2	1.5	5.0			30000	25200	20000	12000

Precautions to use Sewage Pumps !

- The pumping medium temperature must not exceed 40 degree Celsius
- pH range of medium between 6.5-8.5
- Ensure proper earthing to avoid electrical risks
- The depth of water must be less than 5 meters, more than 0.5 meters
- The pump must not be operated in dry condition
- The allowable particle size is upto 20 mm



Smart solutions.
Strong relationships.

SELF-PRIMING NON-CLOG CENTRIFUGAL DEWATERING PUMP



DEWATERING MONOBLOC PUMP



DEWATERING COUPLED PUMP

SELF PRIMING NON CLOG DEWATERING PUMPS

Features

- Self Priming Pump - Priming required during installation only
- Self Priming up to 8.0 meters at mean sea level for DW series & up to 6.0 meters for PS series
- Construction: Bare pump/ Monoset/ Motor coupled/ Engine coupled
- Shaft Sealing: Gland packing / Mechanical seal
- Totally Enclosed Fan Cooled motor suitable for wide voltage
- Non-clog type impeller suitable to handle liquid with solid particles & mixtures
- Easy maintenance with interchangeable parts

Applications

Industrial

- Effluent Treatment Plants
- Transfer of Petroleum products, Chemicals, Treated / Raw water
- Ash water in Thermal Power Plants
- Waste liquid in Tiles & Marble factories

Domestic

- Civil construction sites
- Swimming pool filtration
- Dewatering of basement water & trenches

Marine

- Pumping water from docks, ports, vessels

Agriculture

- Dewatering

Standard Specifications

- Power Range : 0.75 to 18.7KW (1.0 to 25 HP)
- Supply : 225Volts, 1 phase, 50 Hz AC supply
: 415Volts, 3 phase, 50 Hz AC supply
- Suc. X Del. Size : \varnothing 40 x 40 mm to \varnothing 150 x 150 mm
- Speed : 1500 / 3000 RPM
- Total Head : Up to 36 meters
- Capacity : Up to 4310 LPM
- Solid Handling Capacity : Up to 40 mm
- Operating Temperature : Up to 65° C
- Motor- Degree of Protection : IP 54
- Motor Class of Insulation : 'B' class

Material of Construction for Dewatering Pumps DW Series

S. No.	PART	MATERIAL
1	Impeller (Semi open type)	Graded Cast Iron
2	Delivery Casing	Graded Cast Iron
3	Wear Plate	Graded Cast Iron
4	Shaft	Carbon Steel
5	Shaft Sleeve	SS 410

Material of Construction for Self Priming Monoset Pumps PS Series

S. No.	PART	MATERIAL
1	Impeller (Non-Clog type)	Bronze
2	Casing	Graded Cast Iron
3	Wear plate	Stainless Steel
4	Delivery Bend	Graded Cast Iron
5	Shaft	Carbon Steel
6	Shaft Sealing	Mechanical seal fitted
7	Integrated Non Return Valve	Nitrile Rubber with M.S. plate
8	Bracket	Graded Cast Iron
9	Base Frame	M.S. Fabricated

SELF PRIMING NON CLOG DEWATERING PUMPS

PERFORMANCE CHART - DEWATERING BARE SHAFT PUMP

RATING	Suc. X Del. Size (mm)	KW	HP	RPM	Solid Handling size (mm)	TOTAL HEAD IN METERS														
						6	9	12	13.5	15	16.5	18	19.5	20	21	24	25.5	26	27.5	28
						DISCHARGE IN LPM														
DWCJ 12	40 X 40	0.75	1.0	2820	7.0	270	230	170	130	60										
DWCJ 22	40 X 40	1.5	2.0	2830	8.5		375	320	290	260	220	175	120	80						
DWCM32	50 X 50	2.2	3.0	2830	10.5		575	530	500	470	440	400	350	330	290	160	80	50		
DWCQ5	80 X 80	3.7	5.0	1430	15.5		1125	990	875	750	600	380								
DWCS10	100 X 100	7.5	10.0	1455	18.5			1960	1860	1730	1610	1465	1330	1280	1165	775	490	402		
DWCS12.5	100 X 100	9.3	12.5	1460	23.0			2340	2255	2060	1880	1770	1630	1570	1475	1115	900	805	480	340
DWCV20	150 X 150	15	20.0	1460	34.0			3790	3630	3440	3210	2930	2640	2530	2310	1420				
DWCV25	150 X 150	18.7	25.0	1475	40.0			4310	4110	3955	3750	3500	3240	3100	2910	2020	1560	1180		

