WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Wellrounder

"W" Series Motors

These motors are eco-friendly, wet type, water filled and rewindable. The stator windings are of water proof synthetic film insulated copper winding wires. It features water lubricated thrust and journal bearings. Motor is pre-filled with clear, cold, pure, fresh, filtered propylene glycon (anti-freez agent) mixed water. Before commissioning, ensure the pre-filled level of water inside the motor. If any loss of volume is noticed, refill with clear, cold, pure, fresh, filtered water, through water filling plugs / valves provided in the upper housing. Where the use of anti-freeze agent mixed water is not be allowed for special applications, these motors can also be filled with clear, cold, pure, fresh, filtered water and operated. Dynamically balanced rotors maintains uniform clearance thereby giving 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 and up thrust loads with minimum wear and tear.

The unique design of thrust bearings create a wedge of water between the shoe and the disc, and thereby providing better water lubrication and increases the life cycle of the thrust bearings. Pressure equalizing rubber diaphragm is provided to balance the pressure and volume variations of the water inside the motor. Motor sealing are made by means of 'O' rings. Shaft seals and sand guard prevents ingress of well water, sand and fiber particles into the motor. Care should betaken to ensure that the motor does not run when it is not submerged in the water, To prevent the motor from dry running, install water level monitor/dry run preventor. The motor needs a constant flow of water passed over it's body to keep it at correct operating temperature. Ideally the motors should be set just above the final yield point of bore well and when the level is not ascertained, fit a "flow inducer pipe" over the pumpset to ensure adequate cooling. It is mandatory to use C.R.I. Control boxes for all motors with adequate protection & control systems. Mounting dimensions of these motors are in accordance with NEMA standard.

Features

- Water cooled Re-windable motor
- Can be easily dismantled and repaired
- High operating efficiency
- Extremely hardwearing and water lubricated bearings
- Specially designed thrust bearing to withstand high axial loads.
- AISI 630 (17.4 PH) motor shaft extension for longer life.

Applications

These prime mover submersible motors are suitable to couple with deepwell submersible pumpends used for

- Residential
- Irrigation
- Fountains
- Industrial water supply
- Pressure boosting units
- Gardens
- Sprinkler systems
- Mining
- Oil & Gas
- De-watering
- CBM (coal bed methane)

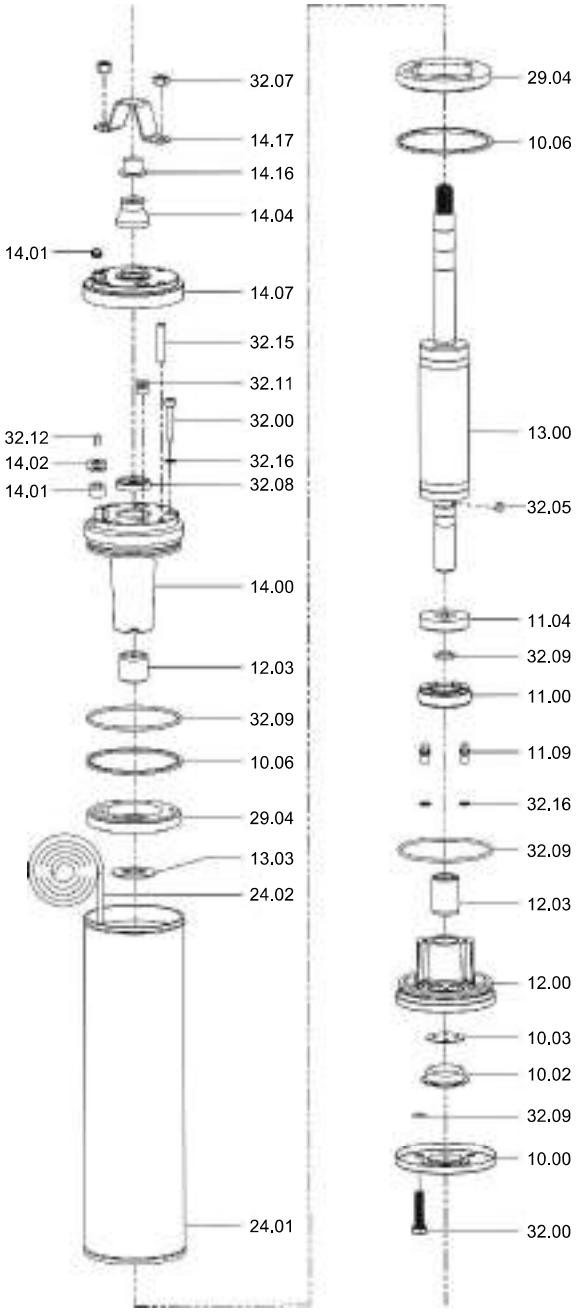
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

"W" Series
(Upto 2 HP)

Wellrounder

Exploded view



Part No.	Part Name
10.00	Motor Base
10.02	Diaphragm
10.03	Diaphragm Plate
10.06	Snap Ring
11.00	Thrust Base
11.04	Thrust Pad
11.09	Rocker Screw
12.00	Lower Housing
12.03	Bush
13.00	Rotor
13.03	Up Thrust Washer
14.00	Upper Housing
14.01	Cable Grommet
14.02	Grommet Clamp
14.04	Rubber Sand Guard
14.07	Upper Housing Shell
14.16	Motor Cap
14.17	Motor Clamp
24.01	Wound Stator
24.02	Lead Out Cable
29.04	Flange
32.00	Bolt
32.05	Key
32.07	Nut
32.08	Oil Seal
32.09	O Ring
32.11	Drain Plug
32.12	Screw
32.15	Stud
32.16	Washer

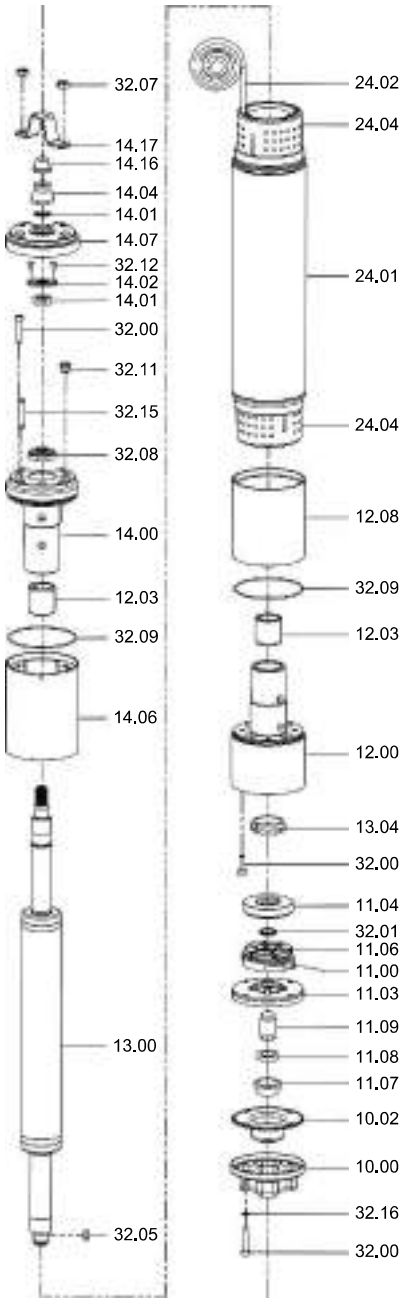
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

"W" Series
(3HP & above)

