



**SUBMERSIBLE MOTOR**  
6"-8"-10" Rewindable Motor  
50HZ

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# NPS6 Series

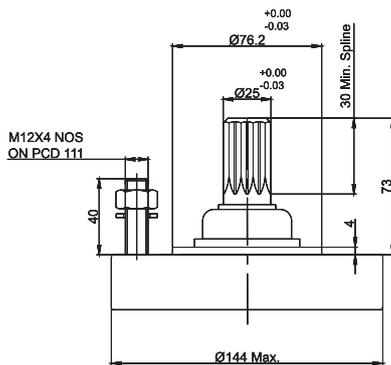
## 6" Water Filled Rewindable Submersible Motor

### SPECIFICATIONS

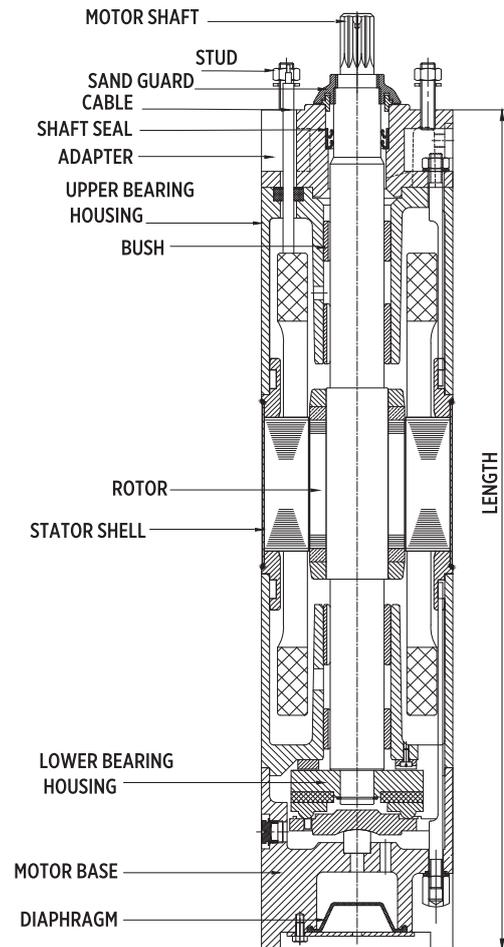
- Ratings: Three Phase - 4kW - 37kW
- Supply Voltage (Tolerance +6% /-10%):  
220V-230V 1 Phase 50Hz  
380V-415V 3 Phase 50Hz
- Degree of protection: IP68
- Duty Cycle: S1 Continuous
- Ambient Temperature: 30°C
- Rotation: CCW from top
- Maximum No. of Starts/hour: 20
- Water pH: 6.5-8
- Use cooling sleeve for borewell size larger than 200mm
- Minimum Cooling flow along the motor: 0.2m/sec
- Mounting: Vertical

### FEATURES

- Completely rewindable
- Cooling and lubrication by non-toxic fluid
- Special coated Cu rotor shaft for longer life
- High quality carbon vs SS thrust bearing
- High efficiency electrical design (lower operating cost)
- 6" NEMA coupling flanges
- Pressure compensation diaphragm



4Kw - 37kw



PART	STANDARD CAST IRON
▪ Motor Shaft	Stainless Steel
▪ Cable	EPR/PVC
▪ Sand Guard	NBR
▪ Stud/Hardware	SS
▪ Shaft Seal	NBR
▪ Upper Bearing Housing	CI FG-260
▪ Bush	Carbon
▪ Stator Shell	SS
▪ Rotor	Copper
▪ Lower Bearing Housing	CI FG-260
▪ Motor Base	CI FG-260
▪ Diaphragm	NBR

## PERFORMANCE

MODEL	6" Rewindable Motor - Performance Data 50Hz [3 Phase] DOL																	
	P <sub>N</sub>		Thrust	U <sub>N</sub>	n <sub>N</sub>	I <sub>N</sub>	I <sub>max</sub>	I <sub>J</sub>	n [%] at % load			Cos ϕ [PF] at % load			T <sub>N</sub>	T <sub>A</sub>	Length	Weight
	kW	HP	F[N]	[V]	[RPM]	[A]	[A]	[A]	50	75	100	50	75	100	[Nm]	[Nm]	mm	kg
NPS6 550T	4	5.5	15500	380	2850	9	10	37	73	75	76	0.69	0.75	0.81	12.6	22.6	668	49
				415	2860	9	10	35	72	73	75	0.70	0.79	0.81	12.1	21.8		
NPS6 750T	5.5	7.5	15500	380	2850	13	14.2	52.7	77	79	80	0.70	0.77	0.83	18.4	33.2	698	48.5
				415	2860	12.7	13.8	51.1	77	78	79	0.70	0.79	0.81	18.1	32.7		
NPS6 1000T	7.5	10	15500	380	2850	18	18.5	68.9	78	80	81	0.69	0.76	0.82	25.1	45.3	718	51.5
				415	2860	17.5	18.1	65	77	79	80	0.69	0.75	0.81	24.7	44.6		
NPS6 1250T	9.3	12.5	15500	380	2850	21.3	23.2	86.3	78	80	81	0.65	0.73	0.81	31.2	56.1	748	53.5
				415	2860	21	22.3	81	77	79	80	0.63	0.72	0.80	30.9	55.8		
NPS6 1500T	11	15	15500	380	2850	26	28.3	105.3	79	81	82	0.70	0.76	0.82	36.9	66.4	778	57
				415	2860	25.2	27.5	98	78	80	81	0.68	0.75	0.81	36.3	65.5		
NPS6 1750T	13	17.5	15500	380	2850	26.5	28.9	107.3	79	81	82	0.64	0.73	0.81	43.6	78.5	828	62
				415	2860	24.8	27	130	78	80	81	0.63	0.71	0.79	42.7	77.1		
NPS6 2000T	15	20	15500	380	2850	33.8	36.8	136.9	79	81	82	0.72	0.78	0.83	50.3	90.5	873	67
				415	2860	33	36	133.7	78	80	81	0.69	0.75	0.81	49.3	89		
NPS6 2500T	18.5	25	15500	380	2850	40.5	42.5	164	79	82	83	0.70	0.77	0.83	62	111.6	918	70
				415	2860	40	42.7	164.8	78	81	82	0.68	0.74	0.80	61.1	110.3		
NPS6 3000T	22	30	15500	380	2850	47.6	50	192.8	80	82	83	0.72	0.78	0.84	75.4	135.8	1008	81.5
				415	2860	46.7	49	189.1	79	80	81	0.68	0.75	0.81	72.2	130.3		
NPS6 3500T	26	35	15500	380	2850	57.5	60.4	268	83	84	83	0.68	0.79	0.86	86	120.4	1113	90
				415	2860	56.5	59.3	268	81	81	82	0.66	0.76	0.84	85.3	153.9		
NPS6 4000T	30	40	27500	380	2850	66.4	69.1	328	82	84	83	0.67	0.78	0.84	98.8	135	1213	98
				415	2860	65	67.6	328	81	81	82	0.65	0.76	0.82	98.2	177.2		
NPS6 5000T	37	50	27500	380	2850	82	85.3	409	83	84	83	0.67	0.78	0.85	122.1	192.8	1293	105
				415	2860	81.2	84.4	409	81	83	82	0.65	0.75	0.82	121.3	218.9		

P<sub>N</sub> : Rated Power

U<sub>N</sub> : Rated Voltage

I<sub>A</sub> : Locked Rotor Current

T<sub>N</sub> : Rated Torque

I<sub>N</sub> : Rated Current

T<sub>A</sub> : Locked Rotor Torque

NOTE: Franklin Electric reserves the right to amend specification without prior notice.

