



PLFE

In-Line Planetary Servo Gearhead

With EN ISO 9409 Rotating Output Flange

Efficiency, Stiffness, Backlash, Radial / Axial Loads, Speeds



Design life • Emergency peak torque • IP class • Efficiency • Backlash • Stiffness •				
		PLFE 64	PLFE 90	PLFE 110
Design Life (L10 Life)	hrs	30000 hrs		
Emergency Stop Peak torque		200% of the continuous duty-rated torque. The gearbox will withstand this torque only a very limited time (about 500 to 1000 times during the life of the gearbox). -Torques at this magnitude should not be part of the standard operating cycle!		
IP protection class		IP 54 / 55		
Full load efficiency	%	96 %		
	1-stage	94 %		
Rotational Backlash ⁽¹⁾	1-stage	<16	<9	<8
	(arc.min)	<20	<14	<12
Torsional Stiffness	1-stage	18 (159)	34 (301)	93 (823)
	Nm/arc.min (lbin /arc.min)	12 (106)	25 (221)	68 (602)
(1) Maximum value of the rotational backlash measured at the output in arc minutes (1 arc min = 1 angular min). Average backlash is approximately 25% smaller than the listed worst-case value.				

Gearhead Weight • Recommended Maximum Unsupported Motor Weight • Operating Temperatures • Lubrication • Mounting Positions •				
Gearhead Weight	kg (lb)	1.1 (2.4)	2.9 (6.4)	7.0 (15.4)
	1-stage	1.5 (3.1)	3.3 (7.3)	9.0 (19.8)
Max. Unsupported Motor Weight ⁽²⁾	kg (lb)	3.5 (7.7)	9 (19.8)	16 (35.2)
Operating Temperature ⁽³⁾	°C (°F)	-25 (-13)		
	Minimum	+90 (194)		
Maximum				
Lubrication		Lubricated for life with semi-fluid synthetic grease <i>Kluberplex BEM 34-132</i> (Kluber Lubrication LP, - www.kluber.com)		
Mounting Positions		Any mounting position permissible without change of lubrication.		
(2) For horizontal mounting position (support recommended if motor weight exceeds the given value)				
(3) Measured at the middle of the gearbox main body				

Permissible Output Shaft Radial and Axial loads • Input Speeds • Noise Level •				
Radial Load ⁽¹⁾	N (lb)	550 (124)	1400 (315)	2400 (540)
Axial Load ⁽¹⁾	N (lb)	1200 (270)	3000 (675)	3300 (742)
Max. Peak Input Speed	rpm	13000	7000	6500
Continuous Input Speed	rpm	any rpm as long as the gearbox temperature does not exceed +90 °C (194 °F)		
Noise Level ⁽²⁾	dBA	58	60	65
(1) Based on 20000 hrs. L10 life, 100 rpm mean output speed, radial load at shaft midpoint. (Detailed bearing life calculation utility is available at www.neugartusa.com or contact Neugart USA with the application data.)				
(2) Sound pressure level measured at 3 000 rpm, no load, at 1m distance from the gearbox.				