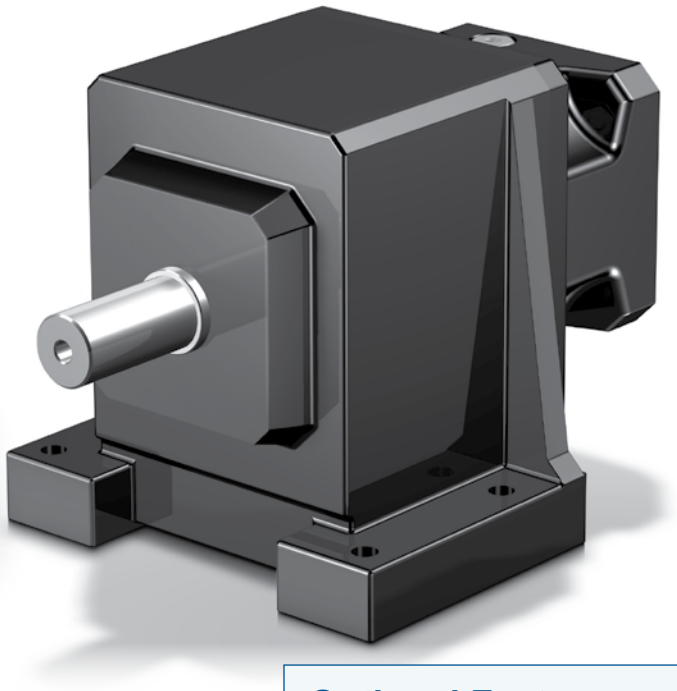
C Series: INLINE – Solid Shaft Output

These versatile STOBER gear drives offer you performance, durability, and economy for a wide range of applications. High efficiency helical gearing keeps motor size to a minimum while running almost silently.



C Series Advantages

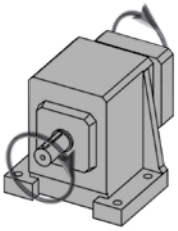
- ≥95.5% efficiency
- 5 year limited warranty (2 years on bearings, seals, etc.)
- Input RPM up to 6,000
- Assembled in the U.S.A.

SHIPS in 1 DAY!
NO EXPEDITE FEE FOR 24 HOUR SERVICE

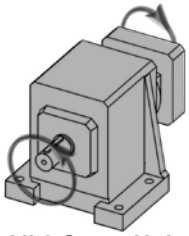
C Series Features

- 2:1 to 276:1 ratios
- ≤20 arc minutes backlash
- Double lip seals keep oil in and contaminants out. Double seals available for severe duty applications
- High quality helical gearing is case hardened to 58-62 Rockwell C, precision finished for low noise and long service life
- Magnetic oil filtration
- High tensile strength shafts with captured keys available inches, metric, or stainless
- One-piece cast iron housing. Precision machined bearing supports assure gearset alignment, prolongs bearing life, provides exceptional overhung load capacities to eliminate leakage problems common to drives with bolt-on output covers
- Motor plate can easily be changed to fit your choice of motors
- Shipped with the proper amount of oil to prevent gear damaging dry start-ups

C Direction of Rotation



All 2 Stage Units (C002 thru C912)



All 3 Stage Units (C103 thru C913)

Optional Features

Four Housing Styles

F Output flange
G Tapped holes
N Foot mounting (shown above)
Q Square output flange

Lubrication Options

- Standard or food grade optional

Coating Options

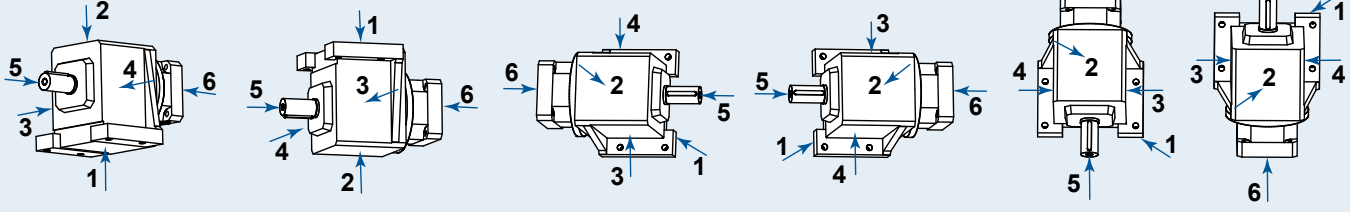
- Beverage Duty (**B** special option)
- Food Duty (**F** special option)
- Stainless steel

ATEX

- ATmosphere EXplosible — Please allow up to 8 weeks for delivery

C Mounting Position Options

When ordering, mounting in Any Position (EL1, EL2, EL3, EL4, EL5, EL6) MUST BE SPECIFIED



Overview

Selection Options *At-a-Glance*

C Series Gearheads are available in a wide range of user-selected design options that tailor the gearhead to your motor choice and exact application requirements. Use the appropriate order codes on the following pages to build a part number for the complete gearhead assembly.

Part Number Example: C | 0 | 0 | 2 | F | 0020 | MT10 | B

Design Option	Part Number Code	Description
Series	C	Concentric inline helical
Gearhead Size	0 1 2 3 4 5 6 7 8 9	10 sizes of gearhead
Generation	0	Version of gearhead
# of Stages	2	Two stage (determined by ratio)
	3	Three stage (determined by ratio)
Housing	F	Round output flange
	G	Tapped holes around output
	N	Foot mounting
	Q	Square output flange (not bolt-on type)
Ratio	0020	Ratios range from 2:1 to 276:1 (0020=2:1; 0063=6.3:1; 2700=270:1)
Motor Adapter	MT10	5 input sizes (see also motor mounting plate option)
Special Options	B	Beverage Duty
	F	Food Duty (size C0 thru C8 only)

General Specifications

Lubrication	Lubricated for life — Mobilgear 600XP220 (standard); Food grade (Mobil SHC CIBUS 220) or Synthetic (Mobil SHC630) optional — please specify
Degree of Protection	IP65 standard; IP69K optional
Mounting Position	Must be specified, see page 62
Direction of Rotation	See page 62
Ambient Temperature	0° C to +40°C (104° F) [Unit temperature ≤ 80° C Max.]
Coating	Standard Black (RAL 9005); stainless steel option available
Warranty	5 Year Limited (2 years on normal wear items: bearings, seals, etc.)

* *M2A equals actual tilting moment of the application. See page 67 for calculation details.*

C Series Performance Overview

C Series performance is dependent on several factors including duty cycle, bearing design, gearhead size and stage configuration, among others. Use the chart below for preliminary evaluation, then use the following performance chart and selection information on the following pages for specific performance sizing and selection.

Size/Generation			C00	C10		C20		C30	
# of Stages			2	2	3	2	3	2	3
Permissible Acceleration Torque M_{2BMAX}		Nm in.lbs	72 638	138 1222		230 2037		400 3543	
Output Torque Nom. M_{2N}		Nm in.lbs	60 531	120 1063		200 1772		350 3100	
Torsional Stiffness C_2		Nm/arcmin in.lbs/arcmin	≤1.6 ≤14	≤3.9 ≤34	≤3.9 ≤35	≤8.3 ≤73	≤8.3 ≤73	≤8.7 ≤77	≤8.7 ≤77
Torsional Backlash [1] $\Delta\varphi$		arcmin	≤20	≤18	≤14	≤14	≤14	≤14	≤14
Input Speed Max. n_{1MAX}	Continuous	EL1, 2, 3, 4 (N1DBH)	4000	4000	4000	4000	4000	3500	3800
		EL5, 6 (N1DBV)	4000	3900	3900	3900	3900	3500	3500
	Cyclic		6000	6000	6000	6000	6000	5000	5500
Efficiency (@nom torque)		%	97	97	96	97	96	97	96
Weight		kg lbs	8.2 18	13.1 29	15.4 34	17.2 38	20.4 45	22.2 49	25.4 56
Noise [2]		dB(A)	≤55	≤55		≤53		≤53	
Axial Load Max. F_{2AMAX}		N lbs	500 112	850 191		1050 236		1400 315	
Radial Load Max. [3] F_{2RMAX}		N lbs	1900 427	3400 765		4200 945		5650 1271	
Tilting Moment Max. [3] M_{2KMAX}		Nm in.lbs	80 708	190 1682		260 2301		350 3098	

[1] *Tested at 1.5% of nominal torque and recorded on the output side of the gearhead. For lower backlash, contact STOBER technical support.*

[2] *Measurement at one (1) meter distance with input speed (n_1) of 2000 RPM.*

[3] *Rating based on output speed (n_2) of 20 RPM. For values at other speeds see page 67.*

C Series Solid Output Shaft Options

Diameters in **BOLD BLUE** are readily available from inventory. Contact STOBER Drives for delivery on other output sizes.

		C0	C1	C2	C3	C4	C5	C6	C7	C8	C9
Carbon Steel	**Inches**	**3/4**	**1**	**1-1/4**	**1-1/4**	**1-5/8**	**1-5/8**	**2-1/8**	**2-3/8**	**2-7/8**	**3-5/8**
	Metric	20	25	30	30	40	40	50	60	70	90
Stainless Steel*	**Inches**	**3/4**	**1**	**1-1/4**	**1-1/4**	**1-5/8**	**1-5/8**	**2-1/8**	**2-3/8**	**2-7/8**	—
	Metric	—	—	—	25	—	—	—	—	—	—

** Stainless steel options are ideal for food and beverage or harsh washdown environments.*

Overview

	C40		C50		C61		C71		C81		C91	
	2	3	2	3	2	3	2	3	2	3	2	3
	600 5315		920 8149		1650 14,616		2760 24,448		4800 42,518		7211 63,876	6500 57,577
	550 4872		800 7086		1450 12,844		2400 21,259		4200 37,204		6300 55,803	6000 53,148
	≤21.7 ≤192	≤21.8 ≤193	≤22.6 ≤200	≤22.7 ≤201	≤73.6 ≤652	≤74.1 ≤656	≤121.5 ≤1076	≤122 ≤1080	≤202.3 ≤1792	≤203.2 ≤1800	≤387.9 ≤3436	≤391.1 ≤3464
	≤14	≤14	≤14	≤14	≤14	≤14	≤14	≤14	≤14	≤14	≤14	≤14
	3500	3500	3400	3400	3200	3200	3100	3100	2900	2900	2500	2800
	3200	3200	3000	3000	2900	2900	2900	2900	2700	2700	2500	2600
	5000	5000	4500	4500	4000	4000	3600	3600	3400	3400	3000	3200
	97	96	97	96	97	96	97	96	97	96	97	96
	32.2 71	35.3 78	43.0 95	50.3 111	52.1 115	72.0 159	90.1 199	100.1 221	145.9 322	154.9 342	270.0 596	307.1 678
	≤61		≤61		≤61		≤67		≤67		≤73	
	2400 540		3000 675		4000 900		5500 1237		7500 1687		9500 2137	
	9700 2182		11,000 2475		16,000 3600		22,000 4950		30,000 6750		37,000 8325	
	750 6638		900 7965		1500 13,275		2400 21,240		3700 32,745		5200 46,020	

C Series Standard & Optional Output Flange Sizes

C0	120	140	160*
C1	140	160	200*
C2	160	200*	250
C3	160	200	250*
C4	200	250*	300
C5	250	300*	
C6		300*	
C7		350*	
C8	350	400*	450
C9		450*	

** This is the standard flange size shipped with the unit unless otherwise specified. Optional flanges are not available for all sizes.*

C Series Motor Mounting Plate Option (Motor information required with Motor Adapter MT option)

STOBER ServoFit Gearheads fit the motor of your choice with the appropriate motor mounting plate assembled between the motor and the gearhead.

NOTE: When ordering a gearhead:

- Specify the motor manufacturer and part number
- Provide the motor drawing with dimensions, or specify the motor mounting dimensions (per the list shown at right)

For a precise dimension on a specific motor, or for general assistance, we recommend you contact STOBER Technical Support.

Customer Required Dimensions for Properly Sized Motor Mounting Plate

D^6 Motor Shaft Diameter (If an adapter bushing is required it will be supplied with the motor plate.)

D^7 Pilot Diameter

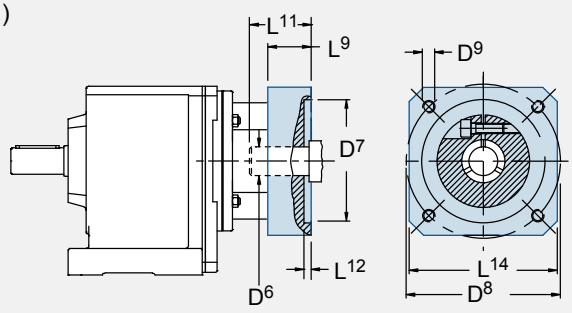
D^8 Bolt Circle Diameter

D^9 Bolt Diameter

L^{11} Motor Shaft Length

L^{12} Pilot Length

L^{14} Square Flange
(Optional – motor plate will typically be made to match this dimension.)

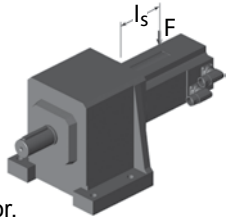


Motor Mounting Plate Dimensions — mm(Gearhead Part Number Specific)	MT10	MT20	MT30	MT40	MT50
Maximum Allowed Motor Shaft Dia. D^6	19	24	38	48	60
Minimum Allowed Motor Plate Thickness L^{9*}	21	24	25	33	43

** Note that the L^9 motor plate thickness is determined by the motor shaft length. The minimum motor plate thickness is the value listed.*

Permissible Motor Tilting Torque

The permissible tilting torque of the motor attached to the gear unit is a result of the static and dynamic load "F" from the motor weight, mass acceleration, and vibration multiplied by the distance from the center of gravity "l_S" of the motor.



$$M_{1k} = F \times l_S \leq M_{1K}$$

M_{1K}	MT10	MT20	MT30	MT40	MT50
Nm	25	60	125	250	600
in.lbs	221	531	1106	2212	5310

Permissible Output Shaft Load and Tilting Moments*

Unit	Z_2		F_{2A}		F_{2R}		M_{2K}	
	mm	in	N	lbs.	N	lbs.	Nm	in.lbs
C002	20	0.79	500	112	1900	427	80	708
C102/C103	30	1.18	850	191	3400	765	190	1682
C202/C203	30	1.18	1050	236	4200	945	260	2301
C302/C303	30	1.18	1400	315	5650	1271	350	3098
C402/C403	35	1.38	2400	540	9700	2182	750	6638
C502/C503	42	1.65	3000	675	11,000	2475	900	7965
C612/C613	40	1.57	4000	900	16,000	3600	1500	13,275
C712/C713	45	1.77	5500	1237	22,000	4950	2400	21,240
C812/C813	50	1.97	7500	1687	30,000	6750	3700	32,745
C912/C913	55	2.17	9500	2137	37,000	8325	5200	46,020

** Refer to illustration and definitions on page 67*

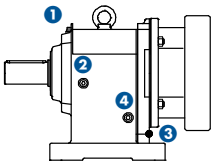
During EMERGENCY OFF operation (maximum stops per gearhead = 1000) the permissible values in the table for F_{2A}, F_{2R}, and M_{2K} can be multiplied by a factor of 2.

The permissible load values given are valid with the load applied to the center of the output shaft (x_2).

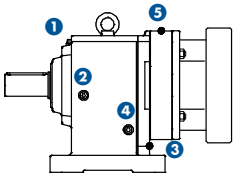
Overview

C Series Lubrication Maintenance

With STOBER reducers very little maintenance is required under normal operating conditions. Units C002 thru C502/C503 are supplied without breathers and are lubricated for life and maintenance free. Breathers are provided on standard units C612/C613 thru C912/C913, located as shown to the right. STOBER recommends changing the lubrication in breather supplied units after 10,000 hours for normal operating conditions or every 5000 hours for wet operating conditions.



2 Stage Units
(C612 thru C912)



3 Stage Units
(C613 thru C913)

Drain Plug and Vent Location

Mounting Position		❶	❷ *	❷a *	❸	❹	❺
EL1		Vent			Drain		
EL2		Drain			Vent		
EL3			Vent	Drain			
EL4			Drain	Vent			
EL5	C612-C912	Drain			Vent		
	C613-C913	Drain					Vent
EL6		Vent			Drain		

** Position 2a is on the opposite side of 2.*

Overhung Load Calculations

Pulling forces or overhung load of pulleys, sheaves, sprockets, etc. on the reducer output shaft must not exceed the allowable limits shown in the load/life/speed calculations below.

Note: Overhung load is measured at the center of the shaft extension. No overhung load is encountered when a reducer is flange mounted and/or coupling connected to another unit. However, the shafts of all components must be accurately aligned and secured to prevent pre-loading of the bearings and premature bearing failure.

Use the following formula to determine actual overhung load for a given drive:.

$$\textbf{Imperial OHL (lbs)} = \frac{126{,}000 \times HP \times K}{D \times n}$$

$$\textbf{Metric OHL (N)} = \frac{19{,}100 \times kW \times K}{D \times n}$$

Where:

OHL	Overhung load
HP	Horsepower
kW	Transmitted Kilowatt
D	Pitch Diameter (inches or meters) of Sprocket, Gear, Sheave, Pulley, etc.
n	Maximum Shaft RPM
K	1.00 Single Chain Drive; 1.25 Timing Belt Drive; 1.25 Spur or Helical Gear Drive; 1.50 V-Belt Drive; 2.50 Flat Belt Drive

C Series Load/Life/Speed Calculations

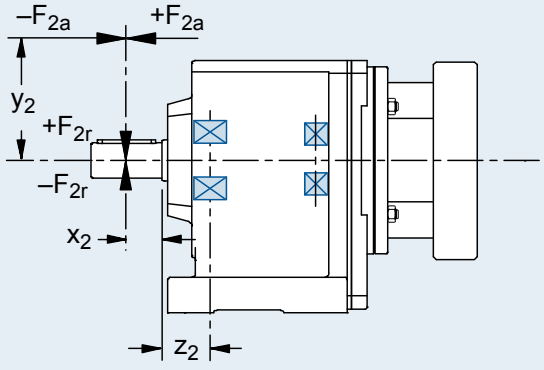
All formulas shown are based on METRIC values
Upper case letters are permissible values. Lower case letters are for existing values.

