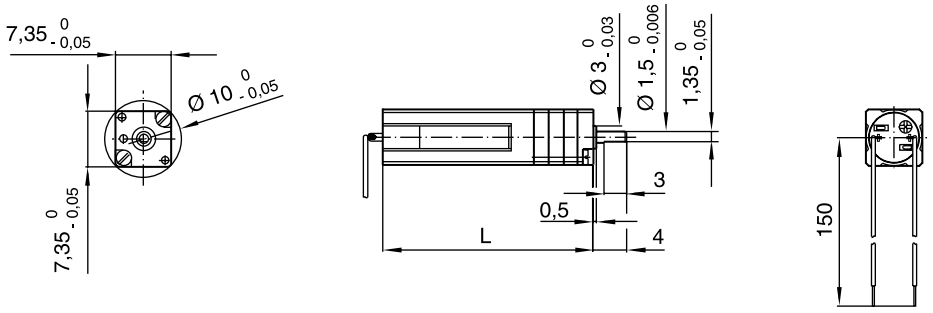
escap M707 L 61

Reduction gearbox with spur gears

Gearmotor
0.012 Nm



scale 1:1
dimensions in mm

M707 L 61 - •••• - •••• • 0

Gearbox specifications

Ratio ••••	7.07	10.7	19.6	29.8	54.6	82.7	152	230	421	638	1170	1770
No. of gear stages	2	2	3	3	4	4	5	5	6	6	7	7
Direction of rotation	=	=	≠	≠	=	=	≠	≠	=	=	≠	≠
1 Efficiency	0.8	0.8	0.75	0.75	0.65	0.65	0.6	0.6	0.55	0.55	0.5	0.5
2 Length = L (mm)	23.8	23.8	25.8	25.8	27.8	27.8	29.8	29.8	31.8	31.8	33.8	33.8
3 Mass (g)	4.3	4.3	4.4	4.4	4.6	4.6	4.7	4.7	4.9	4.9	5.0	5.0
4 Max. recom. dynamic output torque	mNm (oz-in)					12 (1.7) at 20 rpm						
	mNm (oz-in)					8 (1.1) at 150 rpm						
5 Bearing type						sleeve bearings						
6 Max. static torque	mNm (oz-in)					50 (7.08)						
7 Max. side load at 3 mm from mount. face	N (lb)					1 (0.225)						
8 Max. axial load	N (lb)					1 (0.225)						
9 Max. force for press-fit	N (lb)					5 (1.12)						
10 Average backlash at no-load						2°						
11 Average backlash at 12 mNm						3°						
12 Radial play	µm					≤ 30						
13 Axial play	µm					≤ 100						
14 Max. recom. input speed.	rpm					7500						
15 Temperature range	°C (°F)					-30 ... +65 (-22...+150)						

Availability: see document at the end of the catalogue

Motor specifications

Winding types ••••	-207	-205	-204
Measured values			
1 Measuring voltage V	2	3.5	4.5
2 No-load speed rpm	10400	11400	11700
3 Stall torque mNm (oz-in)	0.31 (0.04)	0.37 (0.05)	0.23 (0.03)
4 Average no-load current mA	12	8	6
5 Typical starting voltage V	0.2	0.3	0.5
Max. recommended values			
6 Max. continuous current A	0.28	0.18	0.11
7 Max. continuous torque mNm (oz-in)	0.46 (0.07)	0.48 (0.07)	0.36 (0.05)
Intrinsic parameters			
8 Torque constant mNm/A (oz-in/A)	1.7 (0.24)	2.8 (0.39)	3.3 (0.47)
9 Terminal resistance ohm	11	26	65
10 Motor regulation R/k^2 10^3/Nms	3700	3400	5800
11 Terminal inductance mH	0.03	0.10	0.11
12 Rotor inertia $kgm^2 . 10^{-7}$	0.022	0.030	0.016
Thermal parameters			
13 Mechanical time constant ms	8	10	9
14 Thermal time constant rotor s	3	3	3
15 Thermal resistance body-ambient °C/W	70	70	70