

SM

SM Series End Suction Centrifugal Pumps



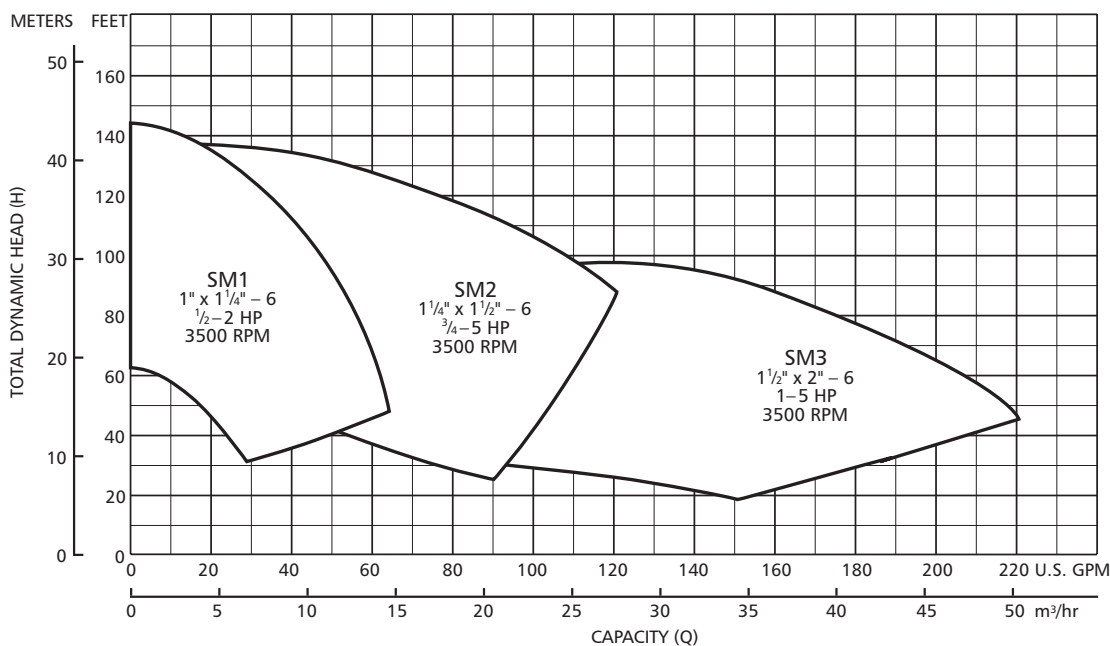
AISI 316L stainless steel impeller and seal housing for corrosion resistance and strength. Cast iron casing for strength and durability.

Enclosed impeller maintains maximum efficiency over the life of the pump without adjustment.

Cast iron casing with NPT threaded, centerline connections. Easily accessible vent, prime and drain connections. Nine position casing rotation for easy piping.

Standard John Crane seal with carbon and ceramic faces, BUNA elastomers and stainless steel metal parts.

Motors are NEMA standard, single phase, open drip proof. Rugged ball bearing design for continuous duty under all operating conditions.



NOTES:
Not recommended for operation beyond printed H-Q curve.
All standard 3500 RPM ODP motors supplied have minimum of 1.15 service factor. Standard catalog units may utilize available service factor.

Red Jacket Water Products is a licensed trademark.

The ITT Engineered Blocks symbol is a registered trademark and tradename of ITT Industries.

Effective July, 2003

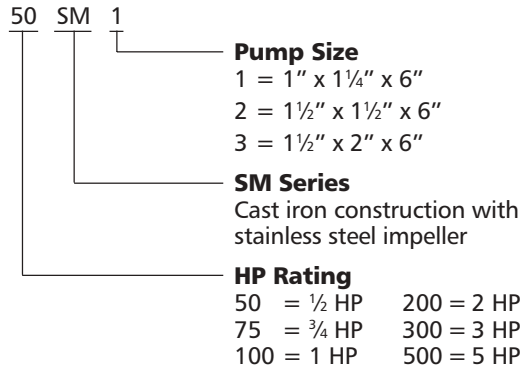
BRJSM

Visit us at: www.redjacketwaterproducts.com

Product Code

The various versions of the SM are identified by a product code number on the pump label. This number is also the catalog number for the pump.

The meaning of each digit in the product code number is shown at right.