The permissible load and tilting moment values are based on an output speed of 20 RPM. For higher speeds the following applies, where n_2 is the desired speed:

$$F_{2AX} = \frac{F_{2A}}{\sqrt[3]{\frac{n_2}{20}}} \qquad F_{2RX} = \frac{F_{2R}}{\sqrt[3]{\frac{n_2}{20}}} \qquad M_{2KX} = \frac{M_{2K}}{\sqrt[3]{\frac{n_2}{20}}}$$

The application input tilting moment should be determined by the following formula:

$$M_{2A} = \frac{2 \cdot F_{2a} \cdot y_2 + F_{2rb} \cdot (x_2 + z_2)}{1000} \leq M_{2KB}$$



Where:

F_{2a}	Axial Load at Output Shaft	F_{2RB}	Acceleration Permissible Radial Load
F_{2A}	Permissible Axial Load	M_{2K}	Rated Tilting Torque
F_{2r}	Radial Load at Output Shaft	M_{2k}	Equivalent Tilting Load
F_{2R}	Permissible Radial Load	z_2	Distance Factor

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal [1] M2N ≤2000 RPM		Output Torque: Acceleration M2B		Output Torque: Peak [2] M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C002		**Two Stage**		**(continued next page)**									**Noise Level < 55 dB(A) [3]**		
1.997	1480/741	21	184	21	184	26	230	C002_0020 MT10	3500	3000	6000	20	1.3	0.8	7
		31	272	39	346	49	433	C002_0020 MT20			5000		1.9		
2.769	36/13	27	241	27	241	34	302	C002_0028 MT10	3500	3000	6000	20	1.0	1.0	9
		34	304	51	455	64	568	C002_0028 MT20			5000		1.6		
3.067	46/15	30	263	30	263	37	329	C002_0031 MT10	3700	3600	6000	20	1.0	1.0	9
		35	314	56	495	70	619	C002_0031 MT20	3500	3500	5000		1.6		
3.318	1702/513	32	284	32	284	40	356	C002_0033 MT10	3700	3600	6000	20	1.0	1.0	9
		36	323	60	536	76	669	C002_0033 MT20	3500	3500	5000		1.6		
3.835	441/115	36	316	36	316	45	395	C002_0038 MT10	3700	3600	6000	20	0.9	1.1	10
		38	339	65	572	84	743	C002_0038 MT20	3500	3500	5000		1.5		
4.149	1813/437	39	342	39	342	48	427	C002_0041 MT10	3700	3600	6000	20	0.9	1.1	10
			348	65	576	91	804	C002_0041 MT20	3500	3500	5000		1.5		
4.680	117/25	41	362	42	372	53	465	C002_0047 MT10	4000	4000	6000	20	0.8	1.1	10
				65	576	99	876	C002_0047 MT20	3500	3500	5000		1.4		
5.063	481/95	42	371	45	403	57	503	C002_0051 MT10	4000	4000	6000	20	0.8	1.1	10
				65	576	107	948	C002_0051 MT20	3500	3500	5000		1.4	1.2	
5.824	99/17	44	389	50	445	63	556	C002_0058 MT10	4000	4000	6000	20	0.7	1.2	10
				65	576	110	974	C002_0058 MT20	3500	3500	5000		1.3		
6.300	2035/323	45	399	54	481	68	601	C002_0063 MT10	4000	4000	6000	20	0.7	1.2	10
				65	576	110	974	C002_0063 MT20	3500	3500	5000		1.3		11
7.714	54/7	48	427	63	561	79	701	C002_0077 MT10	4000	4000	6000	20	0.7	1.2	11
								C002_0077 MT20	3500	3500	5000		1.3		
8.235	667/81	58	516	72	638	100	882	C002_0082 MT10	3700	3600	6000	16	0.9	1.5	14
						120	1063	C002_0082 MT20	3500	3500	5000		1.5		
9.228	1495/162	60	531	65	576	112	989	C002_0092 MT10	3700	3600	6000	16	0.9	1.5	14
						120	1063	C002_0092 MT20	3500	3500	5000		1.5	1.6	
10.30	1421/138	60	531	72	638	120	1060	C002_0105 MT10	3700	3600	6000	16	0.8	1.6	14
							1063	C002_0105 MT20	3500	3500	5000		1.4		
11.54	3185/276	60	531	65	576	120	1063	C002_0115 MT10	3700	3600	6000	16	0.8	1.6	14
								C002_0115 MT20	3500	3500	5000		1.4		
12.57	377/30	60	531	72	638	120	1063	C002_0125 MT10	4000	4000	6000	16	0.8	1.6	14
								C002_0125 MT20	3500	3500	5000		1.4		
14.08	169/12	60	531	65	576	120	1063	C002_0140 MT10	4000	4000	6000	16	0.8	1.6	14
								C002_0140 MT20	3500	3500	5000		1.4		
15.64	1595/102	60	531	72	638	120	1063	C002_0155 MT10	4000	4000	6000	16	0.7	1.6	14
								C002_0155 MT20	3500	3500	5000		1.3		

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] $M_{2N} \leq 2000$ RPM		Output Torque: Acceleration M_{2B}		Output Torque: Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	$\Delta\varphi$	J_1 kgcm²	Nm	in.lbs.
C002		**Two Stage**		**(continued from previous page)**									**Noise Level < 55 dB(A) [3]**		
17.53	3575/204	60	531	65	576	120	1063	**C002_0175 MT10**	4000	4000	6000	16	0.7	1.6	14
								C002_0175 MT20	3500	3500	5000		1.3		
20.71	145/7	60	531	72	638	120	1063	**C002_0210 MT10**	4000	4000	6000	16	0.7	1.6	14
								C002_0210 MT20	3500	3500	5000		1.3		
23.21	325/14	60	531	65	576	120	1063	**C002_0230 MT10**	4000	4000	6000	16	0.7	1.6	14
								C002_0230 MT20	3500	3500	5000		1.3		
24.97	899/36	60	531	72	638	120	1063	**C002_0250 MT10**	4000	4000	6000	16	0.7	1.6	14
								C002_0250 MT20	3500	3500	5000		1.3		
27.99	2015/72	60	531	65	576	120	1063	**C002_0280 MT10**	4000	4000	6000	16	0.7	1.6	14
								C002_0280 MT20	3500	3500	5000		1.3		
31.26	2813/90	60	531	72	638	120	1063	**C002_0310 MT10**	4000	4000	6000	16	0.6	1.6	14
								C002_0310 MT20	3500	3500	5000		1.2		
35.03	1261/36	60	531	65	576	120	1063	**C002_0350 MT10**	4000	4000	6000	16	0.6	1.6	14
								C002_0350 MT20	3500	3500	5000		1.2		
41.77	3509/84	60	531	72	638	120	1063	**C002_0420 MT10**	4000	4000	6000	16	0.6	1.6	14
46.82	7865/168	60	531	65	576	120	1063	**C002_0470 MT10**	4000	4000	6000	16	0.6	1.6	14
49.94	899/18	60	531	72	638	118	1048	**C002_0500 MT10**	4000	4000	6000	16	0.6	1.6	14
55.97	2015/36	60	531	65	576	120	1063	**C002_0560 MT10**	4000	4000	6000	16	0.6	1.6	14
62.35	1247/20	60	531	72	638	120	1063	**C002_0620 MT10**	4000	4000	6000	16	0.6	1.6	14
69.88	559/8	60	531	65	576	120	1063	**C002_0700 MT10**	4000	4000	6000	16	0.6	1.6	14

[1] Maximum torque for continuous input RPM - horizontal output position.

[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)

[3] dB)(A) measured at 1 meter distance with 2000 RPM input.

** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal [1] M2N ≤2000 RPM		Acceleration M2B		Peak [2] M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C102		**Two Stage**						**(continued next page)**					**Noise Level ≤ 55 dB(A) [3]**		
		22	195	22	195	27	243	C102_0020 MT10			5000		2.5	1.3	12
2.018	1128/559	62	547	86	763	121	1076	C102_0020 MT20	3100	2600	5000	18	3.1	1.4	12
		62	547	97	861	121	1076	C102_0020 MT30			4000		7.9	1.8	16
		24	210	24	210	30	263	C102_0022 MT10			5000		2.4	1.4	13
2.177	468/215	63	561	93	823	131	1161	C102_0022 MT20	3100	2600	5000	18	3.0	1.5	13
		63	561	105	929	131	1161	C102_0022 MT30			4000		7.8	1.9	17
2.394	2303/962	65	579	102	905	142	1260	C102_0024 MT20	3100	2600	5000	18	2.7	1.7	15
				110	978			C102_0024 MT30			4000		7.5	2.0	18
2.582	1911/740	67	593	110	976	153	1359	C102_0026 MT20	3100	2600	5000	18	2.7	1.8	16
				113	1003			C102_0026 MT30			4000		7.5	2.1	19
		32	282	32	282	40	352	C102_0031 MT10	3600		6000		1.6	2.0	17
3.091	2491/806	71	630	120	1065	176	1556	C102_0031 MT20	3500	3100	5000	18	2.2	2.0	18
		71	630	120	1065	176	1556	C102_0031 MT30	3500		4000		7.0	2.4	21
		34	304	34	304	43	380	C102_0033 MT10	3600		6000		1.6	2.1	18
3.334	2067/620	73	646	123	1092	189	1678	C102_0033 MT20	3500	3100	5000	18	2.2	2.1	19
		73	646	123	1092	189	1678	C102_0033 MT30	3500		4000		7.0	2.4	22
		39	342	39	342	48	427	C102_0039 MT10	3600		6000		1.3	2.3	20
3.883	1363/351	77	680	130	1149	213	1888	C102_0039 MT20	3500	3100	5000	18	1.9	2.3	21
		77	680	130	1149	213	1888	C102_0039 MT30	3500		4000		6.7	2.6	23
		42	369	42	369	52	461	C102_0042 MT10	3600		6000		1.3	2.4	21
4.189	377/90	79	697	130	1152	220	1949	C102_0042 MT20	3500	3100	5000	18	1.9	2.4	22
		79	697	130	1152	220	1949	C102_0042 MT30	3500		4000		6.7	2.7	24
		45	396	45	396	56	494	C102_0047 MT10	3800		6000		1.1	2.5	22
4.658	3149/676	82	722	130	1152	220	1949	C102_0047 MT20	3500	3500	5000	18	1.7	2.5	22
		82	722	130	1152	220	1949	C102_0047 MT30	3500		4000		6.5	2.7	24
		48	427	48	427	60	533	C102_0050 MT10	3800		6000		1.1	2.6	23
5.025	201/40	84	741	130	1152	220	1949	C102_0050 MT20	3500	3500	5000	18	1.7	2.6	23
		84	741	130	1152	220	1949	C102_0050 MT30	3500		4000		6.5	2.8	25
		54	480	54	480	68	600	C102_0059 MT10	3800		6000		1.0	2.7	24
5.875	47/8	88	781	130	1152	220	1949	C102_0059 MT20	3500	3500	5000	18	1.6	2.7	24
		88	781	130	1152	220	1949	C102_0059 MT30	3500		4000		6.4	2.9	25
		58	517	58	517	73	647	C102_0063 MT10	3800		6000		1.0	2.7	24
6.338	507/80	90	801	130	1152	220	1949	C102_0063 MT20	3500	3500	5000	18	1.6	2.8	25
		90	801	130	1152	220	1949	C102_0063 MT30	3500		4000		6.4	2.9	26
		68	602	68	602	85	752	C102_0078 MT10	4000	3900	6000		0.8	2.9	25
7.796	3243/416	97	858	130	1152	220	1949	C102_0078 MT20	3500	3500	5000	18	1.4	2.9	26
		97	858	130	1152	220	1949	C102_0078 MT30	3500	3500	4000		6.2	3.0	26

[1] *Maximum torque for continuous input RPM - horizontal output position.*
[2] *Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)*
[3] *dB)(A) measured at 1 meter distance with 2000 RPM input.*
* *Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] M_{2N} ≤2000 RPM		Output Torque: Acceleration M_{2B}		Output Torque: Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J_1 kgcm²	Nm	in.lbs.
C102		**Two Stage**		**(continued next page)**								**Noise Level ≤ 55 dB(A) [3]**			
		85	753	85	753	106	941	C102_0083 MT10	3600		6000		1.3	3.6	32
8.263	1537/186	117	1033	138	1222	240	2126	C102_0083 MT20	3500	3100	5000	15	1.9	3.6	32
		117	1033	138	1222	240	2126	C102_0083 MT30	3500		4000		6.7	3.7	33
		96	850	96	850	120	1062	C102_0093 MT10	3600		6000		1.3	3.6	32
9.326	3180/341	120	1063	138	1222	240	2126	C102_0093 MT20	3500	3100	5000	15	1.9	3.7	32
		120	1063	138	1222	240	2126	C102_0093 MT30	3500		4000		6.7	3.8	33
		103	914	103	914	129	1142	C102_0105 MT10	3600		6000		1.1	3.7	33
10.38	841/81	120	1063	138	1222	240	2126	C102_0105 MT20	3500	3100	5000	15	1.7	3.7	33
		120	1063	138	1222	240	2126	C102_0105 MT30	3500		4000		6.5	3.8	34
		116	1031	116	1031	146	1289	C102_0115 MT10	3600		6000		1.1	3.7	33
11.72	1160/99	120	1063	138	1222	240	2126	C102_0115 MT20	3500	3100	5000	15	1.7	3.8	33
		120	1063	138	1222	240	2126	C102_0115 MT30	3500		4000		6.5	3.8	34
		119	1058	119	1058	149	1322	C102_0125 MT10	3800		6000		1.0	3.8	33
12.46	1943/156	120	1063	138	1222	240	2126	C102_0125 MT20	3500	3500	5000	15	1.6	3.8	33
		120	1063	138	1222	240	2126	C102_0125 MT30	3500		4000		6.4	3.8	34
				135	1194	168	1492	C102_0140 MT10	3800		6000		1.0	3.8	
14.06	2010/143	120	1063	138	1222	240	2126	C102_0140 MT20	3500	3500	5000	15	1.6	3.8	34
				138	1222	240	2126	C102_0140 MT30	3500		4000		6.4	3.9	
						181	1603	C102_0155 MT10	3800		6000		0.9	3.8	
15.71	377/24	120	1063	138	1222	240	2126	C102_0155 MT20	3500	3500	5000	15	1.5	3.8	34
						240	2126	C102_0155 MT30	3500		4000		6.3	3.9	
						204	1809	C102_0175 MT10	3800		6000		0.9	3.8	
17.73	195/11	120	1063	138	1222	240	2126	C102_0175 MT20	3500	3500	5000	15	1.5	3.9	34
						240	2126	C102_0175 MT30	3500		4000		6.3	3.9	
						227	2012	C102_0210 MT10	4000	3900	6000		0.8		
20.84	667/32	120	1063	138	1222	240	2126	C102_0210 MT20	3500	3500	5000	15	1.4	3.9	34
						240	2126	C102_0210 MT30	3500	3500	4000		6.2		
								C102_0240 MT10	4000	3900	6000		0.8		34
23.52	1035/44	120	1063	138	1222	240	2126	C102_0240 MT20	3500	3500	5000	15	1.4	3.9	34
								C102_0240 MT30	3500	3500	4000		6.2		35
								C102_0250 MT10	4000	3900	6000		0.8		34
25.13	377/15	120	1063	138	1222	240	2126	C102_0250 MT20	3500	3500	5000	15	1.4	3.9	34
								C102_0250 MT30	3500	3500	4000		6.2		35
								C102_0280 MT10	4000	3900	6000		0.8		
28.36	312/11	120	1063	138	1222	240	2126	C102_0280 MT20	3500	3500	5000	15	1.4	3.9	35
								C102_0280 MT30	3500	3500	4000		6.2		

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal 1) M2N ≤2000 RPM		Output Torque: Acceleration M2B		Output Torque: Peak 2) M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C102		**Two Stage (continued from previous page)**											Noise Level ≤ 55 dB(A) 3)		
31.07	435/14	120	1063	138	1222	240	2126	C102_0310 MT10	4000	3900	6000		0.7		
								C102_0310 MT20	3500	3500	5000	15	1.3	3.9	35
								C102_0310 MT30	3500	3500	4000		6.1		
35.07	2700/77	120	1063	138	1222	240	2126	C102_0350 MT10	4000	3900	6000		0.7		
								C102_0350 MT20	3500	3500	5000	15	1.3	3.9	35
								C102_0350 MT30	3500	3500	4000		6.1		
41.57	1247/30	120	1063	138	1222	240	2126	C102_0420 MT10	4000	3900	6000	15	0.7	3.9	35
								C102_0420 MT20	3500	3500	5000		1.3		
46.91	516/11	120	1063	138	1222	240	2126	C102_0470 MT10	4000	3900	6000	15	0.7	3.9	35
								C102_0470 MT20	3500	3500	5000		1.3		
49.94	899/18	120	1063	138	1222	236	2089	C102_0500 MT10	4000	3900	6000	15	0.6	3.9	35
56.36	620/11	120	1063	138	1222	240	2126	C102_0560 MT10	4000	3900	6000	15	0.6	3.9	35
62.43	4495/72	119	1054	138	1222	238	2108	C102_0620 MT10	4000	3900	6000	15	0.6	3.9	35
70.46	775/11	120	1063	138	1222	240	2126	C102_0700 MT10	4000	3900	6000	15	0.6	3.9	35
C103		**Three Stage**											Noise Level ≤ 55 dB(A) 3)		
81.64	31,349/384	120	1063	138	1222	240	2126	C103_0820 MT10	4000	3900	6000	15	0.7	3.9	35
92.13	16,215/176	120	1063	138	1222	240	2126	C103_0920 MT10	4000	3900	6000	15	0.7	3.9	35
111.1	1222/11	120	1063	138	1222	240	2126	C103_1110 MT10	4000	3900	6000	15	0.7	3.9	35
137.3	10575/77	120	1063	138	1222	240	2126	C103_1370 MT10	4000	3900	6000	15	0.7	3.9	35
183.7	2021/11	120	1063	138	1222	240	2126	C103_1840 MT10	4000	3900	6000	15	0.6	3.9	35
220.8	7285/33	120	1063	138	1222	240	2126	C103_2210 MT10	4000	3900	6000	15	0.6	3.9	35
275.9	36,425/132	120	1063	138	1222	240	2126	C103_2760 MT10	4000	3900	6000	15	0.6	3.9	35

1) Maximum torque for continuous input RPM - horizontal output position.
2) Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
3) dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque						Part Number* (Gearhead + Input)	Maximum Input Speed RPM			Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
		Nominal [1] M2N ≤2000 RPM		Acceleration M2B		Peak [2] M2PEAK			Continuous		Cyclic				
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C202		**Two Stage**		**(continued next page)**									**Noise Level ≤ 53 dB(A) [3]**		
2.009	432/215	78	690	86	760	126	1114	C202_0020 MT20	3000	2600	4500	17	5.1	1.7	15
		94	834	159	1408	324	2874	C202_0020 MT30					9.9	2.4	21
2.184	2160/989	85	751	93	826	137	1211	C202_0022 MT20	3000	2600	4500	17	4.9	2.0	17
		97	857	163	1448	350	3100	C202_0022 MT30					9.7	2.6	23
2.475	99/40	96	851	106	936	150	1328	C202_0025 MT20	3000	2600	4500	17	4.1	2.3	20
		101	894	120	1062	150	1328	C202_0025 MT30			4000		8.9	3.0	27
2.690	495/184	104	919	115	1017	163	1443	C202_0027 MT20	3000	2600	4500	17	4.0	2.5	23
				130	1155	163	1443	C202_0027 MT30			4000		8.8	3.3	29
3.103	90/29	109	964	132	1173	183	1618	C202_0031 MT20	3500	3100	5000	17	3.3	3.0	26
				146	1295	183	1618	C202_0031 MT30			4000		8.1	3.7	33
3.373	2250/667	112	991	144	1275	199	1759	C202_0034 MT20	3500	3100	5000	17	3.2	3.2	29
				159	1407	199	1759	C202_0034 MT30			4000		8.0	3.9	35
3.888	486/125	117	1039	166	1470	221	1954	C202_0039 MT20	3500	3100	5000	17	2.7	3.6	32
				176	1563	221	1954	C202_0039 MT30			4000		7.5	4.3	38
4.226	486/115	121	1068	180	1598	240	2124	C202_0042 MT20	3500	3100	5000	17	2.6	3.9	34
								C202_0042 MT30			4000		7.4	4.5	40
4.667	14/3	125	1104	199	1764	255	2261	C202_0047 MT20	3500	3500	5000	17	2.3	4.1	37
								C202_0047 MT30			4000		7.1	4.7	42
5.072	350/69	128	1135	200	1772	277	2457	C202_0051 MT20	3500	3500	5000	17	2.3	4.4	39
								C202_0051 MT30			4000		7.1	4.9	43
5.791	666/115	55	488	55	488	69	610	C202_0058 MT10	3700		5500		1.4	4.5	40
		134	1186	200	1772	304	2696	C202_0058 MT20	3500	3500	5000	17	2.0	4.7	41
		134	1186	200	1772	304	2696	C202_0058 MT30	3500		4000		6.8	5.1	45
6.295	3330/529	60	530	60	530	75	663	C202_0063 MT10	3700		5500		1.4	4.7	42
		138	1220	200	1772	331	2930	C202_0063 MT20	3500	3500	5000	17	2.0	4.8	43
		138	1220	200	1772	331	2930	C202_0063 MT30	3500		4000		6.8	5.2	46
7.800	39/5	70	618	70	618	87	772	C202_0078 MT10	4000	3900	6000		1.1	5.1	45
		148	1310	200	1772	350	3100	C202_0078 MT20	3500	3500	5000	17	1.7	5.2	46
		148	1310	200	1772	350	3100	C202_0078 MT30	3500	3500	4000		6.5	5.5	48
8.190	475/58	191	1692	230	2037	400	3543	C202_0082 MT20	3500	3100	5000	14	2.7	6.9	61
								C202_0082 MT30			4000		7.5	7.4	65
9.387	2450/261	200	1771	230	2037	400	3543	C202_0094 MT20	3500	3100	5000	14	2.7	7.2	64
								C202_0094 MT30			4000		7.5	7.6	67
10.26	513/50	200	1772	230	2037	400	3543	C202_0105 MT20	3500	3100	5000	14	2.3	7.3	65
								C202_0105 MT30			4000		7.1	7.7	68
11.76	294/25	200	1772	230	2037	400	3543	C202_0120 MT20	3500	3100	5000	14	2.3	7.5	67
								C202_0120 MT30			4000		7.1	7.8	69
12.32	665/54	200	1772	230	2037	400	3543	C202_0125 MT20	3500	3500	5000	14	2.1	7.6	67
								C202_0125 MT30			4000		6.9	7.9	70
14.12	3430/243	200	1772	230	2037	400	3543	C202_0140 MT20	3500	3500	5000	14	2.0	7.8	69
								C202_0140 MT30			4000		6.8	8.0	70
15.28	703/46	145	1287	145	1287	182	1609	C202_0155 MT10	3700		5500		1.2	7.8	69
		200	1772	230	2037	400	3543	C202_0155 MT20	3500	3500	5000	14	1.8	7.8	69
		200	1772	230	2037	400	3543	C202_0155 MT30	3500		4000		6.6	8.0	71
17.52	3626/207	167	1476	167	1476	208	1844	C202_0175 MT10	3700		5500		1.2	7.9	70
		200	1772	230	2037	400	3543	C202_0175 MT20	3500	3500	5000	14	1.8	7.9	70
		200	1772	230	2037	400	3543	C202_0175 MT30	3500		4000		6.6	8.1	71

[1] Maximum torque for continuous input RPM - horizontal output position.