Wellrounder

Exploded view



Part No.	Part Name
10.00	Motor Base
10.02	Diaphragm
11.00	Thrust Base
11.03	Thrust Base Plate
11.04	Thrust Pad
11.06	Thrust Segment
11.07	Rocker Screw Cap
11.08	Rocker Screw Nut
11.09	Rocker Screw
12.00	Lower Housing
12.03	Bush
12.08	Lower Pipe
13.00	Rotor
13.04	Counter Thrust Pad
14.00	Upper Housing
14.01	Cable Grommet
14.02	Grommet Clamp
14.04	Rubber Sand Guard
14.06	Upper Pipe
14.07	Upper Housing Shell
14.16	Motor Cap
14.17	Motor Clamp
24.01	Wound Stator
24.02	Lead Out Cable
24.04	Winding Guard
32.00	Bolt
32.01	Circlip
32.05	Key
32.07	Nut
32.08	Oil Seal
32.09	O Ring
32.11	Drain Plug
32.12	Screw
32.15	Stud
32.16	Washer

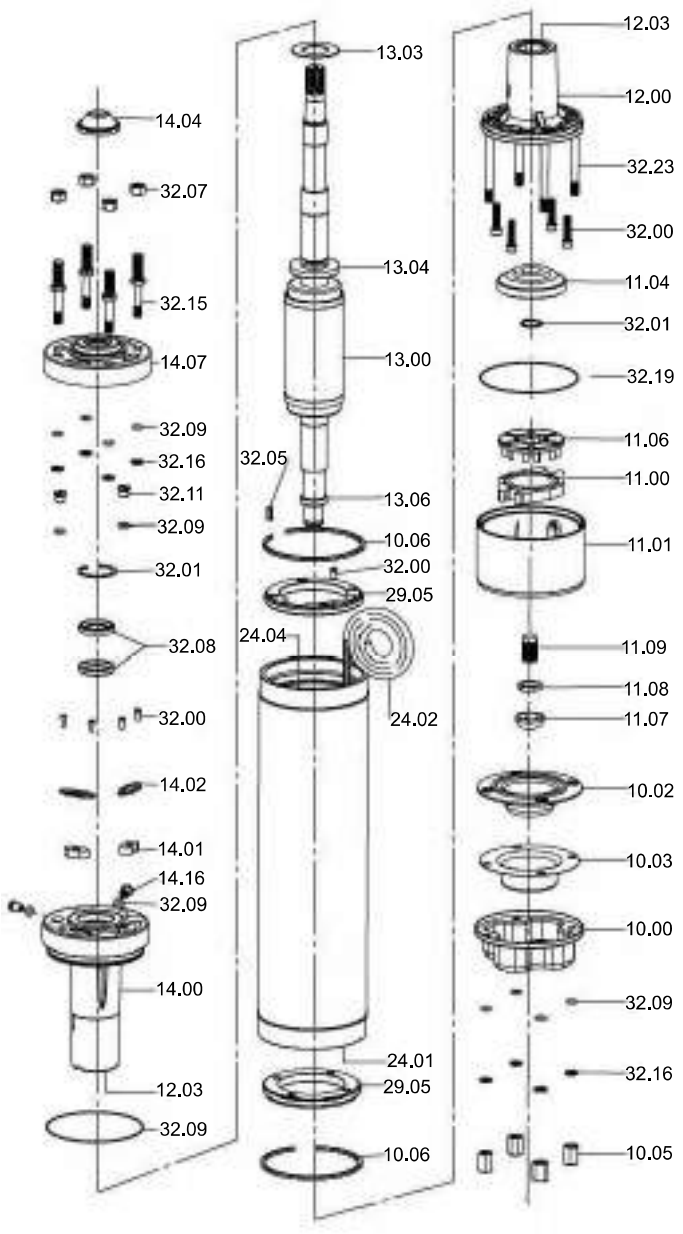
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **6"**

"W" Series

Wellrounder

Exploded view



Part No.	Part Name
10.00	Motor Base
10.02	Diaphragm
10.03	Diaphragm Bottom Plate
10.05	Doom Nut
10.06	Snap Ring
11.00	Thrust Base
11.01	Thrust Base Housing
11.04	Thrust pad
11.06	Thrust Segment
11.07	Rocker cap
11.08	Rocker Lock Nut
11.09	Rocker Screw
12.00	Lower Housing
12.03	Bush-Carbon
13.00	Rotor
13.03	Up Thrust Washer
13.04	Counter Thrust Pad
13.06	Pad Supporting Ring
14.00	Upper Housing
14.01	Cable Grommet
14.02	Cable Grommet Lock Plate
14.04	Sand Guard Rubber
14.07	Upper Housing Shell
14.16	Inlet / Outlet Valve
24.01	Wound Stator
24.02	Cable
24.04	Winding Guard
29.05	Retaining Ring
32.00	Bolt
32.01	Circlip
32.05	Key
32.07	Nut
32.08	Oil Seal
32.09	O-Ring
32.11	Plug
32.15	Stud
32.16	Washer
32.19	Gasket
32.23	Tie Rod

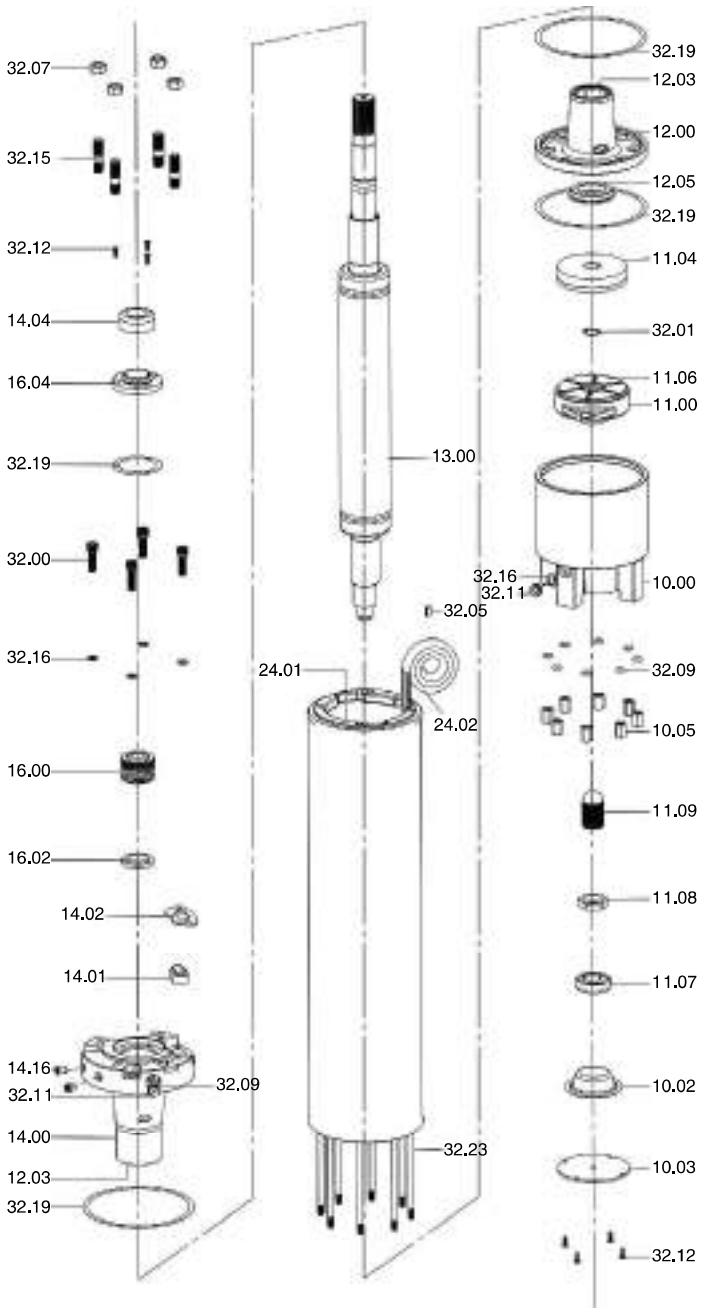
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **8"**

