

Submersible Rewindable Motor

8" WF
Standard

Quality for your borewell :

These motors are heavy duty, rewindable water filled submersible motors which are designed and sized for installation in 8" diameter or larger water wells.

Product Features :

- 8" 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.
- Motors are pre-filled with clean water + Glycol mixture.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- 8" NEMA coupling flange.
- Pressure compensation diaphragm.

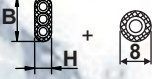
Specifications :

- Ratings: Three phase - 30 to 130 kW
- Supply voltages (Tolerance +10% / -15%):
50 Hz, 3 phase, 380 V, 400 V, 415 V
60 Hz, 3 phase, 230 V, 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:
30 to 55 kW - 25
66 to 130 kW - 20
- Water pH: 6.5 - 8
- Minimum cooling flow along the motor:
30 to 37 kW - 30 cm/sec
45 to 130 kW - 45 cm/sec
- Motor protection: Select thermal overload protection with trip time < 10 sec. at 5 x I_n
- Maximum submerged depth: 200 metres.

On Request :

- Mechanical shaft seal Sic/Sic.
- Built-in PT 100 temperature sensor.
- Special voltages.
- Double cable for Star - Delta operation.

Cable Data :

HP	Type of start	Cable x Leads x Size (mm ²)	Length [m]	H x B [mm]	
40.0 to 125.0	DOL	1 x 4 x 16	5	14 x 37.6	
150.0 to 175.0	DOL	1 x 3 x 35 + 1 x 1 x 16	5	15.3 x 35	



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Motors that are top class in Performance & Reliability

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Cable

Cable safe for drinking water.

Earth cable

Outside earth cable provided.

Sensor

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

Shaft Extension

Stainless steel splined shaft extension to NEMA

Shaft seal

Lip seal is standard. Available with mech. shaft seal in sic / sic for sandy bore well

Windings

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

Easy Maintenance

Designed for easy disassembly & repair

Efficiency

High efficiency provides energy saving.

Contamination

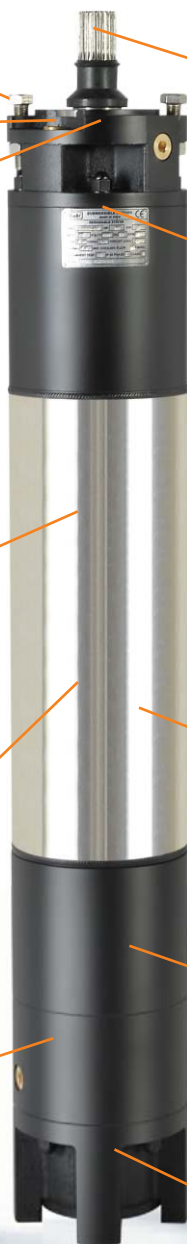
Water filled motor design prevents water contamination.

