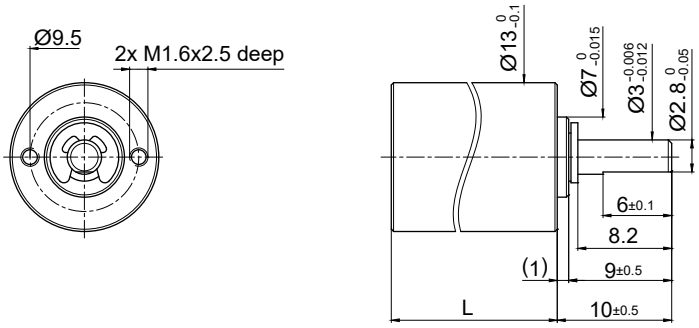


Dimensions in mm.

Ratio		5.5	22	30.2	88	121	166	352	484	665.5	915
1	Number of Gear Stages	1	2	2	3	3	3	4	4	4	4
2	Direction of Rotation	=	=	=	=	=	=	=	=	=	=
3	Efficiency	0.85	0.75	0.75	0.65	0.65	0.65	0.55	0.55	0.55	0.55
4	L (mm)	14.5	18.6	18.6	22.7	22.7	22.7	26.8	26.8	26.8	26.8
5	Weight g	6	9	9	12	12	12	15	15	15	15
	(oz)	(0.211)	(0.317)	(0.317)	(0.423)	(0.423)	(0.423)	(0.529)	(0.529)	(0.529)	(0.529)
6	**Available with Motor – L2 - Length with motor (mm)**										
	13N 88	42.7	46.8	46.8	50.9	50.9	50.9	55	55	55	55
	12G 88	42.7	46.8	46.8	50.9	50.9	50.9	55	55	55	55

Characteristics		Unit	R13 • 0 • ····	R13 2R • 0 • ····
7	Shaft Bearings		Sleeve	Ball Bearing
8	Maximum Static Torque	Nm (oz-in)	0.5 (71)	0.5 (71)
9	Maximum Radial Force			
	@ 8mm from mounting face	N (lb)	5 (1.12)	20 (4.5)
10	Maximum Axial Force	N (lb)	8 (1.8)	10 (2.2)
11	Maximum Press Fit Force	N (lb)	100 (23)	100 (23)
12	Average Backlash @ no-load		1.25°	1.25°
13	Average Backlash @ 0.3 Nm		2°	2°
	Shaft Play:			
14	-radial	µm	≤ 20	≤ 10
15	-axial	µm	50-150	≤50
16	Maximum Recommended Input Speed	rpm	7,500	7,500
17	Operating Temperature Range:	°C (°F)	-30 to +65 (-22 to +150)	

