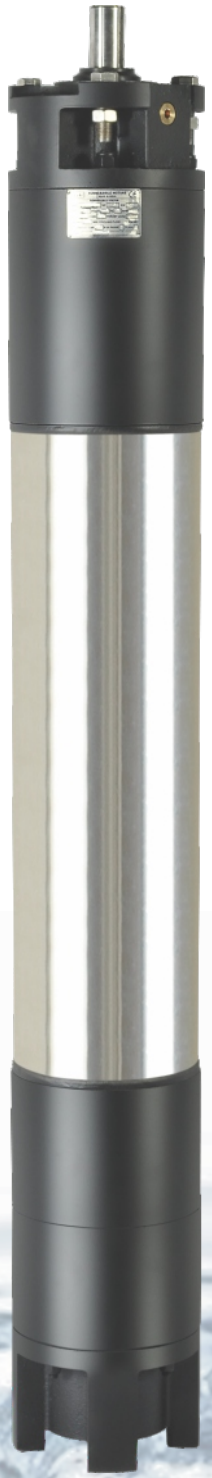
Submersible Rewindable Motor

10" WF Standard



Quality for your borewell :

These motors are heavy duty, rewindable water filled submersible motors which are designed and sized for installation in 10" diameter or larger water wells.

Product Features :

- 10" Water filled heavy duty submersible motor.
- Easily rewindable (wet wound) induction motor with PE insulated windings.
- Corrosion resistant stainless steel stator jacket and shaft.
- Water lubricated heavy duty radial and axial thrust bearings.
- Counter thrust bearing.
- Mechanical shaft seal (Sic/Sic) provided.
- Motors are pre-filled with clean water + Glycol mixture.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- Pressure compensation diaphragm.

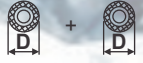
Specifications :

- Ratings: Three phase - 55 to 185 kW
- Supply voltages (Tolerance ±10%):
  50 Hz, 3 phase, 380 V, 400 V, 415 V
  60 Hz, 3 phase, 380 V, 460 V
- Degree of protection: IP 68
- Continuous duty
- Ambient temperature: 45°C
- Rotation: Three phase - CCW and CW
- Maximum nos. of starts/hour:
  55 to 135 kW - 20
  150 to 185 kW - 15
- Water pH: 6,5 - 8
- Minimum cooling flow along the motor:
  55 to 93 kW - 30 cm/sec
  110 to 185 kW - 50 cm/sec
- Motor protection: Select thermal overload protection with trip time < 10 sec. at 5 x In
- Maximum submerged depth: 200 metres.

On Request :

- Built-in PT 100 temperature sensor.
- Special voltages.
- Double cable for Star - Delta operation.
- PE2/PA winding insulation.

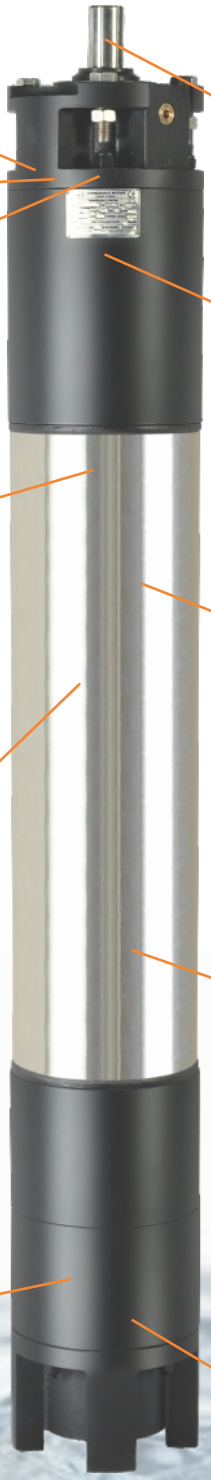
Cable Data :

HP	Type of start	Cable x Leads x Size (mm^2)	Length [m]	D [mm]	
75.0 to 250.0	DOL	3 x 1 x 70 + 1 x 1 x 50	5	14 mm	

Submersible Rewindable Motor

Motors that are top class in Performance & Reliability

10" WF Standard



Cable
Cable safe for drinking water.

Earth cable
Outside earth cable provided.

Sensor
Temperature protection by means of PT 100 sensor (Optional).

Windings
Rewindable motor construction allows for low – cost motor repair that can be done locally.

Efficiency
High efficiency provides energy saving.

Thrust
The thrust bearing is larger than the competition and is rated to take much more thrust load then what would be subjected by the pump.