[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)

[3] dB)(A) measured at 1 meter distance with 2000 RPM input.

** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal 1) M2N ≤2000 RPM		Acceleration M2B		Peak 2) M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous EL 1,2,3,4	Continuous EL 5,6	Cyclic All	Backlash (arcmins) Δφ	Input Inertia J1 kgcm²	Torsional Stiffness C2 (per arcmin) Nm	Torsional Stiffness C2 (per arcmin) in.lbs.
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.								
C202		**Two Stage**						**(continued from previous page)**						**Noise Level ≤ 53 dB(A) 3)**	
		184	1631	184	1631	230	2038	C202_0210 MT10	4000	3900	6000		1.0	8.0	71
20.58	247/12	200	1772	230	2037	400	3543	C202_0210 MT20	3500	3500	5000	14	1.6	8.0	71
		200	1772	230	2037	400	3543	C202_0210 MT30	3500	3500	4000		6.4	8.1	72
				211	1869	264	2337	C202_0240 MT10	4000	3900	6000		1.0	8.1	71
23.59	637/27	200	1772	230	2037	400	3543	C202_0240 MT20	3500	3500	5000	14	1.6	8.1	72
				230	2037	400	3543	C202_0240 MT30	3500	3500	4000		6.4	8.2	72
				213	1889	267	2362	C202_0250 MT10	4000	3900	6000		0.9	8.1	72
24.64	1577/64	200	1772	230	2037	400	3543	C202_0250 MT20	3500	3500	5000	14	1.5	8.1	72
				230	2037	400	3543	C202_0250 MT30	3500	3500	4000		6.3	8.2	72
						306	2707	C202_0280 MT10	4000	3900	6000		0.9	8.1	72
28.24	4067/144	200	1772	230	2037	400	3543	C202_0280 MT20	3500	3500	5000	14	1.5	8.2	72
						400	3543	C202_0280 MT30	3500	3500	4000		6.3	8.2	73
						315	2793	C202_0310 MT10	4000	3900	6000		0.8	8.2	72
30.69	399/13	200	1772	230	2037	400	3543	C202_0310 MT20	3500	3500	5000	14	1.4	8.2	72
						400	3543	C202_0310 MT30	3500	3500	4000		6.2	8.2	73
						361	3201	C202_0350 MT10	4000	3900	6000		0.8	8.2	73
35.18	1372/39	200	1772	230	2037	400	3543	C202_0350 MT20	3500	3500	5000	14	1.4	8.2	73
						400	3543	C202_0350 MT30	3500	3500	4000		6.2	8.2	73
						394	3493	C202_0410 MT10	4000	3900	6000		0.7		
40.85	817/20	200	1772	230	2037	400	3543	C202_0410 MT20	3500	3500	5000	14	1.3	8.2	73
						400	3543	C202_0410 MT30	3500	3500	4000		6.1		
								C202_0470 MT10	4000	3900	6000		0.7		
46.82	2107/45	200	1772	230	2037	400	3543	C202_0470 MT20	3500	3500	5000	14	1.3	8.2	73
								C202_0470 MT30	3500	3500	4000		6.1		
49.23	1083/22	200	1772	230	2037	400	3543	C202_0490 MT10	4000	3900	6000	14	0.7	8.2	73
								C202_0490 MT20	3500	3500	5000		1.3		
56.42	1862/33	200	1772	230	2037	400	3543	C202_0560 MT10	4000	3900	6000	14	0.7	8.3	73
								C202_0560 MT20	3500	3500	5000		1.3		
61.35	2945/48	187	1658	225	1989	284	2518	C202_0610 MT10	4000	3900	6000	14	0.7	8.3	73
70.32	7595/108	200	1772	230	2037	326	2886	C202_0700 MT10	4000	3900	6000	14	0.7	8.3	73
C203		**Three Stage**												**Noise Level ≤ 53 dB(A) 3)**	
79.59	7163/90	200	1772	230	2037	400	3543	C203_0800 MT20	3500	3500	5000	14	1.4	8.3	73
80.62	11,609/144	200	1772	230	2037	400	3543	C203_0810 MT10	4000	3900	6000	14	0.7	8.3	73
91.23	36,946/405	200	1772	230	2037	400	3543	C203_0910 MT20	3500	3500	5000	14	1.4	8.3	73
92.40	29,939/324	200	1772	230	2037	400	3543	C203_0920 MT10	4000	3900	6000	14	0.7	8.3	73
109.2	117,943/1080	200	1772	230	2037	400	3543	C203_1090 MT20	3500	3500	5000	14	1.4	8.3	73
110.6	191,149/1728	200	1772	230	2037	400	3543	C203_1110 MT10	4000	3900	6000	14	0.7	8.3	73
136.0	79576/585	200	1772	230	2037	400	3543	C203_1360 MT20	3500	3500	5000	14	1.4	8.3	73
137.8	16121/117	200	1772	230	2037	400	3543	C203_1380 MT10	4000	3900	6000	14	0.7	8.3	73
181.0	122,206/675	200	1772	230	2037	400	3543	C203_1810 MT20	3500	3500	5000	14	1.4	8.3	73
183.4	99,029/540	200	1772	230	2037	400	3543	C203_1830 MT10	4000	3900	6000	14	0.7	8.3	73
221.0	43,757/198	200	1772	230	2037	400	3543	C203_2210 MT10	4000	3900	6000	14	0.7	8.3	73
275.4	356,965/1296	200	1772	230	2037	326	2885	C203_2750 MT10	4000	3900	6000	14	0.6	8.3	73

1) Maximum torque for continuous input RPM - horizontal output position.
2) Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
3) dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] M_{2N} ≤2000 RPM		Output Torque: Acceleration M_{2B}		Output Torque: Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J_1 kgcm²	Nm	in.lbs.
C302		**Two Stage**		**(continued next page)**									**Noise Level ≤ 53 dB(A) [3]**		
		78	694	86	764	131	1159	C302_0020 MT20			4000		8.2	1.8	16
2.020	608/301	154	1367	205	1814	337	2988	C302_0020 MT30	2700	2300	4000	16	13.0	2.6	23
		154	1367	261	2309	337	2988	C302_0020 MT40			3500		17.0	3.9	34
		84	748	93	823	141	1249	C302_0022 MT20			4000		7.8	2.1	18
2.177	468/215	158	1402	221	1955	364	3221	C302_0022 MT30	2700	2300	4000	16	12.6	2.8	25
		158	1402	267	2368	364	3221	C302_0022 MT40			3500		16.6	4.1	37
		97	863	107	949	158	1398	C302_0025 MT20			4000		6.3	2.5	22
2.510	1634/651	166	1470	254	2254	407	3607	C302_0025 MT30	2700	2300	4000	16	11.1	3.3	29
		166	1470	280	2483	407	3607	C302_0025 MT40			3500		15.1	4.6	41
		105	930	115	1023	170	1507	C302_0027 MT20			4000		6.1	2.7	24
2.705	1677/620	170	1507	274	2429	439	3887	C302_0027 MT30	2700	2300	4000	16	10.9	3.6	32
		170	1507	287	2546	439	3887	C302_0027 MT40			3500		14.9	4.8	43
		121	1069	133	1176	188	1669	C302_0031 MT20	3200		4500		4.8	3.2	28
3.110	1045/336	178	1579	301	2667	486	4304	C302_0031 MT30	3200	2800	4000	16	9.6	4.1	36
		178	1579	301	2667	486	4304	C302_0031 MT40	3000		3500		13.6	5.2	46
		130	1152	143	1267	203	1798	C302_0034 MT20	3200		4500		4.7	3.5	31
3.352	429/128	183	1618	309	2734	524	4639	C302_0034 MT30	3200	2800	4000	16	9.5	4.3	38
		183	1618	309	2734	524	4639	C302_0034 MT40	3000		3500		13.5	5.4	48
		150	1333	166	1466	227	2012	C302_0039 MT20	3200		4500		3.8	4.0	35
3.878	190/49	192	1699	324	2870	550	4872	C302_0039 MT30	3200	2800	4000	16	8.6	4.8	42
		192	1699	324	2870	550	4872	C302_0039 MT40	3000		3500		12.6	5.8	51
		162	1436	178	1580	245	2169	C302_0042 MT20	3200		4500		3.7	4.3	38
4.179	117/28	197	1742	330	2923	550	4872	C302_0042 MT30	3200	2800	4000	16	8.5	5.0	44
		197	1742	330	2923	550	4872	C302_0042 MT40	3000		3500		12.5	5.9	52
		175	1552	200	1767	264	2334	C302_0047 MT20	3500	3100	5000		3.2	4.6	41
4.675	589/126	204	1808	330	2923	550	4872	C302_0047 MT30	3500	3100	4000	16	8.0	5.3	47
		204	1808	330	2923	550	4872	C302_0047 MT40	3000	3000	3500		12.0	6.1	54
		189	1672	215	1905	284	2515	C302_0050 MT20	3500	3100	5000		3.1	4.9	43
5.038	403/80	209	1854	330	2923	550	4872	C302_0050 MT30	3500	3100	4000	16	7.9	5.5	49
		209	1854	330	2923	550	4872	C302_0050 MT40	3000	3000	3500		11.9	6.2	55
		192	1702	250	2215	319	2829	C302_0059 MT20	3500	3100	5000		2.6	5.3	47
5.859	2584/441	220	1950	330	2923	550	4872	C302_0059 MT30	3500	3100	4000	16	7.4	5.9	52
		220	1950	330	2923	550	4872	C302_0059 MT40	3000	3000	3500		11.4	6.4	57
		207	1834	269	2387	344	3049	C302_0063 MT20	3500	3100	5000		2.6	5.5	49
6.314	221/35	226	1999	330	2923	550	4872	C302_0063 MT30	3500	3100	4000	16	7.4	6.0	53
		226	1999	330	2923	550	4872	C302_0063 MT40	3000	3000	3500		11.4	6.5	58

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal 1) M2N ≤2000 RPM		Acceleration M2B		Peak 2) M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C302		**Two Stage**						**(continued next page)**					**Noise Level ≤ 53 dB(A) 3)**		
		200	1771	321	2845	401	3556	C302_0078 MT20	3500	3500	5000		2.1	5.9	53
7.841	494/63	243	2148	330	2923	550	4872	C302_0078 MT30	3500	3500	4000	16	6.9	6.3	56
		243	2148	330	2923	550	4872	C302_0078 MT40	3000	3000	3500		10.9	6.7	59
				352	3119	500	4426	C302_0083 MT20	3200		4500		3.8	7.2	64
8.250	33/4	298	2638	400	3543	700	6201	C302_0083 MT30	3200	2800	4000	13	8.6	7.7	68
				400	3543	700	6201	C302_0083 MT40	3000		3500		12.6	8.2	73
						564	4995	C302_0093 MT20	3200		4500		3.7	7.5	66
9.310	3575/384	310	2746	350	3100	700	6201	C302_0093 MT30	3200	2800	4000	13	8.5	7.9	70
						700	6201	C302_0093 MT40	3000		3500		12.5	8.3	74
						603	5338	C302_0105 MT20	3200		4500		3.1	7.7	68
10.29	72/7	321	2839	400	3543	700	6201	C302_0105 MT30	3200	2800	4000	13	7.9	8.1	71
						700	6201	C302_0105 MT40	3000		3500		11.9	8.4	74
						680	6023	C302_0115 MT20	3200		4500		3.1	7.9	70
11.61	325/28	334	2956	350	3100	700	6201	C302_0115 MT30	3200	2800	4000	13	7.9	8.2	73
						700	6201	C302_0115 MT40	3000		3500		11.9	8.5	75
						699	6191	C302_0125 MT20	3500	3100	5000		2.7	8.0	71
12.40	62/5	341	3022	400	3543	700	6201	C302_0125 MT30	3500	3100	4000	13	7.5	8.3	73
						700	6201	C302_0125 MT40	3000	3000	3500		11.5	8.5	75
								C302_0140 MT20	3500	3100	5000		2.7	8.1	72
13.99	2015/144	350	3100	350	3100	700	6201	C302_0140 MT30	3500	3100	4000	13	7.5	8.4	74
								C302_0140 MT40	3000	3000	3500		11.5	8.5	76
								C302_0155 MT20	3500	3100	5000		2.3	8.2	73
15.54	544/35	350	3100	400	3543	700	6201	C302_0155 MT30	3500	3100	4000	13	7.1	8.4	75
								C302_0155 MT40	3000	3000	3500		11.1	8.6	76
								C302_0175 MT20	3500	3100	5000		2.3	8.3	74
17.54	1105/63	350	3100	350	3100	700	6201	C302_0175 MT30	3500	3100	4000	13	7.1	8.5	75
								C302_0175 MT40	3000	3000	3500		11.1	8.6	76
								C302_0210 MT20	3500	3500	5000		1.9	8.5	75
20.80	104/5	350	3100	400	3543	700	6201	C302_0210 MT30	3500	3500	4000	13	6.7	8.6	76
								C302_0210 MT40	3000	3000	3500		10.7	8.6	77
								C302_0230 MT20	3500	3500	5000		1.9	8.5	75
23.47	845/36	350	3100	350	3100	700	6201	C302_0230 MT30	3500	3500	4000	13	6.7	8.6	76
								C302_0230 MT40	3000	3000	3500		10.7	8.7	77
								C302_0250 MT20	3500	3500	5000		1.7	8.5	76
24.80	124/5	350	3100	400	3543	700	6201	C302_0250 MT30	3500	3500	4000	13	6.5	8.6	76
								C302_0250 MT40	3000	3000	3500		10.5	8.7	77

1) Maximum torque for continuous input RPM - horizontal output position.
2) Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
3) dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] M_{2N} ≤2000 RPM		Output Torque: Acceleration M_{2B}		Output Torque: Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J_1 kgcm²	Nm	in.lbs.
C302		**Two Stage**						**(continued from previous page)**					**Noise Level ≤ 53 dB(A) [3]**		
27.99	2015/72	350	3100	350	3100	700	6201	C302_0280 MT20	3500	3500	5000		1.7	8.6	76
								C302_0280 MT30	3500	3500	4000	13	6.5	8.6	76
								C302_0280 MT40	3000	3000	3500		10.5	8.7	77
31.04	776/25	350	3100	400	3543	700	6201	C302_0310 MT20	3500	3500	5000		1.6	8.6	76
								C302_0310 MT30	3500	3500	4000	13	6.4	8.7	77
								C302_0310 MT40	3000	3000	3500		10.4	8.7	77
35.03	1261/36	350	3100	350	3100	700	6201	C302_0350 MT20	3500	3500	5000		1.6	8.6	76
								C302_0350 MT30	3500	3500	4000	13	6.4	8.7	77
								C302_0350 MT40	3000	3000	3500		10.4	8.7	77
41.35	2688/65	350	3100	400	3543	700	6201	C302_0410 MT20	3500	3500	5000	13	1.4	8.7	77
								C302_0410 MT30			4000		6.2	8.7	
46.67	140/3	350	3100	350	3100	700	6201	C302_0470 MT20	3500	3500	5000	13	1.4	8.7	77
								C302_0470 MT30			4000		6.2	8.7	
49.75	2736/55	350	3100	400	3543	700	6201	C302_0500 MT20	3500	3500	5000	13	1.4	8.7	77
								C302_0500 MT30			4000		6.2	8.7	
56.14	1235/22	350	3100	350	3100	700	6201	C302_0560 MT20	3500	3500	5000	13	1.4	8.7	77
								C302_0560 MT30			4000		6.2	8.7	
61.92	1548/25	331	2932	397	3518	563	4990	C302_0620 MT20	3500	3500	5000	13	1.3	8.7	77
69.88	559/8	350	3100	350	3100	636	5631	C302_0700 MT20	3500	3500	5000	13	1.3	8.7	77
C303		**Three Stage**											**Noise Level ≤ 53 dB(A) [3]**		
80.43	6032/75	350	3100	400	3543	700	6201	C303_0800 MT20	3500	3500	5000	13	1.4	8.7	77
81.47	1222/15	334	2954	334	2954	417	3693	C303_0810 MT10	3800	3500	5500	13	0.7	8.7	77
90.76	4901/54	350	3100	350	3100	700	6201	C303_0910 MT20	3500	3500	5000	13	1.4	8.7	77
91.93	39,715/432	350	3100	350	3100	470	4167	C303_0920 MT10	3800	3500	5500	13	0.7	8.7	77
108.2	11,687/108	350	3100	350	3100	700	6201	C303_1080 MT20	3500	3500	5000	13	1.4	8.7	77
109.6	94,705/864	350	3100	350	3100	561	4969	C303_1100 MT10	3800	3500	5500	13	0.7	8.7	77
135.4	36,569/270	350	3100	350	3100	700	6201	C303_1350 MT20	3500	3500	5000	13	1.4	8.7	77
137.2	59,267/432	350	3100	350	3100	700	6201	C303_1370 MT10	3800	3500	5500	13	0.7	8.7	77
180.4	1624/9	350	3100	350	3100	700	6201	C303_1800 MT20	3500	3500	5000	13	1.4	8.7	77
182.8	1645/9	350	3100	350	3100	700	6201	C303_1830 MT10	3800	3500	5500	13	0.7	8.7	77
217.1	7163/33	350	3100	350	3100	700	6201	C303_2170 MT20	3500	3500	5000	13	1.4	8.7	77
219.9	58,045/264	350	3100	350	3100	700	6201	C303_2200 MT10	3800	3500	5500	13	0.7	8.7	77
273.7	26273/96	350	3100	350	3100	636	5631	C303_2740 MT10	3800	3500	5500	13	0.7	8.7	77

