



PLE

In-Line Planetary Servo Gearhead

Design life, Emergency Stop (Peak) Torque, IP class
 Efficiency, Backlash, Stiffness, Gearhead Weight, Max Unsupported
 Motor Weight, OP-temperature, Lubricant, Mounting Positions



Design life • Emergency peak torque • IP class • Efficiency • Backlash •						
		PLE 40	PLE 60 PLE 60/70	PLE 80 PLE 80/90	PLE 120 PLE 120/115	PLE 160
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	%					
	1-stage	96 %				
	2-stage	94 %				
	3-stage	90%				
Rotational Backlash ⁽¹⁾ (arc.min)	1-stage	<24	<16	<9	<8	<6
	2-stage	<28	<20	<14	<12	<10
	3-stage	<30	<22	<16	<14	—
(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.						

Torsional (Rotational) Stiffness • Gearhead Weight • Recommended Maximum Unsupported Motor Weight • Operating Temperatures • Lubrication • Mounting Positions •						
		PLE 40	PLE 60 PLE 60/70	PLE 80 PLE 80/90	PLE 120 PLE 120/115	PLE 160
Torsional (Rotational) Stiffness ⁽¹⁾ Nm/arc.min (lbin /arc.min)	1-stage	1 (8.85)	2.3 (20)	6 (53)	12 (106)	38 (336)
	2-stage	1.1 (9.7)	2.5 (22)	6.5 (57)	13 (115)	41 (362)
	3-stage	1.0 (8.85)	2.5 (22)	6.3 (55)	12 (106)	—
Gearhead Weight	kg (lb)					
	1-stage	0.35 (0.77)	0.9 (1.9) 1.1 (2.4)	2.1 (4.6) 3.2 (7.2)	6.0 (13.2) 6.6 (14.8)	18 (39.6)
	2-stage	0.45 (0.99)	1.1 (2.4) 1.3 (2.8)	2.6 (5.7) 3.7 (8.1)	8.0 (17.6) 8.6 (18.9)	22 (48.5)
	3-stage	0.55 (1.2)	1.3 (2.8) 1.5 (3.3)	3.1 (6.8) 4.2 (9.2)	10.0 (22) 10.6 (23.3)	—
Max. Unsupported Motor Weight ⁽²⁾	kg (lb)	2 (4.4)	3.5 (7.7)	9 (19.8)	16 (35.2)	50 (110)
Operating Temperature ⁽³⁾	°C (°F)					
	Minimum	-25 (-13)				
	Maximum	+90 (194)				
Lubrication	Lubricated for life with semi-fluid synthetic grease <i>Klüberplex BEM 34-132</i> (<i>Klüber Lubrication LP, - www.kluber.com</i>)					
Mounting Positions	Any mounting position permissible without change of lubrication					
(1) Measured at the output shaft (2) For horizontal mounting position (support recommended if motor weight exceeds the given value) (3) Measured at the middle of the gearbox main body						