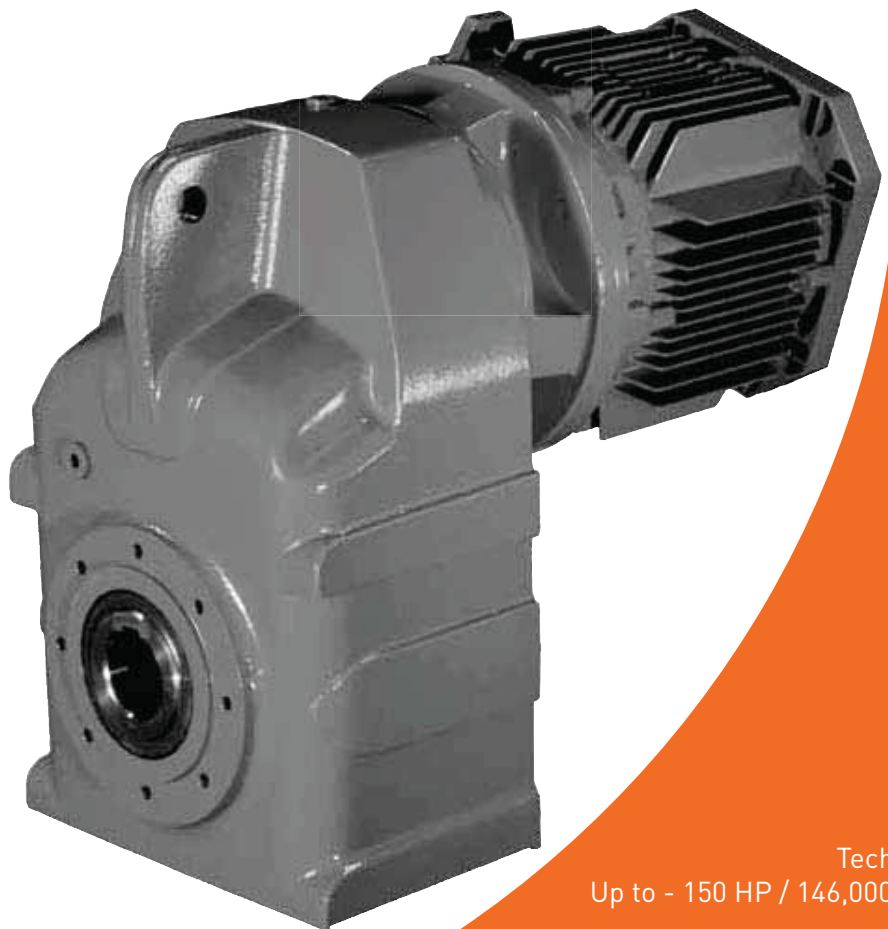


radicon

with you at every turn

Series F Shaft Mounted Helical

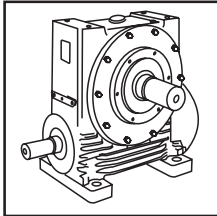


Technical
Up to - 150 HP / 146,000 lb.in

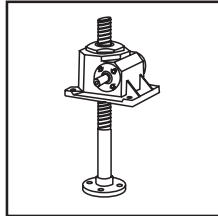
Geared Motors
CF-1.04US0411

PRODUCTS IN THE RANGE

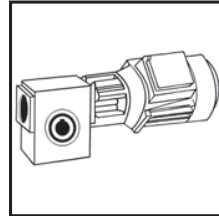
Serving an entire spectrum of mechanical drive applications from food, energy, mining and metal; to automotive, aerospace and marine propulsion, we are here to make a positive difference to the supply of drive solutions.



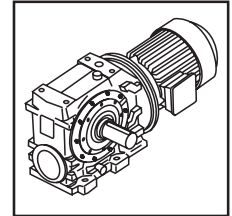
Series A
Worm Gear units
and geared motors
in single & double
reduction types



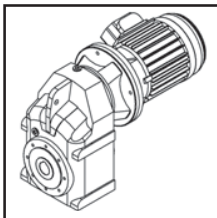
Series BD
Screwjack worm
gear unit



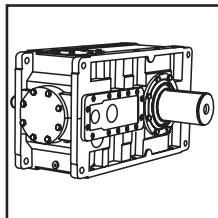
Series BS
Worm gear unit



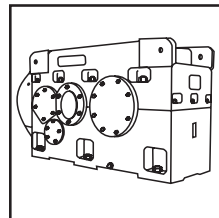
Series C
Right angle drive
helical worm geared
motors & reducers



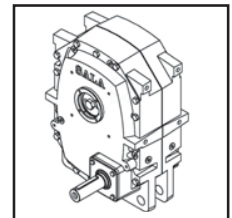
Series F
Parallel angle helical
bevel helical geared
motors & reducers



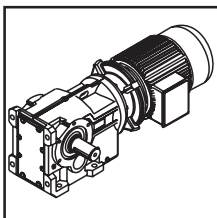
Series G
Helical parallel shaft
& bevel helical right
angle drive gear
units



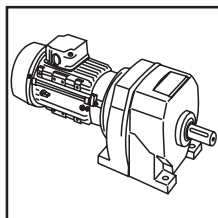
Series H
Large helical parallel
shaft & bevel helical
right angle drive units



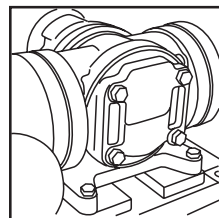
Series J
Shaft mounted
helical speed
reducers



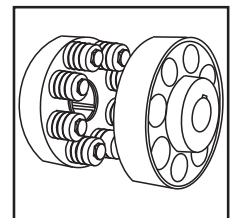
Series K
Right angle helical
bevel helical geared
motors & reducers



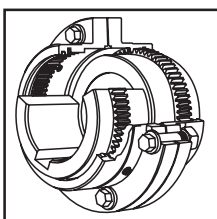
Series M
In-line helical geared
motors & reducers



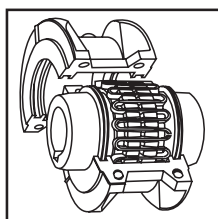
Roloid Gear Pump
Lubrication and fluid
transportation pump



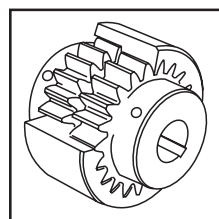
**Series X
Cone Ring**
Pin and bush
elastomer coupling



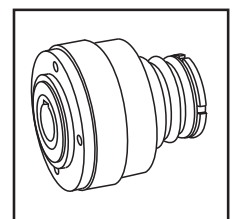
**Series X
Gear**
Torsionally rigid,
high torque coupling



**Series X
Grid**
Double flexing steel
grid coupling



**Series X
Nylicon**
Gear coupling with
nylon sleeve



**Series X
Torque Limiter**
Overload protection
device



We offer a wide range of repair services and many years experience of repairing demanding and highly critical transmissions in numerous industries.

We can create custom engineered transmission solutions of any size and configuration.

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SERIES F

GENERAL DESCRIPTION

Series F

Series F shaft mounted geared motors offer ratios from 5 to 100/1 in double reduction, from 100 to 360 in triple and up to 5600/1 in combined reductions. Motors are available up to 50 HP giving a maximum output torque of 63600 lb. in.

The Series F geared motor is primarily designed as a shaft mounted unit incorporating an integral torque reaction bracket. The units are also available with rubber torque bushings, output flanges, output shafts and taper release bushings to allow for trouble free maintenance. All variants are available either motorized or with input shaft assembly.

The Range Includes

Nine sizes of units
F02, F03, F04, F05, F06, F07, F08, F09, and F10.

- Version T - Standard unit with torque bushing
- Version W - Standard unit without torque bushing
- Version F - Standard unit with output flange

- Unit type N - Motorized
- Unit type A - Unit to allow fitting of NEMA motor
- Unit type G - Unit to allow fitting of a standard IEC motor

- Unit type R - Reducer
- Unit type S - Reducer unit fitted with a fan
- Unit type X - Reducer unit fitted with a backstop
- Unit type Y - Reducer unit with a fan and backstop

Design Features Include

Patented standard motor connection
(IEC or NEMA).

Ability to fit double oil seals input and output as required.

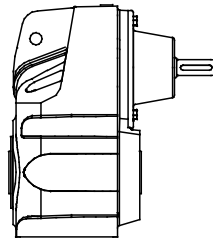
All units are dimensionally interchangeable with other major manufacturers.

Brake geared motors are available as standard.

Units are manufactured and assembled from a family of modular kits for distributor friendliness maximizing availability and flexibility.

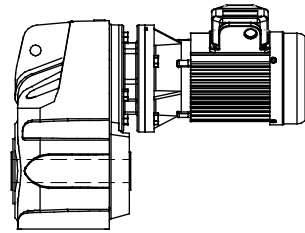
Motorized units can be fitted with a backstop module and reducer units can be fitted with a backstop and fan.

As improvements in design are being made continually this specification is not to be regarded as binding in detail and drawings and capacities are subject to alteration without notice. Drawings and 3D-models are available at <http://www.swift-gears.com>



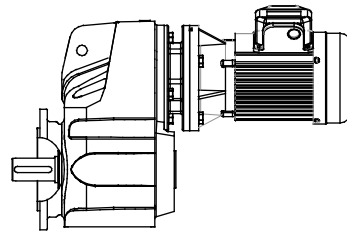
Double reduction/triple shaft mounted reducer

* F 0 4 2 2 5 0 . T R A - 1 - - - - -



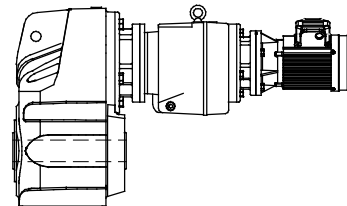
Motorized double/triple reduction shaft mount

* F 0 4 2 2 5 0 . T N A - 1 A . 7 5 B - -



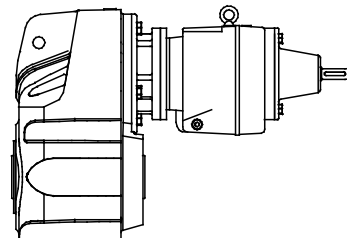
Motorized double/triple reduction with output shaft and flange

* F 0 4 2 2 5 0 . F N N - 1 A . 7 5 B - -



Motorized quadruple reduction shaft mount

* F 0 6 4 2 5 0 0 T N A - 1 A . 2 5 B - -



Reducer quadruple reduction shaft mount

* F 0 6 4 2 5 0 0 T R A - 1 - - - - -

* Typical Unit Designations

SERIES F UNIT DESIGNATIONS

Gearbox Codes													Motor Codes						
Series	Size of Unit			No of Reductions	Revision Version	Nominal Overall Ratio			Unit Version	Type of Unit	Output Shaft	Motor Adaptor	Mounting Position	Geared Motor Power	No of Motor Poles	Additional Motor Features	Additional Gearbox Features		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
F																			
F	0	8	2	2	5	0	.	T	N	N	Q	1	D	7	.	5	B	-	-

Example

20 - Additional Gearbox Features
Double Oil Seal, Motorized Backstop Etc
eg

1 - Series F

Range

2, 3 - Size of Unit

Through

4 - No of Reductions

Through

5 - Revision Version

For Sizes 02 to 08

 For Sizes 09 to 10

6, 7, 8 - Nominal Overall Ratio

eg

9 - Unit Version

Standard Unit with Torque Bushing

STD Unit without Torque Bushing

STD Unit with Output Flange

10 - Type of Unit

- Motorized with IEC standard motor (IE2)
- Motorized with NEMA standard motor (EPACT)
- Motorized with IEC high efficiency motor (IE3)
- Motorized with NEMA high efficiency motor (PREMIUM)
- Unit to allow fitting of IEC motor (customer own motor)
- Unit to allow fitting of NEMA motor (customer own motor)
- Reducer unit
- Reducer unit with fan kit
- Reducer unit with backstop CCW rotation
- Reducer unit with backstop CW rotation
- Reducer unit with fan and backstop CW rotation
- Reducer unit with fan and backstop CCW rotation

19 - Additional Motor Features

eg

For Types Without Motor Enter

18 - No of Motor Poles

No motor

4 Pole (Std) 1800 rpm

6 Pole (Std) 1200 rpm

15, 16, 17 - Geared Motor Powers

Motor Power Required

eg

For reducer and non standard motor types enter

13, 14 - Mounting Position

eg

12 - Motor Adaptor For Motorized Units Type M and G

Column 10 Entries (enter) eg

Motorized Units Type A & N and Reducer Units Type R, S, W, X, Y and Z (enter)

11 - OUTPUT SHAFT

Standard Single Extension

 (not available for F02)

Standard Hollow Shaft

Unit with Taper Release Bushing

 (not available for F02 and F03)

See pages 7 & 8 for metric options

* This Page May Be Photocopied Allowing The Customer To Enter Their Order To access the on line configurator please visit www.radicon.com

SERIES F

EXPLANATION & USE OF RATINGS & SERVICE FACTORS

Gear unit selection is made by comparing actual loads with catalog ratings. Catalog ratings are based on a standard set of loading conditions, whereas actual load conditions vary according to type of application. Service Factors are therefore used to calculate an equivalent load to compare with catalog ratings. (i.e. Equivalent Load = Actual Load x Service Factor)

Mechanical ratings and service factors Fm and Fs

Mechanical ratings measure capacity in terms of life and/or strength, assuming 10 hr/day continuous running under uniform load conditions.

Catalog ratings allow 100% overload at starting, braking or momentarily during operation up to 10 hours per day.

The unit selected must therefore have a catalog rating at least equal to half maximum overload.

Mechanical Service Factor Fm (Table 1) is used to modify the actual load according to daily operating time, and type of loading.

Load characteristics for a wide range of applications are detailed in Table 3 opposite, which are used in deciding the appropriate Service Factor Fm from Table 1.

If overloads can be calculated, or accurately assessed, actual loads should be used instead of Fm.

For units subjected to frequent stop/starts overloads in excess of 10 times/day multiply factor Fm x Factor Fs (table 2).

For applications where units are to operate in extremely dusty or moist/humid atmospheres unit selection should be referred to application engineers.

Table 1. Mechanical Service Factor (Fm)

Prime mover	Duration of service- hrs per day	Load classification-driven machine		
		Uniform mass acceleration factor ≤ 0.2	Moderate mass acceleration factor ≤ 3	Heavy mass acceleration factor ≤ 10
Electric motor, steam turbine or hydraulic motor	Under 3	0.80	1.00	1.50
	3 to 10	1.00	1.25	1.75
	Over 10	1.25	1.50	2.00
Multi-cylinder internal combustion engine	Under 3	1.00	1.25	1.75
	3 to 10	1.25	1.50	2.00
	Over 10	1.50	1.75	2.25
Single cylinder internal combustion engine	Under 3	1.25	1.50	2.00
	3 to 10	1.50	1.75	2.25
	Over 10	1.75	2.00	2.50

$$\text{Mass acceleration factor} = \frac{\text{all external moments of inertia}^*}{\text{moment of inertia of driving motor}} \quad * \text{ calculated with reference to the motor speed}$$

Table 2. Number of Starts Factor (Fs)

Start / Stops per hour (1)	Up to 1	5	10	40	60	≥ 200
Factor Fs	1.00	1.03	1.06	1.10	1.15	1.20

Note: (1) Intermediate values are obtained by linear interpolation

SERIES F

LOAD CLASSIFICATION

APPLICATION

Table 3

U = Uniform load

M = Moderate shock load

H = Heavy shock load

† = Refer to Application Engineering

		Driven Machine	type of load	Driven Machine	type of load	Driven Machine	type of load
		Cranes		log haul-incline	H	log haul presses	H
		main hoists	†	log haul-well type	H	pulp machine reel	M
		bridge travel	†	log turning device	H	stock chest	M
		trolley travel	†	main log conveyor	H	suction roll	M
				off bearing rolls	M	washers and thickeners	M
		Crusher		planer feed chains	M	winders	M
		ore	H	planer floor chains	M		
		stone	H	planer tilting hoist	M	Printing presses	†
		sugar	H	re-saw merry-go-round		Pullers	
				conveyor	M	barge haul	H
		Dredges		roll cases	H	Pumps	
		cable reels	M	slab conveyor	H	centrifugal	U
		conveyors	M	small waste		proportioning	M
		cutler head drives	H	conveyor-belt	U	reciprocating	
		jig drives	H	small waste		single acting; 3 or more cylinders	M
		maneuvering winches	M	conveyor-chain	M	double acting; 2 or more cylinders	M
		pumps	M	sorting table	M	single acting; 1 or 2 cylinders	†
		screen drive	H	tipple hoist conveyor	M	double acting; single cylinder	†
		stackers	M	tipple hoist drive	M	rotary gear type lobe, vane	U
		utility winches	M	transfer conveyors	M		
				transfer rolls	M	Rubber and plastics industries	
		Dry dock cranes		tray drive	M	crackers	H
		main hoist	†	trimmer feed	M	laboratory equipment	M
		auxiliary hoist	†	waste conveyor	M	mixed mills	H
		boom, luffing	†			refiners	M
		rotating, swing or slew tracking, drive wheels	†	Machine tools		rubber calenders	M
				bending roll	M	rubber mill-2 on line	M
				punch press-gear driven	H	rubber mill-3 on line	M
				notching press- belt driven	†	sheeter	M
		Elevators		plate planers	H	tire building machines	†
		bucket-uniform load	U	tapping machine	H	tire and tube press	†
		bucket-heavy load	M	other machine tools		openers	†
		bucket-continuous	U	main drives	M	tubers and strainers	M
		centrifugal discharge	U	auxiliary drives	U	warming mills	M
		escalators	U			Sand muller	M
		freight	M	Metal mills		Sewage disposal equipment	
		gravity discharge	U	draw bench carriage		bar screens	U
		man lifts	†	and main drive	M	chemical feeders	U
		passenger	†	pinch, dryer and scrubber rolls-reversing	†	collectors	U
				slitters	M	dewatering screws	M
		Fans		table conveyors		scum breakers	M
		centrifugal	U	non-reversing		slow or rapid mixers	M
		cooling towers		group drives	M	thickeners	M
		induced draft	†	individual drives	H	vacuum filters	M
		forced draft	†	reversing		Screens	
		induced draft	M	wire drawing and flattening machine	M	air washing	U
		large, mine, etc	M	wire winding machine	M	rotary-stone or gravel	M
		large, industrial	M			travelling water intake	U
		light, small diameter	U	Mill-rotary type ball		Slab pushers	M
				cement kilns	H	Steering gear	†
		Feeders		dryers and coolers	H	Stokers	U
		apron	M	kilns, other than cement pebble rod	H	Sugar industry	
		belt	M			cane knives	M
		disc	U	Mixers		crushers	M
		reciprocating	H	concrete mixers		mills	M
		screw	M	-continuous	M	Textile industry	
				concrete mixers	M	batchers	M
		Food industry		-intermittent	U	calenders	M
		beef slicer	M	constant density	U	cards	M
		cereal cooker	U	variable density	M	dry cans	M
		dough mixer	M	Oil industry		dryers	M
		meat grinders	M	chillers	M	dyeing machinery	M
				oil well pumping	†	knitting machines	†
		Generators-not welding		paraffin filter press	M	looms	M
			U	rotary kilns	M	mangles	M
		Hammer mills		Paper mills		nappers	M
			H	agitators, (mixers)	M	pads	M
		Hoists		barker-auxiliaries-hydraulic	M	range drives	†
		heavy duty	H	barker-mechanical	H	slashers	M
		medium duty	M	barking drum	H	soapers	M
		skip hoist	M	beater and pulper	M	spinners	M
				bleacher	U	tenter frames	M
		Laundry washers		calenders	M	washers	M
		reversing	M	calenders-super	H	winders	M
				converting machine, except cutters, platers	M	Windlass	†
		Laundry tumblers		conveyors	U		
			M	couch	M		
		Line shafts		cutters-plates	H		
		driving processing equipment	M	cylinders	M		
		light	U	dryers	M		
		other line shafts	U	felt stretcher	M		
				felt whipper	H		
		Lumber industry		jordans	M		
		barkers-hydraulic-mechanical	M				
		burner conveyor	M				
		chain saw and drag saw	H				
		chain transfer	H				
		craneway transfer	H				
		de-barking drum	H				
		edger feed	M				
		gang feed	M				
		green chain	M				
		live rolls	H				
		log deck	H				

SERIES F

SELECTION PROCEDURE FOR MOTORIZED UNITS

EXAMPLE APPLICATION DETAILS

Absorbed power of driven machine = 0.96 HP
 Output speed of gearbox or Input speed of machine = 62 rev/min
 Application = Uniformly loaded belt conveyor
 Duration of service (hours per day) = 24hrs
 Mounting position = 1
 Ambient temperature = 68°F
 Running time (%) = 100%

1 DETERMINE MECHANICAL SERVICE FACTOR (Fm)

Refer to Load Classification by Application, table 3, page 4
 Application = Uniformly loaded belt conveyor

Conveyors-uniformly loaded or fed		
apron	U	U = Uniform load
assembly	U	
belt	U	
bucket	U	
chain	U	

Refer to mechanical service factor (Fm), table 1, page 3

Duration of service (hours per day) = 24hrs

Prime mover	Duration of service-hrs per day	Load classification-drive	
		Uniform	Moderate
Electric motor, steam turbine or hydraulic motor	Under 3	0.80	1.00
	3 to 10	1.00	1.25
	Over 10	1.25	1.50

Therefore mechanical service factor (Fm) = 1.25

If the unit is subject to frequent start/stops Fm must be multiplied by factor Fs (see table 2 page 3)

2 DETERMINE REQUIRED OUTPUT TORQUE AT GEARBOX OUTPUT SHAFT

Absorbed output torque = $\frac{\text{Absorbed power} \times 63000}{\text{Gearbox output speed}}$

$\frac{0.96 \times 63000}{62} = 975 \text{ lb. in}$

3 SELECT GEARED MOTOR

Refer to selection table one motor size larger than absorbed power.
 Absorbed power = 0.96 HP, therefore refer to 1.00 HP selection table.
 Required output speed of gearbox = 62 rev/min

1.00 HP	N2 R/MIN	i	lb in	Fm	lbf	UNIT DESIGNATION	lb	
	Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight	Motor Frame Size
4 POLE	70	24.53	867	3.66	1036	F 0 3 2 2 2 5 . . N 1 0 B . .	76.3	143TC
	62	27.86	984	3.29	1065	2 8 .		
	56	30.68	1085	3.00	1085	3 2 .		
	49	35.30	1244	2.62	1114	3 6 .		
	45	38.37	1353	2.41	1132	4 0 .		
	37	46.07	1620	2.01	1165	5 0 .		
	31	55.28	1940	1.68	1195	5 6 .		
	28	62.29	2186	1.44	1208	6 3 .		
	24	72.41	2550	1.07	1223	7 1 .		

4 CHECK OUTPUT TORQUE

Output torque of selected unit must be equal or more than required output torque at gearbox output shaft.
 Required output torque at gearbox output shaft = 975 lb. in

1.00 HP	N2 R/MIN	i	lb in	Fm	N	UNIT DESIGNATION	lb	
	Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight	Motor Frame Size
4 POLE	70	24.53	867	3.66	1036	F 0 3 2 2 2 5 . . N 1 0 B . .	76.3	143TC
	62	27.86	984	3.29	1065	2 8 .		
	56	30.68	1085	3.00	1085	3 2 .		
	49	35.30	1244	2.62	1114	3 6 .		
	45	38.37	1353	2.41	1132	4 0 .		
	37	46.07	1620	2.01	1165	5 0 .		
	31	55.28	1940	1.68	1195	5 6 .		
	28	62.29	2186	1.44	1208	6 3 .		
	24	72.41	2550	1.07	1223	7 1 .		

Selected units output torque = 984 lb. in, therefore unit is acceptable

Go to point 5

SERIES F

SELECTION PROCEDURE FOR MOTORIZED UNITS

5 CHECK SERVICE FACTOR

Service factor (Fm) of selected unit must be equal or more than required service factor.

Required service factor of gearbox = 1.25

1.00 HP	N2 R/MIN	i	lb in	Fm	lbf	UNIT DESIGNATION	lb	
	Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> Through <input type="text" value="20"/> Spaces to be filled when entering order	Weight	Motor Frame Size
4 POLE	70	24.53	867	3.66	1036	F 0 3 2 2 2 5 . . . N 1 - 0 B - -	76.3	143TC
	62	27.86	984	3.29	1065	2 8		
	56	30.68	1085	3.00	1085	3 2		
	49	35.30	1244	2.62	1114	3 6		
	45	38.37	1353	2.41	1132	4 0		
	37	46.07	1620	2.01	1165	5 0		
	31	55.28	1940	1.68	1195	5 6		
	28	62.29	2186	1.44	1208	6 3		
	24	72.41	2550	1.07	1223	7 1		

Selected unit's service factor (Fm) = 3.29, therefore unit is acceptable.

Alternatively an F04 unit could be selected which has a larger diameter output bore

1.00 HP	N2 R/MIN	i	lb in	Fm	lbf	UNIT DESIGNATION	lb	
	Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> Through <input type="text" value="20"/> Spaces to be filled when entering order	Weight	Motor Frame Size
4 POLE	70	24.53	867	3.66	1036	F 0 4 2 2 2 5 . . . N 1 0 B - -	76.3	143TC
	62	27.86	984	3.29	1065	2 8		
	56	30.68	1085	3.00	1085	3 2		
	49	35.30	1244	2.62	1114	3 6		
	45	38.37	1353	2.41	1132	4 0		
	37	46.07	1620	2.01	1165	5 0		
	31	55.28	1940	1.68	1195	5 6		
	28	62.29	2186	1.44	1208	6 3		
	24	72.41	2550	1.07	1223	1 1		

Selected unit's service factor (Fm) = 3.29, therefore unit is acceptable.

