

Franklin Electric Europa GmbH

6" Rewindable Motors

Product Information and Service



Franklin Electric

QUALITY IN THE WELL

POWERED BY



Franklin Electric



QUALITY



AVAILABILITY



SERVICE



INNOVATION





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6" Rewindable Motors

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6" Rewindable Motors

6" Rewindable Motors

Standard: **SAND FIGHTER**

Optional: **STAINLESS STEEL 316 SS** / **STAINLESS STEEL 904 L**



Submersible Motors Quality in the Well

These 6" rewindable motors, manufactured in ISO 9001 certified facilities, are built for dependable operation in 6" diameter or larger water wells. Water lubricated thrust and radial bearings enable a maintenance free operation. A special diaphragm ensures pressure compensation inside the motor. The motor is filled with a special FES93 fluid, providing frost protection down to -15°C storage temperature. The Sand fighter® SiC seal system is the option for sandy applications. For applications in aggressive media, motors made of 316SS and 904L are available.

Product advantages:

- Cable material according to drinking water regulations (VDE / ACS / KTW approved)
- motor with SiC mechanical and sand slinger
- High efficiency electrical design for low operation cost
- All motors prefilled and 100% tested
- Max. storage temperature -15°C - +60°C
- Design for retrofitable PT100 sensor
- Approved Franklin Electric „Kingsbury Type“ thrust bearing
- Non contaminating FES 93 -filled design
- Sand fighter® SiC seal system is standard
- Standard Motors complete 304SS

Technical Specifications

Standard Motor:

- 4,0 - 37,0kW
- 6" NEMA flange with Studs (M 12)
- Protection: IP 68
- Starts per hour: max. 20
- Installation position: vertical / horizontal (**37 kW** motors may not be installed horizontally)
- Motor Lead in 4m length (KTW approved)
- Standard Voltage: 380-415V/50Hz, 460V/60Hz
- Voltage tolerance 50Hz: -10% / +6% U_N [380-415V = (380-10%) – (415+6%)]
- Voltage tolerance 60Hz: $\pm 10\% U_N$
- Motor protection: Select thermal overloads according to EN 60947-4-1, trip class 10 or 10A, trip time < 10 s at $5 \times I_N$
- Standard motor with PVC winding insulation (37kW in standard with PE2/PA insulation) for max. ambient temp. of 30°C with a min. cooling flow:

4 kW - 15 kW $v = 0,2$ m/s
18,5 kW - 37 kW $v = 0,5$ m/s

Options

- Other voltages
- YΔ - start (pos. of cables 90°)
- Motors complete in 316SS and 904L
- Motors up to 30kW with PE2/PA winding insulation for max. ambient temp. of 50°C at the same cooling conditions as standard (37 kW max. 45°C)
- PT 100 temperature sensor (sold separately)
- Lead in different lengths up to 50m

6" Rewindable Motors



6" Rewindable Motors - Model Numbers *

P _N [kW]	U _N / f [V] / [Hz]	Model Number Digit 1 – 6		Model Number Digit 7 – 10			
		DOL	YΔ	304SS	316SS	904L	PE2/PA
4,0	380 - 415 / 50 460 / 60	262 610	262 710	8611	6611	7611	*7** ONLY DOL
	380/ 60	262 660	262 780				
5,5	380 - 415 / 50 460 / 60	262 611	262 711	8611	6611	7611	*7** ONLY DOL
	500 / 50	262 511	262 811				
	380/ 60	262 661	262 781				
7,5	380 - 415 / 50 460 / 60	262 612	262 712	8611	6611	7611	*7** ONLY DOL
	500 / 50	262 512	262 812				
	380/ 60	262 662	262 782				
9,3	380 - 415 / 50 460 / 60	262 231	262 331	8611	6611	7611	*7** ONLY DOL
	500 / 50	262 27	262 371				
	380/ 60	262 221	262 321				
11	380 - 415 / 50 460 / 60	262 613	262 713	8611	6611	7611	*7** ONLY DOL
	500 / 50	262 513	262 813				*7**
	380/ 60	262 663	262 783				
13	380 - 415 / 50 460 / 60	262 232	262 332	8611	6611	7611	*7**
	500 / 50	262 27	262 372				
	380/ 60	262 222	262 322				
15	380 - 415 / 50 460 / 60	262 614	262 714	8611	6611	7611	*7**
	500 / 50	262 514	262 814				
	380/ 60	262 664	262 784				
18,5	380 - 415 / 50 460 / 60	262 615	262 715	8611	6611	7611	*7**
	500 / 50	262 515	262 815				
	380/ 60	262 665	262 785				
22	380 - 415 / 50 460 / 60	262 616	262 716	8611	6611	7611	*7**
	500 / 50	262 516	262 816				
	380/ 60	262 666	262 786				
26	380 - 415 / 50 460 / 60	262 233	262 333	8611	6611	7611	*7**
	500 / 50	262 273	262 373				
	380/ 60	262 223	262 323				
30	380 - 415 / 50 460 / 60	262 617	262 717	8611	6611	7611	*7**
	500 / 50	262 517	262 817				
	380/ 60	262 667	262 787				
37	380 - 415 / 50 460 / 60	262 618	262 718		6711	7611	STANDARD
	500 / 50	262 518	262 818				
	380/ 60	262 668	262 788				

* For VFD Operation is PE2/PA mandatory!



6" Rewindable Motors

6" Rewindable Motors - Performance Data 50Hz

P _N [kW]	Thrust F [N]	U _N [V]	n _N [min ⁻¹]	I _N [A]	I _A [A]	η (Eff.) [%] at % load			cos φ (PF) at % load			T _N [Nm]	T _A [Nm]
						50	75	100	50	75	100		
4	15500	380	2910	10,4	48	71	75	76	0,59	0,71	0,78	13,1	15,5
		400	2930	10,6	51	68	73	76	0,53	0,65	0,73	13,1	17,3
		415	2930	10,9	53	65	72	76	0,50	0,61	0,69	13,0	18,8
5,5	15500	380	2860	13,7	48	74	76	75	0,67	0,78	0,83	18,3	15,5
		400	2890	13,3	51	72	76	76	0,62	0,74	0,81	18,2	17,3
		415	2890	13,4	53	71	75	75	0,59	0,71	0,78	18,1	18,8
		500	2890	10,6	41	72	76	76	0,62	0,74	0,81	17	18
7,5	15500	380	2860	18,3	59	77	78	76	0,70	0,80	0,84	25,0	19,2
		400	2880	17,7	63	75	78	77	0,65	0,76	0,82	24,8	21,5
		415	2890	17,7	65	73	77	77	0,61	0,73	0,80	24,7	23,4
		500	2880	14,0	50	75	78	77	0,65	0,76	0,82	22	25
9,3	15500	380	2850	22,0	74	79	80	78	0,71	0,80	0,84	31,1	25,9
		400	2870	21,4	78	78	79	78	0,64	0,76	0,82	31,0	29,0
		415	2880	21,2	81	76	79	78	0,60	0,72	0,80	30,9	31,4
		500	2870	17,1	62	78	79	78	0,64	0,76	0,82	29	31
11,0	15500	380	2860	25,8	93	78	80	78	0,71	0,80	0,85	36,7	31,5
		400	2880	25,2	98	77	80	79	0,65	0,76	0,83	36,4	35,3
		415	2890	25,1	102	75	78	79	0,61	0,73	0,80	36,3	38,2
		500	2880	20,0	79	77	80	79	0,65	0,76	0,82	35	36
13,0	15500	380	2880	30,1	118	80	81	80	0,68	0,79	0,84	43,1	45,0
		400	2900	29,6	125	78	80	80	0,61	0,74	0,81	42,8	50,3
		415	2900	29,7	130	76	79	80	0,57	0,70	0,78	42,7	54,6
		500	2900	23,7	100	78	80	80	0,61	0,74	0,81	50	43
15,0	15500	380	2880	33,9	140	81	82	81	0,71	0,81	0,85	49,7	53,9
		400	2890	33,1	148	79	81	81	0,65	0,77	0,83	49,4	60,4
		415	2900	33,0	154	77	80	81	0,60	0,73	0,81	49,3	65,5
		500	2890	26,4	119	79	81	81	0,65	0,77	0,83	60	49
18,5	15500	380	2860	42,3	172	81	82	81	0,68	0,78	0,84	61,7	75,2
		400	2880	42,0	182	78	81	81	0,61	0,74	0,80	61,2	84,3
		415	2890	42,5	189	76	79	80	0,57	0,70	0,77	61,1	91,3
		500	2880	33,6	146	78	81	81	0,61	0,74	0,80	84	61
22,0	15500	380	2880	49,1	218	82	84	83	0,68	0,78	0,84	72,6	91,2
		400	2900	49,0	231	80	82	82	0,61	0,73	0,80	72,5	102,2
		415	2910	49,6	240	77	81	82	0,56	0,69	0,77	72,2	110,7
		500	2900	39,2	185	80	82	82	0,61	0,73	0,80	102	72
26	15500	380	2880	57,5	268	83	84	83	0,68	0,79	0,86	86,0	120,4
		400	2900	56,7	284	81	83	83	0,61	0,74	0,83	85,6	134,7
		415	2910	57,3	296	78	82	82	0,56	0,69	0,80	85,3	146,1
		500	2900	45,7	227	80	83	83	0,61	0,74	0,81	135	86
30,0	27500	380	2900	66,4	328	82	84	83	0,67	0,78	0,84	98,8	135,0
		400	2910	66,4	347	80	83	83	0,60	0,73	0,80	98,4	151,0
		415	2910	67,5	361	77	81	82	0,55	0,68	0,77	98,2	163,0
		500	2910	53,2	277	80	83	83	0,60	0,73	0,80	151	98
37	27500	380	2890	82,0	409	83	84	83	0,67	0,78	0,85	122,1	192,8
		400	2900	81,9	433	80	83	83	0,60	0,72	0,80	121,6	215,8
		415	2910	83,9	450	77	81	82	0,55	0,68	0,76	121,3	234,0
		500	2900	65,6	346	80	83	83	0,60	0,72	0,80	216	122