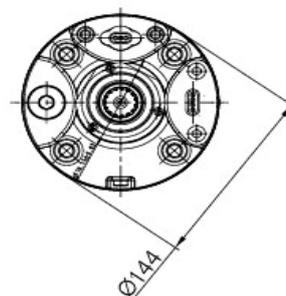
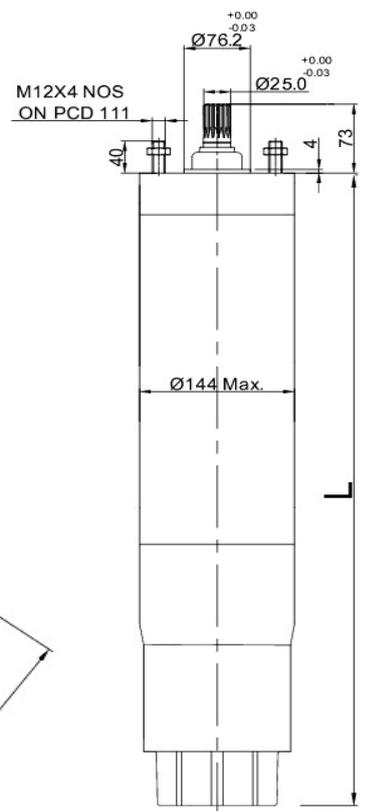
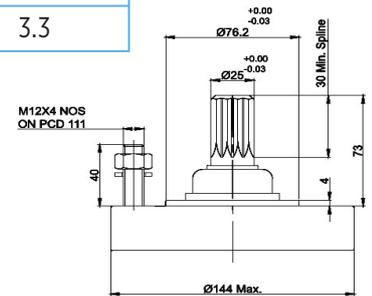
## MOTOR LEADS

MODEL TYPE	HP	KW	Lead [mm <sup>2</sup> ]			
			Cable Size [mm <sup>2</sup> ]		Cable Length [M]	
			DOL	STAR - DELTA	DOL	STAR - DELTA
NPS6 550T	4	5.5	3 x 6	-	3.3	3.3
NPS6 750T	5.5	7.5	3 x 6	2 x (3 X 2.5)	3.3	3.3
NPS6 1000T	7.5	10	3 x 6	2 x (3 X 2.5)	3.3	3.3
NPS6 1250T	9.3	12.5	3 x 6	2 x (3 X 2.5)	3.3	3.3
NPS6 1500T	11	15	3 x 6	2 x (3 X 4)	3.3	3.3
NPS6 1750T	13	17.5	3 x 6	2 x (3 X 4)	3.3	3.3
NPS6 2000T	15	20	3 x 6	2 x (3 X 4)	3.3	3.3
NPS6 2500T	18.5	25	3 x 6	2 x (3 X 6)	3.3	3.3
NPS6 3000T	22	30	3 x 6	2 x (3 X 6)	3.3	3.3
NPS6 3500T	26	35	3 x 6	2 x (3 X 6)	3.3	3.3
NPS6 4000T	30	40	3 x 10	2 x (3 X 10)	3.3	3.3
NPS6 5000T	37	50	3 x 10	2 x (3 X 10)	3.3	3.3

## DIMENSIONS

MODEL TYPE	Power		Axial Thrust [N]	Length	Weight
	HP	KW		mm	kg
NPS6 550T	4	5.5	15500	668	46
NPS6 750T	5.5	7.5	15500	698	48.5
NPS6 1000T	7.5	10	15500	718	51.5
NPS6 1250T	9.3	12.5	15500	748	53.5
NPS6 1500T	11	15	15500	778	57
NPS6 1750T	13	17.5	15500	828	62
NPS6 2000T	15	20	15500	873	67
NPS6 2500T	18.5	25	15500	918	70
NPS6 3000T	22	30	15500	1008	82
NPS6 3500T	26	35	15500	1113	90
NPS6 4000T	30	40	27500	1213	98
NPS6 5000T	37	50	27500	1293	105

NOTE: Franklin Electric reserves the right to amend specification without prior notice.



# RWK6 SERIES

## 6" Water Filled Rewindable Submersible Motor

### SPECIFICATIONS

- Motors are built to operate in wells of 175mm and larger
- Maintenance free water lubricated radial and axial (Kingsbury) bearings
- rubber diaphragm and pressure valve for pressure balancing
- Removeable winding covers for easy repairing and reduced maintenance cost

### FEATURES

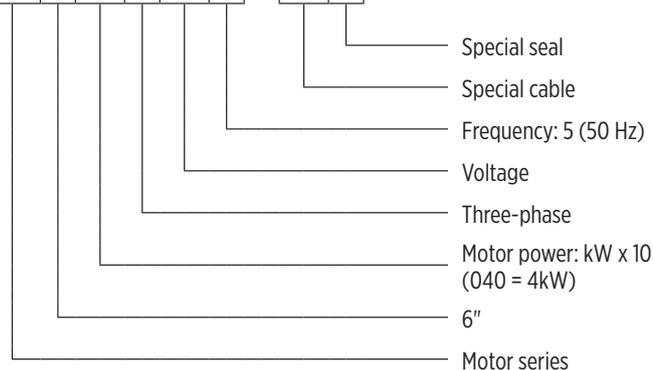
- Motor powers range: 4 - 45kW
- 6" NEMA connection
- LPE/PPC winding wire
- Motors instllation: Vertical/Horizontal operation (except 45kW)
- Voltage tolerance  $\pm$  %10
- Maximum liquid temperature 50°C
- 50-60 Hz
- Starts per hour: 10
- Min. cooling flow 0.5 m/s
- Rubber cable length: 4m
- Mechanical Seal Material: Carbon/Ceramic
- DOL starting: 4 - 45kW
- Standard windings: 380V - 400V - 415V in 50Hz
- Filled with mixture of water and glycol (FP below -15°C)
- Suitable for VFD operation (30 Hz min. frequency)

### Options

- Mechanical seal: Silicon carbide
- Starting method: S/D
- For further specialties, please contact Franklin Electric office

### MOTOR IDENTIFICATION CODE

RWK 6 040 T 400 5 / XXX YY





## PERFORMANCE

MODEL	Power		Frequency Hz	Voltage V	Current			Efficiency				Factor				Rotation [rpm]
	HP	kW			100%	115%	50%	75%	100%	115%	50%	75%	100%	115%		
RWK6040T4005	5.5	4	50	380	10.8	-	62.5	66.5	69.3	-	0.67	0.78	0.83	-	2900	
				400	10.4	-	58.7	68.0	71.4	-	0.63	0.73	0.80	-	2914	
				415	10.7	-	58.4	66.3	69.8	-	0.59	0.70	0.77	-	2924	
RWK6055T4005	7.5	5.5	50	380	13.4	-	69.3	73.3	72.8	-	0.73	0.81	0.86	-	2867	
				400	13.2	-	65.8	69.8	72.2	-	0.69	0.78	0.84	-	2878	
				415	13.4	-	63.9	70.5	71.2	-	0.63	0.74	0.81	-	2885	
RWK6075T4005	10	7.5	50	380	17.5	-	70.7	74.0	75.9	-	0.69	0.80	0.84	-	2864	
				400	17.8	-	66.9	73.3	73.8	-	0.64	0.75	0.81	-	2871	
				415	18.0	-	67.6	72.4	74.0	-	0.58	0.70	0.77	-	2878	
RWK6092T4005	12.5	9.2	50	380	22.2	-	70.9	74.5	75.0	-	0.66	0.77	0.84	-	2873	
				400	22.5	-	68.1	73.4	74.6	-	0.61	0.73	0.80	-	2888	
				415	23.0	-	65.1	71.8	73.7	-	0.56	0.68	0.76	-	2890	
RWK6110T4005	15	11	50	380	25.7	-	76.4	77.9	77.4	-	0.66	0.77	0.84	-	2863	
				400	25.7	-	72.0	75.4	77.0	-	0.63	0.75	0.81	-	2880	
				415	25.7	-	71.6	76.1	77.1	-	0.58	0.70	0.78	-	2891	
RWK6130T4005	17.5	13	50	380	29.4	-	76.6	78.5	78.5	-	0.69	0.80	0.85	-	2870	
				400	29.6	-	73.2	77.6	78.0	-	0.62	0.74	0.81	-	2882	
				415	29.8	-	71.6	75.9	77.5	-	0.57	0.70	0.78	-	2888	
RWK6150T4005	20	15	50	380	32.8	-	76.2	79.6	81.0	-	0.66	0.78	0.84	-	2874	
				400	34.0	-	72.5	77.2	78.6	-	0.60	0.73	0.80	-	2884	
				415	35.0	-	70.7	75.9	77.5	-	0.55	0.67	0.76	-	2890	
RWK6185T4005	25	18.5	50	380	41.2	-	78.3	80.2	79.8	-	0.68	0.79	0.85	-	2865	
				400	41.7	-	74.6	78.7	78.9	-	0.62	0.74	0.81	-	2875	
				415	42.3	-	73.2	78.7	78.8	-	0.56	0.69	0.77	-	2881	
RWK6220T4005	30	22	50	380	48.0	-	79.7	81.6	81.1	-	0.68	0.80	0.86	-	2858	
				400	48.3	-	77.3	80.2	80.4	-	0.62	0.74	0.82	-	2868	
				415	49.2	-	74.7	78.7	80.1	-	0.57	0.70	0.78	-	2874	
RWK6260T4005	35	26	50	380	56.0	-	79.8	81.6	81.2	-	0.70	0.81	0.86	-	2855	
				400	55.0	-	79.7	80.8	81.5	-	0.63	0.76	0.83	-	2868	
				415	56.0	-	75.8	80.3	80.1	-	0.59	0.72	0.80	-	2874	
RWK6300T4005	40	30	50	380	65.0	-	80.1	81.1	80.7	-	0.67	0.79	0.85	-	2848	
				400	65.3	-	77.6	82.2	80.3	-	0.61	0.74	0.81	-	2865	
				415	66.5	-	76.3	79.2	80.2	-	0.55	0.69	0.77	-	2878	
RWK6370T4005	50	37	50	380	77.0	-	77.0	80.0	79.6	-	0.72	0.82	0.87	-	2837	
				400	76.5	-	80.6	83.2	82.2	-	0.65	0.77	0.84	-	2850	
				415	77.8	-	79.2	82.8	82.1	-	0.60	0.73	0.80	-	2858	
RWK6450T4005	60	45	50	380	95.0	-	81.6	83.2	82.1	-	0.69	0.81	0.86	-	2850	
				400	94.0	-	79.3	82.6	85.3	-	0.62	0.74	0.82	-	2961	
				415	95.5	-	77.8	81.2	81.7	-	0.57	0.71	0.79	-	2866	

