

DATA BOOKLET

SHAKTI

THE POWER OF INNOVATION, EFFICIENCY & TECHNOLOGY.



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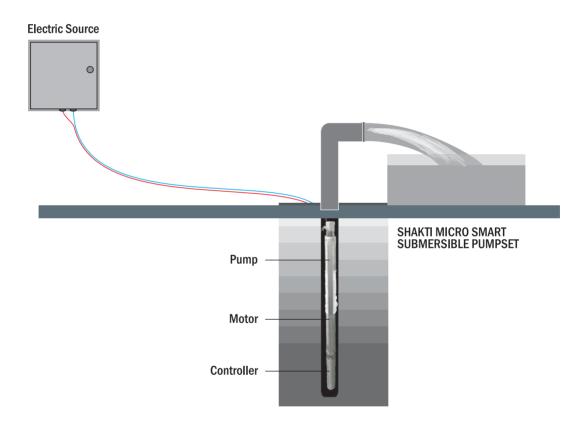
Considering continuous product development the information/performance/specifications and illustrations disseminated in this catalogue are subject to change without notice.



INTRODUCTION

This pumpset has three major components VFD (Variable Frequency Drive), motor and pump. All three components are attached modularly to provide an integrated controller system with motor pump. The modular approach provides benefit of easy installation and service.

The micro smart pumpset is a premium product for best wire to water efficiency. It uses a multi stage power processing technology; all stages are customized to obtain a paradigm shift in the efficiency and reliability. In this pumpset the input power is drawn from single phase AC source which drives a PFC (Power Factor Correction) based VFD (variable Frequency Drive). The VFD then drives a 3-Phase PMSM (Permanent Magnet Synchronous Motor), which is best known for its efficiency and power density in this power range. The input VFD stage also gives soft start and stop feature to the system thereby improving the mechanical life of overall system. The shaft of PMSM motor is coupled with positive displacement pump, which provides good efficiency even under wide range of head variation.



Applications

- Ground water lowering
- Irrigation systems
- Industrial Application
- Drip irrigation & sprinkler
- Tank / Cistern filling
- Wildlife refuge
- Rural water supply for ranches, cabins, and cottages
- Fountains



Smart VFD Inbuilt Controller Details

The micro smart submersible pumpset is a positive displacement pump, driven by high efficiency PMSM motor. The input stage is a variable frequency drive therefore the motor is not affected by input voltage fluctuation and surges.

Smart input side controller provides various protections such as dry run, over voltage, over current, over load along with soft start and stop feature.

Only two wires phase and neutral are need for connection of the pumpset which leads to easy installation. No external element is needed for installation.

Input rating:-

Model	Input Supply	Input Power (HP)	Head (m)	Discharge (LPM)	
9900004900		1.5	120	13.5	
9900004895	230 VOLT, 50Hz	1.5	60	29	
9900004855	230 VOL1, 30112	2.0	90	29	
9900004804		2.0	60	49	

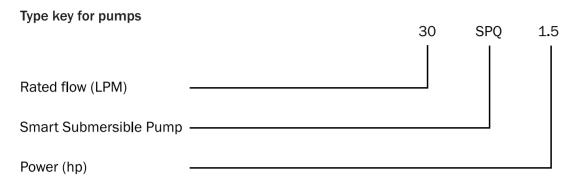
Features

- Intelligent Governor.
- Ultra Wide Voltage Input from 150V to 260V
- High Conversion Efficiency
- Dry Run Protect.
- Over Voltage Protect
- Over Current Protect.
- Over Load Protection
- Proven motor and pump technology for long-term reliability
- Simple installation and maintenance free.

^{*}NOTE :- Subject to technical change without notice.



Identification

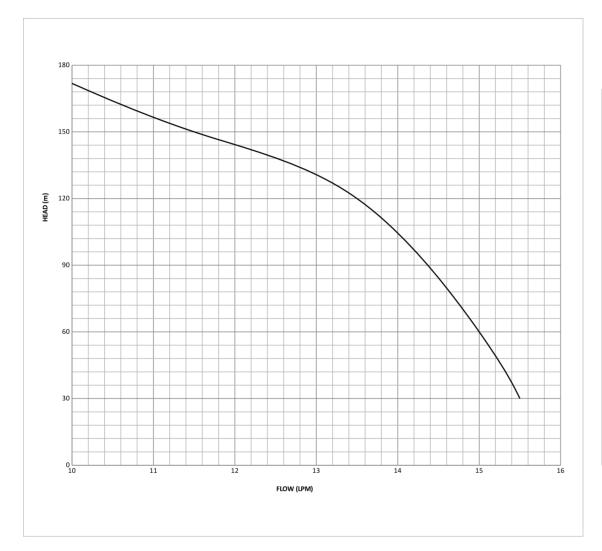


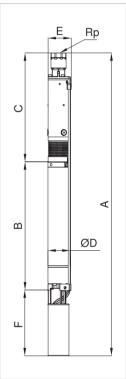


PUMPSET 15 SPQ-1.5HP (3X3) 1.25"BSP

BSP : 32mm (3x3) PUMPSET CODE : 9900004900

DISCHARGE (LPM): 13.5 DUTY HEAD : 120 METER





PUMPSET CODE	POWER (HP)		DISCHARGE (LPM)						
POWIFSET CODE	POWER (HP)	10	12	13.5	15	16			
9900004900	0004900 1.5	HEAD (m)							
990004900	1.5	180	150	120	60	30			

