

Pool and Spa OEM Pump/Motor Replacement Guide

Square Flange and C-Flange Motors

Understanding The Application

One of the major failure modes for motors is the misapplication of the motor to a particular pump. When selecting your replacement motor you will need to know six important pieces of information:

- Mounting
- Horsepower
- Service Factor
- Voltage
- Frequency
- Phase

Most of this information can be attained from the motor nameplate. Always be sure that the total of horsepower times the service factor of your new motor is equal to or greater than the total of horsepower times the service factor of the original motor.

$$\text{Total Output HP (THP or SFHP)} = (\text{horsepower}) \times (\text{service factor})$$

Pump OEM	Brand Name	Category
American ^{®†}	American Eagle ^{®†}	J
American ^{®†}	Ultra-Flow/Power Pump ^{®†}	S
Aqua Flo ^{®†}	Dominator ^{®†}	S
Astral ^{®†}	2000 Series ^{®†}	J
Baker Hydro ^{®†}	Hydron ^{®†}	J
Hayward ^{®†}	Super Pump ^{®†}	J
Hayward ^{®†}	Super Pump II ^{®†}	J
Hayward ^{®†}	Max-Flo ^{®†}	J
Hayward ^{®†}	Northstar ^{®†}	J
Hayward ^{®†}	Tristar ^{®†}	S
Hayward ^{®†}	Tristar ^{®†}	T
Hayward ^{®†}	MaxFlo II ^{®†}	S
ITT Marlow ^{®†}	Argonaut ^{®†}	J
Jacuzzi Bros. ^{®†}	Bronze ^{®†}	C
Jacuzzi Bros. ^{®†}	Cygnets ^{®†}	S
Jacuzzi Bros. ^{®†}	Plastic ^{®†}	J
Jacuzzi Bros. ^{®†}	Magnum ^{®†} /Magnum Force ^{®†}	J

Pump OEM	Brand Name	Category
Letro ^{®†}	Legend ^{®†}	P
Pentair/American ^{®†}	Ultra-Flow ^{®†}	S
Pentair/Pac Fab ^{®†}	Challenger ^{®†}	S
Pentair/Pac Fab ^{®†}	Hydro Pump ^{®†}	C
Pentair/Pac Fab ^{®†}	Pinnacle ^{®†}	S
Pentair/Purex ^{®†}	Whisperflo ^{®†}	S
Pentair/Purex/ Hydrotech ^{®†}		J
Polaris ^{®†}	Vac-Sweep PB4 ^{®†}	P
Premier/ Springwater ^{®†}		C
Speck Pumps ^{®†}	Models 90,98,423,433,21-80	J
Sta-Rite ^{®†}	Dura-Glas ^{®†} /Maxi-Glas ^{®†}	S
Sta-Rite ^{®†}	Dura-Glas II ^{®†} /Maxi-Glas II ^{®†}	S
Waterway ^{®†}	SVL56 ^{®†}	S
Wet Institute ^{®†}		J
WMC ^{®†}		J

Category "C" NEMA^{®†} C-Flange Keyed Shaft

HP	SF	Voltage	Standard Eff. (6.5" Frame)	Energy Eff. extreme-E (6.5" Frame)
1/2	1.60	230/115	EB120	EB656
3/4	1.50	230/115	EB121	EB634
1	1.40	230/115	EB122	EB653
1.5	1.30	230/115	EB123	EB795
2	1.20	230	EB124	EB808
3	1.15	208-230		EB817

Category "T" Hayward Tristar^{®†} Replacements Square Flange

HP	SF	Voltage	Standard Eff. (6.5" Frame)	Energy Eff. extreme-E (6.5" Frame)
1/2	1.98	208-230/115		ET3205
3/4	1.85	208-230/115		ET3207
	1.25	230/115	EB852	
1	1.85	208-230/115		ET3210
	1.25	230/115	EB853	
1.5	1.60	208-230/115		ET3215
	1.10	230/115	EB854	
2	1.35	208-230		ET3220
	1.10	230/115	EB859	
2.5	1.04	230	EB840	
3	1.20	208-230		EB3230
	1.15	208-230	EB844	

Category "N" Hayward Northstar^{®†} Replacements C-Flange Threaded Shaft

HP	SF	Voltage	Energy Eff. extreme-E (6.5" Frame)
3/4	1.85	208-230/115	ESN1072
1	1.40	208-230/115	EUSN1102
	1.85	208-230/115	ESN1102
1.5	1.25	208-230/115	EUSN1152
	1.60	208-230/115	ESN1152
2	1.20	208-230/115	EUSN1202
	1.35	208-230	ESN1202
3	1.20	208-230	EUSN1302
	1.60	208-230	ESN1302

Category "J" NEMA^{®†} C-Flange Threaded Shaft

HP	SF	Voltage	Standard Eff. (6.5" Frame)	Standard Eff. (5.5" Frame)	Energy Eff. extreme-E (6.5" Frame)
1/2	1.60	230/115	EB126	EST1052	EB657
3/4	1.00	230/115	EB227	EUST1072	
	1.50	230/115	EB127	EST1072	EB638
1	1.00	230/115	EB228	EUST1102	
	1.40	230/115	EB128	EST1102	EB654
1.5	1.00	230/115	EB229	EUST1152	
	1.30	230/115	EB129	EST1152	EB796
2	1.00	230/115	EB230	EUST1202	
	1.20	230	EB130	EST1202	EB809
2.5	1.00	230	EB231	EUST1252	
3	1.15	208-230			EB818
5	1.00	208-230			EB819

Category "P" Pool Cleaners

HP	SF	Voltage	Brand	Emerson 56 (6.5" Frame)
3/4	1.50	230/115	Polaris	EB625
	1.50	208-230/115	Polaris	EB626
	1.50	230/115	Letro	EB668

Category "S" Square Flange

HP	SF	Voltage	Standard Eff. (6.5" Frame)	Standard Eff. (5.5" Frame)	Energy Eff. extreme-E (6.5" Frame)
1/2	1.30	230/115	EB856	EUSQ1052	
	1.90	230/115	EB846	ESQ1052	EB845
3/4	1.27	230/115	EB852	EUSQ1072	
	1.65	230/115	EB847	ESQ1072	EB661
1	1.25	230/115	EB853	EUSQ1102	
	1.65	230/115	EB848	ESQ1102	EB841
1.5	1.10	230/115	EB854	EUSQ1152	
	1.50	230/115	EB858	ESQ1152	EB842
2	1.10	230/115	EB859	EUSQ1202	
	1.30	230	EB748	ESQ1202	EB843
2.5	1.04	230	EB840	EUSQ1252	
3	1.15	208-230			EB844
5	1.00	208-230			EB850

†All marks shown within this document are properties of their respective owners.

