



PFVH Features

- 10 Vane Cartridge Design
- Cartridge Style Design to Facilitate Field Service and Conversions
- High Operating Speeds to Meet Mobile Equipment Requirements
- Wide Selection of Pumps to Meet Complex Circuit Requirements
- Efficient, Simple Design
- High Tolerance to System Contamination
- Low Noise Levels for Quiet Operation
- Hydraulically Balanced Design for Reduced Bearing Loads and Long Pump Life
- Mount Piston, Gear and other Vane Pumps on Common Drive Shaft
- Ideal for "HI/LO" Pump Circuits
- Replacement for popular competitor models

Installation Note: See *Installation Information Section* of this catalog for specific recommendations pertaining to system cleanliness, fluids, start-up, inlet conditions, shaft alignment, and other important factors relative to the proper installation and use of these pumps.

hpm250-2.p65, lw, dk

PFVH Specifications

Flow Ratings*: 12gpm (45LPM) to 60gpm (227LPM)
@ 1200 RPM single units
17gpm (64LPM) to 98gpm (371LPM)
@ 1200 RPM tandem units

Operating Speeds*: to 2700 RPM

Operating Pressures*: to 3000 PSI Continuous

Mountings: PFVH25 SAE - B - Two Bolt Flange
PFVH35 SAE - C - Two Bolt Flange
PFVH45 SAE - C - Two Bolt Flange

Housing Material: Cast-Iron

Operating temperature Range: -40°F to 185°F
(-40°C to 85°C)

Filtration: Maintain ISO 18/15 or Better

* Refer to Technical Information section of this catalog for individual model ratings.

Specifications

| 25 Series Code | | 12 | 14 | 17 | 19 | 21 |
|---|----------------------------------|---------------|---------------|---------------|---------------|---------------|
| Displacement | cu. in./rev. (cc / rev.) | 2.4 (40) | 2.8 (45) | 3.4 (55) | 3.7 (60) | 4.1 (68) |
| Maximum Pressure | Continuous psi (Bar) | 3000 (206) | 3000 (206) | 3000 (206) | 3000 (206) | 3000 (206) |
| Minimum Speed | Below 1000 psi Above 1000 psi | 600 1000 | 600 1000 | 600 1000 | 600 1000 | 600 1000 |
| Maximum Speed, RPM | | 2700 | 2700 | 2500 | 2500 | 2500 |
| Typical Flow at Max. Speed & Pressure | GPM (Liters/min) | 25 (96) | 28 (108) | 32 (122) | 36 (137) | 40 (153) |
| Typical Input HP at Max. Speed & Pressure | HP (KW) | 54 (40) | 66 (50) | 68 (51) | 75 (56) | 83 (63) |

