

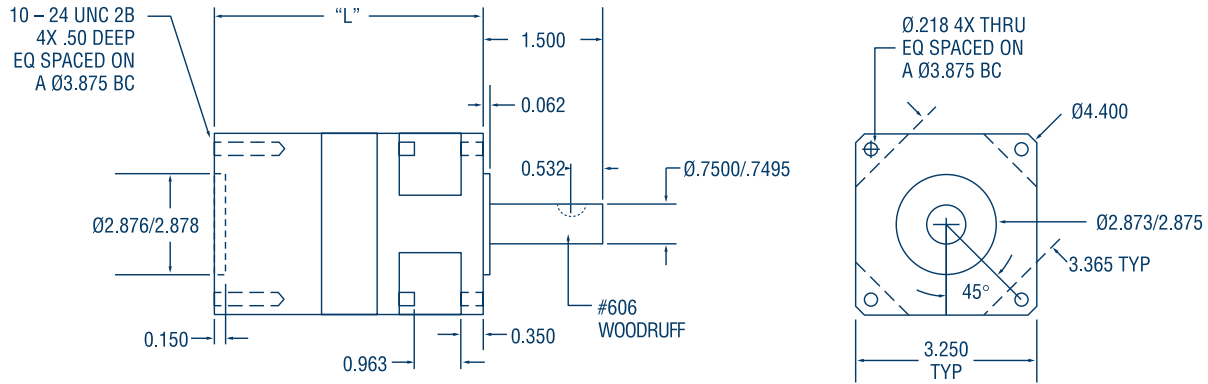


# SIZE 34 PRECISION PLANETARY

## DIMENSION "L"

Single Stage (3:1 to 10:1) = 4.063 ± .015

Double Stage (16:1 to 100:1) = 5.431 ± .015



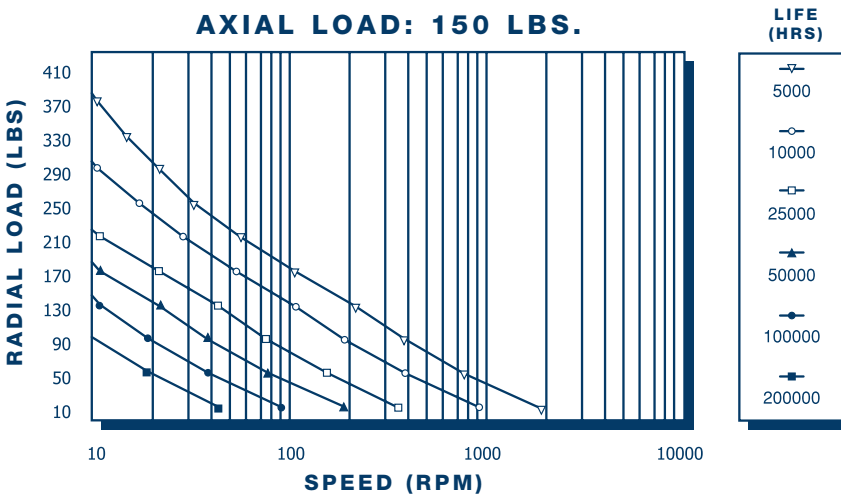
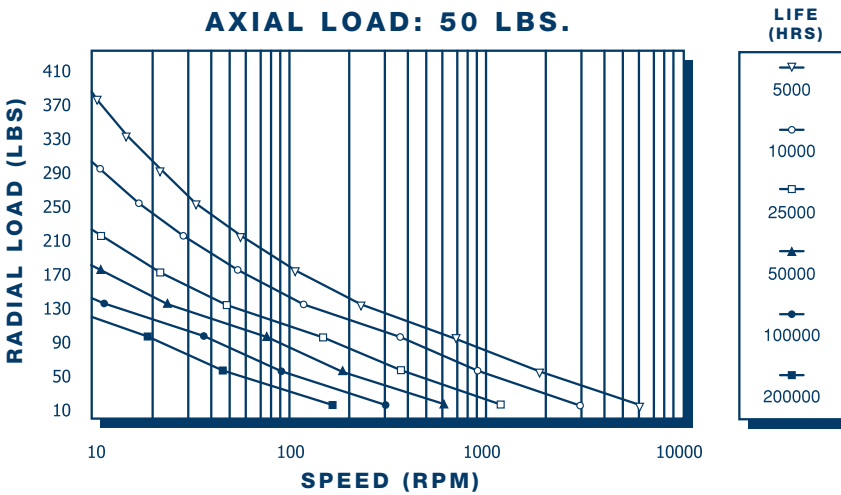
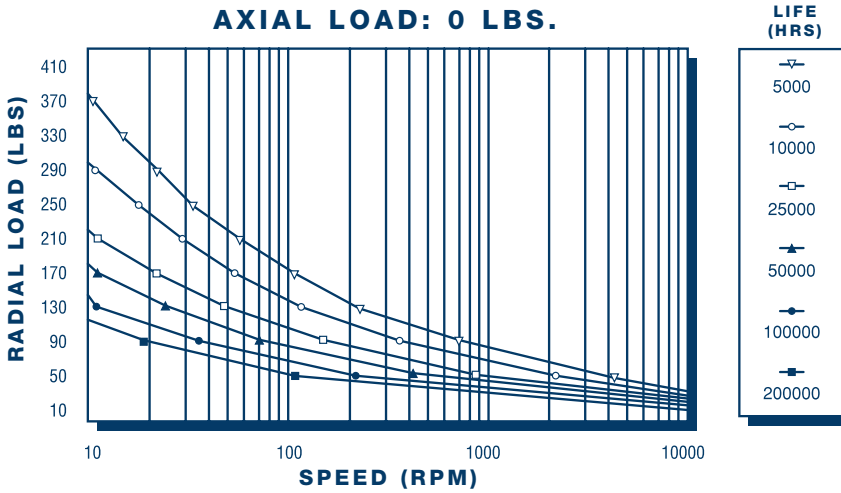
| Part #       | Ratio   | Continuous output torque at 1500 rpm input (in-lbs) | Continuous output torque at 3500 rpm input (in-lbs) | Continuous output torque at 5000 rpm input (in-lbs) | Gearhead inertia at input (lb-in-sec <sup>2</sup> ) |                         |
|--------------|---------|---|---|---|---|-------------------------|
| SINGLE STAGE | 34PL003 | 3:1   | 1189  | 724   | 560   | 6.77 x 10 <sup>-4</sup> |
|              | 34PL004 | 4:1   | 1144  | 757   | 604   | 2.77 x 10 <sup>-5</sup> |
|              | 34PL005 | 5.5:1   | 1074  | 773   | 638   | 1.51 x 10 <sup>-5</sup> |
|              | 34PL007 | 7:1   | 1011  | 768   | 651   | 1.11 x 10 <sup>-5</sup> |
|              | 34PL010 | 10:1  | 832   | 677   | 594   | 7.90 x 10 <sup>-5</sup> |
| DOUBLE STAGE | 34PL016 | 16:1  | 1805  | 1531  | 1374  | 2.86 x 10 <sup>-5</sup> |
|              | 34PL022 | 22:1  | 1874  | 1650  | 1515  | 1.55 x 10 <sup>-5</sup> |
|              | 34PL028 | 28:1  | 1915  | 1728  | 1609  | 1.14 x 10 <sup>-5</sup> |
|              | 34PL040 | 40:1  | 1963  | 1821  | 1728  | 8.04 x 10 <sup>-5</sup> |
|              | 34PL049 | 49:1  | 1428  | 1351  | 1298  | 1.11 x 10 <sup>-5</sup> |
|              | 34PL055 | 55:1  | 1640  | 1558  | 1501  | 7.94 x 10 <sup>-5</sup> |
|              | 34PL070 | 70:1  | 1445  | 1390  | 1351  | 7.90 x 10 <sup>-5</sup> |
|              | 34PL100 | 100:1   | 1106  | 1078  | 1056  | 7.87 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      | 3:1 to 10:1   | 6                                | 3                                    | 90%        | 5.47         | 5000                     |
| Double Stage      | 16:1 to 100:1 | 10                               | 7                                    | 85%        | 8.85         | 5000                     |

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

# SIZE 34 PL 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.