6 CHECK OVERHUNG LOADS

If sprocket, gear, etc is mounted on the output shaft then refer to Overhung Loads Procedure, and compare with allowable overhung load (lb) of selected unit

Allowable overhung load (lb) must be equal or more than calculated overhung load (P)

1.00 HP	N2 R/MIN	i	lb in	Fm	lbf	UNIT DESIGNATION	lb	
	Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> Through <input type="text" value="20"/> Spaces to be filled when entering order	Weight	Motor Frame Size
4 POLE	70	24.53	867	3.66	1036	F 0 3 2 2 2 5 . . . N 1 0 B - -	76.3	143TC
	62	27.86	984	3.29	1065	2 8		
	56	30.68	1085	3.00	1085	3 2		
	49	35.30	1244	2.62	1114	3 6		
	45	38.37	1353	2.41	1132	4 0		
	37	46.07	1620	2.01	1165	5 0		
	31	55.28	1940	1.68	1195	5 6		
	28	62.29	2186	1.44	1208	6 3		
	24	72.41	2550	1.07	1223	7 1		

NOTE: If any of the following conditions occur then consult Application Engineering

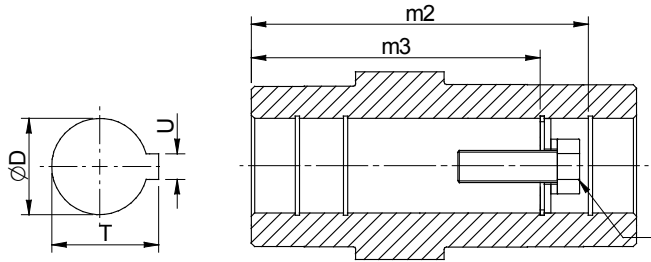
- a) Mass acceleration factor > 10
- b) Ambient temperature is above 104°F (40°C)

SERIES F OUTPUT OPTIONS

OUTPUT BORE OPTIONS, COLUMN 11 ENTRY

Column 11 Entry

Standard / Inch Hollow Shaft



Output Shaft Bore

Inch Hollow Shaft

A

Inch Taper Release *

T

(entry depends on shaft diameter contact Application Engineering)

Metric Hollow Shaft

H

* See pages 84 - 85 for dimensions of these shaft options

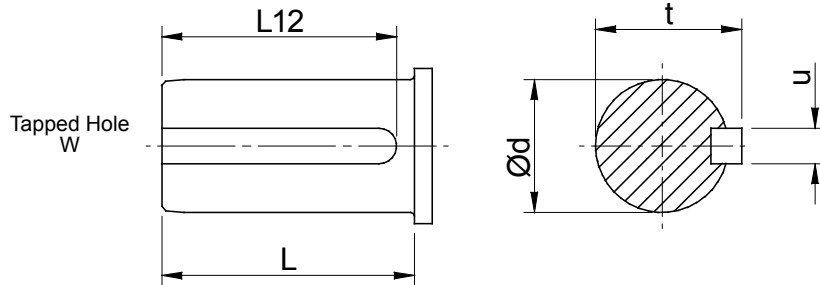
UNIT SIZE	TYPE OF BORE	COL 11 ENTRY	DIMENSIONS IN INCHES (Metric bore dimensions in mm)						
			Ø D	m1	m2	m3	T	U	v3
F02	Inch	A	1.001" / 1.000"	4.63"	4.13"	3.5"	1.11"	0.250"	3/8"UNFx2"
	Metric	H	25.021 / 25.000	117.5	105	89	28.5	8	M10x50
F03	Inch	A	1.251" / 1.250"	6.16"	4.8"	4.13"	1.37"	0.250"	3/8"UNFx2"
	Metric	H	30.025 / 30.000	156.5	122	105	33.5	8	M10x50
F04	Inch	A	1.376" / 1.375"	6.16"	5.20"	4.80"	1.53"	0.313"	1/2"UNFx2.25"
	Metric	H	35.021 / 35.000	156.5	132	122	38.5	10	M12x55
F05	Inch	A	1.501" / 1.500"	7.05"	6.85"	5.59"	1.67"	0.375"	5/8"UNFx2.75"
	Metric	H	40.025 / 40.000	179	174	142	43.5	12	M16x70
F06	Inch	A	1.501" / 1.500"	8.07"	6.85"	6.14"	1.67"	0.375"	5/8"UNFx2.75"
	Metric	H	40.025 / 40.000	205	174	156	43.5	12	M16x70
F07	Inch	A	2.001" / 2.000"	9.19"	7.80"	7.20"	2.23"	0.500"	5/8"UNFx2.75"
	Metric	H	50.025 / 50.000	233.5	198	183	54	14	M16x70
F08	Inch	A	2.376" / 2.375"	10.63"	9.06"	8.27"	2.66"	0.625"	3/4"UNFx3.25"
	Metric	H	60.030 / 60.000	270	230	210	64.5	18	M20x80
F09	Inch	A	2.751" / 2.750"	12.99"	10.63"	-	3.04"	0.625"	3/4"UNFx3.25"
	Metric	H	70.030 / 70.000	330	270	-	75	20	M20x80
F10	Inch	A	3.251" / 3.250"	14.57"	12.32"	-	3.59"	0.750"	3/4"UNFx3.25"
	Metric	H	80.030 / 80.000	370	313	-	85.5	22	M20x80

SERIES F OUTPUT OPTIONS

OUTPUT SHAFT OPTIONS COLUMN 11 ENTRY

Column 11 Entry

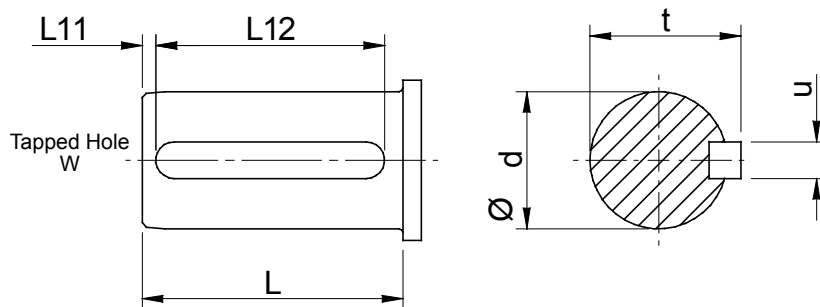
Inch Shafts



Inch Single Extension N

Metric Single Extension C

Metric Shafts



UNIT SIZE	TYPE OF BORE	COL 11 ENTRY	DIMENSIONS IN INCHES (Metric shaft dimensions in mm)						
			Ø D	L	L11	L12	t	u	w
F02	Inch	N	-	-	-	-	-	-	-
	Metric	C	-	-	-	-	-	-	-
F03	Inch	N	1.0000" / 0.9995"	1.85"	*	1.57"	1.11"	0.250"	3/8"UNFx 0.75"
	Metric	C	25.015 / 25.002	47	3	40	28	8	M10x22
F04	Inch	N	1.2500" / 1.2495"	2.20"	*	2.00"	1.36"	0.250"	1/2"UNFx 1.13"
	Metric	C	30.015 / 30.002	56	3	50	33	8	M12x28
F05	Inch	N	1.3750" / 1.3745"	2.60"	*	2.38"	1.51"	0.3125"	5/8"UNFx 1.5"
	Metric	C	35.018" / 35.002"	66	3	60	38	10	M16x36
F06	Inch	N	1.625" / 1.624"	3.00"	*	2.38"	1.78"	0.375"	5/8"UNFx 1.5"
	Metric	C	40.018 / 40.002	76	3	70	43	12	M16x36
F07	Inch	N	2.002" / 1.999"	3.74"	*	2.75"	2.23"	0.500"	5/8"UNFx 1.5"
	Metric	C	50.018 / 50.002	95	3	80	53.5	14	M16x36
F08	Inch	N	2.375" / 2.374"	4.49"	*	3.69"	2.65	.625"	3/4"UNFx 1.65"
	Metric	C	60.030 / 60.011	114	3	100	64	18	M20x42
F09	Inch	N	2.875" / 2.874"	5.32"	*	4.63"	3.20"	0.750"	3/4"UNFx 1.65"
	Metric	C	70.030 / 70.011	135	3	110	74.5	20	M20x42
F10	Inch	N	3.625" / 3.624"	6.77"	*	5.94"	4.01"	0.875"	3/4"UNFx 1.65"
	Metric	C	90.035 / 90.013	172	5	140	95	25	M20x42

SERIES F MOTOR ADAPTERS

DOUBLE REDUCTION UNITS

NEMA Flanges C face Column 12 entry for units type A (Column 10)

MOTOR	RATIO COVERAGE	F0222		F0322 F0422		F0522		F0622		F0722		F0822		F0921		F1021	
		6.3 - 14.	16. - 90.	7.1 - 25.	28. - 100	5.0 - 14.	16. - 71.	7.1 - 20.	22. - 100	7.1 - 16.	20. - 100	7.1 - 25.	28. - 100	5.0 - 25.	28. - 100	5.0 - 25.	28. - 100
		*T	*U	T	U	-	Q	-	Q	-	Q	-	M	-	-	-	-
56C	COLUMN 12 ENTRY	*V	*W	V	W	-	R	-	R	-	R	-	N	-	-	-	-
143/145TC		*X	-	*X	-	S	T	S	T	S	T	J	P	-	S	-	P
182/184TC		-	-	-	-	U	-	U	-	U	V	K	Q	-	T	-	Q
213/215TC		-	-	-	-	-	-	-	-	W	-	L	U	P	U	L	R
254/256TC		-	-	-	-	-	-	-	-	-	-	-	-	Q	V	M	S
284/286TC		-	-	-	-	-	-	-	-	-	-	-	-	R	W	N	T
324/326TC		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

IEC Flanges B14 Column 12 entry for units type G (Column 10)

MOTOR	RATIO COVERAGE	F0222		F0322 F0422		F0522		F0622		F0722	
		6.3 - 14.	16. - 90.	7.1 - 25.	28. - 100	5.0 - 14.	16. - 71.	7.1 - 20.	22. - 100	7.1 - 16.	20. - 100
		*H	*H	-	H	-	-	-	-	-	-
71	COLUMN 12 ENTRY	*B	*K	B	K	-	G	-	G	-	G
80		*D	*R	D	R	-	J	-	J	-	J
90		*E	*S	E	S	B	L	B	L	B	L
100		*E	*S	E	S	B	L	B	L	B	L
112		-	-	-	-	-	-	-	-	-	-
132		-	-	-	-	-	-	-	-	D	N

Motor codes marked * are not suitable for units with Taper Release Bushing

IEC Flanges B5 Column 12 entry for units type G (Column 10)

MOTOR	RATIO COVERAGE	F0222		F0322 F0422		F0522		F0622		F0722		F0822		F0921		F1021	
		6.3 - 14.	16. - 90.	7.1 - 25.	28. - 100	5.0 - 14.	16. - 71.	7.1 - 20.	22. - 100	7.1 - 16.	20. - 100	7.1 - 25.	28. - 100	5.0 - 25.	28. - 100	5.0 - 25.	28. - 100
		*F	*F	-	F	-	V	-	V	-	-	-	-	-	-	-	-
63	COLUMN 12 ENTRY	*G	*G	-	G	-	D	-	D	-	-	-	-	-	-	-	
71		*A	*J	*A	*J	W	F	W	F	-	F	-	D	-	E	-	
80		*C	*Q	*C	*Q	Y	H	Y	H	-	H	-	E	-	F	-	
90		-	-	-	-	A	K	A	K	A	K	A	F	-	G	-	
100		-	-	-	-	A	K	A	K	A	K	A	F	-	G	-	
112		-	-	-	-	N	P	N	P	C	M	B	G	-	H	-	
132		-	-	-	-	-	-	-	-	E	-	C	H	A	J	A	
160		-	-	-	-	-	-	-	-	-	-	-	-	B	K	B	
180		-	-	-	-	-	-	-	-	-	-	-	-	C	-	C	
200		-	-	-	-	-	-	-	-	-	-	-	-	D	-	D	
225		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
250		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
280		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



Limited Availability / Non Preferred

SERIES F MOTOR ADAPTERS

TRIPLE REDUCTION UNITS

NEMA Flanges C face Column 12 entry for units type A (Column 10)

MOTOR	RATIO COVERAGE	F0232	F0332 F0432	F0532	F0632	F0732	F0832	F0931	F1031
		90. - 315	100 - 360	80. - 280	100 - 360	100 - 360	100 - 360	100 - 360	100 - 360
56C	COLUMN 12 ENTRY	*U	U	U	U	Q	Q	X	-
143/145TC		*W	W	W	W	R	R	Y	-
182/184TC		-	-	-	-	T	T	Z	S
213/215TC		-	-	-	-	-	V	-	T
254/256TC		-	-	-	-	-	-	-	U
284/286TC		-	-	-	-	-	-	-	V
324/326TC		-	-	-	-	-	-	-	W

IEC Flanges B14 Column 12 entry for units type G (Column 10)

MOTOR	RATIO COVERAGE	F0232	F0332 F0432	F0532	F0632	F0732	F0832
		90. - 315	100 - 360	80. - 280	100 - 360	100 - 360	100 - 360
71	COLUMN 12 ENTRY	*H	H	H	H	-	-
80		*K	K	K	K	G	G
90		*R	R	R	R	J	J
100		-	-	-	-	-	L
112		-	-	-	-	-	L
132		-	-	-	-	-	N

Motor codes marked * are not suitable for units with Taper Release Bushing

IEC Flanges B5 Column 12 entry for units type G (Column 10)

MOTOR	RATIO COVERAGE	F0232	F0332 F0432	F0532	F0632	F0732	F0832	F0931	F1031
		90. - 315	100 - 360	80. - 280	100 - 360	100 - 360	100 - 360	100 - 360	100 - 360
63	COLUMN 12 ENTRY	*F	F	F	F	-	-	-	-
71		*G	G	G	G	-	-	-	-
80		*J	*J	J	J	F	F	L	E
90		*Q	*Q	Q	Q	H	H	M	F
100		-	-	-	-	K	K	N	G
112		-	-	-	-	K	K	N	G
132		-	-	-	-	-	M	-	H
160		-	-	-	-	-	-	-	-
180		-	-	-	-	-	-	-	-
200		-	-	-	-	-	-	-	-
225		-	-	-	-	-	-	-	-



Limited Availability / Non Preferred

SERIES F MOTOR ADAPTERS

QUADRUPLE REDUCTION UNITS

NEMA Flanges C face Column 12 entry for units type A (Column 10)

MOTOR	RATIO COVERAGE	F0342 F0442	F0542	F0642	F0742	F0842	F0941	F1041
		400 - 50C	320 - 40C	400 - 50C	400 - 50C	400 - 56C	400 - 56C	400 - 56C
56C	COLUMN 12 ENTRY	U	U	U	U	Q	Q	Q
143/145TC		W	W	W	W	R	R	R
182/184TC		-	-	-	-	T	T	T
213/215TC		-	-	-	-	-	-	V

IEC Flanges B14 Column 12 entry for units type G (Column 10)

MOTOR	RATIO COVERAGE	F0342 F0442	F0542	F0642	F0742	F0842	F0941	F1041
		400 - 50C	320 - 40C	400 - 50C	400 - 50C	400 - 56C	400 - 56C	400 - 56C
71	COLUMN 12 ENTRY	H	H	H	H	-	-	-
80		K	K	K	K	G	G	G
90		R	R	R	R	J	J	J
100		-	-	-	-	L	L	L
112		-	-	-	-	L	L	L
132		-	-	-	-	-	-	N

IEC Flanges B5 Column 12 entry for units type G (Column 10)

MOTOR	RATIO COVERAGE	F0342 F0442	F0542	F0642	F0742	F0842	F0941	F1041
		400 - 50C	320 - 40C	400 - 50C	400 - 50C	400 - 56C	400 - 56C	400 - 56C
63	COLUMN 12 ENTRY	F	F	F	F	V	V	-
71		G	G	G	G	D	D	-
80		J	J	J	J	F	F	F
90		Q	Q	Q	Q	H	H	H
100		-	-	-	-	K	K	K
112		-	-	-	-	K	K	K
132		-	-	-	-	P	P	M
160		-	-	-	-	-	-	P



Limited Availability / Non Preferred

SERIES F LUBRICATION

Gear units 02, 03, 04, 05, 06 & 07 will be supplied filled with a quantity of EP mineral oil (Grade 6E) appropriate to the intended mounting position. However if, as requested, the unit is supplied without lubricant then the oil quantity required is obtained from Table 2. Gear units 08, 09, and 10 are supplied without lubricant. Recommended lubricants are listed in the Approved Lubricant scheme booklet.

TEMPERATURE LIMITATIONS

The standard lubricant is suitable for operation in ambient temperatures of 32°F to 95°F (0°C to 35°C), outside of this consult Table 1 or our Application Engineers.

TABLE 1 OIL GRADES

LUBRICANT	AMBIENT TEMPERATURE RANGE		
	23°F to 68°F (type E) (-5°C to 20°C) -22°F to 68°F (type H) (-30°C to 20°C)	32°F to 95°F (0°C to 35°C)	68°F to 122°F (20°C to 50°C)
EP Mineral Oil (type E)	5E (VG 220)	6E (VG 320)	7E (VG 460)
Polyalphaolefin based Synthetic (type H)	5H (VG 220)	5H (VG 220)	6H (VG 320)

TABLE 2 Lubrication Quantity (Liters)

DOUBLE REDUCTION										
Unit Size	F0222	F0322	F0422	F0522	F0622	F0722	F0822	F0921	F1021	
MOUNTING POSITION	1	0.8	1.3	1.3	2.1	3.5	6.3	10.7	19	34
	2	0.4	0.8	0.8	1.4	2.3	3.5	7.1	13	22
	3	0.4	1.1	1.1	1.4	2.3	3.4	8.8	17	28
	4	0.5	0.8	0.8	1.8	3.0	5.0	4.7	15	27
	5	1.1	1.2	1.2	2.8	4.5	8.0	9.7	24	43
	6	1.3	2.0	2.0	3.2	5.2	9.0	17.2	25	43

TRIPLE REDUCTION										
Unit Size	F0232	F0332	F0432	F0532	F0632	F0732	F0832	F0931	F1031	
MOUNTING POSITION	1	0.8	1.2	1.3	2.1	3.5	6.3	10.4	19	34
	2	0.4	0.8	0.8	1.4	2.3	3.5	7.3	15	24
	3	0.4	1.1	1.1	1.4	2.3	3.4	9.2	17	28
	4	0.5	0.8	0.8	1.8	3.0	5.0	5.3	16	27
	5	1.1	1.2	1.2	2.8	4.5	8.0	9.7	24	43
	6	1.3	2.0	2.0	3.2	5.2	9.0	17.4	25	43

QUADRUPLE REDUCTION											
Unit Size	F0342		F0442		F0542		F0642		F0742		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
	M0122	F0322	M0122	F0422	M0322	F0522	M0322	F0622	M0322	F0722	
MOUNTING POSITION	1	0.5	1.3	0.5	1.3	0.8	2.1	0.8	3.5	0.8	6.3
	2	0.5	0.8	0.5	0.8	0.8	1.4	0.8	2.3	0.8	3.5
	3	0.5	1.1	0.5	1.1	0.8	1.4	0.8	2.3	0.8	3.4
	4	0.5	0.8	0.5	0.8	0.8	1.8	0.8	3.0	0.8	5.0
	5	0.7	1.2	0.7	1.2	1.1	2.8	1.1	4.5	1.1	8.0
	6	1.0	2.0	1.0	2.0	1.4	3.2	1.4	5.2	1.4	9.0

QUADRUPLE REDUCTION..CONT							
Unit Size	F0842		F0941		F1041		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	
	M0522	F0822	M0522	F0921	M0722	F1021	
MOUNTING POSITION	1	1.5	10.7	1.5	19.0	2.6	34.0
	2	1.5	7.1	1.5	13.0	2.6	22.0
	3	1.5	8.8	1.5	17.0	2.6	28.0
	4	1.5	4.7	1.5	15.0	2.6	27.0
	5	2.0	9.7	2.0	24.0	3.2	43.0
	6	2.6	17.2	2.6	25.0	4.7	43.0

Conversion Table:
Liters to Gallons = Liters x 0.26

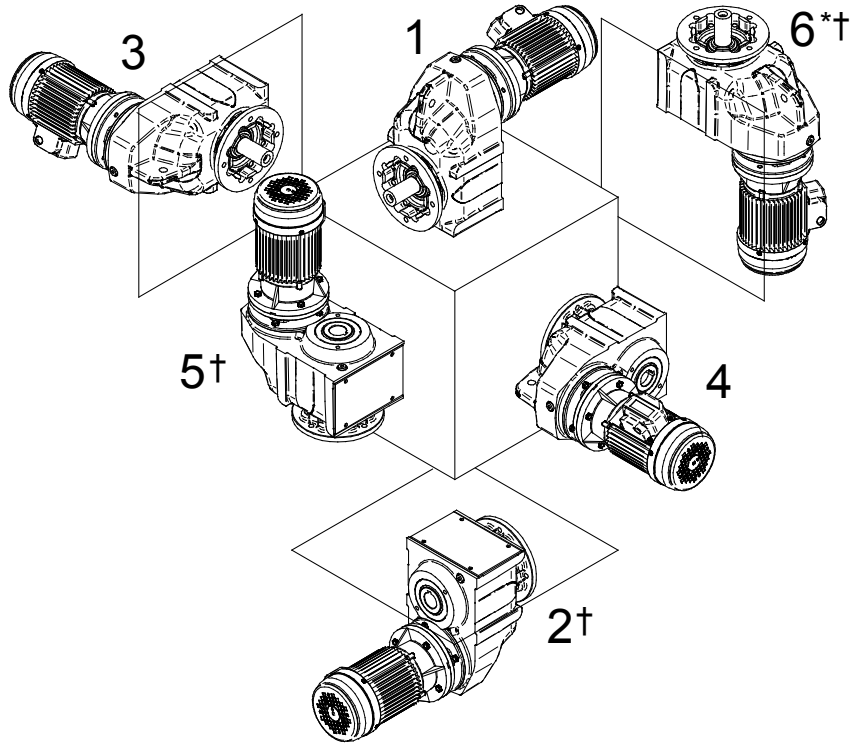
* NOTE: Primary units filled with Grade 6E lubricant suitable for all ambient temperatures between 32°F and 95°F (0°C and 35°C)

SERIES F MOUNTING POSITIONS

Mounting Positions

COLUMN 13 ENTRY

Enter for units with no oil fill

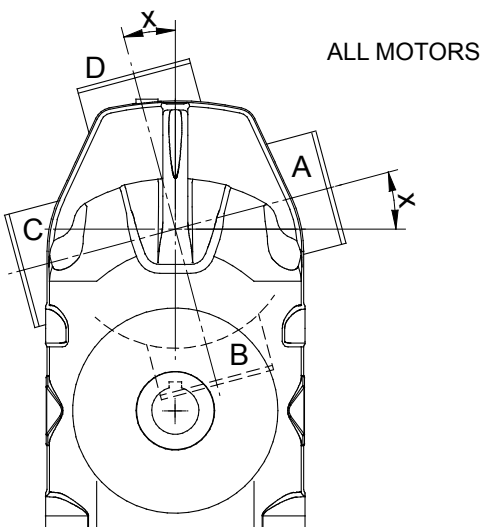


* Mounting Position 6 is not recommended for Geared Motors - Consult Application Engineering
 † Gear Units selected for use in mounting positions 2, 5 and 6 should only be used with overall ratios greater or equal to those shown in the table below

Unit Size	Input Speed (rpm)				Consult Application Engineering
	< 1000	< 1500	< 1800	> 1800	
F02 - F07	All	All	All		
F0822	All	9.0	9.0		
F0921	8.0	11.0	12.0		
F1021	11.0	16.0	18.0		

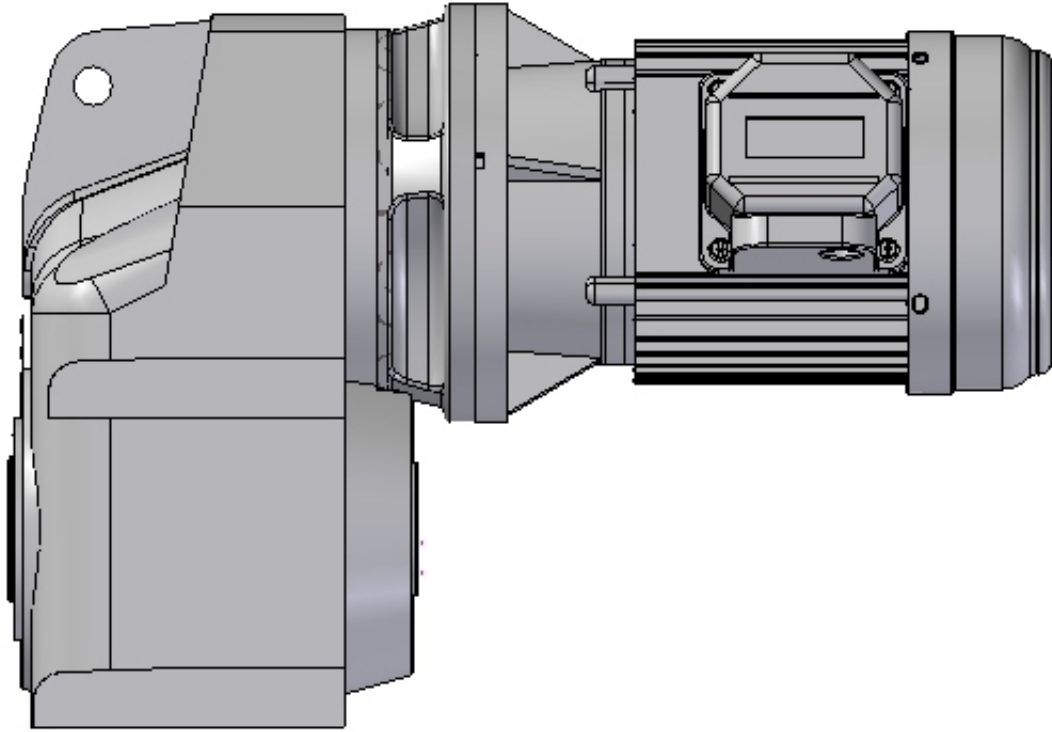
MOUNTING POSITIONS - SHOWN AS MOTORIZED - APPLIES ALSO FOR REDUCERS

COLUMN 14 ENTRY



Column 14 Entry	Angle X				
	F02	F03	F04	F05	F06
A	15°	23°	23°	9.5°	16.5°
B	105°	113°	113°	99.5°	106.5°
C	195°	203°	203°	189.5°	196.5°
D	285°	293°	293°	279.5°	286.5°
-	Reducer or no motor fitted				