"W" Series

Wellrounder

Exploded view



Part No.	Part Name
10.00	Motor Base
10.02	Diaphragm
10.03	Diaphragm Bottom Plate
10.05	Doom nut
11.00	Thrust Base
11.04	Thrust Pad
11.06	Thrust Segment
11.07	Rocker Cap
11.08	Rocker Lock nut
11.09	Rocker Screw
12.00	Lower Housing
12.03	Bush-Carbon
12.05	Counter Thrust Ring
13.00	Rotor
14.00	Upper Housing
14.01	Cable Grommet
14.02	Cable Grommet Lock Plate
14.04	Sand Guard-Rubber
14.16	Inlet / Outlet Valve
16.00	Mechanical Seal
16.02	Mechanical Seal Rest Washer
16.04	Mechanical Seal Guide Plate
24.01	Wound Stator
24.02	Cable
32.00	Bolt
32.01	Circlip
32.05	Key
32.07	Nut
32.09	O-ring
32.11	Plug
32.12	Screw
32.15	Stud
32.16	Washer
32.19	Gasket
32.23	Tie Rod

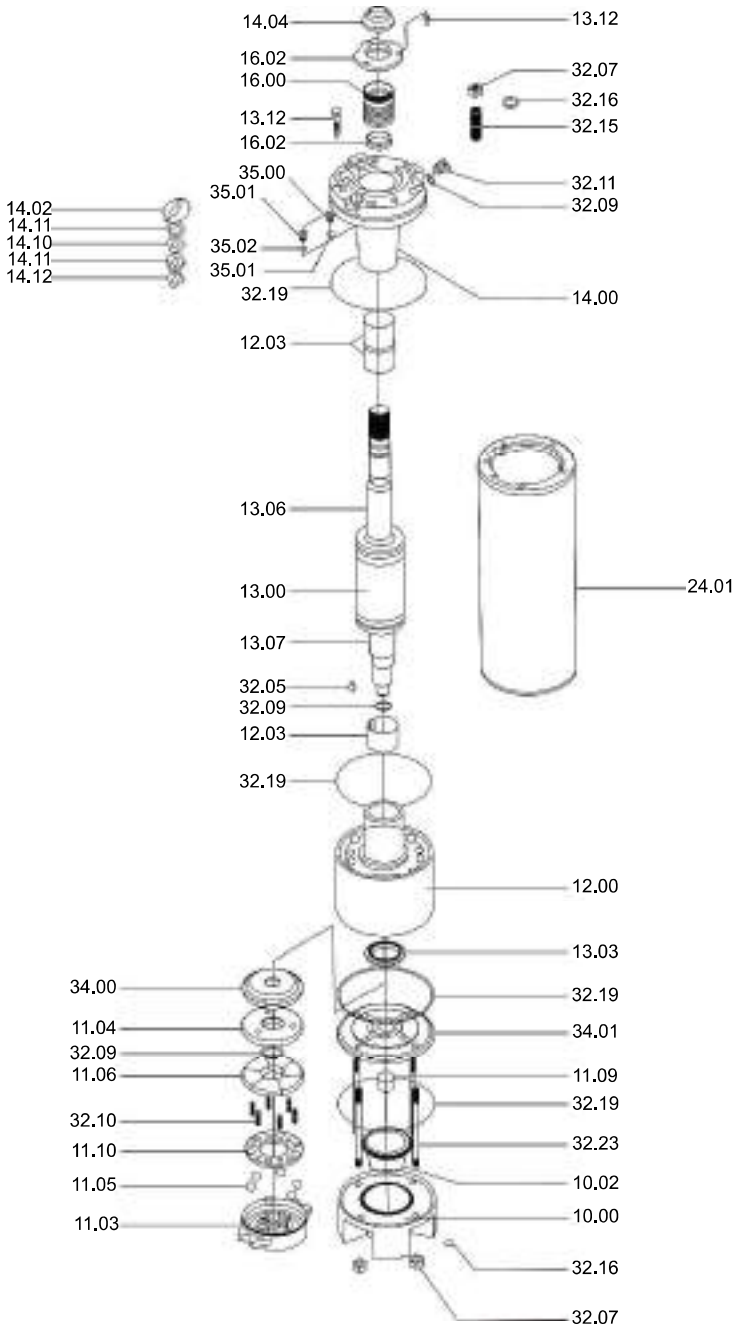
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **10"**

"W" Series

Wellrounder

Exploded view



Part No.	Part Name
10.00	Motor Base
10.02	Diaphragm
11.03	Thrust Bearing Bottom
11.04	Thrust Pad
11.05	Ball
11.09	Rocker Screw
12.00	Lower Housing
12.03	Bush
13.00	Rotor
13.03	Upthrust Washer
13.06	Rotor Sleeve
13.07	Rotor Sleeve
14.00	Upper Housing
14.02	Grommat Locking Plate
14.04	Rubber Sand Guard
14.10	Cable clamping Plate
14.11	Cable clamping Plastic
14.12	Cable Clamping Washer
16.00	Mechanical Seal
16.02	Mechanical Seal Clamp Plate
24.01	Wound Stator
32.01	Circlip
32.05	Pad Key
32.07	Nut
32.09	"O" Ring
32.10	Segment Guide Pin
32.11	Drain Plug
32.12	Screw
32.15	Stud
32.16	Washer
32.19	Gasket
32.23	Tie Rod
34.00	Thrust Pad Holder
34.01	Adjustment Cover
35.00	PT Sensor Cap
35.01	PT Sensor Dummy
35.02	' O " Ring

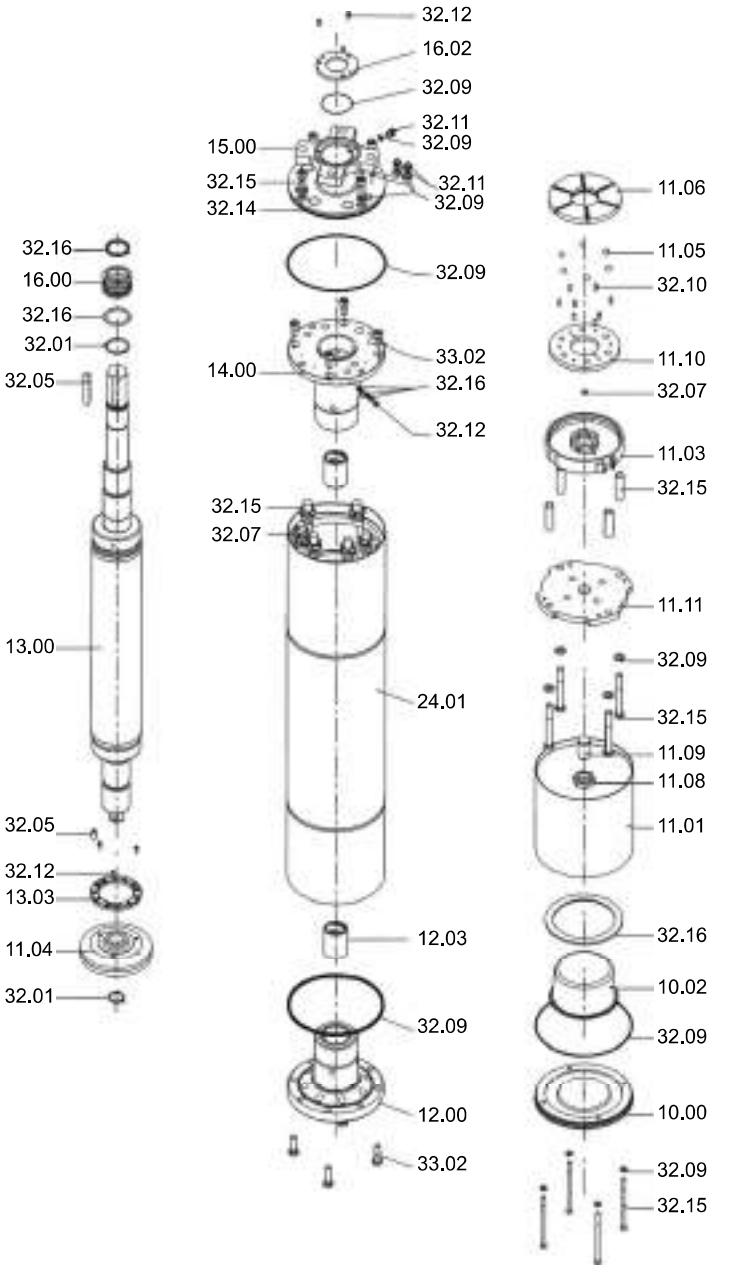
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **12"**