6" Rewindable Motors



6" Rewindable Motors - Performance Data 60Hz

P _N [kW]	P _{max} [kW]	Thrust F [N]	U _N [V]	n _{max} [min ⁻¹]	I _{max} [A]	I _A [A]	η _{max} (Eff.) [%] at % load			cos φ _{max} (Pf.) at % load			T _{max} [Nm]	T _A [Nm]
							50	75	100	50	75	100		
4	4,6	15500	230	3520	21,0	106	70	75	77	0,52	0,64	0,73	12,5	18,6
			380	3530	13,3	61	66	72	77	0,51	0,63	0,71	12,4	15,0
			460	3520	10,1	51	70	76	78	0,56	0,67	0,75	12,5	15,3
5,5	6,3	15500	230	3490	26,1	106	74	78	78	0,61	0,73	0,80	17,3	15,9
			380	3480	15,4	61	76	78	78	0,64	0,75	0,81	17,3	15,0
			460	3480	12,9	51	74	77	77	0,65	0,76	0,82	17,3	15,1
7,5	8,6	15500	230	3490	35,9	146	75	79	79	0,58	0,71	0,78	23,6	22,4
			380	3480	20,8	81	76	79	79	0,64	0,75	0,81	23,6	20,2
			460	3470	17,2	64	75	78	78	0,67	0,77	0,82	23,7	19,4
9,3	10,7	15500	230	3490	44,4	183	75	79	79	0,59	0,71	0,78	29,3	28,9
			380	3470	25,6	100	77	80	80	0,64	0,75	0,81	29,4	25,9
			460	3460	20,8	78	78	80	80	0,67	0,78	0,82	29,4	24,4
11,0	12,7	15500	230	3490	51,2	220	77	80	81	0,60	0,72	0,79	34,6	35,6
			380	3490	30,3	129	77	81	81	0,62	0,74	0,80	34,5	34,3
			460	3480	25,0	98	78	81	80	0,68	0,77	0,83	34,7	31,5
13,0	15,0	15500	230	3500	62,4	288	76	80	81	0,55	0,68	0,76	40,7	50,5
			380	3500	36,3	164	77	81	82	0,59	0,71	0,78	40,7	47,2
			460	3490	29,0	125	78	81	81	0,65	0,76	0,82	40,9	43,3
15,0	17,3	15500	230	3500	65,9	325	80	83	83	0,63	0,74	0,81	47,0	59,5
			380	3490	39,1	188	81	83	83	0,66	0,77	0,82	47,2	56,5
			460	3490	32,1	151	80	83	83	0,68	0,78	0,84	47,1	55,6
18,5	21,3	15500	230	3490	85,4	402	77	81	82	0,59	0,71	0,78	58,1	81,8
			380	3490	52,5	249	76	80	81	0,58	0,70	0,77	58,1	83,6
			460	3480	40,6	184	80	82	82	0,65	0,76	0,81	58,4	74,5
22,0	25,3	15500	230	3510	100,2	520	82	84	84	0,65	0,74	0,77	68,8	96,6
			380	3510	59,9	309	82	84	84	0,67	0,75	0,78	68,8	94,9
			460	3500	47,1	232	83	84	84	0,72	0,79	0,82	69,1	85,8
26	29,9	15500	230	3510	118,3	657	83	85	85	0,63	0,72	0,76	81,3	135,0
			380	3500	67,5	360	83	85	85	0,62	0,74	0,81	81,6	121,4
			460	3500	55,7	287	83	85	85	0,64	0,76	0,84	81,6	117,2
30,0	34,5	27500	230	3510	135,7	758	78	82	83	0,58	0,71	0,78	93,8	139,6
			380	3510	79,6	436	79	83	84	0,62	0,74	0,81	93,9	132,9
			460	3500	64,4	346	81	84	84	0,64	0,75	0,82	94,0	126,4
37,0	42,6	27500	230	3510	169,9	937	77	81	82	0,59	0,71	0,78	115,8	193,6
			380	3510	102,8	567	77	81	82	0,59	0,71	0,78	115,8	193,6
			460	3500	79,1	430	82	84	85	0,63	0,75	0,81	116,0	177,8



6" Rewindable Motors

6" Rewindable Motors - Motor Leads*

DOL	P _N [kW]	St.#	∅ [mm ²]	H / B [mm]	Length [m]	Lead Mod.- Nr.	Motor Design up to 12.2012			Motor Design starting 01.2013
							Lead seal Kit Cast Iron	Lead seal Kit 316 SS	Lead seal Kit 904 L	Lead seal Kit
	4 - 13	1	4G2,5	7,0 x 19,0	4	308 710 100	308 660 801	308 660 821	308 660 831	308 660 811
	15 - 22	1	4G4	8,2 x 23,0	4	308 710 101	308 660 802	308 660 822	308 660 832	308 660 812
	26 - 37	1	4G6	9,0 x 25,0	4	308 710 103	308 660 803	308 660 823	308 660 833	308 660 813

For PE2/PA engines additionally the special Tape **700 541 688** is absolutely necessary

