

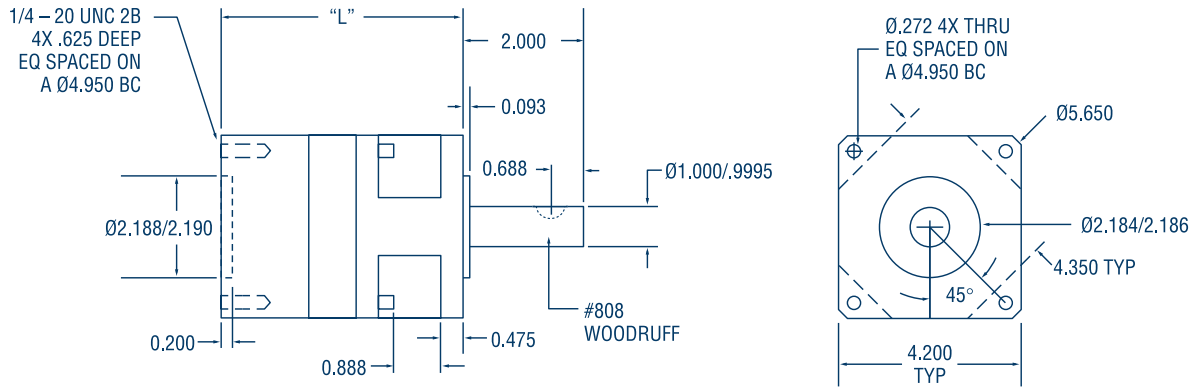


# SIZE 42 PRECISION PLANETARY

## DIMENSION "L"

Single Stage (3:1 to 10:1) =  $4.624 \pm .015$

Double Stage (16:1 to 100:1) =  $6.237 \pm .015$



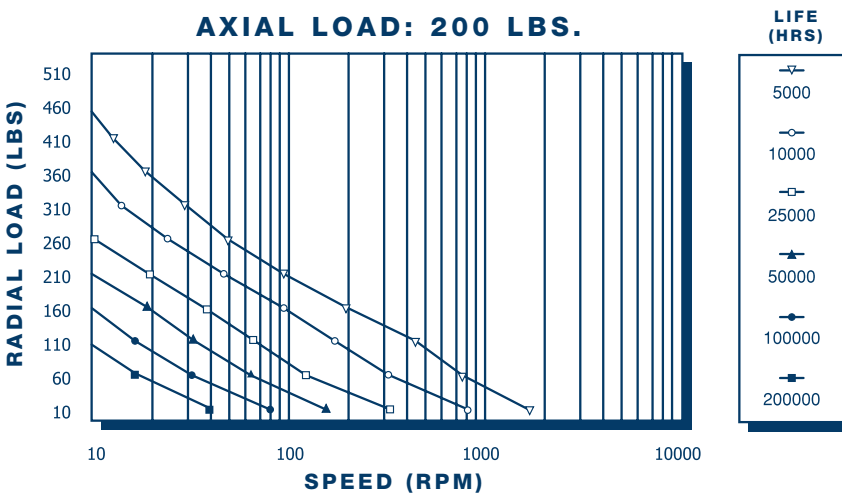
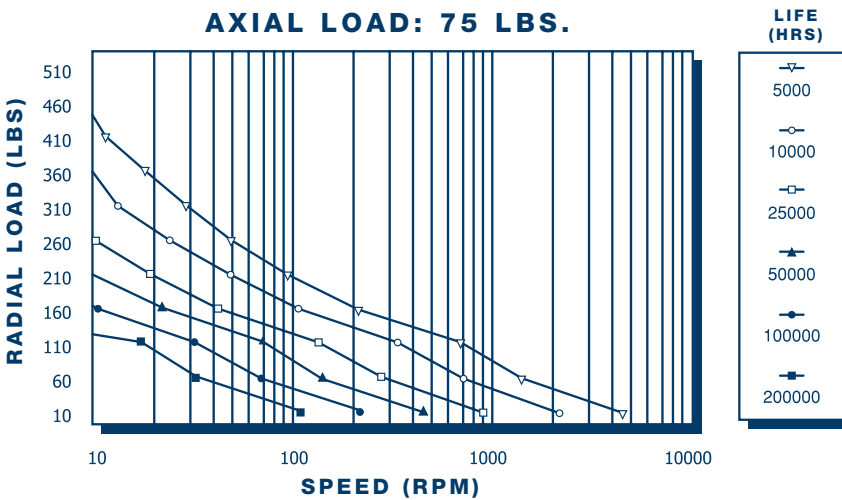
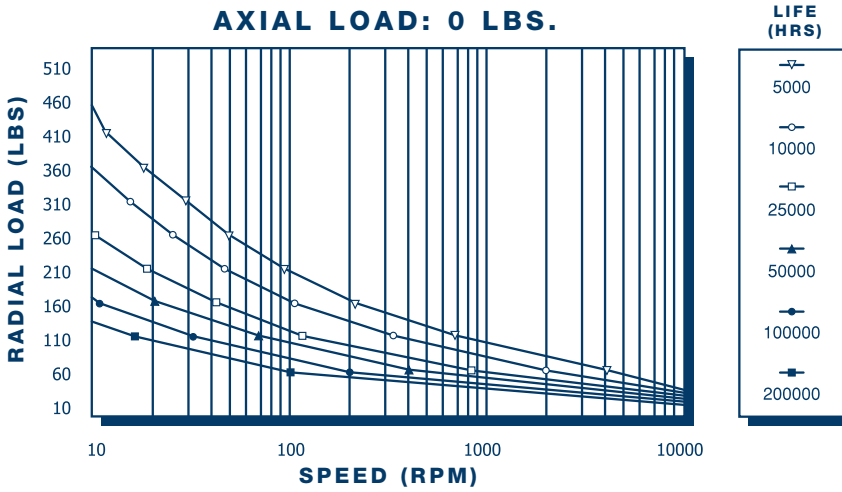
Part #	Ratio	Continuous output torque at 1500 rpm input (in-lbs)	Continuous output torque at 3500 rpm input (in-lbs)	Continuous output torque at 5000 rpm input (in-lbs)	Gearhead inertia at input (lb-in-sec <sup>2</sup> )	
SINGLE STAGE	42PL003	3:1	2022	1175	894	$2.27 \times 10^{-3}$
	42PL004	4:1	1993	1256	983	$1.02 \times 10^{-3}$
	42PL005	5.5:1	1913	1312	1062	$5.87 \times 10^{-4}$
	42PL007	7:1	1826	1327	1101	$4.56 \times 10^{-4}$
	42PL010	10:1	1527	1196	1029	$3.52 \times 10^{-4}$
DOUBLE STAGE	42PL016	16:1	3346	2745	2419	$1.05 \times 10^{-3}$
	42PL022	22:1	3503	3003	2711	$6.01 \times 10^{-4}$
	42PL028	28:1	3599	3173	2913	$4.65 \times 10^{-4}$
	42PL040	40:1	3711	3383	3173	$3.57 \times 10^{-4}$
	42PL049	49:1	2710	2530	2411	$4.56 \times 10^{-4}$
	42PL055	55:1	3118	2923	2793	$3.53 \times 10^{-4}$
	42PL070	70:1	2754	2621	2530	$3.52 \times 10^{-4}$
	42PL100	100:1	2113	2043	1994	$3.51 \times 10^{-4}$

## 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%	10.37	5000
Double Stage	16:1 to 100:1	10	7	85%	16.89	5000

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

# SIZE 42 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.