NOTE: Franklin Electric reserves the right to amend specification without prior notice.

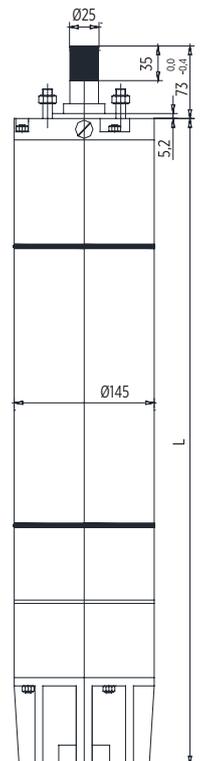
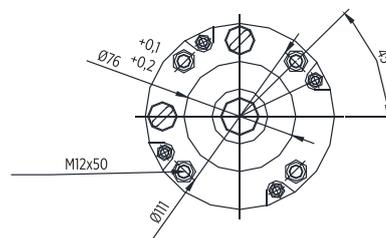
## MOTOR LEADS

MODEL TYPE	HP	kW	Lead [mm <sup>2</sup> ]				Cable Length [m]
			380V 50 Hz / 400V 50Hz / 415V 50Hz		220V 50 Hz		
			DOL	STAR - DELTA	DOL	STAR - DELTA	
RWK6040T4005	5.5	4	3 x 2.5	2 x (3 x 2.5)	3 x 2.5	2 x (3 x 2.5)	2.5
RWK6055T4005	7.5	5.5	3 x 2.5	2 x (3 x 2.5)	3 x 2.5	2 x (3 x 2.5)	2.5
RWK6075T4005	10	7.5	3 x 2.5	2 x (3 x 2.5)	3 x 2.5	2 x (3 x 2.5)	2.5
RWK6092T4005	12.5	9.2	3 x 2.5	2 x (3 x 2.5)	3 x 4	2 x (3 x 2.5)	2.5
RWK6110T4005	15	11	3 x 2.5	2 x (3 x 2.5)	3 x 4	2 x (3 x 2.5)	2.5
RWK6130T4005	17.5	13	3 x 2.5	2 x (3 x 2.5)	3 x 4	2 x (3 x 2.5)	2.5
RWK6150T4005	20	15	3 x 4	2 x (3 x 2.5)	3 x 6	2 x (3 x 2.5)	3.5
RWK6185T4005	25	18.5	3 x 4	2 x (3 x 2.5)	3 x 10	2 x (3 x 4)	3.5
RWK6220T4005	30	22	3 x 4	2 x (3 x 2.5)	3 x 10	2 x (3 x 4)	3.5
RWK6260T4005	35	26	3 x 6	2 x (3 x 4)	3 x 10	2 x (3 x 6)	3.5
RWK6300T4005	40	30	3 x 6	2 x (3 x 4)	3 x 16	2 x (3 x 6)	3.5
RWK6370T4005	50	37	3 x 10	2 x (3 x 4)	3 x 16	2 x (3 x 10)	4
RWK6450T4005	60	45	3 x 10	2 x (3 x 6)	3 x 16	2 x (3 x 10)	4

## DIMENSIONS

MODEL TYPE	Power		Axial Thrust [N]	Length	Weight
	HP	kW		mm	kg
RWK6040T4005	5.5	4	26000	630	46
RWK6055T4005	7.5	5.5	26000	630	46
RWK6075T4005	10	7.5	26000	650	48
RWK6092T4005	12.5	9.2	26000	690	50
RWK6110T4005	15	11	26000	730	56
RWK6130T4005	17.5	13	26000	780	60
RWK6150T4005	20	15	26000	830	66
RWK6185T4005	25	18.5	26000	880	72
RWK6220T4005	30	22	26000	980	82
RWK6260T4005	35	26	26000	1030	88
RWK6300T4005	40	30	30000	1110	98
RWK6370T4005	50	37	30000	1190	106
RWK6450T4005	60	45	30000	1270	116

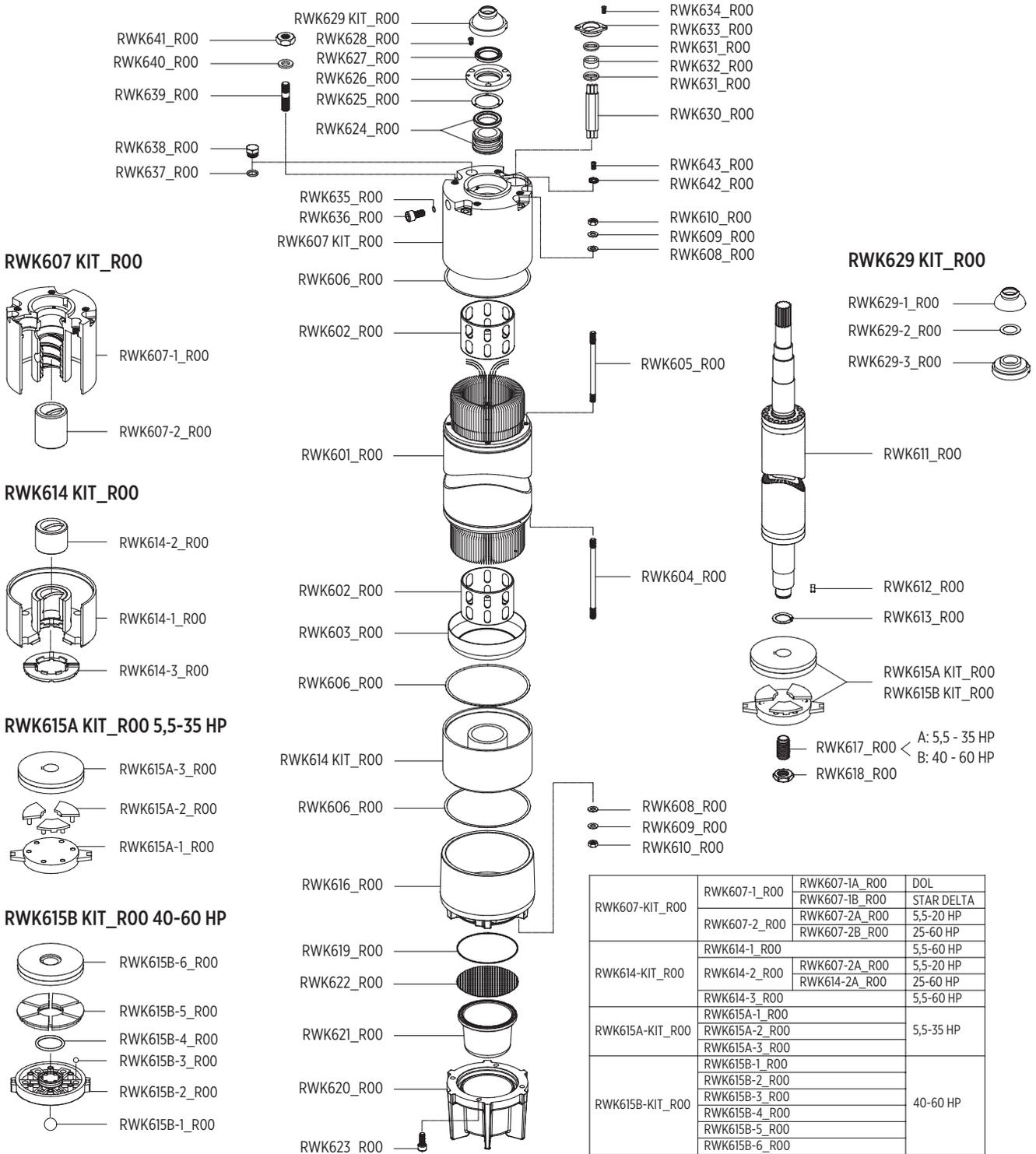
NOTE: Franklin Electric reserves the right to amend specification without prior notice.



