

PRESSURE BOOSTER PUMPS

FW0125
1021
Supersedes
1020



PRESSURES TO 200 PSI

The pressure booster pump is designed to increase water pressure from city mains or private water systems.

Applications include pressure cleaning, spray or mist systems, jockey pumps, booster service, reverse osmosis, water circulation and general purpose pumping.



PB SERIES STAINLESS STEEL,
POWDER COATED CAST IRON OR
CAST IRON

1/3 - 3 HP

60Hz or 50Hz

5, 7, 10, 19, 27, 35, 55 & 85 GPM

††NOTE: Models with TEFC motors are not CSA certified



BOOSTER PUMP

MATERIAL CONSTRUCTION

| Component Description | Stainless Steel Models 5, 7, 10, 19, 27 & 35 GPM 1/3 thru 3 HP | Powder-coated Models 5, 7, 10, 19, 27 & 35 GPM 1/3 thru 3 HP | Cast Iron Models 5, 7, 10, 19, 27 & 35 GPM 1/3 thru 3 HP |
|--|--|--|--|
| Suction and Discharge Casting | 304 (CF-8) stainless steel | Powder coated cast iron | Cast Iron |
| Pump Shell | 304 heavy wall stainless steel | 304 heavy wall stainless steel | 304 heavy wall stainless steel |
| Staging* | Noryl® impellers and diffusers; type 304 stainless steel floating bearing inserts and acetal diffuser plates | Noryl® impellers and diffusers; type 304 stainless steel floating bearing inserts and acetal diffuser plates | Noryl® impellers and diffusers; type 304 stainless steel floating bearing inserts and acetal diffuser plates |
| Pump Shaft and Motor Coupling Assembly | 304L stainless steel hex shaft with 316 S.S. motor to shaft coupling | 304L stainless steel hex shaft with 316 S.S. motor to shaft coupling | 304L stainless steel hex shaft with 316 S.S. motor to shaft coupling |
| Shaft Seal | Carbon-silicon carbide, stainless steel spring, and Viton® | Carbon-silicon carbide, stainless steel spring, and Buna-N | Carbon-silicon carbide, stainless steel spring, and Buna-N |
| O-Rings | Viton® | Buna N | Buna-N |



Open drip proof (ODP) and Totally enclosed fan cooled (TEFC) motors available with single or three phase options.

* Replacement cartridge assembly available for all models. Includes all necessary parts to restore pumps to like-new performance. No special tools required.

Noryl® is a registered trademark of General Electric.

Viton® is a registered trademark of Dupont.