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal [1] M2N ≤2000 RPM		Output Torque: Acceleration M2B		Output Torque: Peak [2] M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C402		**Two Stage**		**(continued next page)**									**Noise Level ≤ 61 dB(A) [3]**		
1.968	551/280	181	1606	199	1767	342	3029	C402_0020 MT30	2500	2100	3500	15	23.1	3.1	28
		223	1971	274	2424	342	3029	C402_0020 MT40					27.1	5.5	49
2.221	171/77	205	1813	225	1994	386	3419	C402_0022 MT30	2500	2100	3500	15	21.2	3.8	34
		232	2052	309	2735	386	3419	C402_0022 MT40					25.2	6.4	57
2.456	609/248	226	2005	249	2205	414	3668	C402_0025 MT30	2500	2100	3500	15	18.2	4.4	39
		240	2122	331	2934	414	3668	C402_0025 MT40					22.2	7.2	64
2.771	945/341	249	2209	281	2488	467	4138	C402_0028 MT30	2500	2100	3500	15	17.0	5.3	47
				374	3311	467	4138	C402_0028 MT40					21.0	8.3	73
3.099	1537/496	259	2293	314	2783	503	4453	C402_0031 MT30	2900	2500	4000	15	14.5	6.1	54
				402	3562	503	4453	C402_0031 MT40			3500		18.5	9.2	82
3.497	2385/682	270	2388	354	3140	567	5025	C402_0035 MT30	2900	2500	4000	15	13.7	7.1	63
				454	4020	567	5025	C402_0035 MT40			3500		17.7	10.2	91
3.894	841/216	151	1338	166	1472	236	2088	C402_0039 MT20	2900	2500	4000	15	7.2	6.0	53
		279	2475	395	3496	608	5385	C402_0039 MT30			4000		12.0	8.0	71
		279	2475	472	4181	608	5385	C402_0039 MT40			3500		16.0	11.1	98
4.394	145/33	170	1510	188	1661	266	2356	C402_0044 MT20	2900	2500	4000	15	6.7	7.0	62
		291	2576	445	3945	686	6077	C402_0044 MT30			4000		11.5	9.0	80
		291	2576	491	4353	686	6077	C402_0044 MT40			3500		15.5	12.0	106
4.682	899/192	182	1609	200	1770	275	2438	C402_0047 MT20	3300	2800	4500	15	5.8	7.5	66
		297	2632	475	4204	710	6287	C402_0047 MT30			4000		10.6	9.5	84
		297	2632	502	4446	710	6287	C402_0047 MT40			3500		14.6	12.4	110
5.284	465/88	205	1816	226	1998	311	2751	C402_0053 MT20	3300		4500	15	5.4	8.5	75
		309	2740	523	4629	801	7096	C402_0053 MT30	3300	2800	4000		10.2	10.5	93
		309	2740	523	4629	801	7096	C402_0053 MT40	3000		3500		14.2	13.2	117
5.891	377/64	218	1927	251	2227	331	2930	C402_0059 MT20	3300		4500	15	4.4	9.4	84
		321	2841	542	4799	850	7529	C402_0059 MT30	3300	2800	4000		9.2	11.4	101
		321	2841	542	4799	850	7529	C402_0059 MT40	3000		3500		13.2	13.8	122
6.648	585/88	245	2174	284	2513	373	3307	C402_0066 MT20	3300		4500	15	4.2	10.4	92
		334	2958	550	4872	850	7529	C402_0066 MT30	3300	2800	4000		9.0	12.3	109
		334	2958	550	4872	850	7529	C402_0066 MT40	3000		3500		13.0	14.4	127
7.816	2001/256	231	2045	332	2942	415	3677	C402_0078 MT20	3500	3200	5000	15	3.3	11.7	103
		352	3122	550	4872	850	7529	C402_0078 MT30	3500	3200	4000		8.1	13.3	118
		352	3122	550	4872	850	7529	C402_0078 MT40	3000	3000	3500		12.1	15.0	133
8.285	3339/403	500	4432	600	5315	1100	9744	C402_0083 MT30	2900	2500	4000	12	11.9	16.5	146
								C402_0083 MT40			3500		15.9	18.9	168
9.261	3445/372	519	4600	550	4872	1100	9744	C402_0093 MT30	2900	2500	4000	12	11.8	17.4	154
								C402_0093 MT40			3500		15.8	19.5	172

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] M_{2N} ≤2000 RPM		Acceleration M_{2B}		Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J_1 kgcm²	Nm	in.lbs.
C402		**Two Stage**		**(continued next page)**									**Noise Level ≤ 61 dB(A) [3]**		
		404	3578	444	3936	630	5582	C402_0105 MT20			4000		5.6	16.4	145
10.41	406/39	540	4783	600	5315	1100	9744	C402_0105 MT30	2900	2500	4000	12	10.4	18.1	161
		540	4783	600	5315	1100	9744	C402_0105 MT40			3500		14.4	19.9	176
		451	3999	497	4399	704	6239	C402_0115 MT20			4000		5.5	17.3	153
11.64	1885/162	550	4872	550	4872	1100	9744	C402_0115 MT30	2900	2500	4000	12	10.3	18.8	166
		550	4872	550	4872	1100	9744	C402_0115 MT40			3500		14.3	20.3	179
		486	4303	534	4733	736	6518	C402_0125 MT20	3300		4500		4.6	17.8	157
12.52	651/52	550	4872	600	5315	1100	9744	C402_0125 MT30	3300	2800	4000	12	9.4	19.1	169
		550	4872	600	5315	1100	9744	C402_0125 MT40	3000		3500		13.4	20.5	181
		543	4809	550	4872	822	7285	C402_0140 MT20	3300		4500		4.6	18.5	163
13.99	2015/144	550	4872	550	4872	1100	9744	C402_0140 MT30	3300	2800	4000	12	9.4	19.6	174
		550	4872	550	4872	1100	9744	C402_0140 MT40	3000		3500		13.4	20.7	183
						884	7835	C402_0160 MT20	3300		4500		3.7	19.1	169
15.75	63/4	550	4872	600	5315	1100	9744	C402_0160 MT30	3300	2800	4000	12	8.5	20.0	178
						1100	9744	C402_0160 MT40	3000		3500		12.5	20.9	185
						989	8757	C402_0175 MT20	3300		4500		3.7	19.6	173
17.60	845/48	550	4872	550	4872	1100	9744	C402_0175 MT30	3300	2800	4000	12	8.5	20.4	180
						1100	9744	C402_0175 MT40	3000		3500		12.5	21.1	187
								C402_0210 MT20	3500	3200	5000		2.9	20.2	179
20.90	4347/208	550	4872	600	5315	1100	9744	C402_0210 MT30	3500	3200	4000	12	7.7	20.8	184
								C402_0210 MT40	3000	3000	3500		11.7	21.3	189
								C402_0230 MT20	3500	3200	5000		2.9	20.5	181
23.36	1495/64	550	4872	550	4872	1100	9744	C402_0230 MT30	3500	3200	4000	12	7.7	21.0	186
								C402_0230 MT40	3000	3000	3500		11.7	21.4	190
								C402_0250 MT20	3500	3200	5000		2.5	20.6	183
24.92	324/13	550	4872	600	5315	1100	9744	C402_0250 MT30	3500	3200	4000	12	7.3	21.1	187
								C402_0250 MT40	3000	3000	3500		11.3	21.5	190
								C402_0280 MT20	3500	3200	5000		2.5	20.9	185
27.86	195/7	550	4872	550	4872	1100	9744	C402_0280 MT30	3500	3200	4000	12	7.3	21.2	188
								C402_0280 MT40	3000	3000	3500		11.3	21.5	191
								C402_0310 MT20	3500	3200	5000		2.1	21.0	186
31.15	405/13	550	4872	600	5315	1100	9744	C402_0310 MT30	3500	3200	4000	12	6.9	21.3	189
								C402_0310 MT40	3000	3000	3500		10.9	21.6	191
								C402_0350 MT20	3500	3200	5000		2.1	21.2	188
34.82	975/28	550	4872	550	4872	1100	9744	C402_0350 MT30	3500	3200	4000	12	6.9	21.4	190
								C402_0350 MT40	3000	3000	3500		10.9	21.6	192

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal 1) M2N ≤2000 RPM		Output Torque: Acceleration M2B		Output Torque: Peak 2) M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C402		**Two Stage**						**(continued from previous page)**					**Noise Level ≤ 61 dB(A) 3)**		
41.75	7056/169	550	4872	600	5315	1100	9744	**C402_0420 MT20**	3500	3200	5000		1.8	21.4	189
								C402_0420 MT30	3500	3200	4000	12	6.6	21.5	191
								C402_0420 MT40	3000	3000	3500		10.6	21.7	192
46.67	140/3	550	4872	550	4872	1100	9744	**C402_0470 MT20**	3500	3200	5000		1.7	21.5	190
								C402_0470 MT30	3500	3200	4000	12	6.5	21.6	191
								C402_0470 MT40	3000	3000	3500		10.5	21.7	192
50.19	1305/26	550	4872	600	5315	938	8313	**C402_0500 MT20**	3500	3200	5000	12	1.6	21.5	191
								C402_0500 MT30			4000		6.4	21.6	192
56.10	9425/168	550	4872	550	4872	1049	9292	**C402_0560 MT20**	3500	3200	5000	12	1.6	21.6	191
								C402_0560 MT30			4000		6.4	21.7	192
62.52	8127/130	501	4440	600	5315	1002	8879	**C402_0630 MT20**	3500	3200	5000	12	1.5	21.6	192
								C402_0630 MT30			4000		6.3	21.7	
69.88	559/8	550	4872	550	4872	1100	9744	**C402_0700 MT20**	3500	3200	5000	12	1.5	21.7	192
								C402_0700 MT30			4000		6.3		
C403		**Three Stage**											**Noise Level ≤ 61 dB(A) 3)**		
80.81	42,021/520	550	4872	600	5315	1100	9744	**C403_0810 MT20**	3500	3200	5000	12	1.5	21.7	192
90.32	8671/96	550	4872	550	4872	1100	9744	**C403_0900 MT20**	3500	3200	5000	12	1.5	21.7	192
107.7	754/7	550	4872	550	4872	1100	9744	**C403_1080 MT20**	3500	3200	5000	12	1.5	21.8	193
134.6	1885/14	550	4872	550	4872	1100	9744	**C403_1350 MT20**	3500	3200	5000	12	1.4	21.8	193
180.4	1624/9	550	4872	550	4872	1100	9744	**C403_1800 MT20**	3500	3200	5000	12	1.4	21.8	193
216.9	54,665/252	550	4872	550	4872	1049	9291	**C403_2170 MT20**	3500	3200	5000	12	1.4	21.8	193
270.2	16,211/60	550	4872	550	4872	1100	9744	**C403_2700 MT20**	3500	3200	5000	12	1.4	21.8	193

1) Maximum torque for continuous input RPM - horizontal output position.
2) Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
3) dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] $M_{2N} \leq 2000$ RPM		Output Torque: Acceleration M_{2B}		Output Torque: Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous EL 1,2,3,4	Maximum Input Speed RPM: Continuous EL 5,6	Maximum Input Speed RPM: Cyclic All	Backlash (arcmins) $\Delta\varphi$	Input Inertia J_1 kgcm²	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.							Nm	in.lbs.
C502		**Two Stage**		**(continued next page)**									**Noise Level ≤ 61 dB(A) [3]**		
		182	1613	200	1774	355	3142	**C502_0020 MT30**					36.0	3.3	29
1.976	81/41	284	2514	284	2514	355	3142	**C502_0020 MT40**	2400	2000	3000	14	40.0	5.9	52
		345	3060	542	4804	678	6005	**C502_0020 MT50**					50.0	11.6	103
		207	1834	228	2018	403	3573	**C502_0022 MT30**					33.8	4.0	36
2.247	645/287	323	2859	323	2859	403	3573	**C502_0022 MT40**	2400	2000	3000	14	37.8	7.0	62
		361	3193	609	5395	771	6828	**C502_0022 MT50**					47.8	12.9	114
		226	2000	248	2200	427	3784	**C502_0025 MT30**					27.6	4.6	41
2.450	49/20	342	3027	342	3027	427	3784	**C502_0025 MT40**	2400	2000	3000	14	31.6	7.9	70
		371	3287	627	5553	816	7231	**C502_0025 MT50**					41.6	13.8	122
		257	2275	283	2502	486	4305	**C502_0028 MT30**					26.1	5.6	50
2.787	301/108	387	3431	389	3444	486	4305	**C502_0028 MT40**	2400	2000	3000	14	30.1	9.2	81
		387	3431	654	5797	929	8226	**C502_0028 MT50**					40.1	15.0	133
		284	2512	312	2763	519	4595	**C502_0031 MT30**	2800		3500		21.3	6.5	58
3.077	477/155	400	3546	415	3676	519	4595	**C502_0031 MT40**	2800	2400	3500	14	25.3	10.2	91
		400	3546	415	3676	519	4595	**C502_0031 MT50**	2500		3000		35.3	15.8	140
		323	2858	355	3144	590	5228	**C502_0035 MT30**	2800		3500		20.4	7.7	68
3.501	2279/651	418	3702	472	4183	590	5228	**C502_0035 MT40**	2800	2400	3500	14	24.4	11.6	103
		418	3702	472	4183	590	5228	**C502_0035 MT50**	2500		3000		34.4	16.8	149
		356	3156	392	3472	630	5579	**C502_0039 MT30**	2800		3500		17.0	8.7	77
3.867	58/15	432	3827	504	4463	630	5579	**C502_0039 MT40**	2800	2400	3500	14	21.0	12.6	112
		432	3827	504	4463	630	5579	**C502_0039 MT50**	2500		3000		31.0	17.4	154
		405	3591	446	3950	716	6346	**C502_0044 MT30**	2800		3500		16.4	10.1	89
4.399	2494/567	451	3995	573	5077	716	6346	**C502_0044 MT40**	2800	2400	3500	14	20.4	13.9	123
		451	3995	573	5077	716	6346	**C502_0044 MT50**	2500		3000		30.4	18.2	161
		180	1591	198	1750	282	2496	**C502_0046 MT20**	3100	2700	4000		9.4	8.1	72
4.629	162/35	396	3512	469	4156	727	6439	**C502_0046 MT30**	3100	2700	4000	14	14.2	10.6	94
		459	4063	582	5151	727	6439	**C502_0046 MT40**	3000	2700	3500		18.2	14.4	128
		459	4063	582	5151	727	6439	**C502_0046 MT50**	2500	2500	3000		28.2	18.4	163
		204	1810	225	1990	321	2839	**C502_0053 MT20**	3100	2700	4000		9.0	9.4	83
5.265	258/49	451	3994	534	4727	827	7323	**C502_0053 MT30**	3100	2700	4000	14	13.8	12.0	106
		479	4242	661	5859	827	7323	**C502_0053 MT40**	3000	2700	3500		17.8	15.5	138
		479	4242	661	5859	827	7323	**C502_0053 MT50**	2500	2500	3000		27.8	19.0	168
		227	2011	250	2212	343	3036	**C502_0059 MT20**	3100	2700	4000		7.1	10.5	93
5.850	117/20	429	3804	593	5253	884	7830	**C502_0059 MT30**	3100	2700	4000	14	11.9	13.1	116
		496	4393	707	6264	884	7830	**C502_0059 MT40**	3000	2700	3500		15.9	16.4	145
		496	4393	707	6264	884	7830	**C502_0059 MT50**	2500	2500	3000		25.9	19.4	172
		258	2287	284	2516	390	3453	**C502_0067 MT20**	3100	2700	4000		6.8	11.9	105
6.655	559/84	489	4328	675	5975	1006	8907	**C502_0067 MT30**	3100	2700	4000	14	11.6	14.3	127
		518	4586	800	7086	1006	8907	**C502_0067 MT40**	3000	2700	3500		15.6	17.3	153
		518	4586	800	7086	1006	8907	**C502_0067 MT50**	2500	2500	3000		25.6	19.8	175

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal 1) M2N ≤2000 RPM		Acceleration M2B		Peak 2) M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C502		**Two Stage**						**(continued next page)**					**Noise Level ≤ 61 dB(A) 3)**		
7.763	621/80	272	2405	331	2935	430	3810	C502_0078 MT20	3400	3000	4500	14	5.0	13.5	119
		456	4039	787	6970	1109	9826	C502_0078 MT30	3400	3000	4000		9.8	15.7	139
		545	4828	800	7086	1109	9826	C502_0078 MT40	3000	3000	3500		13.8	18.2	161
		545	4828	800	7086	1109	9826	C502_0078 MT50	2500	2500	3000		23.8	20.1	178
8.263	1537/186	750	6642	838	7419	1393	12,340	C502_0083 MT30	2800	2400	3500	12	16.9	17.0	150
				920	8149	1393	12,340	C502_0083 MT40	2800		3500		20.9	19.6	173
				920	8149	1393	12,340	C502_0083 MT50	2500		3000		30.9	21.6	191
9.261	3445/372	779	6900	850	7529	1561	13,830	C502_0093 MT30	2800	2400	3500	12	16.6	17.9	159
								C502_0093 MT40	2800		3500		20.6	20.1	178
								C502_0093 MT50	2500		3000		30.6	21.8	193
10.38	841/81	800	7086	920	8149	1600	14,173	C502_0105 MT30	2800	2400	3500	12	14.1	18.7	166
								C502_0105 MT40	2800		3500		18.1	20.6	183
								C502_0105 MT50	2500		3000		28.1	22.0	195
11.64	1885/162	800	7086	850	7529	1600	14,173	C502_0115 MT30	2800	2400	3500	12	13.9	19.4	172
								C502_0115 MT40	2800		3500		17.9	21.0	186
								C502_0115 MT50	2500		3000		27.9	22.1	196
12.43	87/7	482	4272	530	4699	757	6703	C502_0125 MT20	3100	2700	4000	12	7.4	18.3	162
		800	7086	920	8149	1600	14,173	C502_0125 MT30	3100	2700	4000		12.2	19.8	175
		800	7086	920	8149	1600	14,173	C502_0125 MT40	3000	2700	3500		16.2	21.2	188
		800	7086	920	8149	1600	14,173	C502_0125 MT50	2500	2500	3000		26.2	22.2	197
13.93	195/14	540	4787	594	5266	848	7512	C502_0140 MT20	3100	2700	4000	12	7.3	19.0	169
		800	7086	850	7529	1600	14,173	C502_0140 MT30	3100	2700	4000		12.1	20.3	180
		800	7086	850	7529	1600	14,173	C502_0140 MT40	3000	2700	3500		16.1	21.5	190
		800	7086	850	7529	1600	14,173	C502_0140 MT50	2500	2500	3000		26.1	22.3	197
15.71	377/24	609	5399	670	5939	920	8151	C502_0155 MT20	3100	2700	4000	12	5.8	19.7	175
		800	7086	920	8149	1600	14,173	C502_0155 MT30	3100	2700	4000		10.6	20.8	184
		800	7086	920	8149	1600	14,173	C502_0155 MT40	3000	2700	3500		14.6	21.7	193
		800	7086	920	8149	1600	14,173	C502_0155 MT50	2500	2500	3000		24.6	22.4	198
17.60	845/48	683	6050	751	6655	1031	9135	C502_0175 MT20	3100	2700	4000	12	5.8	20.3	179
		800	7086	850	7529	1600	14,173	C502_0175 MT30	3100	2700	4000		10.6	21.1	187
		800	7086	850	7529	1600	14,173	C502_0175 MT40	3000	2700	3500		14.6	21.9	194
		800	7086	850	7529	1600	14,173	C502_0175 MT50	2500	2500	3000		24.6	22.4	199
20.84	667/32	729	6458	890	7880	1155	10,229	C502_0210 MT20	3400	3000	4500	12	4.3	20.9	185
		800	7086	920	8149	1600	14,173	C502_0210 MT30	3400	3000	4000		9.1	21.6	191
		800	7086	920	8149	1600	14,173	C502_0210 MT40	3000	3000	3500		13.1	22.1	196
		800	7086	920	8149	1600	14,173	C502_0210 MT50	2500	2500	3000		23.1	22.5	199
23.36	1495/64	800	7086	850	7529	1294	11,464	C502_0230 MT20	3400	3000	4500	12	4.2	21.2	188
						1600	14,173	C502_0230 MT30	3400	3000	4000		9.0	21.8	193
						1600	14,173	C502_0230 MT40	3000	3000	3500		13.0	22.2	197
						1600	14,173	C502_0230 MT50	2500	2500	3000		23.0	22.5	200