RATING	Suc. X Del. Size (mm)	KW	HP	RPM	Solid Handling size (mm)	TOTAL HEAD IN METERS														
						20	21	24	25.5	26	27.5	28	29.5	30	31.5	32	33.5	34	35.5	36
						DISCHARGE IN LPM														
DWCQ52	80 X 80	3.7	5.0	2840	7.0	575	555	480	445	430	405	390	355	340	305	295	235	220	150	125
DWCQ7.52	80 X 80	5.5	7.5	2865	14.5	925	910	865	830	810	740	715	625	600	500	460	340	305	220	190

PERFORMANCE CHART - DEWATERING MONOBLOC PUMP

RATING	Suc. X Del. Size (mm)	KW	HP	RPM	Solid Handling size (mm)	TOTAL HEAD IN METERS														
						9	10.5	12	13.5	15	16.5	18	19.5	21	22.5	24	25.5			
						DISCHARGE IN LPM														
DWMJ12	40 X 40	0.75	1.0	2820	7.0		295	260	210	145										
DWMJ 22	40 X 40	1.5	2.0	2830	8.5			410	355	310	255	210	145							
DWMM32	50 X 50	2.2	3.0	2830	10.5			560	535	510	470	425	370	305	235	155	80			
DWMQ5	80 X 80	3.7	5.0	1430	15.5	1125	1060	985	900	800	685	550	400							

RATING	Suc. X Del. Size (mm)	KW	HP	RPM	Solid Handling size (mm)	TOTAL HEAD IN METERS														
						21	22.5	24	25.5	27	28.5	30	31.5	33	34.5	36				
						DISCHARGE IN LPM														
DWMQ52	80 X 80	3.7	5.0	2840	7.0	550	515	480	450	415	380	340	305	260	205	125				
DWMQ7.52	80 X 80	5.5	7.5	2865	14.5	910	890	865	820	760	685	600	520	425	325	190				

Note:

Performance figure provided above are approximate for water at ambient temperature, may vary with liquid & site conditions. Pipe sizes mentioned in mm are nearest conversion of inches but actual pipe threadings are provided as per 'BSP' Standards.



SP

SELF PRIMING
SEWAGE / DEWATERING PUMPS



SP BS

FEATURES

Self Priming

No need of foot valve and priming pumpset every time for quicker operations.

Non clog Impeller

Non clog impeller to handle suspended soft solids upto 60 MM in size made it suitable for sewage and dewatering applications.

Flatter Efficiency Curve

Minimum variations in efficiency during entire operating range increases the utility of pumpset for variable conditions.

Designed to Prevent Overloading

Lesser chances of motor burning as the motor does not get overloaded even if the pump is operated at a head lower than recommended, thus ensuring substantial cost savings due to low maintenance and breakdown.

Dynamically Balanced Rotating Parts

Minimum vibrations protect components from damages during the operations, thus ensuring consistent performance as concentricity is maintained.

Replaceable Wearing Parts

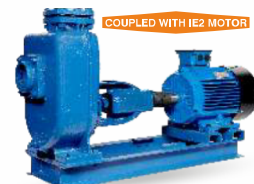
All wearing parts within the pumps are easily accessible and replaceable which facilitates ease of maintenance thereby extending the life of the pump.

Easy Maintainable Designs

Easy maintainable design and better interchangeability of components so that pump can be serviced even at remote locations by semi-skilled technicians.