## MAX. PERMITTED LENGHT OF ELECTRIC CABLES (DOL)

Motor Power		DOL												
		Cable size [mm <sup>2</sup> ] - Copper wire (Rated insulation: 90°C)												
[HP]	[kW]	2.5	4	6	10	16	25	35	50	70	95	120	150	185
5.5	4	95	155	230	385	605	915							
7.5	5.5	70	110	170	280	440	670	915						
10	7.5	50	80	126	205	325	500	685	935					
12.5	9.2	40	65	100	170	270	410	565	770	1030				
15	11		55	85	140	225	345	470	645	865	1110			
17.5	13		50	75	125	195	300	410	560	750	965			
20	15		40	65	105	170	265	360	495	665	855	1030		
25	18.5			50	85	140	210	290	400	530	680	810	950	
30	22				75	120	180	250	340	455	585	700	815	945
35	26				60	100	150	210	290	385	500	600	705	815
40	30					85	135	185	250	335	430	515	600	695
50	37						105	150	205	270	350	420	485	565
60	45						90	125	175	235	310	375	445	520

# MOTOR SPARE PARTS



RWK607-KIT_R00	RWK607-1_R00	RWK607-1A_R00	DOL
		RWK607-1B_R00	STAR DELTA
	RWK607-2_R00	RWK607-2A_R00	5,5-20 HP
RWK614-KIT_R00		RWK607-2B_R00	25-60 HP
	RWK614-1_R00		5,5-60 HP
	RWK614-2_R00	RWK607-2A_R00	5,5-20 HP
RWK615A-KIT_R00		RWK614-2A_R00	25-60 HP
	RWK614-3_R00		5,5-60 HP
	RWK615A-1_R00		
RWK615B-KIT_R00	RWK615A-2_R00		5,5-35 HP
	RWK615A-3_R00		
	RWK615B-1_R00		
RWK615B-KIT_R00	RWK615B-2_R00		40-60 HP
	RWK615B-3_R00		
	RWK615B-4_R00		
	RWK615B-5_R00		
	RWK615B-6_R00		
	RWK615B-6_R00		

## PART LISTS

	Part Name	Material	
	RWK601_R00	Stator	Lam. Sheet
	RWK602_R00	End Turn Protector - Internal	POM
	RWK603_R00	End Turn Protection Cover - External	POM
	RWK604_R00	Stud (Bottom)	AISI 304
	RWK605_R00	Stud (Top)	AISI 304
	RWK606_R00	Gasket	Klingerite
<b>RWK607 KIT_R00</b>	RWK607 KIT_R00	Top End Bell Kit	-
	RWK607-1A_R00	Top End Bell (DOL)	Cast Iron
	RWK607-1B_R00	Top End Bell (S/D)	Cast Iron
	RWK607-2A_R00	Radial Bearing (5,5-20 HP)	Carbon
	RWK607-2B_R00	Radial Bearing (25-60 HP)	Carbon
	RWK608_R00	Washer	POM
	RWK609_R00	Washer	AISI 304
	RWK6010_R00	Nut	AISI 304
	RWK6011_R00	Rotor	Lam. Sheet
	RWK6012_R00	Key (Thrust Bearing)	Steel
	RWK6013_R00	Snap Ring (Thrust Bearing)	Steel
<b>RWK614 KIT_R00</b>	RWK614 KIT_R00	Bottom End Bell Kit	-
	RWK614-1_R00	Bottom End Bell	Cast Iron
	RWK614-2A_R00	Radial Bearing (5,5-20 HP)	Carbon
	RWK614-2A_R00	Radial Bearing (25-60 HP)	Carbon
	RWK614-3_R00	Upthrust Washer	Polyamide
<b>RWK615A KIT_R00</b>	RWK615A KIT_R00	Thrust Bearing Kit (5,5-35 HP)	-
	RWK615A-1_R00	Leveling Disc	Cast Iron
	RWK615A-2_R00	Thrust Segment	AISI 420
	RWK615A-3_R00	Thrust Bearing Disc	Carbon
	RWK615B KIT_R00	Thrust Bearing Kit (40-60 HP)	-
	RWK615B-1_R00	Thrust Bearing Ball	AISI 304
<b>RWK615B KIT_R00</b>	RWK615B-2_R00	Thrust Segment Holder	Brass
	RWK615B-3_R00	Thrust Segment Ball	AISI 304
	RWK615B-4_R00	Thrust O'Ring	NBR
	RWK615B-5_R00	Thrust Segment	AISI 420
	RWK615B-6_R00	Thrust Bearing Disc	Carbon
	RWK616_R00	Thrust Housing	Cast Iron
	RWK617_R00	Screw (Shaft Adjusting)	AISI 420
	RWK618_R00	Nut (Shaft Adjusting)	Steel
	RWK619_R00	O'Ring	NBR
	RWK620_R00	Diaphragm Cover	Cast Iron
	RWK621_R00	Diaphragm	NBR
	RWK622_R00	Diaphragm Lid	AISI 430
	RWK623_R00	Diaphragm Cover Screw	AISI 304
	RWK624_R00	Shaft Seal	Carbon/Ceramic
	RWK625_R00	Shaft Seal Washer	Fibre
	RWK626_R00	Seal Cover	AISI 420
	RWK627_R00	Lipseal	NBR
	RWK628_R00	Seal Cover Screw	Steel
<b>RWK629 KIT_R00</b>	RWK629 KIT_R00	Sand Slinger Kit	-
	RWK629-1_R00	Sand Slinger	NBR
	RWK629-2_R00	Sand Slinger Washer	AISI 304
	RWK629-3_R00	Sand Slinger Cover	PPO
	RWK630_R00	Lead	Cable
	RWK631_R00	Lead Spacer	POM
	RWK632_R00	Lead Seal	EPDM
	RWK633_R00	Lead Clamp	AISI 304
	RWK634_R00	Lead Clamp Screw	AISI 304
	RWK635_R00	Filling Plug O'Ring	NBR
	RWK636_R00	Filling Plug	AISI 304
	RWK637_R00	Relief Valve O'Ring	NBR
	RWK638_R00	Relief Valve	Brass
	RWK639_R00	Pump Assembly Studs	AISI 304
	RWK640_R00	Lock Washer	AISI 304
	RWK641_R00	Pump Assembly Nut	AISI 304
	RWK642_R00	Lock Washer for Grounding	AISI 304
	RWK643_R00	Ground Screw	AISI 304

Please specify motor power and start method while ordering a spare part.