"W" Series

Wellrounder

Exploded view



Part No.	Part Name
10.00	Motor base
10.02	Diaphragm
11.01	Thrust base housing
11.03	Thrust bearing bottom
11.04	Thrust Pad
11.05	Ball
11.06	Thrust segment
11.08	Rocker screw nut
11.09	Rocker screw
11.10	Ball guide ring
11.11	Thrust bearing base plate
12.00	Lower housing
12.03	Bush
13.00	Rotor
13.03	Upthrust Washer
14.00	Upper housing
15.00	Seal housing
16.00	Mechanical seal
16.02	Mechanical seal clamp plate
24.01	Wound stator
32.01	Circlip
32.05	Key
32.07	Nut
32.09	O - Ring
32.10	Segment guide pin
32.11	Drain plug
32.12	Screw
32.15	Stud
32.16	Washer
32.23	Tie rod
33.02	Bolt

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

"W" Series

Wellrounder

Specifications

Nominal Dia	**4" (100mm)**
Maximum Outer Diameter	97 mm
Power Range	0.37 kW to 2.2 kW - Single Phase
	(Incorporated with Thermal Overload Protector)
	0.37 kW to 7.5 kW - Three Phase
Speed	2900 rpm
Version	Single Phase - 230 V, 50 Hz, A.C Supply
	Three Phase - 380 V - 415 V, 50 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 58
Direction of Rotation	CCW - Single Phase
	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	0.37 kW to 1.5 kW - 3000 N
	2.2 kW to 7.5 kW - 6500 N
Minimum Cooling Flow Along the Motor	0.15 m/sec
Maximum Liquid Temperature	33°C
Starts per Hour	20 Times
Shaft Type	Splined as per NEMA Standard
Mounting Standard	NEMA Standard
Method of Starting	Single Phase - Capacitor Start Capacitor Run (CSCR)
	Three Phase - Direct On Line (DOL)
Cable Lead out	Permanently Connected and Sealed 3/4 Core TPE/EPDM Rubber Flat Cable

Type - A/N

Materials of Construction

Part Name	Type - A	Type - N
Shaft Seal	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)
Housing Shell	SS - 304	SS - 316
Stator Shell	SS - 304 / 441	SS - 316
Thrust Pad	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber
Motor Base	SS - 304	SS - 316
Bush	LTB	LTB

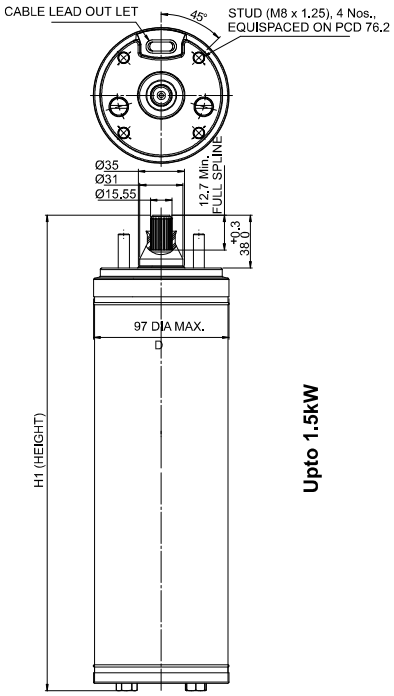
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **4"**

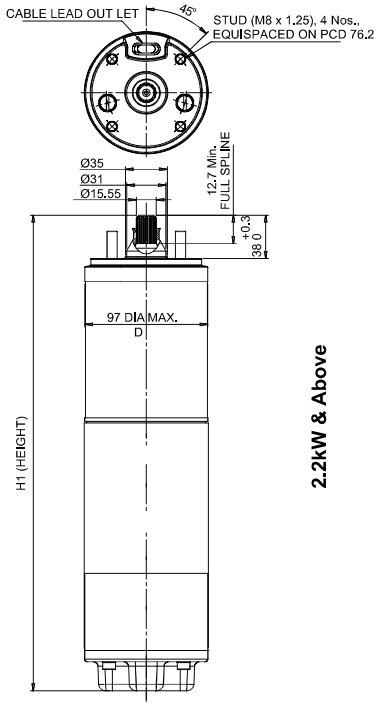
"W" Series

Wellrounder

Technical Data



Upto 1.5kW



2.2kW & Above

ALL DIMENSIONS ARE IN mm

SPLINED SHAFT : 14 TEETH - MODULE 1.5875
PRESSURE ANGLE 30°, A.N.S.I. B-92-1-1970 COUPLING CLASS 5

4" SINGLE PHASE 230V 3 WIRE MOTORS

Model	Motor Power		Full Load Max.(A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
	kW	HP			Eff.%	Power Factor			
W4A-03S	0.37	0.5	5	16	39	0.89	3000	2	1.2
W4A-05S	0.55	0.75	6	21	52	0.9	3000	2.9	1.8
W4A-07S	0.75	1	7.5	26	54	0.9	3000	4.1	2.5
W4A-11S	1.1	1.5	10	40	57	0.95	3000	6.1	3.7
W4A-15S	1.5	2	12	48	60	0.95	3000	8.3	4.9
W4A-22S	2.2	3	16.5	66	62	0.95	6500	13.3	7.4

4" THREE PHASE 380-415V D.O.L MOTORS

Model	Motor Power		Full Load Max.(A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
	kW	HP			Eff. %	Power Factor			
W4A-03T	0.37	0.5	1.8	5	48	0.75	3000	2.2	1.2
W4A-05T	0.55	0.75	2.3	7	57	0.75	3000	3.4	1.9
W4A-07T	0.75	1	2.8	9	64	0.75	3000	4.5	2.5
W4A-11T	1.1	1.5	3.8	15	67	0.76	3000	6.7	3.7
W4A-15T	1.5	2	4.6	19	69	0.79	3000	9	5
W4A-22T	2.2	3	7	32	70	0.73	6500	14.1	7.5
W4A-30T	3	4	9	42	72	0.72	6500	19	10
W4A-37T	3.7	5	10	44	71	0.76	6500	22	12.4
W4A-40T	4	5.5	10.3	47	69	0.76	6500	23	12.4
W4A-55T	5.5	7.5	14	71	70	0.74	6500	33.7	18.7
W4A-75T	7.5	10	18.5	93	73	0.74	6500	45.2	25.1

