

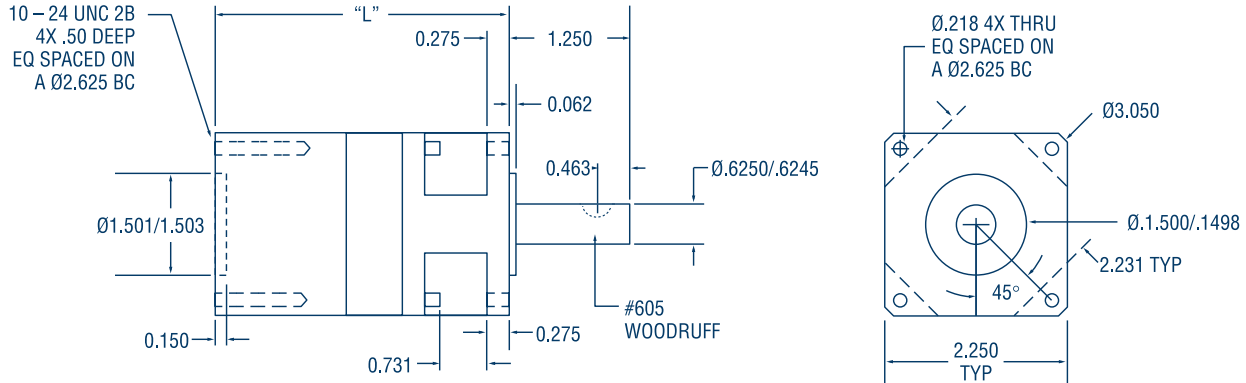


# SIZE 23 PRECISION PLANETARY

## DIMENSION "L"

Single Stage (3:1 to 10:1) = 3.146 ± .015

Double Stage (16:1 to 100:1) = 4.249 ± .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	23PL003	3:1	520	343	273	1.22 x 10 <sup>-4</sup>
	23PL004	4:1	482	346	285	5.24 x 10 <sup>-5</sup>
	23PL005	5.5:1	439	339	290	2.65 x 10 <sup>-5</sup>
	23PL007	7:1	405	329	288	1.93 x 10 <sup>-5</sup>
	23PL010	10:1	325	280	253	1.35 x 10 <sup>-5</sup>
DOUBLE STAGE	23PL016	16:1	698	619	571	5.32 x 10 <sup>-5</sup>
	23PL022	22:1	716	654	614	2.70 x 10 <sup>-5</sup>
	23PL028	28:1	728	676	643	1.96 x 10 <sup>-5</sup>
	23PL040	40:1	740	703	676	1.36 x 10 <sup>-5</sup>
	23PL049	49:1	535	515	501	1.90 x 10 <sup>-5</sup>
	23PL055	55:1	615	593	578	1.34 x 10 <sup>-5</sup>
	23PL070	70:1	540	525	515	1.33 x 10 <sup>-5</sup>
	23PL100	100:1	411	404	399	1.33 x 10 <sup>-5</sup>

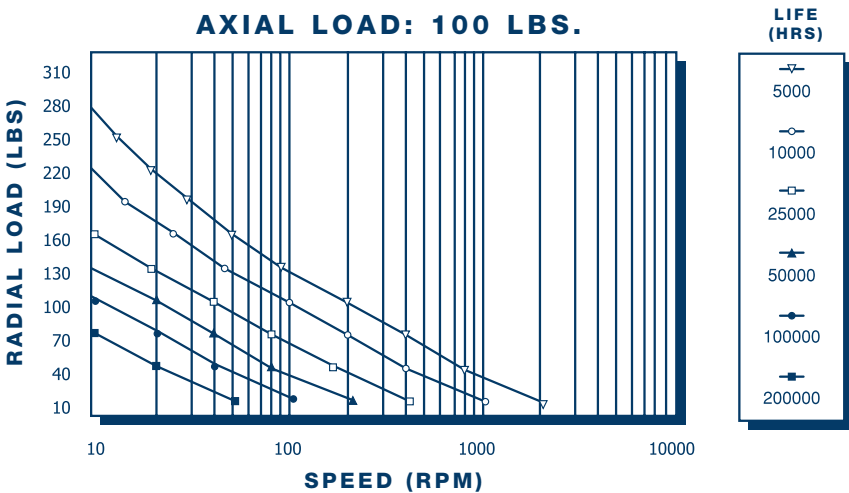
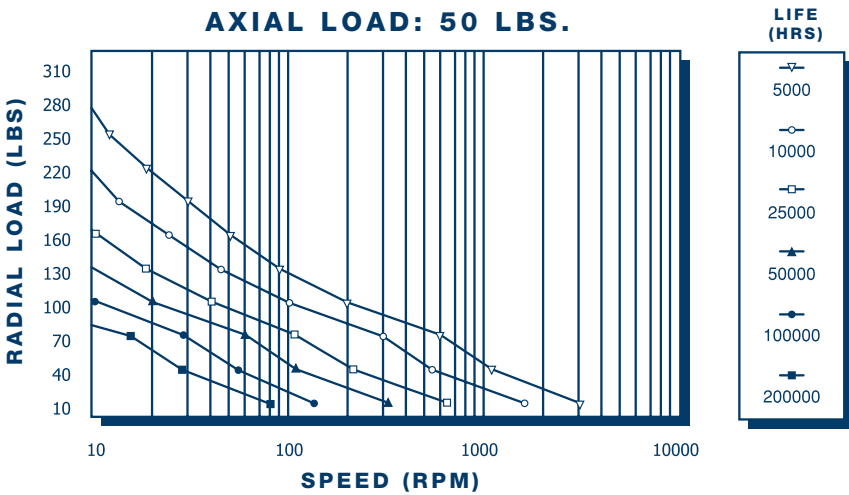
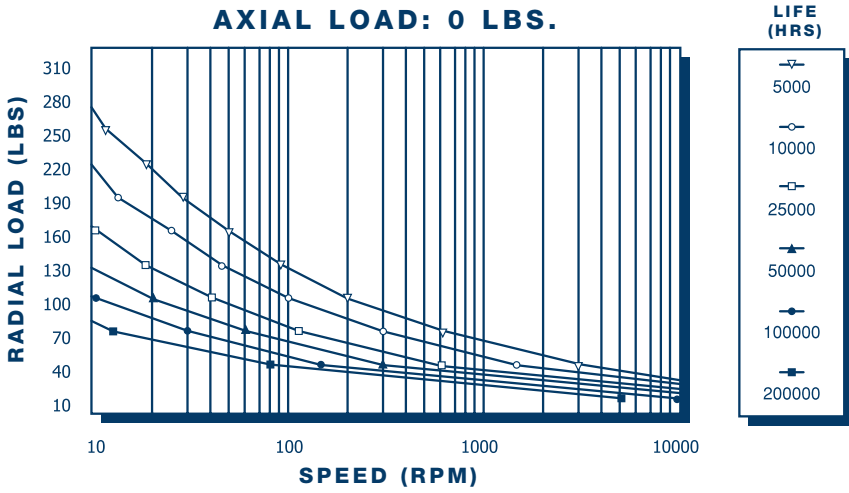
## GENERAL SPECIFICATIONS

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%	2.05	5000
Double Stage	16:1 to 100:1	10	7	85%	3.30	5000

**PEAK TORQUE:** 15% above continuous rating.

**NOTE:** Repeated peak torque loading may cause failure.

# SIZE 23 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.