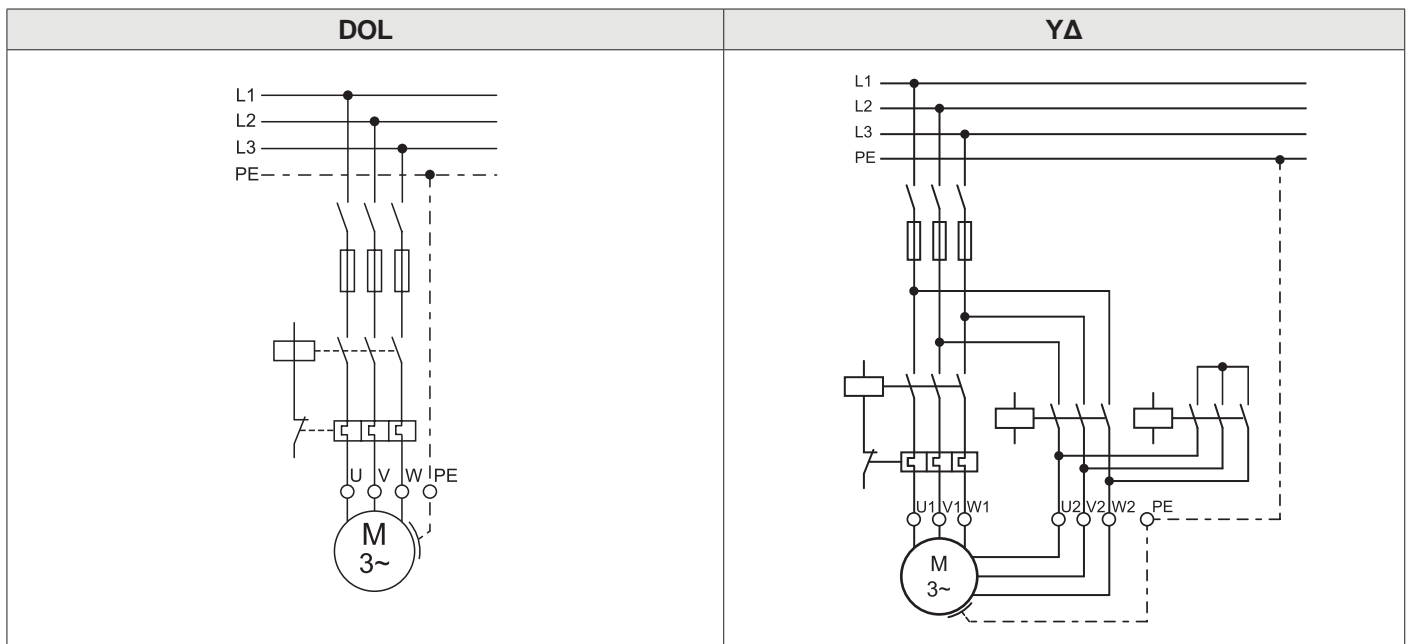
YΔ	P _N [kW]	St.#	∅ [mm ²]	B / H [mm]	Length [m]	Lead Mod.- Nr.	Motor Design up to 12.2012			Motor Design starting 01.2013
							Lead seal Kit Cast Iron	Lead seal Kit 316 SS	Lead seal Kit 904 L	Lead seal Kit
	4 - 22	1	3X2,5	7,3 x 15,3	4	308 710 104	308 660 806	308 660 826	308 660 836	308 660 816
		1	4G2,5	7,0 x 19,0	4					
	26 - 30	1	3X4	8,5 x 17,8	4	308 710 105	308 660 807	308 660 827	308 660 837	308 660 817
		1	4G4	8,2 x 23,0	4					
	37	1	3X4	8,5 x 17,8	4	308 710 106	308 660 807	308 660 827	308 660 837	308 660 817
		1	4G4	8,2 x 23,0	4					

For PE2/PA engines additionally the special Tape **700 541 688** is absolutely necessary

Lead opening seal Kit	Motor Design up to 12.2012			Motor Design starting 01.2013
4 - 37 kW DOL / YΔ	Cast Iron	Kit 316 SS	Kit 904 L	Kit
	308 660 805	308 660 825	308 660 835	308 660 815

*Cables are designed for submerged operation. For air operation please consult Franklin Electric.

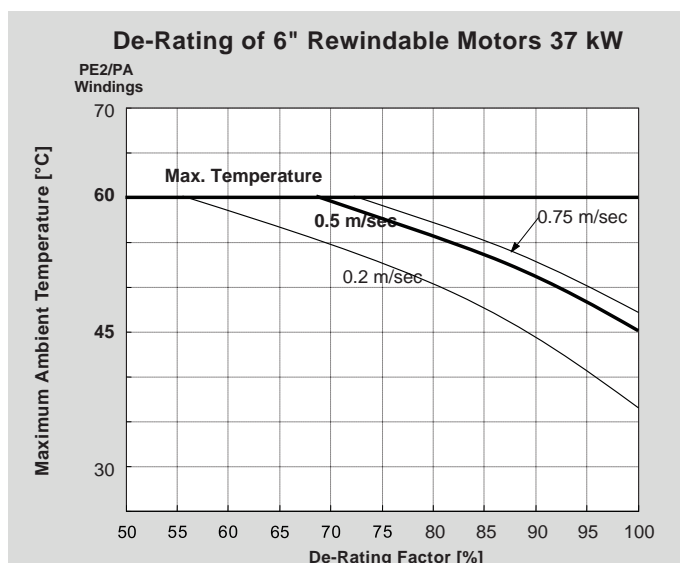
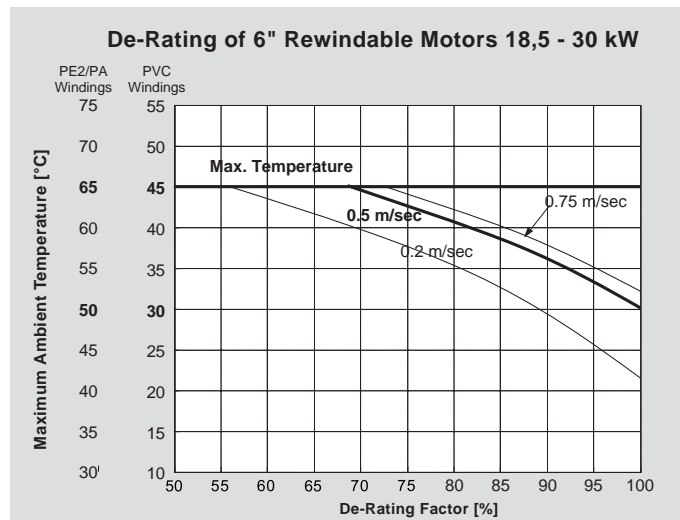
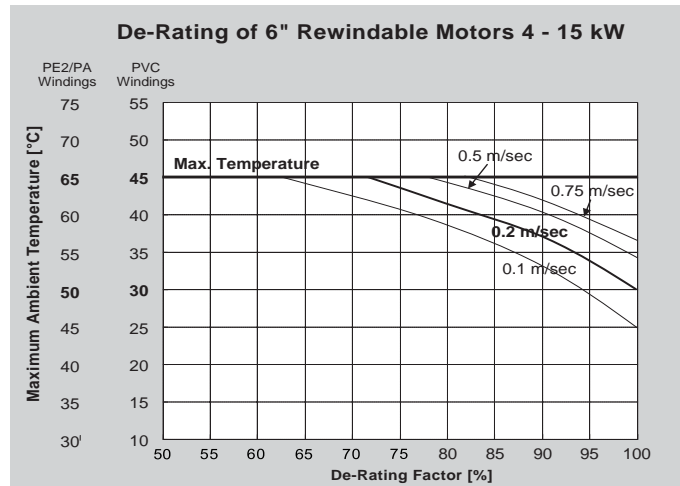
Electrical Connection



U	V	W	PE
brown	grey	black	yellow/green



6" Rewindable De-Rating Curves



If these conditions are not met please contact Franklin Electric !



6" Rewindable Motors

6" Rewindable Motor Design

304SS / 316SS / 904L



Construction Materials

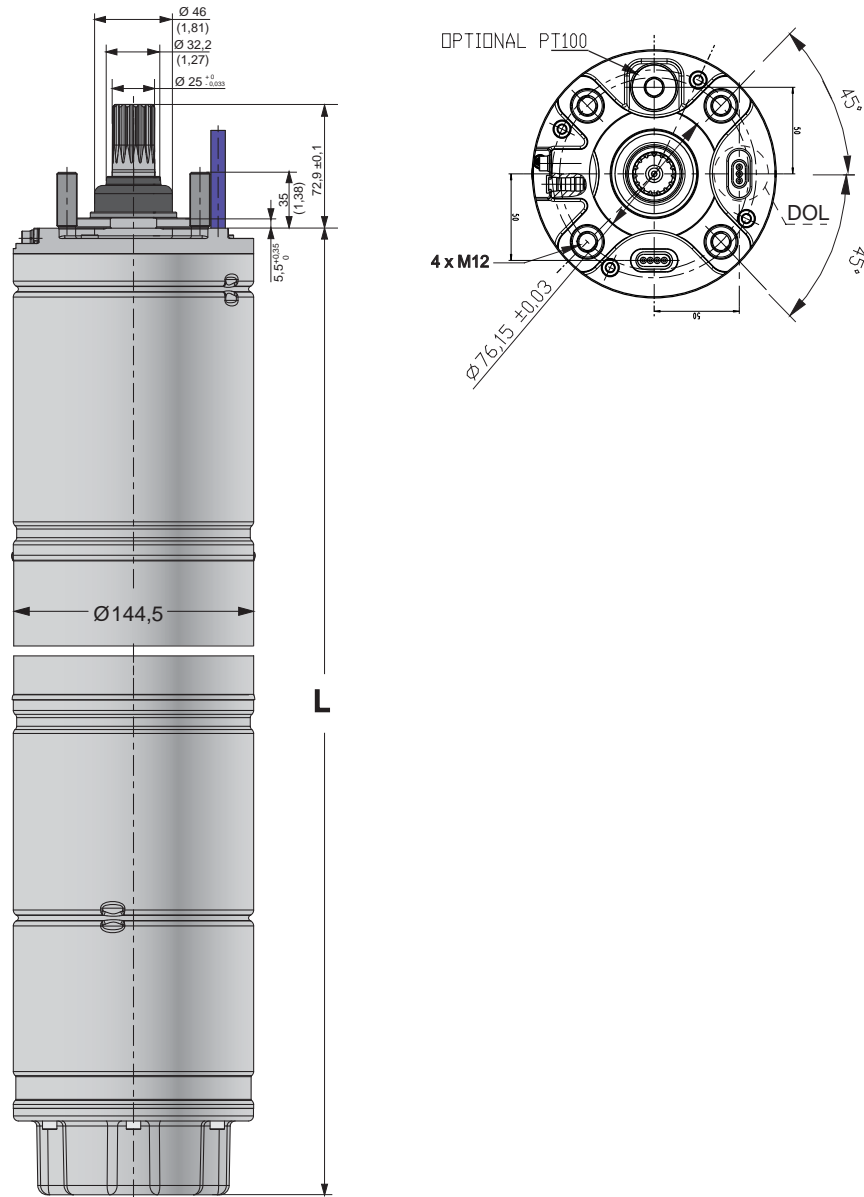
Component	304SS	316SS	904L
Shaft Extensions	1.4021	1.4462	1.4462
Slinger	NBR	NBR	NBR
Seal	SiC/SiC	SiC/SiC	SiC/SiC
End bell, NEMA	1.4308	1.4408	1.4539
Stator Shell	1.4301	1.4571	1.4539
Diaphragm	EPDM	EPDM	EPDM
Diaphragm Cover	1.4301	1.4404	1.4539