PERFORMANCE SPECIFICATIONS

| PRESSURE ADDED - PSI† | | | | | 10 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 | 220 | Max. Press. PSI | Suction Pipe Tap NPT | Disch. Pipe Tap NPT |
|------------------------|--------------------------------|------------------|-------|-------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|-----------------|----------------------|---------------------|
| Stainless Steel Fitted | Powder-Coated Cast Iron Fitted | Cast Iron Fitted | HP | Stage | Output - Gallons per Minute | | | | | | | | | | | | | | |
| 60Hz Models | | | | | | | | | | | | | | | | | | | |
| PB0508S031 Δ | PB0508C031 | PB0508A031 | 1/3 | 8 | 10.2 | 9.6 | 8.3 | 6.5 | 4.3 | | | | | | | | 96 | 3/4" | 3/4" |
| PB0512S051 Δ | PB0512C051 | PB0512A051 | 1/2 | 12 | 10.0 | 9.5 | 8.3 | 7.1 | 6.0 | 4.0 | 2.3 | | | | | | 132 | | |
| PB0516S071 Δ | PB0516C071 | PB0516A071 | 3/4 | 16 | 10.2 | 9.7 | 9.1 | 8.3 | 7.5 | 6.6 | 5.8 | 4.6 | 3.3 | | | | 189 | | |
| PB0712S071 Δ | PB0712C071 | PB0712A071 | 3/4 | 12 | 14.0 | 13.4 | 12.2 | 10.9 | 9.5 | 8.9 | 7.0 | 4.6 | | | | | 158 | | |
| PB1014S101 Δ | PB1014C101 | PB1014A101 | 1 | 14 | * | * | 14.5 | 13.4 | 12.3 | 11.2 | 9.8 | 8.0 | 6.0 | 2.3 | | | 183 | | |
| PB1016S151 Δ | PB1016C151 | PB1016A151 | 1-1/2 | 16 | * | * | 15.0 | 14.1 | 13.1 | 12.1 | 11.0 | 9.8 | 8.2 | 5.2 | 2.0 | | 212 | | |
| PB1914S201 | PB1914C201 | PB1914A201 | 2 | 14 | 27.6 | 27.0 | 25.7 | 24.2 | 22.6 | 20.8 | 18.7 | 16.2 | 12.9 | 7.7 | | | 190 | 1" | 1" |
| PB3506S201 | PB3506C201 | PB3506A201 | 2 | 6 | 48.0 | 47.0 | 42.5 | 35.2 | 24.0 | | | | | | | | 85 | | |
| PB2711S201 | PB2711C201 | PB2711A201 | 2 | 11 | * | * | 31.5 | 29.5 | 27.1 | 24.2 | 20.3 | 13.0 | | | | | 147 | | |
| PB3508S301 | PB3508C301 | PB3508A301 | 3 | 8 | 48.0 | 47.5 | 44.0 | 40.0 | 35.2 | 27.5 | | | | | | | 118 | | |
| PB2714S301 ‡ | PB2714C301 ‡ | PB2714A301 | 3 | 14 | * | * | 33.0 | 31.5 | 29.8 | 27.9 | 25.6 | 22.8 | 18.9 | 11.1 | | | 187 | | |
| PB2717S303A** | - | - | 3 | 17 | * | * | * | 34.1 | 32.3 | 30.5 | 28.3 | 25.8 | 23.1 | 20.0 | 16.6 | 11.4 | 225 | | |
| PB2717S303T** | - | - | 3 | 17 | * | * | * | 34.1 | 32.3 | 30.5 | 28.3 | 25.8 | 23.1 | 20.0 | 16.6 | 11.4 | 225 | | |
| - | - | PB5504A201 | 2 | 4 | 77.6 | 71.5 | 52.5 | | | | | | | | | | 55 | 2" | 2" |
| - | - | PB5506A301 | 3 | 6 | 77.8 | 74.4 | 65.0 | 51.1 | 31.9 | | | | | | | | 83 | | |
| - | - | PB8504A201 | 2 | 4 | 105.8 | 90.0 | 47.0 | | | | | | | | | | 49 | | |
| - | - | PB8505A301 | 3 | 5 | 108.8 | 98.8 | 60.0 | 25.0 | | | | | | | | | 60 | | |
| 50Hz Models | | | | | | | | | | | | | | | | | | | |
| PB0508Y031 Δ | PB0508Z031 | PB0508X031 | 1/3 | 8 | 7.5 | 6.8 | 5.0 | 2.0 | | | | | | | | | 66 | 3/4" | 3/4" |
| PB0514Y051 Δ | PB0514Z051 | PB0514X051 | 1/2 | 14 | * | 7.3 | 6.4 | 5.3 | 4.0 | 2.1 | | | | | | | 113 | | |
| PB0714Y071 Δ | PB0714Z071 | PB0714X071 | 3/4 | 14 | * | 10.9 | 9.7 | 8.5 | 7.0 | 5.2 | 2.8 | | | | | | 132 | | |
| PB1020Y101 | PB1020Z101 | PB1020X101 | 1 | 20 | * | 13.0 | 12.2 | 11.4 | 10.5 | 9.5 | 8.2 | 6.8 | 5.0 | 2.0 | | | 183 | | |
| PB1022Y101 | PB1022Z101 | PB1022X101 | 1 | 22 | * | 12.0 | 12.2 | 11.4 | 10.5 | 9.5 | 8.4 | 7.4 | 6.0 | 4.3 | 2.0 | | 203 | | |
| PB1023Y101 | PB1023Z101 | PB1023X101 | 1 | 23 | * | 12.0 | 12.2 | 11.4 | 10.5 | 9.6 | 8.6 | 7.6 | 6.5 | 5.1 | 3.3 | | 213 | | |
| PB1920Y151 | PB1920Z151 | PB1920X151 | 1-1/2 | 20 | * | 22.1 | 21.0 | 19.5 | 18.0 | 16.1 | 14.1 | 11.6 | 8.3 | 2.0 | | | 182 | | |
| PB2717Y201 | PB2717Z201 | PB2717X201 | 2 | 17 | * | 30.8 | 28.9 | 26.7 | 24.1 | 21.2 | 18.0 | 13.5 | | | | | 160 | | |
| PB3508Y151 | PB3508Z151 | PB3508X151 | 1-1/2 | 8 | * | 39.4 | 33.9 | 27.0 | 14.0 | | | | | | | | 84 | 1" | 1" |
| PB3514Y301T | PB3514Z301T | PB3514X301T | 3 | 14 | * | * | 38.5 | 36.5 | 32.1 | 28.1 | 23.0 | 14.4 | | | | | 146 | | |