Thrust

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

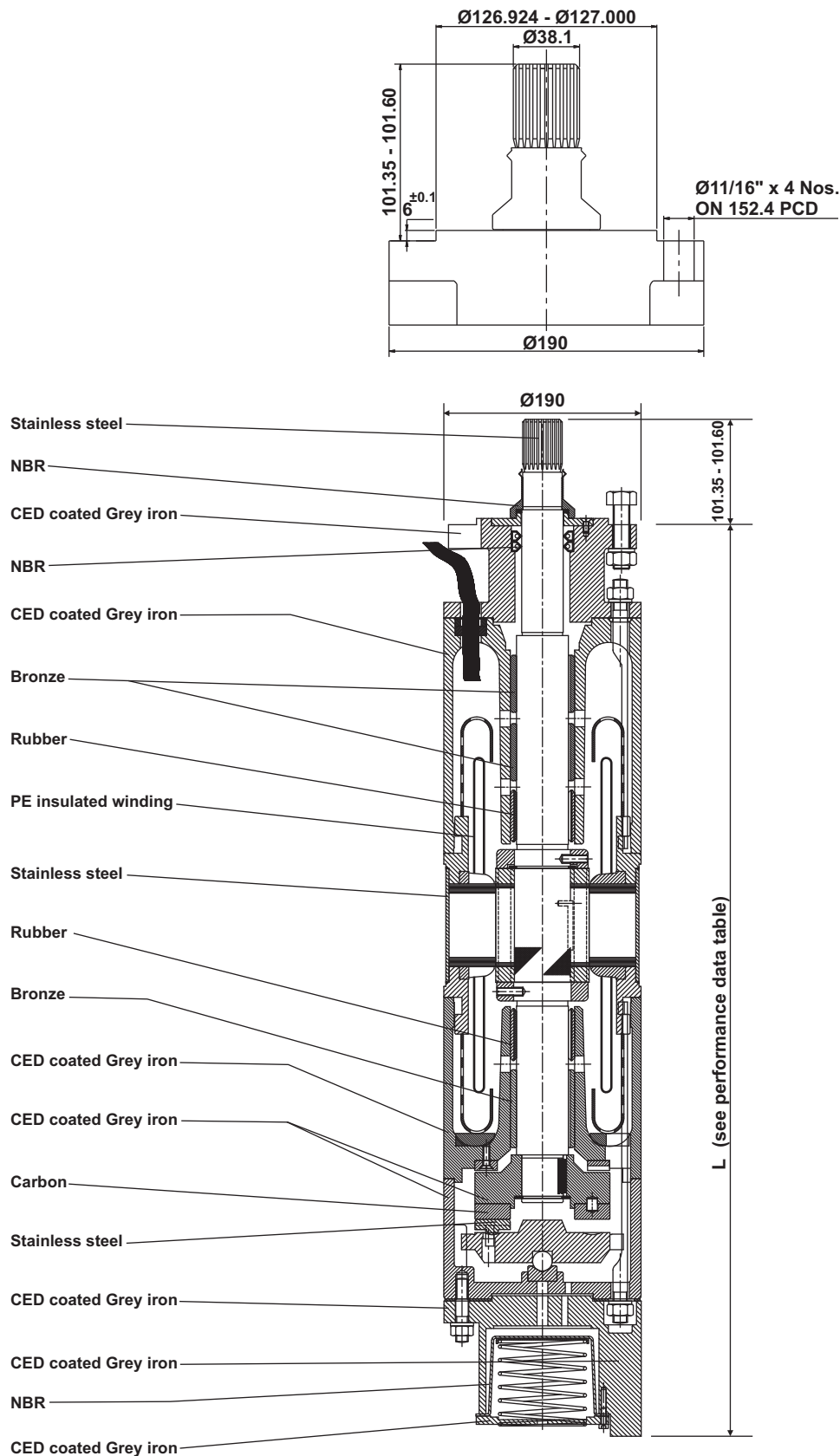
Corrosion

Water resistance CED coating used for corrosion resistance.



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Shaft :

Spline shaft: 23 teeth, 16/32 pitch, module 1.5875, 30° pressure angle, coupling tolerance 5 as per ANSI B.92.1, confirming with NEMA 8".

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8" Submersible Rewindable Motor Performance Data 50 Hz

Performance data

Motor type	Pn		Ka [N]	Un [V]	In [A]	Ist/In	n [min ⁻¹]	η [%]			COS ϕ			Tn [Nm]	L [mm]	Gross weight [kg]	Gross volume [m ³]
	kW	HP						50%	75%	100%	50%	75%	100%				
L8540-KH	30.00	40.00	45000	380	62.8	4.51	2890	79.9	83.3	84.2	0.72	0.83	0.89	99.19	1012	172.0	0.1793
				400	59.9	4.61	2900	81.1	84.1	85.0	0.71	0.84	0.89	98.84			
				415	57.8	4.66	2900	80.7	83.9	84.9	0.69	0.83	0.88	98.84			
L8550-KH	37.00	50.00	45000	380	78.0	4.70	2890	80.1	83.1	84.1	0.74	0.84	0.88	122.30	1112	194.0	0.1943
				400	75.0	4.80	2900	81.3	84.1	85.0	0.72	0.83	0.86	121.90			
				415	74.0	4.85	2900	80.7	83.5	84.4	0.70	0.80	0.84	121.90			
L8560-KH	45.00	60.00	45000	380	92.5	4.70	2890	80.3	83.3	85.2	0.73	0.87	0.88	148.80	1212	214.0	0.2130
				400	89.8	4.80	2900	81.5	84.1	85.9	0.72	0.81	0.86	148.30			
				415	88.8	4.90	2900	81.3	83.9	85.8	0.70	0.80	0.84	148.30			
L8575-KH	55.00	75.00	45000	380	113.8	4.90	2890	80.5	84.1	85.7	0.74	0.84	0.88	181.84	1262	228.0	0.2204
				400	109.5	5.00	2910	81.9	85.1	86.4	0.72	0.82	0.86	180.60			
				415	108.8	5.10	2910	81.5	84.7	86.2	0.69	0.80	0.84	180.60			
L8590-H	66.00	90.00	45000	380	135.5	4.90	2890	80.7	85.3	86.4	0.74	0.85	0.89	218.20	1433	267.0	0.2430
				400	131.0	5.00	2910	81.9	85.9	86.9	0.72	0.83	0.86	216.70			
				415	128.5	5.05	2910	81.3	85.3	86.6	0.69	0.81	0.84	216.70			
L85100-H	75.00	100.0	45000	380	151.0	4.91	2890	80.9	84.7	86.2	0.74	0.85	0.89	247.96	1480	278.0	0.2503
				400	147.0	5.01	2910	81.9	85.5	87.0	0.72	0.83	0.87	246.26			
				415	145.5	5.11	2910	81.7	85.3	86.6	0.70	0.79	0.84	246.26			
L85125-H	93.00	125.0	45000	380	186.8	4.91	2900	80.5	84.5	86.5	0.75	0.84	0.88	306.40	1620	305.0	0.2690
				400	181.0	5.01	2910	81.5	86.4	87.8	0.71	0.81	0.86	305.36			
				415	180.5	5.06	2920	81.7	85.5	87.0	0.70	0.79	0.84	304.31			
L85150-H	110.0	150.0	45000	380	231.0	4.92	2890	79.0	83.3	85.0	0.72	0.81	0.85	363.68	1750	342.0	0.2877
				400	224.0	5.02	2900	79.5	84.1	85.5	0.71	0.79	0.83	362.42			
				415	220.0	5.08	2900	80.0	84.7	86.0	0.69	0.77	0.81	362.42			
L85175-H	130.0	175.0	45000	380	273.0	4.93	2890	79.2	83.4	85.2	0.72	0.81	0.85	429.80	1950	388.0	0.3213
				400	261.0	5.02	2900	79.7	84.3	85.7	0.71	0.80	0.84	428.32			
				415	256.0	5.08	2900	80.2	84.9	86.2	0.70	0.78	0.82	428.32			