1) Maximum torque for continuous input RPM - horizontal output position.
2) Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
3) dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] M_{2N} ≤2000 RPM		Acceleration M_{2B}		Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous EL 1,2,3,4	Continuous EL 5,6	Cyclic All	Backlash (arcmins) $\Delta\varphi$	Input Inertia J_1 kgcm²	Torsional Stiffness C_2 (per arcmin) Nm	Torsional Stiffness C_2 (per arcmin) in.lbs.
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.								
C502		**Two Stage**						**(continued from previous page)**						**Noise Level ≤ 61 dB(A) [3]**	
25.07	2407/96	741	6561	920	8149	1332	11,796	C502_0250 MT20	3400	3000	4500	12	3.5	21.4	190
		800	7086			1600	14,173	C502_0250 MT30	3400	3000	4000		8.3	21.9	194
		800	7086			1600	14,173	C502_0250 MT40	3000	3000	3500		12.3	22.3	198
		800	7086			1600	14,173	C502_0250 MT50	2500	2500	3000		22.3	22.6	200
28.10	5395/192	800	7086	850	7529	1492	13,219	C502_0280 MT20	3400	3000	4500	12	3.5	21.7	192
						1600	14,173	C502_0280 MT30	3400	3000	4000		8.3	22.1	195
						1600	14,173	C502_0280 MT40	3000	3000	3500		12.3	22.4	198
						1600	14,173	C502_0280 MT50	2500	2500	3000		22.3	22.6	200
31.23	406/13	761	6739	920	8149	1581	14,001	C502_0310 MT20	3400		4500	12	2.8	21.9	194
		800	7086					C502_0310 MT30	3400	3000	4000		7.6	22.2	196
		800	7086					C502_0310 MT40	3000		3500		11.6	22.4	199
35.00	35/1	800	7086	850	7529	1600	14,173	C502_0350 MT20	3400		4500	12	2.8	22.0	195
								C502_0350 MT30	3400	3000	4000		7.6	22.3	197
								C502_0350 MT40	3000		3500		11.6	22.5	199
41.69	667/16	792	7014	920	8149	1600	14,173	C502_0420 MT20	3400		4500	12	2.2	22.2	197
		800	7086					C502_0420 MT30	3400	3000	4000		7.0	22.4	198
		800	7086					C502_0420 MT40	3000		3500		11.0	22.5	200
46.72	1495/32	800	7086	850	7529	1600	14,173	C502_0470 MT20	3400		4500	12	2.2	22.3	198
								C502_0470 MT30	3400	3000	4000		7.0	22.5	199
								C502_0470 MT40	3000		3500		11.0	22.6	200
49.82	1943/39	800	7086	920	8149	1600	14,173	C502_0500 MT20	3400		4500	12	1.9	22.4	198
								C502_0500 MT30	3400	3000	4000		6.7	22.5	199
								C502_0500 MT40	3000		3500		10.7	22.6	200
55.83	335/6	800	7086	850	7529	1600	14,173	C502_0560 MT20	3400		4500	12	1.9	22.4	199
								C502_0560 MT30	3400	3000	4000		6.7	22.5	200
								C502_0560 MT40	3000		3500		10.7	22.6	200
62.43	4495/72	714	6325	857	7590	1153	10,212	C502_0620 MT20	3400	3000	4500	12	1.7	22.5	199
								C502_0620 MT30			4000		6.5	22.6	200
69.97	10075/144	800	7086	850	7529	1292	11,444	C502_0700 MT20	3400	3000	4500	12	1.7	22.5	199
								C502_0700 MT30			4000		6.5	22.6	200
C503		**Three Stage**												**Noise Level ≤ 61 dB(A) [3]**	
80.60	19,343/240	800	7086	920	8149	1155	10,228	C503_0810 MT20	3400	3000	4500	12	1.6	22.6	200
90.32	8671/96	800	7086	850	7529	1294	11,463	C503_0900 MT20	3400	3000	4500	12	1.6	22.6	200
108.6	31,291/288	800	7086	850	7529	1492	13,218	C503_1090 MT20	3400	3000	4500	12	1.5	22.6	200
135.3	406/3	800	7086	850	7529	1600	14,173	C503_1350 MT20	3400	3000	4500	12	1.5	22.6	201
180.6	8671/48	800	7086	850	7529	1600	14,173	C503_1810 MT20	3400	3000	4500	12	1.4	22.7	201
215.9	1943/9	800	7086	850	7529	1600	14,173	C503_2160 MT20	3400	3000	4500	12	1.4	22.7	201
270.5	58,435/216	800	7086	850	7529	1292	11,443	C503_2710 MT20	3400	3000	4500	12	1.4	22.7	201

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal [1] M2N ≤2000 RPM		Acceleration M2B		Peak [2] M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C612		**Two Stage (continued next page)**											**Noise Level ≤ 61 dB(A) [3]**		
		386	3415	424	3757	771	6831	C612_0042 MT30					52.9	14.0	124
4.184	2745/656	623	5522	623	5522	779	6902	C612_0042 MT40	2300	1900	2800	10	56.9	24.5	217
		823	7293	1191	10,552	1489	13,190	C612_0042 MT50					66.9	45.0	398
		468	4149	515	4564	920	8147	C612_0051 MT30					42.1	19.0	168
5.083	61/12	736	6518	736	6518	920	8147	C612_0051 MT40	2300	1900	2800	10	46.1	31.3	277
		878	7782	1406	12,455	1758	15,569	C612_0051 MT50					56.1	51.5	456
		601	5320	661	5852	1136	10,064	C612_0065 MT30	2700		3300		31.7	26.8	238
6.518	3233/496	909	8051	909	8051	1136	10,064	C612_0065 MT40	2700	2300	3300	10	35.7	40.4	358
		954	8454	1612	14,282	2171	19,232	C612_0065 MT50	2500		3000		45.7	58.5	518
		655	5804	721	6385	1287	11,398	C612_0071 MT30					38.4	29.9	265
7.111	64/9	983	8703	1029	9118	1287	11,398	C612_0071 MT40	2300	1900	2800	10	42.4	43.6	386
		983	8703	1380	12,224	2459	21,780	C612_0071 MT50					52.4	60.6	536
		755	6685	830	7354	1379	12,217	C612_0082 MT30	2700		3300		25.0	35.0	310
8.190	1769/216	1030	9123	1103	9773	1379	12,217	C612_0082 MT40	2700	2300	3300	10	29.0	48.5	430
		1030	9123	1650	14,616	2635	23,344	C612_0082 MT50	2500		3000		39.0	63.4	562
		840	7443	924	8187	1589	14,079	C612_0091 MT30	2700		3300		29.4	39.0	346
9.118	848/93	1067	9455	1272	11,263	1589	14,079	C612_0091 MT40	2700	2300	3300	10	33.4	52.0	460
		1067	9455	1380	12,224	2600	23,031	C612_0091 MT50	2500		3000		43.4	65.3	578
		932	8253	1025	9079	1636	14,489	C612_0100 MT30	3000	2600	3500		20.7	42.8	379
10.11	3721/368	1105	9787	1309	11,592	1636	14,489	C612_0100 MT40	3000	2600	3500	10	24.7	55.1	488
		1105	9787	1650	14,616	2900	25,688	C612_0100 MT50	2500	2500	3000		34.7	66.8	591
		1056	9352	1161	10,287	1929	17,090	C612_0115 MT30	2700		3300		23.6	47.2	418
11.46	928/81	1152	10,203	1380	12,224	1929	17,090	C612_0115 MT40	2700	2300	3300	10	27.6	58.4	517
		1152	10,203	1380	12,224	2600	23,031	C612_0115 MT50	2500		3000		37.6	68.3	605
		1026	9091	1275	11,296	1952	17,288	C612_0125 MT30	3000	2600	3500		16.7	50.3	446
12.58	2013/160	1188	10,526	1561	13,830	1952	17,288	C612_0125 MT40	3000	2600	3500	10	20.7	60.6	537
		1188	10,526	1650	14,616	2900	25,688	C612_0125 MT50	2500	2500	3000		30.7	69.2	613
						2288	20,270	C612_0140 MT30	3000	2600	3500		19.7	54.0	478
14.15	976/69	1236	10,945	1380	12,224	2288	20,270	C612_0140 MT40	3000	2600	3500	10	23.7	63.0	558
						2600	23,031	C612_0140 MT50	2500	2500	3000		33.7	70.2	622
		1088	9634	1642	14,549	2394	21,206	C612_0160 MT30	3200	2900	4000		13.3	57.7	511
16.20	1037/64	1293	11,452	1650	14,616	2394	21,206	C612_0160 MT40	3000	2900	3500	10	17.3	65.3	579
		1293	11,452	1650	14,616	2900	25,688	C612_0160 MT50	2500	2500	3000		27.3	71.1	630
								C612_0175 MT30	3000	2600	3500		16.1	59.7	529
17.60	88/5	1300	11,515	1380	12,224	2600	23,031	C612_0175 MT40	3000	2600	3500	10	20.1	66.6	590
								C612_0175 MT50	2500	2500	3000		30.1	71.6	634
		1120	9917					C612_0195 MT30	3200	2900	4000		11.4	62.1	550
19.61	549/28	1378	12,204	1650	14,616	2782	24,644	C612_0195 MT40	3000	2900	3500	10	15.4	67.9	602
		1378	12,204					C612_0195 MT50	2500	2500	3000		25.4	72.0	638
								C612_0230 MT30	3200	2900	4000		12.9	64.7	573
22.67	68/3	1300	11,515	1380	12,224	2600	23,031	C612_0230 MT40	3000	2900	3500	10	16.9	69.4	615
								C612_0230 MT50	2500	2500	3000		26.9	72.6	643

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] M_{2N} ≤2000 RPM		Acceleration M_{2B}		Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous EL 1,2,3,4	Continuous EL 5,6	Cyclic All	Backlash (arcmins) $\Delta\varphi$	Input Inertia J_1 kgcm²	Torsional Stiffness C_2 (per arcmin) Nm	Torsional Stiffness C_2 (per arcmin) in.lbs.
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.								
C612		**Two Stage**						**(continued from previous page)**					**Noise Level ≤ 61 dB(A) [3]**		
		1157	10,244					C612_0250 MT30	3200	2900	4000		9.7	66.2	586
24.93	5185/208	1450	12,844	1650	14,616	2900	25,688	C612_0250 MT40	3000	2900	3500	10	13.7	70.2	622
		1450	12,844					C612_0250 MT50	2500	2500	3000		23.7	72.8	645
								C612_0270 MT30	3200	2900	4000		11.2	67.5	598
27.43	192/7	1300	11,515	1380	12,224	2600	23,031	C612_0270 MT40	3000	2900	3500	10	15.2	70.8	627
								C612_0270 MT50	2500	2500	3000		25.2	73.1	647
		1206	10,679					C612_0320 MT30	3200	2900	4000		8.4	69.2	613
32.41	1037/32	1450	12,844	1650	14,616	2900	25,688	C612_0320 MT40	3000	2900	3500	10	12.4	71.8	636
		1450	12,844					C612_0320 MT50	2500	2500	3000		22.4	73.4	650
								C612_0350 MT30	3200	2900	4000		9.5	69.9	619
34.87	1360/39	1300	11,515	1380	12,224	2600	23,031	C612_0350 MT40	3000	2900	3500	10	13.5	72.1	638
								C612_0350 MT50	2500	2500	3000		23.5	73.5	651
39.40	1891/48	1221	10,812	1465	12,975	1860	16,479	C612_0390 MT30	3200	2900	4000	10	7.7	70.8	627
								C612_0390 MT40	3000	2900	3500		11.7	72.5	642
								C612_0450 MT30	3200	2900	4000		8.3	71.6	634
45.33	136/3	1300	11,515	1380	12,224	2600	23,031	C612_0450 MT40	3000	2900	3500	10	12.3	72.9	646
								C612_0450 MT50	2500	2500	3000		22.3	73.8	653
55.11	496/9	1300	11,515	1380	12,224	2600	23,031	C612_0550 MT30	3200	2900	4000	10	7.6	72.4	641
								C612_0550 MT40	3000		3500		11.6	73.3	649
68.89	620/9	1300	11,515	1380	12,224	2600	23,031	C612_0690 MT30	3200	2900	4000	10	7.1	73.0	647
								C612_0690 MT40	3000	2	3500		11.1	73.6	652
C613		**Three Stage**											**Noise Level ≤ 61 dB(A) [3]**		
49.28	31,537/640	1432	12,688	1561	13,829	1952	17,287	C613_0490 MT30	3200	2900	4000	10	7.2	72.0	637
63.46	48,739/768	1450	12,844	1650	14,616	2394	21,204	C613_0630 MT30	3200	2900	4000	10	6.9	72.8	645
75.81	5307/70	863	7643	863	7643	1079	9554	C613_0760 MT20	3200	2900	4000	10	1.7	72.6	643
76.80	8601/112	1450	12,844	1650	14,616	2782	24,642	C613_0770 MT30	3200	2900	4000	10	6.8	73.2	649
87.64	3944/45	1039	9200	1039	9200	1298	11,500	C613_0880 MT20	3200	2900	4000	10	1.8	73.0	647
88.78	799/9	1300	11,515	1380	12,224	2600	23,031	C613_0890 MT30	3200	2900	4000	10	6.9	73.5	651
97.63	243,695/2496	1450	12,844	1650	14,616	2900	25,688	C613_0980 MT30	3200	2900	4000	10	6.7	73.6	652
106.1	3712/35	1207	10,692	1207	10,692	1509	13,365	C613_1060 MT20	3200	2900	4000	10	1.7	73.4	650
107.4	752/7	1300	11,515	1380	12,224	2600	23,031	C613_1070 MT30	3200	2900	4000	10	6.8	73.7	653
126.9	48,739/384	1450	12,844	1650	14,616	2900	25,688	C613_1270 MT30	3200	2900	4000	10	6.6	73.8	654
134.8	15,776/117	1300	11,515	1380	12,224	1821	16,132	C613_1350 MT20	3200	2900	4000	10	1.6	73.7	653
136.6	15,980/117	1300	11,515	1380	12,224	2600	23,031	C613_1370 MT30	3200	2900	4000	10	6.7	73.9	654
175.3	7888/45	1300	11,515	1380	12,224	2240	19,846	C613_1750 MT20	3200	2900	4000	10	1.5	73.9	655
177.6	1598/9	1300	11,515	1380	12,224	2600	23,031	C613_1780 MT30	3200	2900	4000	10	6.6	74.0	656
213.1	28,768/135	1300	11,515	1380	12,224	2600	23,031	C613_2130 MT20	3200	2900	4000	10	1.5	74.0	655
266.4	7192/27	1300	11,515	1380	12,224	2600	23,031	C613_2660 MT20	3200	2900	4000	10	1.4	74.1	656

[1] Maximum torque for continuous input RPM - horizontal output position.

[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)

[3] dB)(A) measured at 1 meter distance with 2000 RPM input.

** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal 1) M2N ≤2000 RPM		Acceleration M2B		Peak 2) M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J1 kgcm²	Nm	in.lbs.
C712		**Two Stage**		**(continued next page)**									**Noise Level ≤ 67 dB(A) 3)**		
		392	3476	432	3824	785	6953	C712_0043 MT30					101.8	15.7	139
4.259	477/112	666	5899	666	5899	832	7374	C712_0043 MT40	2200	1900	2600	10	105.8	28.9	256
		1273	11,272	1273	11,272	1591	14,090	C712_0043 MT50					115.8	60.1	532
		489	4335	538	4769	979	8670	C712_0053 MT30					77.3	22.7	201
5.311	1827/344	804	7120	804	7120	1005	8900	C712_0053 MT40	2200	1900	2600	10	81.3	39.8	352
		1475	13,070	1536	13,605	1920	17,006	C712_0053 MT50					91.3	73.4	650
		628	5560	690	6116	1241	10,992	C712_0068 MT30	2600		3100		57.4	33.4	296
6.811	252/37	993	8794	993	8794	1241	10,992	C712_0068 MT40	2600	2300	3100	10	61.4	54.1	479
		1603	14,200	1897	16,804	2371	21,005	C712_0068 MT50	2500		3000		71.4	87.0	771
		678	6005	746	6606	1356	12,011	C712_0074 MT30					70.9	37.2	330
7.357	3480/473	1113	9862	1113	9862	1392	12,328	C712_0074 MT40	2200	1900	2600	10	74.9	58.7	520
		1645	14,569	2128	18,846	2659	23,557	C712_0074 MT50					84.9	90.8	804
		782	6930	861	7623	1492	13,214	C712_0085 MT30	2600		3100		44.2	45.0	399
8.490	4347/512	1193	10,571	1193	10,571	1492	13,214	C712_0085 MT40	2600	2300	3100	10	48.2	67.5	598
		1725	15,282	2280	20,200	2850	25,250	C712_0085 MT50	2500		3000		58.2	97.0	859
		869	7701	956	8472	1719	15,227	C712_0094 MT30	2600		3100		53.4	51.2	454
9.435	3840/407	1375	12,182	1375	12,182	1719	15,227	C712_0094 MT40	2600	2300	3100	10	57.4	73.7	653
		1787	15,829	2300	20,373	3285	29,097	C712_0094 MT50	2500		3000		67.4	100.9	894
		913	8091	1005	8900	1699	15,052	C712_0099 MT30	2900	2600	3400		37.5	54.2	480
9.912	4599/464	1359	12,041	1359	12,041	1699	15,052	C712_0099 MT40	2900	2600	3400	10	41.5	76.6	678
		1817	16,091	2598	23,010	3247	28,762	C712_0099 MT50	2500	2500	3000		51.5	102.6	909
		1084	9600	1192	10,560	2066	18,304	C712_0120 MT30	2600		3100		41.7	64.6	572
11.76	1035/88	1653	14,644	1653	14,644	2066	18,304	C712_0120 MT40	2600	2300	3100	10	45.7	85.9	761
		1923	17,035	2300	20,373	3949	34,978	C712_0120 MT50	2500		3000		55.7	107.6	953
		1215	10,760	1336	11,836	2133	18,890	C712_0130 MT30	2900	2600	3400		27.6	71.4	633
13.18	4851/368	1706	15,112	1706	15,112	2133	18,890	C712_0130 MT40	2900	2600	3400	10	31.6	91.4	810
		1998	17,696	2760	24,448	4075	36,097	C712_0130 MT50	2500	2500	3000		41.6	110.3	977
		1265	11,207	1392	12,328	2354	20,850	C712_0135 MT30	2900	2600	3400		35.6	73.8	654
13.73	4380/319	1883	16,680	1883	16,680	2354	20,850	C712_0135 MT40	2900	2600	3400	10	39.6	93.3	826
		2000	17,716	2300	20,373	4000	35,432	C712_0135 MT50	2500	2500	3000		49.6	111.1	984
		1365	12,091	1696	15,025	2596	22,994	C712_0165 MT30	3100	2900	3600		21.1	84.8	751
16.73	1071/64	2077	18,395	2077	18,395	2596	22,994	C712_0165 MT40	3000	2900	3500	10	25.1	101.1	895
		2163	19,160	2760	24,448	4800	42,518	C712_0165 MT50	2500	2500	3000		35.1	114.5	1014
		1683	14,906	1851	16,396	2954	26,169	C712_0185 MT30	2900	2600	3400		26.5	89.2	790
18.26	420/23	2000	17,716	2300	20,373	2954	26,169	C712_0185 MT40	2900	2600	3400	10	30.5	103.9	921
		2000	17,716	2300	20,373	4000	35,432	C712_0185 MT50	2500	2500	3000		40.5	115.7	1025
		1388	12,291	2095	18,561	3054	27,054	C712_0210 MT30	3100	2900	3600		16.9	94.8	840
20.67	1323/64	2321	20,559	2443	21,643	3054	27,054	C712_0210 MT40	3000	2900	3500	10	20.9	107.5	952
		2321	20,559	2760	24,448	4800	42,518	C712_0210 MT50	2500	2500	3000		30.9	117.0	1037
		1891	16,751	2300	20,373	3596	31,854	C712_0230 MT30	3100	2900	3600		20.4	99.4	880
23.18	255/11	2000	17,716	2300	20,373	3596	31,854	C712_0230 MT40	3000	2900	3500	10	24.4	110.2	976
		2000	17,716	2300	20,373	4000	35,432	C712_0230 MT50	2500	2500	3000		34.4	118.1	1046

