

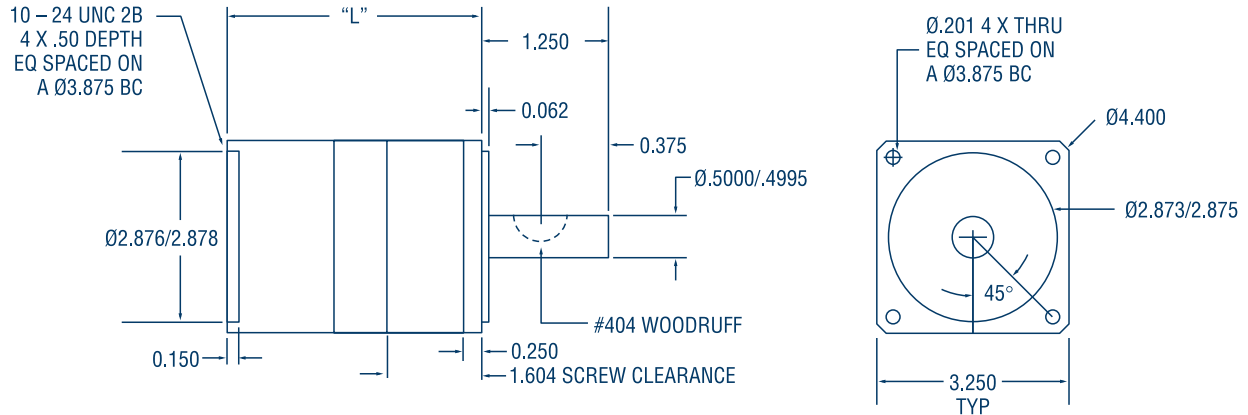


# SIZE 34 "S" SERIES PLANETARY

## DIMENSION "L"

Single Stage (4:1 to 10:1) = 3.229± .015

Double Stage (16:1 to 100:1) = 4.087 ± .015



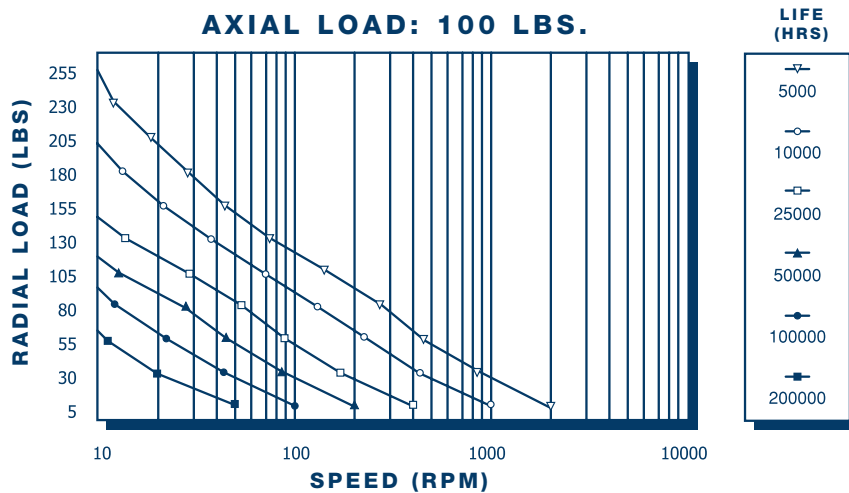
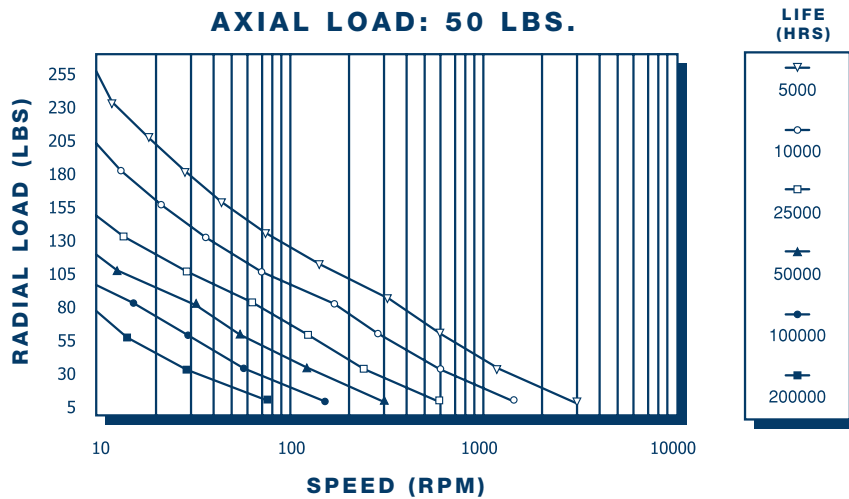
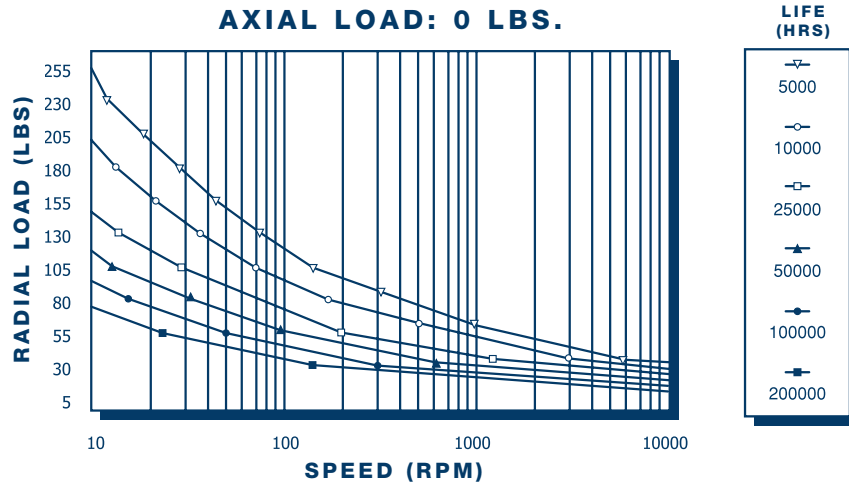
| Part #              | Ratio | Continuous output torque at 1500 rpm input (in-lbs) | Continuous output torque at 3500 rpm input (in-lbs) | Continuous output torque at 5000 rpm input (in-lbs) | Gearhead inertia at input (lb-in-sec <sup>2</sup> ) |
|---------------------|-------|---|---|---|---|
| <b>SINGLE STAGE</b> |       |   |   |   |   |
| 34SP004             | 4:1   | 529   | 350   | 279   | 1.28 x 10 <sup>-4</sup>                             |
| 34SP007             | 7:1   | 467   | 355   | 301   | 7.65 x 10 <sup>-5</sup>                             |
| 34SP010             | 10:1  | 384   | 313   | 275   | 6.69 x 10 <sup>-5</sup>                             |
| <b>DOUBLE STAGE</b> |       |   |   |   |   |
| 34SP016             | 16:1  | 667   | 566   | 508   | 1.27 x 10 <sup>-4</sup>                             |
| 34SP028             | 28:1  | 670   | 639   | 595   | 7.63 x 10 <sup>-5</sup>                             |
