



# PLE

## In-Line Planetary Servo Gearhead

Radial / Axial Loads, Input Speeds, Noise Level, Inertias



Output Shaft Radial and Axial Loads • Input Speeds • Noise Level •						
		PLE 40	PLE 60 PLE 60/70	PLE 80 PLE 80/90	PLE 120 PLE 120/115	PLE 160
Output shaft radial load <sup>(1)</sup> (at 10000 hrs L10 and 100 output shaft rpm)	<i>N (lb)</i>	200 (44)	500 (112) 1000 (224)	950 (213) 2500 (562)	2000 (449) 3500 (786)	6000 (1349)
Output shaft axial load (at 10000 hrs L10 and 100 output shaft rpm)	<i>N (lb)</i>	200 (44)	600 (134) 1200 (269)	1200 (269) 2800 (629)	2800 (629) 2800 (629)	8000 (1798)
Output shaft radial load <sup>(1)</sup> (at 30000 hrs L10 and 100 output shaft rpm)	<i>N (lb)</i>	160 (36)	340 (77) 700 (158)	650 (146) 1700 (383)	1500 (338) 2400 (540)	4200 (945)
Output shaft axial load (at 30000 hrs L10 and 100 output shaft rpm)	<i>N (lb)</i>	160 (36)	450 (101) 800 (180)	900 (203) 2000 (450)	2100 (473) 2100 (473)	6000 (1350)
Max input speed	<i>rpm</i>	18000	13000	7000	6500	6500
Continuous / average input speed	<i>rpm</i>	any rpm as long as the gearbox temperature does not exceed +90 °C (194 °F)				
Noise level <sup>(2)</sup>	<i>dBA</i>	58	58	60	65	70

(1) Radial load at shaft midpoint.  
*(Detailed bearing life calculation utility is available at [www.neugartusa.com](http://www.neugartusa.com) or contact Neugart USA with the application data.)*

(2) Sound pressure level measured at 3000 rpm, no load, 1m distance from the gearbox.

Standard Motor Mount Gearhead Moment of Inertia (at the input)					<i>kgcm<sup>2</sup></i>	<i>(lbin.sec<sup>2</sup> 10<sup>-4</sup>)</i>
PLE 40	PLE 60 & 60/70	PLE 80 & 80/90	PLE 120 & 120/115	PLE 160	Ratio	Stages
0.031 (0.27)	0.135 (1.19)	0.77 (6.8)	2.63 (23.2)	12.14 (107.4)	3	1
0.022 (0.19)	0.093 (0.82)	0.52 (4.6)	1.79 (15.8)	7.78 (68.8)	4	1
0.019 (0.16)	0.078 (0.69)	0.45 (3.9)	1.53 (13.5)	6.07 (53.7)	5	1
0.017 (0.15)	0.065 (0.57)	0.39 (3.4)	1.32 (11.6)	4.63 (40.9)	8	1
0.03 (0.26)	0.131 (1.15)	0.74 (6.54)	2.62 (23.1)	—	9	2
0.029 (0.25)	0.127 (1.12)	0.72 (6.3)	2.56 (22.6)	12.37 (109)	12	2
0.023 (0.2)	0.077 (0.68)	0.71 (6.28)	2.53 (22.3)	12.35 (109)	15	2
0.022 (0.19)	0.088 (0.77)	0.5 (4.4)	1.75 (15.4)	7.47 (66)	16	2
0.019 (0.16)	0.075 (0.66)	0.44 (3.8)	1.5 (13.2)	6.65 (58.8)	20	2
0.019 (0.16)	0.075 (0.66)	0.44 (3.8)	1.49 (13.1)	5.81 (51.4)	25	2
0.017 (0.15)	0.064 (0.56)	0.39 (3.4)	1.3 (11.5)	6.36 (56.2)	32	2
0.016 (0.14)	0.064 (0.56)	0.39 (3.4)	1.3 (11.5)	5.28 (46.7)	40	2
0.016 (0.14)	0.064 (0.56)	0.39 (3.4)	1.3 (11.5)	4.5 (39.8)	64	2
0.029 (0.25)	0.076 (0.67)	0.51 (4.5)	2.57 (22.7)	—	60	3
0.019 (0.16)	0.075 (0.66)	0.5 (4.4)	1.5 (13.2)	—	80	3
0.019 (0.16)	0.075 (0.66)	0.44 (3.8)	1.49 (13.1)	—	100	3
0.029 (0.25)	0.064 (0.56)	0.7 (6.1)	2.5 (22.1)	—	120	3
0.016 (0.14)	0.064 (0.56)	0.39 (3.45)	1.3 (11.5)	—	160	3
0.016 (0.14)	0.064 (0.56)	0.39 (3.45)	1.3 (11.5)	—	200	3
0.016 (0.14)	0.064 (0.56)	0.39 (3.45)	1.3 (11.5)	—	256	3
0.016 (0.14)	0.064 (0.56)	0.39 (3.45)	1.3 (11.5)	—	320	3
0.016 (0.14)	0.064 (0.56)	0.39 (3.45)	1.3 (11.5)	—	512	3