



॥ राष्ट्रदेवो भवः ॥



Since 1994

100 MM

**V4 BOREWELL**

**SUBMERSIBLE PUMPSET**



Farming



Gardening



Domestic



Water Supply



Industrial



Mfg. by : **Falcon Pumps Pvt. Ltd.**

Chale Pragati Ki Aur®

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## ■ V4 BOREWELL SUBMERSIBLE PUMPSET

Falcon Premium 100 mm (4") Borewell Submersible pump is firmly coupled to a submersible electric motor and Operates by being submerged beneath the surface of the water. The optimal design of impeller and diffuser enables the best Possible hydraulic efficiency. Built-in check valve prevents back flow and reduces the risk of water hammering. All Vital components of these pumps are made up of corrosive resistance thermoplastic and the shaft is of SS 410.

## ■ PUMP LIQUIDS

- Clean
- Thin
- Non-Aggressive
- Non-Explosive
- Clear
- Cold
- Fresh water
- Without abrasives
- Solid particles.



## ■ SALIENT FEATURES

- Motor portion covered with corrosive resistance Stainless steel J4 shell
- More durability and hygiene
- High operating efficiency
- Specially designed thrust bearing to withstand high axial thrust load
- Extremely hardwearing water lubricated bearing
- Thread type motor construction ensures service feasibility
- Specially designed Deep Drawn type pump ensures perfect alignment and  
Thereby increases the life of the pump set
- Designed for wide voltage operation
- Best alternative for JET & Compressor pump set
- Additional intermediate bearing in higher stage pumps.



## ■ SPECIFICATION

- Power Range : 0.37 kW to 4.4 kW (0.50 HP to 6.0 HP)
- Version : Single Phase 160V to 230V, Three Phase 350 to 415V, 50Hz AC Supply.  
Single Phase available in 0.5 HP to 5.0 HP  
Three Phase available in 1.0 HP to 6.0 HP
- Speed : 2880 RPM
- Head Range : 10 Mtr. To 340 Mtr.
- Discharge Range : 450 LPM to 12 LPM
- Outlet Size in Inch : 1.0", 1.25", 1.5" & 2.0"
- Degree of Protection : IP 58
- Direction of Rotation Minimum Cooling : Counter clockwise from driving end - 1ph: Electrically Reversible - 3ph
- Thrust Load : 0.37 kW – 0.75 kW- 650 lbs, 1.1 kW -1.5 kW -1000 lbs,  
2.2kW – 7.5 kW -1500 lbs.
- Flow Along the Motor : 0.15 m/sec.
- Type of Duty : S1 (Continuous)
- Method of Starting : 1ph-Capacitor Start Capacitor Run (CSCR): 3ph –Direct Online (D.O.L)
- Maximum Starts Per Hour : 20 Times



**Thrust Bearing Set**



**Noryl Bowl**



**Sand Guard**

## ■ CHARACTERISTICS OF CLEAR COLD WATER

- Maximum liquid temperature : 33°C max
- Permissible amount of sand : 25 g/m<sup>3</sup>
- Allowable solids : 3000 ppm (max.)
- Chloride ion density : 500 ppm (max.)
- Turbidity : 50 ppm silica scale (max.)
- Hardness (Drinking Water) : 300 ppm (max.)
- Specific gravity : 1.004 (max.)
- Viscosity :  $6.175 \times 10^{-3} \text{ m}^2/\text{sec}$  (max.)
- Ph Value : 6.5 to 8.5



## ■ MATERIAL OF CONSTRUCTION - MOTOR

<u>Part Name</u>	<u>Material</u>
Oil Seal	: Nitrile butyl rubber
Motor Shaft	: SS - 420
Motor Body Pipe	: J4
Motor Bush	: LTB-4 / Teflon
Thrust bearing assembly	: SS - 420 & Carbon
Diaphragm	: High Nitrile Butyl Rubber
Motor Base	: Cast Iron / SS - 304
Housing Set	: Cast Iron / SS - 304



## ■ MATERIAL OF CONSTRUCTION - PUMP

<u>Part Name</u>	<u>Material</u>
Check Valve Housing	: Cast iron / SS - 304
Check Valve	: SS-410
Outer Shell	: J4
Impeller	: Noryl / Nylon
Bowl	: Noryl / Cast Iron / SS
Counter Bush	: LTB-4 / SS - 304
Pump Bush	: NBR / LTB 4
Pump Sleeve	: SS-410
Suction	: Cast iron / SS - 304
Pump Shaft	: SS-410
Coupling / Pump Couple	: SS-410