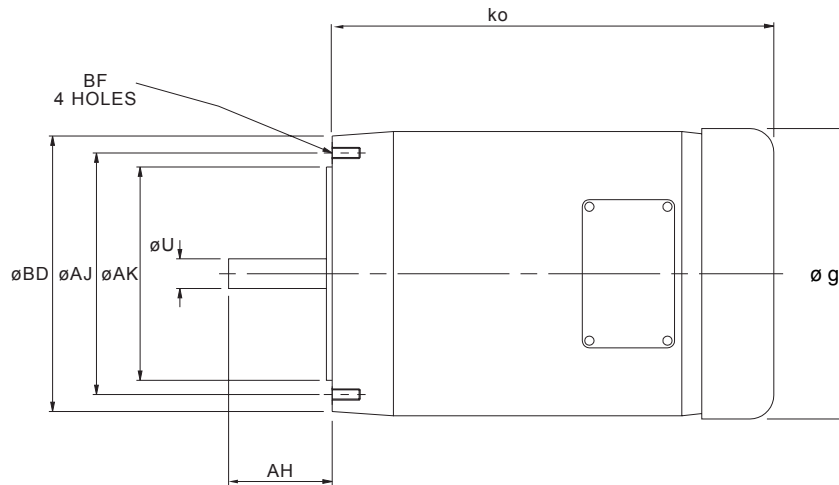
Column 14 Entry	Angle X	
	F07	F08, F09, F10, F11, F12
A	28°	0°
B	118°	90°
C	208°	180°
D	298°	270°
-	Reducer or no motor fitted	



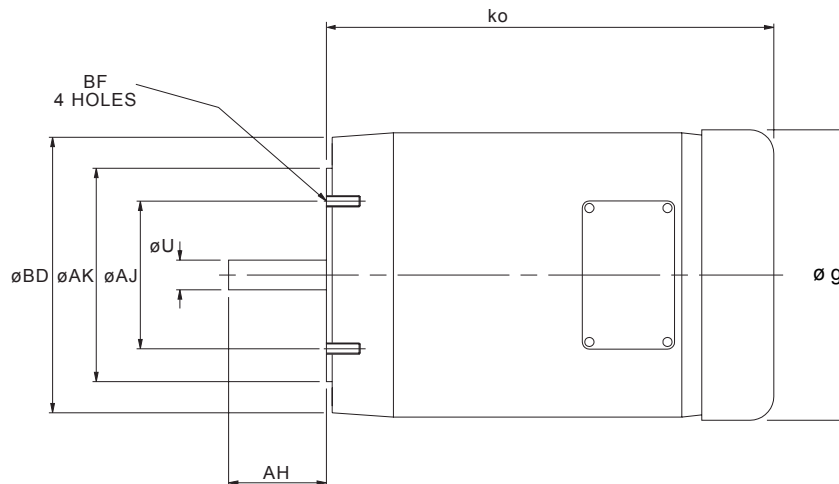
**MOTORIZED
SERIES F**

SERIES F MOTOR DETAILS

NEMA Standard Motors



MOTOR FRAME SIZE	Ø BD	Ø AJ	Ø AK	Ø U	AH	ko max	Ø g	BF TAP UNC
56C	6.50	5.875	4.5	0.625	2.062	12.00	6.13	3/8 - 16
143TC/145TC	6.50	5.875	4.5	0.875	2.125	12.00	7.19	3/8 - 16



MOTOR FRAME SIZE	Ø BD	Ø AJ	Ø AK	Ø U	AH	ko max	Ø FP	BF TAP UNC
182TC/184TC	9.00	7.25	8.5	1.125	2.625	15.50	8.50	1/2 - 13
213TC/215TC	9.00	7.25	8.5	1.375	3.125	16.50	10.19	1/2 - 13
254TC/256TC	10.00	7.25	8.5	1.625	3.75	20.00	12.50	1/2 - 13
284TC/286TC	11.25	9.00	10.5	1.875	4.375	23.25	15.56	1/2 - 13
324TC/326TC	13.875	11.00	12.5	2.125	5.00	25.25	16.94	5/8 - 11
364TC/365TC	13.875	11.00	12.5	2.375	5.625	27.00	19.00	5/8 - 11
404TC/405TC	13.875	11.00	12.5	2.875	7.00	30.00	20.63	5/8 - 11

* Motor lengths for our standard motors.
These lengths may vary if alternative motor is fitted.

SERIES F

ADDITIONAL MOTOR FEATURES

ADDITIONAL MOTOR FEATURES - COLUMN 19 ENTRY

Column 19 Entry	Brake Motor	Hand Release on Brake	Forced Ventilation/ Constant Blower (TECB)	Thermistors	Special
-					
A	•				
B	•	•			
C			•		
D	•		•		
E	•	•	•		
F				•	
G	•			•	
H	•	•		•	
K			•	•	
L	•		•	•	
M	•	•	•	•	
S					•

Please refer to our Application Engineers for details of the following additional motor features:

- Wash down
- Customized brake torque
- Seperate brake supply
- Anti Condensation heater
- Bi-metal temperature detectors, Thermostat
- Metal fan cover
- Rain cowl
- Seperate terminal box

SERIES F

ADDITIONAL GEARBOX FEATURES

ADDITIONAL GEARBOX FEATURES - COLUMN 20 ENTRY

Column 20 Entry	Double Oil* Seals	Oil Level** Glass	Motorized Backstop***		Special****
			CW Rotation	CCW Rotation	
-					
A	•				
B		•			
C	•	•			
D			•		
E	•		•		
F		•	•		
G	•	•	•		
H				•	
I	•			•	
J		•		•	
K	•	•		•	
L					•

*Double oil seals are for output shafts only. Double oil seals are NOT AVAILABLE on Taper Release output shafts.

**Oil level glass is available on F06-F10. Oil level glass is NOT AVAILABLE on F02-F05 units.

***Limited frame size availability.

NEMA Frame sizes 182TC - 326TC & IEC Frame sizes 100 - 200

****Please refer to our Application Engineers for details regarding special gearbox features.

SERIES F EXACT RATIOS

EXACT RATIOS - DOUBLE REDUCTION

Column Entry			F0222	F0322	F0422	F0522	F0622	F0722	F0822	F0921	F1021	F1121	F1221
6	7	8											
4.5			-	-	-	-	-	-	-	-	-	4.53	4.63
5.0			-	-	-	4.841	-	-	-	5.085	5.107	5.16	5
5.6			-	-	-	-	-	-	-	-	-	5.53	5.73
6.3			5.903	-	-	6.806	-	-	-	6.567	6.433	6.3	6.19
7.1			7.974	6.262	6.262	7.628	7.494	6.772	6.959	7.000	7.133	7.2	7.31
8.0			-	-	-	-	-	-	-	7.846	7.758	8.2	7.9
9.0			9.069	8.784	8.784	8.563	8.750	9.380	9.865	8.807	8.812	8.75	9.19
10.			10.27	9.680	9.680	10.87	9.807	10.54	10.96	10.13	9.772	9.97	9.92
11.			-	-	-	12.33	-	-	-	11.35	11.48	11.33	11.55
12.			13.14	10.99	10.99	-	11.009	11.59	12.19	12.68	12.39	12.9	12.48
14.			14.16	13.96	13.96	14.70	13.98	15.13	15.76	14.66	14.46	13.66	13.88
16.			17.88	15.86	15.86	16.93	15.85	17.21	17.70	16.37	15.61	15.56	14.99
18.			-	-	-	19.69	-	-	-	17.58	18.07	17.96	17.77
20.			20.27	19.46	19.46	-	18.90	20.89	20.77	20.04	20.46	20.46	19.19
22.			23.16	21.59	21.59	22.03	21.76	22.98	23.40	22.70	22.76	22.42	22.84
25.			25.77	24.52	24.52	23.48	25.31	26.41	27.24	25.88	21.70	25.54	24.67
28.			28.41	27.86	27.86	27.83	28.32	29.95	30.21	28.41	24.45	28.4	28.92
32.			31.26	30.68	30.68	29.71	30.18	33.03	33.07	31.56	28.46	32.34	31.23
36.			36.63	35.30	35.30	36.87	35.77	37.83	37.41	36.69	31.57	34.96	35.61
40.			43.94	38.37	38.37	43.47	38.19	42.77	42.23	40.76	34.55	39.83	38.46
45.			-	-	-	47.60	-	-	-	44.58	39.09	44.74	43.75
50.			51.22	46.07	46.07	-	47.40	49.59	51.19	49.22	44.13	50.96	47.26
56.			56.91	55.28	55.28	58.34	55.89	59.14	59.69	57.58	53.49	51.85	54.03
63.			68.54	62.29	62.29	65.02	61.20	64.77	65.57	63.56	62.38	59.06	58.36
71.			78.56	72.41	72.41	72.92	75.00	77.72	80.36	67.71	68.52	-	-
80.			-	-	-	-	-	-	-	76.14	83.97	-	-
90.			89.28	82.18	82.18	-	83.59	89.42	87.75	87.44	91.70	-	-
100			-	93.43	93.43	-	93.75	99.36	101.05	98.32	105.60	-	-

SERIES F EXACT RATIOS

EXACT RATIOS - TRIPLE REDUCTION

Column Entry			F0232	F0332	F0432	F0532	F0632	F0732	F0832	F0931	F1031
6	7	8									
4 5 .	-	-	-	-	-	-	-	-	-	-	-
5 0 .	-	-	-	-	-	-	-	-	-	-	-
5 6 .	-	-	-	-	-	-	-	-	-	-	-
6 3 .	-	-	-	-	-	-	-	-	-	-	-
7 1 .	-	-	-	-	-	-	-	-	-	-	-
8 0 .	-	-	-	78.8	-	-	-	-	-	-	-
9 0 .	92.02	-	-	86.8	-	-	-	-	-	-	-
1 0 0	101.5	99.52	99.52	99.86	101.4	108.6	114.2	102.5	102.8		
1 1 2	111.6	109.7	109.7	108.6	111.6	115.7	124.9	113.9	114.2		
1 2 5	130.8	120.7	120.7	130.3	128.4	137.1	141.3	132.3	129.5		
1 4 0	-	-	-	-	-	-	-	147.0	143.9		
1 6 0	156.9	141.5	141.5	156.4	139.6	146.4	159.5	160.8	162.9		
1 8 0	182.9	169.7	169.7	176.2	167.6	181.7	193.4	177.5	187.7		
2 0 0	203.3	197.8	197.8	204.9	201.1	214.2	225.5	207.7	205.2		
2 2 5	244.8	219.8	219.8	232.5	226.6	234.6	247.7	229.3	236.4		
2 5 0	-	-	-	-	-	-	-	244.2	253.9		
2 8 0	280.6	264.7	264.7	264.3	263.4	287.5	303.6	274.6	272.7		
3 1 5	318.8	303.4	303.4	-	298.9	320.4	331.5	315.4	319.8		
3 6 0	-	344.8	344.8	-	339.8	359.4	381.8	354.7	343.6		

EXACT RATIOS - QUAD REDUCTION

Column Entry			F0342	F0442	F0542	F0642	F0742	F0842	F0941	F01041
6	7	8								
3 2 0	-	-	314.4	-	-	-	-	-	-	-
3 6 0	-	-	351.7	-	-	-	-	-	-	-
4 0 0	410.0	410.0	412.8	404.2	404.1	395.8	395.7	400.7		
4 5 0	456.1	456.1	444.3	445.1	464.4	460.4	460.2	445.3		
5 0 0	502.9	502.9	489.3	498.0	534.1	490.0	511.0	489.8		
5 6 0	577.7	577.7	562.8	571.2	580.7	570.0	594.3	562.9		
6 3 0	637.0	637.0	611.9	629.0	658.5	637.7	664.9	638.3		
7 0 0	701.0	701.0	694.2	723.5	726.3	679.7	708.7	704.0		
8 0 0	821.3	821.3	837.0	786.6	831.8	805.5	839.9	806.2		
9 0 0	914.9	914.9	931.5	892.4	944.4	909.5	926.7	924.8		
1 0 C	997.6	997.6	1026	983	1040	1018	1037	1049		
1 1 C	1097.9	1098	1148	1130	1090	1085	1105	1157		
1 2 C	1237.1	1237	1180	1238	1196	1191	1177	1325		
1 4 C	1449.3	1449	1377	1346	1350	1412	1395	1498		
1 6 C	1543.2	1543	1552	1615	1571	1594	1520	1564		
1 8 C	1798.9	1799	1848	1770	1770	1890	1802	1792		
2 0 C	2026.9	2027	2082	1995	2052	2017	1924	2026		
2 2 C	2252.1	2252	2242	2184	2312	2293	2180	2349		
2 5 C	2406.9	2407	2421	2539	2454	2503	2387	2523		
2 8 C	2758.8	2759	2747	2882	2785	2703	2815	2801		
3 2 C	3152.7	3578	3123	3112	3225	3232	3082	3068		
3 6 C	3578.4	3578	3481	3532	3660	3628	3656	3681		
4 0 C	4101.5	4102	3904	3937	4161	3961	3777	4235		
4 5 C	4662.8	4663	-	4415	4679	4415	4210	4550		
5 0 C	5299.2	5299	-	5019	5319	4952	4722	4706		
5 6 C	-	-	-	-	-	5702	5310	5056		

SERIES F

SELECTION TABLES

GEARED MOTORS

0.25 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
292	5.90	51	9.94	406	F 0 2 2 2 6 . 3 _ N _ _ _ _ . 2 5 B - -	51.1	56C
216	7.97	70	8.57	447	7 . 1		
190	9.07	79	8.04	465	9 . 0		
168	10.27	90	7.51	483	1 0 .		
131	13.14	116	6.50	519	1 2 .		
122	14.16	124	6.24	530	1 4 .		
96	17.88	158	5.34	566	1 6 .		
85	20.27	179	4.91	586	2 0 .		
74	23.16	205	4.48	609	2 2 .		
67	25.77	226	4.17	627	2 5 .		
61	28.41	249	3.90	642	2 8 .		
55	31.26	275	3.66	658	3 2 .		
47	36.63	323	3.34	685	3 6 .		
39	43.94	386	2.95	716	4 0 .		
34	51.22	450	2.53	741	5 0 .		
30	56.91	499	2.28	759	5 6 .		
25	68.54	603	1.89	788	6 3 .		
22	78.56	687	1.45	808	7 1 .		
19	89.28	783	1.25	826	9 0 .		
19	92.02	793	1.44	835	F 0 2 3 2 9 0 . _ N _ _ _ _ . 2 5 B - -	53.3	56C
17	101.45	874	1.31	846	1 0 0		
15	111.65	963	1.18	858	1 1 2		
13	130.81	1130	1.01	871	1 2 5		
11	156.93	1355	0.86	822	1 6 0		
21	82.18	722	3.41	1665	F 0 3 2 2 9 0 . _ N _ _ _ _ . 2 5 B - -	66.5	56C
18	93.43	817	2.68	1723	1 0 0		
17	99.52	863	3.50	1757	F 0 3 3 2 1 0 0 _ N _ _ _ _ . 2 5 B - -	68.7	56C
16	109.72	952	3.28	1802	1 1 2		
14	120.75	1049	3.10	1847	1 2 5		
12	141.47	1229	2.65	1923	1 6 0		
10	169.72	1470	2.22	1952	1 8 0		
8.7	197.84	1715	1.90	1903	2 0 0		
7.8	219.82	1901	1.71	1865	2 2 5		
6.5	264.71	2298	1.42	1786	2 8 0		
5.7	303.42	2632	1.24	1718	3 1 5		
5	344.83	2975	1.09	1646	3 6 0		
4.2	410.03	3431	0.85	1582	F 0 3 4 2 4 0 0 _ N _ _ _ _ . 2 5 B - -	88.5	56C
21	82.18	722	3.41	1665	F 0 4 2 2 9 0 . _ N _ _ _ _ . 2 5 B - -	66.5	56C
18	93.43	817	2.68	1723	1 0 0		
17	99.52	863	3.50	1757	F 0 4 3 2 1 0 0 _ N _ _ _ _ . 2 5 B - -	68.7	56C
16	109.72	952	3.28	1802	1 1 2		
14	120.75	1049	3.10	1847	1 2 5		
12	141.47	1229	2.65	1923	1 6 0		
10	169.72	1470	2.22	1952	1 8 0		
8.7	197.84	1715	1.90	1903	2 0 0		
7.8	219.82	1901	1.71	1865	2 2 5		
6.5	264.71	2298	1.42	1786	2 8 0		
5.7	303.42	2632	1.24	1718	3 1 5		
5	344.83	2975	1.09	1646	3 6 0		
4.2	410.03	3431	0.85	1582	F 0 4 4 2 4 0 0 _ N _ _ _ _ . 2 5 B - -	88.5	56C
11	156.40	1357	3.94	2809	F 0 5 3 2 1 6 0 _ N _ _ _ _ . 2 5 B - -	81.9	56C
10	176.23	1529	3.67	2899	1 8 0		
8.4	204.87	1781	3.37	2966	2 0 0		
7.4	232.53	2016	3.13	2921	2 2 5		
6.5	264.35	2290	2.47	2854	2 8 0		
5.5	314.39	2661	2.16	1729	F 0 5 4 2 3 2 0 _ N _ _ _ _ . 2 5 B - -	112.8	56C
4.9	351.75	2970	2.04	1779	3 6 0		
4.2	412.85	3492	1.78	1813	4 0 0		
3.9	444.31	3737	1.65	2006	4 5 0		
3.5	489.28	4122	1.49	2006	5 0 0		
3.1	562.80	4741	1.30	2006	5 6 0		
2.8	611.86	5154	1.19	2006	6 3 0		
2.5	694.17	5761	1.09	2000	7 0 0		
2.1	837.03	6936	0.91	2000	8 0 0		
8.6	201.07	1750	3.94	8789	F 0 6 3 2 2 0 0 _ N _ _ _ _ . 2 5 B - -	112.8	56C
7.6	226.56	1970	3.67	8789	2 2 5		
6.5	263.38	2293	3.37	8767	2 8 0		
5.8	298.94	2601	3.11	8744	3 1 5		
5.1	339.84	2949	2.47	8744	3 6 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

0.25 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
4.3	404.18	3427	2.16	8503	F 0 6 4 2 4 0 0 _ N _ _ _ _ . 2 5 B - -	143.7	56C
3.9	445.09	3779	1.96	8503	4 5 0		
3.5	497.98	4216	1.78	8481	5 0 0		
3	571.21	4808	1.56	8481	5 6 0		
2.7	629.02	5303	1.41	8481	6 3 0		
2.4	723.53	6100	1.23	8481	7 0 0		
2.2	786.61	6632	1.13	8481	8 0 0		
1.9	892.42	7403	1.01	8470	9 0 0		
1.8	982.74	8169	0.92	8470	1 0 C		
4.3	404.11	3453	3.82	7206	F 0 7 4 2 4 0 0 _ N _ _ _ _ . 2 5 B - -	190	56C
3.7	464.36	3962	3.33	7199	4 5 0		
3.2	534.13	4553	2.90	7199	5 0 0		
3	580.70	4948	2.67	7199	5 6 0		
2.6	658.49	5597	2.36	7199	6 3 0		
2.4	726.31	6172	2.14	7199	7 0 0		
2.1	831.78	7054	1.87	7199	8 0 0		
1.8	944.37	7925	1.66	7199	9 0 0		
1.7	1039.95	8741	1.51	7199	1 0 C		
1.6	1090.34	9200	1.43	7199	1 1 C		
1.4	1196.20	10053	1.31	7199	1 2 C		
1.3	1350.14	11408	1.16	7199	1 4 C		
1.1	1570.72	13229	1.00	7199	1 6 C		
0.97	1769.83	14892	0.89	7199	1 8 C		
2.1	805.50	6840	3.59	6696	F 0 8 4 2 8 0 0 _ N _ _ _ _ . 2 5 B - -	190	56C
1.9	909.51	7634	3.37	6696	9 0 0		
1.7	1017.59	8536	3.02	6696	1 0 C		
1.6	1084.58	9111	2.83	6696	1 1 C		
1.4	1191.37	9978	2.58	6696	1 2 C		
1.2	1411.94	11833	2.18	6696	1 4 C		
1.1	1594.33	13227	1.95	6696	1 6 C		
0.91	1889.50	15696	1.64	6696	1 8 C		
0.85	2017.40	16767	1.54	6696	2 0 C		
0.75	2292.50	19138	1.35	6696	2 2 C		
0.68	2503.41	20833	1.24	6696	2 5 C		
0.63	2703.33	22578	1.14	6696	2 8 C		
1.5	1177.20	9936	3.52	7133	F 0 9 4 1 1 2 C _ N _ _ _ _ . 2 5 B - -	469.9	56C
1.2	1395.15	11778	2.97	7133	1 4 C		
1.1	1520.27	12798	3.37	7116	1 6 C		
0.95	1801.73	15171	2.84	7116	1 8 C		
0.89	1923.69	16199	2.66	7116	2 0 C		
0.79	2179.69	18394	1.90	7133	2 2 C		
0.72	2387.12	20102	2.14	7116	2 5 C		
0.61	2814.91	23696	1.82	7116	2 8 C		
0.55	3082.28	25939	1.66	7116	3 2 C		
0.47	3656.25	30759	1.14	7133	3 6 C		
0.45	3777.43	31753	1.36	7116	4 0 C		
0.4	4210.26	35378	1.22	7116	4 5 C		
0.36	4721.79	39633	1.09	7116	5 0 C		

0.33 HP

4 POLE

292	5.90	68	7.53	402	F 0 2 2 2 6 . 3 _ N _ _ _ _ . 3 3 B - -	53.1	56C
216	7.97	92	6.49	441	7 . 1		
190	9.07	105	6.09	458	9 . 0		
168	10.27	119	5.69	475	1 0 .		
131	13.14	153	4.93	508	1 2 .		
122	14.16	164	4.73	519	1 4 .		
96	17.88	208	4.05	552	1 6 .		
85	20.27	236	3.72	570	2 0 .		
74	23.16	271	3.39	590	2 2 .		
67	25.77	299	3.16	606	2 5 .		
61	28.41	329	2.95	620	2 8 .		
55	31.26	363	2.77	634	3 2 .		
47	36.63	427	2.53	656	3 6 .		
39	43.94	510	2.24	682	4 0 .		
34	51.22	595	1.92	701	5 0 .		
30	56.91	659	1.73	715	5 6 .		
25	68.54	796	1.43	734	6 3 .		
22	78.56	907	1.10	747	7 1 .		
19	89.28	1034	0.95	757	9 0 .		
19	92.02	1047	1.09	764	F 0 2 3 2 9 0 . _ N _ _ _ _ . 3 3 B - -	55.3	56C
17	101.45	1153	0.99	768	1 0 0		
15	111.65	1272	0.90	770	1 1 2		
24	72.41	841	3.25	1566	F 0 3 2 2 7 1 . _ N _ _ _ _ . 3 3 B - -	68.5	56C
21	82.18	953	2.58	1618	9 0 .		
18	93.43	1078	2.03	1671	1 0 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