6" Rewindable Motors



6" Rewindable Motor Design

304SS / 316SS / 904L



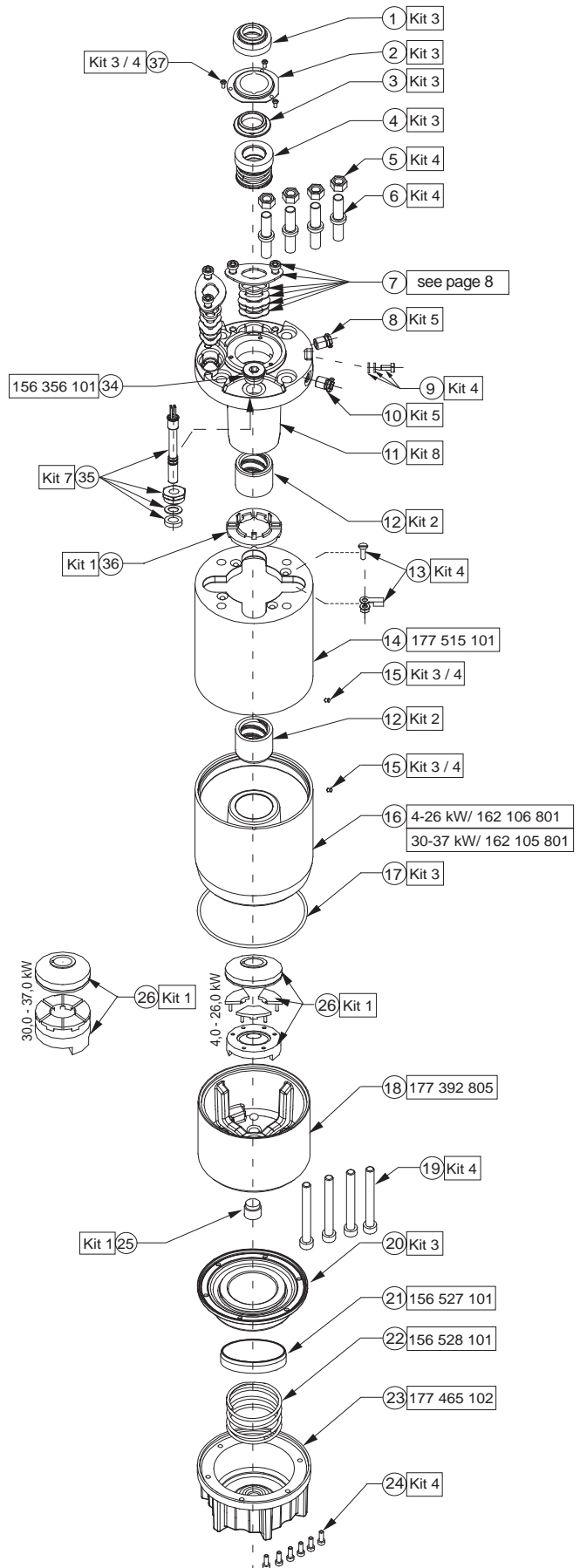
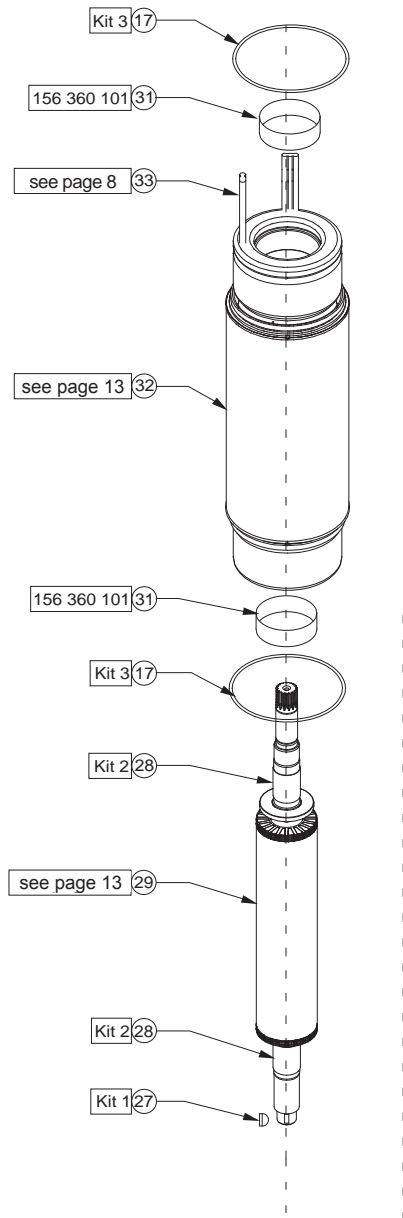
P [kW]	Motor Lengths	Motor weights [kg]		Motor Shipping Size		
	L [mm] 304SS / 316SS / 904L	304SS / 316SS / 904L		B [mm]	H [mm]	L [mm]
		Motor	incl. pack			
4	679	43	48	155	270	905
5,5	679	43	48			
7,5	699	45	50			
9,3	729	49	54			
11	759	53	58			
13	809	57	62	155	270	1135
15	854	61	66			
18,5	899	66	71			
22	989	77	82			
26	1094	88	93	155	270	1435
30	1194	98	103			
37	1274	105	110			



6" Rewindable Motors

6" Rewindable Spare Parts Cast Iron Version (up to 12.2012)

Kit 1 Thrust Bearing Kit	4-26kW	Pos.: 17; 25; 26; 27; 36	308 750 301
	30-37kW		308 750 302
Kit 2 Radial Bearing Kit	4-26kW	Pos.: 12; 28	308 750 401
	30-37kW		308 750 402
Kit 3 Seal Kit	Standard	Pos.: 1; 2; 3; 4; 15; 17; 20; 37	308 800 412
	Sandfighter		308 800 415
Kit 4 Screw Kit	Pos.: 5; 6; 9; 13; 15; 19; 24; 37		308 659 320
Kit 5 Valve Kit	Pos.: 8; 10		308 800 414
Kit 6 Lead Seal Kit	Pos.: 7		see page 8
Kit 7 PT100 Kit	Pos.: 35		see page 22
Kit 8 Endbell upper	4 - 26kW DOL	Pos.: 11	162 104 802
	30- 37kW DOL	Pos.: 11	162 103 802
	4- 26kW YD	Pos.: 11	162 104 801
	30- 37kW YD	Pos.: 11	162 103 801





Cast Iron Version Stator and Rotor Model Number (380 - 415 Volts / 50Hz) (up to 12.2012)

