

SUBMERSIBLE V3

SUBMERSIBLE PUMPSET 50 Hz, 220V



Farming



Domestic



Gardening



Water Supply



Industrial



BOREWELL
SUBMERSIBLE
PUMP SETS V3
74 mm (3")

3"



OM PRASANTH INDUSTRIES

OPI SUBMERSIBLE PUMP V3



1. DESCRIPTION :

Introducing our 3" Submersible Smart Series : Compact with a 74mm outer diameter, yet powerful, ranging from 0.37 kW to 1.1 kW. Achieve flow rates up to 120 lpm and head heights of 98m.

2. SALIENT FEATURES:

- **Engineered Designs :**
Slim and attractive compact design, with easy installation and maintenance free.
- **High Discharge :**
High operating efficiencies of pumpset result into high water discharge rate and lower power bills., Guarantees maximum water output for each cycle.
- **No Problems with Suction or Priming :**
Easy to use without requiring constant attention.
- **Impeller & diffuser Bowl :**
High Quality Noryl impller, a thermoplastic material designed for maximum water flow and efficiency.
- **Water Lubricated Bearings :**
Heavy duty water lubricated journal and Carbon thurst pad with fixed segment bearings for long trouble free operations.
- **Stainless Steel Components :**
All fastners designed for durability and corrosion resistance..
- **Rigid Construction:**
Built to withstand challenging operational conditions.
- **Low Noise Operation :**
Provides a quiet and disturbance-free environment.
- **Consistent Water Flow :**
Steady and uniform water supply guaranteed.
- **Rotating Parts :**
All rotating components are dynamically balanced to ensure long bearing life and vibration free smooth operation.
- **Wide voltage operation :**
Accommodating fluctuating power supply and safeguarding against electrical inconsistencies.
- **Motor Design :**
The motor is completely designed to avoid sand entry into motor and pump.
- **Attachment :**
Motor and pump is a Couple type, and it is easy for installation.
- **Testing process :** All pumpsets are fully tested and prior to despatch.



3. OPERATIONAL CONDITION :

Pump set should be submerged in water with minimum of 0.5m above water level,

- **Turbidity** : 50 ppm Max
- **PH** : 6.5 To 8.5
- **Specific Gravity** : 1.004 Max
- **Chlorides** : 500 ppm Max
- **Temperature** : 33 Deg C Max
- **Hardness** : 300 ppmMax
- **Total Solids** : 3000 ppm Max
- **Voltage** : 160 - 420 Volts
- **Permissible Amount of sand** : 25 g/ m³

4. TECHNICAL SPECIFICATION :

SPECIFICATION :

- **Nominal Diameter** : 3"
- **Power Range** : 0.37 kW to 1.1 kW (0.5 HP - 1.5 HP)
- **Supply Type** : Single Phase (50Hz, AC Supply)
- **Voltage Range** : 160 V - 240 V (Single Phase)
- **Speed** : 2880 RPM
- **Head** : Upto 98 Mtr
- **Flow** : Upto 120 Lpm
- **Liquid / Max Temp** : Clear Water / 33° C ,
- **Type of Duty** : S1 (Continuous)
- **Insulation** : Wet Type, Cat - B, 99.9% Pure Copper
- **Delivery Size** : 1, 1 ¼ , 1 ½.
- **Max. Outer Diameter** : 74 mm
- **Method of Starting** : 1 PH - Capacitor Start Capacitor Run (CSCR)

5. MATERIAL OF CONSTRUCTION:

- **Impeller & diffuser Bowl :**
High Quality Noryl impeller, a thermoplastic material designed for maximum water flow and efficiency.
- **Motor Shaft :**
High Grade stainless steel for durability and anti-rust properties. A sufficient diameter of stainless steel that is ground to precise tolerances and guarantees rigidity.
- **Cable Sealing Arrangement :**
Designed so that no borewell water with sand can enter the motor.
- **Thrust Bearings :**
Carbon Thrust bearing with 4 segment bearing segment and water lubricated to withstand high axial thrust loads.
- **Winding :**
PVC / Polywrap insulated, water cooled.
- **Seal :**
Precision-engineered Mechanical Seal, ensuring leak-proof operation.
- **Casting :**
High Grade cast iron – FG 260.
- **Pressure Equalizing Diaphragm :**
suitably sized to allow for water expansion inside the motor and stop cooling water loss
- **Motor Body and Pump Body :**
SS 202 high graded stainless steel with corrosion resistance
- **Stainless steel components :**
All Fastners, coupling, key stud ring all are high graded stainless steel.



■ 5.1 MATERIAL OF CONSTRUCTION:

MATERIAL OF CONSTRUCTION			
PUMP MATERIALS		MOTOR MATERIALS	
PART	MATERIAL	PART	MATERIAL
IMPELLER	NORYL	STATOR	LC / CRNO STAMPING
BOWL	NORYL WITH SS RING SS 202	WINDING	POLYWRAP, HIGH GRADED COPPER
DIFFUSERS	SS JACKET	BEARING BUSH	CARBON / LTB 4
SLEEVE BUSH	NITRILE RUBBER	ROTOR	COPPER / ALUMINIUM
SHAFT	SS 410	FASTNERS	SS 304 / SS 202
SLEEVE COUPLING	SS 410	STATOR TUBE	SS 202 / SS 301
PUMP DESIGN	COUPLING TYPE	THRUST PAD ASSMLY	4 SEG / 6 SEG PREMIUM

■ 6. APPLICATIONS :



■ 7. BENEFITS:

- Residential water needs, daily household requirement.
- Water circulating systems, fountains, lawns and gardens.
- Lifting water from sump to overhead tanks for domestic, individual houses and apartments.
- Irrigation from open wells especially where there is wide fluctuation in water levels.

■ 8. ACCESSORIES AND PACKING ITEM'S :



3" BOREWELL SUBMERSIBLE PUMPSET -OPI V3



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