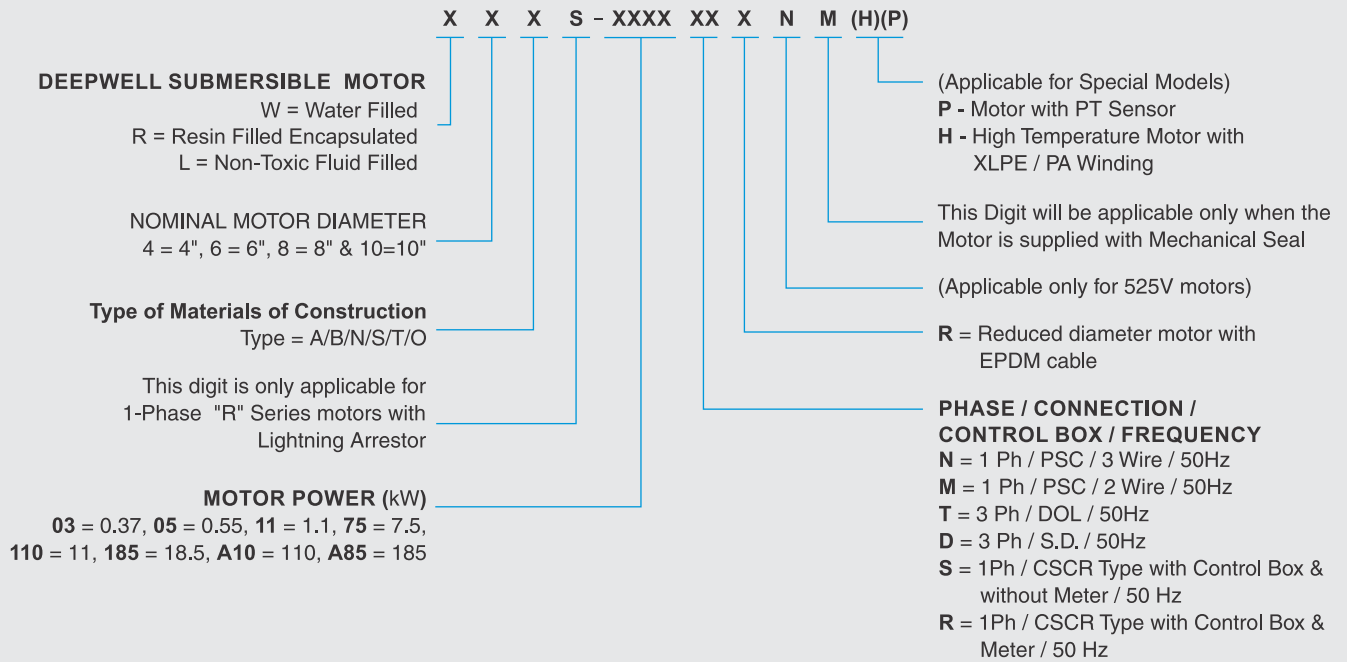


SUBMERSIBLE MOTORS



MODEL IDENTIFICATION CODE

DEEPWELL SUBMERSIBLE MOTOR



DEEPWELL SUBMERSIBLE PUMP SET (Pump + Motor)

PUMP MODEL	+	MOTOR MODEL
S X X - XXX / XX	+	X X X - XXX X

DEEPWELL SUBMERSIBLE PUMP SET (Pump + Motor)

PUMP MODEL	+	MOTOR MODEL
S6S - 18 / 03	+	W6A - 22 T

Sample Description:

L4A-03M : 0.37kW, 1Ph, 220-230V, SUB MOTOR 50Hz

R6B-110T : 11kW, 3Ph, 380-415V DL SUB MOTOR 50Hz

W10B-A85DH : 185kW, 3Ph, 380-415V SD SUB MOTOR 50Hz

OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : 4"

'L' Series Motors

4" Oil filled submersible motors are energy-efficient, durable, low maintenance, quiet, versatile, easy to install and reliable. The oil in the motor provides lubrication for the bearings, reducing wear and tear, resulting in a longer lifespan. This makes them an ideal choice for applications where durability and longevity are important. Ball and angular contact bearings are used to handle high radial and axial thrust loads. The oil in the motor also provides cooling to the motor, which helps to prevent overheating, reduce energy consumption and improve the overall efficiency of the motor.

