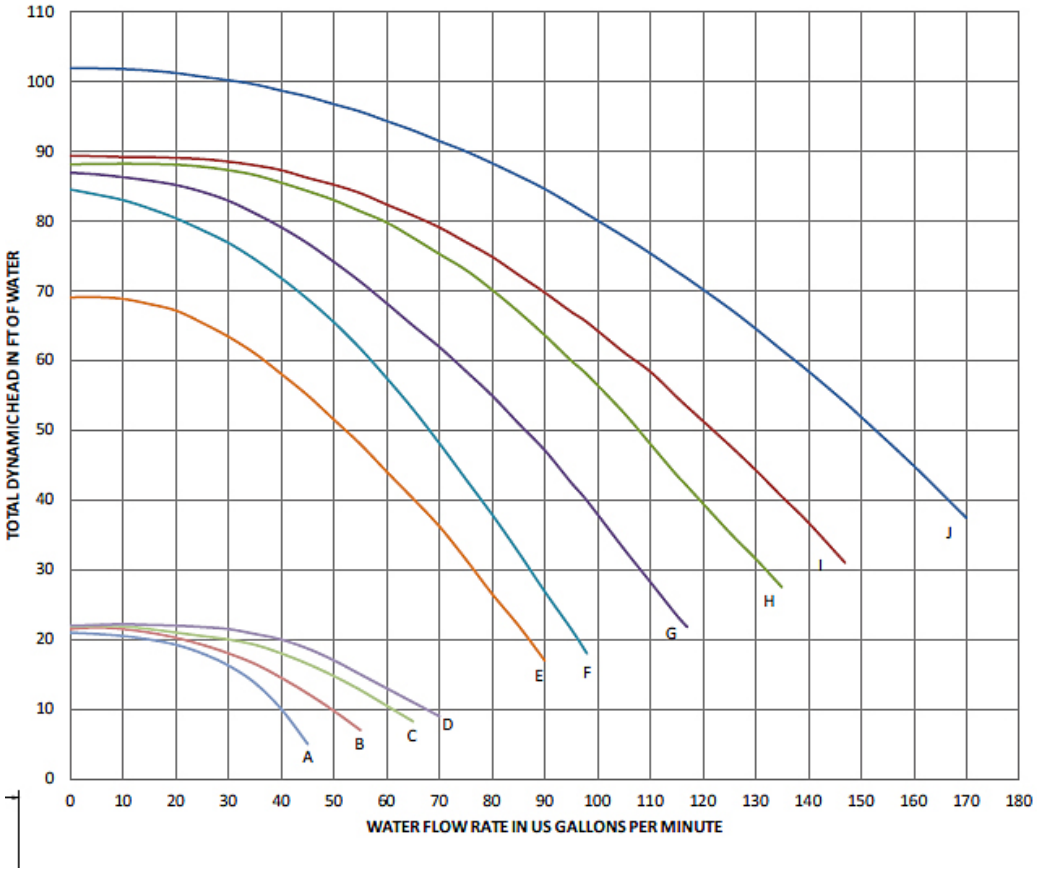
Many of our customers asking about Full Rated Motor vs Up Rated motor!

Here is the fact and the chart performance comparison between Full Rate and Up Rated motor.

Obviously! We only carry the Full Rated Pump/Motors.

Product	Model	Voltage	Full Load Amps	HP	SF	SFHP	Primary Listings and Certifications [4]	Port Size (NPT)	Carton Wt. (Lbs.)	Curve Key
ENERGY EFFICIENT SINGLE SPEED FULL RATED										
011511	WFE-2	115/208-230	8.8/4.5-4.4	1/2	1.90	0.95	UL [1], NSF [2], APSP [3]	2 in. x 2 in.	41	E
011512	WFE-3	115/208-230	12.8/7.0-6.4	3/4	1.67	1.25	UL [1], NSF [2]	2 in. x 2 in.	41	F
011513	WFE-4	115/208-230	14.8/7.8-7.4	1	1.65	1.65	UL [1], NSF [2]	2 in. x 2 in.	46	G
011514	WFE-6	208-230	9.6-8.8	1-1/2	1.47	2.20	UL [1], NSF [2]	2 in. x 2 in.	54	H
011515	WFE-8	208-230	11.0-10.2	2	1.30	2.60	UL [1], NSF [2]	2 in. x 2 in.	55	I
011516	WFE-12	208-230	15.0-13.6	3	1.15	3.45	UL [1], NSF [2]	2 in. x 2 in.	56	J
ENERGY EFFICIENT SINGLE SPEED UP RATED										
011517	WFE-24	115/208-230	12.8/7.0-6.4	1	1.25	1.25	UL [1], NSF [2]	2 in. x 2 in.	41	F
011518	WFE-26	115/208-230	14.8/7.8-7.4	1-1/2	1.10	1.65	UL [1], NSF [2]	2 in. x 2 in.	46	G
011519	WFE-28	208-230	9.6-8.8	2	1.10	2.20	UL [1], NSF [2]	2 in. x 2 in.	54	H
011520	WFE-30	208-230	11.0-10.2	2-1/2	1.04	2.60	UL [1], NSF [2]	2 in. x 2 in.	55	I
STANDARD EFFICIENCY SINGLE SPEED FULL RATED										

Dimensions and Performance



Motor Service Factor (SF) Defined By NEMA

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Permissible horsepower loading

Motor Service Factor (SF) is the percentage of overloading the motor can handle for short periods when operating normally within the correct voltage tolerances. This is practical as it gives you some '***fudge***' in estimating horsepower needs and ***actual running horsepower requirements***.
It also allows for ***cooler winding temperatures*** at rated load, protects against intermittent heat rises, and
helps to offset low or unbalanced line voltages

For example, the standard SF for ***open drip-proof (ODP)*** motors is ***1.15***. This means that a 10-hp motor with a 1.15 SF could provide 11.5 hp when required for short-term use. Some fractional horsepower motors have higher service factors, such as 1.25, 1.35, and even 1.50.

NEMA defines service factor as a ***multiplier***, when applied to the rated horsepower, indicates a ***permissible horsepower loading***, which may be carried under the conditions specified for the service
factor at rated voltage and frequency.

This service factor can be used for the following:

1. To accommodate inaccuracy in predicting intermittent system horsepower needs.
2. To lengthen insulation life by lowering the winding temperature at rated load.
3. To handle intermittent or occasional overloads.
4. To allow occasionally for ambient above 40°C.
5. To compensate for low or unbalanced supply voltages.

NEMA does add some cautions, however, when discussing the service factor:

1. Operation at service factor load for extended periods will usually reduce the motor speed, life and efficiency.
2. Motors may not provide adequate starting and pull-out torques, and incorrect starter/overload sizing is possible. This in turn affects the overall life span of the motor.
3. Do not rely on the service factor capability to carry the load on a continuous basis.
4. The service factor was established for operation at rated voltage, frequency, ambient and sea level conditions.