0.33 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
17	99.52	1139	2.65	1701	F 0 3 3 2 1 0 0 _ N _ _ _ _ . 3 3 B - -	70.7	56C
16	109.72	1257	2.48	1740	1 1 2		
14	120.75	1385	2.35	1779	1 2 5		
12	141.47	1622	2.01	1844	1 6 0		
10	169.72	1940	1.68	1857	1 8 0		
8.7	197.84	2264	1.44	1792	2 0 0		
7.8	219.82	2509	1.30	1742	2 2 5		
6.5	264.71	3033	1.07	1637	2 8 0		
5.7	303.42	3474	0.94	1548	3 1 5		
5	344.83	3927	0.83	1454	3 6 0		
24	72.41	841	3.25	1566	F 0 4 2 2 7 1 . _ N _ _ _ _ . 3 3 B - -	68.5	56C
21	82.18	953	2.58	1618	9 0 .		
18	93.43	1078	2.03	1671	1 0 0		
17	99.52	1139	2.65	1701	F 0 4 3 2 1 0 0 _ N _ _ _ _ . 3 3 B - -	70.7	56C
16	109.72	1257	2.48	1740	1 1 2		
14	120.75	1385	2.35	1779	1 2 5		
12	141.47	1622	2.01	1844	1 6 0		
10	169.72	1940	1.68	1857	1 8 0		
8.7	197.84	2264	1.44	1792	2 0 0		
7.8	219.82	2509	1.30	1742	2 2 5		
6.5	264.71	3033	1.07	1637	2 8 0		
5.7	303.42	3474	0.94	1548	3 1 5		
5	344.83	3927	0.83	1454	3 6 0		
24	72.92	843	3.82	2214	F 0 5 2 2 7 1 . _ N _ _ _ _ . 3 3 B - -	81.7	56C
17	99.86	1147	3.93	2405	F 0 5 3 2 1 0 0 _ N _ _ _ _ . 3 3 B - -	83.9	56C
16	108.57	1246	3.74	2472	1 1 2		
13	130.34	1497	3.36	2585	1 2 5		
11	156.40	1791	2.99	2717	1 6 0		
10	176.23	2018	2.78	2795	1 8 0		
8.4	204.87	2351	2.55	2847	2 0 0		
7.4	232.53	2661	2.37	2785	2 2 5		
6.5	264.35	3023	1.87	2701	2 8 0		
5.5	314.39	3512	1.64	1729	F 0 5 4 2 3 2 0 _ N _ _ _ _ . 3 3 B - -	114.8	56C
4.9	351.75	3920	1.54	1779	3 6 0		
4.2	412.85	4609	1.35	1813	4 0 0		
3.9	444.31	4933	1.25	2006	4 5 0		
3.5	489.28	5441	1.13	2006	5 0 0		
3.1	562.80	6258	0.98	2006	5 6 0		
2.8	611.86	6803	0.90	2006	6 3 0		
2.5	694.17	7605	0.83	2000	7 0 0		
18	93.75	1087	3.82	8834	F 0 6 2 2 1 0 0 _ N _ _ _ _ . 3 3 B - -	112.6	56C
13	128.39	1478	3.93	8812	F 0 6 3 2 1 2 5 _ N _ _ _ _ . 3 3 B - -	114.8	56C
12	139.58	1606	3.74	8812	1 6 0		
10	167.56	1927	3.36	8790	1 8 0		
8.6	201.07	2310	2.99	8763	2 0 0		
7.6	226.56	2600	2.78	8758	2 2 5		
6.5	263.38	3028	2.55	8731	2 8 0		
5.8	298.94	3434	2.36	8704	3 1 5		
5.1	339.84	3893	1.87	8694	3 6 0		
4.3	404.18	4524	1.64	8503	F 0 6 4 2 7 0 0 _ N _ _ _ _ . 3 3 B - -	145.7	56C
3.9	445.09	4989	1.49	8503	4 5 0		
3.5	497.98	5565	1.35	8481	5 0 0		
3	571.21	6347	1.18	8481	5 6 0		
2.7	629.02	7000	1.07	8481	6 3 0		
2.4	723.53	8052	0.93	8481	7 0 0		
2.2	786.61	8754	0.86	8481	8 0 0		
4.8	359.36	4114	3.79	7306	F 0 7 3 2 3 6 0 _ N _ _ _ _ . 3 3 B - -	176.5	56C
4.3	404.11	4558	2.89	7206	F 0 7 4 2 4 0 0 _ N _ _ _ _ . 3 3 B - -	192	56C
3.7	464.36	5229	2.52	7199	4 5 0		
3.2	534.13	6011	2.19	7199	5 0 0		
3	580.70	6532	2.02	7199	5 6 0		
2.6	658.49	7388	1.78	7199	6 3 0		
2.4	726.31	8147	1.62	7199	7 0 0		
2.1	831.78	9311	1.42	7199	8 0 0		
1.8	944.37	10461	1.26	7199	9 0 0		
1.7	1039.95	11538	1.14	7199	1 0 C		
1.6	1090.34	12144	1.09	7199	1 1 C		
1.4	1196.20	13271	0.99	7199	1 2 C		
1.3	1350.14	15059	0.88	7199	1 4 C		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

0.33 HP

4 POLE

0.50 HP

4 POLE

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
3	569.96	6389	3.84	6696	F 0 8 4 2 5 6 0 _ N _ _ _ _ . 3 3 B - -	192	56C
2.7	637.69	7141	3.44	6696	6 3 0 0		
2.5	679.67	7619	3.22	6696	7 0 0 0		
2.1	805.50	9028	2.72	6696	8 0 0 0		
1.9	909.51	10077	2.56	6696	9 0 0 0		
1.7	1017.59	11268	2.29	6696	1 0 C		
1.6	1084.58	12026	2.14	6696	1 1 C		
1.4	1191.37	13171	1.96	6696	1 2 C		
1.2	1411.94	15619	1.65	6696	1 4 C		
1.1	1594.33	17460	1.47	6696	1 6 C		
0.91	1889.50	20719	1.24	6696	1 8 C		
0.85	2017.40	22132	1.16	6696	2 0 C		
0.75	2292.50	25262	1.02	6696	2 2 C		
0.68	2503.41	27500	0.94	6696	2 5 C		
0.63	2703.33	29803	0.86	6696	2 8 C		
1.7	1036.86	11604	3.71	7116	F 0 9 4 1 1 0 C _ N _ _ _ _ . 3 3 B - -	471.9	56C
1.6	1105.12	12382	3.48	7116	1 1 C		
1.5	1177.20	13116	2.67	7133	1 2 C		
1.2	1395.15	15547	2.25	7133	1 4 C		
1.1	1520.27	16894	2.55	7116	1 6 C		
0.95	1801.73	20026	2.15	7116	1 8 C		
0.89	1923.69	21383	2.01	7116	2 0 C		
0.8	2179.69	24280	1.44	7133	2 2 C		
0.72	2387.12	26534	1.62	7116	2 5 C		
0.61	2814.91	31279	1.38	7116	2 8 C		
0.55	3082.28	34239	1.26	7116	3 2 C		
0.47	3656.25	40603	0.86	7133	3 6 C		
0.45	3777.43	41914	1.03	7116	4 0 C		
0.4	4210.26	46699	0.92	7116	4 5 C		
0.36	4721.79	52316	0.82	7116	5 0 C		
292	5.90	103	4.97	392	F 0 2 2 2 6 . 3 _ N _ _ _ _ . 5 0 B - -	55.1	56C
216	7.97	140	4.28	427	7 . 1		
190	9.07	159	4.02	443	9 . 0		
168	10.27	181	3.75	457	1 0 .		
131	13.14	233	3.25	487	1 2 .		
122	14.16	249	3.12	495	1 4 .		
96	17.88	316	2.67	522	1 6 .		
85	20.27	358	2.45	537	2 0 .		
74	23.16	411	2.24	552	2 2 .		
67	25.77	453	2.09	564	2 5 .		
61	28.41	499	1.95	573	2 8 .		
55	31.26	551	1.83	582	3 2 .		
47	36.63	647	1.67	596	3 6 .		
39	43.94	773	1.48	610	4 0 .		
34	51.22	901	1.27	616	5 0 .		
30	56.91	999	1.14	621	5 6 .		
25	68.54	1206	0.95	620	6 3 .		
31	55.28	970	3.36	1391	F 0 3 2 2 5 6 . _ N _ _ _ _ . 5 0 B - -	70.5	56C
28	62.29	1093	2.88	1430	6 3 .		
24	72.41	1275	2.14	1479	7 1 .		
21	82.18	1445	1.70	1519	9 0 .		
18	93.43	1634	1.34	1558	1 0 0		
17	99.52	1726	1.75	1582	F 0 3 3 2 1 0 0 _ N _ _ _ _ . 5 0 B - -	72.7	56C
16	109.72	1905	1.64	1609	1 1 2		
14	120.75	2098	1.55	1634	1 2 5		
12	141.47	2458	1.32	1675	1 6 0		
10	169.72	2940	1.11	1655	1 8 0		
8.7	197.84	3431	0.95	1555	2 0 0		
7.8	219.82	3802	0.86	1481	2 2 5		
31	55.28	970	3.36	1391	F 0 4 2 2 5 6 . _ N _ _ _ _ . 5 0 B - -	70.5	56C
28	62.29	1093	2.88	1430	6 3 .		
24	72.41	1275	2.14	1479	7 1 .		
21	82.18	1445	1.70	1519	9 0 .		
18	93.43	1634	1.34	1558	1 0 0		
17	99.52	1726	1.75	1582	F 0 4 3 2 1 0 0 _ N _ _ _ _ . 5 0 B - -	72.7	56C
16	109.72	1905	1.64	1609	1 1 2		
14	120.75	2098	1.55	1634	1 2 5		
12	141.47	2458	1.32	1675	1 6 0		
10	169.72	2940	1.11	1655	1 8 0		
8.7	197.84	3431	0.95	1555	2 0 0		
7.8	219.82	3802	0.86	1481	2 2 5		

SERIES F

SELECTION TABLES

GEARED MOTORS

0.50 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
27	65.02	1144	3.65	2061	F 0 5 2 2 6 3 . _ N _ _ _ _ . 5 0 B - -	83.7	56C
24	72.92	1278	2.52	2122	7 1 .		
22	78.84	1371	3.25	2169	F 0 5 3 2 8 0 . _ N _ _ _ _ . 5 0 B - -	85.9	56C
20	86.82	1506	2.86	2219	9 0 .		
17	99.86	1738	2.60	2282	1 0 0		
16	108.57	1888	2.47	2336	1 1 2		
13	130.34	2269	2.22	2423	1 2 5		
11	156.40	2714	1.97	2520	1 6 0		
10	176.23	3058	1.84	2574	1 8 0		
8.4	204.87	3563	1.68	2593	2 0 0		
7.4	232.53	4033	1.56	2497	2 2 5		
6.5	264.35	4580	1.23	2377	2 8 0		
5.5	314.39	5322	1.08	1729	F 0 5 4 2 3 2 0 _ N _ _ _ _ . 5 0 B - -	116.8	56C
4.9	351.75	5940	1.02	1779	3 6 0		
4.2	412.85	6984	0.89	1813	4 0 0		
3.9	444.31	7474	0.82	2006	4 5 0		
21	83.59	1474	3.65	8812	F 0 6 2 2 9 0 . _ N _ _ _ _ . 5 0 B - -	114.6	56C
18	93.75	1647	2.52	8805	1 0 0		
17	101.36	1766	3.25	8790	F 0 6 3 2 1 0 0 _ N _ _ _ _ . 5 0 B - -	116.8	56C
15	111.62	1940	2.86	8790	1 1 2		
13	128.39	2239	2.60	8773	1 2 5		
12	139.58	2433	2.47	8770	1 6 0		
10	167.56	2920	2.22	8738	1 8 0		
8.6	201.07	3500	1.97	8707	2 0 0		
7.6	226.56	3940	1.84	8692	2 2 5		
6.5	263.38	4587	1.68	8655	2 8 0		
5.8	298.94	5203	1.55	8617	3 1 5		
5.1	339.84	5899	1.23	8587	3 6 0		
4.3	404.18	6855	1.08	8503	F 0 6 4 2 4 0 0 _ N _ _ _ _ . 5 0 B - -	147.7	56C
3.9	445.09	7559	0.98	8503	4 5 0		
3.5	497.98	8432	0.89	8481	5 0 0		
9.5	181.67	3156	3.70	7306	F 0 7 3 2 1 8 0 _ N _ _ _ _ . 5 0 B - -	178.5	56C
8.1	214.23	3716	3.36	7306	2 0 0		
7.4	234.58	4072	3.17	7306	2 2 5		
6	287.49	4989	2.80	7289	2 8 0		
5.4	320.43	5568	2.67	7289	3 1 5		
4.8	359.36	6234	2.50	7286	3 6 0		
4.3	404.11	6907	1.91	7206	F 0 7 4 2 4 0 0 _ N _ _ _ _ . 5 0 B - -	194	56C
3.7	464.36	7924	1.66	7199	4 5 0		
3.2	534.13	9107	1.45	7199	5 0 0		
3	580.70	9897	1.33	7199	5 6 0		
2.6	658.49	11195	1.18	7199	6 3 0		
2.4	726.31	12344	1.07	7199	7 0 0		
2.1	831.78	14109	0.93	7199	8 0 0		
1.8	944.37	15851	0.83	7199	9 0 0		
4.4	395.81	6741	3.55	6696	F 0 8 4 2 4 0 0 _ N _ _ _ _ . 5 0 B - -	194	56C
3.7	460.35	7840	3.05	6696	4 5 0		
3.5	490.05	8322	2.95	6696	5 0 0		
3	569.96	9680	2.54	6696	5 6 0		
2.7	637.69	10819	2.27	6696	6 3 0		
2.5	679.67	11545	2.13	6696	7 0 0		
2.1	805.50	13680	1.79	6696	8 0 0		
1.9	909.51	15269	1.69	6696	9 0 0		
1.7	1017.59	17073	1.51	6696	1 0 C		
1.6	1084.58	18222	1.41	6696	1 1 C		
1.4	1191.37	19956	1.29	6696	1 2 C		
1.2	1411.94	23666	1.09	6696	1 4 C		
1.1	1594.33	26455	0.97	6696	1 6 C		
0.91	1889.50	31393	0.82	6696	1 8 C		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

0.50 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
2.6	664.91	11350	3.73	7116	F 0 9 4 1 6 3 0 _ N _ _ _ _ . 5 0 B - -	473.9	56C
2.4	708.68	12110	3.49	7116	7 0 0		
2.1	839.89	14343	2.95	7116	8 0 0		
1.9	926.74	15731	2.74	7116	9 0 0		
1.7	1036.86	17582	2.45	7116	1 0 C		
1.6	1105.12	18760	2.30	7116	1 1 C		
1.5	1177.20	19873	1.76	7133	1 2 C		
1.2	1395.15	23557	1.49	7133	1 4 C		
1.1	1520.27	25597	1.68	7116	1 6 C		
0.95	1801.73	30343	1.42	7116	1 8 C		
0.89	1923.69	32399	1.33	7116	2 0 C		
0.79	2179.69	36788	0.95	7133	2 2 C		
0.72	2387.12	40204	1.07	7116	2 5 C		
0.61	2814.91	47393	0.91	7116	2 8 C		
0.6	3082.28	51878	0.83	7116	3 2 C		
1.6	1048.72	17674	3.54	8140	F 1 0 4 1 1 0 C _ N _ _ _ _ . 5 0 B - -	734.1	56C
1.5	1156.73	19516	3.21	8140	1 1 C		
1.3	1324.70	22355	2.80	8140	1 2 C		
1.2	1497.76	25274	2.48	8140	1 4 C		
1.1	1564.43	26169	2.43	8140	1 6 C		
0.96	1791.60	29986	2.12	8140	1 8 C		
0.85	2025.66	33913	1.88	8140	2 0 C		
0.7	2348.52	39328	1.62	8140	2 2 C		
0.68	2523.21	42105	1.48	8140	2 5 C		
0.6	2801.18	46914	1.36	8140	2 8 C		
0.56	3067.59	51369	1.24	8140	3 2 C		
0.46	3681.11	61590	1.03	8140	3 6 C		
0.4	4235.26	70862	0.90	8140	4 0 C		
0.37	4550.28	75906	0.82	8140	4 5 C		
0.36	4705.84	78663	0.81	8140	5 0 C		

0.75 HP

4 POLE

292	5.90	155	3.31	378	F 0 2 2 2 6 . 3 _ N _ _ _ _ . 7 5 B - -	58.1	56C
216	7.97	210	2.86	408	7 . 1		
190	9.07	239	2.68	420	9 . 0		
168	10.27	271	2.50	432	1 0 .		
131	13.14	349	2.17	455	1 2 .		
122	14.16	374	2.08	461	1 4 .		
96	17.88	474	1.78	479	1 6 .		
85	20.27	537	1.64	487	2 0 .		
74	23.16	616	1.49	495	2 2 .		
67	25.77	680	1.39	501	2 5 .		
61	28.41	749	1.30	503	2 8 .		
55	31.26	827	1.22	505	3 2 .		
47	36.63	970	1.11	507	3 6 .		
39	43.94	1160	0.98	503	4 0 .		
34	51.22	1352	0.84	492	5 0 .		
49	35.30	933	3.49	1177	F 0 3 2 2 3 6 . _ N _ _ _ _ . 7 5 B - -	73.5	56C
45	38.37	1015	3.21	1200	4 0 .		
37	46.07	1215	2.68	1246	5 0 .		
31	55.28	1455	2.24	1293	5 6 .		
28	62.29	1640	1.92	1319	6 3 .		
24	72.41	1913	1.43	1351	7 1 .		
21	82.18	2167	1.14	1373	9 0 .		
18	93.43	2451	0.89	1393	1 0 0		
17	99.52	2590	1.17	1407	F 0 3 3 2 1 0 0 _ N _ _ _ _ . 7 5 B - -	75.7	56C
16	109.72	2858	1.09	1416	1 1 2		
14	120.75	3148	1.03	1422	1 2 5		
12	141.47	3688	0.88	1427	1 6 0		
49	35.30	933	3.49	1177	F 0 4 2 2 3 6 . _ N _ _ _ _ . 7 5 B - -	73.5	56C
45	38.37	1015	3.21	1200	4 0 .		
37	46.07	1215	2.68	1246	5 0 .		
31	55.28	1455	2.24	1293	5 6 .		
28	62.29	1640	1.92	1319	6 3 .		
24	72.41	1913	1.43	1351	7 1 .		
21	82.18	2167	1.14	1373	9 0 .		
18	93.43	2451	0.89	1393	1 0 0		
17	99.52	2590	1.17	1407	F 0 4 3 2 1 0 0 _ N _ _ _ _ . 7 5 B - -	75.7	56C
16	109.72	2858	1.09	1416	1 1 2		
14	120.75	3148	1.03	1422	1 2 5		
12	141.47	3688	0.88	1427	1 6 0		
30	58.34	1535	3.07	1897	F 0 5 2 2 5 6 . _ N _ _ _ _ . 7 5 B - -	86.7	56C
27	65.02	1717	2.43	1941	6 3 .		
24	72.92	1917	1.68	1988	7 1 .		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

0.75 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
22	78.84	2057	2.17	2024	F 0 5 3 2 8 0 . _ N _ _ _ _ . 7 5 B - -	88.9	56C
20	86.82	2259	1.90	2059	9 0 .		
17	99.86	2607	1.73	2101	1 0 0		
16	108.57	2833	1.65	2136	1 1 2		
13	130.34	3403	1.48	2186	1 2 5		
11	156.40	4072	1.31	2231	1 6 0		
10	176.23	4587	1.22	2249	1 8 0		
8.4	204.87	5344	1.12	2221	2 0 0		
7.4	232.53	6049	1.04	2072	2 2 5		
6.5	264.35	6870	0.82	1901	2 8 0		
23	75.00	1979	3.07	8789	F 0 6 2 2 7 1 . _ N _ _ _ _ . 7 5 B - -	117.6	56C
21	83.59	2212	2.43	8775	9 0 .		
18	93.75	2471	1.68	8762	1 0 0		
17	101.36	2649	2.17	8745	F 0 6 3 2 1 0 0 _ N _ _ _ _ . 7 5 B - -1	19.8	56C
15	111.62	2910	1.90	8741	1 1 2		
13	128.39	3359	1.73	8715	1 2 5		
12	139.58	3650	1.65	8707	1 6 0		
10	167.56	4380	1.48	8663	1 8 0		
8.6	201.07	5250	1.31	8625	2 0 0		
7.6	226.56	5910	1.22	8595	2 2 5		
6.5	263.38	6881	1.12	8542	2 8 0		
5.8	298.94	7805	1.04	8490	3 1 5		
5.1	339.84	8849	0.82	8430	3 6 0		
17	99.36	2606	3.70	7306	F 0 7 2 2 1 0 0 _ N _ _ _ _ . 7 5 B - -	170.5	56C
16	108.56	2832	3.72	7306	F 0 7 3 2 1 0 0 _ N _ _ _ _ . 7 5 B - -	181.5	56C
15	115.70	3028	3.33	7306	1 1 2		
13	137.12	3578	2.94	7306	1 2 5		
12	146.40	3821	2.80	7295	1 6 0		
9.5	181.67	4734	2.47	7291	1 8 0		
8.1	214.23	5574	2.24	7287	2 0 0		
7.4	234.58	6109	2.12	7287	2 2 5		
6	287.49	7484	1.87	7265	2 8 0		
5.4	320.43	8352	1.78	7265	3 1 5		
4.8	359.36	9352	1.67	7257	3 6 0		
4.7	367.37	9427	1.40	7214	F 0 7 4 2 3 6 0 _ N _ _ _ _ . 7 5 B - -	197	56C
4.3	404.11	10360	1.27	7206	4 0 0		
3.7	464.36	11886	1.11	7199	4 5 0		
3.2	534.13	13661	0.97	7199	5 0 0		
3	580.70	14845	0.89	7199	5 6 0		
5.7	303.60	7917	3.79	6721	F 0 8 3 2 2 8 0 _ N _ _ _ _ . 7 5 B - -	282.9	56C
5.2	331.53	8640	3.47	6721	3 1 5		
4.5	381.76	9926	3.03	6721	3 6 0		
4.4	395.81	10111	2.36	6696	F 0 8 4 2 4 0 0 _ N _ _ _ _ . 7 5 B - -	197	56C
3.7	460.35	11760	2.03	6696	4 5 0		
3.5	490.05	12483	1.97	6696	5 0 0		
3	569.96	14520	1.69	6696	5 6 0		
2.7	637.69	16229	1.51	6696	6 3 0		
2.5	679.67	17317	1.42	6696	7 0 0		
2.1	805.50	20520	1.20	6696	8 0 0		
1.9	909.51	22904	1.12	6696	9 0 0		
1.7	1017.59	25610	1.01	6696	1 0 C		
1.6	1084.58	27333	0.94	6696	1 1 C		
1.4	1191.37	29935	0.86	6696	1 2 C		
4.4	395.66	10179	3.69	7133	F 0 9 4 1 4 0 0 _ N _ _ _ _ . 7 5 B - -	476.9	56C
3.7	460.18	11836	3.17	7133	4 5 0		
3.4	510.96	13103	3.23	7116	5 0 0		
2.9	594.29	15237	2.78	7116	5 6 0		
2.6	664.91	17026	2.48	7116	6 3 0		
2.4	708.68	18165	2.33	7116	7 0 0		
2.1	839.89	21515	1.97	7116	8 0 0		
1.9	926.74	23596	1.83	7116	9 0 0		
1.7	1036.86	26373	1.63	7116	1 0 C		
1.6	1105.12	28141	1.53	7116	1 1 C		
1.5	1177.20	29810	1.17	7133	1 2 C		
1.2	1395.15	35336	0.99	7133	1 4 C		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

0.75 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
2.7	638.26	16282	3.72	8140	F 1 0 4 1 6 3 0 _ N _ _ _ _ . 7 5 B - -	737.1	56C
2.5	703.99	17974	3.37	8140	7 0 0		
2.1	806.22	20579	2.94	8140	8 0 0		
1.9	924.82	23396	2.68	8140	9 0 0		
1.6	1048.72	26511	2.36	8140	1 0 C		
1.5	1156.73	29275	2.14	8140	1 1 C		
1.3	1324.70	33533	1.87	8140	1 2 C		
1.2	1497.76	37911	1.65	8140	1 4 C		
1.1	1564.43	39253	1.62	8140	1 6 C		
0.96	1791.60	44979	1.41	8140	1 8 C		
0.85	2025.66	50869	1.25	8140	2 0 C		
0.73	2348.52	58992	1.08	8140	2 2 C		
0.68	2523.21	63157	0.99	8140	2 5 C		
0.61	2801.18	70370	0.90	8140	2 8 C		
0.56	3067.59	77053	0.83	8140	3 2 C		

1.00HP

4 POLE

292	5.90	207	2.49	363	F 0 2 2 2 6 . 3 _ N _ _ _ _ 1 . 0 B - -	60.9	143TC
216	7.97	281	2.14	388	7 . 1		
190	9.07	319	2.01	398	9 . 0		
168	10.27	362	1.88	407	1 0 .		
131	13.14	466	1.63	422	1 2 .		
122	14.16	498	1.56	426	1 4 .		
96	17.88	632	1.34	435	1 6 .		
85	20.27	717	1.23	438	2 0 .		
74	23.16	822	1.12	438	2 2 .		
67	25.77	907	1.04	438	2 5 .		
61	28.41	999	0.97	434	2 8 .		
55	31.26	1102	0.91	429	3 2 .		
47	36.63	1294	0.83	418	3 6 .		
70	24.53	867	3.66	1036	F 0 3 2 2 2 5 . _ N _ _ _ _ 1 . 0 B - -	76.3	143TC
62	27.86	984	3.29	1065	2 8 .		
56	30.68	1085	3.00	1085	3 2 .		
49	35.30	1244	2.62	1114	3 6 .		
45	38.37	1353	2.41	1132	4 0 .		
37	46.07	1620	2.01	1165	5 0 .		
31	55.28	1940	1.68	1195	5 6 .		
28	62.29	2186	1.44	1208	6 3 .		
24	72.41	2550	1.07	1223	7 1 .		
21	82.18	2890	0.85	1227	9 0 .		
17	99.52	3453	0.87	1232	F 0 3 3 2 1 0 0 _ N _ _ _ _ 1 . 0 B - -	78.5	143TC
16	109.72	3811	0.82	1223	1 1 2		
70	24.53	867	3.66	1036	F 0 4 2 2 2 5 . _ N _ _ _ _ 1 . 0 B - -	76.3	143TC
62	27.86	984	3.29	1065	2 8 .		
56	30.68	1085	3.00	1085	3 2 .		
49	35.30	1244	2.62	1114	3 6 .		
45	38.37	1353	2.41	1132	4 0 .		
37	46.07	1620	2.01	1165	5 0 .		
31	55.28	1940	1.68	1195	5 6 .		
28	62.29	2186	1.44	1208	6 3 .		
24	72.41	2550	1.07	1223	7 1 .		
21	82.18	2890	0.85	1227	9 0 .		
17	99.52	3453	0.87	1232	F 0 4 3 2 1 0 0 _ N _ _ _ _ 1 . 0 B - -	78.5	143TC
16	109.72	3811	0.82	1223	1 1 2		
40	43.47	1531	3.95	1690	F 0 5 2 2 4 0 . _ N _ _ _ _ 1 . 0 B - -	96.1	143TC
36	47.60	1679	3.64	1722	5 0 .		
30	58.34	2047	2.30	1789	5 6 .		
27	65.02	2289	1.82	1821	6 3 .		
24	72.92	2557	1.26	1853	7 1 .		
22	78.84	2743	1.63	1880	F 0 5 3 2 8 0 . _ N _ _ _ _ 1 . 0 B - -	98.3	143TC
20	86.82	3012	1.43	1899	9 0 .		
17	99.86	3477	1.30	1919	1 0 0		
16	108.57	3777	1.23	1937	1 1 2		
13	130.34	4538	1.11	1949	1 2 5		
11	156.40	5429	0.99	1942	1 6 0		
10	176.23	6117	0.92	1924	1 8 0		
8.4	204.87	7126	0.84	1848	2 0 0		
31	55.89	1977	3.99	8790	F 0 6 2 2 5 6 . _ N _ _ _ _ 1 . 0 B - -	127	143TC
28	61.20	2161	3.64	8767	6 3 .		
23	75.00	2639	2.30	8758	7 1 .		
21	83.59	2949	1.82	8737	9 0 .		
18	93.75	3294	1.26	8719	1 0 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