Motor sealing is done by 'O' rings, oil seal and mechanical seal. Pressure equalizing rubber diaphragm is provided to balance the pressure and volume variation due to thermal expansion of oil into motor. Oil-filled submersible motors are often preferred in applications where the pumping depth is less than 150 meters.

Design Features

- High efficiency
- Corrosion resistant stainless-steel parts
- Extremely hardwearing ball and angular contact bearings
- Rewindable motor
- Class F insulation

Applications

These submersible motors are suitable for use with deepwell submersible pump ends.

- Ground water supply to residences and commercial buildings
- Agriculture
- Pressure boosting system
- Fountains
- Gardens
- Landscaping
- Livestock watering



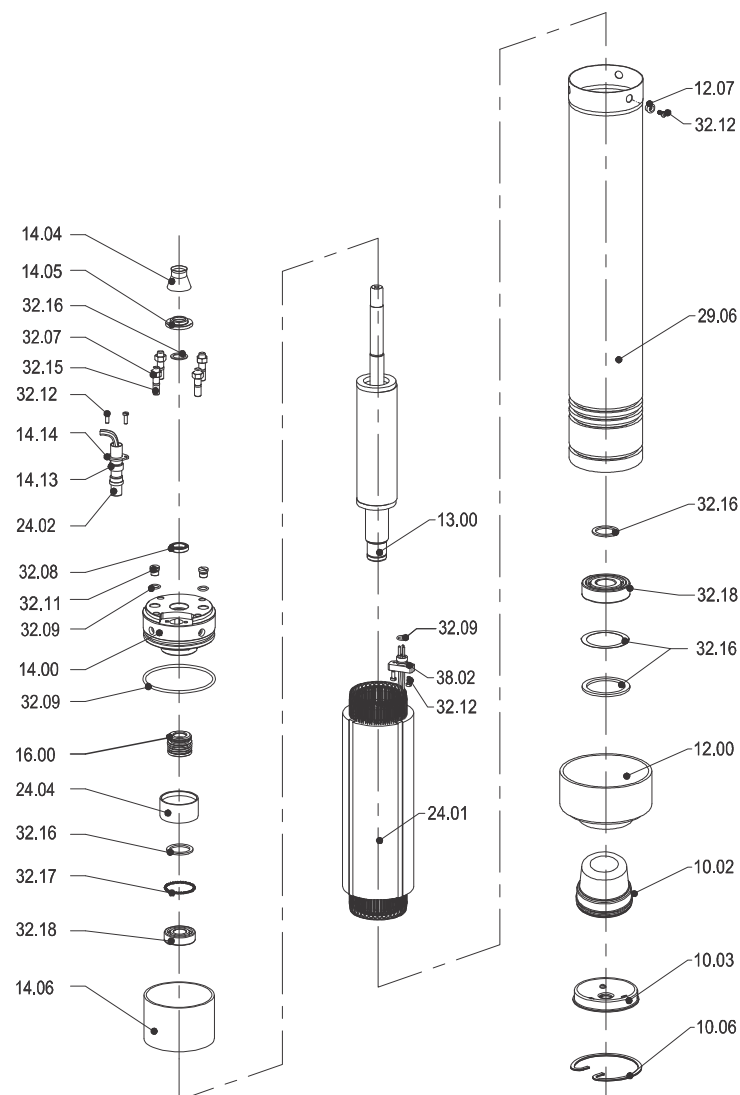
OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

"L" Series
(0.37 kW - 4 kW)

Exploded View

Single Phase : 0.37 kW - 2.2 kW
Three Phase : 0.37 kW - 4 kW



Part No.	Part Name
10.02	Diaphragm
10.03	Diaphragm Bottom Plate
10.06	Snap ring
12.00	Lower housing
12.07	Guide bush
13.00	Rotor
14.00	Upper Housing
14.04	Sand Guard - Rubber
14.05	Sand Guard - SS

Part No.	Part Name
14.06	Upper housing Pipe
14.13	Cable plug shell
14.14	Cable Clamp
16.00	Mechanical seal
24.01	Wound stator
24.02	Cable
24.04	Winding guard
29.06	Outer shell
32.07	Nut

