

5.00 6/7 LOBES 7 STAGES

| Stator Specifications | | |
|--|-----------|---------|
| Overall Length in. [mm] | 212.0 | [5385] |
| Tube O.D. in. [mm] | 5.00 | [127] |
| Tube I.D. (Terminal) in. [mm] | 4.00 | [102] |
| Rubber Cutback Top in. [mm] | 8.0 | [203.2] |
| Rubber Cutback Btm in. [mm] | 8.0 | [203.2] |
| Weight lb [kg] | 485 | [220] |
| Tube Material | 4140-4145 | |
| To be threaded and ID Banded by customer | | |

| Rotor Specifications | | |
|----------------------------|-------------------|--------|
| Overall Length in. [mm] | 205.0 | [5207] |
| Contour Length in. [mm] | 197.3 | [5010] |
| Major Diameter in. [mm] | 3.018 | [76.7] |
| Eccentricity in. [mm] | 0.192 | [4.9] |
| Head Diameter in. [mm] | 3.125 | [79.4] |
| Gunbored Weight lb [kg] | 278 | [126] |
| Solid Weight lb [kg] | 321 | [146] |
| Material (See note 3) | 17-4 PH | |
| Coating Options | Chrome or Carbide | |
| To be threaded by customer | | |

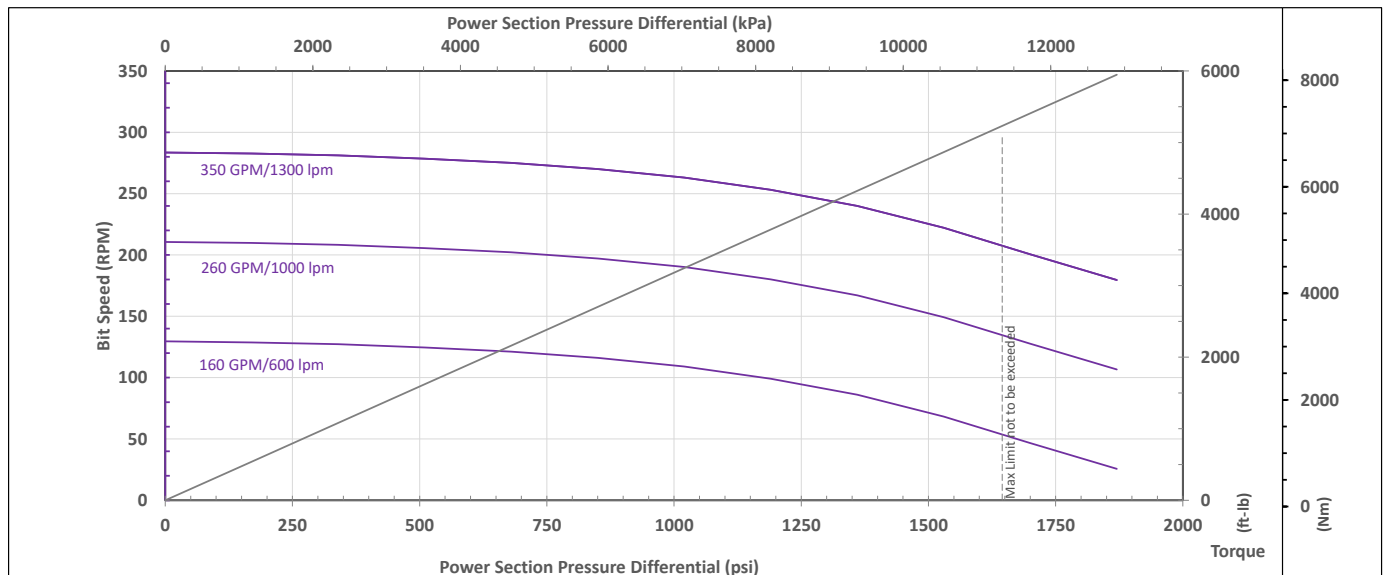
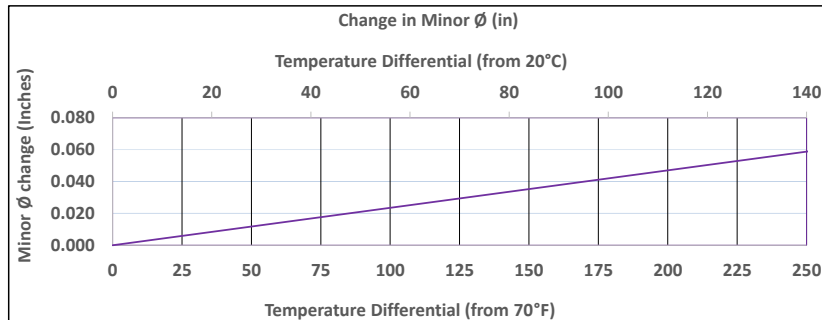
Notes:

1. Reduce differential pressure 20% for temps above 250°F (125°C) and 40% for temps above 285°F (140°C)
2. Typical stator minor diameter tolerances are +/- 0.015
3. Material minimum yield to be discussed at time of order subject to availability
4. Negative fit indicates clearance

| Minor Ø Fit Details at 70°F (20°C) (See Note 2) | | |
|---|--------------------------|---------------------------|
| PARADIGM 89 HRD | | |
| Size Band | Vector Fit See note 4 | Vector (in) See note 4 |
| 1.0T | 0.006 | 2.628 |
| 0.5T | -0.004 | 2.638 |
| STD | - | - |
| 0.5L | - | - |
| 1.0L | - | - |
| Minor Shrinkage (in/°F) [in/°C] | | 0.000235 [0.000423] |

| Performance Specifications | | |
|---------------------------------|-----------|--------------|
| Flow Range GPM [lpm] | 160 - 350 | [610 - 1320] |
| Speed Range RPM | 130 - 285 | |
| Torque Slope ft-lb/psi [Nm/kPa] | 3.180 | [0.625] |
| Rotation rev/Gal [rev/lit] | 0.810 | [0.214] |
| Stall Torque ft-lb [Nm] | 7,850 | [10,600] |

| Operating Parameters | | |
|-----------------------------|----------------|----------|
| Max Diff Pressure psi [kPa] | 1650 | [11,300] |
| Torque ft-lbs [Nm] | 5,250 | [7,100] |
| Max Flow Rate GPM [lpm] | 350 | [1,300] |
| Full Load RPM | 208 at 350 GPM | |



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.