## NRS8 SERIES

### 8" Water Filled Rewindable Submersible Motor

#### SPECIFICATIONS

- Suitable for wells with 203 mm and larger inner diameter
- Maintenance free water lubricated radial and axial (Kingsbury) bearings
- Pressure balancing between inner and outer side with a rubber diaphragm and a pressure
- Rewindable stator reduce repair and maintenance costs

#### FEATURES

- Powers from 30HP to 150HP
- 8" NEMA shaft end and flange
- Water lubricated
- Voltage tolerance  $\pm$  %10
- Max. water temperature 30 °C
- Speed 2900 / 3600 rpm
- Starts per hour 7
- Min. cooling flow 1 m/s
- Rubber Lead
- SiC Mechanical Seal (IP68)
- S-D starting for all power rates
- 380V - 400V - 415V in 50Hz & 380V - 460V in 60Hz
- Filled with mixture of water and glycol (FP below -15°C)

#### Options

- Cable length
- PT 100 temperature sensor
- 220V - 220/380V - 500V in 50Hz & 220V - 220/380V in 60Hz
- AISI 304-316 material options
- Starting DOL or dual voltage
- Wire for hot water applications





## PERFORMANCE

MODEL	Power		Frequency Hz	Voltage V	Current		Efficiency				Factor				Rotation [rpm]
	HP	kW			100%	115%	50%	75%	100%	115%	50%	75%	100%	115%	
NRS8 3000T	30	22	50	380	51.2	-	77.7	80.6	78.3	-	0.76	0.82	0.84	-	2867
				400	48.8	-	79.4	80.7	79.9	-	0.71	0.79	0.82	-	2881
				415	48.3	-	78.1	80.7	78.8	-	0.66	0.76	0.81	-	2890
NRS8 4000T	40	30	50	380	63.3	-	83.2	85.0	83.8	-	0.75	0.82	0.85	-	2889
				400	62.0	-	82.6	84.6	84.0	-	0.69	0.78	0.83	-	2913
				415	62.0	-	81.4	83.5	84.1	-	0.64	0.75	0.80	-	2918
NRS8 5000T	50	37	50	380	79.0	-	82.3	85.2	83.5	-	0.78	0.84	0.86	-	2891
				400	76.2	-	83.3	85.4	84.1	-	0.73	0.81	0.84	-	2897
				415	74.0	-	84.1	85.3	84.4	-	0.68	0.78	0.83	-	2901
NRS8 6000T	60	45	50	380	93.7	-	82.2	85.2	83.1	-	0.80	0.85	0.87	-	2885
				400	89.5	-	83.0	85.5	84.0	-	0.75	0.83	0.86	-	2898
				415	88.8	-	82.8	84.4	83.7	-	0.71	0.80	0.84	-	2911
NRS8 7000T	70	52	50	380	108.0	-	83.1	85.9	84.2	-	0.79	0.85	0.87	-	2887
				400	103.3	-	84.1	86.7	85.0	-	0.75	0.82	0.86	-	2895
				415	101.7	-	82.6	86.6	85.6	-	0.71	0.80	0.84	-	2910
NRS8 7500T	75	55	50	380	115.3	-	83.3	86.6	84.1	-	0.78	0.84	0.87	-	2883
				400	112.0	-	84.0	86.3	85.3	-	0.73	0.81	0.85	-	2912
				415	110.2	-	84.6	86.4	85.7	-	0.68	0.78	0.83	-	2918
NRS8 8000T	80	59	50	380	123.4	-	83.3	86.1	84.6	-	0.80	0.85	0.87	-	2894
				400	116.8	-	84.1	86.5	85.5	-	0.74	0.82	0.86	-	2903
				415	115.4	-	84.8	86.7	85.8	-	0.70	0.79	0.84	-	2909
NRS8 9000T	90	66	50	380	139.7	-	84.4	85.8	84.8	-	0.74	0.82	0.86	-	2901
				400	137.0	-	83.2	85.4	85.2	-	0.68	0.78	0.83	-	2903
				415	138.0	-	83.0	85.0	84.9	-	0.62	0.73	0.80	-	2906
NRS8 10000T	100	75	50	380	150.8	-	84.1	87.1	85.0	-	0.79	0.85	0.88	-	2884
				400	146.0	-	85.0	86.1	85.6	-	0.74	0.82	0.86	-	2892
				415	144.5	-	85.9	86.7	86.2	-	0.68	0.78	0.83	-	2900
NRS8 11000T	110	81	50	380	167.7	-	85.2	87.6	86.1	-	0.76	0.84	0.87	-	2911
				400	164.0	-	85.9	86.8	86.6	-	0.70	0.80	0.84	-	2917
				415	163.0	-	86.2	86.7	86.9	-	0.63	0.75	0.81	-	2918
NRS8 12500T	125	92	50	380	191.0	-	85.2	86.2	85.8	-	0.73	0.82	0.86	-	2905
				400	189.0	-	84.7	86.4	85.8	-	0.66	0.77	0.83	-	2905
				415	191.3	-	82.8	85.7	86.0	-	0.61	0.72	0.79	-	2908
NRS8 15000T	150	110	50	380	221.0	-	85.0	87.0	86.1	-	0.81	0.87	0.89	-	2886
				400	213.0	-	86.1	88.4	87.0	-	0.77	0.84	0.87	-	2892
				415	210.0	-	85.2	88.8	86.8	-	0.74	0.82	0.86	-	2918

NOTE: Franklin Electric reserves the right to amend specification without prior notice.

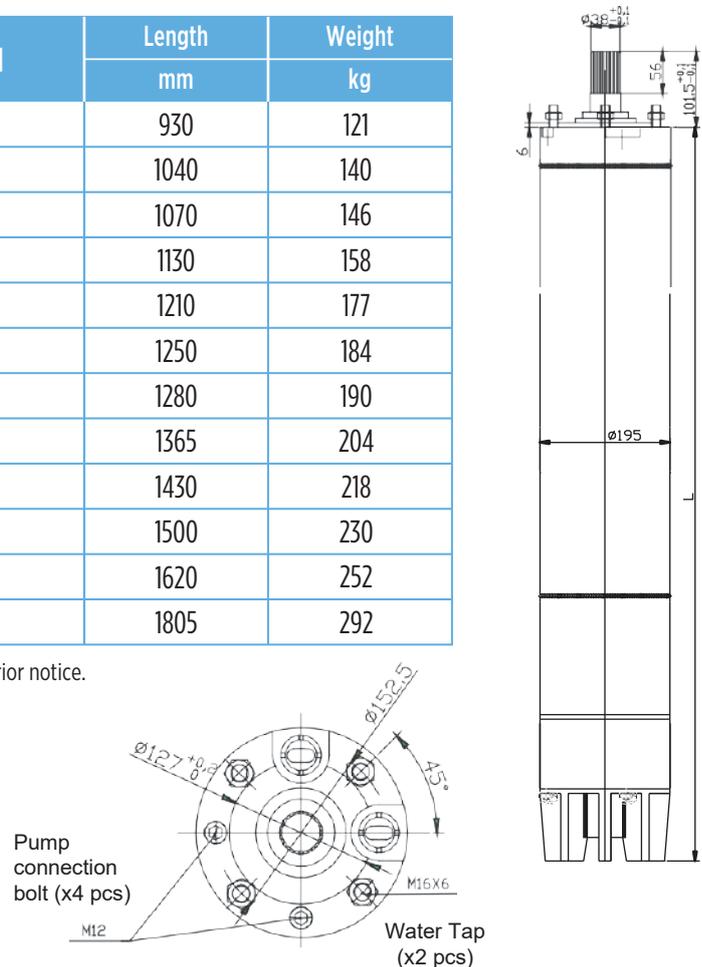
## MOTOR LEADS

MODEL TYPE	HP	KW	Lead [mm <sup>2</sup> ]		Cable Length [m]
			380 V 50 Hz / 400 V 50 Hz / 415 V 50 Hz		
			DOL	STAR - DELTA	
NRS8 3000T	30	22	3 x 4	2 x (3 x 2,5)	4
NRS8 4000T	40	30	3 x 10	2 x (3 x 6)	4
NRS8 5000T	50	37	3 x 10	2 x (3 x 6)	4
NRS8 6000T	60	45	3 x 10	2 x (3 x 6)	4
NRS8 7000T	70	52	3 x 16	2 x (3 x 6)	4
NRS8 7500T	75	55	3 x 16	2 x (3 x 10)	4
NRS8 8000T	80	59	3 x 16	2 x (3 x 10)	4
NRS8 9000T	90	66	3 x 25	2 x (3 x 10)	4
NRS8 10000T	100	75	3 x 25	2 x (3 x 10)	4
NRS8 11000T	110	81	3 x 25	2 x (3 x 16)	4
NRS8 12500T	125	92	3 x 25	2 x (3 x 16)	4
NRS8 15000T	150	110	3 x 35	2 x (3 x 25)	4