^{*}NOTE :-

 $^{1. \ {\}it Subject to technical change without notice}.$

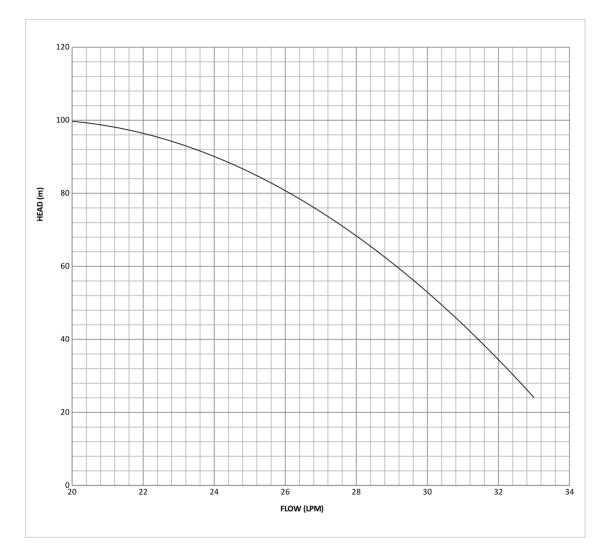
^{2.} For dimensions refer technical data page.

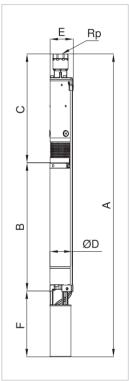


PUMPSET 30 SPQ-1.5HP

BSP : 32mm (3x3) PUMPSET CODE : 9900004895

DISCHARGE (LPM): 29 DUTY HEAD : 60 METER





PUMPSET CODE	POWER (HP)		DI	SCHARGE (LP	M)	
PUIVIPSET CODE	POWER (HP)	20	26	29	32	33
9900004895	1 5			HEAD (m)		
990004693	1.5	100	80	60	40	20

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^{2.} For dimensions refer technical data page.

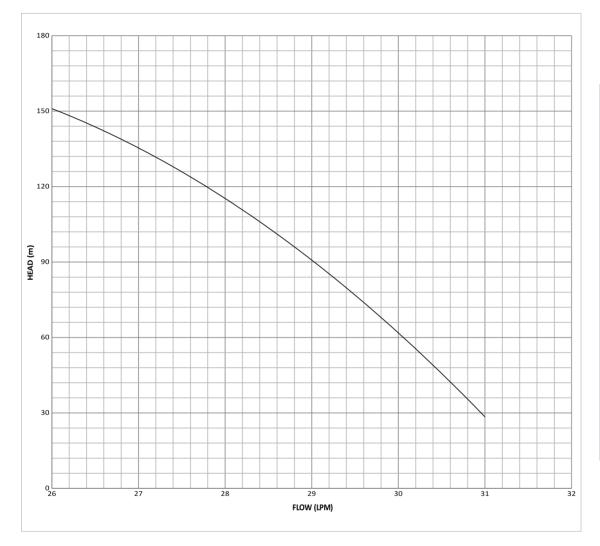


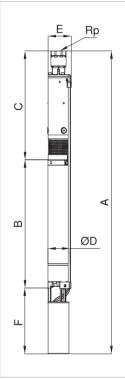
PUMPSET 30 SPQ- 2.0HP (3x3) 1.25" BSP

BSP : 32mm (3x3) PUMPSET CODE : 9900004855

DISCHARGE (LPM): 29

DUTY HEAD : 90 METER





PUMPSET CODE	POWER (HP)		DI	M)				
PUNIFSEI CODE	POWER (HP)	26	28	29	30			
9900004855	24855	HEAD (m)						
990004633	2.0	150	120	90	60	30		

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^{2.} For dimensions refer technical data page.

