# Power Sections

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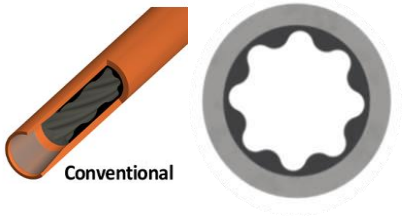
## 5.00" 5/6 LOBES 6.7 STAGES

Model: SPS500566.7

**Imperial Units**




| Stator Specifications | |
|---|---|
| | Inches |
| Overall Length | 250.0 |
| Tube O.D. | 5.00 |
| Tube I.D. | 4.00 |
| Rubber Cut Back Top | 8.0 |
| Rubber Cut Back Bottom | 8.0 |
| Weight (lb) | 555 |
| Tube Material | 4140-4145 |
| | |
| | |
| | |
| To be threaded and ID Banded by customer | |

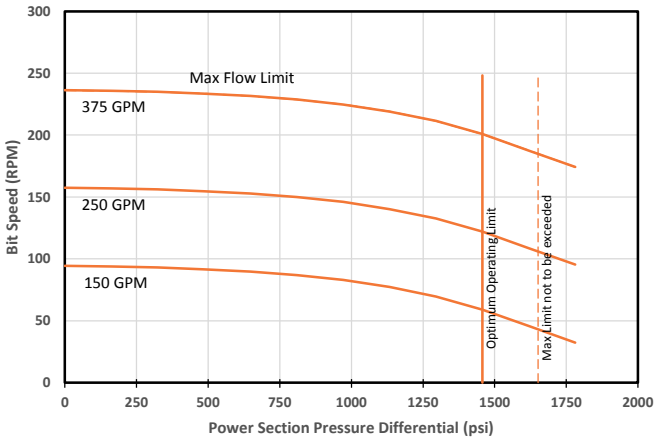
| Rotor Specifications | |
|---|---|
| | Inches |
| Overall Length | 241.0 |
| Contour Length | 235 |
| Major Diameter | 3.120 |
| Eccentricity | 0.235 |
| Head Diameter | 2.900 |
| Gunbored Weight (lb) | 330 |
| Solid Weight (lb) | 383 |
| Material | 17-4PH |
| Coating option 1 | Chrome |
| Coating option 2 | Carbide |
| To be threaded by customer | |

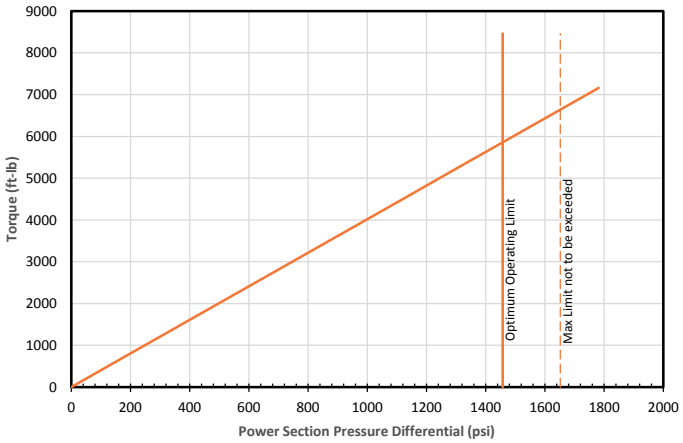
| Performance Specifications | | |
|---|---|---|
| | | |
| Flow Range (GPM) | 150 - 375 | |
| Speed Range (RPM) | 95 - 235 | |
| Torque Slope (ft-lbs/psi) | 4.020 | |
| Rotation (rev/Gal) | 0.630 | |
| Off Bottom Pressure (psi) | 100 | |
| Stall Torque (ft-lbs) | 8,800 | |
| | Optimal Limit | Max Limit* |
| Motor Pressure (psi) | 1,458 | 1,652 |
| Torque (ft-lbs) | 5,900 | 6,600 |
| Flow (GPM) | 375 | 375 |
| Power (hp) | 224 | 234 |

*Expect reduced life when operating at this limit for extended duration

| Minor Diameter Fit Details (at 68°F) | | | | | |
|---|---|---|---|---|---|
| | Nominal Fit (in.)** | Minor Dia (in.)* | Nominal Fit (in.)** | Minor Dia (in.)* | |
| Size Band | Vector Measurements | | True Size Laser Measurements | | Best Oper. Temp*** |
| 1.0T | - | - | - | - | - |
| 0.5T | -0.005 | 2.655 | 0.007 | 2.643 | 115 - 170 °F |
| STD | -0.015 | 2.665 | -0.003 | 2.653 | 150 - 205 °F |
| 0.5L | -0.025 | 2.675 | -0.013 | 2.663 | 180 - 235 °F |
| 1.0L | -0.035 | 2.685 | -0.023 | 2.673 | 215 - 270 °F |
| 1.5L | -0.045 | 2.695 | -0.033 | 2.683 | 245 - 300 °F |
| 2.0L | - | - | - | - | - |
| Minor Shrinkage (in./°F) | | | | 0.00030 | |

*Approximate Vector/laser gauge conversion: 0.012 ± 0.005
**Negative fits indicate clearance fit at room temperature using nominal new rotor
***Best operating temperatures are based on new stators subject to normal thermal expansion conditions. Operators may wish to consider swell and run life when selecting sizes.




Performance curves are for reference only. Actual power section performance may vary depending on operating conditions (e.g. chosen rotor/stator interference fit, possible rubber swelling by drilling fluid, rotor and stator wear, actual downhole temperature, actual stator temperature, physical and chemical properties of the drilling fluid and other factors encountered downhole). The torque may exceed that specified for the connected components. Operating above the recommended limits may result in damage to the power section and connected components which will be the liability of the operator. Data subject to change without notice.

Model last revised: 06/04/2018