



Design Features

- Economical true planetary design
- High torque gear geometry
- Advanced materials and heat treatments
- Compact and efficient design
- 2-year warranty
- NEMA standard frame sizes
- Quick installation
- High reliability design

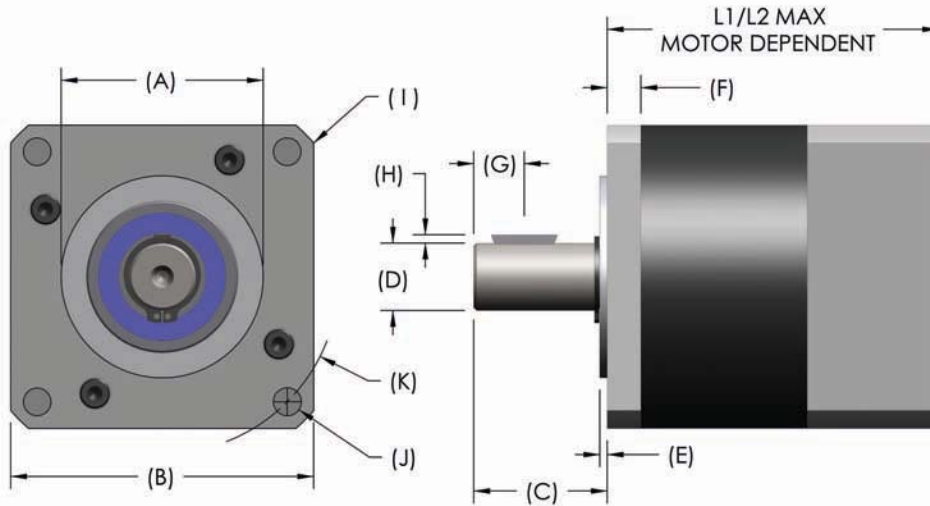
Performance Specifications

		017VPX			023VPX			034VPX		
		T _{NOM} (1)	T _{MAX ACCEL}	T _{E-STOP} (2)	T _{NOM} (1)	T _{MAX ACCEL}	T _{E-STOP} (2)	T _{NOM} (1)	T _{MAX ACCEL}	T _{E-STOP} (2)
Ratio		In-lbs (Nm)	In-lbs (Nm)	In-lbs (Nm)	In-lbs (Nm)	In-lbs (Nm)	In-lbs (Nm)	In-lbs (Nm)	In-lbs (Nm)	In-lbs (Nm)
1 STAGE	4:1	109 (12)	137 (16)	221 (25)	201 (23)	253 (29)	409 (46)	744 (84)	937 (106)	1515 (171)
	5:1	103 (12)	130 (15)	210 (24)	195 (22)	248 (28)	400 (45)	702 (80)	884 (100)	1429 (161)
	7:1	90 (10)	113 (13)	183 (21)	160 (18)	201 (23)	325 (37)	621 (70)	782 (88)	1264 (143)
	10:1	81 (9)	102 (12)	153 (17)	140 (16)	177 (20)	285 (32)	530 (60)	668 (76)	1080 (122)
2 STAGE	15:1	110 (12)	138 (16)	224 (25)	210 (24)	265 (30)	428 (48)	756 (85)	952 (108)	1539 (174)
	20:1	120 (14)	151 (17)	244 (28)	221 (25)	279 (32)	451 (51)	830 (94)	1046 (118)	1690 (191)
	25:1	113 (13)	142 (16)	230 (26)	216 (24)	272 (31)	440 (50)	778 (88)	980 (111)	1585 (179)
	28:1	121 (14)	153 (17)	248 (28)	225 (26)	284 (32)	459 (52)	845 (96)	1065 (120)	1721 (194)
	40:1	124 (14)	156 (18)	252 (29)	229 (26)	289 (33)	467 (53)	861 (97)	1085 (123)	1754 (198)
	50:1	117 (13)	147 (17)	237 (27)	223 (26)	281 (32)	454 (51)	806 (91)	1016 (115)	1642 (186)
	70:1	101 (11)	127 (14)	205 (23)	179 (20)	226 (26)	366 (41)	706 (80)	889 (100)	1437 (162)
	100:1	81 (9)	102 (12)	153 (17)	140 (16)	177 (20)	285 (32)	598 (68)	753 (85)	1217 (138)
Gearbox Weight		1 stage 0.8 lbs / 2 stage 1.1 lbs			1 stage 1.7 lbs / 2 stage 2.2 lbs			1 stage 5.0 lbs / 2 stage 6.0 lbs		
Input Speed		5000 RPM Maximum								
Backlash (arc-min)		12 (1 stage), 16 (2 stage)								
IP Rating		IP54								
Service Life		>10,000 HOURS								
Efficiency (3)		1 stage >90% / 2 stage >85%								
Operating Temperature		-40°F to +250°F								
Shaft Loads		See Tables on Page 12								