1.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
17	101.36	3532	1.63	8700	F 0 6 3 2 1 0 0 _ N _ _ _ _ _ 1 . 0 B - -	129.2	143TC
15	111.62	3880	1.43	8692	1 1 2		
13	128.39	4479	1.30	8657	1 2 5		
12	139.58	4867	1.23	8645	1 6 0		
10	167.56	5840	1.11	8587	1 8 0		
8.6	201.07	7000	0.99	8542	2 0 0		
7.6	226.56	7880	0.92	8497	2 2 5		
6.5	263.38	9175	0.84	8430	2 8 0		
19	89.42	3132	3.50	7306	F 0 7 2 2 9 0 . _ N _ _ _ _ _ 1 . 0 B - -175.5	143TC	
17	99.36	3475	2.78	7298	1 0 0		
16	108.56	3776	2.79	7298	F 0 7 3 2 1 0 0 _ N _ _ _ _ _ 1 . 0 B - -	186.5	143TC
15	115.70	4038	2.50	7298	1 1 2		
13	137.12	4770	2.21	7292	1 2 5		
12	146.40	5095	2.10	7283	1 6 0		
9.5	181.67	6312	1.85	7276	1 8 0		
8.1	214.23	7433	1.68	7268	2 0 0		
7.4	234.58	8145	1.59	7268	2 2 5		
6	287.49	9979	1.40	7241	2 8 0		
5.4	320.43	11136	1.34	7241	3 1 5		
4.8	359.36	12469	1.25	7229	3 6 0		
4.7	367.37	12570	1.05	7214	F 0 7 4 2 3 6 0 _ N _ _ _ _ _ 1 . 0 B - -	197.5	143TC
4.3	404.11	13814	0.95	7206	4 0 0		
3.7	464.36	15848	0.83	7199	4 5 0		
7.6	225.53	7853	3.82	6721	F 0 8 3 2 2 0 0 _ N _ _ _ _ _ 1 . 0 B - -	287.9	143TC
7	247.74	8597	3.49	6721	2 2 5		
5.7	303.60	10556	2.84	6716	2 8 0		
5.2	331.53	11521	2.60	6716	3 1 5		
4.5	381.76	13234	2.27	6717	3 6 0		
4.4	395.81	13482	1.77	6696	F 0 8 4 2 4 0 0 _ N _ _ _ _ _ 1 . 0 B - -	197.5	143TC
3.7	460.35	15680	1.52	6696	4 5 0		
3.5	490.05	16644	1.47	6696	5 0 0		
3	569.96	19361	1.27	6696	5 6 0		
2.7	637.69	21639	1.13	6696	6 3 0		
2.5	679.67	23090	1.06	6696	7 0 0		
2.1	805.50	27360	0.90	6696	8 0 0		
1.9	909.51	30538	0.84	6696	9 0 0		
6.3	274.63	9558	3.93	7171	F 0 9 3 1 2 8 0 _ N _ _ _ _ _ 1 . 0 B - -	418	143TC
5.5	315.41	10978	3.93	7171	3 1 5		
4.9	354.67	12304	3.50	7171	3 6 0		
4.4	395.66	13572	2.76	7133	F 0 9 4 1 4 0 0 _ N _ _ _ _ _ 1 . 0 B - -4	81.9	143TC
3.7	460.18	15781	2.38	7133	4 5 0		
3.4	510.96	17471	2.42	7116	5 0 0		
2.9	594.29	20316	2.08	7116	5 6 0		
2.6	664.91	22701	1.86	7116	6 3 0		
2.4	708.68	24220	1.75	7116	7 0 0		
2.1	839.89	28686	1.47	7116	8 0 0		
1.9	926.74	31462	1.37	7116	9 0 0		
1.7	1036.86	35164	1.23	7116	1 0 C		
1.6	1105.12	37521	1.15	7116	1 1 C		
1.5	1177.20	39747	0.88	7133	1 2 C		
3.9	445.30	15165	3.99	8140	F 1 0 4 1 4 5 0 _ N _ _ _ _ _ 1 . 0 B - -	742.1	143TC
3.5	489.83	16681	3.63	8140	5 0 0		
3.1	562.85	19166	3.16	8140	5 6 0		
2.7	638.26	21709	2.79	8140	6 3 0		
2.5	703.99	23965	2.53	8140	7 0 0		
2.1	806.22	27439	2.21	8140	8 0 0		
1.9	924.82	31195	2.01	8140	9 0 0		
1.6	1048.72	35348	1.77	8140	1 0 C		
1.5	1156.73	39033	1.61	8140	1 1 C		
1.3	1324.70	44711	1.40	8140	1 2 C		
1.2	1497.76	50548	1.24	8140	1 4 C		
1.1	1564.43	52338	1.22	8140	1 6 C		
1.0	1791.60	59972	1.06	8140	1 8 C		
0.85	2025.66	67826	0.94	8140	2 0 C		
0.73	2348.52	78657	0.81	8140	2 2 C		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

1.50HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
292	5.90	311	1.66	335	F 0 2 2 2 6 . 3 _ N _ _ _ _ 1 . 5 B - -	64.9	145TC
216	7.97	421	1.43	349	7 . 1		
190	9.07	479	1.34	354	9 . 0		
168	10.27	543	1.25	356	1 0 .		
131	13.14	699	1.08	358	1 2 .		
122	14.16	748	1.04	357	1 4 .		
96	17.88	948	0.89	348	1 6 .		
85	20.27	1075	0.82	339	2 0 .		
124	13.96	742	3.79	854	F 0 3 2 2 1 4 . _ N _ _ _ _ 1 . 5 B - -	80.3	145TC
109	15.86	843	3.53	876	1 6 .		
89	19.46	1034	2.96	912	2 0 .		
80	21.59	1147	2.71	929	2 2 .		
70	24.53	1301	2.44	948	2 5 .		
62	27.86	1476	2.19	965	2 8 .		
56	30.68	1628	2.00	976	3 2 .		
49	35.30	1866	1.74	989	3 6 .		
45	38.37	2030	1.60	995	4 0 .		
37	46.07	2431	1.34	1001	5 0 .		
31	55.28	2910	1.12	998	5 6 .		
28	62.29	3280	0.96	986	6 3 .		
124	13.96	742	3.79	854	F 0 4 2 2 1 4 . _ N _ _ _ _ 1 . 5 B - -	80.3	145TC
109	15.86	843	3.53	876	1 6 .		
89	19.46	1034	2.96	912	2 0 .		
80	21.59	1147	2.71	929	2 2 .		
70	24.53	1301	2.44	948	2 5 .		
62	27.86	1476	2.19	965	2 8 .		
56	30.68	1628	2.00	976	3 2 .		
49	35.30	1866	1.74	989	3 6 .		
45	38.37	2030	1.60	995	4 0 .		
37	46.07	2431	1.34	1001	5 0 .		
31	55.28	2910	1.12	998	5 6 .		
28	62.29	3280	0.96	986	6 3 .		
62	27.83	1476	3.86	1425	F 0 5 2 2 2 8 . _ N _ _ _ _ 1 . 5 B - -	100.1	145TC
58	29.71	1576	3.65	1443	3 2 .		
47	36.87	1953	3.03	1495	3 6 .		
40	43.47	2297	2.64	1529	4 0 .		
36	47.60	2519	2.42	1545	5 0 .		
30	58.34	3070	1.53	1574	5 6 .		
27	65.02	3434	1.22	1581	6 3 .		
24	72.92	3835	0.84	1584	7 1 .		
22	78.84	4115	1.08	1590	F 0 5 3 2 8 0 . _ N _ _ _ _ 1 . 5 B - -	102.3	145TC
20	86.82	4519	0.95	1579	9 0 .		
17	99.86	5215	0.87	1557	1 0 0		
16	108.57	5666	0.82	1537	1 1 2		
45	38.19	2031	3.88	8092	F 0 6 2 2 4 0 . _ N _ _ _ _ 1 . 5 B - -	131	145TC
36	47.40	2516	3.14	8587	5 0 .		
31	55.89	2966	2.66	8686	5 6 .		
28	61.20	3242	2.42	8717	6 3 .		
23	75.00	3959	1.53	8695	7 1 .		
21	83.59	4424	1.22	8662	9 0 .		
18	93.75	4942	0.84	8632	1 0 0		
17	101.36	5299	1.08	8610	F 0 6 3 2 1 0 0 _ N _ _ _ _ 1 . 5 B - -	133.2	145TC
15	111.62	5821	0.95	8595	1 1 2		
13	128.39	6719	0.87	8542	1 2 5		
12	139.58	7300	0.82	8520	1 6 0		
22	77.72	4102	3.32	7306	F 0 7 2 2 7 1 . _ N _ _ _ _ 1 . 5 B - - 1	79.5	145TC
19	89.42	4699	2.34	7289	9 0 .		
17	99.36	5212	1.85	7283	1 0 0		
16	108.56	5664	1.86	7283	F 0 7 3 2 1 0 0 _ N _ _ _ _ 1 . 5 B - -	190.5	145TC
15	115.70	6057	1.67	7283	1 1 2		
13	137.12	7156	1.47	7265	1 2 5		
12	146.40	7642	1.40	7261	1 6 0		
9.5	181.67	9469	1.23	7246	1 8 0		
8.1	214.23	11149	1.12	7231	2 0 0		
7.4	234.58	12218	1.06	7231	2 2 5		
6	287.49	14969	0.93	7193	2 8 0		
5.4	320.43	16705	0.89	7193	3 1 5		
4.8	359.36	18704	0.83	7171	3 6 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

1.50 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
11	159.53	8344	3.60	6721	F 0 8 3 2 1 6 0 _ N _ _ _ _ 1 . 5 B - -	291.9	145TC
8.9	193.39	10102	2.97	6721	1 8 0		
7.6	225.53	11780	2.55	6716	2 0 0		
7	247.74	12895	2.33	6716	2 2 5		
5.7	303.60	15835	1.89	6706	2 8 0		
5.2	331.53	17281	1.74	6706	3 1 5		
4.5	381.76	19852	1.52	6708	3 6 0		
4.4	395.81	20223	1.18	6696	F 0 8 4 2 4 0 0 _ N _ _ _ _ 1 . 5 B - -	201.5	145TC
3.7	460.35	23520	1.02	6696	4 5 0		
3.5	490.05	24966	0.98	6696	5 0 0		
3	569.96	29041	0.85	6696	5 6 0		
8.3	207.69	10844	3.97	7171	F 0 9 3 1 2 0 0 _ N _ _ _ _ 1 . 5 B - -	422	145TC
7.5	229.28	11987	3.60	7171	2 2 5		
7.1	244.23	12787	2.93	7171	2 5 0		
6.3	274.63	14337	2.62	7162	2 8 0		
5.5	315.41	16467	2.62	7160	3 1 5		
4.9	354.67	18456	2.34	7160	3 6 0		
4.4	395.66	20358	1.84	7133	F 0 9 4 1 4 0 0 _ N _ _ _ _ 1 . 5 B - -	485.9	145TC
3.7	460.18	23672	1.59	7133	4 5 0		
3.4	510.96	26207	1.61	7116	5 0 0		
2.9	594.29	30475	1.39	7116	5 6 0		
2.6	664.91	34052	1.24	7116	6 3 0		
2.4	708.68	36330	1.16	7116	7 0 0		
2.1	839.89	43030	0.98	7116	8 0 0		
1.9	926.74	47192	0.91	7116	9 0 0		
1.7	1036.86	52746	0.82	7116	1 0 C		
4.3	400.73	20515	2.99	8140	F 1 0 4 1 4 0 0 _ N _ _ _ _ 1 . 5 B - -	746.1	145TC
3.9	445.30	22747	2.66	8140	4 5 0		
3.5	489.83	25022	2.42	8140	5 0 0		
3.1	562.85	28749	2.10	8140	5 6 0		
2.7	638.26	32564	1.86	8140	6 3 0		
2.5	703.99	35948	1.68	8140	7 0 0		
2.1	806.22	41158	1.47	8140	8 0 0		
1.9	924.82	46792	1.34	8140	9 0 0		
1.6	1048.72	53022	1.18	8140	1 0 C		
1.5	1156.73	58550	1.07	8140	1 1 C		
1.3	1324.70	67066	0.93	8140	1 2 C		
1.2	1497.76	75823	0.83	8140	1 4 C		
1.1	1564.43	78507	0.81	8140	1 6 C		
292	5.90	415	1.24	306	F 0 2 2 2 6 . 3 _ N _ _ _ _ 2 . 0 B - -	71.9	145TC
216	7.97	562	1.07	310	7 . 1		
190	9.07	638	1.00	310	9 . 0		
168	10.27	724	0.94	305	1 0 .		
131	13.14	932	0.81	294	1 2 .		
196	8.78	621	3.60	735	F 0 3 2 2 9 . 0 _ N _ _ _ _ 2 . 0 B - -	87.3	145TC
178	9.68	684	3.44	750	1 0 .		
157	10.99	779	3.23	771	1 2 .		
124	13.96	990	2.84	804	1 4 .		
109	15.86	1124	2.64	819	1 6 .		
89	19.46	1378	2.22	842	2 0 .		
80	21.59	1530	2.04	852	2 2 .		
70	24.53	1735	1.83	860	2 5 .		
62	27.86	1968	1.65	865	2 8 .		
56	30.68	2170	1.50	867	3 2 .		
49	35.30	2488	1.31	863	3 6 .		
45	38.37	2707	1.20	858	4 0 .		
37	46.07	3241	1.00	838	5 0 .		
31	55.28	3880	0.84	802	5 6 .		
196	8.78	621	3.60	735	F 0 4 2 2 9 . 0 _ N _ _ _ _ 2 . 0 B - -	87.3	145TC
178	9.68	684	3.44	750	1 0 .		
157	10.99	779	3.23	771	1 2 .		
124	13.96	990	2.84	804	1 4 .		
109	15.86	1124	2.64	819	1 6 .		
89	19.46	1378	2.22	842	2 0 .		
80	21.59	1530	2.04	852	2 2 .		
70	24.53	1735	1.83	860	2 5 .		
62	27.86	1968	1.65	865	2 8 .		
56	30.68	2170	1.50	867	3 2 .		
49	35.30	2488	1.31	863	3 6 .		
45	38.37	2707	1.20	858	4 0 .		
37	46.07	3241	1.00	838	5 0 .		
31	55.28	3880	0.84	802	5 6 .		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

2.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
88	19.69	1393	3.89	1254	F 0 5 2 2 2 0 . _ N _ _ _ _ 2 . 0 B - -	107.1	145TC
78	22.03	1556	3.54	1279	2 2 .		
73	23.48	1661	3.35	1290	2 5 .		
62	27.83	1968	2.90	1321	2 8 .		
58	29.71	2102	2.74	1332	3 2 .		
47	36.87	2604	2.27	1358	3 6 .		
40	43.47	3063	1.98	1368	4 0 .		
36	47.60	3359	1.82	1369	5 0 .		
30	58.34	4094	1.15	1359	5 6 .		
27	65.02	4579	0.91	1341	6 3 .		
22	78.84	5486	0.81	1301	F 0 5 3 2 8 0 . _ N _ _ _ _ 2 . 0 B - -	109.3	145TC
61	28.32	2008	3.87	7373	F 0 6 2 2 2 8 . _ N _ _ _ _ 2 . 0 B - -	138	145TC
57	30.18	2139	3.68	7508	3 2 .		
48	35.77	2537	3.09	7864	3 6 .		
45	38.19	2708	2.91	7993	4 0 .		
36	47.40	3355	2.35	8465	5 0 .		
31	55.89	3955	2.00	8582	5 6 .		
28	61.20	4323	1.82	8666	6 3 .		
23	75.00	5279	1.15	8632	7 1 .		
21	83.59	5899	0.91	8587	9 0 .		
17	101.36	7065	0.81	8520	F 0 6 3 2 1 0 0 _ N _ _ _ _ 2 . 0 B - -	140.2	145TC
29	59.14	4165	3.27	7306	F 0 7 2 2 5 6 . _ N _ _ _ _ 2 . 0 B - -	186.5	145TC
27	64.77	4570	3.02	7283	6 3 .		
22	77.72	5469	2.49	7293	7 1 .		
19	89.42	6265	1.75	7272	9 0 .		
17	99.36	6950	1.39	7268	1 0 0		
16	108.56	7552	1.39	7268	F 0 7 3 2 1 0 0 _ N _ _ _ _ 2 . 0 B - -	197.5	145TC
15	115.70	8076	1.25	7268	1 1 2		
13	137.12	9541	1.10	7238	1 2 5		
12	146.40	10190	1.05	7238	1 6 0		
9.5	181.67	12625	0.93	7216	1 8 0		
8.1	214.23	14866	0.84	7193	2 0 0		
19	91.70	6473	3.79	6721	F 0 8 2 2 9 0 . _ N _ _ _ _ 2 . 0 B - -	294.5	145TC
16	105.59	7429	3.13	6719	1 0 0		
15	114.15	7949	3.77	6721	F 0 8 3 2 1 0 0 _ N _ _ _ _ 2 . 0 B - -	298.9	145TC
14	124.92	8712	3.44	6721	1 1 2		
12	141.33	9846	3.05	6716	1 2 5		
11	159.53	11125	2.70	6718	1 6 0		
8.9	193.39	13469	2.23	6715	1 8 0		
7.6	225.53	15707	1.91	6710	2 0 0		
7	247.74	17194	1.74	6710	2 2 5		
5.7	303.60	21113	1.42	6696	2 8 0		
5.2	331.53	23042	1.30	6696	3 1 5		
4.5	381.76	26469	1.14	6699	3 6 0		
4.4	395.81	26964	0.89	6696	F 0 8 4 2 4 0 0 _ N _ _ _ _ 2 . 0 B - -	208.5	145TC
11	160.82	11220	3.34	7171	F 0 9 3 1 1 6 0 _ N _ _ _ _ 2 . 0 B - -	429	145TC
10	177.54	12396	3.03	7168	1 8 0		
8.3	207.69	14459	2.98	7164	2 0 0		
7.5	229.28	15983	2.70	7164	2 2 5		
7.1	244.23	17049	2.20	7164	2 5 0		
6.3	274.63	19116	1.96	7154	2 8 0		
5.5	315.41	21956	1.96	7148	3 1 5		
4.9	354.67	24608	1.75	7148	3 6 0		
4.4	395.66	27144	1.38	7133	F 0 9 4 1 4 0 0 _ N _ _ _ _ 2 . 0 B - -	492.9	145TC
3.7	460.18	31562	1.19	7133	4 5 0		
3.4	510.96	34943	1.21	7116	5 0 0		
2.9	594.29	40633	1.04	7116	5 6 0		
2.6	664.91	45403	0.93	7116	6 3 0		
2.4	708.68	48440	0.87	7116	7 0 0		
4.3	400.73	27353	2.24	8140	F 1 0 4 1 4 0 0 _ N _ _ _ _ 2 . 0 B - -	753.1	145TC
3.9	445.30	30330	2.00	8140	4 5 0		
3.5	489.83	33363	1.81	8140	5 0 0		
3.1	562.85	38332	1.58	8140	5 6 0		
2.7	638.26	43418	1.39	8140	6 3 0		
2.5	703.99	47931	1.26	8140	7 0 0		
2.1	806.22	54878	1.10	8140	8 0 0		
1.9	924.82	62390	1.00	8140	9 0 0		
1.6	1048.72	70696	0.89	8140	1 0 C		
1.5	1156.73	78067	0.80	8140	1 1 C		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

3.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
292	5.90	623	0.83	249	F 0 2 2 2 6 . 3 _ N _ _ _ _ 3 . 0 B - -	91.9	182TC
275	6.26	663	2.78	633	F 0 3 2 2 7 . 1 _ N _ _ _ _ 3 . 0 B - -	107.3	182TC
196	8.78	932	2.40	672	9 . 0		
178	9.68	1027	2.29	681	1 0 .		
157	10.99	1168	2.15	691	1 2 .		
124	13.96	1485	1.89	703	1 4 .		
109	15.86	1687	1.76	706	1 6 .		
89	19.46	2068	1.48	703	2 0 .		
80	21.59	2295	1.36	698	2 2 .		
275	6.26	663	2.78	633	F 0 4 2 2 7 . 1 _ N _ _ _ _ 3 . 0 B - -	107.3	182TC
196	8.78	932	2.40	672	9 . 0		
178	9.68	1027	2.29	681	1 0 .		
157	10.99	1168	2.15	691	1 2 .		
124	13.96	1485	1.89	703	1 4 .		
109	15.86	1687	1.76	706	1 6 .		
89	19.46	2068	1.48	703	2 0 .		
80	21.59	2295	1.36	698	2 2 .		
140	12.33	1310	3.78	1047	F 0 5 2 2 1 2 . _ N _ _ _ _ 3 . 0 B - -	140.4	182TC
117	14.70	1562	3.34	1074	1 4 .		
102	16.93	1801	2.82	1092	1 6 .		
88	19.69	2090	2.60	1107	2 0 .		
78	22.03	2334	2.36	1114	2 2 .		
73	23.48	2491	2.23	1115	2 5 .		
62	27.83	2953	1.93	1114	2 8 .		
58	29.71	3153	1.82	1111	3 2 .		
47	36.87	3906	1.52	1084	3 6 .		
40	43.47	4594	1.32	1046	4 0 .		
36	47.60	5039	1.21	1016	5 0 .		
109	15.85	1688	3.84	6204	F 0 6 2 2 1 6 . _ N _ _ _ _ 3 . 0 B - -	171.2	182TC
91	18.90	2013	3.48	6496	2 0 .		
79	21.76	2318	2.82	6744	2 2 .		
68	25.31	2695	2.75	7021	2 5 .		
61	28.32	3012	2.58	7231	2 8 .		
57	30.18	3209	2.45	7351	3 2 .		
48	35.77	3806	2.06	7678	3 6 .		
45	38.19	4062	1.94	7794	4 0 .		
36	47.40	5032	1.57	8221	5 0 .		
31	55.89	5932	1.33	8374	5 6 .		
28	61.20	6485	1.21	8565	6 3 .		
52	33.03	3504	3.49	7306	F 0 7 2 2 3 2 . _ N _ _ _ _ 3 . 0 B - -	224.1	182TC
46	37.83	4028	3.16	7306	3 6 .		
40	42.77	4529	2.83	7283	4 0 .		
35	49.59	5259	2.51	7283	5 0 .		
29	59.14	6248	2.18	7285	5 6 .		
27	64.77	6856	2.01	7267	6 3 .		
22	77.72	8204	1.66	7267	7 1 .		
19	89.42	9398	1.17	7238	9 0 .		
17	99.36	10425	0.93	7238	1 0 0		
16	108.56	11328	0.93	7238	F 0 7 3 2 1 0 0 _ N _ _ _ _ 3 . 0 B - -	235.2	182TC
15	115.70	12115	0.83	7238	1 1 2		
28	62.38	6611	3.52	6721	F 0 8 2 2 5 6 . _ N _ _ _ _ 3 . 0 B - -	314.5	182TC
25	68.52	7271	3.27	6721	6 3 .		
21	83.97	8894	2.74	6721	7 1 .		
19	91.70	9709	2.52	6716	9 0 .		
16	105.59	11144	2.09	6716	1 0 0		
15	114.15	11924	2.52	6713	F 0 8 3 2 1 0 0 _ N _ _ _ _ 3 . 0 B - -	318.9	182TC
14	124.92	13069	2.30	6713	1 1 2		
12	141.33	14770	2.03	6704	1 2 5		
11	159.53	16688	1.80	6712	1 6 0		
8.9	193.39	20204	1.48	6702	1 8 0		
7.6	225.53	23560	1.27	6699	2 0 0		
7	247.74	25791	1.16	6699	2 2 5		
5.7	303.60	31670	0.95	6676	2 8 0		
5.2	331.53	34563	0.87	6676	3 1 5		
23	76.14	8053	3.71	7171	F 0 9 2 1 8 0 . _ N _ _ _ _ 3 . 0 B - -	415.9	182TC
18	98.32	10388	3.71	7171	1 0 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