Part No.	Part Name
32.08	Oil Seal
32.09	O-Ring
32.11	Plug
32.12	Screw
32.15	Stud
32.16	Washer
32.17	Wave washer
32.18	Bearing
38.02	Cable plug Assembly

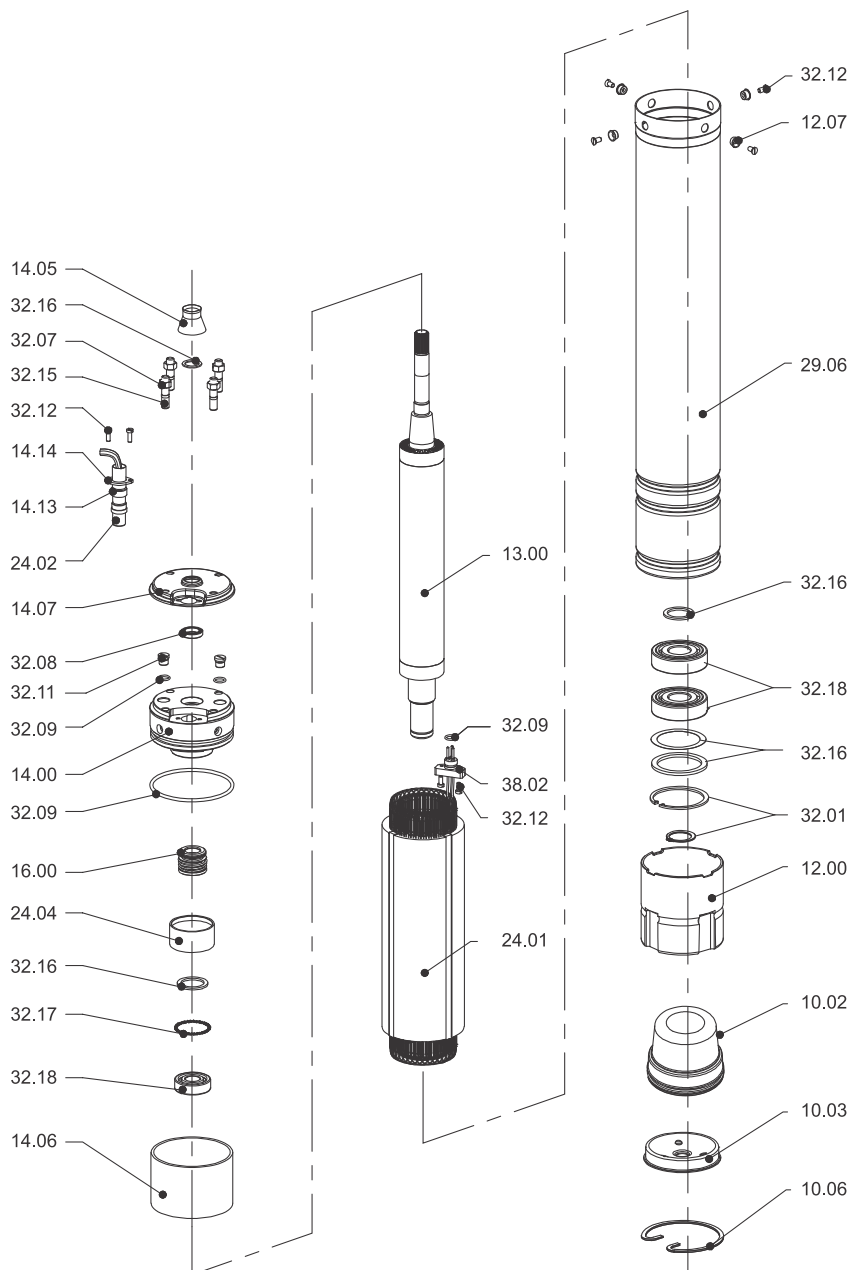
OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