† Example: If PB0508A031 pump is connected to supply line of sufficient capacity, carrying water at 40 PSI, and the output of the pump is held to 8.3 GPM by a gate valve, the pump will add 40 PSI to line pressure for a total output pressure of 80 PSI.

* Operation of pump in this range may result in reduced pump life and/or motor damage.

To keep pump and seal lubricated, a minimum flow of 1.5 GPM must always be maintained through the pump.

** Only available in 3 phase

‡ Models marked are also available in 575V, 3 Phase Only.

Motor voltage:

Open Drip Proof

Single Phase 1/3 - 2 HP - 115/230; 3 HP - 230V 60 Hz.

Three Phase 1/2 - 2 HP - 208-230/460, 50/60Hz.

Three Phase 3 HP - 208-230/460, 60 HZ

Three Phase 2 - 3 HP - 575V, 60Hz

For three phase models, use suffix "3" on the model no.

Example: PB0512A053

Totally Enclosed Fan Cooled

Single Phase: 1/2 thru 3 HP - 115/230V 60/50Hz

Three Phase: 1/2 thru 3 HP - 208/230/460V 60/50Hz

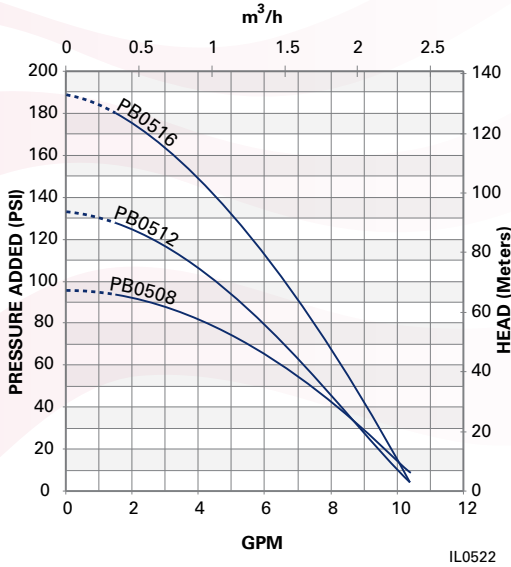
Δ Less than 50% US content



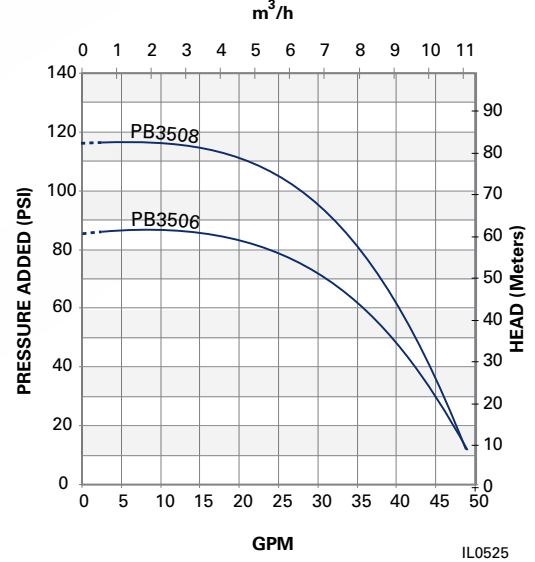
BOOSTER PUMP

60 Hz PERFORMANCE CURVES

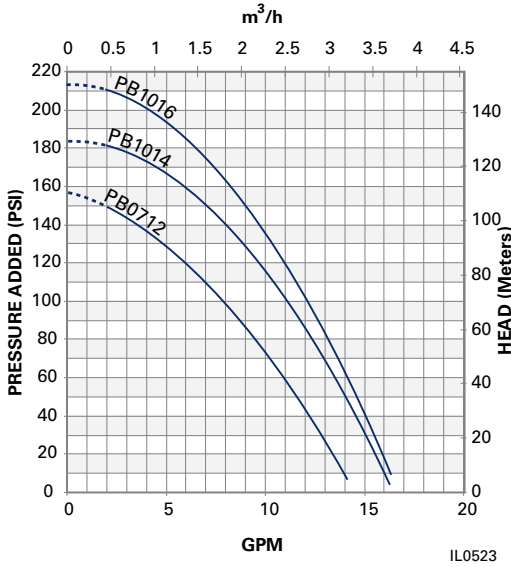
5 GPM



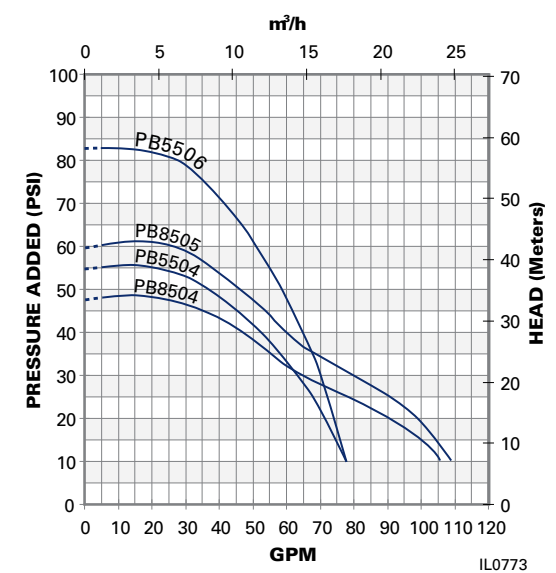
35 GPM



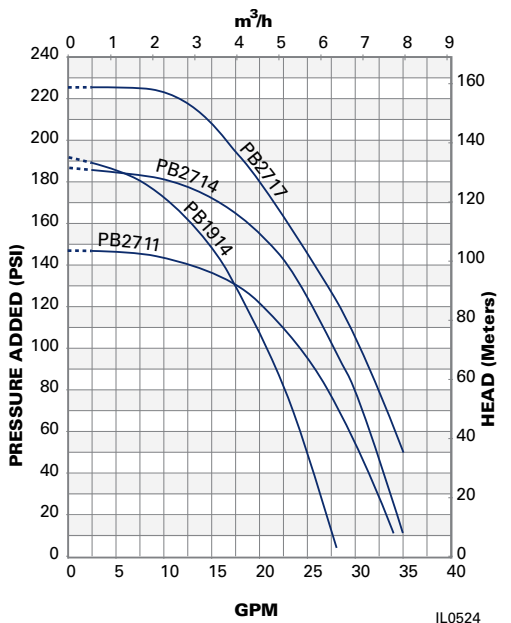
7 and 10 GPM



55 & 85 GPM



19 & 27 GPM



Do not operate pumps in flow range indicated by dotted line.

MODEL NUMBER CODE
PB 05 12 A 05 1 T* V**

- Series
- GPM
- Stages
- Construction Code
 - 60HZ
 - S = Stainless Steel
 - C = Powder Coated Cast Iron
 - A = Cast Iron
 - 50HZ
 - Y = Stainless Steel
 - Z = Powder Coated Cast Iron
 - X = Cast Iron
- Horsepower
 - 03 = 1/3 HP
 - 05 = 1/2 HP, etc.
- Phase
 - 1 = 1 Phase
 - 3 = 3 Phase
- TEFC* (Add T Suffix for TEFC motor)
- 575V** (Add V Suffix for 575V motor)

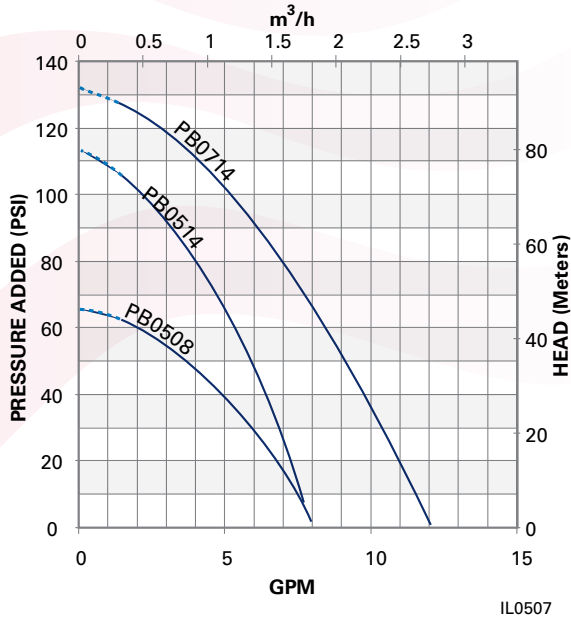
TEFC motors available on powder coated cast iron models and stainless steel models only



