**PGP/PGM 505 How to Specify**

<table>
<thead>
<tr>
<th>Gear Design</th>
<th>Side Suction Port1</th>
<th>Side Pressure Port1</th>
<th>Rear Suction Port1</th>
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</table>

**1 Pump/Motor**

- **P** Pump
- **M** Motor

**2,15 Unit**

<table>
<thead>
<tr>
<th>Pump</th>
<th>Motor</th>
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<tr>
<td>A</td>
<td>Single unit</td>
</tr>
<tr>
<td>B</td>
<td>Multiple unit</td>
</tr>
<tr>
<td>C</td>
<td>—</td>
</tr>
<tr>
<td>D</td>
<td>—</td>
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</table>

**3,16 Displacement**

- 0020 2.0 ccm (0.12 cir)
- 0030 3.0 ccm (0.18 cir)
- 0040 4.0 ccm (0.24 cir)
- 0050 5.0 ccm (0.31 cir)
- 0060 6.0 ccm (0.37 cir)
- 0070 7.0 ccm (0.43 cir)
- 0080 8.0 ccm (0.49 cir)
- 0100 10.0 ccm (0.61 cir)
- 0110 11.0 ccm (0.67 cir)
- 0120 12.0 ccm (0.73 cir)

**4 Rotation**

- **C** Clockwise
- **A** Counter clockwise
- **B** Bi-directional motors only

**5 Shaft**

- **A1** 9T, 16/32 Pitch, 32L, SAE "A" spline
- **A2** 9T, 20/40 Pitch, 27L, SAE "AA" spline
- **J1** Ø12.7, 3.2 Key, no thread, 38L, parallel
- **K1** Ø15.88, 4.0 Key, no thread, 32L, SAE "A", parallel

**6 Shaft End Covers**

- **A1** 50.8x50.8 - Ø45.25 4 bolt square flange
- **H1** 82.5 - Ø50.8 SAE "A-A" 2 bolt flange
- **H2** 106.4 - Ø82.55 SAE "A" 2 bolt flange

**7,17 Shaft Seal**

- **X** No seal
- **N** NBR
- **V** FPM, FKM

**8,9,10,11,18,19,20,21 Port Options**

- **B1** No ports
- **D2** 9/16" - 18 UNF thread
- **D3** 3/4" - 16 UNF thread
- **D4** 7/8" - 14 UNF thread
- **D5** 1 1/16" - 12UN thread

**12 Motor Drain Option**

- **B1** No drain
- **A** 7/16"-20 UNF thread
- **C** 9/16"-18 UNF thread

**13 Drain Position**

- **2** Drain on bottom
- **3** Drain on top
- **4** Rear drain

**14 Section Connection**

- **S** Separate inlets
- **C** Common inlets

**NOTES:**

1. Only coded for the last section.
2. Only for motors
3. For further "B" triple unit repeat displacement, shaft seal between sections, side suction port, side pressure port, rear suction port, rear pressure port.
4. Dimensions are in millimeters except where noted.
5. Distributor unit contains shaft with add on capability for multiples.

---

*Please note the bold, italicized items reflect Parker preferred product options.*
PGP/PGM 505 Specifications

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<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>0020</th>
<th>0030</th>
<th>0040</th>
<th>0050</th>
<th>0060</th>
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<th>0100</th>
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<th>0120</th>
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<td>6.5</td>
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<td>Pump Input Power @ Max.</td>
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<td>38.4</td>
<td>41.1</td>
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<td>46.5</td>
<td>49.1</td>
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<td>Dimension &quot;L&quot;</td>
<td>kg</td>
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<td>5.59</td>
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</table>

1) Single pump with Shaft End Cover D3 and non ported Port End Cover.

PGP/PGM 505 Dimensions

Single Unit PGP/PGM 505

Single Unit PGP/PGM 505 with rear ports

Tandem Unit PGP/PGM 505

NOTE:
- Dimension "F" see shaft end covers on page 7
- Dimension "L" see table above

Notes:
1. Dimensions are in millimeters (inches).
2. Dimensions are nominal except where noted.
3. Subscript and/or superscript numbers are tolerances.