"L" Series

Three Phase : 5.5 kW & 7.5 kW

Exploded View



Part No.	Part Name
10.02	Diaphragm
10.03	Diaphragm Bottom Plate
10.06	Snap ring
12.00	Lower housing
12.07	Guide bush
13.00	Rotor
14.00	Upper Housing
14.05	Sand Guard
14.06	Upper housing Pipe
14.07	Upper housing shell
14.13	Cable Plug Shell
14.14	Cable Clamp
16.00	Mechanical seal
24.01	Wound stator
24.02	Cable
24.04	Winding guard
29.06	Outer shell
32.01	Circlip
32.07	Nut
32.08	Oil Seal
32.09	O-ring
32.11	Plug
32.12	Screw
32.15	Stud
32.16	Washer
32.17	Wave Washer
32.18	Bearing
38.02	Cable Plug Assembly

OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

"L" Series

Technical Specifications

Nominal Dia	4"
Maximum Outer Diameter	98 mm
Power Range	0.37 - 2.2 kW - Single Phase
	0.37 - 7.5 kW - Three Phase
Speed	2900 rpm
Version	Single Phase - 230V, 50Hz, A.C Supply
	Three Phase - 380-415V, 50Hz, A.C Supply
Class of Insulation	F
Degree of Protection	IP68
Direction of Rotation	CCW - When viewed from driving end - Single Phase
	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	0.37 - 0.75 kW - 1500 N
	1.1 - 4.0 kW - 2500 N
	5.5 - 7.5 kW - 4500 N
Minimum Cooling Flow Along the Motor	0.15 m/sec
Maximum Liquid Temperature	35°C
Maximum Immersion Depth	150 m
Max. Starts per Hour	20 Times
Shaft End	Splines
Mounting Standard	4" NEMA
Method of Starting	Single Phase - Permanent Split Capacitor (PSC)
	Three Phase - Direct On Line (DOL)
Cable Lead out	Single Phase - 3+1 TPE Flat Cable - 0.37 - 2.2 kW
	Three Phase - 3+1 TPE Flat cable - 0.37 - 7.5 kW



OIL FILLED SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

"L" Series

Material of Construction

PART NAME	MATERIAL - L4A		
	EUROPE	DIN	AISI/SAE
Outer Shell	X5CrNi 18 9	1.4301	ASTM A240 AISI 304
Upper Housing Shell	X5CrNi 18 9	1.4301	ASTM A240 AISI 304
Upper Housing	Cast Iron - EN-GJL-220 (X5CrNi 18 9 Claded)	GG20 (1.4301 Claded)	ASTM A48 Class 30 B (ASTM A240 AISI 304 Claded)
Lower Housing	0.37 - 2.2kW -ADC12 3 - 7.5kW - Cast Iron - EN-GJL-220 (X5CrNi 18 9 Claded)	0.37 - 2.2kW - ADC12 3 - 7.5kW - GG20 (1.4301 Claded)	0.37 - 2.2kW - ADC12 ASTM A383 3 - 7.5kW - ASTM A48 Class 30 B (ASTM A240 AISI 304 Claded)
Diaphragm	HNBR (ASTM - D2000)	HNBR (ASTM - D2000)	HNBR (ASTM - D2000)
Sand Guard, O Ring & Oil Seal	Standard - NBR (Buna - N)	Standard - NBR (Buna - N)	Standard - NBR (Buna - N)
Shaft Seal	Mechanical Seal (Carbon, Ceramic, NBR (Buna - N)	Mechanical Seal (Carbon, Ceramic, NBR (Buna - N)	Mechanical Seal (Carbon, Ceramic, NBR (Buna - N)
Shaft Shell	X5CrNi 18 9	1.4301	ASTM A240 AISI 304
Shaft	0.37 - 1.5kW - X20Cr13 2.2 - 7.5kW - EN8	0.37 - 1.5kW - 1.4021 2.2 - 7.5kW - CK45 (1.1191) with Shaft End	0.37 - 1.5kW - ASTM A276 AISI 420 2. - 7.5 kW - ASTM A29 AISI 1045
Shaft Extention	X5CrNiCuNb 16 4	1.4542	ASTM A693 AISI 630 (UNS S17400)

OIL FILLED SUBMERSIBLE MOTORS

Electrical Data

SINGLE PHASE, 230V

Model	kW	HP	F.L. Current (A)	Starting Current (A)	Full load		Capacitor (MFD)	Thrust Load (N)
					Efficiency (%)	Power Factor		
L4A-03N	0.37	0.5	3.6	10.4	53	0.92	15	1500
L4A-05N	0.55	0.75	4.8	13.6	58	0.92	20	1500
L4A-07N	0.75	1	6.3	17.6	60	0.96	30	1500
L4A-11N	1.1	1.5	8.6	21.1	64	0.98	40	2500
L4A-15N	1.5	2	11.5	35	72	0.98	50	2500
L4A-22N	2.2	3	15	52	70	0.95	60	2500