1. All torque ratings are based upon 3,000 RPM nominal input speed, and 10,000 hours minimum service life.

2. E-STOP torque rating is limited to 1,000 occurrences.

3. Efficiency rated at 3,000 RPM input speed, at Nominal Rated Torque.



Gearhead Dimensions

Dimension	Code	017VPX	023VPX	034VPX
		Inch (mm)	Inch (mm)	Inch (mm)
Pilot Diameter (+.000/-0.002 in)	A	0.866 (22)	1.500 (38.1)	2.875 (73)
Square Flange	B	1.70 (43.2)	2.25 (57.2)	3.45 (87.6)
Shaft Length	C	0.75 (19)	1.00 (25.4)	1.25 (31.8)
Shaft Diameter (+.0000/-0.0005 in)	D	0.500 (12.7)	0.500 (12.7)	0.750 (19)
Pilot Length	E	0.060 (1.5)	0.060 (1.5)	0.060 (1.5)
Flange Thickness	F	0.190 (4.8)	0.250 (6.4)	0.312 (7.9)
Key Location	G	0.28 (7.1)	0.38 (9.7)	0.50 (12.7)
Key Height	H	0.062 (1.6)	0.062 (1.6)	0.094 (2.4)
Woodruff Key Size		#404	#404	#606
Housing Diameter	I	2.25 (57)	3.00 (76.2)	4.63 (118)
Bolt Hole Diameter	J	0.125 (31.8)	0.205 (5.2)	0.220 (5.6)
Bolt Circle Diameter	K	1.725 (43.8)	2.625 (66.7)	3.875 (98.4)
Gearhead Length ⁽¹⁾	L1	2.41 (61.2)	2.46 (62.5)	3.33 (85)
	L2	2.96 (75.2)	3.14 (79.8)	4.26 (1-8)

Moment of Inertia Table ⁽²⁾ (oz-in-sec²)

Ratio	017VPX	023VPX	034VPX
4:1	2.331E-04	1.322E-03	4.594E-03
5:1	1.895E-04	1.202E-03	3.544E-03
7:1	1.566E-04	1.110E-03	2.748E-03
10:1	1.395E-04	1.061E-03	2.332E-03
16:1	3.606E-04	1.755E-03	7.719E-03
20:1	1.896E-04	1.208E-03	3.611E-03
25:1	1.878E-04	1.203E-03	3.569E-03
28:1	1.566E-04	1.113E-03	2.782E-03
40:1	1.396E-04	1.062E-03	2.349E-03
50:1	1.391E-04	1.061E-03	2.338E-03
70:1	1.388E-04	1.060E-03	2.330E-03
100:1	1.386E-04	1.060E-03	2.326E-03

(1) Gearhead Length based on NEMA motor mounting.

(2) Gearhead inertia values shown include pinion, clamp and sleeve, and are for standard NEMA mounting.

- All specifications are subject to change without prior notice.



Quality at Every Turn