

PAVC Medium Pressure/Super Charged Piston Pumps



PAVC piston pumps are ideal for many applications with operating pressure up to 3000 PSI (210 BAR). These compact pumps feature convenient cartridge style controls and carry a full pressure rating on most water glycol fluids.

- High strength cast-iron housing
- Built-in supercharger
- High speed capability - 3000 RPM (2600 RPM PAVC100)
- Sealed shaft bearing

- Two piece design for ease of service
- Cartridge bronze clad port plate
- Airbleed standard for quick priming
- Hydrodynamic cylinder barrel bearing
- Thru-shaft (PAVC100 only)
- Full pressure rating on water glycol fluids
- Pump case and shaft seal - see inlet pressure only
- Filter and/or cool drain line (100 PSI Max.) (6.9 BAR Max.)

Pump Performance Data

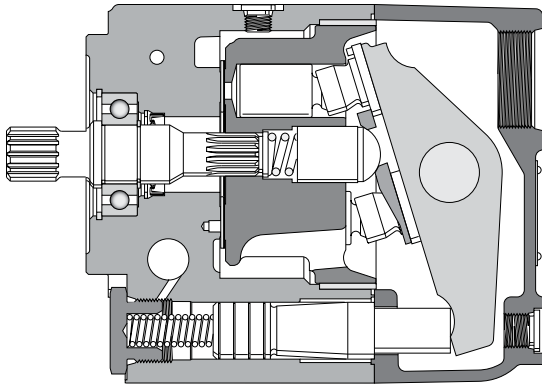
| Model Series | Max. Displacement in ³ /rev (cc/rev) | Rated Outlet Pressure PSI (BAR) | Drive Speed RPM | At MAX RPM and 3000 PSI | |
|--------------|--|------------------------------------|--------------------|-------------------------|-----------------------------|
| | | | | Flow GPM (LPM) | Input Horsepower HP (KW) |
| PAVC33 | 2.01 (33) | 3000 (210) | 3000 | 25 (94.6) | 50 (37.3) |
| PAVC38 | 2.32 (38) | 3000 (210) | 3000 | 28 (106.0) | 55 (41.0) |
| PAVC65 | 3.97 (65) | 3000 (210) | 3000 | 52 (196.8) | 96 (71.6) |
| PAVC100 | 6.10 (100) | 3000 (210) | 2600 | 69 (261.2) | 140 (104.4) |



Piston Pumps (Mobile & Industrial)

PAVC Medium Pressure/Super Charged Piston Pumps

Performance Characteristics



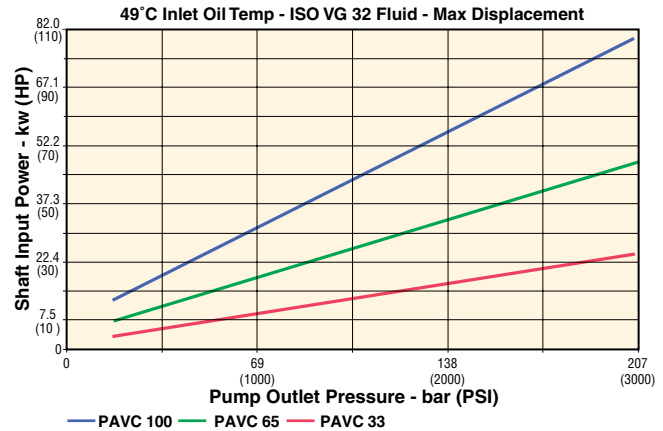
Benefits/Features

- High strength cast-iron housing
- Built-in supercharger ensures high speed capability - 3000 RPM (2600 RPM PAVC100)
- Sealed shaft bearing
- Two-piece design for ease of service
- Cartridge type controls field changeable
- Replaceable bronze clad port plate
- Airbled standard for quick priming
- Hydrodynamic cylinder barrel bearing
- Thru-shaft (PAVC100 only)
- Full pressure rating on most water glycol fluids
- Pump case and shaft seal are subjected to inlet pressure only
- Filter and/or cool drain line 100 PSI (7 BAR) maximum