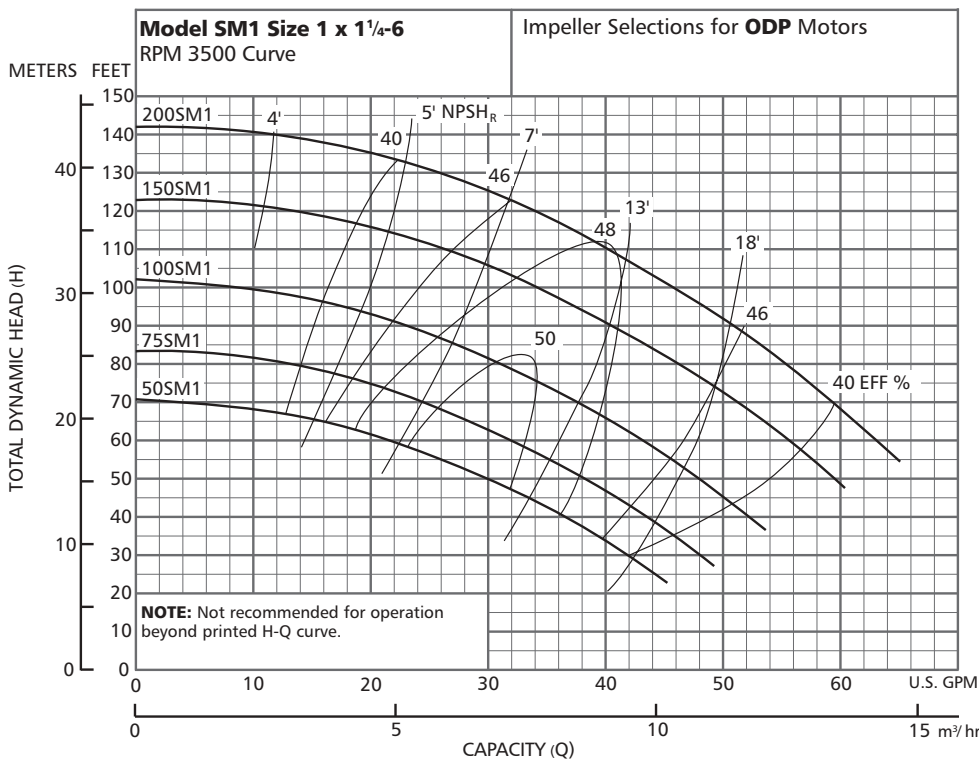


Typical Applications

Specifically designed for a broad range of general applications.

- Water circulation
- Booster service
- Liquid transfer
- Spray system
- Chillers
- Washing/cleaning systems
- Injection molding cooling
- Air scrubbers
- Heat exchangers
- Filtration systems
- Jockey pumps
- OEM applications
- General water services

Performance Curves – 60 Hz, 3500 RPM



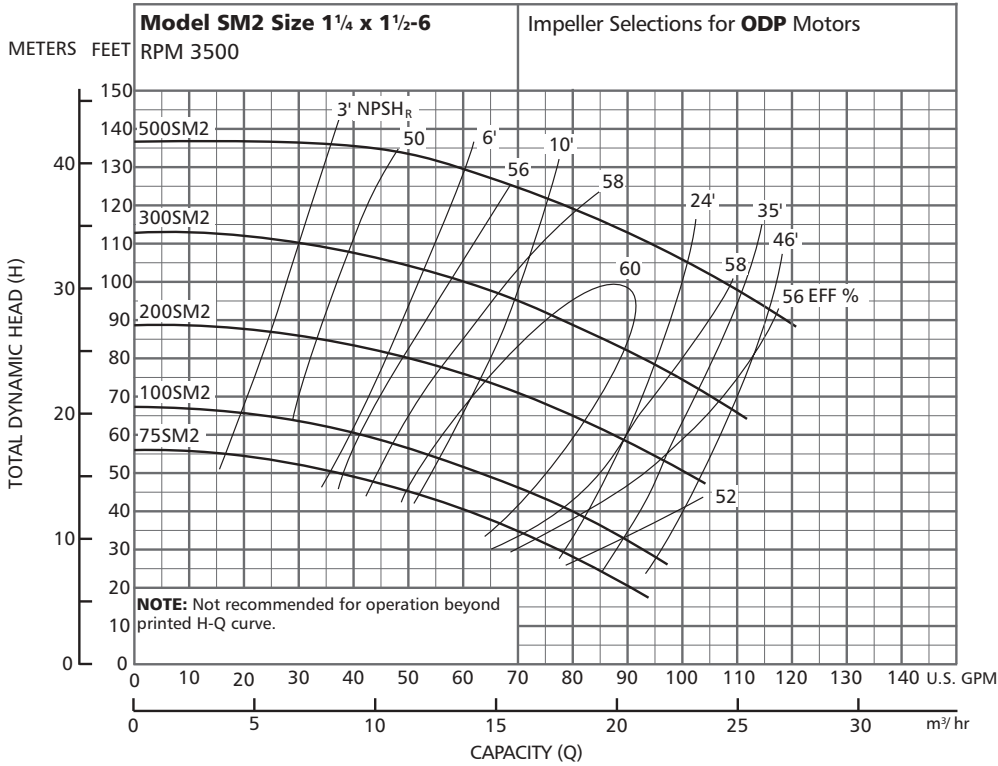
Ordering Code	Standard HP Rating	Imp. Dia.
50SM1	½	4 ⁷ / ₁₆
75SM1	¾	4 ³ / ₄
100SM1	1	5 ³ / ₁₆
150SM1	1½	5 ³ / ₄
200SM1	2	6 ¹ / ₈

