



Manufacturer & Exporter

Of All Water Pumps in India.





SALIENT FEATURES, MATERIAL SPECIFICATION AND RANGE FOR 100 MM (4") BOREWELL DIA. SUBMERSIBLE PUMPSETS - (WATER FILLED)

SALIENT FEATURES

- ★ Multi Stage Centrifugal Pump with Radial flow Impeller.
- ★ It Operates submerged beneath the surface of water.
- ★ Prime Mover Motors are wet type, water lubricated.
- ★ It also works on low voltage.
- ★ Easy installation and easy servicing.
- ★ Good quality components and parts require less maintenance.
- ★ All CI components with CED coating.

MATERIAL SPECIFICATION MOTOR

- ★ Motor Body - Stainless Steel
- ★ Stamping - Electrical Grade Silicon steel sheet
- ★ Thrust Bearing - Stainless steel 420 Tilting pad segment with carbon plate
- ★ Bush Bearing - GM LTB-4
- ★ Shaft - Stainless Steel 410/420
- ★ Rotor - Dynamically Balanced
- ★ Seal - Nitrile rubber oil seal
- ★ Winding Wire - Poly wrap double coated copper wire

PUMP

- ★ Suction/NRV - Graded cast iron
- ★ Bowl/Impeller - Noryl-Glass filled with stainless steel neck ring
- ★ Pump Sleeve - Stainless steel 410 with hard chrome

RANGE

- ★ **4" (100 MM)**
- ★ **1 PHASE: (180-240V)**
- ★ **3 PHASE: (300-415V)**
- ★ **HP: 0.5 HP TO 2.0 HP 1ø**
- ★ **HEAD: 5 MTR TO 109 MTR**
- ★ **CAPACITY: 20 LPM TO 81**
- ★ **LPM AC, 50Hz, 2800 RPM**
- ★ **TOTAL NO. OF MODELS: 26 Nos.**



Borewell Submersible Pumpsets

100 mm (4") with Oil Filled Motor



Description

Watercat has designed and developed the latest technology rewindable oil filled submersible motors for its 4" submersible pumpsets. Following are the salient features of these motors.

Salient Features

- ♦ Motors are designed using enamelled copper wire instead of PVC insulated copper wire. Due to this the design is highly efficient reducing power consumption & thereby reducing cost of operation.
- ♦ The motors are filled with special food non-toxic dielectric oil, which lubricates the ball bearing and axial thrust bearings. It also offers insulation and thermal properties which increases the reliability & working life of the motor.
- ♦ Outer casing of the motor is constructed completely with Stainless Steel, which reduces corrosion and gives a good overall appearance to the motor.
- ♦ The motors are compact and weigh substantially less, which facilitates transportation storage & installation.
- ♦ The electric cable of the motor constitutes three-wire removable cable with watertight connector. This facilitates the changing of the cable, if required, without dismantling the motor
- ♦ The motor are permanently split capacitor motors, which do not require the starting capacitor or a starting switch. Due to this the cost of the control box reduces substantially, thereby reducing the cost of installation.
- ♦ The motor are designed for a wide voltage range of operation and are suitable for installation in areas experiencing wide voltage fluctuations.
- ♦ All rotating components and assemblies are dynamically balanced to ensure long bearing life and vibration free smooth operation.
- ♦ The Pumpsets are compact and slim and can be easily installed in narrow wells.

Material of Construction

Motor Body	-	Stainless Steel
Stator	-	Vacuum Impregnated with class F insulation
Rotor	-	Aluminum pressure die-cast / Copper Rotor
Windings	-	Enamelled copper wire with class F insulation
Cable Sealing Arrangement	-	Designed so that no bore well water with sand can enter the motor.
Bearing	-	Heavy duty angular contact bearing / ball bearing
Pressure Equalizing Diaphragm	-	Adequately sized to accommodate expansion of oil inside the motor and prevent loss of oil
Impeller	-	High quality abrasion resistant Noryl / Stainless Steel & dynamically balanced.
Bowl	-	High grade Noryl / Cast Iron
Wear Rings	-	High quality abrasion resistant P.U. / Rubber
Shaft	-	Stainless Steel of adequate diameter to ensure rigidity and ground to close tolerances.
Suction Casing	-	Provided with perforated Stainless Steel Strainer and adequately sizes to allow the water to be sucked in with minimum friction.
Seal	-	Mechanical Seal

Applications : Water Supply, Civil and Industrial, Fire Fighting, Irrigation

SUITABLE FOR 100 mm BOREWELL OR ABOVE (Min.Bore.Dia.100 mm)
APPROXIMATE PERFORMANCE CHART AT 2880 RPM, 200-240 VOLT SINGLE PHASE / 380-415 VOLTS THREE PHASE,
50 Hz, A.C SUPPLY, Maximum Motor OD : 96.5 mm & Pump OD : 96 mm

OUTLET SIZE : 32mm

TYPE OF FLOW : REDIAL

MODEL	MOTOR RATING		STAGE	Q LPM	0	20	30	40	50	60	70	90
OF	KW	HP		Q m3/h	0	1.2	1.8	2.4	3.0	3.6	4.2	5.4
40506	0.37	0.50	6	HEAD IN METER	36	34	32	32	31	28	26	20
40707	0.55	0.75	7		42	39	38	37	36	33	30	23
41008	0.75	1.00	8		48	45	43	42	41	38	34	26
41010	0.75	1.00	10		60	56	54	53	51	47	43	33
41515	1.10	1.50	15		90	84	81	80	77	71	65	50
42020	1.50	2.00	20		120	112	108	106	102	94	86	66

Registered Office
G-9 Shri Nivas
Complex, Ghodasar,
Ahmedabad - 380050

Contact Number :
9327 408 205

Visit Us :
www.watercatpumps.com

Mail Us :
watercatpumps@gmail.com