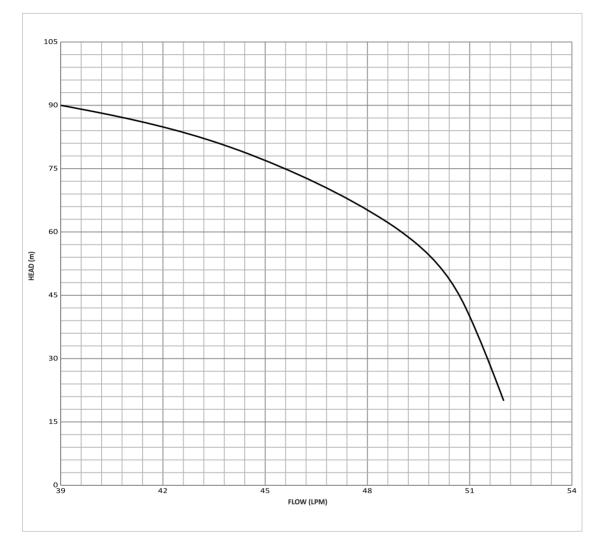


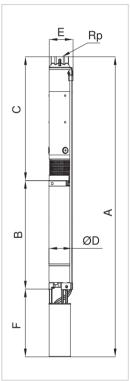
PUMPSET 50 SPQ- 2.0HP (3x3) 1.25" BSP

BSP : 32mm (3x3) PUMPSET CODE : 9900004804

DISCHARGE (LPM): 49

DUTY HEAD : 60 METER





PUMPSET CODE	POWER (HP)	DISCHARGE (LPM)						
PUNIFSET CODE	FOWER (HF)	39	44	49	51	52		
9900004804	2.0			HEAD (m)				
990004804	2.0	90	80	60	40	20		

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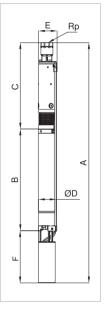
^{2.} For dimensions refer technical data page.



MICRO SMART SUBMERSIBLE PUMPSET GA DRAWING (IN MM)

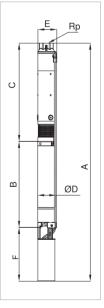
SET CODE	DESCRIPTION	A	В	С	F	ØD	E	RP	NET WEIGHT (Kg) *
9900004900	PUMPSET 15 SPQ-1.50HP (3X3) 1.25"BSP	1036	347	374	315	67	77	32	10
9900004895	PUMPSET 30 SPQ-1.50HP	1007.5	347	345.5	315	67	77	32	10
9900004855	PUMPSET 30 SPQ-2.0HP(3X3)1.25"BSP	1106	347	444	315	67	77	32	12

Note: * PUMP+MOTOR+CONTROLLER



SET CODE	DESCRIPTION	A	В	С	F	ØD	E	RP	NET WEIGHT (Kg) *
9900004804	PUMPSET 50 SPQ-2.0HP (3X3) 1.25"BSP	1251	347	589	315	67	77	32	12

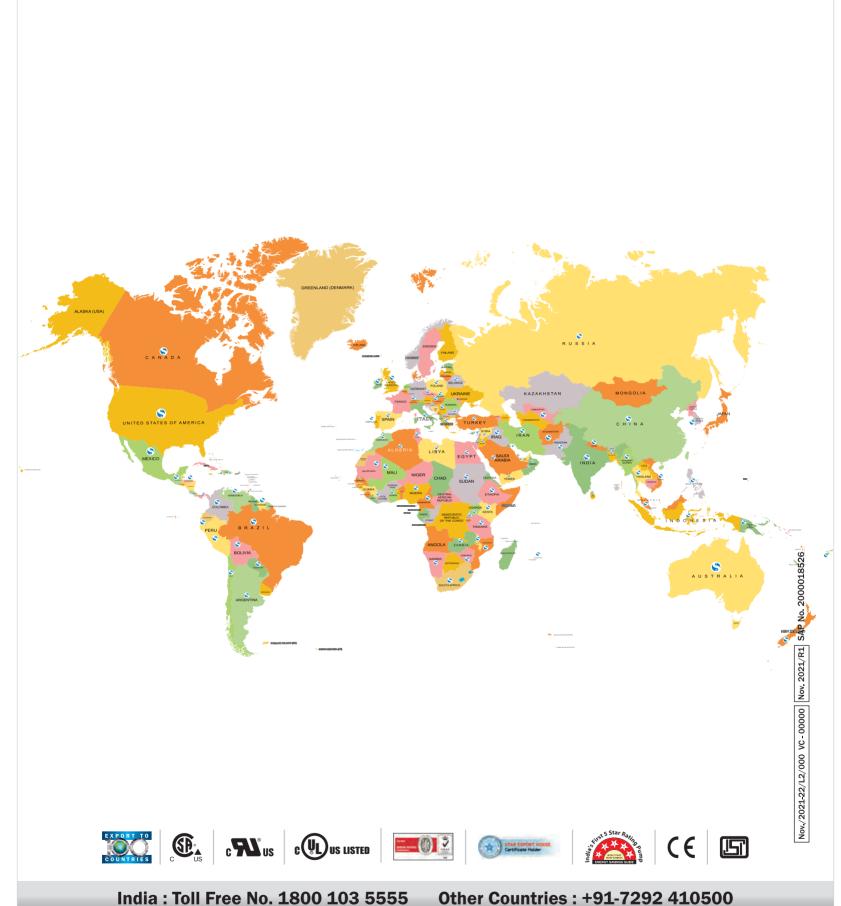
Note: * PUMP+MOTOR+CONTROLLER



^{*}NOTE :-

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^{2.} For dimensions refer technical data page.



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