SP M



SP COUPLED

With Energy Efficient IE2 Motor

APPLICATIONS

- Handling chemicals, effluents, sewage, ash-water
- Dewatering foundation, trenches and pits
- Flood water handling
- Pumping water from docks, ports, vessels
- Dewatering from basements, multi-storeys, shopping malls, godowns
- Cooling water for marine engines and shovels



TECHNICAL SPECIFICATION

	SP BARE SHAFT/MOTOR COUPLED	SP MONOBLOC
Head Range	: Upto 44 metres	Upto 24 metres
Discharge Range	: Upto 80 lps	Upto 17.5 lps
Power Rating	: 0.75 - 18.7 kW (1 - 25 HP) Motor Coupled*	0.37 - 3.7 kW (0.5 - 5 HP)
Voltage Range	: 415 ± 10% (For motor coupled only)	300 - 440V (Three Phase) 180 - 240V (Single Phase)
Class of Insulation	: F Class (Motor coupled only)	B / F Class
Protection	: IP 55	IP 44 / IP 55

***Energy Efficient IE2 Motor**

MATERIAL OF CONSTRUCTION

	SP BARE SHAFT	SP MONOBLOC	SP MOTOR COUPLED
Impeller	: Cast Iron / Stainless Steel/ Bronze	Cast iron / Stainless Steel/ Bronze	Cast Iron / Stainless Steel/ Bronze
Motor Body	: -	Cast Iron	Cast Iron
Delivery Casing	: Cast Iron	Cast Iron	Cast Iron
Shaft	: Carbon Steel / Stainless Steel	Carbon Steel / Stainless Steel	Carbon Steel / Stainless Steel
Shaft Sleeve	: Stainless Steel	Stainless Steel (Bronze -SP-3LM+)	Stainless Steel
Sealing	: Gland Packed / Mechanical Seal	Gland Packed / Mechanical Seal	Gland Packed / Mechanical Seal



PERFORMANCE CHART FOR 'SP' SERIES, SELF PRIMING, BARE / ENERGY EFFICIENT IE2 MOTOR COUPLED PUMPS, AT RATED SPEED																																						
S. No.	Pump Model	Power Rating		Pump Size (mm)		Rated Voltage (Volts)	Impeller Dia. (mm)	Solid Handling Size (mm)	Rated Speed (RPM)	TOTAL HEAD IN METRES																												
		kW	HP	SUC.	DEL.					6	8	10	12	14	15	17	19	22	23	25	28	30																
										DISCHARGE IN LITRES PER SECOND																												
1	SP 'V'	0,75	1	40	40	415	116	7,0	2780	4,6	4,1	3,6	2,7	1,5	0,8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	SP 1H	1,5	2	40	40	415	134	8,5	2900	-	-	6,3	5,6	4,8	4,5	3,4	2,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	SP 2H	2,2	3	50	50	415	145	10,5	2900	-	-	9,2	8,7	8,1	7,8	7,0	6,0	4,2	3,5	1,8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	SP 3L+	3,7	5	80	80	415	224	15,5	1450	-	-	18,0	16,5	13,5	11,5	8,0	2,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	SP 4LA+	7,5	10	100	100	415	292	18,5	1450	-	-	36,0	33,5	31,0	30,0	27,0	24,0	18,0	15,0	7,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SP 4L+	9,3	12,5	100	100	415	292	23,0	1450	-	-	41,0	39,0	37,0	35,0	32,0	28,0	22,0	19,5	14,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	SP 6LA	15	20	150	150	415	296	34,0	1450	-	-	66,0	63,4	60,0	57,5	52,5	45,0	34,3	30,0	16,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	SP 6L	18,7	25	150	150	415	296	40,0	1450	-	-	75,0	72,5	68,7	66,2	61,3	55,0	45,0	40,0	27,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	SP 8LA	11	15	200	200	415	240	60,0	1450	-	80,0	72,0	60,0	32,0	20,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
											20	22	23	25	28	30	32	34	36	38	40	42	44															
10	SP 3A	3,7	5	80	80	415	174	7,0	2900	10,0	9,2	8,7	7,5	5,2	3,7	1,9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	SP 3	5,5	7,5	80	80	415	174	14,5	2900	16,5	16,2	16,0	15,0	12,5	10,5	8,0	5,5	3,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	SP 3HH	9,3	12,5	80	80	415	194	14,5	2900	-	-	-	-	-	18,7	18,0	17,3	16,5	15,0	12,5	10,5	8,5	6,5	5,0														