3.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
17	102.48	10752	3.49	7171	F 0 9 3 1 1 0 0 _ N _ _ _ _ 3 . 0 B - -	449	182TC
15	113.85	11944	3.14	7171	1 1 2		
13	132.34	13855	3.11	7171	1 2 5		
12	147.03	15380	2.80	7171	1 4 0		
11	160.82	16830	2.23	7163	1 6 0		
10	177.54	18594	2.02	7161	1 8 0		
8.3	207.69	21689	1.99	7152	2 0 0		
7.5	229.28	23974	1.80	7152	2 2 5		
7.1	244.23	25574	1.47	7152	2 5 0		
6.3	274.63	28674	1.31	7137	2 8 0		
5.5	315.41	32935	1.31	7126	3 1 5		
4.9	354.67	36912	1.17	7126	3 6 0		
4.4	395.66	40716	0.92	7133	F 0 9 4 1 4 0 0 _ N _ _ _ _ 3 . 0 B - -	524	182TC
3.4	510.96	52415	0.81	7116	5 0 0		
11	162.91	17096	3.17	8205	F 1 0 3 1 1 6 0 _ N _ _ _ _ 3 . 0 B - -	629.8	182TC
9.2	187.70	19699	2.75	8205	1 8 0		
8.4	205.21	21468	2.82	8205	2 0 0		
7.3	236.45	24718	2.45	8205	2 2 5		
6.8	253.86	26607	2.04	8205	2 5 0		
6.3	272.75	28520	1.90	8205	2 8 0		
5.4	319.79	33378	1.81	8205	3 1 5		
5	343.57	35818	1.69	8205	3 6 0		
4.3	400.73	41030	1.50	8140	F 1 0 4 1 4 0 0 _ N _ _ _ _ 3 . 0 B - -	773.1	182TC
3.9	445.30	45495	1.33	8140	4 5 0		
3.5	489.83	50044	1.21	8140	5 0 0		
3.1	562.85	57498	1.05	8140	5 6 0		
2.7	638.26	65128	0.93	8140	6 3 0		
2.5	703.99	71896	0.84	8140	7 0 0		

5.00HP

4 POLE

275	6.26	1105	1.67	544	F 0 3 2 2 7 . 1 _ N _ _ _ _ 5 . 0 B - -	121.3	184TC
196	8.78	1554	1.44	546	9 . 0		
178	9.68	1712	1.37	541	1 0 .		
157	10.99	1948	1.29	532	1 2 .		
124	13.96	2475	1.14	503	1 4 .		
109	15.86	2812	1.06	478	1 6 .		
89	19.46	3447	0.89	424	2 0 .		
80	21.59	3825	0.81	388	2 2 .		
275	6.26	1105	1.67	544	F 0 4 2 2 7 . 1 _ N _ _ _ _ 5 . 0 B - -	121.3	184TC
196	8.78	1554	1.44	546	9 . 0		
178	9.68	1712	1.37	541	1 0 .		
157	10.99	1948	1.29	532	1 2 .		
124	13.96	2475	1.14	503	1 4 .		
109	15.86	2812	1.06	478	1 6 .		
89	19.46	3447	0.89	424	2 0 .		
80	21.59	3825	0.81	388	2 2 .		
356	4.84	853	3.57	811	F 0 5 2 2 5 . 0 _ N _ _ _ _ 5 . 0 B - -	154.4	184TC
253	6.81	1209	3.07	834	6 . 3		
226	7.63	1354	2.91	845	7 . 1		
201	8.56	1519	2.75	854	9 . 0		
159	10.87	1925	2.43	864	1 0 .		
140	12.33	2183	2.27	863	1 2 .		
117	14.70	2604	2.00	855	1 4 .		
102	16.93	3002	1.69	840	1 6 .		
88	19.69	3484	1.56	813	2 0 .		
78	22.03	3890	1.42	786	2 2 .		
73	23.48	4153	1.34	766	2 5 .		
62	27.83	4922	1.16	701	2 8 .		
58	29.71	5255	1.09	669	3 2 .		
47	36.87	6510	0.91	537	3 6 .		
277	6.22	1106	3.54	4720	F 0 6 2 2 7 . 1 _ N _ _ _ _ 5 . 0 B - -	185.2	184TC
197	8.75	1550	3.09	5170	9 . 0		
176	9.81	1740	2.93	5327	1 0 .		
157	11.01	1954	2.78	5485	1 2 .		
123	13.98	2483	2.46	5845	1 4 .		
109	15.85	2813	2.30	6037	1 6 .		
91	18.90	3356	2.09	6304	2 0 .		
79	21.76	3864	1.69	6519	2 2 .		
68	25.31	4492	1.65	6766	2 5 .		
61	28.32	5021	1.55	6946	2 8 .		
57	30.18	5348	1.47	7036	3 2 .		
48	35.77	6344	1.24	7306	3 6 .		
45	38.19	6771	1.16	7396	4 0 .		
36	47.40	8387	0.94	7733	5 0 .		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

5.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
114	15.13	2663	3.62	7306	F 0 7 2 2 1 4 . _ N _ _ _ _ 5 . 0 B - -	238.1	184TC
100	17.21	3055	3.33	7306	1 6 .		
83	20.89	3706	2.96	7306	2 0 .		
75	22.98	4049	2.78	7306	2 2 .		
65	26.41	4680	2.48	7283	2 5 .		
58	29.95	5316	2.30	7283	2 8 .		
52	33.03	5840	2.09	7287	3 2 .		
46	37.83	6713	1.90	7280	3 6 .		
40	42.77	7549	1.70	7258	4 0 .		
35	49.59	8766	1.50	7251	5 0 .		
29	59.14	10414	1.31	7244	5 6 .		
27	64.77	11427	1.21	7234	6 3 .		
22	77.72	13674	1.00	7216	7 1 .		
50	34.55	6128	3.44	6721	F 0 8 2 2 3 2 . _ N _ _ _ _ 5 . 0 B - -	328.5	184TC
44	39.09	6920	3.15	6721	3 6 .		
39	44.13	7811	2.86	6721	4 0 .		
32	53.49	9443	2.41	6721	5 0 .		
28	62.38	11019	2.11	6714	5 6 .		
25	68.52	12119	1.96	6715	6 3 .		
21	83.97	14824	1.64	6708	7 1 .		
19	91.70	16183	1.51	6704	9 0 .		
16	105.59	18574	1.25	6708	1 0 0		
15	114.15	19874	1.51	6696	F 0 8 3 2 1 0 0 _ N _ _ _ _ 5 . 0 B - -	332.9	184TC
14	124.92	21782	1.38	6697	1 1 2		
12	141.33	24617	1.22	6682	1 2 5		
11	159.53	27814	1.08	6699	1 6 0		
8.9	193.39	33674	0.89	6676	1 8 0		
27	63.56	11211	3.33	7171	F 0 9 2 1 6 3 . _ N _ _ _ _ 5 . 0 B - -	429.9	184TC
25	67.71	11960	2.50	7171	7 1 .		
23	76.14	13422	2.23	7163	8 0 .		
20	87.44	15428	2.50	7171	9 0 .		
18	98.32	17313	2.23	7160	1 0 0		
17	102.48	17921	2.09	7171	F 0 9 3 1 1 0 0 _ N _ _ _ _ 5 . 0 B - -	463	184TC
15	113.85	19907	1.89	7171	1 1 2		
13	132.34	23092	1.87	7171	1 2 5		
12	147.03	25633	1.68	7171	1 4 0		
11	160.82	28051	1.34	7148	1 6 0		
10	177.54	30991	1.21	7148	1 8 0		
8.3	207.69	36148	1.19	7126	2 0 0		
7.5	229.28	39958	1.08	7126	2 2 5		
7.1	244.23	42624	0.88	7126	2 5 0		
23	74.39	13133	3.78	8205	F 1 0 2 1 8 0 . _ N _ _ _ _ 5 . 0 B - -	601.9	184TC
18	93.70	16480	3.78	8205	1 0 0		
17	102.80	17971	3.01	8205	F 1 0 3 1 1 0 0 _ N _ _ _ _ 5 . 0 B - -	643.8	184TC
15	114.24	19890	2.72	8205	1 1 2		
13	129.50	22637	2.67	8205	1 2 5		
12	143.90	25070	2.41	8190	1 4 0		
11	162.91	28494	1.90	8192	1 6 0		
9.2	187.70	32832	1.65	8186	1 8 0		
8.4	205.21	35781	1.69	8186	2 0 0		
7.3	236.45	41196	1.47	8175	2 2 5		
6.8	253.86	44345	1.22	8175	2 5 0		
6.3	272.75	47534	1.14	8175	2 8 0		
5.4	319.79	55630	1.09	8160	3 1 5		
5	343.57	59697	1.01	8160	3 6 0		
4.3	400.73	68384	0.90	8140	F 1 0 4 1 4 0 0 _ N _ _ _ _ 5 . 0 B - -	787.1	184TC

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

7.50 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
356	4.84	1279	2.38	720	F 0 5 2 2 5 . 0 _ N _ _ _ _ 7 . 5 B - -	200.2	213TC
253	6.81	1813	2.04	706	6 . 3		
226	7.63	2031	1.94	702	7 . 1		
201	8.56	2278	1.83	694	9 . 0		
159	10.87	2888	1.62	661	1 0 .		
140	12.33	3275	1.51	634	1 2 .		
117	14.70	3907	1.33	581	1 4 .		
277	6.22	1660	2.36	4631	F 0 6 2 2 7 . 1 _ N _ _ _ _ 7 . 5 B - -	231	213TC
197	8.75	2326	2.06	5058	9 . 0		
176	9.81	2610	1.96	5204	1 0 .		
157	11.01	2931	1.85	5350	1 2 .		
123	13.98	3725	1.64	5665	1 4 .		
109	15.85	4220	1.54	5828	1 6 .		
91	18.90	5034	1.39	6063	2 0 .		
255	6.77	1789	2.78	5777	F 0 7 2 2 7 . 1 _ N _ _ _ _ 7 . 5 B - -	288.3	213TC
184	9.38	2485	2.78	6317	9 . 0		
164	10.54	2793	2.78	6519	1 0 .		
149	11.59	3073	2.78	6676	1 2 .		
114	15.13	3995	2.41	7141	1 4 .		
100	17.21	4583	2.22	7163	1 6 .		
83	20.89	5559	1.97	7283	2 0 .		
75	22.98	6073	1.85	7283	2 2 .		
65	26.41	7020	1.65	7272	2 5 .		
58	29.95	7974	1.53	7261	2 8 .		
52	33.03	8760	1.39	7262	3 2 .		
46	37.83	10070	1.27	7248	3 6 .		
40	42.77	11323	1.13	7225	4 0 .		
35	49.59	13149	1.00	7211	5 0 .		
29	59.14	15622	0.87	7193	5 6 .		
27	64.77	17141	0.81	7193	6 3 .		
97	17.70	4689	3.74	6721	F 0 8 2 2 1 6 . _ N _ _ _ _ 7 . 5 B - -	387.6	213TC
79	21.70	5754	3.26	6721	2 0 .		
71	24.45	6515	2.96	6721	2 2 .		
61	28.46	7565	2.68	6721	2 5 .		
55	31.57	8404	2.49	6721	2 8 .		
50	34.55	9193	2.29	6718	3 2 .		
44	39.09	10380	2.10	6718	3 6 .		
39	44.13	11716	1.90	6714	4 0 .		
32	53.49	14165	1.61	6716	5 0 .		
28	62.38	16528	1.41	6704	5 6 .		
25	68.52	18179	1.31	6707	6 3 .		
21	83.97	22236	1.09	6692	7 1 .		
19	91.70	24274	1.01	6690	9 0 .		
16	105.59	27861	0.84	6699	1 0 0		
15	114.15	29812	1.01	6675	F 0 8 3 2 1 0 0 _ N _ _ _ _ 7 . 5 B - -	392	213TC
14	124.92	32673	0.92	6676	1 1 2		
12	141.33	36925	0.81	6654	1 2 5		
42	40.76	10838	3.90	7171	F 0 9 2 1 4 0 . _ N _ _ _ _ 7 . 5 B - -	477.9	213TC
39	44.58	11828	3.17	7171	4 5 .		
35	49.22	13061	2.87	7171	5 0 .		
30	57.58	15284	2.41	7171	5 6 .		
27	63.56	16817	2.22	7163	6 3 .		
25	67.71	17941	1.67	7160	7 1 .		
23	76.14	20133	1.49	7154	8 0 .		
20	87.44	23143	1.67	7154	9 0 .		
18	98.32	25970	1.49	7146	1 0 0		
34	51.19	13629	3.95	8205	F 1 0 2 1 5 0 . _ N _ _ _ _ 7 . 5 B - -	649.9	213TC
27	64.49	17092	3.67	8205	6 3 .		
25	69.24	18401	2.94	8205	7 1 .		
23	74.39	19699	2.52	8198	8 0 .		
20	87.21	23143	2.75	8205	9 0 .		
18	93.70	24720	2.52	8194	1 0 0		
17	102.80	26957	2.01	8194	F 1 0 3 1 1 0 0 _ N _ _ _ _ 7 . 5 B - -	691.8	213TC
15	114.24	29836	1.82	8194	1 1 2		
13	129.50	33956	1.78	8188	1 2 5		
12	143.90	37605	1.61	8171	1 4 0		
11	162.91	42741	1.27	8176	1 6 0		
9.2	187.70	49248	1.10	8162	1 8 0		
8.4	205.21	53672	1.13	8162	2 0 0		
7.3	236.45	61795	0.98	8138	2 2 5		
6.8	253.86	66517	0.81	8138	2 5 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

10.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
356	4.84	1706	1.78	629	F 0 5 2 2 5 . 0 _ N _ _ _ _ 1 0 . B - -	215.2	215TC
253	6.81	2418	1.53	579	6 . 3		
226	7.63	2708	1.45	559	7 . 1		
201	8.56	3038	1.37	534	9 . 0		
159	10.87	3850	1.21	458	1 0 .		
140	12.33	4367	1.13	404	1 2 .		
117	14.70	5209	1.00	307	1 4 .		
277	6.22	2213	1.77	4541	F 0 6 2 2 7 . 1 _ N _ _ _ _ 1 0 . B - -	246	215TC
197	8.75	3101	1.55	4945	9 . 0		
176	9.81	3480	1.47	5080	1 0 .		
157	11.01	3908	1.39	5215	1 2 .		
123	13.98	4967	1.23	5485	1 4 .		
109	15.85	5626	1.15	5620	1 6 .		
91	18.90	6712	1.04	5822	2 0 .		
255	6.77	2385	2.09	5705	F 0 7 2 2 7 . 1 _ N _ _ _ _ 1 0 . B - -	303.3	215TC
184	9.38	3313	2.09	6213	9 . 0		
164	10.54	3724	2.09	6402	1 0 .		
149	11.59	4097	2.09	6550	1 2 .		
114	15.13	5326	1.81	6976	1 4 .		
100	17.21	6110	1.67	7021	1 6 .		
83	20.89	7412	1.48	7261	2 0 .		
75	22.98	8098	1.39	7261	2 2 .		
65	26.41	9360	1.24	7261	2 5 .		
58	29.95	10632	1.15	7238	2 8 .		
52	33.03	11680	1.05	7238	3 2 .		
46	37.83	13427	0.95	7216	3 6 .		
40	42.77	15098	0.85	7193	4 0 .		
175	9.87	3495	3.90	6721	F 0 8 2 2 9 . 0 _ N _ _ _ _ 1 0 . B - -	402.6	215TC
157	10.96	3873	3.70	6721	1 0 .		
142	12.19	4311	3.49	6721	1 2 .		
109	15.76	5603	3.00	6721	1 4 .		
97	17.70	6253	2.80	6721	1 6 .		
79	21.70	7672	2.45	6721	2 0 .		
71	24.45	8687	2.22	6717	2 2 .		
61	28.46	10086	2.01	6717	2 5 .		
55	31.57	11206	1.86	6717	2 8 .		
50	34.55	12257	1.72	6714	3 2 .		
44	39.09	13840	1.57	6714	3 6 .		
39	44.13	15622	1.43	6706	4 0 .		
32	53.49	18887	1.20	6710	5 0 .		
28	62.38	22038	1.06	6695	5 6 .		
25	68.52	24239	0.98	6699	6 3 .		
21	83.97	29648	0.82	6676	7 1 .		
61	28.41	10104	3.61	7171	F 0 9 2 1 2 8 . _ N _ _ _ _ 1 0 . B - -	492.9	215TC
55	31.56	11220	3.34	7171	3 2 .		
47	36.69	13023	3.13	7171	3 6 .		
42	40.76	14450	2.92	7166	4 0 .		
39	44.58	15771	2.38	7164	4 5 .		
35	49.22	17415	2.15	7164	5 0 .		
30	57.58	20379	1.81	7161	5 6 .		
27	63.56	22423	1.67	7156	6 3 .		
25	67.71	23921	1.25	7148	7 1 .		
23	76.14	26844	1.11	7145	8 0 .		
20	87.44	30857	1.25	7137	9 0 .		
18	98.32	34627	1.11	7132	1 0 0		
39	44.43	15796	3.38	8205	F 1 0 2 1 4 5 . _ N _ _ _ _ 1 0 . B - -	664.9	215TC
34	51.19	18172	2.96	8198	5 0 .		
31	55.97	19832	3.15	8205	5 6 .		
27	64.49	22789	2.75	8198	6 3 .		
25	69.24	24535	2.21	8195	7 1 .		
23	74.39	26266	1.89	8190	8 0 .		
20	87.21	30858	2.06	8192	9 0 .		
18	93.70	32961	1.89	8183	1 0 0		
17	102.80	35942	1.51	8183	F 1 0 3 1 1 0 0 _ N _ _ _ _ 1 0 . B - -	706.8	215TC
15	114.24	39781	1.36	8183	1 1 2		
13	129.50	45275	1.34	8171	1 2 5		
12	143.90	50141	1.21	8153	1 4 0		
11	162.91	56988	0.95	8160	1 6 0		
9.2	187.70	65665	0.82	8138	1 8 0		
8.4	205.21	71562	0.84	8138	2 0 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

15.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
260	6.77	3507	1.42	5561	F 0 7 2 2 7 . 1 _ N _ _ _ _ 1 5 . B - -	405.3	254TC
188	9.38	4871	1.42	6006	9 . 0		
167	10.54	5476	1.42	6168	1 0 .		
152	11.59	6024	1.42	6299	1 2 .		
116	15.13	7831	1.23	6646	1 4 .		
102	17.21	8983	1.13	6736	1 6 .		
253	6.96	3601	2.85	6609	F 0 8 2 2 7 . 1 _ N _ _ _ _ 1 5 . B - -	504.5	254TC
178	9.87	5138	2.65	6721	9 . 0		
161	10.96	5694	2.52	6721	1 0 .		
144	12.19	6338	2.37	6721	1 2 .		
112	15.76	8238	2.04	6721	1 4 .		
99	17.70	9193	1.91	6721	1 6 .		
81	21.70	11279	1.66	6721	2 0 .		
72	24.45	12772	1.51	6708	2 2 .		
62	28.46	14829	1.37	6708	2 5 .		
56	31.57	16475	1.27	6708	2 8 .		
51	34.55	18020	1.17	6706	3 2 .		
45	39.09	20348	1.07	6706	3 6 .		
40	44.13	22967	0.97	6691	4 0 .		
33	53.49	27768	0.82	6699	5 0 .		
139	12.68	6606	3.97	7171	F 0 9 2 1 1 2 . _ N _ _ _ _ 1 5 . B - -	621.4	254TC
120	14.66	7626	3.71	7171	1 4 .		
107	16.37	8520	3.48	7171	1 6 .		
100	17.58	9170	3.29	7171	1 8 .		
88	20.04	10483	3.04	7171	2 0 .		
78	22.70	11811	2.88	7171	2 2 .		
68	25.88	13513	2.65	7171	2 5 .		
62	28.41	14854	2.45	7163	2 8 .		
56	31.56	16496	2.27	7165	3 2 .		
48	36.69	19146	2.13	7160	3 6 .		
43	40.76	21245	1.99	7156	4 0 .		
39	44.58	23186	1.62	7152	4 5 .		
36	49.22	25604	1.47	7152	5 0 .		
31	57.58	29960	1.23	7142	5 6 .		
28	63.56	32966	1.13	7141	6 3 .		
26	67.71	35169	0.85	7126	7 1 .		
20	87.44	45366	0.85	7103	9 0 .		
77	22.76	11862	3.86	8205	F 1 0 2 1 2 2 . _ N _ _ _ _ 1 5 . B - -	797.7	254TC
68	25.77	13438	3.57	8205	2 5 .		
63	28.04	14658	3.33	8205	2 8 .		
56	31.16	16244	3.11	8205	3 2 .		
50	35.32	18391	2.94	8205	3 6 .		
45	39.25	20428	2.74	8205	4 0 .		
40	44.43	23223	2.30	8194	4 5 .		
34	51.19	26717	2.01	8184	5 0 .		
31	55.97	29157	2.14	8190	5 6 .		
27	64.49	33504	1.87	8183	6 3 .		
25	69.24	36071	1.50	8175	7 1 .		
24	74.39	38615	1.29	8175	8 0 .		
20	87.21	45366	1.40	8166	9 0 .		
19	93.70	48458	1.29	8160	1 0 0		
17	102.80	52842	1.03	8160	F 1 0 3 1 1 0 0 _ N _ _ _ _ 1 5 . B - -	835.2	254TC
15	114.24	58485	0.93	8160	1 1 2		
14	129.50	66563	0.91	8138	1 2 5		
12	143.90	73715	0.82	8115	1 4 0		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

20.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
260	6.77	4676	1.07	5417	F 0 7 2 2 7 . 1 _ N _ _ _ _ 2 0 . B - -	432.3	256TC
188	9.38	6495	1.07	5800	9 . 0		
167	10.54	7301	1.07	5934	1 0 .		
152	11.59	8032	1.07	6047	1 2 .		
116	15.13	10441	0.92	6317	1 4 .		
102	17.21	11978	0.85	6452	1 6 .		
253	6.96	4802	2.14	6496	F 0 8 2 2 7 . 1 _ N _ _ _ _ 2 0 . B - -	531.5	256TC
178	9.87	6851	1.99	6721	9 . 0		
161	10.96	7593	1.89	6721	1 0 .		
144	12.19	8451	1.78	6721	1 2 .		
112	15.76	10985	1.53	6721	1 4 .		
99	17.70	12257	1.43	6721	1 6 .		
81	21.70	15039	1.25	6721	2 0 .		
72	24.45	17030	1.13	6699	2 2 .		
62	28.46	19772	1.03	6699	2 5 .		
56	31.57	21966	0.95	6699	2 8 .		
51	34.55	24027	0.88	6699	3 2 .		
45	39.09	27130	0.80	6699	3 6 .		
224	7.85	5449	3.82	7171	F 0 9 2 1 8 . 0 _ N _ _ _ _ 2 0 . B - -	648.4	256TC
200	8.81	6144	3.60	7171	9 . 0		
174	10.13	7032	3.39	7171	1 0 .		
155	11.35	7919	3.16	7171	1 1 .		
139	12.68	8809	2.97	7171	1 2 .		
120	14.66	10168	2.79	7171	1 4 .		
107	16.37	11360	2.61	7168	1 6 .		
100	17.58	12227	2.47	7168	1 8 .		
88	20.04	13978	2.28	7164	2 0 .		
78	22.70	15749	2.16	7164	2 2 .		
68	25.88	18018	1.99	7161	2 5 .		
62	28.41	19806	1.84	7156	2 8 .		
56	31.56	21994	1.71	7160	3 2 .		
48	36.69	25528	1.60	7148	3 6 .		
43	40.76	28326	1.49	7146	4 0 .		
39	44.58	30914	1.21	7139	4 5 .		
36	49.22	34139	1.10	7139	5 0 .		
31	57.58	39947	0.92	7123	5 6 .		
28	63.56	43955	0.85	7126	6 3 .		
122	14.46	10030	3.78	8205	F 1 0 2 1 1 4 . _ N _ _ _ _ 2 0 . B - -	824.7	256TC
113	15.61	10842	3.61	8205	1 6 .		
97	18.07	12609	3.26	8205	1 8 .		
86	20.46	14266	3.02	8205	2 0 .		
77	22.76	15816	2.89	8202	2 2 .		
68	25.77	17917	2.68	8202	2 5 .		
63	28.04	19544	2.50	8199	2 8 .		
56	31.16	21658	2.33	8199	3 2 .		
50	35.32	24522	2.21	8195	3 6 .		
45	39.25	27238	2.06	8195	4 0 .		
40	44.43	30964	1.73	8183	4 5 .		
34	51.19	35622	1.51	8170	5 0 .		
31	55.97	38876	1.61	8175	5 6 .		
27	64.49	44672	1.40	8168	6 3 .		
25	69.24	48095	1.13	8155	7 1 .		
24	74.39	51487	0.96	8160	8 0 .		
20	87.21	60489	1.05	8141	9 0 .		
19	93.70	64611	0.96	8138	1 0 0		

25.00HP

4 POLE

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

346	5.08	4404	3.72	7171	F 0 9 2 1 5 . 0 _ N _ _ _ _ 2 5 . B - -	769	284TC
268	6.57	5707	3.33	7171	6 . 3		
251	7.00	6100	3.22	7171	7 . 1		
224	7.85	6811	3.05	7171	8 . 0		
200	8.81	7680	2.88	7171	9 . 0		
174	10.13	8790	2.71	7171	1 0 .		
155	11.35	9899	2.53	7171	1 1 .		
139	12.68	11011	2.38	7171	1 2 .		
120	14.66	12711	2.23	7171	1 4 .		
107	16.37	14200	2.09	7164	1 6 .		
100	17.58	15284	1.97	7164	1 8 .		
88	20.04	17473	1.82	7158	2 0 .		
78	22.70	19686	1.73	7158	2 2 .		
68	25.88	22522	1.59	7152	2 5 .		
62	28.41	24758	1.47	7148	2 8 .		
56	31.56	27493	1.36	7154	3 2 .		
48	36.69	31910	1.28	7137	3 6 .		
43	40.76	35408	1.19	7136	4 0 .		
39	44.58	38643	0.97	7126	4 5 .		
36	49.22	42673	0.88	7126	5 0 .		

