

Lead-Free Wet Rotor Circulators for Hot Water Circulation

Description

A residential or light commercial, maintenance-free, in-line, lead-free† bronze, wet rotor circulator for potable water systems and other applications. Flanged, union or sweat models available. UL, cUL and CSA listed.

Operating Data

Maximum working pressure150 psi (10 bar)
 Maximum operating temperature
 NBF-25, NBF-33, NBF-36, NBF-45 225°F (107°C)
 All Others 230°F (110°C)
 Shaft Ceramic
 Bearings Double-Sintered Carbon

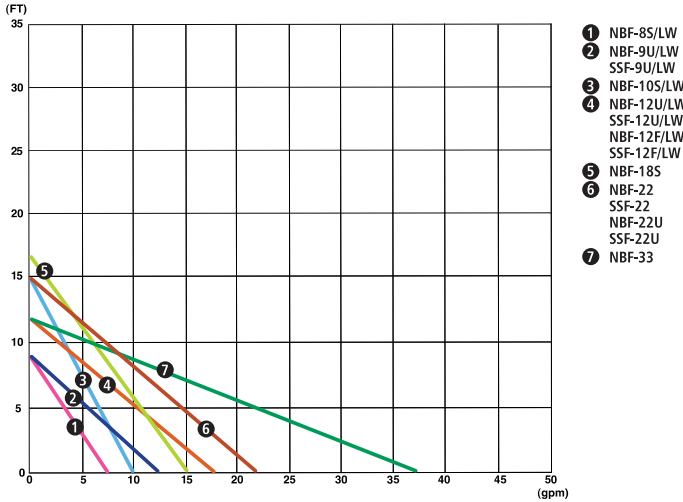
Materials of Construction

Pump Body NBF 100% Lead-Free† Bronze
 SSF Stainless Steel
 Impeller Noryl
 Shaft Ceramic
 Bearings Double-Sintered Carbon

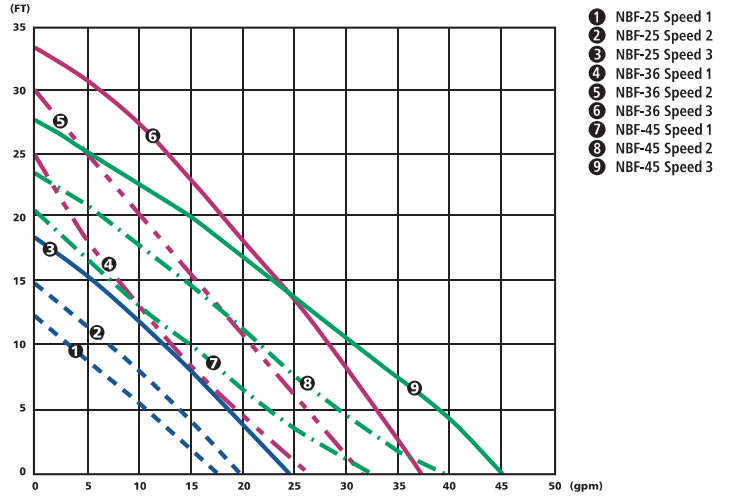
Warranty

Bell & Gossett offers a warranty of three years from date of manufacture or 18 months from date of installation (which ever comes first) against failure as a result of defects in materials and workmanship.

Single Speed—NBF 60 HZ Performance Curve



Three Speed—NBF 60 HZ Performance Curve



Cross Reference

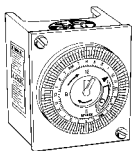
| BELL & GOSSETT | GRUNDFOS‡ | TACO‡ |
|----------------|------------|--------|
| NBF-8S/LW | UM 15-10B5 | 003B |
| NBF-9U/LW | UP 15-18SU | 006B |
| NBF-10S/LW | UP 15-18B5 | 006B |
| NBF-12U/LW | UP 15-42SU | 005B |
| NBF-12F/LW | UP 15-42SF | 005B |
| NBF-18S | UP 15-42B5 | — |
| NBF-22U | UP 25-64SU | 007B |
| NBF-22 | UP 25-64SF | 007B |
| SSF-22 | UP25-64SF | 007B |
| NBF-25 | UPS15-58 | 00R-MS |
| NBF-33 | — | 0010B |
| NBF-36 | UP26-96BF | 0011B |
| | UP26-99BF | 0013B |
| | UP26-64SF | 0014B |
| NBF-45 | UP43-75BF | — |

