

Design Features

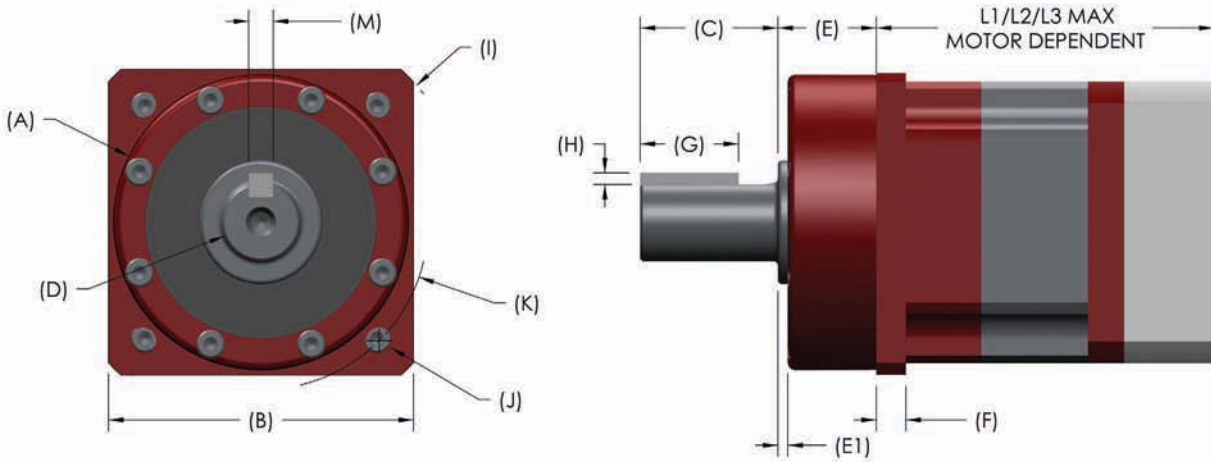
- Metric extended pilot (EP) configuration
- High torque gear geometry
- Advanced materials and heat treatments
- Improved design for stiffness and loading
- Mounting in any direction
- Captive input pinion
- IP65 sealed
- Simplified quick installation

Performance Specifications

		060RTA (METRIC)			075RTA (METRIC)		
		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)
1 STAGE	4:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	5:1	340 (38)	400 (45)	926 (105)	1274 (144)	1605 (181)	3316 (375)
	7:1	231 (26)	280 (32)	861 (97)	863 (98)	1088 (123)	2821 (319)
	10:1	150 (17)	190 (22)	720 (81)	559 (63)	704 (80)	2456 (277)
2 STAGE	16:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	20:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	25:1	340 (38)	400 (45)	926 (105)	1274 (144)	1605 (181)	3316 (375)
	28:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	35:1	340 (38)	400 (45)	926 (105)	1274 (144)	1605 (181)	3316 (375)
	40:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	50:1	340 (38)	400 (45)	926 (105)	1274 (144)	1605 (181)	3316 (375)
	70:1	265 (30)	320 (36)	861 (97)	993 (112)	1251 (141)	2821 (319)
100:1	175 (20)	221 (25)	720 (81)	642 (73)	810 (91.5)	2456 (277)	
3 STAGE (5)	160:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	280:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	400:1	395 (45)	468 (53)	947 (107)	1452 (164)	1829 (207)	3473 (392)
	500:1	340 (38)	400 (45)	926 (105)	1274 (144)	1605 (181)	3316 (375)
	700:1	265 (30)	320 (36)	861 (97)	993 (112)	1251 (141)	2821 (319)
Torsional Stiffness (3)		15 in-lbs/arc-min			70 in-lbs/arc-min		
Gearbox Weight (lbs)		1 stage 2.5 lbs / 2 stage 3.5 lbs / 3 stage 4.3 lbs			1 stage 6.9 lbs / 2 stage 10.4 lbs / 3 stage 13.6 lbs		

Input Speed	6500 RPM Maximum
Backlash (arc-min)	4 (1 stage), 6 (2 stage), 8 (3 stage)
IP Rating	IP65
Service Life	>15,000 HOURS
Efficiency (4)	1 stage >95% / 2 stage >90% / 3 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 15,000 hours minimum service life.
 2. E-STOP torque rating is limited to 1,000 occurrences.
 3. Torsional Stiffness rating varies by type and ratio. Specified rating based on Metric, 5:1 ratio.
 4. Efficiency rated at 3,000 RPM input speed, at Nominal Rated Torque.
 5. Other ratios available.



Gearhead Dimensions

Dimension	Code	060RTA		075RTA	
		Metric	(in)	Metric	(in)
Pilot Diameter (+.000/-0.002 in)	A	60	(2.362)	70	(2.756)
Square Flange	B	62	(2.44)	76	(2.99)
Shaft Length	C	28	(1.10)	36	(1.42)
Shaft Diameter (+.0000/-0.0005 in)	D	16	(0.6299)	22	(0.8661)
Pilot Length	E	20	(0.787)	20	(0.787)
Step Length	E1	2	(0.079)	2.5	(0.098)
Flange Thickness	F	6	(0.236)	7	(0.276)
Key Length	G	20	(0.79)	25	(0.98)
Key Height	H	2	(0.079)	3	(0.115)
Key Width (3)	M	5	(0.1969)	6	(0.2362)
Housing Diameter	I	84	(3.32)	116	(4.58)
Bolt Hole Diameter	J	5.5	(0.217)	6.6	(0.260)
Bolt Circle Diameter	K	68	(2.677)	85	(3.346)
Gearhead Length (1)	L1	69	(2.70)	114	(4.46)
	L2	91	(3.60)	149	(5.88)
	L3	114	(4.49)	185	(7.28)

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

Ratio	060RTA	075RTA	Ratio	060RTA	075RTA
4:1	1.886E-03	1.246E-02	40:1	1.439E-03	8.939E-03
5:1	1.692E-03	1.088E-02	50:1	1.437E-03	8.923E-03
7:1	1.544E-03	9.646E-03	70:1	1.436E-03	8.911E-03
10:1	1.468E-03	9.016E-03	100:1	1.435E-03	8.919E-03
16:1	1.703E-03	1.198E-02	160:1	1.437E-03	8.934E-03
20:1	1.575E-03	1.057E-02	280:1	1.435E-03	8.909E-03
25:1	1.568E-03	1.050E-02	400:1	1.435E-03	8.919E-03
28:1	1.485E-03	9.488E-03	500:1	1.435E-03	8.919E-03
35:1	1.481E-03	9.455E-03	700:1	1.435E-03	8.918E-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.

(3) Key Width tolerance for English keys is: +.001 / -.000 in.
Key Width tolerance for Metric keys is: +.000 / -.0012 in.

• All specifications are subject to change without prior notice.



Quality at Every Turn