

Power Sections

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| Rotor Specifications | | | | | | | |
|----------------------------|-------------------|--------|--|--|--|--|--|
| | | | | | | | |
| verall Length in. [mm] | 262.3 | [6661] | | | | | |
| ontour Length in. [mm] | 256.3 | [6509] | | | | | |
| lajor Diameter in. [mm] | 3.609 | [91.7] | | | | | |
| ccentricity in. [mm] | 0.200 | [5.1] | | | | | |
| ead Diameter in. [mm] | 3.500 | [88.9] | | | | | |
| unbored Weight lb [kg] | 494 | [224] | | | | | |
| olid Weight Ib [kg] | 552 | [250] | | | | | |
| laterial (See note 4) | 17-4 PH | | | | | | |
| oating Options | Chrome or Carbide | | | | | | |
| To be threaded by systemer | | | | | | | |

5.25 7/8 LOBES 8.5 STAGES

Model: SPS525788.5 FATBOY™

Mixed Units



| Stator Specifications | | Rotor Specifications | | Performance Specifications | | | | |
|---|-------|------------------------------|-------------------------|--|--------------|---------------------------------|-----------|--------------|
| | | | | | | | | |
| Overall Length in. [mm] | 275.0 | [6985] | Overall Length in. [mm] | 262.3 | [6661] | Flow Range GPM [lpm] | 200 - 425 | [760 - 1610] |
| Tube O.D. in. [mm] | 5.25 | [133] | Contour Length in. [mm] | 256.3 [6509] Speed Range RPM 105 - 220 | | 5 - 220 | | |
| Tube I.D. (Terminal) in. [mm] | 4.10 | [104] | Major Diameter in. [mm] | 3.609 | [91.7] | Torque Slope ft-lb/psi [Nm/kPa] | 5.300 | [1.042] |
| Rubber Cutback Top in. [mm] | 11.0 | [279.4] | Eccentricity in. [mm] | 0.200 | [5.1] | Rotation rev/Gal [rev/lit] | 0.518 | [0.137] |
| Rubber Cutback Btm in. [mm] | 11.0 | [279.4] | Head Diameter in. [mm] | 3.500 | [88.9] | Stall Torque ft-lb [Nm] | 15,900 | [21,500] |
| Weight lb [kg] | 615 | [280] | Gunbored Weight lb [kg] | 494 | [224] | | | |
| Tube Material | 4140 |)-4145 | Solid Weight lb [kg] | 552 | [250] | 250] Operating Parameters | | |
| | | | Material (See note 4) | 17-4 PH | | Max Diff Pressure psi [kPa] | 2,000 | [13,800] |
| | | | Material (See Hote 4) | | | Torque ft-lbs [Nm] | 10,600 | [14,400] |
| | | | Coating Options | Chrome | e or Carbide | Flow Rate GPM [lpm] | 425 | [1,600] |
| To be threaded and ID Banded by customer To be threaded by customer | | Full Load RPM 161 at 425 GPM | | | | | | |
| | | | | | | | | |
| Minor Diameter Fit Details at 20°C [68°F] (See note 3) | | | | | | | | |
| | | | | | | | | |

| Size Band | Vector Fit (in.) (see note 1) | Vector Measurement (in.) | Recommended Min Operating Temperature | Recommended Optimal Operating Temperature (see note 2) | Recommended Max Operating Temperature (see note 2) | | |
|-----------|----------------------------------|--------------------------|--|--|--|--|--|
| 1.0T | - | - | - | - | - | | |
| 0.5T | 0.005 | 3.205 | 140°F [60°C] | 210°F [100°C] | 280°F [135°C] | | |
| STD | -0.005 | 3.215 | 185°F [85°C] | 255°F [125°C] | 300°F [150°C] | | |
| 0.5L | - | - | - | - | - | | |
| 1.0L | - | - | - | - | - | | |
| | 0.000205 [0.000370] | | | | | | |

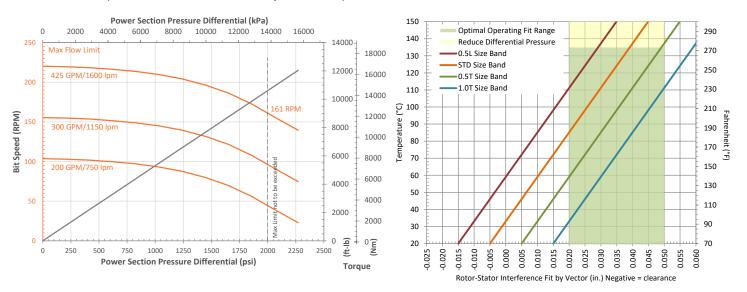
Notes:

1. Negative fits indicate clearance fit at room temperature using nominal new rotor.

2. Reduce differential pressure by 20% for temperatures above 250°F (125°C) and by 40% for temperatures above 285°F (140°C)

3. Typical stator minor diameter tolerances are +/- 0.015.

4. Material minimum yield to be discussed at time of order subject to availability.



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 the operator may be liable for. Data subject to change without notice. Visit www.spirasystems.com for most up to date information.