## DIMENSIONS

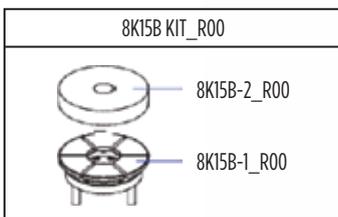
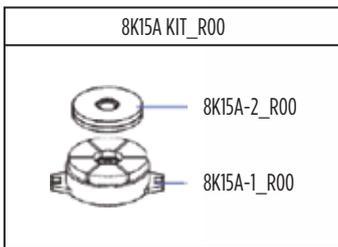
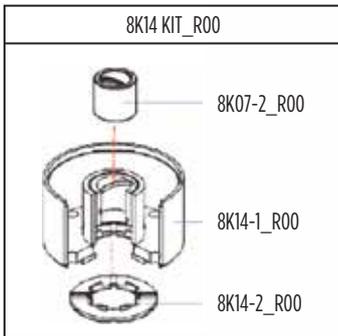
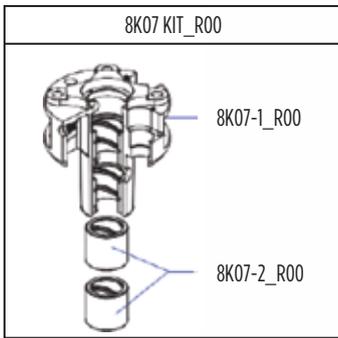
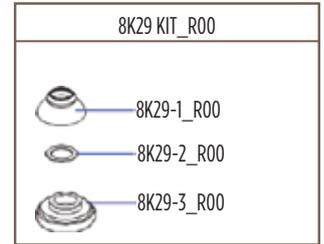
MODEL TYPE	Power		Axial Thrust [N]	Length	Weight
	HP	KW		mm	kg
NRS8 3000T	30	22	38000	930	121
NRS8 4000T	40	30	38000	1040	140
NRS8 5000T	50	37	38000	1070	146
NRS8 6000T	60	45	38000	1130	158
NRS8 7000T	70	52	38000	1210	177
NRS8 7500T	75	55	38000	1250	184
NRS8 8000T	80	59	38000	1280	190
NRS8 9000T	90	66	45000	1365	204
NRS8 10000T	100	75	45000	1430	218
NRS8 11000T	110	81	45000	1500	230
NRS8 12500T	125	92	45000	1620	252
NRS8 15000T	150	110	45000	1805	292

NOTE: Franklin Electric reserves the right to amend specification without prior notice.

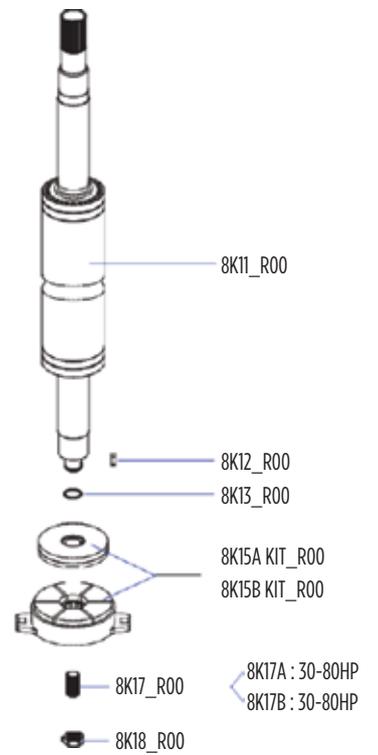


# MOTOR SPARE PARTS

- 8K41\_R00
- 8K40\_R00
- 8K39\_R00
- 8K38\_R00
- 8K37\_R00
- 8K29\_KIT\_R00
- 8K28\_R00
- 8K27\_R00
- 8K26\_R00
- 8K25\_R00
- 8K24\_R00
- 8K34\_R00
- 8K33\_R00
- 8K31\_R00
- 8K32\_R00
- 8K31\_R00
- 8K30\_R00



- 8K35\_R00
- 8K36\_R00
- 8K42\_R00
- 8K43\_R00
- 8K05\_R00
- 8K06\_R00
- 8K05\_R00
- 8K02\_R00
- 8K01\_R00
- 8K02\_R00
- 8K05\_R00
- 8K14\_KIT\_R00
- 8K05\_R00
- 8K16\_R00
- 8K19\_R00
- 8K22\_R00
- 8K21\_R00
- 8K20\_R00
- 8K23\_R00
- 8K07\_KIT\_R00
- 8K10\_R00
- 8K09\_R00
- 8K08\_R00
- 8K04\_R00
- 8K03\_R00
- 8K08\_R00
- 8K09\_R00
- 8K10\_R00



	8K07-1_R00	8K07-1A_R00	DOL
8K07-KIT_R00	8K07-2_R00	8K07-1B_R00	STAR DELTA
		30-60 HP	1PC
8K14-KIT_R00	8K14-1_R00	70-150 HP	2 PCS
	8K14-2_R00		30-150 HP
	8K07-2_R00		1PC
8K15A-KIT_R00	8K15A-1_R00		30-80 HP
8K15B-KIT_R00	8K15A-2_R00		30-80 HP
	8K15B-1_R00		90-150 HP

## PART LISTS

	Part Name	Material	
	8K01_R00	Stator	Lam. Sheet
	8K02_R00	End Turn Protector - Internal	POM
	8K03_R00	Stud - Bottom	AISI 420
	8K04_R00	Stud - Top	AISI 420
	8K05_R00	Gasket	Klingerite
	8K06_R00	Spacer Ring	Steel
8K07 KIT_R00	8K07 KIT_R00	Top End Bell Kit Bell DOL	-----
	8K07-1A_R00	Top End Bell DOL	Cast. Iron
	8K07-1B_R00	Top End Bell SD	Cast. Iron
	8K07-2_R00	Radial Bearing 30-150 HP	Carbon
	8K08_R00	Washer	Copper
	8K09_R00	Washer	AISI 304
	8K10_R00	Nut	AISI 304
	8K11_R00	Rotor	Lam. Sheet
	8K12_R00	Key - Thrust Bearing	Steel
	8K13_R00	Snap Ring - Thrust Bearing	Steel
8K14 KIT_R00	8K14 KIT_R00	Bottom End Bell Kit	-----
	8K14-1_R00	Bottom End Bell	Cast. Iron
	8K14-2_R00	Upthrust Washer	Polyamide
	8K07-2_R00	Radial Bearing 30-150 HP	Carbon
8K15A KIT_R00	8K15A KIT_R00	Thrust Bearing Kit 30-80 HP	-----
	8K15A-1_R00	Thrust Bearing Holder Kit	Steel
	8K15A-2_R00	Thrust Bearing Disc	Carbon
8K15B KIT_R00	8K15B KIT_R00	Thrust Bearing Kit 90-150 HP	-----
	8K15B-1_R00	Leveling Disc Kit	Steel
	8K15B-2_R00	Thrust Bearing Disc	Carbon
	8K16_R00	Thrust Housing	Cast. Iron
	8K17_R00	Screw - Shaft Adjusting	AISI 420
	8K18_R00	Nut - Shaft Adjusting	Steel
	8K19_R00	O Ring	NBR
	8K20_R00	Diaphragm Cover	Cast. Iron
	8K21_R00	Diaphragm	NBR
	8K22_R00	Diaphragm Lid	AISI 430
	8K23_R00	Diaphragm Cover Screw	AISI 304
	8K24_R00	Shaft Seal	SiC
	8K25_R00	Shaft Seal Washer	Fibre
	8K26_R00	Seal Cover	AISI 420
	8K27_R00	Lipseal	NBR
	8K28_R00	Seal Cover Screw	Steel
8K29 KIT_R00	8K29 KIT_R00	Sand Slinger Kit	-----
	8K29-1_R00	Sand Slinger	NBR
	8K29-2_R00	Sand Slinger Washer	AISI 304
	8K29-3_R00	Sand Slinger Cover	PPO
	8K30_R00	Lead	Cable
	8K31_R00	Lead Spacer	POM
	8K32_R00	Lead Seal	EPDM
	8K33_R00	Lead Clamp	PPO
	8K34_R00	Lead Clamp Screw	AISI 304
	8K35_R00	Fill Valve O Ring	NBR
	8K36_R00	Fill Valve	AISI 304
	8K37_R00	Relief Valve O Ring	NBR
	8K38_R00	Relief Valve	Brass
	8K39_R00	Pump Assembly Bolt	AISI 304
	8K40_R00	Lock Washer	AISI 304
	8K41_R00	Pump Assembly Nut	AISI 304
	8K42_R00	Lock Washer for Grounding	AISI 304
	8K43_R00	Ground Screw	AISI 304

Please specify the horse power (HP) and start-up type while ordering a spare part.



