Life Cycle Curves

**400 Type Pivot Bearing Loaded in Compression (Vc)**
Factor of Safety = 1.0

- Infinite Life
- 35,000 Cycles
- 200,000 Cycles
- Riverhawk Recommends Electron Beam Welded Construction for Pivots Loaded Beyond This Point

**400 Type Pivot Bearing Loaded in Tension (Vt)**
Factor of Safety = 1.0

- Infinite Life
- 35,000 Cycles
- 200,000 Cycles
- Riverhawk Recommends Electron Beam Welded Construction for Pivots Loaded Beyond This Point

**600 Type Pivot Bearing Loaded in Compression (Vc)**
Factor of Safety = 1.0

- Infinite Life
- 35,000 Cycles
- 200,000 Cycles

**600 Type Pivot Bearing Loaded in Tension (Vt)**
Factor of Safety = 1.0

- Infinite Life
- 35,000 Cycles
- 200,000 Cycles

**800 Type Pivot Bearing Loaded in Compression (Vc)**
Factor of Safety = 1.0

- Infinite Life
- 35,000 Cycles
- 200,000 Cycles

**800 Type Pivot Bearing Loaded in Tension (Vt)**
Factor of Safety = 1.0

- Infinite Life
- 35,000 Cycles
- 200,000 Cycles
Pivot Selection Process

1. Determine the preferred mounting arrangement so as to select a Cantilevered (Single-Ended) or Double Ended design.
2. Identify the load carrying requirements.
3. Determine if the loads are axial, radial, or combined. If the loads are combined please consult Riverhawk Engineering for assistance.
4. Review the Pivot Characteristics Chart for pivot sizes capable of carrying the loads identified in Step 2.
5. Select the most probable size using the loads and directions. Consider the torsional spring rate in your selection process.
6. From the selected pivot part number, use the last three digits and the desired load direction to refer to the appropriate Life Cycle Curves.
7. Using the X-Axis formula, compute the percentage of load and use it to determine the maximum deflection angle of the pivot for the desired life cycles.
8. If that angle meets your requirements then the selection process is complete. If that angle does not meet your requirements, please refer back to Step 5 and repeat the process until all of your requirements have been met.

* If you have any questions during the selection process, please consult Riverhawk Engineering for assistance.

(1) Pounds at zero deflection based on pure radial load. When the load is applied directly through a single spring, multiply capacity shown by 0.0707.
(2) At zero load.

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<table>
<thead>
<tr>
<th>Nominal Outside Diameter (Inch)</th>
<th>Catalog Number</th>
<th>Load Capacity (Pounds)</th>
<th>Load at Center of “A” See Note (1)</th>
<th>Series 5000 Cantilevered (size-type)</th>
<th>Vc</th>
<th>Vt</th>
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(2) At zero load.