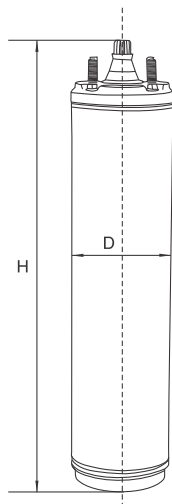
THREE PHASE, 380V

Model	kW	HP	F.L. Current (A)	Starting Current (A)	Full load		Thrust Load (N)
					Efficiency (%)	Power Factor	
L4A-03T	0.37	0.5	1.1	5.2	63	0.80	1500
L4A-05T	0.5	0.75	1.9	9.3	63	0.80	1500
L4A-07T	0.75	1	2.4	11.1	64	0.81	1500
L4A-11T	1.1	1.5	3.15	13	68	0.82	2500
L4A-15T	1.5	2	4.2	19.5	72	0.82	2500
L4A-22T	2.2	3	6	28	72	0.83	2500
L4A-30T	3	4	7.8	40.2	75	0.83	2500
L4A-37T	3.7	5	9.6	48	75	0.83	2500
L4A-40T	4	5.5	10	51	77	0.83	2500
L4A-55T	5.5	7.5	13.6	71.1	78	0.85	4500
L4A-75T	7.5	10	17.6	87.8	79	0.85	4500

THREE PHASE, 415V

Model	kW	HP	F.L. Current (A)	Starting Current (A)	Full load		Thrust Load (N)
					Efficiency (%)	Power Factor	
L4A-03T	0.37	0.5	1.3	7	63	0.74	1500
L4A-05T	0.55	0.75	2.1	11.2	66	0.73	1500
L4A-07T	0.75	1	2.7	13.8	71	0.75	1500
L4A-11T	1.1	1.5	3.7	19	72	0.72	2500
L4A-15T	1.5	2	4.9	25	73	0.72	2500
L4A-22T	2.2	3	6.1	30	73	0.73	2500
L4A-30T	3	4	8	41	73	0.73	2500
L4A-37T	3.7	5	9.9	49	74	0.72	4500
L4A-40T	4	5.5	10.5	56	75	0.73	4500
L4A-55T	5.5	7.5	14.5	73	75	0.72	4500
L4A-75T	7.5	10	19	82	78	0.78	4500

DIMENSIONS AND WEIGHT DATA



Model	kW	HP	Phase	Dia (mm) D	Height (mm) H	Net Weight (kg)	Cable Leadout	
							Cable Size (Sq mm)	Cable Length (m)
L4A-03N	0.37	0.5	Single	97.5	375	8.3	1.5	1.5
L4A-05N	0.55	0.75	Single	97.5	390	9	1.5	1.5
L4A-07N	0.75	1	Single	97.5	425	10.7	1.5	1.5
L4A-11N	1.1	1.5	Single	97.5	440	11.3	1.5	1.5
L4A-15N	1.5	2	Single	97.5	465	12.6	2	1.5
L4N-22N	2.2	3	Single	97.5	515	14.2	2.3	2
L4A-03T	0.37	0.5	Three	97.5	375	8.3	1.5	1.5
L4A-05T	0.55	0.75	Three	97.5	390	9	1.5	1.5
L4A-07T	0.75	1	Three	97.5	425	10.7	1.5	1.5
L4A-11T	1.1	1.5	Three	97.5	440	11.3	1.5	1.5
L4A-15T	1.5	2	Three	97.5	465	12.6	1.5	1.5
L4A-22T	2.2	3	Three	97.5	495	14.2	1.5	2
L4A-30T	3	4	Three	97.5	590	18.6	2	2
L4A-37T	3.7	5	Three	97.5	640	21	2	2
L4A-40T	4	5.5	Three	97.5	640	21	2	2
L4A-55T	5.5	7.5	Three	95	730	24.8	2.3	3
L4A-75T	7.5	10	Three	95	850	30.4	2.3	3