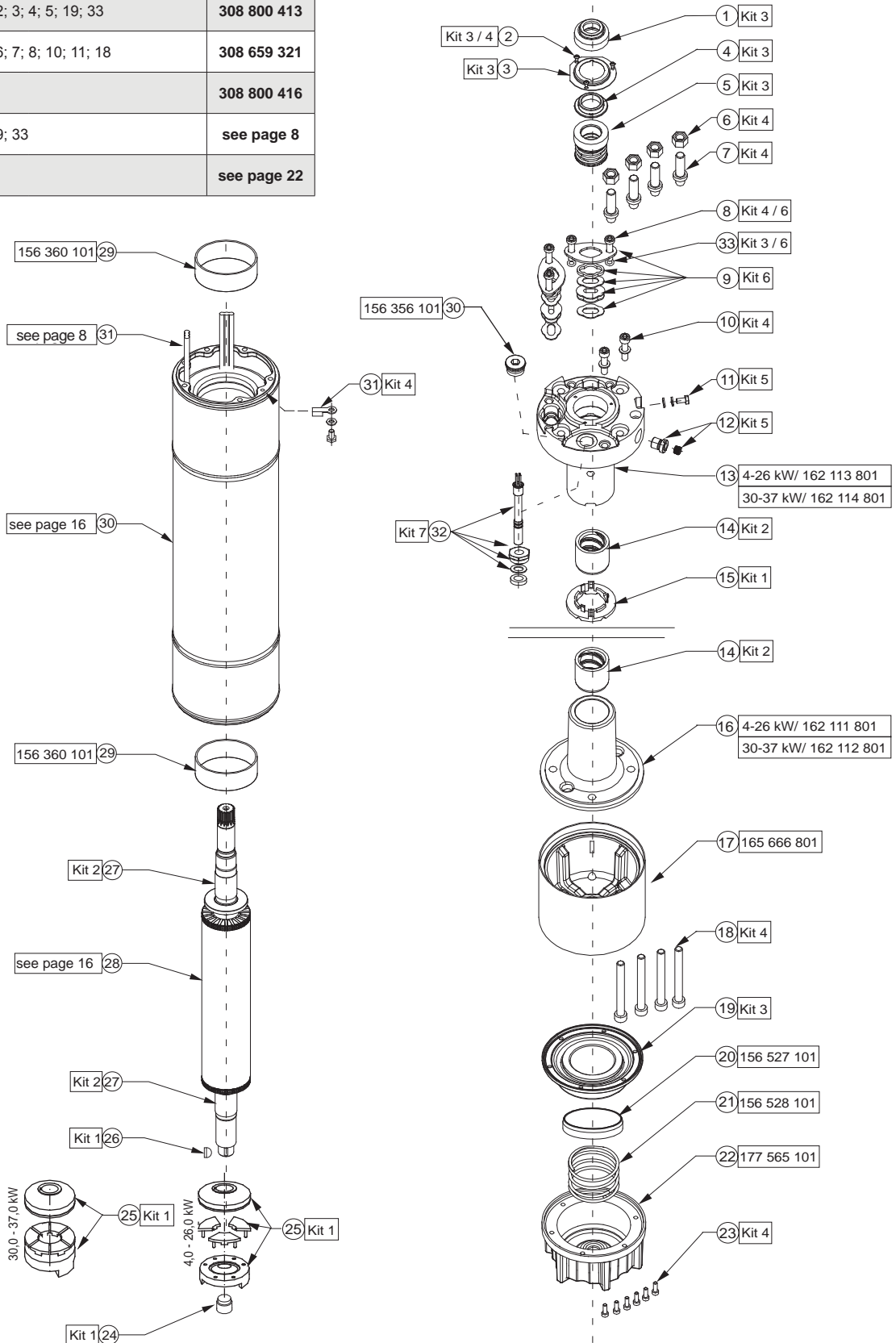
P _N [kW]	Stator (incl. winding and 4m motor lead)				Rotor
	DOL 304		YΔ 304		
	PVC	PE2/PA	PVC	PE2/PA	
4	326 364 931	326 461 931	326 364 981		161 133 811K
5,5	326 364 931	326 461 931	326 364 981		161 133 811K
7,5	326 375 931	326 428 931	326 375 981		161 133 810K
9,3	326 374 931	326 429 931	326 374 981		161 133 809K
11	326 373 931	326 430 931	326 373 981		161 133 808K
13	326 372 931	326 431 931	326 372 981		161 133 807K
15	326 366 931	326 432 931	326 366 981	326 432 981	161 133 806K
18,5	326 371 931	326 433 931	326 371 981	326 433 981	161 133 805K
22	326 370 931	326 434 931	326 370 981	326 434 981	161 133 804K
26	326 378 931	326 435 931	326 378 981	326 435 981	161 133 801K
30	326 369 931	326 436 931	326 369 981	326 436 981	161 133 802K
37		326 377 931		326 377 981	161 133 803K



6" Rewindable Motors

6" Rewindable Spare Parts 316SS (up to 12.2012)

Kit 1 Thrust Bearing Kit	4-26kW	Pos.: 15; 24; 25; 26	308 750 301
	30-37kW		308 750 302
Kit 2 Radial Bearing Kit	4-26kW	Pos.: 14; 27	308 750 401
	30-37kW		308 750 402
Kit 3 Seal Kit	Pos.: 1; 2; 3; 4; 5; 19; 33		308 800 413
Kit 4 Screw Kit	Pos.: 2; 6; 7; 8; 10; 11; 18		308 659 321
Kit 5 Valve Kit	Pos.: 12		308 800 416
Kit 6 Lead Seal Kit	Pos.: 8; 9; 33		see page 8
Kit 7 PT100 Kit	Pos.: 32		see page 22

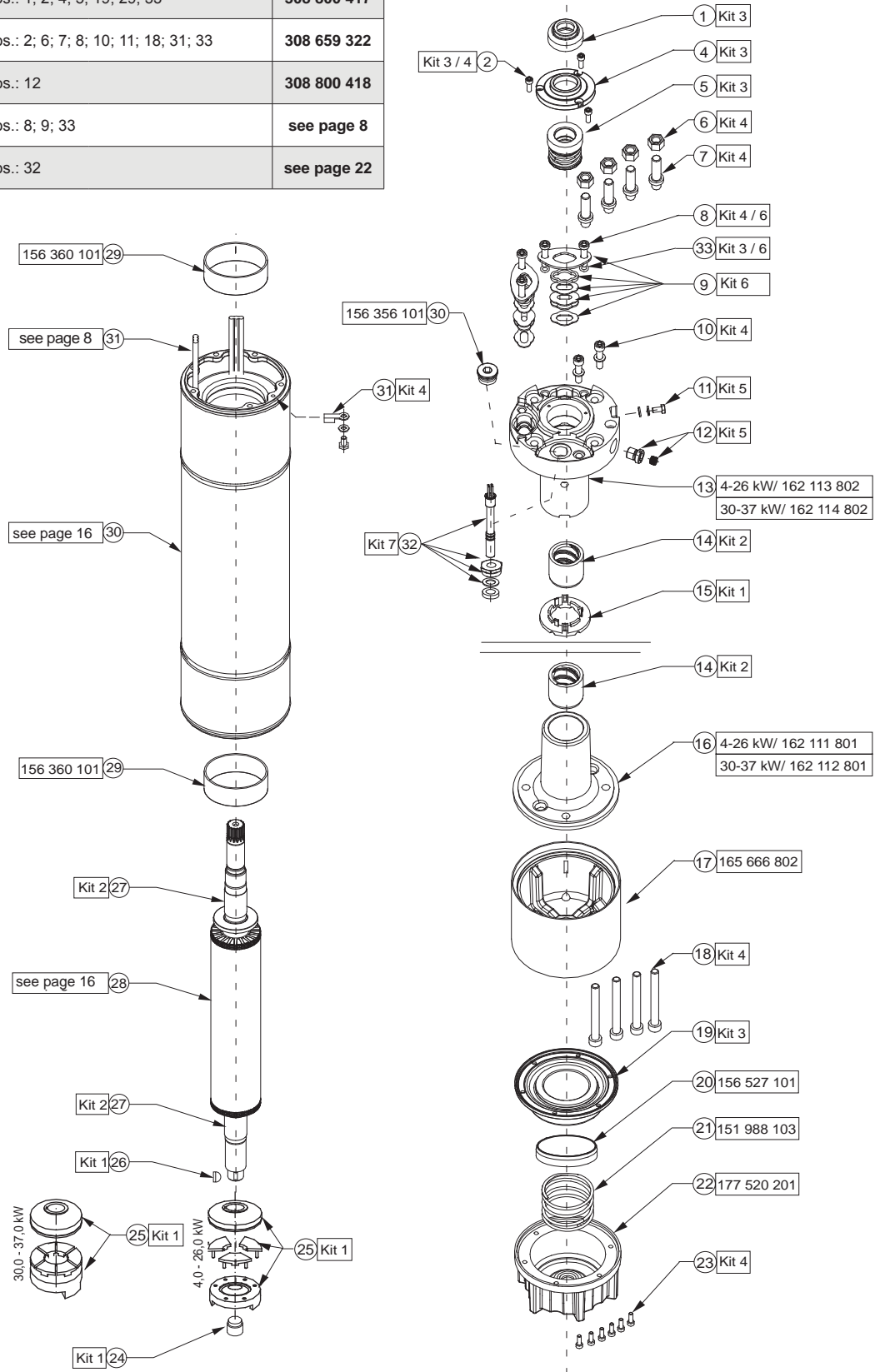


6" Rewindable Motors



6" Rewindable Spare Parts 904L (up to 12.2012)