DIMENSIONS AND WEIGHT

Model	Motor Power		*Method of Starting	Dimension (mm)		Nett Weight (kg) (approx.)	Cable leadouts	
	kW	HP		D	H1		Cable Size (Sq.mm)	Cable Length (m)
W4A-03S	0.37	0.5	S	97	496	11.6	1.5	1.5
W4A-05S	0.55	0.75	S	97	511	12.6	1.5	1.5
W4A-07S	0.75	1	S	97	556	13.8	1.5	1.5
W4A-11S	1.1	1.5	S	97	596	15.7	2.5	1.5
W4A-15S	1.5	2	S	97	646	17.7	2.5	1.5
W4A-22S	2.2	3	S	97	806	33.4	2.5	2
W4A-03T	0.37	0.5	T	97	496	11.7	1.5	1.5
W4A-05T	0.55	0.75	T	97	511	13.3	1.5	1.5
W4A-07T	0.75	1	T	97	576	15.2	1.5	1.5
W4A-11T	1.1	1.5	T	97	626	16.6	1.5	1.5
W4A-15T	1.5	2	T	97	666	17.1	1.5	1.5
W4A-22T	2.2	3	T	97	741	27.6	1.5	2
W4A-30T	3	4	T	97	806	29.5	1.5	2
W4A-37T	3.7	5	T	97	846	32.9	2.5	2
W4A-40T	4	5.5	T	97	846	32.9	2.5	2
W4A-55T	5.5	7.5	T	97	970	38.3	2.5	3
W4A-75T	7.5	10	T	97	1210	44.8	2.5	3

* **METHOD OF STARTING** : **S -** 1P / CSCR / 3 Wire / 50Hz **T -** 3P / D.O.L. / 50Hz

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **6"**

"W" Series

Wellrounder

Specifications

Nominal Dia	**6" (150mm)**
Maximum Outer Diameter	W6A / N - 143 mm
Power Range	4 kW to 45 kW - Three Phase
Speed	2900 rpm
Version	Three Phase - 380 V, 400 V, 415 V & 525 V, 50 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 58 / IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	4 kW to 22 kW - 15500 N
	26 kW to 45 kW - 27500 N
Minimum Cooling Flow Along the Motor	0.15 m/sec
Maximum Liquid Temperature	33°C
Starts per Hour	20 Times
Shaft Type	Splined as per NEMA Standard
Mounting Standard	NEMA Standard
Method of Starting	4 kW to 45 kW - Direct On Line (DOL)
	5.5 kW to 45 kW - Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core EPDM Rubber Flat Cable
Thermal Protection	High Temperature Motors for 70°C / 90°C can be supplied with PT Sensor and XLPE / PA Winding

Materials of Construction

Part Name	Type - A	Type - N
Shaft Seal / Mechanical Seal	Nitrile Rubber (NBR) / Ceramic - Carbon	Nitrile Rubber (NBR) / Ceramic - Carbon
Upper & Lower Housings	Cast Iron	Cast Iron
Stator Shell	SS - 304 / SS - 441	SS - 316
Thrust Pad	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber
Motor Base	SS - 304	SS - 316
Upper Housing Shell	SS - 304	SS - 316
Shaft	EN-8	EN-8
Shaft Extension	17.4 Ph	17.4 Ph
Sleeves	SS - 431	SS - 431

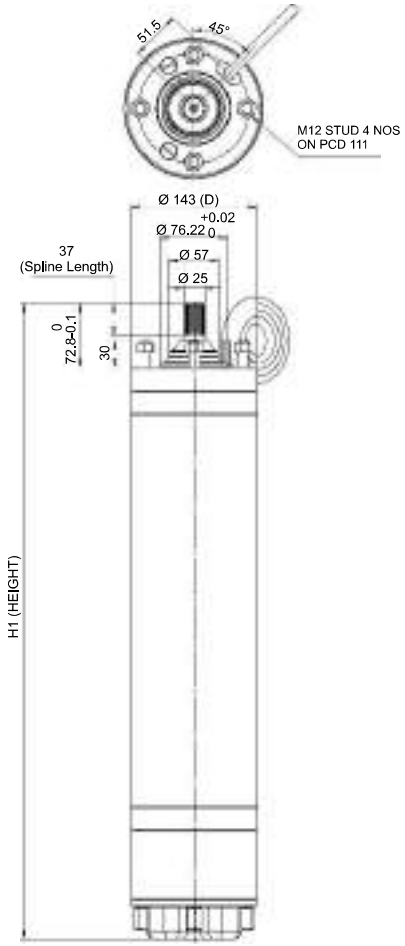
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **6"**

"W" Series

Wellrounder

Technical Data



All Dimensions are in mm
Splined Shaft : 15 teeth - Module 1.5875
Pressure Angle 30°
A.N.S.I.B-92-1-1970
Tolerance Class 5

6" THREE PHASE 380V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Eff.%	Power Factor	Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP							
W6A-40T	-	4	5.5	11	41	76	0.72	15500N	20	14
W6A-45T	-	4.5	6	12.5	46	76	0.77	15500N	21	15
W6A-55T	W6A-55D	5.5	7.5	13.7	50	78	0.78	15500N	24	18
W6A-75T	W6A-75D	7.5	10	19	67	82	0.76	15500N	27	25
W6A-93T	W6A-93D	9.3	12.5	22	81	82	0.8	15500N	35	31
W6A-110T	W6A-110D	11	15	26	99	82	0.81	15500N	43	37
W6A-130T	W6A-130D	13	17.5	30	115	83	0.81	15500N	51	43
W6A-150T	W6A-150D	15	20	34	145	83	0.82	15500N	62	49
W6A-185T	W6A-185D	18.5	25	43	185	83	0.82	15500N	98	61
W6A-220T	W6A-220D	22	30	50	222	83	0.82	15500N	115	73
W6A-260T	W6A-260D	26	35	57	267	83	0.83	27500N	130	85
W6A-300T	W6A-300D	30	40	68	352	83	0.83	27500N	190	97
W6A-370T	W6A-370D	37	50	84	416	82	0.82	27500N	240	122
W6A-450T	W6A-450D	45	60	95	461	82	0.82	27500N	390	150

6" THREE PHASE 50Hz, 400V, D.O.L. & S.D MOTORS

Models		Motor Power		Full Load Max (A)	Starting Current (A)	Eff.%	Power Factor	Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP							
W6A-40T	-	4	5.5	10.8	42	76	0.72	15500N	19	13
W6A-45T	-	4.5	6	12.2	47	77	0.77	15500N	20	14
W6A-55T	W6A-55D	5.5	7.5	13.5	51	78	0.78	15500N	23	17
W6A-75T	W6A-75D	7.5	10	18.5	68	83	0.76	15500N	26	24
W6A-93T	W6A-93D	9.3	12.5	21.5	82	83	0.8	15500N	34	30
W6A-110T	W6A-110D	11	15	25	100	82	0.81	15500N	42	36
W6A-130T	W6A-130D	13	17.5	29.5	116	83	0.81	15500N	50	42
W6A-150T	W6A-150D	15	20	33.5	146	83	0.82	15500N	61	48
W6A-185T	W6A-185D	18.5	25	42.5	186	83	0.82	15500N	97	60
W6A-220T	W6A-220D	22	30	49.5	223	83	0.82	15500N	115	73
W6A-260T	W6A-260D	26	35	56.5	268	83	0.83	27500N	135	85
W6A-300T	W6A-300D	30	40	67.5	353	83?	0.83	27500N	190	97
W6A-370T	W6A-370D	37	50	83	418	83	0.82	27500N	240	122
W6A-450T	W6A-450D	45	60	94	463	83	0.82	27500N	390	150