NOTE:
 Although not recommended, the pump may pass a 1/16" sphere.



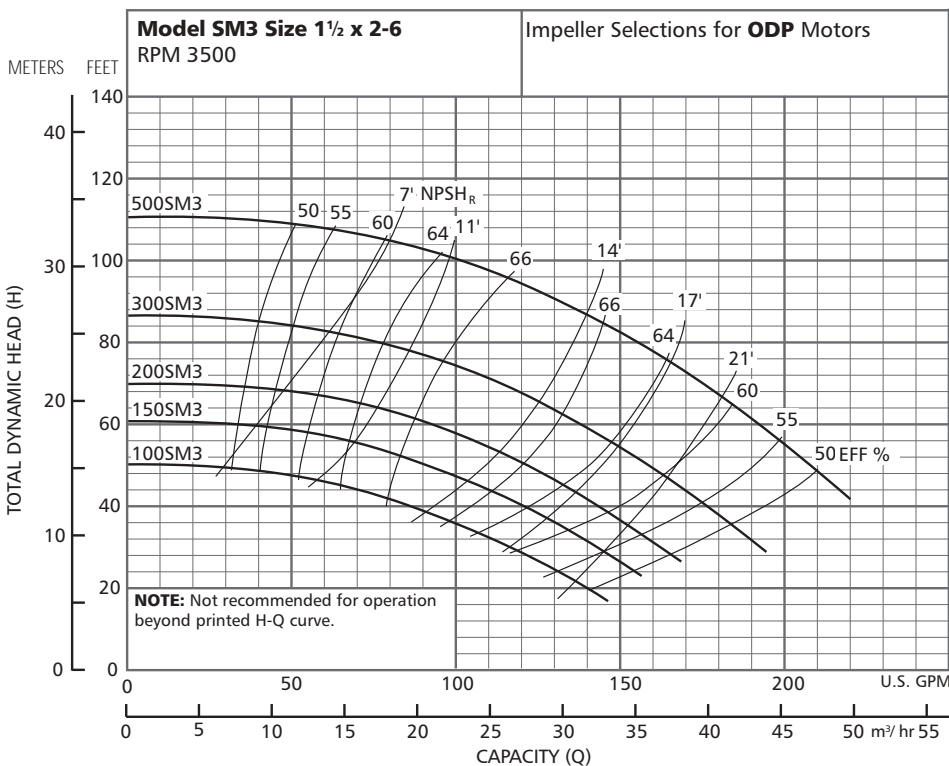
RED JACKET®

Water Products



Ordering Code	Standard HP Rating	Imp. Dia.
75SM2	¾	3⅞"
100SM2	1	4¼
200SM2	2	4⅝
300SM2	3	5¼
500SM2	5	5⅝

NOTE:
Although not recommended, the pump may pass a ⅜" sphere.



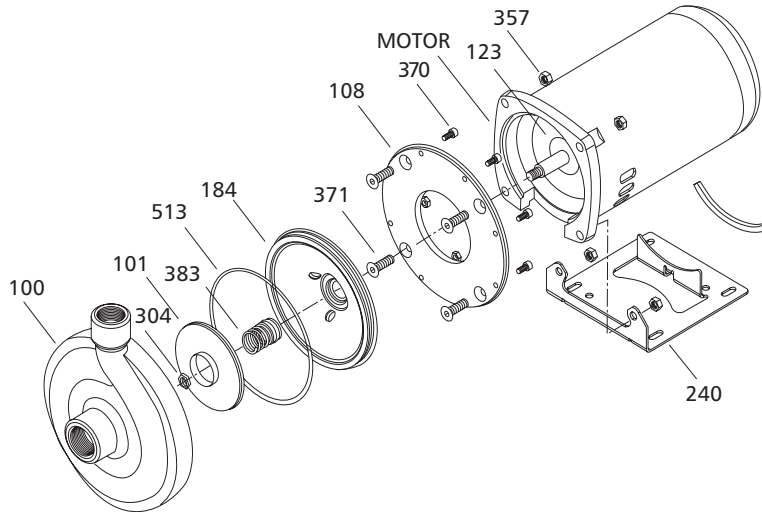
Ordering Code	Standard HP Rating	Imp. Dia.
100SM3	1	3⅝"
150SM3	1½	4⅞
200SM3	2	4⅝
300SM3	3	4¾
500SM3	5	5⅝

NOTE:
Although not recommended, the pump may pass a 1½" sphere.