Kit 1 Thrust Bearing Kit	4-26kW	Pos.: 15; 24; 25; 26	308 750 301
	30-37kW		308 750 302
Kit 2 Radial Bearing Kit	4-26kW	Pos.: 14; 27	308 750 401
	30-37kW		308 750 402
Kit 3 Seal Kit	Pos.: 1; 2; 4; 5; 19; 29; 33		308 800 417
Kit 4 Screw Kit	Pos.: 2; 6; 7; 8; 10; 11; 18; 31; 33		308 659 322
Kit 5 Valve Kit	Pos.: 12		308 800 418
Kit 6 Lead Seal Kit	Pos.: 8; 9; 33		see page 8
Kit 7 PT100 Kit	Pos.: 32		see page 22





6" Rewindable Motors

316SS Stator and Rotor Md. Nr. (380 - 415 Volts / 50Hz) (up to 12.2012)

P _N [kW]	Stator (incl. winding and 4m motor lead)				Rotor
	DOL 316 SS		YΔ 316 SS		
	PVC	PE2/PA	PVC	PE2/PA	
4	326 364 941	326 461 941	326 364 991		161 137 801K
5,5	326 364 941	326 461 941	326 364 991		161 137 801K
7,5	326 375 941	326 428 941	326 375 991		161 137 802K
9,3	326 374 941	326 429 941	326 374 991		161 137 803K
11	326 373 941	326 430 941	326 373 991		161 137 804K
13	326 372 941	326 431 941	326 372 991		161 137 805K
15	326 366 941	326 432 941	326 366 991	326 432 991	161 137 806K
18,5	326 371 941	326 433 941	326 371 991	326 433 991	161 137 807K
22	326 370 941	326 434 941	326 370 991	326 434 991	161 129 804K
26	326 378 941	326 435 941	326 378 991	326 435 991	161 129 801K
30	326 369 941	326 436 941	326 369 991	326 436 991	161 129 802K
37		326 377 941		326 377 991	161 129 803K

904L Stator and Rotor Model Number (380 - 415 Volts / 50Hz) (up to 12.2012)

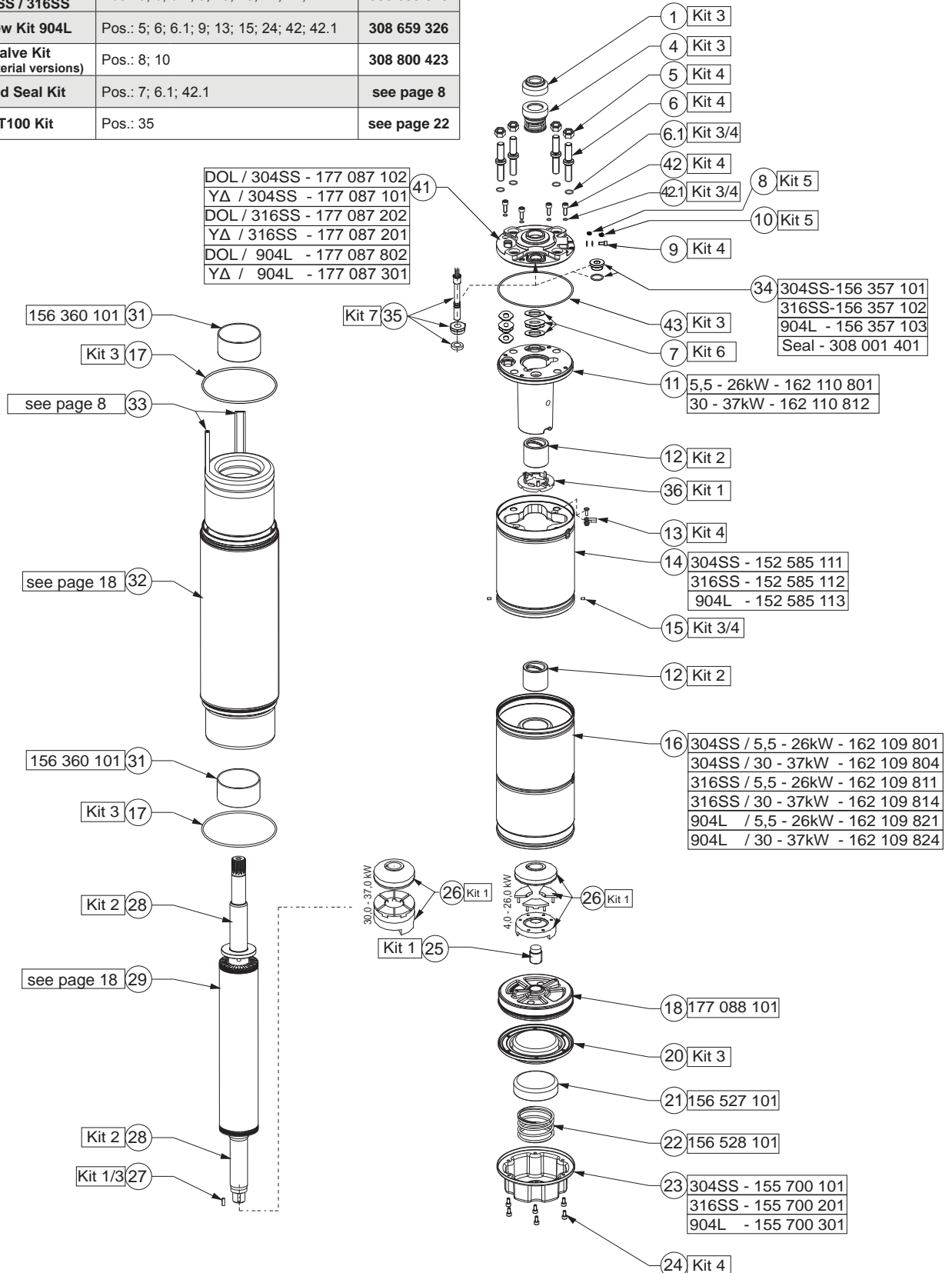
P _N [kW]	Stator (incl. winding and 4m motor lead)				Rotor
	DOL 904 L		YΔ 904 L		
	PVC	PE2/PA	PVC	PE2/PA	
4	326 364 921	326 461 921	326 364 971		161 137 801K
5,5	326 364 921	326 461 921	326 364 971		161 137 801K
7,5	326 375 921	326 428 921	326 375 971		161 137 802K
9,3	326 374 921	326 429 921	326 374 971		161 137 803K
11	326 373 921	326 430 921	326 373 971		161 137 804K
13	326 372 921	326 431 921	326 372 971		161 137 805K
15	326 366 921	326 432 921	326 366 971	326 432 971	161 137 806K
18,5	326 371 921	326 433 921	326 371 971	326 433 971	161 137 807K
22	326 370 921	326 434 921	326 370 971	326 434 971	161 129 804K
26	326 378 921	326 435 921	326 378 971	326 435 971	161 129 801K
30	326 369 921	326 436 921	326 369 971	326 436 971	161 129 802K
37		326 377 921		326 377 971	161 129 803K

6" Rewindable Motors



6" Rewindable Spare Parts 304SS / 316SS / 904L (starting 01.2013)

Kit 1	Thrust Bearing Kit	4-26kW	Pos.: 17; 25; 26; 27; 36	308 750 301
		30-37kW		308 750 302
Kit 2	Radial Bearing Kit	4-26kW	Pos.: 12; 28	308 750 401
		30-37kW		308 750 402
Kit 3A	Seal Kit Standard 304SS / 316SS / 904L	Pos.: 1; 4; 6.1; 15; 17; 20; 34; 42.1, 43		308 800 422
Kit 3B	Seal Kit Viton 304SS / 316SS / 904L	Pos.: 1; 4; 6.1; 15; 17; 20; 34; 42.1, 43		308 800 424
Kit 4	Screw Kit 304SS / 316SS	Pos.: 5; 6; 6.1; 9; 13; 15; 24; 42; 42.1		308 659 325
	Screw Kit 904L	Pos.: 5; 6; 6.1; 9; 13; 15; 24; 42; 42.1		308 659 326
Kit 5	Valve Kit (all material versions)	Pos.: 8; 10		308 800 423
Kit 6	Lead Seal Kit	Pos.: 7; 6.1; 42.1		see page 8
Kit 7	PT100 Kit	Pos.: 35		see page 22