1) Maximum torque for continuous input RPM - horizontal output position.
2) Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
3) dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] $M_{2N} \leq 2000$ RPM		Acceleration M_{2B}		Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous EL 1,2,3,4	Continuous EL 5,6	Cyclic All	Backlash (arcmins) $\Delta\varphi$	Input Inertia J_1 kgcm²	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.							Nm	in.lbs.
C712		**Two Stage** (continued from previous page)												**Noise Level ≤ 67 dB(A) [3]**	
		1445	12,803	2566	22,728			C712_0250 MT30	3100	2900	3600		13.8	102.4	907
25.31	405/16	2400	21,259	2760	24,448	3592	31,815	C712_0250 MT40	3000	2900	3500	10	17.8	112.0	992
		2400	21,259	2760	24,448			C712_0250 MT50	2500	2500	3000		27.8	118.7	1051
		1922	17,027					C712_0290 MT30	3100	2900	3600		16.5	106.2	941
28.64	315/11	2000	17,716	2300	20,373	4000	35,432	C712_0290 MT40	3000	2900	3500	10	20.5	114.0	1010
		2000	17,716					C712_0290 MT50	2500	2500	3000		30.5	119.4	1058
		1489	13,188					C712_0340 MT30	3100	2900	3600		10.9	110.3	977
33.80	2163/64	2400	21,259	2760	24,448	4494	39,811	C712_0340 MT40	3000	2900	3500	10	14.9	116.2	1029
		2400	21,259					C712_0340 MT50	2500	2500	3000		24.9	120.2	1065
								C712_0350 MT30	3100	2900	3600		13.6	111.0	983
35.07	2700/77	2000	17,716	2300	20,373	4000	35,432	C712_0350 MT40	3000	2900	3500	10	17.6	116.6	1033
								C712_0350 MT50	2500	2500	3000		27.6	120.3	1066
		1526	13,517					C712_0410 MT30	3100	2900	3600		9.5	113.8	1008
41.02	2625/64	2095	18,554	2514	22,265	4189	37,108	C712_0410 MT40	3000	2900	3500	10	13.5	118.1	1046
		2095	18,554					C712_0410 MT50	2500	2500	3000		23.5	120.8	1070
								C712_0470 MT30	3100	2900	3600		10.7	115.7	1024
46.82	515/11	2000	17,716	2300	20,373	4000	35,432	C712_0470 MT40	3000	2900	3500	10	14.7	119.0	1054
								C712_0470 MT50	2500	2500	3000		24.7	121.1	1073
								C712_0570 MT30	3100	2900	3600		9.4	117.7	1042
56.82	625/11	2000	17,716	2300	20,373	4000	35,432	C712_0570 MT40	3000	2900	3500	10	13.4	120.0	1063
								C712_0570 MT50	2500	2500	3000		23.4	121.5	1076
69.55	765/11	2000	17,716	2300	20,373	3284	29,091	C712_0700 MT30	3100	2900	3600	10	8.3	119.1	1055
								C712_0700 MT40	3000		3500		12.3	120.7	1069
C713		**Three Stage**												**Noise Level ≤ 67 dB(A) [3]**	
50.85	18711/368	2400	21,259	2760	24,448	4075	36,099	C713_0510 MT40	3000	2900	3500	10	13.1	119.5	1058
64.55	4131/64	2400	21,259	2760	24,448	4800	42,518	C713_0650 MT40	3000	2900	3500	10	12.6	120.5	1067
79.73	5103/64	2400	21,259	2760	24,448	4800	42,518	C713_0800 MT40	3000	2900	3500	10	12.4	121.1	1072
80.97	20,727/256	1975	17,492	2443	21,642	3054	27,052	C713_0810 MT30	3100	2900	3600	10	7.2	119.9	1062
89.42	6885/77	2000	17,716	2300	20,373	4000	35,432	C713_0890 MT40	3000	2900	3500	10	12.6	121.3	1074
97.63	10,935/112	2400	21,259	2760	24,448	3592	31,816	C713_0980 MT40	3000	2900	3500	10	12.2	121.4	1076
99.14	6345/64	2090	18,518	2760	24,448	3591	31,812	C713_0990 MT30	3100	2900	3600	10	7.0	120.7	1069
110.5	1215/11	2000	17,716	2300	20,373	4000	35,432	C713_1100 MT40	3000	2900	3500	10	12.3	121.6	1077
130.4	8343/64	2400	21,259	2760	24,448	4494	39,812	C713_1300 MT40	3000	2900	3500	10	12.0	121.8	1078
132.4	33,887/256	2210	19,575	2760	24,448	4494	39,807	C713_1320 MT30	3100	2900	3600	10	6.8	121.3	1075
135.3	72,900/539	2000	17,716	2300	20,373	4000	35,432	C713_1350 MT40	3000	2900	3500	10	12.1	121.8	1079
137.3	10575/77	2000	17,716	2300	20,373	4000	35,432	C713_1370 MT30	3100	2900	3600	10	7.0	121.4	1075
180.6	13,905/77	2000	17,716	2300	20,373	4000	35,432	C713_1810 MT40	3000	2900	3500	10	11.9	122.0	1080
183.4	24,205/132	2000	17,716	2300	20,373	4000	35,432	C713_1830 MT30	3100	2900	3600	10	6.8	121.7	1078
219.2	16875/77	2000	17,716	2300	20,373	4000	35,432	C713_2190 MT40	3000	2900	3500	10	11.9	122.0	1081
222.5	29,375/132	2000	17,716	2300	20,373	4000	35,432	C713_2230 MT30	3100	2900	3600	10	6.7	121.9	1079

[1] Maximum torque for continuous input RPM - horizontal output position.
[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
[3] dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal [1] $M_{2N} \leq 2000$ RPM		Output Torque: Acceleration M_{2B}		Output Torque: Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	$\Delta\varphi$	J_1 kgcm²	Nm	in.lbs.
C812		**Two Stage**												**Noise Level ≤ 67 dB(A) [3]**	
4.225	1711/405	1327	11,756	1327	11,756	1659	14,695	C812_0042 MT50	2100	1800	2500	10	264.3	64.7	573
5.387	1239/230	1632	14,454	1632	14,454	2040	18,067	C812_0054 MT50	2100	1800	2500	10	195.5	82.2	728
6.670	767/115	1962	17,377	1962	17,377	2452	21,721	C812_0067 MT50	2500	2200	2800	10	151.9	96.9	858
7.304	168/23	2212	19,597	2212	19,597	2765	24,496	C812_0073 MT50	2100	1800	2500	10	179.0	128.4	1138
8.472	1652/195	2391	21,179	2391	21,179	2989	26,474	C812_0085 MT50	2500	2200	2800	10	113.4	111.0	983
9.043	208/23	2660	23,559	2660	23,559	3325	29,448	C812_0090 MT50	2500	2200	2800	10	141.2	147.3	1305
10.15	944/93	2776	24,585	2776	24,585	3469	30,732	C812_0100 MT50	2500	2400	3000	10	93.8	119.6	1059
11.49	448/39	3100	27,458	3242	28,716	4052	35,895	C812_0115 MT50	2500	2200	2800	10	106.8	164.7	1458
12.75	5546/435	1748	15,488	1748	15,488	2186	19,360	C812_0125 MT40	2700	2400	3200	10	63.5	101.8	902
		3209	28,429	3341	29,596	4176	36,994	C812_0125 MT50	2500		3000		73.5	127.9	1133
13.76	1280/93	3292	29,164	3763	33,334	4704	41,667	C812_0140 MT50	2500	2400	3000	10	89.2	174.8	1548
17.10	1180/69	2213	19,605	2213	19,605	2767	24,506	C812_0170 MT40	2900	2700	3400	10	45.2	117.5	1041
		3540	31,353	4229	37,463	5287	46,829	C812_0170 MT50	2500	2500	3000		55.2	135.1	1197
17.29	1504/87	2371	21,001	2371	21,001	2964	26,251	C812_0175 MT40	2700	2400	3200	10	60.6	153.6	1360
		3552	31,466	4140	36,672	5663	50,163	C812_0175 MT50	2500		3000		70.6	184.4	1633
20.26	6077/300	2532	22,426	2532	22,426	3165	28,032	C812_0200 MT40	2900	2700	3400	10	37.1	124.4	1102
		3745	33,174	4800	42,518	6047	53,566	C812_0200 MT50	2500	2500	3000		47.1	137.9	1222
23.19	1600/69	3001	26,583	3001	26,583	3751	33,229	C812_0230 MT40	2900	2700	3400	10	43.6	172.4	1527
		3600	31,889	4140	36,672	7168	63,497	C812_0230 MT50	2500	2500	3000		53.6	192.4	1705
26.06	3127/120	3066	27,158	3080	27,283	3850	34,103	C812_0260 MT40	2900	2700	3400	10	28.3	131.9	1169
		4073	36,079	4800	42,518	7357	65,167	C812_0260 MT50	2500	2500	3000		38.3	140.8	1247
27.47	412/15	3433	30,408	3433	30,408	4291	38,010	C812_0270 MT40	2900	2700	3400	10	35.9	180.3	1597
		3600	31,889	4140	36,672	7200	63,778	C812_0270 MT50	2500	2500	3000		45.9	195.5	1732
33.59	2183/65	3163	28,022	3755	33,261	4694	41,577	C812_0340 MT40	2900	2700	3400	10	22.1	137.0	1213
		4200	37,204	4800	42,518	8400	74,407	C812_0340 MT50	2500	2500	3000		32.1	142.6	1263
35.33	106/3	3600	31,889	4140	36,672	5220	46,242	C812_0350 MT40	2900	2700	3400	10	27.6	188.9	1673
						7200	63,778	C812_0350 MT50	2500	2500	3000		37.6	198.7	1760
39.94	2596/65	3248	28,769	4304	38,126	5380	47,658	C812_0400 MT40	2900	2700	3400	10	18.9	139.4	1234
		3785	33,527					C812_0400 MT50	2500	2500	3000		28.9	143.4	1271
45.54	592/13	3600	31,889	4140	36,672	6364	56,374	C812_0460 MT40	2900	2700	3400	10	21.7	194.5	1723
						7200	63,778	C812_0460 MT50	2500	2500	3000		31.7	200.6	1777
54.15	704/13	3600	31,889	4140	36,672	7200	63,778	C812_0540 MT40	2900	2700	3400	10	18.6	197.1	1746
								C812_0540 MT50	2500	2500	3000		28.6	201.5	1785
68.89	620/9	3600	31,889	4140	36,672	7200	63,778	C812_0690 MT40	2900	2700	3400	10	15.6	199.5	1767
								C812_0690 MT50	2500	2500	3000		25.6	202.3	1792

[1] *Maximum torque for continuous input RPM - horizontal output position.*
[2] *Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)*
[3] *dB)(A) measured at 1 meter distance with 2000 RPM input.*
* *Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Selection Data

Reducer Ratio (i)		Output Torque: Nominal [1] M_{2N} ≤2000 RPM		Output Torque: Acceleration M_{2B}		Output Torque: Peak [2] M_{2PEAK}		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous		Maximum Input Speed RPM: Cyclic	Backlash (arcmins)	Input Inertia	Torsional Stiffness C_2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.		EL 1,2,3,4	EL 5,6	All	Δφ	J_1 kgcm²	Nm	in.lbs.
C813		**Three Stage**												**Noise Level ≤ 61 dB(A) [3]**	
49.18	49,914/1015	3341	29,597	3341	29,597	4177	36,997	C813_0490 MT40	2900	2700	3400	10	15.2	195.7	1734
65.96	10,620/161	3718	32,936	4230	37,466	5287	46,832	C813_0660 MT40	2900	2700	3400	10	14.0	199.2	1764
78.13	54,693/700	3884	34,401	4800	42,518	6047	53,567	C813_0780 MT40	2900	2700	3400	10	13.4	200.4	1775
79.34	285,619/3600	2365	20,953	2531	22,424	3164	28,029	C813_0790 MT30	2900	2700	3400	10	8.3	197.2	1747
89.44	14,400/161	3600	31,889	4140	36,672	7169	63,501	C813_0890 MT40	2900	2700	3400	10	13.9	201.2	1782
90.82	18,800/207	2812	24,905	3001	26,582	3751	33,227	C813_0910 MT30	2900	2700	3400	10	8.7	198.7	1760
100.5	28,143/280	4087	36,202	4800	42,518	7357	65,171	C813_1010 MT40	2900	2700	3400	10	12.9	201.7	1786
105.9	3708/35	3600	31,889	4140	36,672	7200	63,778	C813_1060 MT40	2900	2700	3400	10	13.4	201.9	1788
107.6	4841/45	3207	28,411	3432	30,405	4291	38,006	C813_1080 MT30	2900	2700	3400	10	8.2	200.1	1772
129.5	58,941/455	4200	37,204	4800	42,518	8400	74,407	C813_1300 MT40	2900	2700	3400	10	12.4	202.4	1793
136.3	954/7	3600	31,889	4140	36,672	7200	63,778	C813_1360 MT40	2900	2700	3400	10	12.8	202.6	1794
138.4	2491/18	3375	29,899	4140	36,672	5220	46,238	C813_1380 MT30	2900	2700	3400	10	7.6	201.5	1784
175.6	15,984/91	3600	31,889	4140	36,672	7200	63,778	C813_1760 MT40	2900	2700	3400	10	12.4	203.0	1798
178.4	6956/39	3561	31,543	4140	36,672	6364	56,370	C813_1780 MT30	2900	2700	3400	10	7.3	202.3	1792
208.9	19,008/91	3600	31,889	4140	36,672	7200	63,778	C813_2090 MT40	2900	2700	3400	10	12.2	203.2	1800
212.1	8272/39	3600	31,889	4140	36,672	7200	63,778	C813_2120 MT30	2900	2700	3400	10	7.1	202.7	1795
265.7	1860/7	3600	31,889	4140	36,672	7200	63,778	C813_2660 MT40	2900	2700	3400	10	12.0	203.3	1801
269.8	7285/27	3600	31,889	4140	36,672	7200	63,778	C813_2700 MT30	2900	2700	3400	10	6.9	203.0	1799

[1] Maximum torque for continuous input RPM - horizontal output position.

[2] Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)

[3] dB)(A) measured at 1 meter distance with 2000 RPM input.

** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

C Series: INLINE – Solid Shaft Output

Reducer Ratio (i)		Output Torque: Nominal 1) M2N ≤2000 RPM		Acceleration M2B		Peak 2) M2PEAK		Part Number* (Gearhead + Input)	Maximum Input Speed RPM: Continuous EL 1,2,3,4	Continuous EL 5,6	Cyclic All	Backlash (arcmins) Δφ	Input Inertia J1 kgcm²	Torsional Stiffness C2 (per arcmin)	
Nom.	Exact	Nm	in.lbs.	Nm	in.lbs.	Nm	in.lbs.							Nm	in.lbs.
C912		**Two Stage**												**Noise Level ≤ 73 dB(A) 3)**	
16.5	5795/352	4258	37,713	4258	37,713	5322	47,141	C912_0165 MT50	2500	2500	3000	10	101.5	228.0	2020
20.2	2257/112	4999	44,280	4999	44,280	6249	55,349	C912_0200 MT50	2500	2500	3000	10	79.6	238.2	2110
23.4	6175/264	6000	53,148	6049	53,581	7561	66,977	C912_0230 MT50	2500	2500	3000	10	96.8	353.8	3134
25.3	6893/272	5985	53,014	5985	53,014	7481	66,268	C912_0250 MT50	2500	2500	3000	10	61.5	246.4	2183
28.6	2405/84	6000	53,148	6500	57,577	8878	78,638	C912_0290 MT50	2500	2500	3000	10	76.4	365.8	3240
32.1	3599/112	6300	55,803	7203	63,801	9003	79,751	C912_0320 MT50	2500	2500	3000	10	48.0	252.0	2232
36.0	7345/204	6000	53,148	6500	57,577	10,629	94,151	C912_0360 MT50	2500	2500	3000	10	59.6	375.3	3324
39.3	4087/104	6009	53,230	7211	63,876	10,495	92,963	C912_0390 MT50	2500	2500	3000	10	39.9	255.2	2260
45.7	3835/84	6000	53,148	6500	57,577	12,000	106,296	C912_0460 MT50	2500	2500	3000	10	46.8	381.7	3381
55.8	335/6	6000	53,148	6500	57,577	12,000	106,296	C912_0560 MT50	2500	2500	3000	10	39.0	385.3	3413
70.0	10,075/144	6000	53,148	6500	57,577	9304	82,414	C912_0700 MT50	2500	2500	3000	10	32.8	387.9	3436
C913		**Three Stage**												**Noise Level ≤ 73 dB(A) 3)**	
77.7	60,939/784	4429	39,232	4999	44,280	6249	55,351	C913_0780 MT40	2800	2600	3200	10	15.8	380.9	3374
90.2	55,575/616	5973	52,907	6049	53,584	7561	66,979	C913_0900 MT40	2800	2600	3200	10	17.0	383.8	3400
110.4	21,645/196	6000	53,148	6500	57,577	8878	78,641	C913_1100 MT40	2800	2600	3200	10	15.6	386.7	3426
138.9	66,105/476	6000	53,148	6500	57,577	10,629	94,154	C913_1390 MT40	2800	2600	3200	10	14.5	388.9	3445
176.1	34,515/196	6000	53,148	6500	57,577	12,000	106,296	C913_1760 MT40	2800	2600	3200	10	13.6	390.3	3458
215.4	3015/14	6000	53,148	6500	57,577	12,000	106,296	C913_2150 MT40	2800	2600	3200	10	13.1	391.1	3464

1) Maximum torque for continuous input RPM - horizontal output position.
2) Maximum momentary torque for emergency stops or heavy shock load. (Admissible stops per life of gearhead = 1,000 stops maximum.)
3) dB)(A) measured at 1 meter distance with 2000 RPM input.
** Motor shaft adapter code (shaft diameter max - mm): MT10 (19), MT20 (24), MT30 (38), MT40 (48), MT50 (60)*