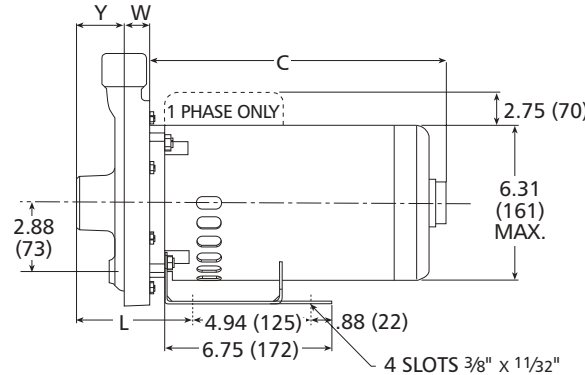
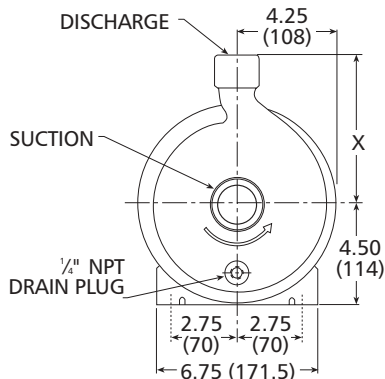
ITT Industries

SM Close Coupled Pump Major Components: Materials of Construction



Item No.	Description	Materials
100	Casing	Cast iron
101	Impeller	AISI 316L SS
108	Motor adapter	Steel
123	Deflector	BUNA-N
184	Seal housing	AISI 316L SS
240	Motor Support	Steel
	Rubber Channel	Rubber
304	Impeller Locknut	AISI 316 SS
357	Nut, Motor	AISI 300 SS
370	Socket head screws, casing	AISI 410 SS
371	Bolts, motor	Plated steel
383	Mechanical seal	CAR/CER/BUNA
513	O-ring, casing	BUNA
Motor	NEMA standard, 48Y or 56Y flange	

SM Close Coupled – Dimensions, Weights and Specifications



Dimensions and Weights – Determined by Pump

Pump	Suction	Discharge	HP	W	X	Y	L	Wt. Less Motor
SM1	1.25 (32)	1.00 (25)	½-3	1.10 (28)	6.25 (159)	2.00 (51)	4.75 (121)	10 (4.5)
SM2	1.50 (38)	1.25 (32)	¾-5	1.35 (34)	6.25 (159)	2.00 (51)	5.00 (127)	11 (5.0)
SM3	2.00 (51)	1.50 (38)	1-5	1.35 (34)	6.25 (159)	2.00 (51)	5.00 (127)	13 (5.9)

Dimensions and Weights – Determined by Motor

1 Phase, ODP					
HP	C	Weight	HP	C	Weight
½	10.88 (276)	24 (10.9)	2	12.62 (321)	30 (13.6)
¾	10.88 (276)	26 (11.8)	3	12.44 (316)	36 (16.3)
1	11.62 (295)	27 (12.2)	5	14.03 (356)	48 (21.7)
1½	13.62 (346)	28 (12.7)			

NOTES:

Dimensions in inches and millimeters (mm). Weight in pounds and kilograms (kg).

Motor dimensions may vary with motor manufacturer.

Not to be used for construction purposes unless certified.

Specifications

Capacities to: 220 GPM (50 m³/hr) at 3500 RPM

Heads to: 140 feet (45 m) at 3500 RPM

Working pressures to: 75 PSIG (5 bars); 125 PSIG (9 bars) optional seals

Maximum temperatures to: 212°F (100°C) with standard seal

Direction of rotation: Clockwise when viewed from motor end.

Motor specifications: NEMA 48 or 56 square flange frame. 3500 RPM ½ through 5 HP. Open drip-proof enclosures. Stainless steel shaft with ball bearings.

Single phase: 115/230 V, (3 HP model – 230 V only) Built-in overload with auto-reset provided.

Pumps will be shipped with top vertical discharge as standard. For other orientations, remove casing screws, rotate to desired position, and tighten ¼" screws to 5 – 6 lbs./ft. (6.8-8 N•m).