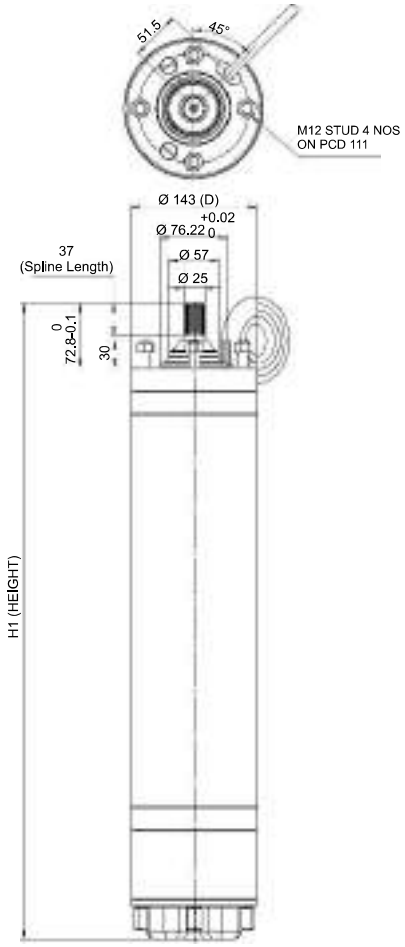
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **6"**

"W" Series

Wellrounder

Technical Data



All Dimensions are in mm
Splined Shaft : 15 teeth - Module 1.5875
Pressure Angle 30°
A.N.S.I.B-92-1-1970
Tolerance Class 5

6" THREE PHASE 415V, D.O.L. & S.D MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP			Eff.%	Power Factor			
W6A-40T	-	4	5.5	10.8	43	76	0.70	15500	20	14
W6A-45T	-	4.5	6	12	48	76	0.75	15500	21	15
W6A-55T	W6A-55D	5.5	7.5	13.5	52	78	0.77	15500	24	18
W6A-75T	W6A-75D	7.5	10	18.5	70	82	0.75	15500	27	25
W6A-93T	W6A-93D	9.3	12.5	21	84	82	0.79	15500	35	31
W6A-110T	W6A-110D	11	15	25	102	82	0.80	15500	43	37
W6A-130T	W6A-130D	13	17.5	29.5	118	83	0.80	15500	51	43
W6A-150T	W6A-150D	15	20	33	148	83	0.81	15500	62	49
W6A-185T	W6A-185D	18.5	25	42.5	188	83	0.81	15500	98	61
W6A-220T	W6A-220D	22	30	49.2	225	83	0.81	15500	118	74
W6A-260T	W6A-260D	26	35	56.5	270	83	0.82	27500	138	86
W6A-300T	W6A-300D	30	40	67.2	355	83	0.82	27500	196	98
W6A-370T	W6A-370D	37	50	83	420	82	0.83	27500	245	123
W6A-450T	W6A-450D	45	60	93	465	82	0.83	27500	396	151

6" THREE PHASE 525V, D.O.L. & S.D. MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
D.O.L	S.D	kW	HP			Eff.%	Power Factor			
W6A-55TN	W6A-55DN	5.5	7.5	11	45	79.3	0.72	15500	24	18.4
W6A-75TN	W6A-75DN	7.5	10	15	60	75	0.81	15500	28	24.5
W6A-93TN	W6A-93DN	9.3	12.5	19.5	85	78.3	0.8	15500	35	30.6
W6A-110TN	W6A-110DN	11	15	20	95	82.5	0.8	15500	43.2	36.7
W6A-130TN	W6A-130DN	13	17.5	22.5	112	83	0.82	15500	51	43
W6A-150TN	W6A-150DN	15	20	27	135	82.5	0.82	15500	61.8	49
W6A-185TN	W6A-185DN	18.5	25	30.5	152	86	0.82	15500	98.1	61.3
W6A-220TN	W6A-220DN	22	30	38	180	83	0.8	15500	118	73.5
W6A-260TN	W6A-260DN	26	35	44	200	83.5	0.83	27500	138.3	85.8
W6A-300TN	W6A-300DN	30	40	51	235	84	0.83	27500	196.1	98.1
W6A-370TN	W6A-370DN	37	50	63	285	85	0.85	27500	245	122.6
W6A-450TN	W6A-450DN	45	60	75	340	85.5	0.85	27500	396	150

DIMENSIONS AND WEIGHT

Model		Motor Power		*Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable leadouts		
								Cable Size (Sq.mm)		Cable Length (m)
D.O.L	S.D	kW	HP		D	H1		D.O.L	S.D	
W6A-40T	-	4	5.5	T	143	734	42	2.5	-	3
W6A-45T	-	4.5	6	T	143	754	44	2.5	-	3
W6A-55T	W6A-55D	5.5	7.5	T / D	143	804	50	4	2.5	3
W6A-75T	W6A-75D	7.5	10	T / D	143	854	55	4	2.5	3
W6A-93T	W6A-93D	9.3	12.5	T / D	143	884	58	6	2.5	3
W6A-110T	W6A-110D	11	15	T / D	143	924	63	6	4	3
W6A-130T	W6A-130D	13	17.5	T / D	143	964	67	6	4	3
W6A-150T	W6A-150D	15	20	T / D	143	1004	71	10	4	3
W6A-185T	W6A-185D	18.5	25	T / D	143	1084	80	10	4	3.5
W6A-220T	W6A-220D	22	30	T / D	143	1154	86	10	4	3.5
W6A-260T	W6A-260D	26	35	T / D	143	1174	89	10	6	4.25
W6A-300T	W6A-300D	30	40	T / D	143	1229	94	10	6	4.25
W6A-370T	W6A-370D	37	50	T / D	143	1304	98	16	6	5.25
W6A-450T	W6A-450D	45	60	T / D	143	1379	105	16	10	5.25

*** METHOD OF STARTING : T -** 3P / DOL / 50Hz **D -** 3P / SD / 50Hz

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **8"**

"W" Series

Wellrounder

Specifications

Nominal Dia	**8" (200mm)**
Maximum Outer Diameter	196 mm
Power Range	37 kW to 93 kW - Three Phase
Speed	2900 rpm
Version	Three Phase - 380 V, 400 V, 415 V & 525 V, 50 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 58 / IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	45500 N
Minimum Cooling Flow Along the Motor	0.16 m/sec
Maximum Liquid Temperature	33°C
Starts per Hour	15 Times
Shaft Type	Splined as per NEMA Standard
Mounting Standard	NEMA Standard
Method of Starting	Direct On Line (DOL)
	Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core Rubber Insulated Flat Cable
Thermal Protection	High Temperature Motors for 70°C / 90°C can be supplied with PT Sensor and XLPE / PA Winding

Materials of Construction

Part Name	Type - B	Type - S
Shaft Seal Housing	Cast Iron	SS - 304 Casted
Shaft Seal / Mechanical Seal	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC
Upper & Lower Housings	Cast Iron	SS - 304 Casted
Stator Shell	SS - 304	SS - 304
Thrust Pad	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420
Diaphragm	High Nitrile Rubber	High Nitrile Rubber
Motor Base	Cast Iron	SS - 304 Casted
Shaft	EN-8	EN-8
Shaft Extension	17.4 Ph	17.4 Ph
Sleeves	SS - 431	SS - 431