Dimensional Data

MGS Reducer Optional Output Flange
For “F” Round Output Flange Units Only
(Note: optional flanges are not available on all sizes)

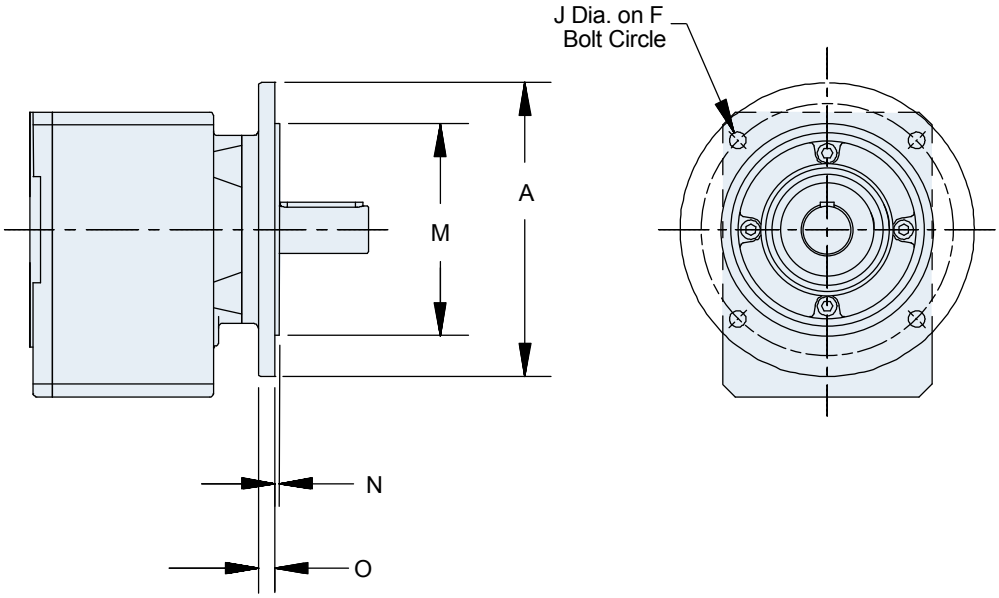


Table 1 Dimensions (mm)

Unit	Accommodate NEMA C-Frame Motors	Flange Size A	F	J	M *	N	O
C002	050	120	100	7	80_{j6}	3	10
	140	140	115	9	90_{j6}	3	10
C102/C103	050	140	115	9	95_{j6}	3.5	8
	140	160	130	9	110_{j6}	3.5	10
C202/C203	180	160	130	9	110_{j6}	3.5	10
		250	215	14	180_{j6}	4	12
C302/C303	050	160	130	9	110_{j6}	3.5	10
	140	200	265	11	130_{j6}	3.5	12
C402/C403	180	200	165	11	130_{j6}	3.5	14
	210	300	265	14	230_{j6}	4	14
C502/C503	180	250	215	14	180_{j6}	4	14
C812/C813	210	350	300	18	250_{h6}	5	18
	250	450	400	18	350_{h6}	5	20
	280						

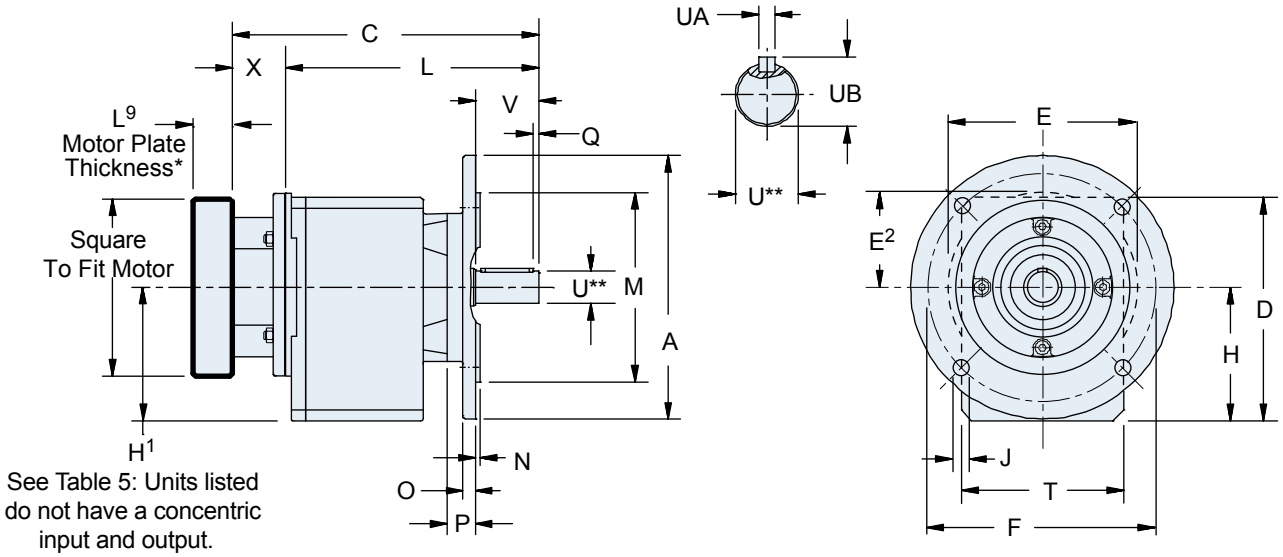
** h6, j6 = existing values*

Please contact STOBER for ordering assistance.

"F" Round Output Flange —

Optional MGS Reducer Output Flange available on most models, see page 91 for details.

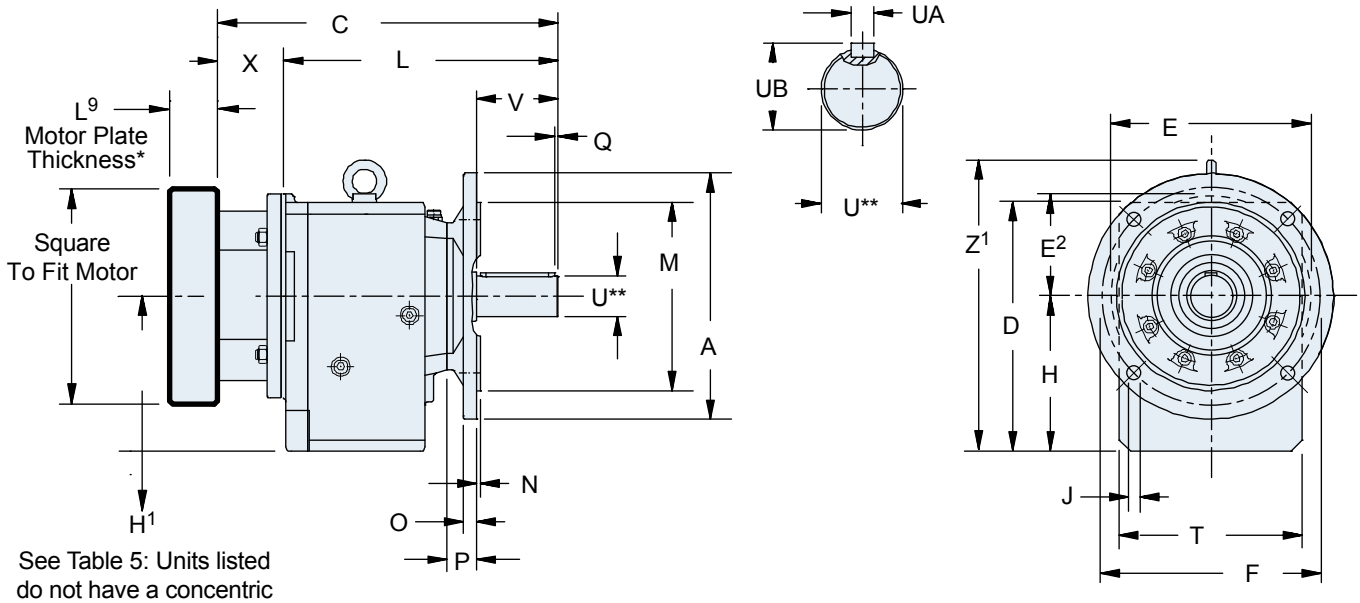
C002F thru C503F



See Table 5: Units listed do not have a concentric input and output.

** See Motor Mounting Plate Option, page 66 for details.*
*** For optional output shaft options, see page 65.*

C612F thru C913F



See Table 5: Units listed do not have a concentric input and output.

** See Motor Mounting Plate Option, page 66 for details.*
*** For optional output shaft options, see page 65.*

NOTE: Instead of 4 holes as shown in the drawing, the C912 and C913 output flange has 8 "J" dia. mounting holes on "F" bolt circle (located 22.5° from horizontal).

Dimensional Data

Table 1 Dimensions (mm)

Unit	A	D	F	H	J	M *	N	O	P	Q	T	V	Z[1]
C002	160	141	130	79	9	110_{j6}	3	10	18	3	97	40	–
C102/C103	200	175	165	100	11	130_{j6}	3.5	12	21	5	130	50	–
C202/C203	200	192	165	112[1)]	11	130_{j6}	3.5	12	27	5	142	60	–
C302/C303	250	212	215	127[1)]	14	180_{j6}	4	12	27	5	154	60	–
C402/C403	250	242.5	215	142.5	14	180_{j6}	4	14	28	5	178	80	–
C502/C503	300	286	265	166	14	230_{j6}	4	16	29	5	195	80	–
C612/C613	300	310	265	195[1)]	14	230_{j6}	4	17	36	5	225	100	362
C712/C713	350	371	300	231[1)]	18	250_{h6}	5	18	44	5	265	120	432
C812/C813	400	445	350	285	18	300_{h6}	5	20	45	5	310	140	506
C912/C913	450	524	400	334	18	350_{h6}	5	23	50	5	365	170	594

[1)] *See Table 5*

Table 2 Metric output available on request.

	Standard Shaft - inches			Optional Shaft - mm		
Unit	U_{h6} *	UA	UB	U *	UA	UB
C002	0.750	3/16 x 3/16 x 1–7/32	0.83	20_{k6}	A6x6x32	22.5
C102/C103	1.000	1/4 x 1/4 x 1–9/16	1.11	25_{k6}	A8x7x40	28
C202/C203	1.250	1/4 x 1/4 x 1–15/16	1.36	30_{k6}	A8x7X50	33
C302/C303	1.250	1/4 x 1/4 x 1–15/16	1.36	30_{k6}	A8x7X50	33
C402/C403	1.625	3/8 x 3/8 x 2–7/8	1.79	40_{k6}	A12x8X70	43
C502/C503	1.625	3/8 x 3/8 x 2–7/8	1.79	40_{k6}	A12x8X70	43
C612/C613	2.125	1/2 x 1/2 x 3–5/32	2.35	50_{k6}	A14x9x90	53.5
C712/C713	2.375	5/8 x 5/8 x 3–15/16	2.65	60_{m6}	A18x11x100	64
C812/C813	2.875	3/4 x 3/4 x 4–5/16	3.21	70_{m6}	A20x12x125	74.5
C912/C913	3.625	7/8 x 7/8 x 5–1/2	4.01	90_{m6}	A25x14x140	95

Table 3 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D^6 Max. [2)]	Thickness L^9 Min. [3)]	E	E^2	X	Wt. lbs.
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18
MT50	60	43	300	150	81.5	16

[2)] *If an adapter bushing is required it will be supplied as a component of the motor mounting plate.*

[3)] *Motor plate maximum thickness (L^9) will vary with motor shaft length but will not be less than shown.*

Table 4 Dimensions (mm)

	MT10		MT20		MT30		MT40		MT50		Approx.
Unit	C	L	C	L	C	L	C	L	C	L	Wt.(lbs.)
C002	194	154	208	158	—	—	—	—	—	—	18
C102	227	187	241	191	253	193	—	—	—	—	29
C103	264	224	—	—	—	—	—	—	—	—	34
C202	255	215	269	219	281	221	—	—	—	—	38
C203 [1)]	292	252	312	262	—	—	—	—	—	—	45
C302	—	—	288	238	300	240	332	243	—	—	49
C303 [1)]	311	271	331	281	—	—	—	—	—	—	56
C402	—	—	335.5	285.5	347.5	287.5	379.5	290.5	—	—	71
C403	—	—	378.5	328.5	—	—	—	—	—	—	78
C502	—	—	357	307	369	309	401	312	407.5	326	95
C503	—	—	400	350	—	—	—	—	—	—	111
C612 [1)]	—	—	—	—	393	333	425	336	430.5	349	115
C613 [1)]	—	—	425	375	455	395	—	—	—	—	159
C712	—	—	—	—	446	386	477	388	482.5	401	199
C713 [1)]	—	—	—	—	507	447	548	459	—	—	221
C812	—	—	—	—	—	—	544	455	549.5	468	322
C813	—	—	—	—	574	514	615	526	—	—	342
C912	—	—	—	—	—	—	—	—	616.5	535	596
C913	—	—	—	—	—	—	682	593	—	—	678

[1)] *See Table 5*

** h6, j6, k6, m6 = existing values*

For approximate weight, add adapter weight from Table 3 and base module weight from Table 4.

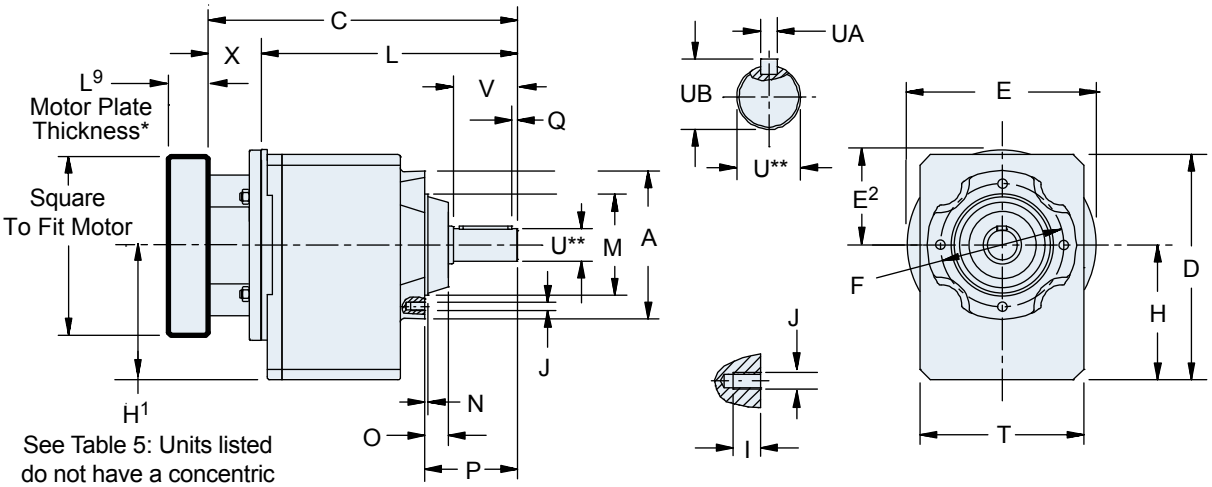
Table 5 Input Dimensions (mm)

	H[1]			
Unit	MT20	MT30	MT40	MT50
C203	75.5	–	–	–
C303	90	–	–	–
C612	–	189	189	189
C613	–	–	189	–
C713	–	–	250	–

Units shown in Table 5 do not have a concentric input and output.

"G" Tapped Holes Around Output —

C002G thru C503G

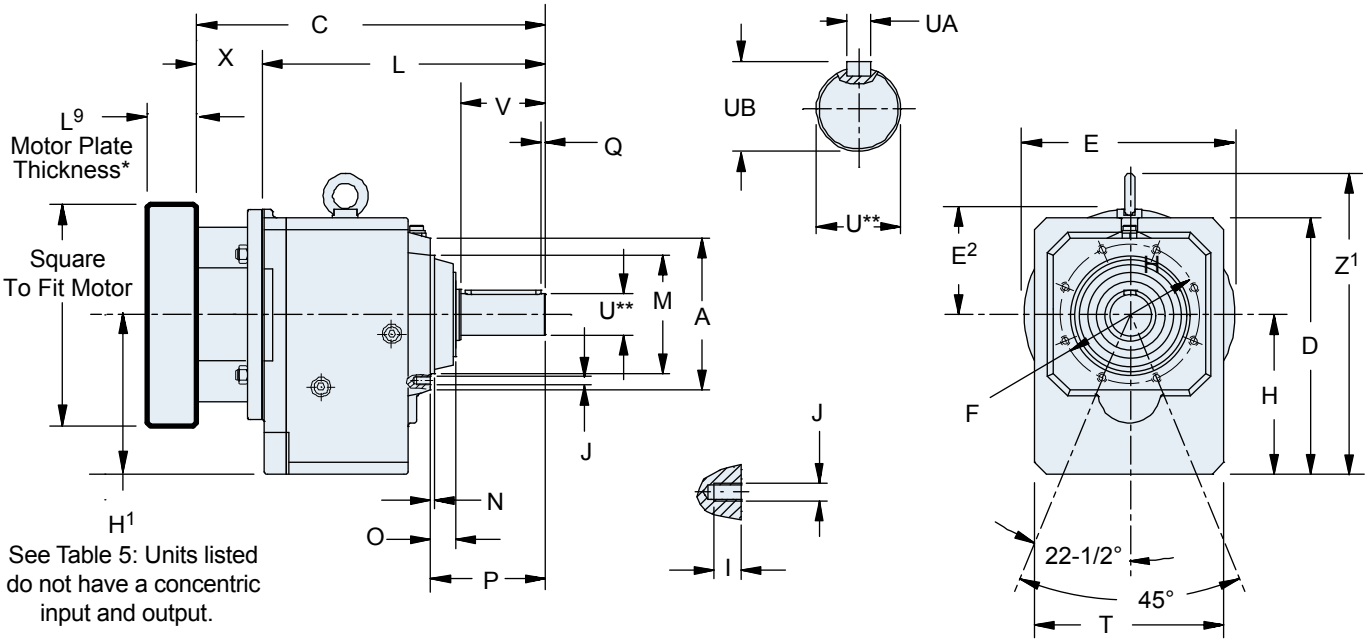


See Table 5: Units listed do not have a concentric input and output.

† NOTE: Instead of 4 holes as shown in the drawing, the C502/C503 has 8 holes located as shown on drawing for C612G – C913G.

** See Motor Mounting Plate Option, page 66 for details.*
*** For optional output shaft options, see page 65.*

C612G thru C913G



See Table 5: Units listed do not have a concentric input and output.

** See Motor Mounting Plate Option, page 66 for details.*
*** For optional output shaft options, see page 65.*

Dimensional Data

Table 1 Dimensions (mm)

Unit	A	D	F	H	I	J	M_{j6}	N	O	P	Q	T	V	Z[1]
C002	87	141	75	79	10	M6x1	55	3	14	58	3	97	40	–
C102/C103	120	175	100	100	13	M6x1	80	3	17	71	5	130	50	–
C202/C203	140	192	115	112 [1)]	13	M6x1	95	3	22	87	5	142	60	–
C302/C303	140	212	115	127 [1)]	13	M8x1.25	95	3	22	87	5	154	60	–
C402/C403	160	242.5	130	142.5	16	M8x1.25	110	3.5	22	108	5	178	80	–
C502/C503	192	286	165	166	16	M10x1.5†	130	3.5	23	109	5	195	80	–
C612/C613	180	310	165	195 [1)]	16	M10x1.5	140	5	30	136	5	225	100	362
C712/C713	195	371	185	231 [1)]	19	M12x1.75	155	8	37	164	5	265	120	432
C812/C813	226	445	215	285	19	M12x1.75	185	5	37	185	5	310	140	506
C912/C913	280	524	265	334	26	M16x2	230	5	42	220	5	365	170	594

[1)] *See Table 5*

Table 2 Metric output available on request.