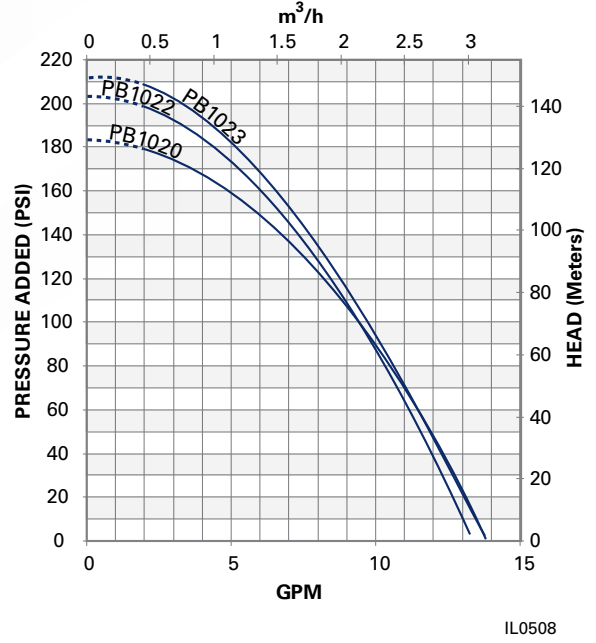
BOOSTER PUMP

50 Hz PERFORMANCE CURVES

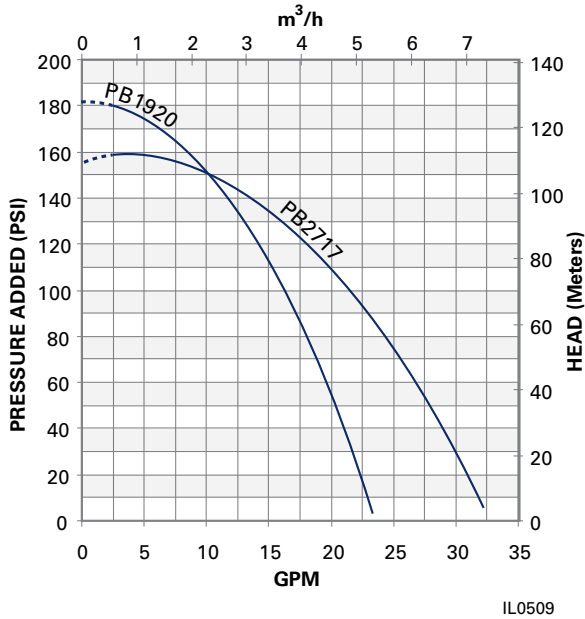
5 and 7 GPM



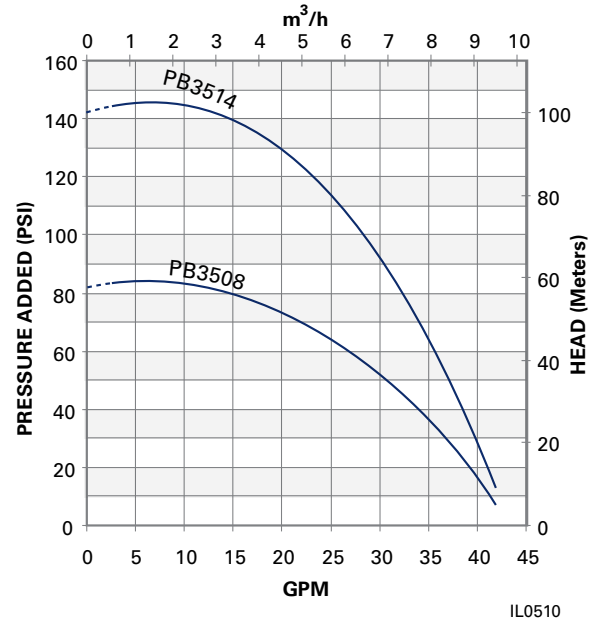
10 GPM



19 and 27 GPM



35 GPM



Do not operate pumps in flow range indicated by dotted line.