| 34SP049             | 49:1  | 528   | 499   | 480   | 7.55 x 10 <sup>-5</sup>                             |
| 34SP070             | 70:1  | 534   | 514   | 499   | 6.64 x 10 <sup>-5</sup>                             |
| 34SP100             | 100:1 | 409   | 398   | 391   | 6.63 x 10 <sup>-5</sup>                             |

## GENERAL SPECIFICATIONS

| Construction Type | Ratio         | Backlash: Standard (arc-minutes) | Backlash: Low Backlash (arc-minutes) | Efficiency | Weight (lbs) | Maximum Tested Input rpm |
|-------------------|---------------|----------------------------------|--------------------------------------|------------|--------------|--------------------------|
| Single Stage      | 4:1 to 10:1   | 12                               | 6                                    | 95%        | 3.67         | 5000                     |
| Double Stage      | 16:1 to 100:1 | 16                               | 10                                   | 90%        | 5.10         | 5000                     |

**PEAK TORQUE:** 15% above continuous rating. **NOTE:** Repeated peak torque loading may cause failure.

# SIZE 34 SP BEARING LIFE VS. SHAFT LOAD



**SPEED (RPM)** refers to the gearheads output shaft speed.

**LIFE (HRS)** = (# of lifetime revolutions) ÷ (60 x rpm)

**F<sub>RADIAL</sub>** is calculated at 1/2 the shaft length.