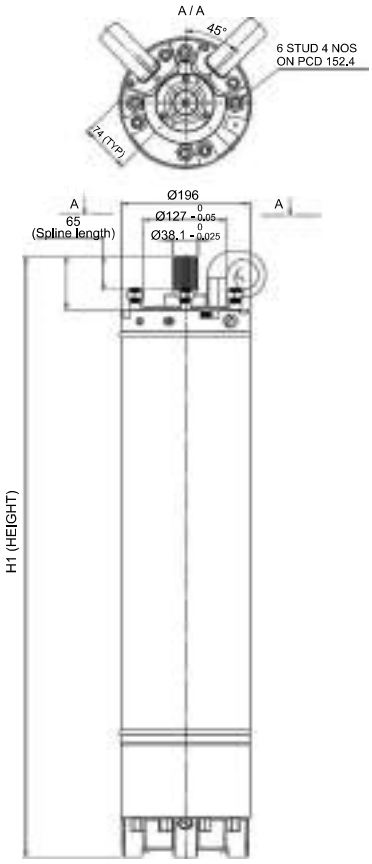
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **8"**

"W" Series

Wellrounder

Technical Data



All Dimensions are in mm
Splined Shaft : 23 teeth -
Module 1.5875 Pressure Angle 30°
A.N.S.I.B92-1 Tolerance Class 5

8" THREE PHASE 380V, D.O.L. & S.D MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
DOL	SD	kW	HP			Eff.%	Power Factor			
W8B-370T	W8B-370D	37	50	69	380	83.6	0.86	45500	160	122
W8B-450T	W8B-450D	45	60	94.5	480	84	0.87	45500	225	148
W8B-550T	W8B-550D	55	75	116	620	84.5	0.87	45500	310	182
W8B-630T	W8B-630D	63	85	130	710	85	0.87	45500	350	208
W8B-750T	W8B-750D	75	100	156	855	85	0.88	45500	420	248
W8B-930T	W8B-930D	93	125	186	1050	87	0.87	45500	570	308

8" THREE PHASE 400V, D.O.L. & S.D MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
DOL	SD	kW	HP			Eff.%	Power Factor			
W8B-370T	W8B-370D	37	50	75	390	84.5	0.85	45500	180	122
W8B-450T	W8B-450D	45	60	90	490	85	0.86	45500	250	148
W8B-550T	W8B-550D	55	75	114	650	85.8	0.86	45500	348	181
W8B-630T	W8B-630D	63	85	127	715	86	0.86	45500	380	207
W8B-750T	W8B-750D	75	100	148	900	85	0.88	45500	480	247
W8B-930T	W8B-930D	93	125	188	1200	87	0.88	45500	660	307

8" THREE PHASE 415V, D.O.L. & S.D MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
DOL	SD	kW	HP			Eff.%	Power Factor			
W8B-370T	W8B-370D	37	50	80	400	86	0.84	45500	200	122
W8B-450T	W8B-450D	45	60	92	520	85	0.84	45500	268	149
W8B-550T	W8B-550D	55	75	112	660	87	0.84	45500	370	180
W8B-630T	W8B-630D	63	85	126	720	88	0.86	45500	410	206
W8B-750T	W8B-750D	75	100	151	930	89	0.86	45500	520	246
W8B-930T	W8B-930D	93	125	188	1250	88	0.86	45500	680	306

8" THREE PHASE 525V, D.O.L. & S.D MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Starting Torque (Nm)	Torque (Nm)
DOL	SD	kW	HP			Eff.%	Power Factor			
W8B-450TN	W8B-450DN	45	60	80	320	85	0.82	45500	320	154
W8B-550TN	W8B-550DN	55	75	92	365	85	0.84	45500	450	185
W8B-630TN	W8B-630DN	63	85	103	410	86	0.88	45500	500	211
W8B-750TN	W8B-750DN	75	100	118	470	87	0.9	45500	620	251
W8B-930TN	W8B-930DN	93	125	145	580	87	0.88	45500	685	311

DIMENSIONS AND WEIGHT

Model	Motor Power		*Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable Leadouts		
							Cable Size (Sq.mm)		Cable Length (m)
	kW	HP		D	H1		D.O.L	S.D	
W8B-370	37	50	T / D	196	1181	153	16	10	4
W8B-450	45	60	T / D	196	1231	164	16	10	4
W8B-550	55	75	T / D	196	1281	180	35	25	5
W8B-630	63	85	T / D	196	1351	193	35	25	5
W8B-750	75	100	T / D	196	1466	215	35	25	5
W8B-930	93	125	T / D	196	1556	235	35	35	5

*** METHOD OF STARTING : T -** 3P / DOL / 50Hz **D -** 3P / SD / 50Hz

In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **10"**

"W" Series

Wellrounder

Specifications

Nominal Dia	**10" (250mm)**
Maximum Outer Diameter	Upto 185 kW - 236 mm / 220 kW - 240 mm
Power Range	81 kW to 220 kW - Three Phase
Speed	2900 rpm
Version	Three Phase - 380 V - 415 V, 50 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	60000 N
Minimum Cooling Flow Along the Motor	0.16 m/sec
Maximum Liquid Temperature	33°C
Starts per Hour	10 Times
Shaft Type	Splined as per NEMA Standard
Mounting Standard	NEMA Standard
Method of Starting	Direct On Line (DOL)
	Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core Rubber Insulated Flat Cable
Thermal Protection	High Temperature Motors for 70°C / 90°C can be supplied with PT Sensor and PE2 / PA Winding

Type - A/N **Type - B**

Materials of Construction

Part Name	Type - A	Type - N	Type - B
Shaft Seal Housing	SS - 304	SS - 316	Cast Iron
Shaft Seal / Mechanical Seal	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC	Nitrile Rubber (NBR) / Ceramic - Carbon, SiC - SiC
Upper & Lower Housings	SS - 304	SS - 316	Cast Iron
Stator Shell	SS - 304	SS - 316	SS - 304
Thrust Pad	Carbon Graphite	Carbon Graphite	Carbon Graphite
Thrust Bearing	SS - 420	SS - 420	SS - 420
Diaphragm	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)	Nitrile Rubber (NBR)
Motor Base	SS - 304	SS - 316	Cast Iron

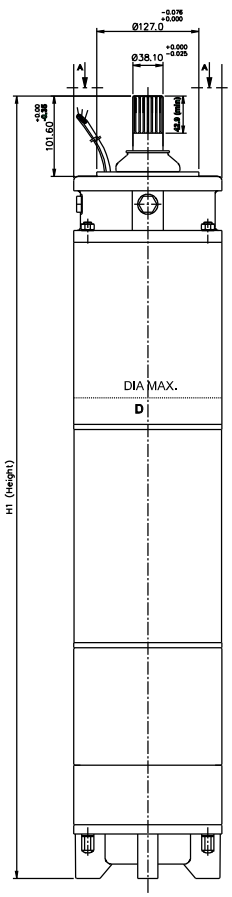
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **10"**

"W" Series

Wellrounder

Technical Data



ALL DIMENSIONS ARE IN mm.