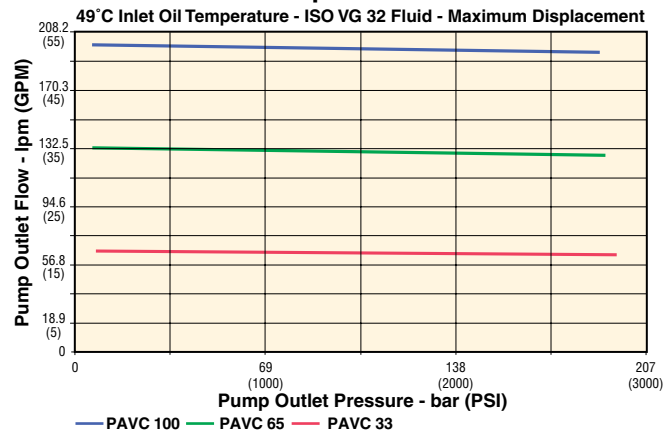
Controls

- Pressure compensation
- Load sensing
- Power (torque) limiting
- Power and load sensing
- Remote pressure compensation
- Adjustable maximum volume stop
- Low pressure standby

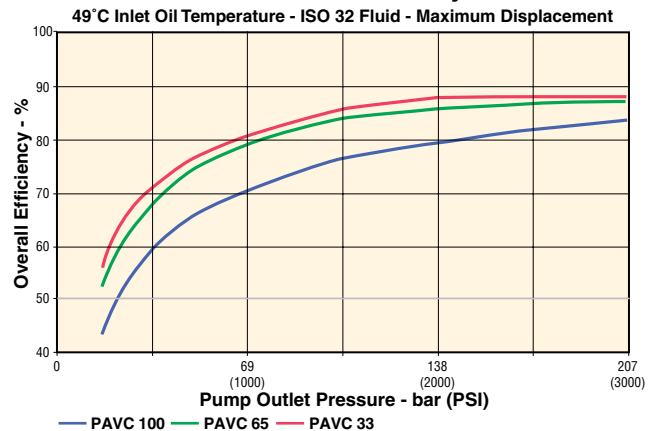
PAVC Series Shaft Input Power - 2000 RPM



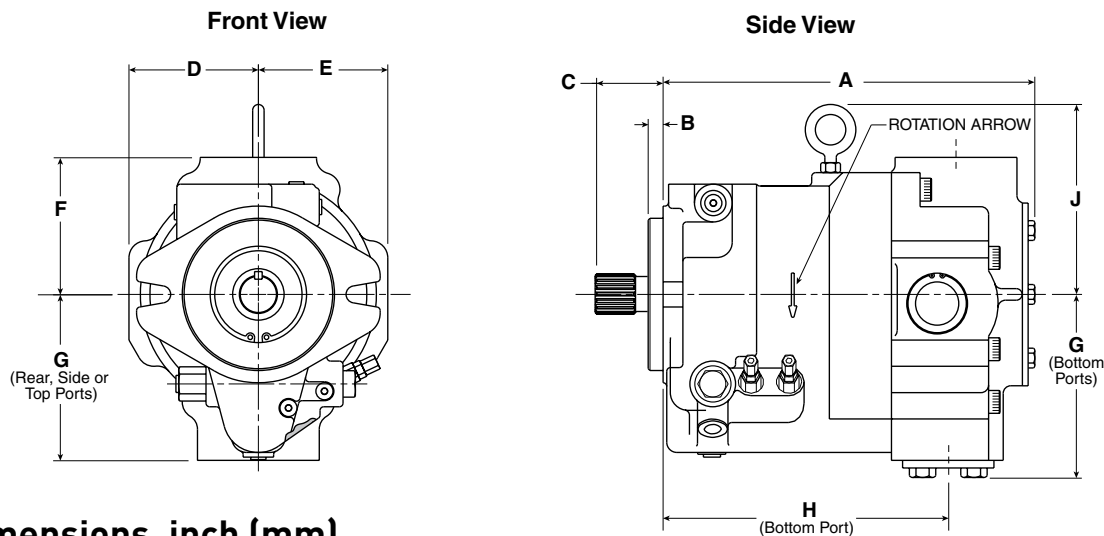
PAVC Series Pump Outlet Flow - 2000 RPM



PAVC Series Overall Efficiency - 2000 RPM



PAVC Medium Pressure/Super Charged Piston Pumps



Dimensions, inch (mm)