SERIES F

SELECTION TABLES

GEARED MOTORS

25.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
200	8.81	7667	3.89	8205	F 1 0 2 1 9 . 0 _ N _ _ _ _ 2 5 . B - -	940.9	284TC
180	9.77	8487	3.72	8205	1 0 .		
153	11.48	9979	3.39	8205	1 1 .		
142	12.39	10772	3.24	8205	1 2 .		
122	14.46	12538	3.02	8205	1 4 .		
113	15.61	13553	2.89	8205	1 6 .		
97	18.07	15761	2.61	8205	1 8 .		
86	20.46	17833	2.42	8205	2 0 .		
77	22.76	19770	2.31	8199	2 2 .		
68	25.77	22397	2.14	8199	2 5 .		
63	28.04	24430	2.00	8192	2 8 .		
56	31.16	27073	1.87	8192	3 2 .		
50	35.32	30653	1.76	8186	3 6 .		
45	39.25	34047	1.65	8186	4 0 .		
40	44.43	38706	1.38	8171	4 5 .		
34	51.19	44528	1.21	8157	5 0 .		
31	55.97	48595	1.28	8160	5 6 .		
27	64.49	55841	1.12	8153	6 3 .		
25	69.24	60119	0.90	8135	7 1 .		
20	87.21	75611	0.84	8115	9 0 .		

30.00HP

4 POLE

346	5.08	5285	3.10	7166	F 0 9 2 1 5 . 0 _ N _ _ _ _ 3 0 . B - -	763	286TC
268	6.57	6848	2.78	7171	6 . 3		
251	7.00	7320	2.68	7171	7 . 1		
224	7.85	8173	2.54	7171	8 . 0		
200	8.81	9216	2.40	7171	9 . 0		
174	10.13	10549	2.26	7171	1 0 .		
155	11.35	11878	2.11	7171	1 1 .		
139	12.68	13213	1.98	7171	1 2 .		
120	14.66	15253	1.86	7171	1 4 .		
107	16.37	17041	1.74	7161	1 6 .		
100	17.58	18341	1.65	7161	1 8 .		
88	20.04	20967	1.52	7152	2 0 .		
78	22.70	23623	1.44	7152	2 2 .		
68	25.88	27027	1.33	7142	2 5 .		
62	28.41	29709	1.23	7141	2 8 .		
56	31.56	32992	1.14	7148	3 2 .		
48	36.69	38292	1.07	7126	3 6 .		
43	40.76	42490	0.99	7126	4 0 .		
274	6.43	6694	3.78	8205	F 1 0 2 1 6 . 3 _ N _ _ _ _ 3 0 . B - -	934.9	286TC
247	7.13	7440	3.59	8205	7 . 1		
227	7.76	8100	3.45	8205	8 . 0		
200	8.81	9201	3.24	8205	9 . 0		
180	9.77	10185	3.10	8205	1 0 .		
153	11.48	11974	2.82	8205	1 1 .		
142	12.39	12927	2.70	8205	1 2 .		
122	14.46	15045	2.52	8205	1 4 .		
113	15.61	16264	2.41	8205	1 6 .		
97	18.07	18913	2.18	8205	1 8 .		
86	20.46	21400	2.01	8205	2 0 .		
77	22.76	23724	1.93	8195	2 2 .		
68	25.77	26876	1.78	8195	2 5 .		
63	28.04	29316	1.66	8186	2 8 .		
56	31.16	32488	1.56	8186	3 2 .		
50	35.32	36783	1.47	8176	3 6 .		
45	39.25	40857	1.37	8176	4 0 .		
40	44.43	46447	1.15	8160	4 5 .		
34	51.19	53434	1.01	8143	5 0 .		
31	55.97	58314	1.07	8145	5 6 .		
27	64.49	67009	0.94	8138	6 3 .		

NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

SELECTION TABLES

GEARED MOTORS

40.00 HP

4 POLE

N2 R/MIN	i	lb.in	Fm	lb	Unit Designation	lb	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 Through 20 Spaces to be filled when entering order	Weight of base mount unit	
346	5.08	7047	2.32	7157	F 0 9 2 1 5 . 0 _ N _ _ _ _ 4 0 . B - -	876.2	324TC
268	6.57	9131	2.08	7171	6 . 3		
251	7.00	9760	2.01	7171	7 . 1		
224	7.85	10898	1.91	7171	8 . 0		
200	8.81	12288	1.80	7171	9 . 0		
174	10.13	14065	1.69	7171	1 0 .		
155	11.35	15838	1.58	7171	1 1 .		
139	12.68	17618	1.49	7171	1 2 .		
120	14.66	20337	1.39	7171	1 4 .		
107	16.37	22721	1.30	7155	1 6 .		
100	17.58	24455	1.23	7155	1 8 .		
88	20.04	27956	1.14	7139	2 0 .		
78	22.70	31498	1.08	7139	2 2 .		
68	25.88	36036	0.99	7123	2 5 .		
62	28.41	39613	0.92	7126	2 8 .		
345	5.11	7086	3.12	8205	F 1 0 2 1 5 . 0 _ N _ _ _ _ 4 0 . B - -	1050.4	324TC
274	6.43	8926	2.84	8205	6 . 3		
247	7.13	9921	2.69	8205	7 . 1		
227	7.76	10800	2.59	8205	8 . 0		
200	8.81	12268	2.43	8205	9 . 0		
180	9.77	13580	2.33	8205	1 0 .		
153	11.48	15966	2.12	8205	1 1 .		
142	12.39	17236	2.02	8205	1 2 .		
122	14.46	20061	1.89	8205	1 4 .		
113	15.61	21685	1.80	8205	1 6 .		
97	18.07	25218	1.63	8205	1 8 .		
86	20.46	28533	1.51	8205	2 0 .		
77	22.76	31632	1.45	8189	2 2 .		
68	25.77	35835	1.34	8189	2 5 .		
63	28.04	39088	1.25	8173	2 8 .		
56	31.16	43317	1.17	8173	3 2 .		
50	35.32	49045	1.10	8157	3 6 .		
45	39.25	54476	1.03	8157	4 0 .		
40	44.43	61929	0.86	8138	4 5 .		
31	55.97	77752	0.80	8115	5 6 .		

50.00HP

4 POLE

346	5.08	8809	1.86	7148	F 0 9 2 1 5 . 0 _ N _ _ _ _ 5 0 . B - -	1029.2	326TC
268	6.57	11414	1.67	7171	6 . 3		
251	7.00	12200	1.61	7171	7 . 1		
224	7.85	13622	1.53	7171	8 . 0		
200	8.81	15360	1.44	7171	9 0 .		
174	10.13	17581	1.35	7171	1 0 .		
155	11.35	19798	1.27	7171	1 1 .		
139	12.68	22022	1.19	7171	1 2 .		
120	14.66	25422	1.11	7171	1 4 .		
107	16.37	28401	1.04	7148	1 6 .		
100	17.58	30569	0.99	7148	1 8 .		
88	20.04	34946	0.91	7126	2 0 .		
78	22.70	39372	0.86	7126	2 2 .		
345	5.11	8858	2.50	8205	F 1 0 2 1 5 . 0 _ N _ _ _ _ 5 0 . B - -	1203.4	326TC
274	6.43	11157	2.27	8205	6 . 3		
247	7.13	12401	2.16	8205	7 . 1		
227	7.76	13500	2.07	8205	8 . 0		
200	8.81	15335	1.94	8205	9 . 0		
180	9.77	16975	1.86	8205	1 0 .		
153	11.48	19958	1.69	8205	1 1 .		
142	12.39	21545	1.62	8205	1 2 .		
122	14.46	25076	1.51	8205	1 4 .		
113	15.61	27107	1.44	8205	1 6 .		
97	18.07	31522	1.31	8205	1 8 .		
86	20.46	35666	1.21	8205	2 0 .		
77	22.76	39540	1.16	8183	2 2 .		
68	25.77	44794	1.07	8183	2 5 .		
63	28.04	48861	1.00	8160	2 8 .		
56	31.16	54146	0.93	8160	3 2 .		
50	35.32	61306	0.88	8138	3 6 .		
45	39.25	68095	0.82	8138	4 0 .		

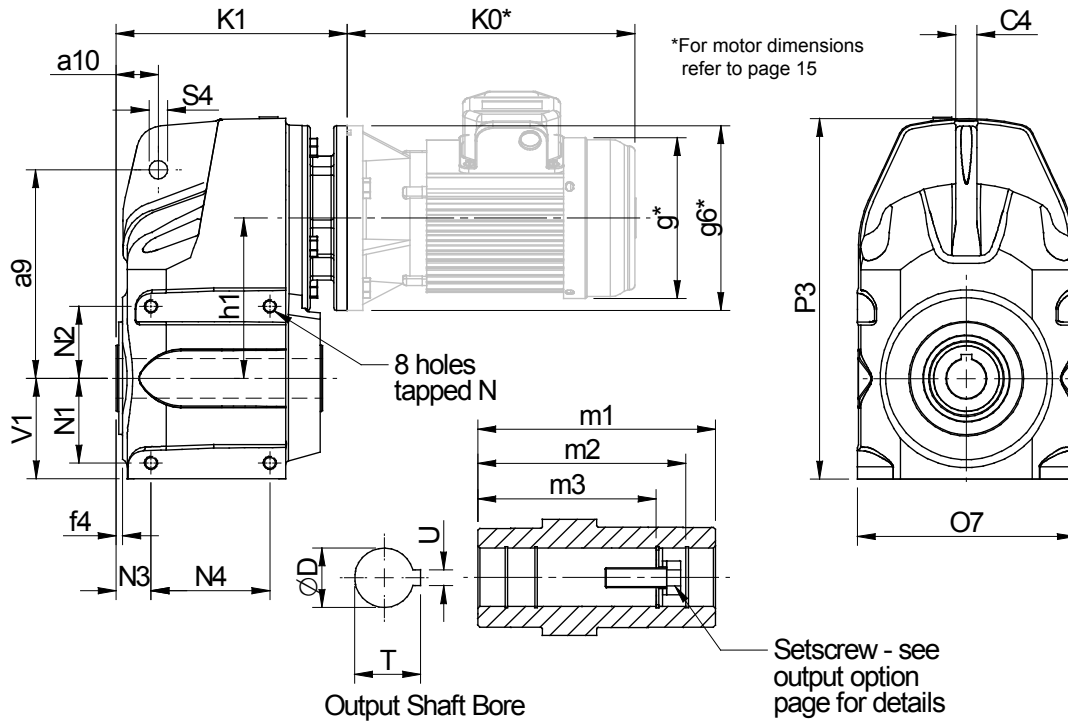
NOTE

Other output speeds are available using 6 and 8 pole motors - Consult Application Engineering

SERIES F

DIMENSIONS

MOTORIZED



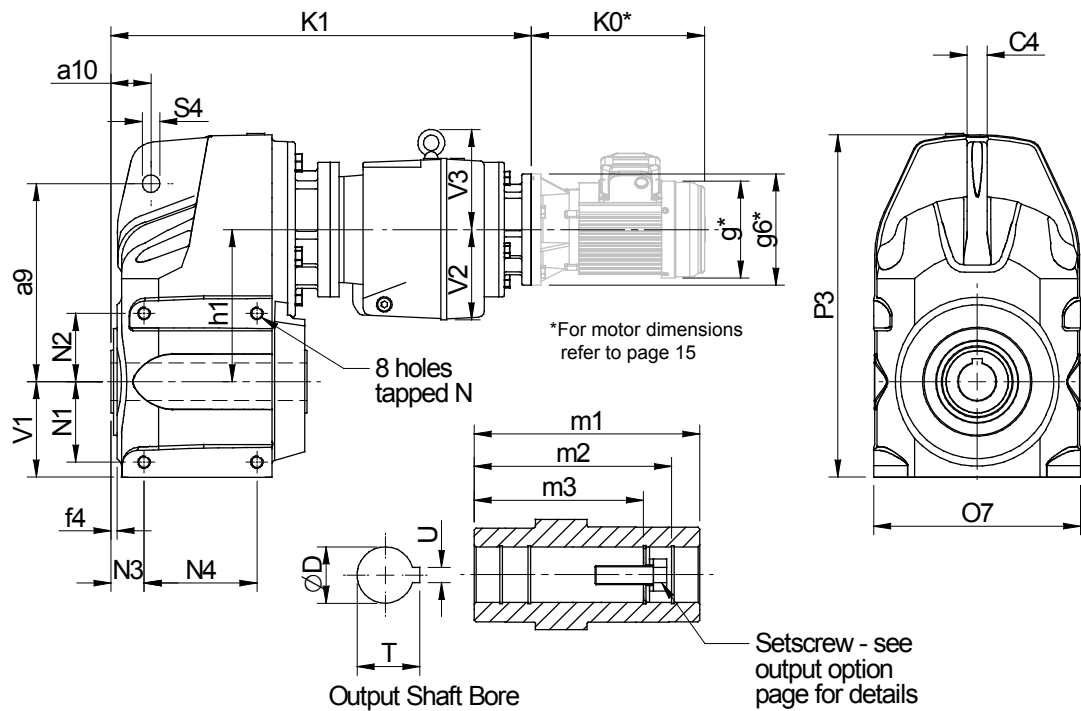
UNIT SIZE	a9	a10	C4	f4	h1	N	N1	N2	N3	N4	O7	P3	S4	V1	Hollow Output Bore					
															D	m1	m2	m3	T	U
F0222 F0232	5.51	0.98	0.59	0.20	3.77	M8 x 1.25p 0.39 deep	1.89	1.50	0.96	2.68	5.67	8.82	0.59	2.32	1.00	4.63	4.13	3.50	1.11	0.25
F0322 F0332	6.22	1.26	0.63	0.20	4.78	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99	1.25	6.16	4.80	4.13	1.37	0.25
F0422 F0432	6.69	1.26	0.63	0.20	4.78	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99	1.38	6.16	5.20	4.80	1.53	0.31
F0522 F0532	7.80	1.61	0.63	0.20	5.69	M10 x 1.50p 0.63 deep	2.56	2.95	1.08	4.59	7.87	12.52	0.59	3.15	1.50	7.05	6.85	5.59	1.67	0.38
F0622 F0632	8.58	1.61	0.63	0.24	6.51	M12 x 1.75p 0.67 deep	3.37	3.52	1.34	4.72	8.87	14.37	0.59	3.98	1.50	8.07	6.85	6.14	1.67	0.38
F0722 F0732	10.94	1.97	0.79	0.28	7.87	M16 x 2.00p 0.79 deep	4.31	3.64	1.42	5.75	10.87	17.40	0.94	5.00	2.00	9.19	7.80	7.20	2.23	0.50
F0822 F0832	13.62	2.44	1.02	0.12	9.57	M16 x 2.00p 0.79 deep	5.22	4.63	1.75	6.61	13.39	21.10	0.94	6.14	2.38	10.63	9.06	8.27	2.66	0.63
F0921 F0931	15.55	2.76	1.18	0.20	10.77	M16 x 2.00p 0.94 deep	4.92	8.86	1.50	8.46	15.75	24.09	1.06	6.89	2.75	12.99	10.63	-	3.04	0.63
F1021 F1031	19.09	3.46	1.42	0.22	13.05	M20 x 2.50p 1.06 deep	6.22	10.71	1.63	9.84	18.48	29.45	1.06	8.50	3.25	14.57	12.32	-	3.59	0.75

MOTOR FRAME SIZE	F0222	F0232	F0322 F0422	F0332 F0432	F0522	F0532	F0622	F0632	F0722	F0732	F0822	F0832	F0921	F0931	F1021	F1031
	K1	K1	K1	K1	K1	K1	K1	K1	K1	K1	K1	K1	K1	K1	K1	K1
56c	7.28	7.87	8.11	8.62	8.94	9.84	9.37	10.28	10.79	11.34	13.66	13.39	-	15.24	-	-
143 - 145TC	7.28	7.87	8.11	8.62	8.94	9.84	9.37	10.28	10.79	11.34	13.66	13.39	-	15.24	-	-
182 - 184TC	6.97	7.65	7.8	8.31	9.92	9.53	10.35	9.96	11.14	12.32	13.66	13.74	14.17	15.24	15.87	17.60
213 - 215TC	-	-	-	-	9.92	-	10.35	-	11.06	12.32	13.66	13.74	14.17	-	15.87	17.60
254 - 256TC	-	-	-	-	-	-	-	-	-	-	13.66	-	15.55	-	17.05	18.98
284 - 286TC	-	-	-	-	-	-	-	-	-	-	13.66	-	15.67	-	17.17	-
324 - 326TC	-	-	-	-	-	-	-	-	-	-	-	-	16.34	-	17.80	-

SERIES F

DIMENSIONS

MOTORIZED QUAD



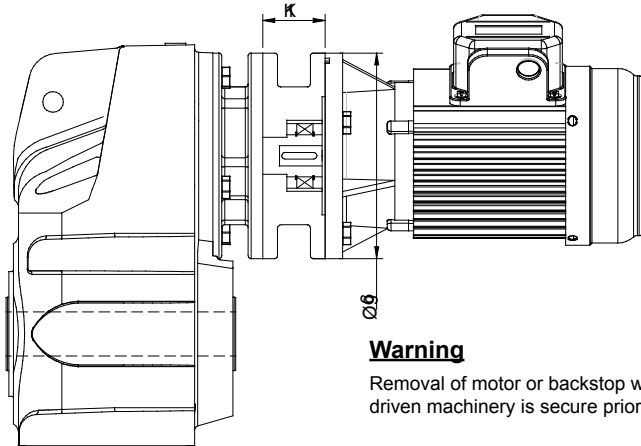
UNIT SIZE	a9	a10	C4	f4	h1	N	N1	N2	N3	N4	O7	P3	S4	V1	V2	V3	Hollow Output Bore					
																	D	m1	m2	m3	T	U
F0342	6.22	1.26	0.63	0.20	4.78	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99	2.99	2.91	1.25	6.16	4.80	4.13	1.37	0.25
F0442	6.69	1.26	0.63	0.20	4.78	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99	2.99	2.91	1.38	6.16	5.20	4.80	1.53	0.31
F0542	7.80	1.61	0.63	0.20	5.69	M10 x 1.50p 0.63 deep	2.56	2.95	1.08	4.59	7.83	12.52	0.59	3.15	3.58	3.54	1.50	7.05	6.85	5.59	1.67	0.38
F0642	8.58	1.61	0.63	0.24	6.51	M12 x 1.75p 0.67 deep	3.37	3.52	1.34	4.72	8.87	14.37	0.59	3.98	3.58	3.54	1.50	8.07	6.85	6.14	1.67	0.38
F0742	10.94	1.97	0.79	0.28	7.87	M16 x 2.00p 0.79 deep	4.31	3.64	1.42	5.75	10.87	17.40	0.94	5.00	3.58	3.54	2.00	9.19	7.80	7.20	2.23	0.50
F0842	13.62	2.44	1.02	0.12	9.57	M16 x 2.00p 0.79 deep	5.22	4.63	1.75	6.61	13.39	21.10	0.94	6.14	4.53	3.66	2.38	10.63	9.06	8.27	2.66	0.63
F0941	15.55	2.76	1.18	0.20	10.77	M16 x 2.00p 0.94 deep	4.92	8.86	1.50	8.46	15.75	24.09	1.06	6.89	4.53	3.66	2.75	12.99	10.63	-	3.04	0.63
F1041	19.09	3.46	1.42	0.22	13.05	M20 x 2.50p 1.06 deep	6.22	10.71	1.63	9.84	18.48	29.45	1.06	8.50	5.51	6.10	3.25	14.57	12.32	-	3.59	0.75

MOTOR FRAME SIZE	F0342	F0442	F0542	F0642	F0742	F0842	F0941	F1041
	K1	K1	K1	K1	K1	K1	K1	K1
56C	15.43	15.43	17.48	17.91	19.29	21.77	23.70	27.03
143-145TC	15.43	15.43	17.48	17.91	19.29	21.77	23.70	27.03
182-184TC	15.12	15.12	17.17	17.60	18.98	22.76	24.69	27.38
213-215TC	-	-	-	-	-	22.76	24.69	27.38

SERIES F MOTORIZED BACKSTOP MODULE

Motorized backstop modules can be fitted between the gear unit and motor. The backstop device incorporates high quality centrifugal lift off sprags which are wear free above the lift off speed (n min).
To ensure correct operation motor speed must exceed lift off speed.

Suitable for ambient temperature -40°F to + 122°F (-40°C to + 50°C)



Warning

Removal of motor or backstop will release the drive. Ensure all driven machinery is secure prior to any maintenance work.

NEMA C FLANGE

Motor Frame Size	Lift off Speed ('n' min) (rev/min)	Rated Locking Torque ('T max') (at motor) (lb. in.)	øg6	K1
182TC / 184TC	670	2655	8.976	3.75
213TC / 215TC	670	2655	8.976	3.75
254TC / 256TC	620	8320	8.976	4.75
284TC / 286TC	620	8320	11.02	5.374
324TC / 326TC	550	11150	12.99	6

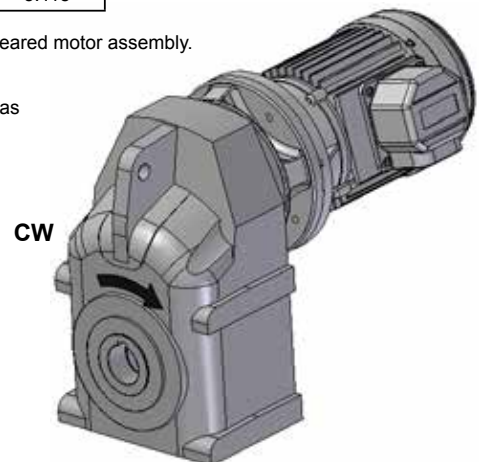
IEC B5 FLANGE

Motor Frame Size	Lift off Speed ('n' min) (rev/min)	Rated Locking Torque ('T max') (at motor) (lb. in.)	øg6	K1
100	670	1505	9.84	2.756
112	670	1505	9.84	2.756
132	620	8320	11.81	3.740
160	620	8320	13.78	5.118
180	620	8320	13.78	5.118
200	550	11150	15.75	5.118

When a backstop module is fitted, dimension K1 should be added to the overall length of the geared motor assembly.

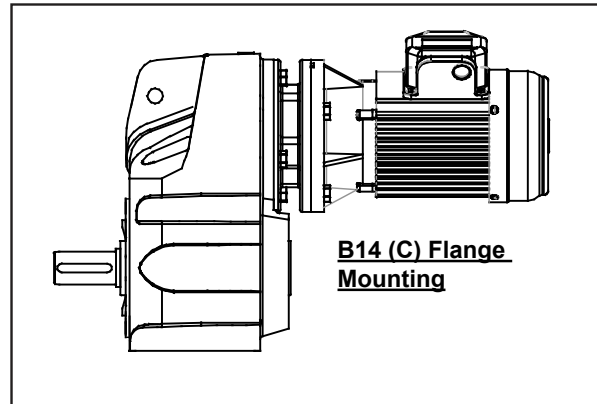
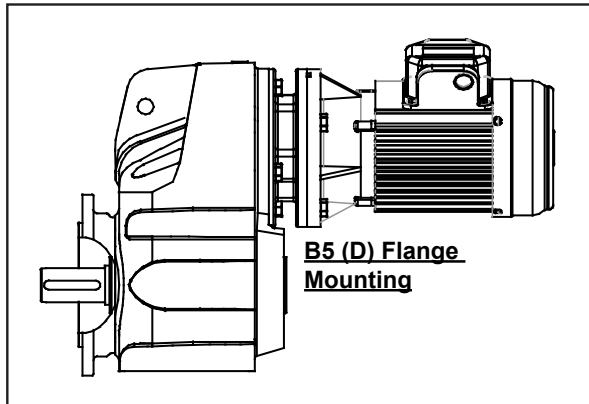
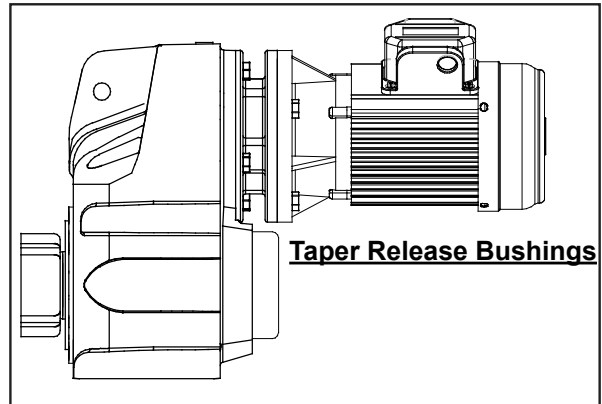
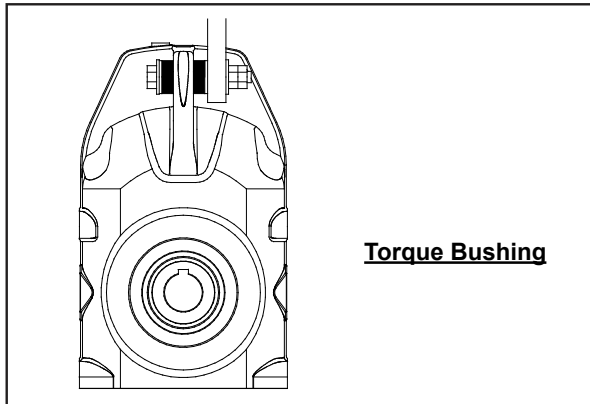
Rotation of output shaft must be specified when ordering as viewed from the output shaft end (as shown in the diagram) see page 17 for column 20 entry

CW	-	Free Rotation	-	Clockwise
		Locked	-	Counterclockwise
CCW	-	Free Rotation	-	Counterclockwise
		Locked	-	Clockwise



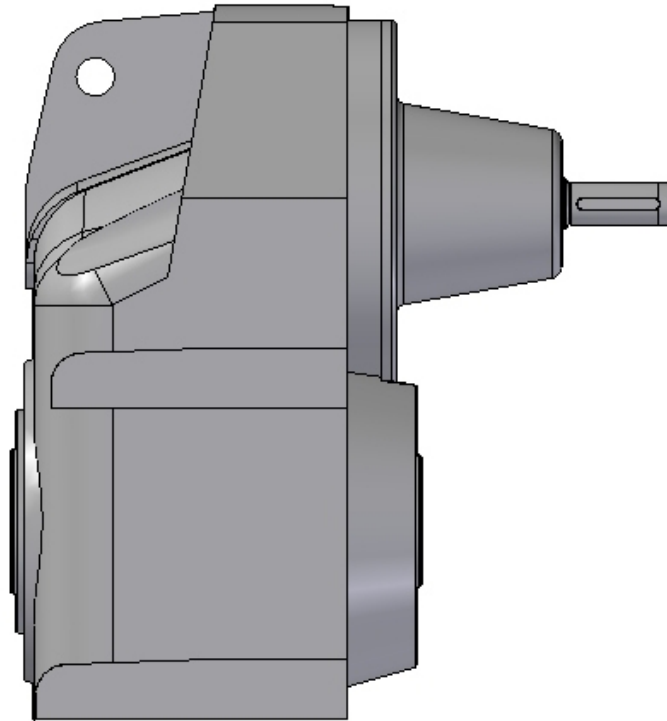
SERIES F

OUTPUT OPTIONS



SERIES F
NOTES

SERIES F



REDUCER
SERIES F

SERIES F

OVERHUNG & AXIAL LOADS (POUNDS) ON SHAFTS

Maximum Permissible Overhung Loads

When a sprocket, gear, etc. is mounted on the shaft a calculation, as below, must be made to determine the overhung load on the shaft, and the results compared to the maximum permissible overhung loads tabulated. Overhung loads can be reduced by increasing the diameter of the sprocket, gear, etc. If the maximum permissible overhung load is exceeded, the sprocket, gear, etc. should be mounted on a separate shaft, flexibly coupled and supported in its own bearings, or the gear unit shaft should be extended to run in an outboard bearing. Alternatively, a larger gear is often a less expensive solution.