Note: All pump sets are suitable with three phase Induction Motor, Performance applicable to liquid of specific gravity 1 and viscosity as of water.

PERFORMANCE CHART FOR 'SP-M' SERIES, SELF PRIMING MONOBLOC PUMPS, AT RATED SPEED, 50 Hz FREQUENCY, THREE PHASE A.C. POWER SUPPLY																			
S. No.	Pump Model	Power Rating		Pump Size (mm)		Impeller Dia. (mm)	Rated Voltage (Volts)	Solid Handling Size (mm)	Rated Speed (RPM)	TOTAL HEAD IN METRES									
		kW	HP	SUC.	DEL.					6	8	10	12	14	15	18	20	22	24
		DISCHARGE IN LITRES PER SECOND																	
1	SP 05M*	0,37	0,5	40	40	116	210/415	5	2700	3,1	2,6	2,1	1,2	-	-	-	-	-	-
2	SP 01M*	0,75	1	40	40	116	210/415	7	2700	4,4	4,0	3,2	2,3	1,0	-	-	-	-	-
3	SP 1HM	1,5	2	40	40	134	415	8,5	2800	-	-	5,9	5,1	4,2	3,1	1,5	-	-	-
4	SP 2HM	2,2	3	50	50	145	415	10,5	2800	-	-	8,7	8,2	7,4	6,5	5,5	4,3	3,0	1,0
5	SP 3LM+	3,7	5	60	80	224	415	15,5	1420	-	-	17,5	15,5	12,5	8,0	3,5	-	-	-

Note: SP 05M and SP01M are supplied with mechanical seal arrangement and also available in single phase.
All other models are supplied with stuffing box arrangement for gland packed or mechanical seal as per the requirement.

PERFORMANCE CHART FOR 'SP' SERIES, SELF PRIMING, ENGINE COUPLED PUMPS, AT RATED SPEED																					
S. No.	Pump Model	Power Rating		Pump Size (mm)		Impeller Dia. (mm)	Solid Handling Size (mm)	Rated Speed (RPM)	TOTAL HEAD IN METRES												
		kW	HP	SUC.	DEL.				10	12	14	15	16	18	19	20	22	24	25	26	28
		DISCHARGE IN LITRES PER SECOND																			
1	SP3L+	4	6	80	80	224	15,5	1500	-	18,0	15,5	14,0	12,5	8,2	6,0	3,5	-	-	-	-	
2	SP3L+	9	12	80	80	224	15,5	1800	-	-	-	22,0	21,0	20,0	19,0	16,7	13,7	12,0	10,0	6,0	
3	SP4LA+	9	12	100	100	292	18,5	1500	-	36,0	33,9	32,5	31,0	28,0	26,6	25,0	21,5	17,0	14,5	12,0	
4	SP4L+	10,5	14	100	100	292	23	1500	-	41,0	39,0	38,0	36,5	33,9	32,0	30,5	25,0	21,5	18,5	16,0	
5	SP6LA	16,5	22	150	150	296	34	1500	68	66,0	63,0	62,0	59,0	53,5	51,5	48,0	41,0	33,0	28,5	21,5	
6	SP6L	19,5	26	150	150	296	40	1500	-	76,0	73,0	71,0	69,0	63,5	61,5	58,0	51,0	43,5	38,8	32,5	

Note: Performance applicable to liquid of specific gravity 1 and viscosity as of water.