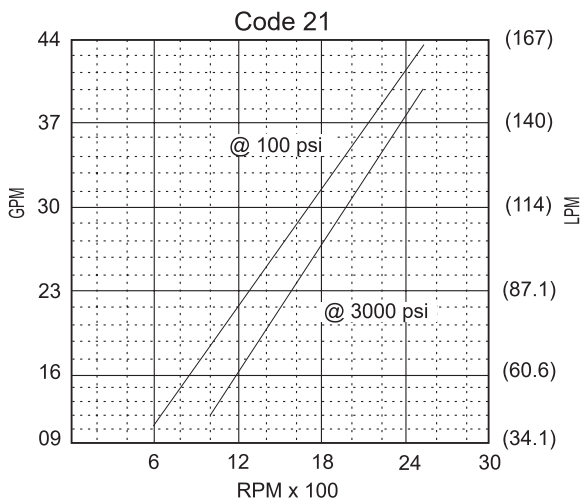
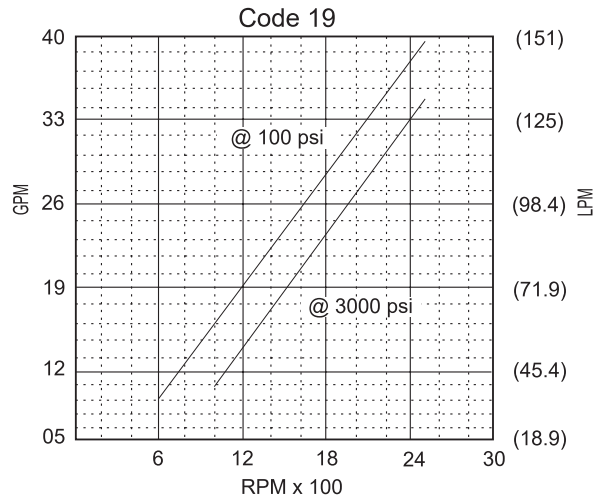
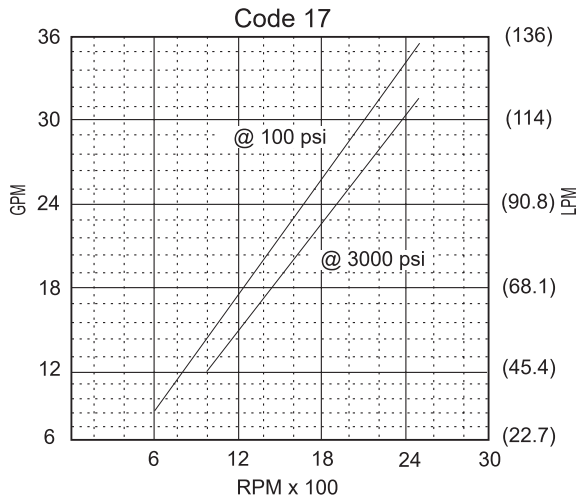
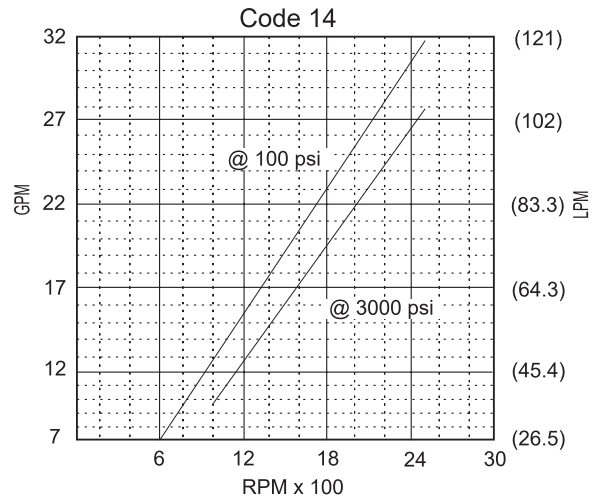
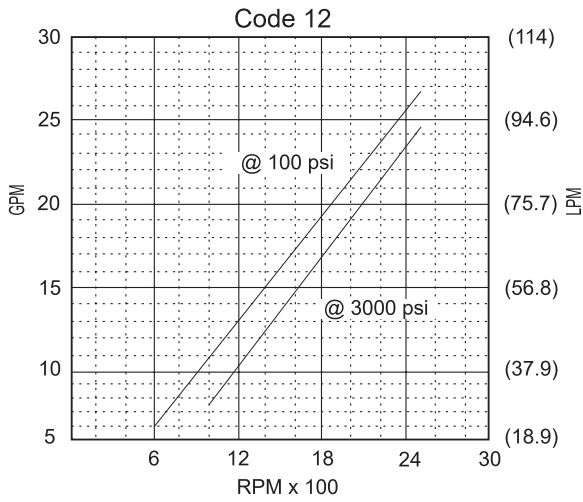
Specifications

| 35 Series Code | | 21 | 25 | 30 | 35 | 38 |
|---|----------------------------------|---------------|---------------|---------------|---------------|---------------|
| Displacement | cu. in./rev. (cc / rev.) | 4.2 (69) | 5.0 (82) | 6.0 (98) | 6.9 (113) | 7.4 (122) |
| Maximum Pressure | Continuous psi (Bar) | 3000 (206) | 3000 (206) | 3000 (206) | 3000 (206) | 3000 (206) |
| Minimum Speed | Below 1000 psi Above 1000 psi | 600 1000 | 600 1000 | 600 1000 | 600 1000 | 600 1000 |
| Maximum Speed, RPM | | 2500 | 2500 | 2500 | 2400 | 2400 |
| Typical Flow at Max. Speed & Pressure | GPM (Liters/min) | 40 (151) | 47 (178) | 57 (215) | 64 (242) | 69 (263) |
| Typical Input HP at Max. Speed & Pressure | HP (KW) | 84 (63) | 98 (73) | 122 (91) | 129 (96) | 142 (106) |