**Franklin Electric**

## NRS10 SERIES

### 10" Water Filled Rewindable Submersible Motor

#### SPECIFICATIONS

- Suitable for wells with 298 mm and larger inner diameter
- Maintenance free water lubricated radial and axial (Kingsbury) bearings
- Pressure balancing between inner and outer side with a rubber diaphragm and a pressure
- Rewindable stator reduce repair and maintenance costs

#### FEATURES

- Powers from 150HP to 250HP
- Splined shaft end
- 8" NEMA flange
- Water lubricated
- Voltage tolerance  $\pm 10\%$
- Max. water temperature 30 °C
- Speed 2900 / 3600 rpm
- Starts per hour 5
- Min. cooling flow 1 m/s
- PVC Lead
- Carbon - Ceramic Mechanical Seal (IP68)
- S-D starting for all power rates
- 380V - 400V - 415V in 50Hz & 380V - 460V in 60Hz
- Filled with mixture of water and glycol (FP below -15 °C)

#### Option

- Cable length
- Key type shaft end
- PT 100 temperature sensor
- SiC mechanical seal (IP68)
- Windings for 220V - 220V-380V - 500V in 50Hz & 220V - 220/380V in 60Hz
- Starting DOL or dual voltage
- Rubber lead



## PERFORMANCE

MODEL TYPE	Power		Frequency	Voltage	Current		Efficiency				Factor				Rotation
	HP	kW	Hz	V	100%	115%	50%	75%	100%	115%	50%	75%	100%	115%	[rpm]
NRS10 15000T				380	230.0	-	81.3	84.3	83.2	-	0.83	0.87	0.88	-	2883
	150	110	50	400	223.0	-	82.4	84.8	83.5	-	0.79	0.85	0.87	-	2885
				415	216.0	-	83.0	84.9	83.8	-	0.75	0.82	0.84	-	2895
NRS10 18000T				380	278.0	-	82.6	84.6	83.8	-	0.77	0.84	0.87	-	2900
	180	132	50	400	270.0	-	83.6	85.5	84.7	-	0.71	0.81	0.85	-	2914
NRS10 20000T				415	267.0	-	83.1	85.6	84.6	-	0.65	0.76	0.82	-	2918
				380	305.0	-	82.7	85.2	84.6	-	0.78	0.85	0.87	-	2904
	200	147	50	400	299.0	-	83.8	85.5	84.2	-	0.74	0.82	0.86	-	2905
NRS10 25000T				415	294.0	-	83.1	85.4	85.5	-	0.68	0.78	0.83	-	2907
				380	380.0	-	82.3	85.3	84.9	-	0.76	0.84	0.87	-	2893
	250	185	50	400	374.0	-	82.9	85.1	84.6	-	0.71	0.81	0.85	-	2910
			415	370.0	-	83.9	85.8	84.9	-	0.66	0.77	0.82	-	2914	

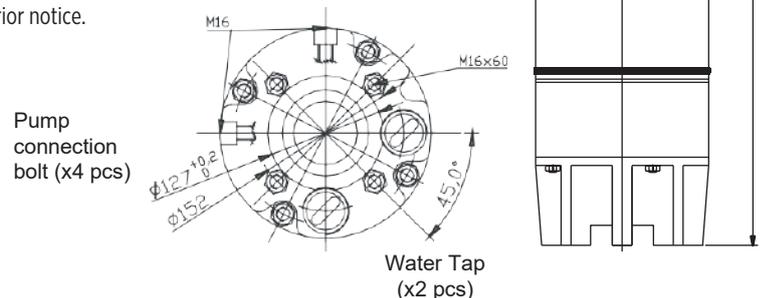
## MOTOR LEADS

MODEL TYPE	HP	kW	Lead [mm <sup>2</sup> ]		
			380 V50 Hz / 400V 50Hz / 415V 50Hz		Cable Length [m]
			DOL	STAR - DELTA	
NRS10 15000T	150	110	3 x 2.5	2 x (3 x 25)	5
NRS10 18000T	180	132	50 + 50 + 50	2 x (3 x 25)	5
NRS10 20000T	200	147	50 + 50 + 50	2 x (3 x 25)	5
NRS10 25000T	250	185	70 + 70 + 70	2 x (3 x 25)	5

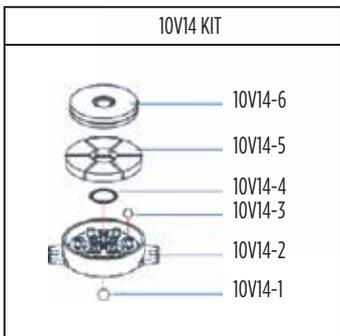
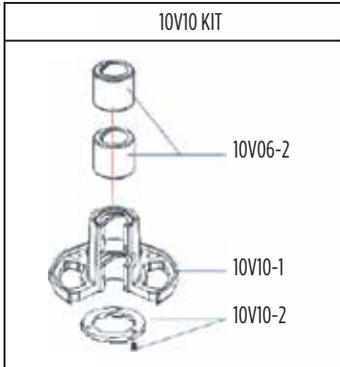
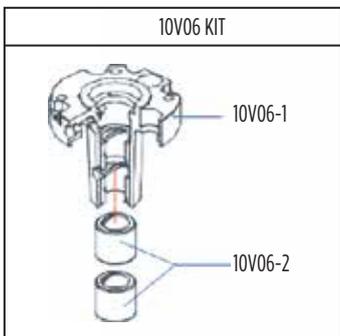
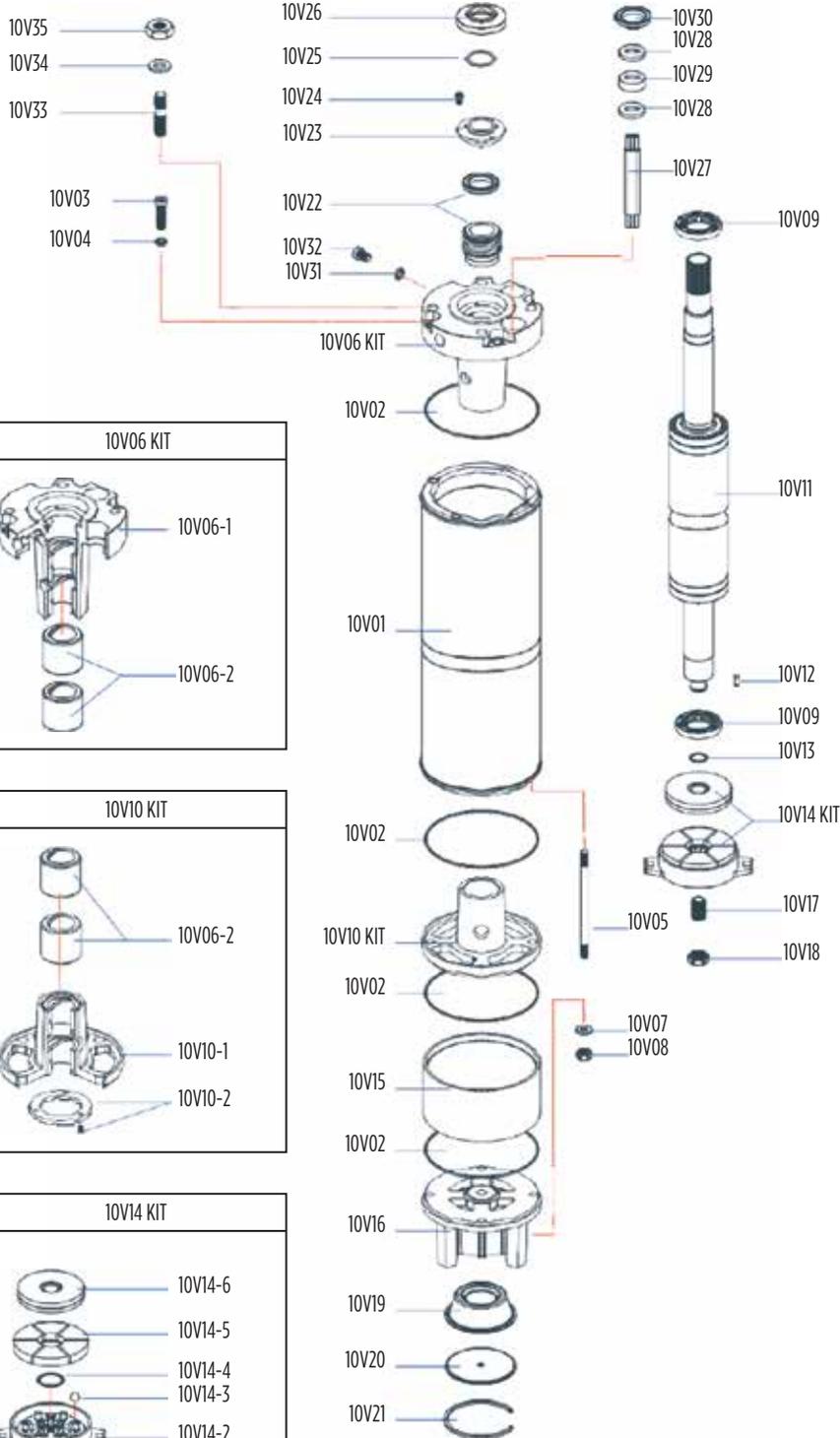
## DIMENSIONS