| Model Number | Part Number | Connections | Dimensions Inches (mm) | | | Standard 60 Cycle Motor Characteristics* | | | | | Shipping Weight lbs. (Kg) |
|--------------|-------------|-----------------------------|------------------------|--------------|-------------|--|---|-------|-----------|------|---------------------------|
| | | | A | B | C | Watts | Ø | Volts | F.L. Amps | RPM | |
| NBF-8S/LW | 103257 | 1/2" Sweat | 5 (127) | 5 7/32 (132) | 4 7/8 (124) | 39 | | | 0.39 | 2800 | 9.0 (4.1) |
| NBF-9U/LW | 103258 | Union** | 6 1/8 (156) | 5 1/16 (129) | 4 7/8 (124) | 41 | | | 0.40 | | 9.3 (4.2) |
| NBF-10S/LW | 103259 | 1/2" Sweat | 5 (127) | 5 7/32 (132) | 4 7/8 (124) | 55 | | | 0.46 | | 9.0 (4.1) |
| NBF-12F/LW | 103260 | Flange 3/4, 1, 1 1/4, 1 1/2 | 6 3/8 (162) | 5 9/16 (141) | 4 7/8 (124) | 55 | | | 0.48 | 2950 | 9.5 (4.3) |
| NBF-12U/LW | 103261 | Union** | 6 1/8 (156) | 5 1/16 (129) | 4 7/8 (124) | 55 | | | 0.48 | | 9.3 (4.2) |
| NBF-18S | 103316 | 1/2" Sweat | 5 (127) | 5 7/32 (132) | 4 7/8 (124) | 90 | 1 | 115 | 0.74 | | 3000 |
| NBF-22 | 103252 | Flange 3/4, 1, 1 1/4, 1 1/2 | 6 3/8 (162) | 5 9/16 (141) | 4 7/8 (124) | 92 | | | 0.80 | 2940 | 9.5 (4.3) |
| NBF-22U | 103255 | Union** | 6 1/8 (156) | 5 1/16 (129) | 4 7/8 (124) | 92 | | | 0.80 | | 9.3 (4.2) |
| SSF-22 | 103357 | Flange 3/4, 1, 1 1/4, 1 1/2 | 6 3/8 (162) | 5 9/16 (141) | 4 7/8 (124) | 92 | | | 0.80 | | 9.5 (4.3) |
| NBF-25 | 103418 | Flange 3/4, 1, 1 1/4, 1 1/2 | 6 3/8 (162) | 6 3/16 (157) | 5 1/8 (130) | 125 | | | 1.10 | 2950 | 10.4 (4.7) |
| NBF-33 | 103351 | Flange 3/4, 1, 1 1/4, 1 1/2 | 6 3/8 (162) | 6 3/16 (157) | 5 1/8 (130) | 125 | | | 1.10 | | 10.4 (4.7) |
| NBF-36 | 103401 | Flange 3/4, 1, 1 1/4, 1 1/2 | 6 3/8 (162) | 6 7/8 (175) | 5 3/4 (146) | 270 | | | 2.30 | | 13.1 (6.0) |
| NBF-45 | 103405 | Flange 1, 1 1/4, 1 1/2 | 8 1/2 (216) | 7 3/8 (187) | 5 3/4 (147) | 270 | | | 2.30 | 3300 | 14.5 (6.6) |

* 230/60/1 motors available upon request. Impedance protected
 ** Union Connections are available in 3/4" NPT, 1/2" sweat & 3/4" sweat.

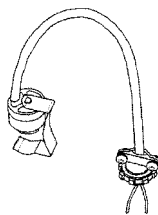
‡ Grundfos is a registered trademark of Grundfos Pumps Corp.

‡ Taco is a registered trademark of Taco, Inc.



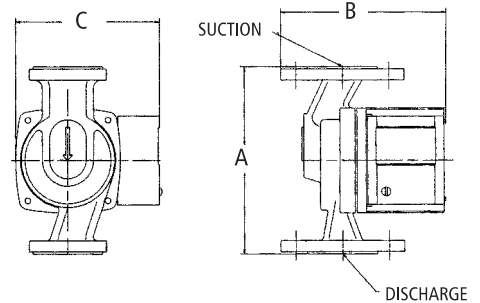
TC-1 Automatic Timer Kit— (Part No. 113210)

To increase the overall efficiency of a hot water recirculation system, the TC-1 timer control kit can be installed for use on any B&G NBF circulator. The TC-1 timer control is programmable to turn the circulator ON and OFF automatically at preset times. This permits the user to have the pump circulate hot water only during those times when high usage can be expected throughout the day.



AQS-1/2 (Part No. 113223) and AQS-3/4 (Part No. 113224)

Aquastat—are designed to thermostatically turn any B&G NBF circulator ON and OFF. The AQ-1/2 or AQ-3/4 will switch the pump OFF at 120°F (48.9°C) and ON at 100°F (37.8°C). The aquastats are available in separate models that will sense the temperature for either 1/2" or 3/4" copper pipe.



Engineered for life

Bell & Gossett
 8200 N. Austin Avenue
 Morton Grove, IL 60053
 Phone: 847/966-3700
 FAX: 847/966-9052
 www.bellgossett.com



THE ITT ENGINEERED BLOCKS SYMBOL AND "ENGINEERED FOR LIFE" ARE REGISTERED TRADEMARKS OF ITT CORPORATION. © 2008 PRINTED IN U.S.A. 6.08