Specifications

| 45 Series Code | | 42 | 47 | 50 | 57 | 60 |
|---|----------------------------------|---------------|---------------|---------------|---------------|---------------|
| Displacement | cu. in./rev. (cc / rev.) | 8.5 (138) | 9.4 (154) | 9.9 (162) | 11.2 (183) | 11.8 (193) |
| Maximum Pressure | Continuous psi (Bar) | 2500 (172) | 2500 (172) | 2500 (172) | 2500 (172) | 2500 (172) |
| Minimum Speed | Below 1000 psi Above 1000 psi | 600 1000 | 600 1000 | 600 1000 | 600 1000 | 600 1000 |
| Maximum Speed, RPM | | 2200 | 2200 | 2200 | 2200 | 2200 |
| Typical Flow at Max. Speed & Pressure | GPM (Liters/min) | 69 (263) | 77 (294) | 82 (313) | 96 (364) | 99 (375) |
| Typical Input HP at Max. Speed & Pressure | HP (KW) | 126 (94) | 137 (102) | 146 (109) | 158 (118) | 168 (125) |

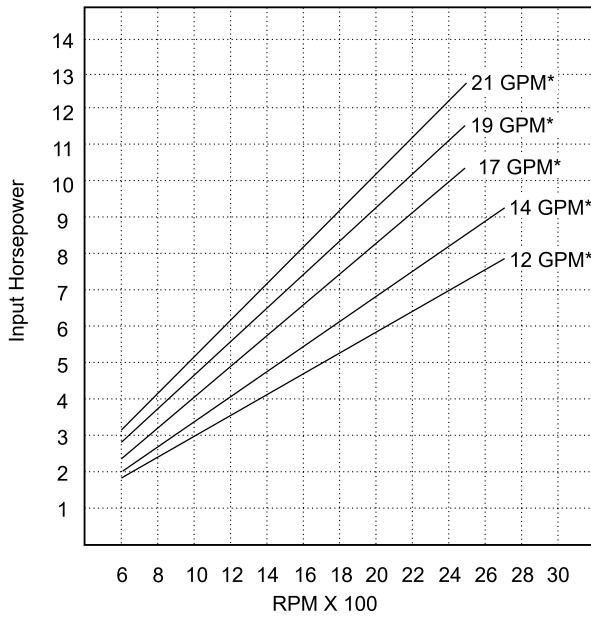
Flow In Gallons Per Minute — GPM (LPM)



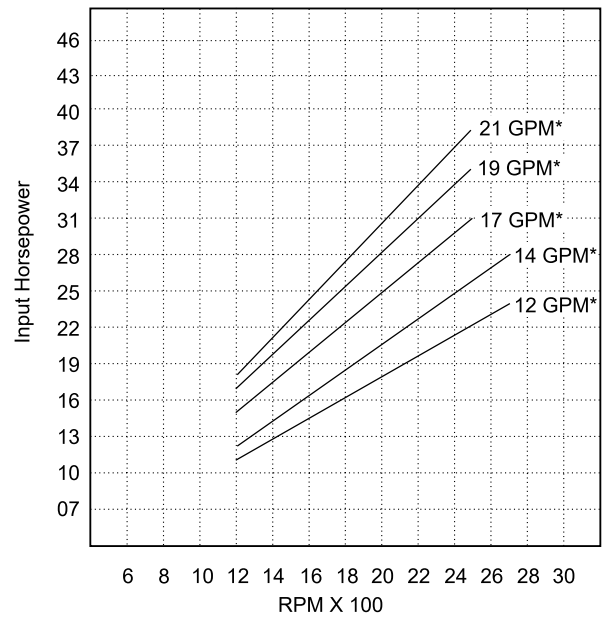
Data Based on SAE 20W Fluid @ 120°F and Pump Inlet @ 0 PSIG (14.7 PSIA)