| Dim. | PAVC33/38 | | PAVC65 | | PAVC100 | |
|----------|---------------|---------------|---------------|---------------|----------------|-------------------|
| | Rear Ported | Side Ported | Rear Ported | Top Ported | Rear Ported | Top/Bottom Ported |
| A | 7.25 (184.15) | 7.32 (185.93) | 8.82 (224.03) | 8.82 (224.02) | 11.95 (303.53) | 12.21 (310.13) |
| B | 0.37 (9.39) | 0.37 (9.37) | 0.49 (12.45) | 0.49 (12.44) | 0.49 (12.44) | 0.49 (12.44) |
| C | 2.31 (58.67) | 2.31 (58.67) | 2.19 (55.63) | 2.19 (55.62) | 2.19 (55.62) | 2.19 (55.62) |
| D | 3.31 (84.07) | 4.17 (105.92) | 4.00 (101.60) | 4.00 (101.60) | 4.25 (107.95) | 4.25 (107.94) |
| E | 3.31 (84.07) | 3.53 (89.66) | 4.00 (101.60) | 4.00 (101.60) | 4.25 (107.95) | 4.25 (107.94) |
| F | 2.50 (63.50) | 2.50 (63.50) | 3.50 (88.90) | 3.38 (85.85) | 4.62 (117.34) | 4.50 (114.30) |
| G | 3.81 (96.77) | 4.12 (104.65) | 4.56 (115.82) | 4.56 (115.82) | 5.57 (141.47) | 6.25 (159.25) |
| H | — | — | — | — | — | 9.37 (237.99) |
| J | — | — | — | — | 6.24 (158.49) | 6.24 (159.49) |

PAVC100 SAE B, SAE BB and SAE C Thru-drive Kits

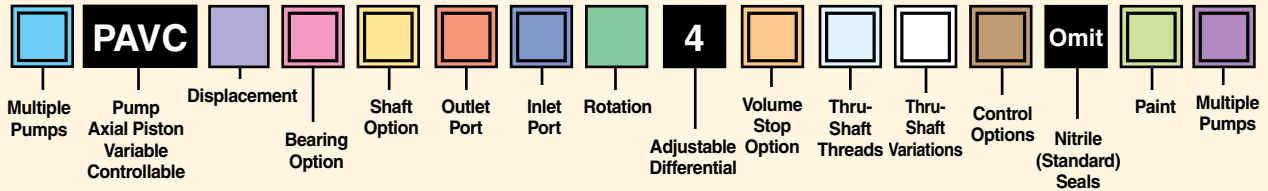
| Pump Series | Mount | Spline | Kit # |
|----------------|-------|--------|--------|
| PAVC 100...6B3 | SAE B | SAE B | 787076 |
| PAVC 100...6B4 | SAE B | SAE BB | 787077 |
| PAVC 100...6C3 | SAE C | SAE C | 787076 |

Note: Pumps can be converted from/to SAE B, BB or SAE C thru-drives by using the kits listed.



Piston Pumps

PAVC Model Ordering Code



| Code | Multiple Pumps |
|------|---|
| Omit | Single Pump |
| — | Factory Mounted to Rear of Another Pump |

| Code | Displacement in ³ /rev (cm ³ /rev) |
|------|--|
| 33 | 2.0 (33) |
| 38 | 2.3 (38) |
| 65 | 4.0 (65) |
| 100 | 6.1 (100) |

| Code | Bearing Option |
|------|--------------------|
| Omit | Single Piece Shaft |
| 9* | Dual Bearing |

* For applications where side loading may be experienced. Max. side load = 113.4 kg (250 lbs).

