



Ratio	****	3.67	5	13.4	18.3	25	49.3	67.2	91.7	125	180.8	246.5	336.1	458.3	625	903.8
1	Number of gear stages	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5
2	Direction of rotation	=	=	=	=	=	=	=	=	=	=	=	=	=	=	=
3	Efficiency	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.55	0.55	0.55	0.55	0.55	0.5
4	L1 (mm)	22.6	22.6	29.5	29.5	29.5	36.4	36.4	36.4	36.4	43.3	43.3	43.3	43.3	43.3	50.2
5	Weight g (oz)	26 (0.917)	26 (0.917)	33 (1.164)	33 (1.164)	33 (1.164)	40 (1.552)	40 (1.552)	40 (1.552)	40 (1.552)	47 (1.657)	47 (1.657)	47 (1.657)	47 (1.657)	47 (1.657)	54 (1.904)
6	Available with Motor - L2 = Length with motor (mm)															
	22N28.....286	54.6	54.6	61.5	61.5	61.5	68.4	68.4	68.4	68.4	75.3	75.3	75.3	75.3	75.3	82.2
	22N48.....308	56.5	56.5	63.4	63.4	63.4	70.3	70.3	70.3	70.3	77.2	77.2	77.2	77.2	77.2	84.1
	22V28.....201	57	57	63.9	63.9	63.9	70.8	70.8	70.8	70.8	77.7	77.7	77.7	77.7	77.7	84.6
	22V48.....204	58.8	58.8	65.7	65.7	65.7	72.6	72.6	72.6	72.6	79.5	79.5	79.5	79.5	79.5	86.4
	22N78.....1001	54.6	54.6	61.5	61.5	61.5	68.4	68.4	68.4	68.4	75.3	75.3	75.3	75.3	75.3	82.2
	22N98.....1008 / 1005	56.5	56.5	63.4	63.4	63.4	70.3	70.3	70.3	70.3	77.2	77.2	77.2	77.2	77.2	84.1
	25GST82.....6	66.1	66.1	73	73	73	79.9	79.9	79.9	79.9	86.8	86.8	86.8	86.8	86.8	93.7
	23GST82.....2	57.7	57.7	64.6	64.6	64.6	71.5	71.5	71.5	71.5	78.4	78.4	78.4	78.4	78.4	85.3
	23V58.....4	71.4	71.4	78.3	78.3	78.3	85.2	85.2	85.2	85.2	92.1	92.1	92.1	92.1	92.1	99
	23V48.....11	70.2	70.2	77.1	77.1	77.1	84	84	84	84	90.9	90.9	90.9	90.9	90.9	97.8
	26N58.....5	65.9	65.9	72.8	72.8	72.8	79.7	79.7	79.7	79.7	86.6	86.6	86.6	86.6	86.6	93.5
	26N48.....9	64.7	64.7	71.6	71.6	71.6	78.5	78.5	78.5	78.5	85.4	85.4	85.4	85.4	85.4	92.3
	28L28.....164	66.1	66.1	73	73	73	79.9	79.9	79.9	79.9	86.8	86.8	86.8	86.8	86.8	93.7
	28L28.....317	66.1	66.1	73	73	73	79.9	79.9	79.9	79.9	86.8	86.8	86.8	86.8	86.8	93.7
	28LT12.....164	63.8	63.8	70.7	70.7	70.7	77.6	77.6	77.6	77.6	84.5	84.5	84.5	84.5	84.5	91.4

Characteristics	M22 • 0 / • 200 •	
7	Shaft Bearings	Sleeve
8	Maximum Static Torque	Nm (oz-in) 4 (556)
9	Maximum Radial Force	
	@ 8mm from mounting face	N (lb) 50 (11)
10	Maximum Axial force	N (lb) 70 (16)
11	Maximum press fit force	N (lb) 100 (22)
12	Average Backlash @ no-load	2°
13	Average Backlash @ 3 Nm	3°
	Shaft play:	
14	-radial	µm ≤ 200
15	-axial	µm 50-150
16	Maximum Recommended Input speed	rpm 7500
17	Operating Temperature Range:	°C (°F) -30 to +65 (-22 to +150)