MODEL TYPE	Power		Axial Thrust [N]	Length	Weight
	HP	kW		mm	kg
NRS10 15000T	150	110	60000	1464	330
NRS10 18000T	180	132	60000	1584	370
NRS10 20000T	200	147	60000	1674	400
NRS10 25000T	250	185	60000	1874	464

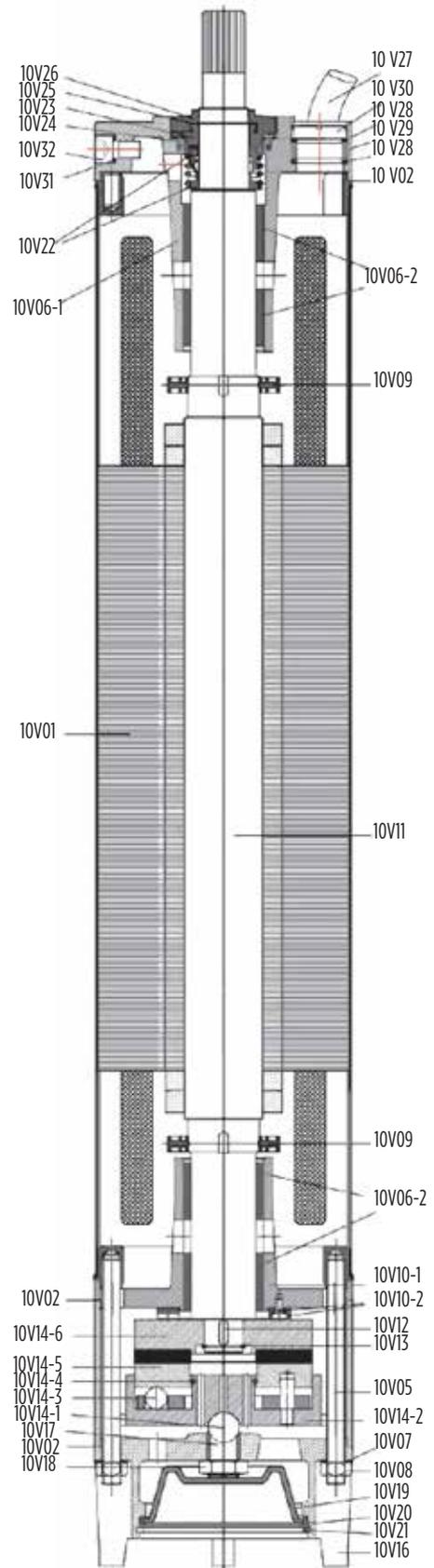
NOTE: Franklin Electric reserves the right to amend specification without prior notice.



# MOTOR SPARE PARTS



10V06-KIT	10V06-1	10V06-1A	DOL
	10V06-2	10V06-1B	STAR DELTA
10V10-KIT	10V10-1	10V06-2	150-250 HP
	10V10-2	10V10-1	150-250 HP
	10V06-2	10V10-2	
10V14-KIT	10V14-1	10V06-2	150-250 HP
	10V14-2		
	10V14-3		
	10V14-4		
	10V14-5		
	10V14-6		



## PART LISTS

	Part Name	Material	
	10V01	Stator	Magn. Iron Sheet
	10V02	Gland	Guarnital
	10V03	Stud	AISI 304
	10V04	Stud	AISI 304
	10V05	Stud	AISI 304
10V06 KIT	10V06 KIT	Motor Upper Body Kit	-----
	10V06-1A	Motor Upper Body DOL	Cast. Iron
	10V06-1B	Motor Upper Body SD	Cast. Iron
	10V06-2	Bushing 125-250 HP	Carbon
	10V07	Washer	AISI 304
	10V08	Nut	AISI 304
	10V09	Impeller	Plastic
10V10 KIT	10V10 KIT	Motor Lower Body Kit	-----
	10V10-1	Motor Lower Body Kit	Cast Iron
	10V10-2	Striker Disk	Resine
	10V06-2	Bushing 125-250 HP	Carbon
	10V11	Rotor	Magn. Iron Sheet
	10V12	Key	Steel
	10V13	Seeger Ring	Steel
10V14 KIT	10V14 KIT	Thrust Kit 125-250 HP	-----
	10V14-1	Thrust Ball	AISI 316
	10V14-2	Thrust Box	AISI 304
	10V14-3	Thrust Sliding Ball	AISI 316
	10V14-4	Thrust O.R. Ring	Rubber
	10V14-5	Thrust Sliding	Stainless Steel
	10V14-6	Thrust Disk Carbon	Carbon
	10V15	Motor Base Flange	Steel
	10V16	Motor Base	Cast. Iron
	10V17	Motor Adjustment Screw	AISI 304
	10V18	Motor Adjustment Nut	AISI 304
	10V19	Membrane	Rubber
	10V20	Membrane Lid	AISI 420
	10V21	Membrane Lid Seeger Ring	Steel
	10V22	Mech. Seal	Carbon-Ceramic
	10V23	Mech. Seal Cover	AISI 420
	10V24	Mech. Seal Seeger R	AISI 304
	10V25	Sand Guard	AISI 420
	10V26	Sand Guard Screw	AISI 304
	10V27	Supply Cable	Cable
	10V28	Cable - Press	Nylon
	10V29	Gland	Rubber
	10V30	Ring Nut	Bronze
	10V31	Washer O.R. Ring	Rubber
	10V32	Plug	AISI 304
	10V33	Assembly Screw	AISI 304
	10V34	Pump Locking Washer	AISI 304
	10V35	Pump Locking Nut	AISI 304

Please specify the horse power (HP) and start-up type while ordering a spare part.











COVERCO is a long recognized Italian manufacturer of high quality submersible motors with more than 50 years of experience in the industry. FRANKLIN ELECTRIC acquired COVERCO in year 2002, further strengthening COVERCO R&D capability, production capacity, sales and service networks, delivering expanded product portfolio around the globe.

**Franklin Electric (SEA) Pte Ltd**

**ASEAN|Bangladesh|Pakistan|Sri Lanka**

17 Changi Business Park Central 1 | #06-05 Honeywell Building | Singapore 486073

Phone. +65 6789 6865 - Fax. +65 6789 0155



[www.franklinwatersea.com](http://www.franklinwatersea.com)



0123.3 ed 12/2025