	Standard Shaft - inches			Optional Shaft - mm		
Unit	U_{h6}	UA	UB	U	UA	UB
C002	0.750	3/16 x 3/16 x 1–7/32	0.83	20_{k6}	A6x6x32	22.5
C102/C103	1.000	1/4 x 1/4 x 1–9/16	1.11	25_{k6}	A8x7x40	28
C202/C203	1.250	1/4 x 1/4 x 1–15/16	1.36	30_{k6}	A8x7x50	33
C302/C303	1.250	1/4 x 1/4 x 1–15/16	1.36	30_{k6}	A8x7x50	33
C402/C403	1.625	3/8 x 3/8 x 2–7/8	1.79	40_{k6}	A12x8x70	43
C502/C503	1.625	3/8 x 3/8 x 2–7/8	1.79	40_{k6}	A12x8x70	43
C612/C613	2.125	1/2 x 1/2 x 3–5/32	2.35	50_{k6}	A14x9x90	53.5
C712/C713	2.375	5/8 x 5/8 x 3–15/16	2.65	60_{m6}	A18x11x100	64
C812/C813	2.875	3/4 x 3/4 x 4–5/16	3.21	70_{m6}	A20x12x125	74.5
C912/C913	3.625	7/8 x 7/8 x 5–1/2	4.01	90_{m6}	A25x14x140	95

Table 3 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D^6 Max.[2)]	Thickness[3)] L^9 Min.	E	E^2	X	Wt. lbs.
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18
MT50	60	43	300	150	81.5	16

[2)] *If an adapter bushing is required it will be supplied as a component of the motor mounting plate.*

[3)] *Motor plate maximum thickness (L^9) will vary with motor shaft length but will not be less than shown.*

Table 4 Dimensions (mm)

	MT10		MT20		MT30		MT40		MT50		Approx.
Unit	C	L	C	L	C	L	C	L	C	L	Wt.(lbs.)
C002	194	154	208	158	—	—	—	—	—	—	18
C102	227	187	241	191	253	193	—	—	—	—	29
C103	264	224	—	—	—	—	—	—	—	—	34
C202	255	215	269	219	281	221	—	—	—	—	38
C203 [1)]	292	252	312	262	—	—	—	—	—	—	45
C302	—	—	288	238	300	240	332	243	—	—	49
C303 [1)]	311	271	331	281	—	—	—	—	—	—	56
C402	—	—	335.5	285.5	347.5	287.5	379.5	290.5	—	—	71
C403	—	—	378.5	328.5	—	—	—	—	—	—	78
C502	—	—	357	307	369	309	401	312	407.5	326	95
C503	—	—	400	350	—	—	—	—	—	—	111
C612 [1)]	—	—	—	—	393	333	425	336	430.5	349	115
C613 [1)]	—	—	425	375	455	395	—	—	—	—	159
C712	—	—	—	—	446	386	477	388	482.5	401	199
C713 [1)]	—	—	—	—	507	447	548	459	—	—	221
C812	—	—	—	—	—	—	544	455	549.5	468	322
C813	—	—	—	—	574	514	615	526	—	—	342
C912	—	—	—	—	—	—	—	—	616.5	535	596
C913	—	—	—	—	—	—	682	593	—	—	678

[1)] *See Table 5*

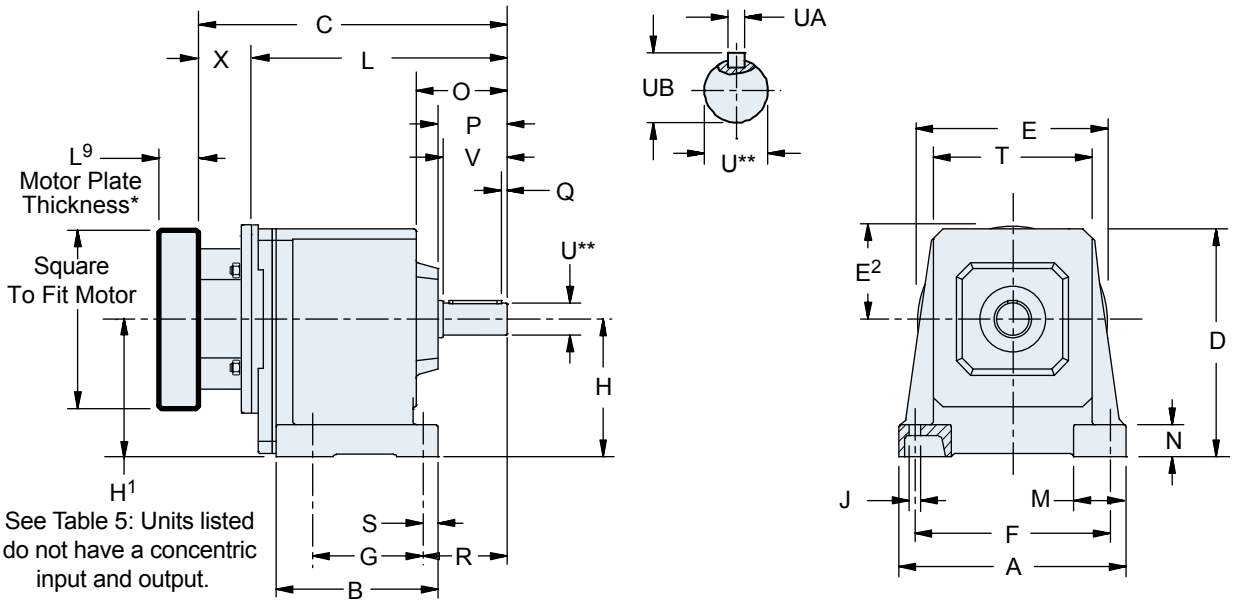
For approximate weight, add adapter weight from Table 3 and base module weight from Table 4.

Table 5 Input Dimensions (mm)

	H[1]			
Unit	MT20	MT30	MT40	MT50
C203	75.5	–	–	–
C303	90	–	–	–
C612	–	189	189	189
C613	–	–	189	–
C713	–	–	250	–

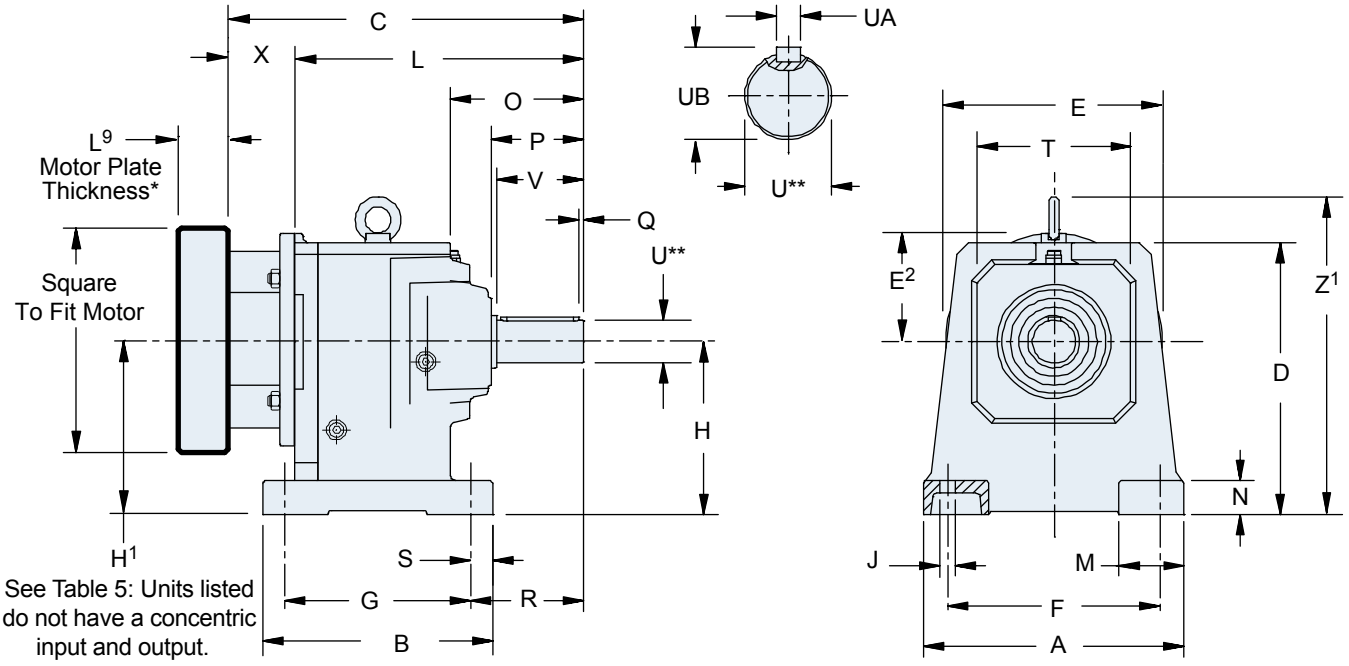
"N" Foot Mount —

C002N thru C503N



** See Motor Mounting Plate Option, page 66 for details.*
*** For optional output shaft options, see page 65.*

C612N thru C913N



** See Motor Mounting Plate Option, page 66 for details.*
*** For optional output shaft options, see page 65.*

Dimensional Data

Table 1 Dimensions (mm)

Unit	A	B	D	F	G	H	J	M	N	O	P	Q	R	S	T	V	Z[1]
C002	132	95	144	110	62	82	7	35	20	57	44	3	55	11	92	40	—
C102/C103	176	118	177	150	70	102	9	42	25	69	54	5	67	13	124	50	—
C202/C203	200	135	195	170	85	115[1)]	11	50	30	86	65	5	79	14	138	60	—
C302/C303	215	154	215	185	105	130[1)]	11	50	30	85	65	5	79	14	150	60	—
C402/C403	255	180	245	220	110	145	14	60	35	106	86	5	105	19	175	80	—
C502/C503	290	197	290	245	130	170	18	70	40	107	86	5	108	22	192	80	—
C612/C613	300	265	315	245	215	200[1)]	18	75	40	153	106	5	130	25	225	100	367
C712/C713	365	285	375	300	235	235[1)]	18	90	50	185	127	5	163	25	265	120	436
C812/C813	435	360	450	340	300	290	22	95	55	218	148	5	190	29	310	140	511
C912/C913	510	410	530	400	340	340	26	110	60	256	178	5	222	34	365	170	600

[1)] *See Table 5*

Table 2 Metric output available on request.

	Standard Shaft - inches			Optional Shaft - mm		
Unit	U_{h6} *	UA	UB	U *	UA	UB
C002	0.750	3/16 x 3/16 x 1–7/32	0.83	20_{k6}	A6x6x32	22.5
C102/C103	1.000	1/4 x 1/4 x 1–9/16	1.11	25_{k6}	A8x7x40	28
C202/C203	1.250	1/4 x 1/4 x 1–15/16	1.36	30_{k6}	A8x7X50	33
C302/C303	1.250	1/4 x 1/4 x 1–15/16	1.36	30_{k6}	A8x7X50	33
C402/C403	1.625	3/8 x 3/8 x 2–7/8	1.79	40_{k6}	A12x8X70	43
C502/C503	1.625	3/8 x 3/8 x 2–7/8	1.79	40_{k6}	A12x8X70	43
C612/C613	2.125	1/2 x 1/2 x 3–5/32	2.35	50_{k6}	A14x9x90	53.5
C712/C713	2.375	5/8 x 5/8 x 3–15/16	2.65	60_{m6}	A18x11x100	64
C812/C813	2.875	3/4 x 3/4 x 4–5/16	3.21	70_{m6}	A20x12x125	74.5
C912/C913	3.625	7/8 x 7/8 x 5–1/2	4.01	90_{m6}	A25x14x140	95

Table 3 Motor Adapter Dimensions (mm)

Motor Adapter	Motor Shaft D^6 Max.[2)]	Thickness L^9 Min.[3)]	E	E^2	X	Wt. lbs.
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18
MT50	60	43	300	150	81.5	16

[2)] *If an adapter bushing is required it will be supplied as a component of the motor mounting plate.*

[3)] *Motor plate maximum thickness (L^9) will vary with motor shaft length but will not be less than shown.*

Table 4 Dimensions (mm)

	MT10		MT20		MT30		MT40		MT50		Approx.
Unit	C	L	C	L	C	L	C	L	C	L	Wt.(lbs.)
C002	194	154	208	158	—	—	—	—	—	—	18
C102	227	187	241	191	253	193	—	—	—	—	29
C103	264	224	—	—	—	—	—	—	—	—	34
C202	255	215	269	219	281	221	—	—	—	—	38
C203 [1)]	292	252	312	262	—	—	—	—	—	—	45
C302	—	—	288	238	300	240	332	243	—	—	49
C303 [1)]	311	271	331	281	—	—	—	—	—	—	56
C402	—	—	335.5	285.5	347.5	287.5	379.5	290.5	—	—	71
C403	—	—	378.5	328.5	—	—	—	—	—	—	78
C502	—	—	357	307	369	309	401	312	407.5	326	95
C503	—	—	400	350	—	—	—	—	—	—	111
C612 [1)]	—	—	—	—	393	333	425	336	430.5	349	115
C613 [1)]	—	—	425	375	455	395	—	—	—	—	159
C712	—	—	—	—	446	386	477	388	482.5	401	199
C713 [1)]	—	—	—	—	507	447	548	459	—	—	221
C812	—	—	—	—	—	—	544	455	549.5	468	322
C813	—	—	—	—	574	514	615	526	—	—	342
C912	—	—	—	—	—	—	—	—	616.5	535	596
C913	—	—	—	—	—	—	682	593	—	—	678

[1)] *See Table 5*

** h6, k6, m6 = existing values*

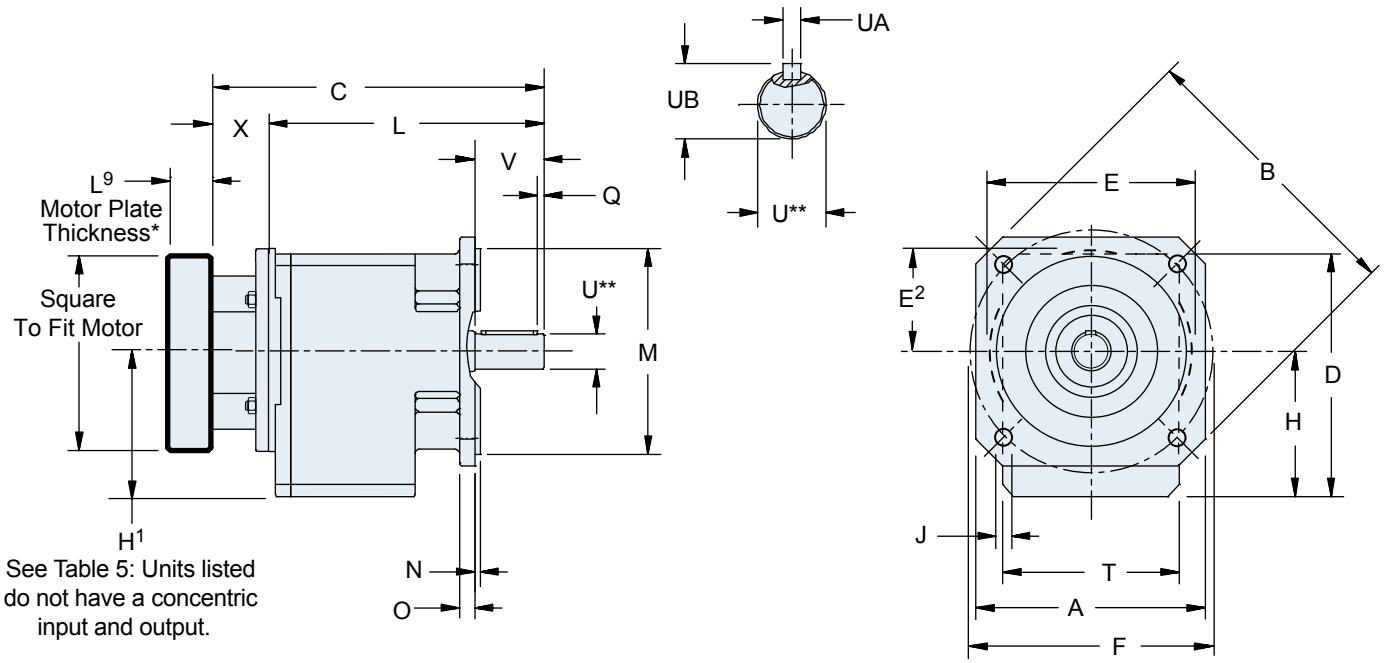
For approximate weight, add adapter weight from Table 3 and base module weight from Table 4.

Table 5 Input Dimensions (mm)

	H[1]			
Unit	MT20	MT30	MT40	MT50
C203	78.5	–	–	–
C303	93	–	–	–
C612	–	193	193	193
C613	–	–	193	–
C713	–	–	254	–

"Q" Square Output Flange —

C002Q thru C403Q Only



** See Motor Mounting Plate Option, page 66 for details.*
*** For optional output shaft options, see page 65.*

Contact STOBER for availability.

Dimensional Data

Table 1 Dimensions (mm)

Unit	A	B	D	F	H	J	M_{j6} *	N	O	Q	T	V
C002	124	160	141	130	79	9	110	3	9	3	97	40
C102/C103	145	192	175	165	100	11	130	3.5	11	5	130	50
C202/C203	145	192	192	165	112 [1)]	11	130	3.5	11	5	142	60
C302/C303	200	250	212	215	127 [1)]	14	180	4	14	5	154	60
C402/C403	200	250	242.5	215	142.5	14	180	4	14	5	178	80

[1)] See Table 5

Table 2 Metric output available on request.

	Standard Shaft - inches			Optional Shaft - mm		
Unit	U_{h6} *	UA	UB	U_{k6} *	UA	UB
C002	0.750	3/16 x 3/16 x 1–7/32	0.83	20	A6x6x32	22.5
C102/C103	1.000	1/4 x 1/4 x 1–9/16	1.11	25	A8x7x40	28
C202/C203	1.250	1/4 x 1/4 x 1–15/16	1.36	30	A8x7X50	33
C302/C303	1.250	1/4 x 1/4 x 1–15/16	1.36	30	A8x7X50	33
C402/C403	1.625	3/8 x 3/8 x 2–7/8	1.79	40	A12x8X70	43

Table 3 Motor Adapter Dimensions (mm)

** h6, j6, k6 = existing values*

Motor Adapter	Motor Shaft D^6 Max. [2)]	Thickness L^9 Min. [3)]	E	E^2	X	Wt. (lbs.)
MT10	19	21	140	70	40	5
MT20	24	24	160	80	50	8
MT30	38	25	200	100	60	12
MT40	48	33	250	125	89	18

[2)] If an adapter bushing is required it will be supplied as a component of the motor mounting plate.
[3)] Motor plate maximum thickness (L^9) will vary with motor shaft length but will not be less than shown.

For approximate weight, add adapter weight from Table 3 and base module weight from Table 4.

Table 4 Dimensions (mm)

	MT10		MT20		MT30		MT40		Approx.
Unit	C	L	C	L	C	L	C	L	Wt. (lbs.)
C002	194	154	208	158	—	—	—	—	18
C102	227	187	241	191	253	193	—	—	29
C103	264	224	—	—	—	—	—	—	34
C202	255	215	269	269	281	221	—	—	38
C203 [1)]	292	252	312	262	—	—	—	—	45
C302	—	—	288	238	300	240	332	243	49
C303 [1)]	311	271	331	281	—	—	—	—	56
C402	—	—	335.5	285.5	347.5	287.5	379.5	290.5	71
C403	—	—	378.5	328.5	—	—	—	—	78

[1)] See Table 5

Table 5 Input Dimensions (mm)

Unit	H^1 MT20
C203	75.5
C303	90