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

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8" Submersible Rewindable Motor Performance Data 60 Hz

Performance data

Motor type	Pn		Ka [N]	Un [V]	In [A]	Ist/In	n [min ⁻¹]	η [%]			COS ϕ			Tn [Nm]	L [mm]	Gross weight [kg]	Gross volume [m ³]
	kW	HP						50%	75%	100%	50%	75%	100%				
L8640-KH	30.00	40.00	45000	230	118.5	5.76	3480	81.9	83.9	85.0	0.77	0.83	0.86	82.40	962	161.0	0.1719
				380	70.1	5.66	3500	82.9	84.7	85.0	0.77	0.84	0.88	81.90			
				460	57.2	5.76	3480	82.1	84.3	85.0	0.78	0.84	0.89	82.40			
L8650-KH	37.00	50.00	45000	230	149.6	5.76	3480	82.1	83.9	85.0	0.75	0.81	0.84	101.60	1012	172.0	0.1793
				380	89.1	5.75	3500	82.7	84.7	85.4	0.76	0.82	0.85	101.00			
				460	72.2	5.75	3480	82.1	84.5	85.0	0.77	0.84	0.87	101.60			
L8660-KH	45.00	60.00	45000	230	179.8	5.75	3500	83.1	84.9	86.0	0.75	0.81	0.84	122.85	1112	194.0	0.1943
				380	107.6	5.80	3510	83.9	85.7	86.0	0.75	0.81	0.85	122.50			
				460	86.5	5.80	3500	83.3	85.5	86.3	0.76	0.82	0.87	122.85			
L8675-KH	55.00	75.00	45000	230	217.3	5.75	3500	83.2	85.3	87.0	0.75	0.80	0.84	150.00	1212	214.0	0.2130
				380	130.0	5.80	3510	84.2	86.1	87.0	0.76	0.82	0.85	149.72			
				460	104.9	5.80	3500	83.7	85.9	87.0	0.76	0.82	0.87	150.00			
L8690-H	66.00	90.00	45000	230	254.7	5.75	3500	83.3	86.1	88.0	0.74	0.81	0.85	180.20	1433	267.0	0.2430
				380	152.4	6.00	3510	84.9	87.2	88.0	0.75	0.82	0.86	179.66			
				460	124.4	6.00	3500	84.1	86.9	88.0	0.76	0.83	0.87	180.20			
L86100-H	75.00	100.0	45000	230	286.1	5.76	3500	83.5	85.9	88.0	0.75	0.82	0.86	204.70	1480	278.0	0.2503
				380	169.2	6.01	3510	85.1	87.3	88.0	0.76	0.84	0.88	204.16			
				460	139.8	6.01	3500	84.2	86.9	88.0	0.77	0.83	0.88	204.70			
L86125-H	93.00	125.0	45000	230	363.2	5.76	3500	83.7	85.7	88.0	0.75	0.81	0.84	253.80	1620	305.0	0.2690
				380	216.3	6.01	3510	84.7	87.1	88.4	0.75	0.81	0.85	253.16			
				460	174.7	6.01	3500	84.5	86.9	88.3	0.76	0.82	0.87	253.80			
L86150-H	110.0	150.0	45000	380	263.0	6.01	3500	82.3	84.7	86.0	0.75	0.81	0.85	300.29	1750	342.0	0.2877
				460	214.0	6.01	3480	82.4	84.9	86.2	0.76	0.82	0.86	302.02			
L86175-H	130.0	175.0	45000	460	250.0	6.01	3480	82.6	85.0	86.3	0.77	0.83	0.87	356.93	1950	388.0	0.3213

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NOTE