Input Horsepower

Outlet @ 500 PSI

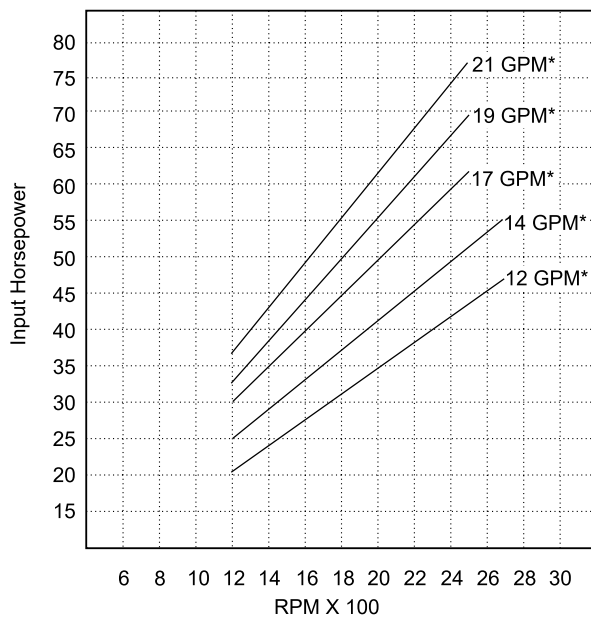


Outlet @ 1500 PSI



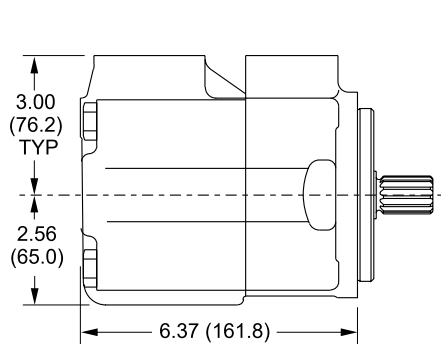
*GPM listed is at 1200 RPM

Outlet @ 3000 PSI

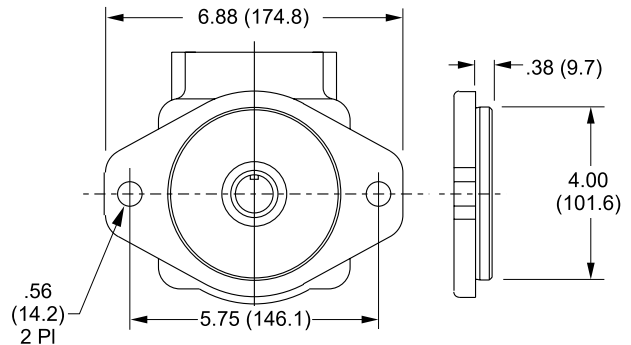


Single Pump Dimensions

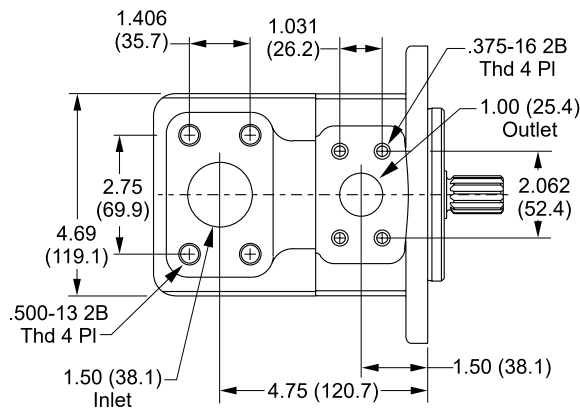
Millimeter equivalents for inch dimensions are shown in (**)



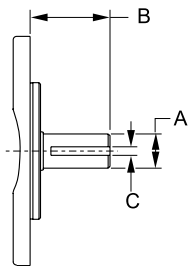
Side View



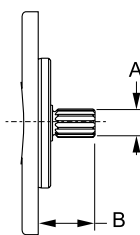
Mounting



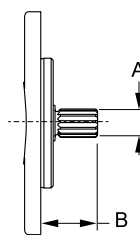
Porting



Shaft Keyed



Shaft Splined



Shaft SAE Splined

| Code | Shaft Type (25 Only) | Dimensions | |
|----------|-------------------------|------------|-----------|
| | | A | B |
| A | 0.188 Square Keyed "C" | 0.875 (22) | 2.31 (59) |
| B | 13T 16/32 Spline | 0.875 (22) | 1.75 (45) |
| C | 0.250 Square Keyed "C" | 1.000 (25) | 3.00 (78) |
| D | SAE 13T 16/32 Spline | 0.875 (22) | 1.62 (41) |