6" Rewindable Motors

304SS Stator and Rotor Model Number (380 - 415 Volts / 50Hz) (starting 01.2013)

P _N [kW]	Stator (incl. winding and 4m motor lead)				Rotor
	DOL 304		YD 304		
	PVC	PE2/PA	PVC	PE2/PA	
4	326 364 811	326 461 811	326 364 861		161 133 811K
5,5	326 364 811	326 461 811	326 364 861		161 133 811K
7,5	326 375 811	326 428 811	326 375 861		161 133 810K
9,3	326 374 811	326 429 811	326 374 861		161 133 809K
11	326 373 811	326 430 811	326 373 861		161 133 808K
13	326 372 811	326 431 811	326 372 861		161 133 807K
15	326 366 811	326 432 811	326 366 861	326 432 861	161 133 806K
18,5	326 371 811	326 433 811	326 371 861	326 433 861	161 133 805K
22	326 370 811	326 434 811	326 370 861	326 434 861	161 133 804K
26	326 378 811	326 435 811	326 378 861	326 435 861	161 133 801K
30	326 369 811	326 436 811	326 369 861	326 436 861	161 133 802K
37		326 377 811		326 377 861	161 133 803K

316SS Stator and Rotor Model Number (380 - 415 Volts / 50Hz) (starting 08.2012)

P _N [kW]	Stator (incl. winding and 4m motor lead)				Rotor
	DOL 316SS		YD 316SS		
	PVC	PE2/PA	PVC	PE2/PA	
4	326 364 821	326 461 821	326 364 871		161 177 801K
5,5	326 364 821	326 461 821	326 364 871		161 177 801K
7,5	326 375 821	326 428 821	326 375 871		161 177 802K
9,3	326 374 821	326 429 821	326 374 871		161 177 803K
11	326 373 821	326 430 821	326 373 871		161 177 804K
13	326 372 821	326 431 821	326 372 871		161 177 805K
15	326 366 821	326 432 821	326 366 871	326 432 871	161 177 806K
18,5	326 371 821	326 433 821	326 371 871	326 433 871	161 177 807K
22	326 370 821	326 434 821	326 370 871	326 434 871	161 176 804K
26	326 378 821	326 435 821	326 378 871	326 435 871	161 176 803K
30	326 369 821	326 436 821	326 369 871	326 436 871	161 176 802K
37		326 377 821		326 377 871	161 176 801K

904L Stator and Rotor Model Number (380 - 415 Volts / 50Hz) (starting 08.2012)

P _N [kW]	Stator (incl. winding and 4m motor lead)				Rotor
	DOL 904L		YD 904L		
	PVC	PE2/PA	PVC	PE2/PA	
4	326 364 831	326 461 831	326 364 881		161 177 801K
5,5	326 364 831	326 461 831	326 364 881		161 177 801K
7,5	326 375 831	326 428 831	326 375 881		161 177 802K
9,3	326 374 831	326 429 831	326 374 881		161 177 803K
11	326 373 831	326 430 831	326 373 881		161 177 804K
13	326 372 831	326 431 831	326 372 881		161 177 805K
15	326 366 831	326 432 831	326 366 881	326 432 881	161 177 806K
18,5	326 371 831	326 433 831	326 371 881	326 433 881	161 177 807K
22	326 370 831	326 434 831	326 370 881	326 434 881	161 176 804K
26	326 378 831	326 435 831	326 378 881	326 435 881	161 176 803K
30	326 369 831	326 436 831	326 369 881	326 436 881	161 176 802K
37		326 377 831		326 377 881	161 176 801K

6" Rewindable Motors



PVC Insulation Standard Windings (380 – 415 V / 50 Hz and 460 V / 60 Hz)

P _N [kW]	Mod.-No. Windingkit	Turns per coil	Wire diameter [mm]	Type of Isolation	Group connection	Total Wire length [m]	Resistance coil [Ω]	Resistance YD (U1-U2) [Ω]	Resistance DoI (U1-V1) [Ω]
4	326 364 999	53+53+53+53	0,9 / 1,6	PVC	Serie	540,00	4,8800	5,1700	3,5000
5,5	326 364 999	53+53+53+53	0,9 / 1,6	PVC	Serie	540,00	4,8800	5,1700	3,5000
7,5	326 375 999	47+47+47+47	1,0 / 1,7	PVC	Serie	500,00	3,6710	4,0400	2,7200
9,3	326 374 999	41+41+41+41	1,1 / 1,8	PVC	Serie	466,00	2,8270	3,0200	2,0600
11	326 373 999	36+36+36+36	1,2 / 1,9	PVC	Serie	436,00	2,2200	2,3500	1,6060
13	326 372 999	30+30+30+30	1,3 / 2,0	PVC	Serie	400,00	1,7330	1,8800	1,2430
15	326 366 999	27+27+27+27	1,4 / 2,2	PVC	Serie	395,00	1,4550	1,5260	1,0160
18,5	326 371 999	23+23+23+23	1,5 / 2,3	PVC	Serie	362,00	1,1610	1,2220	0,8250
22	326 370 999	19+19+19+19	1,7 / 2,5	PVC	Serie	342,00	0,8520	0,9200	0,7130
26	326 378 999	16+16+16+16	1,9 / 2,7	PVC	Serie	330,00	0,6570	0,6980	0,4700
30	326 369 999	27+27	1,4 / 2,2	PVC	Parallel	624,00	0,3810	0,6100	0,4120
37	326 377 999	12+12+12+12	2,0 / 2,9 / 3,1	PE2/PA	Serie	302,00	0,5420	0,5900	0,3840

PE2/PA Insulation Standard Windings (380 – 415 V / 50 Hz and 460 V / 60 Hz)

P _N [kW]	Mod.-No. Windingkit	Turns per coil	Wire diameter [mm]	Type of Isolation	Group connection	Total Wire length [m]	Resistance coil [Ω]	Resistance YD (U1-U2) [Ω]	Resistance DoI (U1-V1) [Ω]
4	326 461 999	30+30+30+30	1,1 / 2,0	PE2/PA	Serie Y	311	1,8500	-	3,7000
5,5	326 461 999	30+30+30+30	1,1 / 2,0	PE2/PA	Serie Y	311	1,8500	-	3,7000
7,5	326 428 999	27+27+27+27	1,3 / 2,2	PE2/PA	Serie Y	295	1,2480	-	2,4960
9,3	326 429 999	23+24+24+23	1,4 / 2,3	PE2/PA	Serie Y	274	1,0060	-	2,3200
11	326 430 999	20+21+21+20	1,4 / 2,4	PE2/PA	Serie Y	255	0,9280	-	1,8560
13	326 431 999	17+18+18+17	1,6 / 2,6	PE2/PA	Serie Y	240	0,6670	-	1,3340
15	326 432 999	27+27+27+27	1,3 / 2,2	PE2/PA	Serie	395	1,6870	1,6870	1,2466
18,5	326 433 999	23+23+23+23	1,3 / 2,2	PE2/PA	Serie	362	1,5500	1,5500	1,0333
22	326 434 999	19+19+19+19	1,5 / 2,5	PE2/PA	Serie	342	1,0940	1,0940	0,7293
26	326 435 999	16+16+16+16	1,7 / 2,7	PE2/PA	Serie	330	0,8210	0,8210	0,5473
30	326 436 999	27+27	1,3 / 2,2	PE2/PA	Parallel	624	1,3260	0,6630	0,4420
37	326 377 999	12+12+12+12	2,0 / 2,9 / 3,1	PE2/PA	Serie	302,00	0,5420	0,5900	0,3840

Insulation resistance (20°C / 500 VDC)

New motor without drop cable	400 >	MΩ
Used motor without drop cable	20 >	MΩ
New motor with drop cable	4 >	MΩ
Used motor with drop cable	1	MΩ

Motor Repair instruction

Pictured Repair instruction)	Cast Iron - 304SS	Motor Design up to 12.2012	Mod.- Nb. :	308 018 460
	316SS / 904L			308 018 ***
	304SS / 316SS / 904L	Motor Design starting 01.2013		308 018 624



Accessories

Motor Filling Liquid

Filling liquid 5 L FES92

4" Encapsulated	→	FES93	8" Encapsulated Standard	→	FES91
6" Encapsulated Standard	→	FES91	8" Encapsulated HighTemp75	→	FES92
6" Encapsulated High-Temp90	→	FES92	Rewindable Motors All	→	FES93



Part number:
308 353 941

FES91	FES92	FES93

Motor Filling Kit

This kit contains all necessary tools to check and replenish Franklin Electric submersible motors with FES 91, 92 or 93 filling liquid (fill solution/concentrate must be ordered separately).

