

Power Sections

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| Stator Specifications | |
|--|-----------------|
| Overall Length (in.) | 250.0 [6350 mm] |
| Tube O.D. (in.) | 5.00 [127 mm] |
| Tube I.D. at Terminal (in.) | 4.00 [102 mm] |
| Rubber Cut Back Top (in.) | 8.0 |
| Rubber Cut Back Bott (in.) | 8.0 |
| Weight (kg) | 250 |
| Tube Material | 4140-4145 |
| To be threaded and ID Banded by customer | |

| Rotor Specifications | |
|----------------------------|-----------------|
| Overall Length (in.) | 240.0 [6096 mm] |
| Contour Length (in.) | 234 [5944 mm] |
| Major Diameter (in.) | 3.144 |
| Eccentricity (in.) | 0.168 |
| Head Diameter (in.) | 3.250 |
| Bored Weight (kg) | 170 |
| Solid Weight (kg) | 194 |
| Material | 17-4PH |
| Coating option 1 | Chrome |
| Coating option 2 | Carbide |
| To be threaded by customer | |

| Performance Specifications | |
|----------------------------|-----------------|
| Flow Range (lpm) | 750 - 1500 |
| Speed Range (RPM) | 105 - 195 |
| Torque Slope (ft-lb/kPa) | 0.669 |
| Rotation (rev/l) | 0.138 |
| Stall Torque (ft-lb) | 9,750 |
| Operating Parameters | |
| Max Diff Pressure (kPa) | 9,700 |
| Torque (ft-lb) | 6,500 |
| Flow Rate (lpm) | 1,400 |
| Full Load RPM | 134 at 1400 lpm |

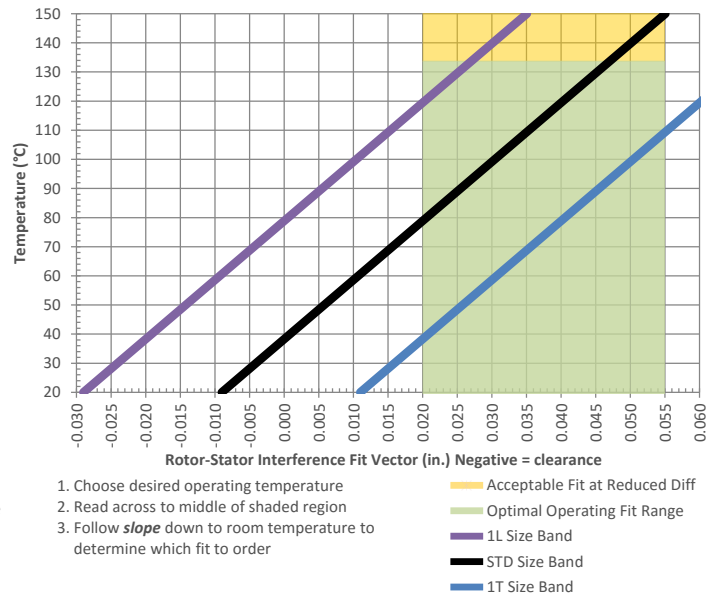
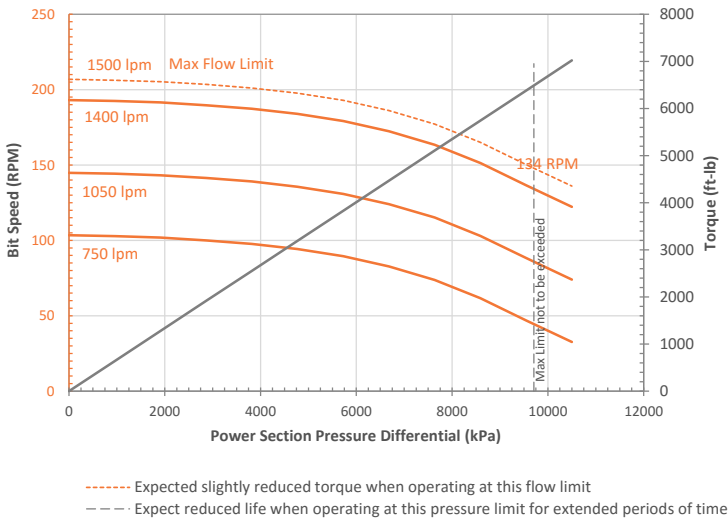
| Minor Diameter Fit Details (at 20°C) | | | | | |
|--------------------------------------|---------------------|------------------|------------------------------|------------------|----------------|
| Size Band | Nominal Fit (in.)** | Minor Dia (in.)* | Nominal Fit (in.)** | Minor Dia (in.)* | Operating Temp |
| | Vector Measurements | | True Size Laser Measurements | | Optimal |
| 1.0T | 0.011 | 2.797 | 0.016 | 2.792 | 40 - 110 °C |
| 0.5T | 0.001 | 2.807 | 0.006 | 2.802 | 60 - 130 °C |
| STD | -0.009 | 2.817 | -0.004 | 2.812 | 80 - 150 °C |
| 0.5L | -0.019 | 2.827 | -0.014 | 2.822 | 100 - 150 °C |
| 1.0L | - | - | - | - | - |
| 1.5L | - | - | - | - | - |
| 2.0L | - | - | - | - | - |
| Minor Shrinkage (in./°C) | | | | | 0.00048 |

All default tolerances are +/- 0.015 unless otherwise explicitly agreed upon with Spira Systems. Call for availability of sizes not listed.

*Approximate Vector/laser gauge conversion: 0.005 ± 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. Visit www.spirasystems.com for most up to date information.