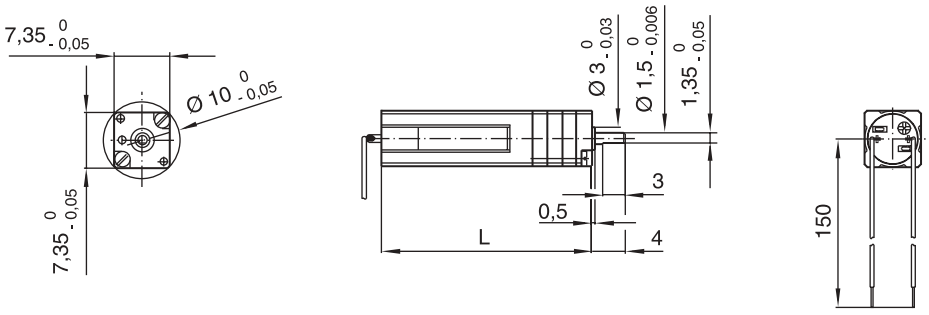
escap M707 L61

Reduction gearbox with spur gears

Gearbox
0.10 Nm



scale: 1:1
dimensions in mm

M707 L61 - [••••] - [••••] •0

Gearbox specifications

Ratio	[••••]	10.7	82.7	230
No. of gear stages		2	4	5
Direction of rotation		=	=	≠
1 Efficiency		0.8	0.65	0.6
2 Length = L (mm)		23.8	27.8	29.8
3 Mass (g)		4.3	4.6	4.7
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)

Motor specifications

Winding types	[••••]	-205
Measured values		
1 Measuring voltage	V	3.5
2 No-load speed	rpm	11400
3 Stall torque	mNm (oz-in)	0.37 (0.05)
4 Average no-load current	mA	8
5 Typical starting voltage	V	0.3
Max. recommended values		
6 Max. continuous current	A	0.18
7 Max. continuous torque	mNm (oz-in)	0.48 (0.07)
Intrinsic parameters		
8 Torque constant	mNm/A (oz-in/A)	2.8 (0.39)
9 Terminal resistance	ohm	26
10 Motor regulation R/k^2	10^3/Nms	3400
11 Terminal inductance	mH	0.10
12 Rotor inertia	$kgm^2 \cdot 10^{-7}$	0.030
Thermal parameters		
13 Mechanical time constant	ms	10
14 Thermal time constant rotor	s	3
15 Thermal resistance body-ambient	°C/W	70