Part number: 308 726 103



Lead Termination Kit 1,5 - 10mm²

- 3M Quality
- 4 wire
- 1,5 - 10mm²
- up to 1,1kV

Part number: 308 090 921





Couplings

Application

Franklin Electric offers this line of motor-pump couplings for maximum customer convenience in matching the Franklin motor to a variety of pump shafts. Couplings are designed to transmit the pump thrust to the motor in order to provide maximum benefits from the Franklin internal thrust bearing construction.

Hardened stainless steel spacer discs in the 4" and 6" couplings assure positive bearing between motor and pump shafts, and assure full support for downward thrust created by the pump.

8" couplings DO NOT contain hardened spacer discs, since the motor shaft itself is hardened.



6" Motor – Pump Couplings

Application:

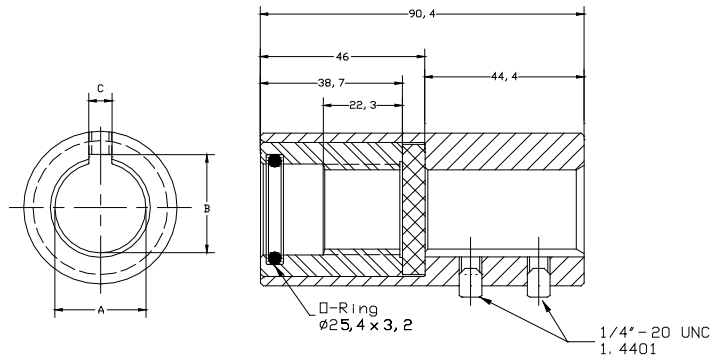
Allow connection of pump to motors shaft.

Specification:

- Material: 304 / 316 SS
- NEMA standard measuring on motor shaft
- separation washer between motor & pump shafts

Outline Drawing:

6" Couplings



Ordering information

No.	Coupling Material DIN / AISI	Dimension A (mm) Max. / Min.	Dimension B (mm) Max. / Min.	Dimension C (mm) Max. / Min.
151 935 902	1.4005 (304)	19,075 / 19,063	20,70 / 20,52	4,84 / 4,79
151 935 922	1.4401 (316SS)			
151 935 910	1.4005 (304)	20,025 / 20, 013	22,76 / 22,60	6,05 / 6,00
151 935 927	1.4401 (316SS)			
151 935 908	1.4005 (304)	22,025 / 22,013	25,53 / 25,32	8,03 / 7,98
151 935 928	1.4401 (316SS)			
151 935 901	1.4005 (304)	22,250 / 22,238	24,54 / 24,36	6,43 / 6,38
151 935 921	1.4401 (316SS)			
151 935 906	1.4005 (304)	25,025 / 25, 013	28,70 / 28,30	8,03 / 7,98
151 935 926	1.4401 (316SS)			
151 935 909	1.4005 (304)	25,425 / 25,413	27,74 / 27,56	6,43 / 6,38
151 935 929	1.4401 (316SS)			



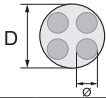
Accessories

PT100 Rewindable Motors

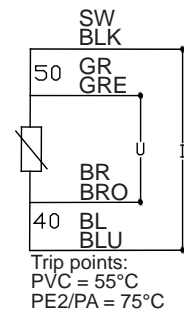
Application

- Fitted into the upper end bell flange , all end bells 6" ,8", 10" and 12" Rewindable are prepare for installation PT100
- Measures the temperature of the filling liquid
- Conductor with a resistance proportional to the temperature
- Allows monitoring the temperature continuously

The above-ground equipment is not available from Franklin Electric and is typically part of a custom panel or data acquisition system. PT100 sensor retrofit kits from Franklin Electric come with complete instructions and allow for easy field installation.



	Ø [mm ²]	D [mm]	Lead Lengths [m]	Mod.- No.:	6" Rew Redesign starting 08.2012		6" (Cast Iron/304SS) / 8" / 10" / 12"	
					304/316	904L	304/316	904L
PT 100	4X0,5	8	10	Mod.- No.:	308 016 501	308 016 522	308 016 401	308 016 422
PT 100	4X0,5	8	20	Mod.- No.:	308 016 502	-	308 016 402	-
PT 100	4X0,5	8	30	Mod.- No.:	308 016 503	-	308 016 403	-
PT 100	4X0,5	8	50	Mod.- No.:	308 016 505	308 016 526	308 016 405	308 016 426

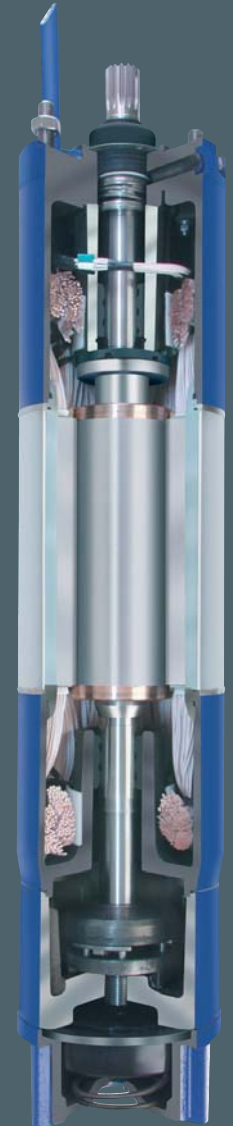


QUALITY IN THE WELL

POWERED BY

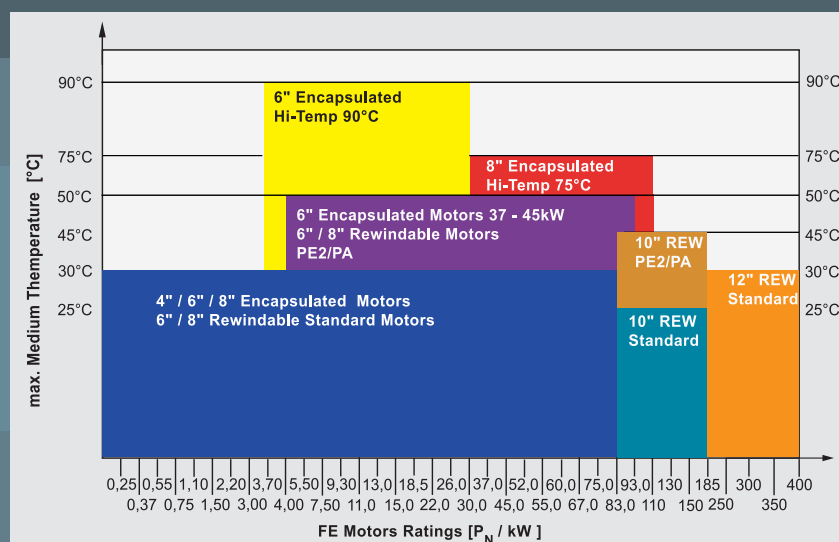


Franklin Electric



- (GB)** Franklin Electric is the world largest manufacturer of submersible motors. Our broad product line, quality manufacturing, on time delivery and outstanding service make us the number one choice of pumps manufacturers, distributors and installers worldwide. We invite you to visit our web site at: www.franklin-electric.eu
- (D)** Franklin Electric ist der größte Hersteller von Unterwassermotoren weltweit. Unsere weite Produktfamilie, die hohe Qualität der Fertigung, die gute Verfügbarkeit und der außerordentliche Service machen uns zur ersten Wahl für Pumpenhersteller, Händler und Installateure weltweit. Bitte besuchen sie unsere Internet Homepage unter: www.franklin-electric.eu
- (F)** Franklin Electric est le plus grand constructeur mondial de moteurs électriques immergés. Notre large gamme de produits, la qualité de nos fabrications, nos délais de livraison courts et notre support client hors du commun, font que nous sommes le choix préférentiel des fabricants de pompes, distributeurs et installateur dans le monde entier. Nous vous invitons à visiter notre site Internet: www.franklin-electric.eu
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Franklin Electric Product Line





Franklin Electric

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