







**KIRLOSKAR BROTHERS LIMITED** 

A Kirloskar Group Company Established 1888





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Enriching Lives



# **SELF PRIMING DEWATERING PUMPS**

**SP COUPLED** 

## **KIRLOSKAR PUMPS**

## **KIRLOSKAR PUMPS**

TECHNICAL SPECIFIC	CATION			
		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 Efficier	nt 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

#### 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

### 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.

	PERFORMANCE CHART FOR 'SP' SERIES, SELF PRIMING, BARE / ENERGY EFFICIENT IE2 MOTOR COUPLED PUMPS, AT RATED SPEED																					
	Pump . Model	Power		Power Pump		Bated	Impeller	Solid	Rated	TOTAL HEAD IN METRES												
S. No.		Rat	ting		nm)	Voltage (Volts)	Dia. (mm)	Handling Size	Speed	6	8	10	12	14	15	17	19	22	23	25	28	30
		kW	HP	SUC.	DEL.	(10115)	(1111)	(mm)	(RPM)	) DISCHARGE IN LITRES PER SECOND												
1	SP '0'	0.75	1	40	40	415	116	7.0	2760	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															Y				
		Power Pump Rating Model		Pump Size (mm)		Impeller	Rated Voltage (Volts)	Size	Rated	TOTAL HEAD IN METRES										
S. No.						Dia. (mm)			Speed (RPM)	6	8	10	12	14	15	18	20	22	24	
		kW	HP	SUC.	DEL.	()		(mm)	(116 M)	DISCHARGE IN LITRES PER SECOND										
1	SP 05'M'*	0.37	0.5	40	40	116	210/415	5	2700	3.1	2.6	2.1	1.2	-	-	-	-	-	-	
2	SP '0'M*	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	80	80	224	415	15.5	1420	-	-	17.5	15.5	12.5	8.0	3.5	-	-	-	

Note: SP 05M and SP0M 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																					
		Power			mp		Solid	Rated	TOTAL HEAD IN METRES												
S. No.	Pump Model	Rat	ing		ize 1m)	Impeller Dia.	Handling Size	Speed	10	12	14	15	16	18 19 20 22 24 25		26	28				
140.	Woder	kW	НР	SUC.	DEL.	(mm)	(mm)	(RPM)		DISCHARGE IN LITRES PER SECOND							ID				
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	26.0	21.5	18.5	16.0	9.9
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	68.0	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.