Typical Applications:

- Belt/chain drive
- Universal joint drive
- Massive couplings
- Foot mount installations

| Code | Shaft Option | |
|------|------------------|-------------------|
| | Size 33/38 | Size 65/100 |
| Omit | 7/8" Keyed SAE B | 1¼" Keyed SAE C |
| B | 13T Spline SAE B | 14T Spline SAE C |
| C* | — | 1½" Keyed SAE CC |
| D* | — | 17T Spline SAE CC |

* Size 100 only

| Code | Outlet Port | | |
|------|-------------|----------|----------|
| | Outlet | Location | Type |
| Omit | Str. Thread | Top | SAE/Inch |
| 3* | Flange | Top | SAE/Inch |

* Size 100 only

| Code | Inlet Port | | | |
|------|-----------------|-----------------|--------------------|------------------|
| | 33/38 Inlet | 65 Inlet | 100 Inlet | Type |
| Omit | Str. Thd., Rear | Str. Thd., Rear | Flange, Rear | SAE/Inch Threads |
| 2 | Flange, Side | Flange, Top | Flange, Top/Bottom | SAE/Inch Threads |

| Code | Rotation* |
|------|-----------|
| R | Right CW |
| L | Left CCW |

* Viewed from shaft end.

| Code | Volume Stop Options |
|------|------------------------------|
| Omit | Volume Stop Plugged |
| 2 | Maximum Volume Stop |
| 5* | Max. Volume Stop with O-ring |

* Not available with Thru-Shaft option on Size 100.

| Code | Thru-Shaft Threads* |
|------|---------------------|
| Omit | No Thru-Shaft |
| 6 | Thru-Shaft, UNC |

* Available on Size 100 only.

| Code | Thru-Shaft Variations |
|------|--|
| Omit | No Thru-Shaft Option |
| A3 | Thru-Shaft, SAE AA Pilot, 9 Tooth 20/40 Pitch Spline Coupling, PAVC 100 Only |
| A4 | Thru-Shaft, SAE A Pilot, 9 Tooth 16/32 Pitch Spline Coupling, PAVC 100 Only |
| *B3 | Thru-Shaft, SAE B Pilot, 13 Tooth 16/32 Pitch Spline Coupling, PAVC 100 Only |
| *B4 | Thru-Shaft, SAE B Pilot, 15 Tooth 16/32 Pitch Spline Coupling, PAVC 100 Only |
| *C3 | Thru-Shaft, SAE C Pilot, 14 Tooth 12/24 Pitch Spline Coupling, PAVC 100 Only |

Inlet port option "2" or "8" (top/bottom) must be used with all Thru-Shaft pumps.

* Use SAE C-C shaft on thru-shaft pump variation when combined input torque of front and rear pumps exceeds 565 N•m (5000 In-Lbs).

| Code | Control Option |
|-------|--|
| Omit | Standard Pressure Compensated Setting Pressure 41-207 bar (600-3000 PSI) |
| A | Pressure & Flow (Load Sensing) |
| *C | Pressure, Flow & Power |
| *H | Pressure Comp. & Power |
| **†M | Remote Pressure |
| **†ME | Remote Pressure |
| †AM | Remote Pressure & Flow |
| ††CM | Remote Pressure, Flow & Power |
| ††HM | Remote Pressure & Power |

* Power controlled pumps (H, C, HM or CM) must have maximum input power limit specifications at a particular drive speed (RPM) and compensator pressure setting (PSI) included with order. Power controlled pumps that do not have input power limit specifications, will be set at default setting (22.5 HP @ 1800 RPM and 3000 PSI) "H" & "C" (60 HP @ 1800 RPM and 3000 PSI) "HM" & "CM"

** "M" may be remotely controlled;

"ME" requires external pilot

† Pumps with M, ME, AM, CM or HM controls will be set to compensate at 207 bar (3000 PSI) unless Chart #1 specifies otherwise.

| Code | Painting |
|------|----------|
| Omit | No Paint |
| P | Paint |

| Code | Multiple Pumps |
|------|------------------------------|
| Omit | Single Pump |
| — | Pump Factory Mounted on Rear |

Chart #1

| Item | Setting |
|------|---------|
| RPM | — |
| PSI | — |
| HP | — |
| GPM | — |

Ordering Notes

Unless otherwise specified, pump is shipped at maximum GPM (1800 RPM) and set to 69 bar (1000 PSI) [See † Exceptions].

When factory settings are required, the items shown in Chart #1 must be included with order.

= Omit if not required or to select standard option coded "omit".