10" THREE PHASE - 380 V - 415 V DOL & SD MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Eff.%	Power Factor	Max. Down Thrust Load (N)
DOL	SD	kW	HP					
W10A-750T	W10A-750D	75	100	150	1500	86	0.87	60000
W10A-810T	W10A-810D	81	110	166	1600	86	0.87	60000
W10A-930T	W10A-930D	93	125	181	1810	87	0.89	60000
W10A-A10T	W10A-A10D	110	150	220	2200	87	0.89	60000
W10A-A30T	W10A-A30D	130	175	255	2550	87	0.89	60000
W10A-A50T	W10A-A50D	150	200	290	2900	88	0.89	60000
W10A-A65T	W10A-A65D	165	225	325	3250	88	0.89	60000
W10A-A85T	W10A-A85D	185	250	355	3550	89	0.90	60000
W10A-B22T	-	220	300	425	4250	88	0.86	60000

DIMENSIONS AND WEIGHT

Model		Motor Power		Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable Leadouts			
								Cable Size(Sq.mm)			Cable Length (m)
DOL	SD	kW	HP		D	H1		D.O.L	# No. of Leadouts	S.D	
W10A-750T	W10A-750D	75	100	T/D	236	1226	240	25	1	16	4
W10A-810T	W10A-810D	81	110	T/D	236	1266	260	25	1	16	4
W10A-930T	W10A-930D	93	125	T/D	236	1316	274	25	1	16	4
W10A-A10T	W10A-A10D	110	150	T/D	236	1446	314	25	2	25	4
W10A-A30T	W10A-A30D	130	175	T/D	236	1546	343	25	2	25	4
W10A-A50T	W10A-A50D	150	200	T/D	236	1736	366	35	2	35	4
W10A-A65T	W10A-A65D	165	225	T/D	236	1856	409	35	2	35	4
W10A-A85T	W10A-A85D	185	250	T/D	236	1956	439	35	2	35	4
W10A-B22T[$]	-	220	300	T	240	2183	500	70	6	-	-

* **METHOD OF STARTING : T -** 3P / DOL / 50Hz **D -** 3P / SD / 50Hz

[#] Applicable for only DOL Motor.

[$] Open Switching

WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **12"**

"W" Series

Wellrounder

Specifications

Nominal Dia	**12" (300mm)**
Maximum Outer Diameter	273 mm
Power Range	150 kW to 300 kW - Three Phase
Speed	2850 rpm
Version	Three Phase - 380 V, 400 V & 415 V, 50 Hz, A.C Supply
Class of Insulation	Y
Degree of Protection	IP 68
Direction of Rotation	Electrically Reversible - Three Phase
Type of Duty	S1 (Continuous)
Down Thrust Load	60000 N
Minimum Cooling Flow Along the Motor	0.5 m/sec (30°C), 2 m/sec (50°C)
Maximum Liquid Temperature	30°C
Starts per Hour	10 Times
Shaft Type	Key Way Type
Mounting Standard	International Standard
Method of Starting	Direct On Line (DOL)
	Star Delta (SD)
Cable Lead out	Permanently Connected and Sealed 3/4 Core Rubber Insulated Flat Cable
Thermal Protection	High Temperature Motors for 50°C can be supplied with PT Sensor and XLPE / PA Winding

Type - A/N **Type - B**

Materials of Construction

Part Name	Type - A	Type - N	Type - B
Seal Housing	SS - 304	SS - 316	Cast Iron
Mechanical Seal	Carbon / Ceramic SiC - SiC*	SiC - SiC	Carbon / Ceramic SiC - SiC*
Upper & Lower Housings	SS - 304	SS - 316	Cast Iron
Stator Shell	SS - 304	SS - 316	SS - 304
Thrust Pad	SS / Carbon	SS / Carbon	SS / Carbon
Thrust Bearing	SS / Carbon	SS / Carbon	SS / Carbon
Diaphragm	NBR	NBR	NBR
Motor Base	SS - 304	SS - 316	Cast Iron
Shaft	SS - 304	Duplex Steel	SS - 304

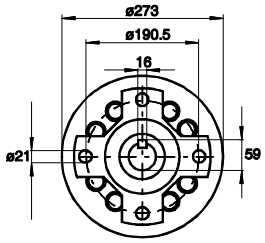
* Optional

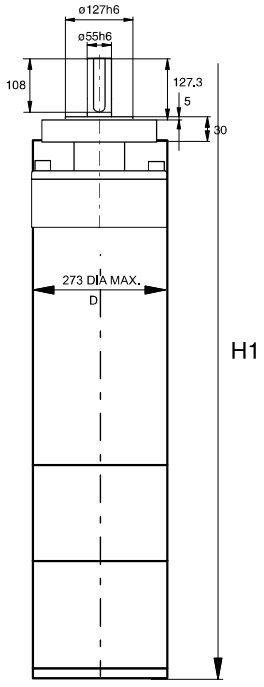
WATER FILLED REWINDABLE SUBMERSIBLE MOTORS

Nominal Diameter : **12"** **"W"** Series

Wellrounder

Technical Data





ALL DIMENSIONS ARE IN mm.

12" THREE PHASE - 380 V DOL & SD MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Torque Ratio Ma/Mn	Torque Ratio Mk/Mn
D.O.L	S.D	kW	HP			Eff.%	Power Factor			
W12A-A50T	-	150	200	308	1571	87	0.85	60000	1.0	2.5
W12A-A85T	-	185	250	380	1862	87	0.85	60000	1.0	2.5
W12A-B25T	-	225	300	462	2217	87	0.85	60000	1.0	2.6
W12A-B60T	W12A-B60D	260	350	540	2700	86	0.85	60000	1.1	2.5
W12A-C00T	W12A-C00D	300	400	624	2995	86	0.85	60000	1.0	2.6

12" THREE PHASE - 400 V DOL & SD MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Torque Ratio Ma/Mn	Torque Ratio Mk/Mn
D.O.L	S.D	kW	HP			Eff.%	Power Factor			
W12A-A50T	-	150	200	295	1505	87	0.85	60000	1.0	2.5
W12A-A85T	-	185	250	365	1789	87	0.85	60000	1.0	2.5
W12A-B25T	-	225	300	440	2112	87	0.85	60000	1.0	2.6
W12A-B60T	W12A-B60D	260	350	515	2575	86	0.85	60000	1.1	2.5
W12A-C00T	W12A-C00D	300	400	595	2856	86	0.85	60000	1.0	2.6

12" THREE PHASE - 415 V DOL & SD MOTORS

Model		Motor Power		Full Load Max (A)	Starting Current (A)	Full load		Max. Down Thrust Load (N)	Torque Ratio Ma/Mn	Torque Ratio Mk/Mn
D.O.L	S.D	kW	HP			Eff.%	Power Factor			
W12A-A50T	-	150	200	282	1438	87	0.85	60000	1.0	2.5
W12A-A85T	-	185	250	348	1705	87	0.85	60000	1.0	2.5
W12A-B25T	-	225	300	423	2030	87	0.85	60000	1.0	2.6
W12A-B60T	W12A-B60D	260	350	495	2475	86	0.85	60000	1.1	2.5
W12A-C00T	W12A-C00D	300	400	571	2741	86	0.85	60000	1.0	2.6

* **Ma / Mn -** Starting Torque / Rated Torque, **Mk / Mn -** Breakdown Torque / Rated Torque

DIMENSIONS AND WEIGHT

Model		Motor Power		Method of Starting	Dimension (mm)		Nett Weight (Kg) (Approx.)	Cable Leadouts			
								Cable Size(Sq.mm)			Cable Length (m)
D.O.L	S.D	kW	HP		D	H1		D.O.L	# No. of Leadouts	S.D	
W12A-A50T	-	150	200	T	273	1699	414	70	3	-	7
W12A-A85T	-	185	250	T	273	1769	449	95	3	-	7
W12A-B25T	-	225	300	T	273	1859	495	120	3	-	7
W12A-B60T	W12A-B60D	260	350	T/D	273	1934	534	70	6	70	7
W12A-C00T	W12A-C00D	300	400	T/D	273	2034	585	70	6	95	7

* **METHOD OF STARTING : T -** 3P / DOL / 50Hz **D -** 3P / SD / 50Hz

Applicable for only DOL Motor.