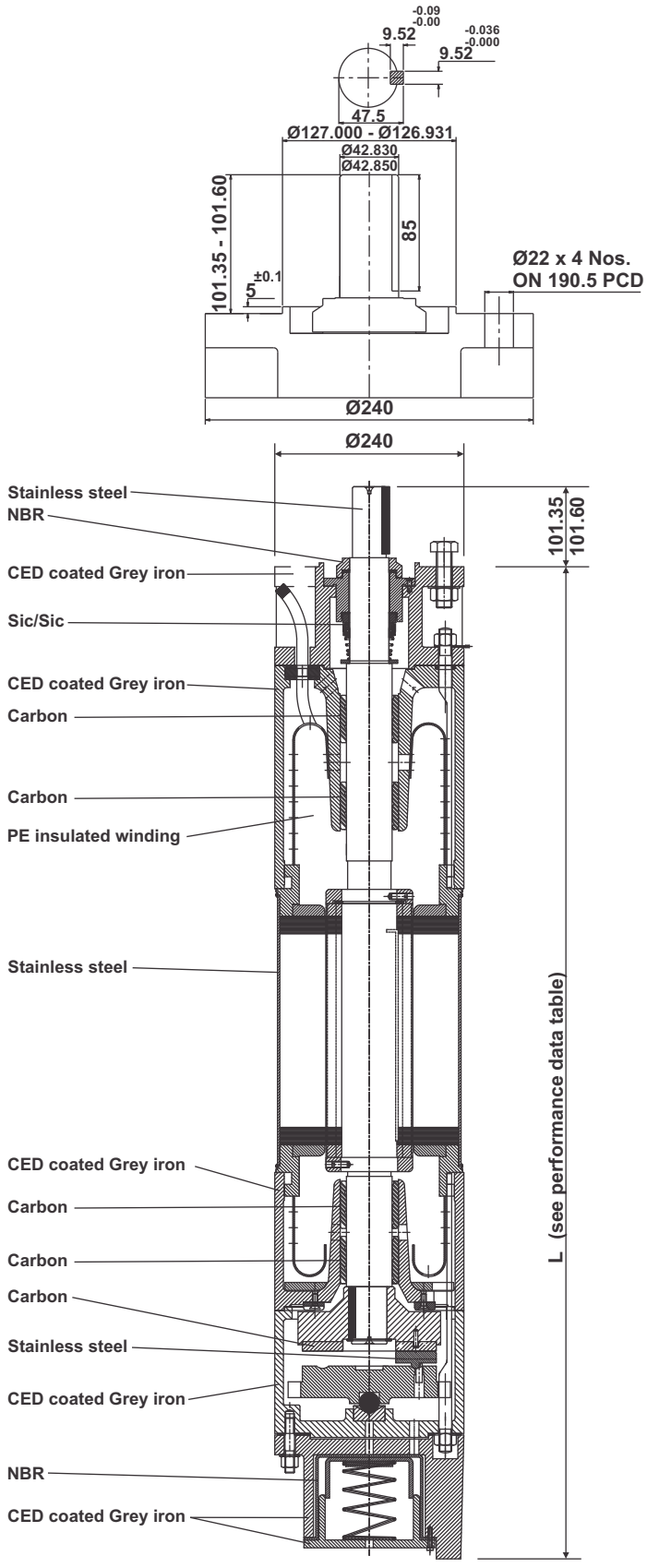
Shaft Extension
Stainless steel shaft extension

Shaft seal
Mecahnical seal sic / sic is standard.

Easy Maintenance
Designed for easy disassembly & repair

Contamination
Water filled motor design prevents water contamination.

Corrosion
Water resistance CED coating used for corrosion resistance.



Shaft :
Cylindrical shaft with key.

Submersible Rewindable Motor

10" Submersible Rewindable Motor Performance Data 50 Hz

10" WF Standard

Performance data

Motor type	Pn		Ka [N]	Un [V]	In	Ist/In	n [min⁻¹]	η [%]			COS φ			Tn [Nm]	L [mm]	Gross weight [kg]	Gross volume [m³]
	kW	HP			[A]			50%	75%	100%	50%	75%	100%				
L15075-D	55.00	75.00	60000	380	123.4	4.54	2890	76.9	81.1	82.6	0.68	0.77	0.82	181.84	1496	309.0	0.2942
				400	115.2	4.59	2900	79.1	82.3	83.0	0.69	0.79	0.83	181.21			
				415	113.2	4.64	2900	79.1	82.1	83.0	0.68	0.79	0.83	181.21			
L15090-D	66.00	90.00	60000	380	147.0	4.59	2890	78.4	81.7	83.2	0.68	0.78	0.82	218.20	1566	330.0	0.3035
				400	137.0	4.69	2900	79.9	83.1	84.0	0.69	0.79	0.83	217.45			
				415	133.8	4.74	2900	79.7	82.9	84.0	0.68	0.79	0.83	217.45			
L15100-D	75.00	100.0	60000	380	163.4	4.63	2890	78.9	82.1	84.0	0.69	0.79	0.83	247.96	1666	361.0	0.3259
				400	152.8	4.69	2900	79.9	84.1	85.0	0.70	0.80	0.84	247.11			
				415	150.5	4.71	2900	79.9	83.1	84.0	0.69	0.80	0.84	247.11			
L15125-D	93.00	125.0	60000	380	195.6	4.74	2890	79.4	83.7	85.0	0.70	0.81	0.85	307.47	1716	378.0	0.3259
				400	187.5	4.80	2900	80.4	83.9	85.0	0.70	0.80	0.84	306.41			
				415	185.5	4.83	2900	80.5	84.1	85.0	0.69	0.78	0.83	306.41			
L15150-D	110.0	150.0	60000	380	228.0	4.75	2900	79.5	84.9	86.0	0.69	0.81	0.85	362.42	1766	397.0	0.3407
				400	223.0	4.80	2910	80.5	85.9	86.0	0.69	0.80	0.83	361.20			
				415	221.0	4.83	2910	80.7	85.1	86.0	0.70	0.80	0.82	361.20			
L15180-D	135.0	180.0	60000	380	266.0	4.80	2900	79.7	85.1	87.0	0.69	0.83	0.87	444.80	1826	419.0	0.3594
				400	255.8	4.90	2910	80.9	87.1	88.0	0.70	0.82	0.86	443.27			
				415	254.5	4.95	2910	80.7	85.9	87.0	0.70	0.81	0.84	443.27			
L15200-D	150.0	200.0	60000	380	303.0	4.80	2900	79.7	84.7	86.0	0.69	0.84	0.88	494.22	1866	433.0	0.3594
				400	293.5	4.90	2910	80.9	86.1	87.0	0.71	0.81	0.85	492.52			
				415	292.0	4.94	2920	80.9	84.9	87.0	0.70	0.81	0.84	490.83			
L15225-D	165.0	225.0	60000	380	335.0	4.89	2900	79.9	84.1	86.0	0.70	0.83	0.87	543.64	1916	451.0	0.3743
				400	325.0	4.99	2910	81.4	85.6	87.0	0.71	0.81	0.85	541.77			
				415	321.0	5.04	2910	81.1	85.8	87.0	0.71	0.81	0.85	541.77			
L15250-D	185.0	250.0	60000	380	376.0	4.89	2900	80.1	85.3	87.0	0.70	0.82	0.86	609.53	1966	472.0	0.3966
				400	366.0	4.99	2910	81.7	86.9	88.0	0.71	0.81	0.85	607.44			
				415	362.0	5.04	2910	81.4	84.6	86.0	0.71	0.82	0.85	607.44			

