

# WATER LUBRICATED C.I. SUBMERSIBLE MOTOR

Unnati UW6 series submersible motors are water Lubricated designed for installation in 6" diameter or larger water wells. These motors can be easily rewound and repaired.

Unnati Submersible Motors are robust rewindable and pre-filled with clean water mixed with anticorrosion fluid. The stator winding is of PVC or Poly Propylene insulated copper winding wires. It features water lubricated radial and thrust bearings. Dynamically balanced rotor of these Unnati UW6 Series submersible motors maintain uniform clearance to give better efficiency and increase the life cycle of the water lubricated bush bearings. Specially designed high performance thrust bearings are used to withstand high axial thrust loads.

Pressure equalizing rubber diaphragm is provided to guard against pressure and volume variations due to thermal expansion of water inside the motor. Motor is sealed by "O" rings, shaft seals and sand guards to prevent leakage of motor lubricants and ingress of well water, sand and fibre particles in to the motor. Mounting dimension of motors are in accordance with "NEMA" standard.





### PRODUCT SPECIFICATION

Rewindable

Connecting piece : Graded C.I Casting with Epoxy paint.

Upper & Lower Housing : Cast iron Graded

Motor base : Graded C.I Casting with Epoxy paint.

Stator shell : \$\$ \$ 304Motor shaft : \$\$ \$ 420

Winding wire : Poly Propylene or PVC insulated
 Shaft extension and coupling dimensions : As per "NEMA" Standards

Degree of protection : IP 68Max water temperature : 35° C

Nos. of Start per Hour
 Voltage variation
 Max 20 at regular intervals.
 +6% / -10% at rated voltage.

• Max depth immersion : 500 metres.

Motor cable length : 3.0 metres (3 core / 4 core)

Maximum Outer Dia : 142 mm

Power Range : 4.0 kW - 45 kW - Three Phase

Versions

A.C. Three phase : 380-400-415 volt - 50 HZ

Direct Online (D.O.L.)
 Star Delta (S.D.)
 Speed
 Type of Duty
 4.0 kW - 45 kW
 7.5 kW - 45 kW
 2900 RPM
 S1 (Continuous)



#### **PRODUCT FEATURE**

- Unnati UW6 Submersible Motors are robust Rewindable and pre-filled with clean water mixed with anti-corrosion fluid.
- Stator shell with corrosion resistant Stainless Steel.
- Bearing: Water lubricated radial and thrust bearing.
- Shaft extension made of Stainless Steel AISI 420.
- High efficiency electrical design for Lower Operating Cost.
- Pressure compensation diaphragm.



### **PRODUCT APPLICATION**

"Unnati" prime mover Submersible Motors are suitable to couple with deep well Submersible Pump used for :

- Residential Purpose
- Irrigation
- Fountains
- Industrial water supply
- Pressure Boosting Units
- Gardens & Horticulture
- Drip & Sprinkler Systems
- Mining Industries
- Oil & Gas Industries
- De-watering
- Fire Fighting





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SR.		
NO.	DESCRIPTION	QTY.
1	MOTOR BASE	1
2	LOWER BEARING HOUSING	1
3	BREATHER DIAPHRAGM	1
4	DIAPHRAGM SPRING	1
5	ROCKER SUPPORT	1
6	THRUST BEARING	1
7	BEARING BUSH	4
8	STATOR STAMPING	AS PER S.L.
9	STATOR TUBE	1
10	SPACER	2
11	ROTOR	1
12	FLANGE	2
13	UPPER BEARING HOUSING	1
14	CONNECTING PIECE	1
15	S.S. STUD	4

Model	Pn		Motor Length	Net Weight
Model	kW	HP	(mm)	(kg)
UW6TP0055H5CI	4.00	5.50	629	49
UW6TP0075H5CI	5.50	7.50	679	52
UW6TP0100H5CI	7.50	10.00	729	57
UW6TP0125H5CI	9.30	12.50	739	60
UW6TP0150H5CI	11.00	15.00	779	64
UW6TP0175H5CI	13.00	17.50	829	68
UW6TP0200H5CI	15.00	20.00	904	74
UW6TP0250H5CI	18.50	25.00	954	79
UW6TP0300H5CI	22.00	30.00	1041	88
UW6TP0350H5CI	26.50	36.00	1116	94
UW6TP0400H5CI	30.00	40.00	1166	101
UW6TP0500H5CI	37.50	50.00	1216	107
UW6TP0600H5CI	45.00	60.00	1316	118