Please note the bold, italicized items reflect Parker preferred product options.
PGP/PGM 505 Shaft End Covers

**Code A1**

![Diagram of Code A1]

**Code H2**

![Diagram of Code H2]

---

**Notes:**
1. Dimensions are in millimeters (inches).
2. Dimensions are nominal except where noted.
3. Subscript and/or superscript numbers are tolerances.

*Please note the bold, italicized items reflect Parker preferred product options.*

---

**PGP/PGM 505 Porting**

**Code D2, D3, D4, D5**

SAE straight thread

See table below for specific port dimensions.

---

**PGP/PGM 505**

<table>
<thead>
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<th>Code</th>
<th>G1</th>
<th>T1</th>
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<tbody>
<tr>
<td>D2</td>
<td>9/16&quot;-18 UNF</td>
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<td>D3</td>
<td>3/4&quot;-16 UNF</td>
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<tr>
<td>D5</td>
<td>1 1/16&quot;-12 UN</td>
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</table>
PGP/PGM 505 Drive Shaft

Code A1

Code A2

Code J1

Code K1

Notes: 1. Dimensions are in millimeters (inches).
2. Dimensions are nominal except where noted.
3. Subscript and/or superscript numbers are tolerances.

When applying a multiple section pump, the maximum drive shaft load is determined by adding the torque values for each pumping section that will be simultaneously loaded.

PGP/PGM 505 - Shaft Load Capacity

<table>
<thead>
<tr>
<th>Code</th>
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<th>Torque Rating</th>
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<td>A1</td>
<td>9T, 16/32 Pitch, SAE “A”</td>
<td>Spline</td>
<td>108Nm/954 in-lb</td>
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<td>9T, 20/40 Pitch, SAE “A-A”</td>
<td>Spline</td>
<td>108Nm/954 in-lb</td>
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<td>J1</td>
<td>Ø 12.7,3.2 Key, No thread, 38L</td>
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<tr>
<td>K1</td>
<td>Ø 15.88, 4.0 Key, No Thread, 32L, SAE “A”</td>
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<td>Tandem Pump/Connecting Shaft</td>
<td>Spline</td>
<td>36Nm/318 in-lb</td>
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</table>

Torque [Nm] = Displacement [cc/rev] x Pressure [bar] / 57.2

PGP/PGM 505 Drain Positions

Please note the bold, italicized items reflect Parker preferred product options.
PGP 505 - 6.0 CC
Fluid Temperature = 45± 2°C
Viscosity = 36mm²/s
Inlet Pressure = 0.9 + 0.1 bar absolute

Pressure [bar]

Flow [l/min]

Flow n=2800 rev/min
Flow n=3600 rev/min
Flow n=500 rev/min

Input power [kW]

Flow n=2800 rev/min
Flow n=3600 rev/min
Flow n=500 rev/min

PGP 505 - 10.0 CC
Fluid Temperature = 45± 2°C
Viscosity = 36mm²/s
Inlet Pressure = 0.9 + 0.1 bar absolute

Pressure [bar]

Flow [l/min]

Flow n=2800 rev/min
Flow n=3600 rev/min
Flow n=500 rev/min

Input power [kW]

Flow n=2800 rev/min
Flow n=3600 rev/min
Flow n=500 rev/min

PGP 505 - 12.0 CC
Fluid Temperature = 45± 2°C
Viscosity = 36mm²/s
Inlet Pressure = 0.9 + 0.1 bar absolute

Pressure [bar]

Flow [l/min]

Flow n=2400 rev/min
Flow n=1600 rev/min
Flow n=500 rev/min

Input power [kW]

Flow n=2400 rev/min
Flow n=1600 rev/min
Flow n=500 rev/min

Performance data shown is based upon a series of laboratory tests and is not representative of any one unit.