Pn: Rated output
Ka: Thrust load
Un: Rated voltage
In: Rated current
Ist/In: Locked rotor current/Rated amperage
n: Rated speed
η: Efficiency
cos φ: Power factor
Tn: Rated torque
L: Motor length

Submersible Rewindable Motor

10" Submersible Rewindable Motor Performance Data 60 Hz

10" WF Standard

Performance data

Motor type	Pn		Ka [N]	Un [V]	In	Ist/In	n [min⁻¹]	η [%]			COS φ			Tn [Nm]	L [mm]	Gross weight [kg]	Gross volume [m³]
	kW	HP			[A]			50%	75%	100%	50%	75%	100%				
L16075-D	55.00	75.00	60000	380	136.2	5.69	3500	81.1	82.1	85.0	0.67	0.76	0.83	150.00	1496	309.0	0.2942
				460	110.0	5.70	3480	82.1	84.1	85.0	0.74	0.81	0.85	151.00			
L16090-D	66.00	90.00	60000	380	163.5	5.85	3500	81.1	83.1	85.0	0.68	0.78	0.83	180.22	1566	330.0	0.3035
				460	133.4	5.89	3480	83.1	84.1	85.0	0.74	0.82	0.84	181.00			
L16100-D	75.00	100.0	60000	380	183.6	5.94	3500	83.1	85.1	86.0	0.69	0.77	0.83	205.00	1666	361.0	0.3259
				460	149.8	5.85	3480	83.1	84.1	85.0	0.75	0.82	0.85	206.00			
L16125-D	93.00	125.0	60000	380	230.3	5.19	3510	81.1	83.1	85.0	0.68	0.77	0.83	253.10	1716	378.0	0.3259
				460	183.6	4.67	3500	83.1	84.1	85.0	0.75	0.82	0.86	253.80			
L16150-D	110.0	150.0	60000	380	274.0	5.20	3510	84.1	86.1	86.0	0.69	0.78	0.84	299.40	1766	397.0	0.3407
				460	224.5	5.16	3500	84.1	86.1	86.0	0.70	0.79	0.84	300.20			
L16180-D	135.0	180.0	60000	380	313.0	5.45	3510	84.1	86.1	86.0	0.72	0.81	0.86	367.50	1826	419.0	0.3594
				460	253.5	5.15	3500	85.1	87.1	87.0	0.76	0.83	0.87	368.50			
L16200-D	150.0	200.0	60000	380	353.0	5.59	3510	84.1	87.1	87.0	0.74	0.82	0.87	408.30	1866	433.0	0.3594
				460	293.5	5.30	3500	85.1	87.1	87.0	0.76	0.83	0.87	409.50			
L16225-D	165.0	225.0	60000	380	393.0	5.83	3510	84.1	86.1	86.0	0.74	0.81	0.85	449.10	1916	451.0	0.3743
				460	333.0	5.38	3500	85.1	86.1	87.0	0.72	0.80	0.85	450.40			
L16250-D	185.0	250.0	60000	380	463.0	5.77	3510	84.1	87.1	87.0	0.65	0.76	0.83	503.60	1966	472.0	0.3966
				460	376.0	5.64	3500	85.1	87.1	87.0	0.69	0.78	0.84	505.00			

Pn: Rated output
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