



**Since 1994** 



Mfg. by: Falcon Pumps Pvt. Ltd.





### **V7 BOREWELL SUBMERSIBLE PUMPSET**

Falcon Premium 175 mm (7") Borewell Submersible pumpsets are powered by water filled, rewindable submersible motor suitable for continuous duty. The stator is wound with special water proof synthetic film insulated copper winding wires and made up of low watt loss silicon steel laminations assembled under pressure and rigidly locked in stainless steel stator shell.

### PUMP LIQUIDS

- Clean - Cold

- Thin - Fresh water

- Non-Aggressive - Without abrasives

- Non-Explosive - Solid particles.

- Clear











### **SALIENT FEATURES**

- Cast iron casting bowl and SS-410 grade impeller in mix flow series
- Specially designed high performance thrust bearing (SS-420 Tilting Pad with Carbon plate) to with stand axial thrust loads.
- Specially designed Deep Drawn type pump ensures perfect alignment and Thereby increases the life of the pump set
- Dynamically balanced rotating parts ensures minimum vibration and longer life
- Motor portion covered with corrosive resistance Stainless steel J4 shell
- More durability and hygiene
- High operating efficiency
- Special designed thrust bearing to withstand high axial thrust load
- Extremely hardwearing water lubricated bearing
- Thread type motor construction ensures services feasibility
- Designed for wide voltage operation
- Best alternative for JET & Compressor pump set
- Additional intermediate bearing in higher stage pumps



**Thrust Bearing Set** 



Rotor









### **SPECIFICATION**

- Method of Starting : 3 ph -Direct Online (D.O.L) upto 5.5 kW, Star Delta (SD) upto 37.3 kW

- Power Range : 11.2 kW to 37.3 kW (15 HP to 50 HP)

- Version : Three Phase 350 to 415V, 50Hz AC Supply

- Speed : 2880 RPM

- Head Range : 18 Mtr. To 650 Mtr.

- Discharge Range : 1860 LPM to 55 LPM

- Outlet Size in Inch : 2.0", 2.5", 3.0" & 4.0"

- Degree of Protection : IP 58

: Electrically Reversible -3ph - Direction of Rotation

: 11.2 kW -37.3 kW -8000 lbs - Thrust Load

- Minimum Cooling Flow Along the Motor : 0.15 m/sec.

- Type of Duty : S1 (Continuous)

- Maximum Starts Per Hour : 20 Times











### CHARACTERISTICS OF CLEAR COLD WATER

- Maximum liquid temperature : 33°C max

- Permissible amount of sand : 25 g/m<sup>3</sup>

: 3000 ppm (max.) - Allowable solids

- Chloride ion density : 500 ppm (max.)

- Turbidity : 50 ppm silica scale (max.)

- Hardness (Drinking Water) : 300 ppm (max.)

- Specific gravity : 1.004 (max.)

: 6 1.75 x 10<sup>6</sup> m<sup>2</sup>/sec (max.) - Viscosity

- Ph Value : 6.5 to 8.5



**SS Pump Parts** 



**Mix Bowl** 









# MATERIAL OF CONSTRUCTION - MOTOR

**Part Name** Material

: Nitrile butyl rubber Oil Seal

**Motor Shaft** : SS - 420

Motor Body Pipe : J4

: LTB-4 / Teflon **Motor Bush** 

Thrust bearing assembly : SS - 420 & Carbon

Diaphragm : High Nitrile Butyl Rubber

: Cast Iron / SS - 304 **Motor Base** 

**Housing Set** : Cast Iron / SS - 304







# MATERIAL OF CONSTRUCTION - PUMP

Material **Part Name** 

**Check Valve Housing** Cast iron / SS - 304

Check Valve SS-410 / Nylon

Impeller SS-410

Bowl Cast Iron

**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



**Sand Guard** 