Permissible overhung loads vary according to the direction of rotation. The values tabulated are for the most unfavorable direction with the unit transmitting full rated power and the load P applied midway along the shaft extension. Hence, they can sometimes be increased for a more favorable direction of rotation, or if the power transmitted is less than the rated capacity of the gear unit, or if the load is applied nearer to the gear unit case. Refer to Application Engineering for further details. In any event, the sprocket, gear, etc. should be positioned as close as possible to the gear unit case in order to reduce bearing loads and shaft stresses, and to prolong life.

All units will accept 100% momentary overload on stated capacities.

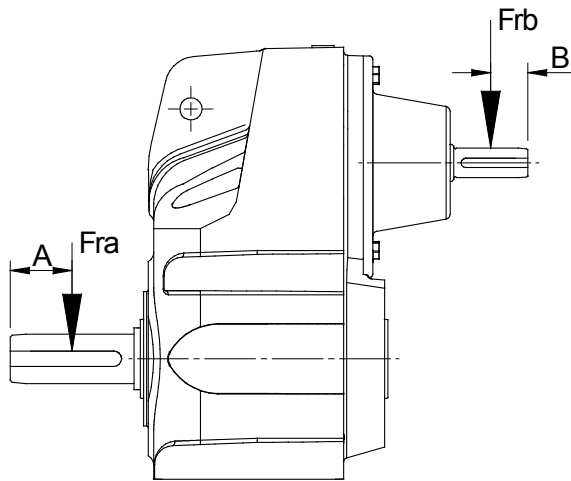
Overhung load (lbf)

$$P = \frac{HP \times 126,000 \times K}{N \times D}$$

Where

- P = equivalent overhung load (lbf)
 HP = power transmitted by the shaft (Horse Power)
 N = speed of shaft (rev/min)
 R = pitch radius of sprocket, etc. (inches)
 K = factor

Note: 1 lbf = 4.4484 Newtons.



Input shaft Overhung Loads, Frb (Lb) 1750 rpm

Two, Three and Four Stage Units

	F02	F03	F04	F05	F06	F07	F08	F09	F10
2 Stage	315	325	325	230	190	345	315	315	535
3 Stage	345	365	365	315	315	380	470	785	880
4 Stage	-	315	315	315	315	315	365	365	470

For output overhung load Fra consult ratings tables

Axial Thrust Capacities (Pounds)

No check or calculation is required for axial loads (F_A) towards or away from the unit up to 50% of the permissible overhung load. If the axial thrust considerably exceeds these values or if there is a combination of axial thrust loads and overhung loads please contact Application Engineering.

Overhung Member K (factor)

Chain sprocket*	1.00
Spur or helical pinion	1.25
Vee belt sheave	1.50
Flat belt pulley	2.00

* If multistrand chain drives are equally loaded and the outer strand is further than dimension A output or B input, refer to Application Engineering.

Distance Midway Along the Shaft Extension

Size of unit	NO of Reductions	Dimensions A (in)	Dimensions B (in)
F02	2	-	0.79
	3	-	0.79
	4	-	-
F03	2	0.93	0.79
	3	0.93	0.79
	4	-	0.79
F04	2	1.10	0.79
	3	1.10	0.79
	4	1.10	0.79
F05	2	1.30	0.79
	3	1.30	0.79
	4	1.26	0.79
F06	2	1.50	0.79
	3	1.50	0.79
	4	1.50	0.79
F07	2	1.87	0.98
	3	1.87	0.79
	4	1.87	0.79
F08	2	2.17	1.18
	3	2.17	0.98
	4	2.17	0.79
F09	2	2.68	1.57
	3	2.56	1.18
	4	2.56	0.79
F10	2	3.35	1.38
	3	3.35	1.57
	4	3.35	0.98

SERIES F THERMAL RATINGS

Thermal Ratings (HP)

Thermal ratings are a measure of the units ability to dissipate heat. If they are exceeded, the lubricant may break down resulting in premature gear failure.

Thermal ratings are based on an ambient temperature of 68°F (20°C), where units are to operate in other ambient temperatures thermal ratings must be adjusted by the following factors.

Thermal Power (HP)

	Ambient Temperature							
Deg F	-4	14	32	50	68	86	104	122
Deg C	-20	-10	0	10	20	30	40	50
Adj. Factor	1.57	1.43	1.29	1.14	1	0.86	0.71	0.5

i Ratio	N1 (rpm)	F0222	F0322 F0422	F0522	F0622	F0722	F0822	F0921	F1021	F1121	F1221
Up To 16	2900	-	-	-	-	-	-	-	-	-	-
	1750	7.7	12	21	27	40	63	88	132	152	232
	1450	6.8	11	19	24	36	57	79	118	138	212
	960	6.2	8.1	14	18	27	43	59	89	103	160
20	2900	9.6	11	21	26	37	65	83	117	135	206
	1750	7.0	10	19	24	34	58	73	103	122	188
	1450	6.2	9.1	17	21	31	52	67	93	110	170
	960	5.6	6.8	12	16	23	39	49	69	82	127
22	2900	6.0	10	19	23	35	55	74	105	127	188
	1750	6.4	9.1	17	20	31	49	66	94	113	167
	1450	5.5	8.2	15	19	28	43	60	85	100	151
	960	5.0	6.0	11	14	21	33	44	63	76	114
25	2900	4.2	9.6	18	21	32	51	68	96	117	173
	1750	5.9	8.4	16	18	28	44	60	85	103	155
	1450	5.2	7.5	15	16	25	40	53	77	92	139
	960	4.6	5.5	11	12	19	29	40	57	69	102
28	2900	3.7	8.8	16	19	29	45	65	92	107	156
	1750	5.5	7.5	14	17	25	39	56	81	93	137
	1450	4.7	6.8	12	15	23	35	49	71	83	123
	960	4.2	5.0	9.3	11	17	26	37	53	63	90
32	2900	3.4	8.2	15	19	28	42	60	85	98	150
	1750	5.2	7.1	13	16	24	36	51	74	86	127
	1450	4.4	6.3	12	14	21	32	46	66	76	113
	960	3.9	4.6	8.9	11	16	24	34	49	57	85
36	2900	3.7	7.4	14	17	26	41	55	81	95	140
	1750	4.7	6.3	12	14	22	35	47	68	82	119
	1450	3.9	5.6	10	13	19	31	42	61	72	103
	960	3.5	4.1	7.6	9.3	14	22	31	44	53	77
40	2900	3.4	7.1	12	16	24	35	51	75	89	132
	1750	4.2	5.9	10	13	20	29	43	62	73	110
	1450	3.4	5.3	8.9	12	18	26	38	56	66	98
	960	3.0	3.9	6.5	8.8	13	19	28	41	48	73
50	2900	2.6	6.4	12	14	22	31	46	66	76	117
	1750	3.8	5.2	10	12	18	25	38	52	63	95
	1450	3.1	4.6	8.4	10	16	22	33	47	55	84
	960	2.7	3.4	6.1	7.5	12	16	24	34	40	62

Note: When checking thermal capacities use actual load required to be transmitted, not rating of prime mover.

SERIES F

DOUBLE REDUCTION RATINGS

SIZES F02 - F05

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input speed N1 (rpm)	F0222					F0322					F0422					F0522				
				N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)
6	7	8	3500	44		1000	0.737	592	48		2550	2.03	995	48		2550	2.03	995	47		3220	2.56	1210
7	1	.	1750	22	78.56	1000	0.369	818	24	72.41	2730	1.09	1350	24	72.41	2730	1.09	1350	23	72.92	3220	1.28	1700
			1160	14		1000	0.244	850	16		2850	0.751	1600	16		2850	0.751	1600	15		3220	0.847	2060
			875	11		1000	0.184	850	12		2930	0.583	1600	12		2930	0.583	1600	11		3220	0.639	2060
			3500	39		916	0.594	654	42		2290	1.61	1110	42		2290	1.61	1110					
9	0	.	1750	19	89.28	981	0.318	850	21	82.18	2460	0.863	1490	21	82.18	2460	0.863	1490					
			1160	12		987	0.212	850	14		2560	0.596	1600	14		2560	0.596	1600					
			875	9		987	0.16	850	10		2630	0.462	1600	10		2630	0.462	1600					
			3500						37		2050	1.27	1230	37		2050	1.27	1230					
1	0	0	1750						18	93.43	2190	0.678	1600	18	93.43	2190	0.678	1600					
			1160						12		2280	0.468	1600	12		2280	0.468	1600					
			875						9		2350	0.363	1600	9		2350	0.363	1600					

SERIES F

DOUBLE REDUCTION RATINGS

SIZES F06 - F08

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input speed N1 (rpm)	F0622					F0722					F0822					
				N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	
5	.	0	3500																
			1750																
			1160																
			875																
6	.	3	3500																
			1750																
			1160																
			875																
7	.	1	3500	562	6.224	3170	29.4	2540	258	6.772	4950	42.3	3820	502	6.959	7880	65.7	4430	
			1750	281		3920	18	2540	258		4980	21.2	3820	251		7940	32.9	4430	
			1160	186		4430	13.5	2540	171		4990	14	3820	166		7960	21.8	4430	
			875	140		4500	10.3	2540	129		5000	10.6	3820	125		7980	16.4	4430	
9	.	0	3500	400	8.75	3890	25.6	2540	373	9.38	6450	39.6	3820	354	9.865	11200	65.7	4430	
			1750	200		4800	15.7	2540	186		6920	21.2	3820	177		11300	32.9	4430	
			1160	132		5430	11.7	2540	123		6930	14	3820	117		11300	21.8	4430	
			875	100		5880	9.59	2540	93		6940	10.6	3820	88		11300	16.4	4430	
1	0	.	3500	356	9.807	4140	24.3	2540	332	10.54	6870	37.6	3820	319	10.96	12200	64.3	4430	
			1750	178		5100	14.9	2540	166		7780	21.2	3820	159		12600	32.9	4430	
			1160	118		5780	11.1	2540	110		7790	14	3820	105		12600	21.8	4430	
			875	89		6290	9.14	2540	83		7800	10.6	3820	79		12600	16.4	4430	
1	2	.	3500	317	11.01	4400	23	2540	302	11.59	7240	36	3820	287	12.19	12900	61	4430	
			1750	158		5420	14.1	2540	151		8560	21.2	3820	143		14000	32.9	4430	
			1160	105		6140	10.5	2540	100		8570	14	3820	95		14000	21.8	4430	
			875	79		6360	8.23	2540	75		8580	10.6	3820	71		14000	16.4	4430	
1	4	.	3500	250	13.98	4960	20.3	2540	231	15.13	8240	31.3	3820	222	15.76	14600	53.4	4430	
			1750	125		6110	12.5	2540	115		10200	19.2	3820	111		18000	32.7	4430	
			1160	82		6910	9.35	2540	76		11200	14	3820	73		18100	21.8	4430	
			875	62		7150	7.29	2540	57		11200	10.6	3820	55		18100	16.4	4430	
1	6	.	3500	220	15.85	5260	19	2540	203	17.21	8750	29.2	3820	197	17.7	15400	50.2	4430	
			1750	110		6480	11.7	2540	101		10800	17.9	3820	98		19000	30.7	4430	
			1160	73		7300	8.71	2540	67		12200	13.4	3820	65		20400	21.8	4430	
			875	55		7300	6.57	2540	50		12700	10.6	3820	49		20400	16.4	4430	
2	0	.	3500	185	18.9	5690	17.3	2540	167	20.89	9560	26.3	3820	161	21.7	16900	44.7	4430	
			1750	92		7010	10.6	2540	83		11800	16.1	3820	80		20800	27.4	4430	
			1160	61		7450	7.46	2540	55		13300	12.1	3820	53		23500	20.5	4430	
			875	46		7450	5.62	2540	41		13500	9.22	3820	40		25000	16.4	4430	
2	2	.	3500	160	21.76	6050	15.9	2540	152	22.98	9960	24.9	3820	143	24.45	17700	41.6	4430	
			1750	80		6550	8.6	2540	76		12300	15.3	3820	71		21800	25.5	4430	
			1160	53		6560	5.7	2540	50		13900	11.4	3820	47		24700	19.1	4430	
			875	40		6560	4.3	2540	38		14000	8.72	3820	35		25800	15	4430	
2	5	.	3500	138	25.31	6440	14.6	2540	132	26.41	10500	22.9	3820	122	28.46	18900	38.1	4430	
			1750	69		7400	8.36	2540	66		13000	14	3820	61		23300	23.4	4430	
			1160	45		7410	5.54	2540	43		14700	10.5	3820	40		25800	17.1	4430	
			875	34		7410	4.18	2540	33		14800	7.99	3820	30		25800	12.9	4430	
2	8	.	3500	123	28.32	6680	13.5	2540	116	29.95	11000	21.1	3820	110	31.57	19400	35.4	4430	
			1750	61		7780	7.86	2540	58		13600	13	3820	55		23800	21.6	4430	
			1160	40		7790	5.21	2540	38		14800	9.36	3820	36		23900	14.3	4430	
			875	30		7790	3.93	2540	29		14800	7.06	3820	27		23900	10.8	4430	
3	2	.	3500	115	30.18	6930	13.1	2540	105	33.03	11500	20	3820	101	34.55	19600	32.7	4430	
			1750	57		7880	7.46	2540	52		14200	12.3	3820	50		22800	18.9	4430	
			1160	38		7890	4.95	2540	35		14800	8.48	3820	33		22900	12.5	4430	
			875	28		7900	3.74	2540	26		14800	6.4	3820	25		22900	9.46	4430	
3	6	.	3500	97	35.77	7350	11.8	2540	92	37.83	12100	18.4	3820	89	39.09	20400	29.9	4430	
			1750	48		7850	6.28	2540	46		14800	11.2	3820	44		24500	17.9	4430	
			1160	32		7850	4.16	2540	30		14800	7.41	3820	29		24500	11.9	4430	
			875	24		7850	3.14	2540	23		14800	5.59	3820	22		24500	8.97	4430	
4	0	.	3500	91	38.19	7440	11.2	2540	81	42.77	12700	17	3820	79	44.13	20800	27.1	4430	
			1750	45		7880	5.9	2540	40		14800	9.9	3820	39		25700	16.7	4430	
			1160	30		7880	3.91	2540	27		14800	6.56	3820	26		25800	11.1	4430	
			875	22		7880	2.95	2540	20		14800	4.95	3820	19		25800	8.35	4430	
5	0	.	3500	73	47.4	7710	9.34	2540	70	49.59	13000	15.1	3820	65	53.49	21300	22.9	4430	
			1750	36		7890	4.77	2540	35		14800	8.55	3820	32		25800	13.8	4430	
			1160	24		7900	3.16	2540	23		14800	5.66	3820	21		25800	9.15	4430	
			875	18		7900	2.39	2540	17		14800	4.27	3820	16		25800	6.9	4430	
5	6	.	3500	62	55.89	7880	8.1	2540	59	59.14	13500	13.1	3820	56	62.38	21700	20.1	4430	
			1750	31		7890	4.05	2540	29		14800	7.18	3820	28		25800	11.9	4430	
			1160	20		7900	2.69	2540	19		14800	4.76	3820	18		25800	7.85	4430	
			875	15		7900	2.03	2540	14		14800	3.59	3820	14		25800	5.92	4430	

SERIES F

DOUBLE REDUCTION RATINGS

SIZES F06 - F08

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input speed N1 (rpm)	F0622					F0722					F0822				
				N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)	N2 (rpm)	i (:1)	M2 (lb.in)	Pm (HP)	fra (lbf)
6	7	8	3500	57		7670	7.21	2540	54		13600	12.1	3820	51		22200	18.7	4430
6	3	.	1750	28	61.2	7860	3.69	2540	27	64.77	14800	6.56	3820	25	68.52	25800	10.8	4430
			1160	18		7900	2.46	2540	17		14800	4.35	3820	16		25800	7.15	4430
			875	14		7900	1.85	2540	13		14800	3.28	3820	12		25800	5.39	4430
			3500	46		5960	4.59	2540	45		13400	9.92	3820	41		22700	15.6	4430
7	1	.	1750	23	75	6070	2.33	2540	22	77.72	13600	5.05	3820	20	83.97	25800	8.81	4430
			1160	15		6330	1.61	2540	14		14600	3.58	3820	13		25800	5.84	4430
			875	11		6510	1.25	2540	11		14600	2.7	3820	10		25800	4.4	4430
			3500	41		5280	3.65	2540	39		10800	6.99	3820	38		22900	14.4	4430
9	0	.	1750	20	83.59	5380	1.85	2540	19	89.42	11000	3.55	3820	19	91.7	25800	8.08	4430
			1160	13		5600	1.28	2540	12		11400	2.44	3820	12		25800	5.35	4430
			875	10		5760	0.993	2540	9		11400	1.84	3820	9		25800	4.03	4430
			3500	37		4140	2.56	2540	35		9510	5.54	3820	33		23100	12.6	4430
1	0	0	1750	18	93.75	4150	1.28	2540	17	99.36	9670	2.81	3820	16	105.6	23200	6.35	4430
			1160	12		4150	0.847	2540	11		9720	1.87	3820	10		24900	4.51	4430
			875	9		4150	0.639	2540	8		9720	1.41	3820	8		25800	3.52	4430

SERIES F

DOUBLE REDUCTION RATINGS

SIZES F09 - F10

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input speed N1 (rpm)	F0921					F1021				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8	(rpm)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)
			3500	688		13300	151	5900	685		18000	203	
5	.	0	1750	344	5.085	16400	92.4	6440	342	5.107	22200	124	8200
			1160	228		18600	69.2	6890	227		22600	83.9	
			875	172		20200	56.7	7110	171		22600	63.3	
			3500	533		15400	135	6150	544		20500	184	
6	.	3	1750	266	6.567	19000	82.9	6660	272	6.433	25300	113	8200
			1160	176		21500	62.1	7110	180		28500	83.9	
			875	133		23400	50.9	7150	136		28500	63.3	
			3500	500		15900	131	6150	490		21700	175	
7	.	1	1750	250	7.000	19600	80.1	6640	245	7.133	26800	107	8200
			1160	165		22200	60	7090	162		30300	80.3	
			875	125		24200	49.2	7150	122		31700	63.3	
			3500	446		16900	124	6220	451		22700	168	
8	.	0	1750	223	8.012	20800	75.9	6710	225	7.758	28000	103	8200
			1160	147		23600	56.8	7160	149		31600	77.1	
			875	111		25700	46.6	7150	112		34400	63.3	
			3500	397		17900	117	6300	397		24200	158	
9	.	0	1750	198	8.807	22100	71.7	6790	198	8.812	29800	96.7	8200
			1160	131		25000	53.7	7150	131		33800	72.4	
			875	99		27200	44	7150	99		36700	59.4	
			3500	345		19300	110	6440	358		25600	151	
1	0	.	1750	172	10.13	23800	67.3	6940	179	9.772	31600	92.6	8200
			1160	114		26900	50.4	7150	118		35700	69.3	
			875	86		29300	41.3	7150	89		38900	56.9	
			3500	308		20300	103	6480	304		27400	137	
1	1	.	1750	154	11.35	25000	63	6950	152	11.48	33800	84.2	8200
			1160	102		28300	47.1	7150	101		38300	63	
			875	77		30800	38.7	7150	76		41700	51.7	
			3500	276		21200	96	6520	282		28300	131	
1	2	.	1750	138	12.68	26200	59.1	7150	141	12.39	34900	80.5	8200
			1160	91		29700	44.2	7150	93		39500	60.3	
			875	69		32300	36.3	7150	70		43000	49.4	
			3500	238		23000	90.3	6650	242		30800	122	
1	4	.	1750	119	14.66	28400	55.4	7150	121	14.46	37900	75.1	8200
			1160	79		32100	41.5	7150	80		42900	56.2	
			875	59		34900	34	7150	60		46700	46.1	
			3500	213		24100	84.6	6710	224		31700	117	
1	6	.	1750	106	16.37	29700	51.9	7150	112	15.61	39100	71.7	8200
			1160	70		33600	38.8	7150	74		44200	53.7	
			875	53		36500	31.9	7150	56		48100	44	
			3500	199		23800	77.6	6780	193		33400	106	
1	8	.	1750	99	17.58	30100	48.9	7150	96	18.07	41100	64.9	8200
			1160	65		34200	36.7	7150	64		46500	48.6	
			875	49		37100	30	7150	48		50000	39.4	
			3500	174		24700	70.5	6940	171		35000	98	
2	0	.	1750	87	20.04	31200	44.4	7150	85	20.46	43100	60.1	8200
			1160	57		35800	33.8	7150	56		48800	45	
			875	43		37500	26.7	7150	42		49500	34.5	
			3500	154		27600	69.9	6980	153		37200	93.8	
2	2	.	1750	77	22.7	34000	42.9	7150	76	22.76	45800	57.5	8200
			1160	51		38500	32.1	7150	50		51800	43.1	
			875	38		41600	26.2	7150	38		56400	35.4	
			3500	174		24700	70.5	6940	171		35000	98	

SERIES F

TRIPLE REDUCTION RATINGS

SIZES F02 - F05

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input speed N1 (rpm)	F0232					F0332					F0432					F0532				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	
			3500															44		3800	2.82	1140	
8	0	.	1750															22	78.84	4460	1.65	1510	
			1160															14		5090	1.24	1730	
			875															11		5650	1.04	1890	
			3500	38		1060	0.687	633										40		3670	2.47	1230	
9	0	.	1750	19	92.02	1140	0.365	839										20	86.82	4300	1.44	1620	
			1160	12		1150	0.244	850										13		4990	1.11	1840	
			875	9		1170	0.185	850										10		5540	0.927	2010	
			3500	34		1100	0.642	642	35									35		3790	2.22	1300	
1	0	0	1750	17	101.5	1140	0.331	850	17	99.52	2560	1.51	1160	35	99.52	2560	1.51	1160	35	99.86	4510	1.32	1690
			1160	11		1170	0.223	850	11		3260	0.633	1600	11		3260	0.633	1600	11		5260	1.01	1930
			875	8		1170	0.168	850	8		3260	0.477	1600	8		3260	0.477	1600	8		5850	0.851	2060
			3500	31		1140	0.602	663	31		2620	1.4	1210	31		2620	1.4	1210	32		3880	2.09	1340
1	1	2	1750	15	111.6	1140	0.3	850	15	109.7	3130	0.831	1550	15	109.7	3130	0.831	1550	16	108.6	4670	1.25	1740
			1160	10		1170	0.203	850	10		3260	0.573	1600	10		3260	0.573	1600	10		5440	0.966	1970
			875	7		1170	0.153	850	7		3260	0.432	1600	7		3260	0.432	1600	8		6060	0.811	2060
			3500	26		1140	0.516	715	28		2700	1.31	1240	28		2700	1.31	1240	26		4070	1.83	1440
1	2	5	1750	13	130.8	1140	0.257	850	14	120.7	3260	0.787	1580	14	120.7	3260	0.787	1580	13	130.3	5020	1.12	1830
			1160	8		1170	0.173	850	9		3260	0.521	1600	9		3260	0.521	1600	8		5860	0.868	2060
			875	6		1170	0.13	850	7		3260	0.393	1600	7		3260	0.393	1600	6		6300	0.704	2060
			3500	22		1140	0.431	779	24		2810	1.16	1320	24		2810	1.16	1320	22		4230	1.58	1550
1	6	0	1750	11	156.9	1170	0.218	850	12	141.5	3260	0.672	1600	12	141.5	3260	0.672	1600	11	156.4	5360	1	1940
			1160	7		1170	0.144	850	8		3260	0.445	1600	8		3260	0.445	1600	7		6260	0.774	2060
			875	5		1170	0.109	850	6		3260	0.336	1600	6		3260	0.336	1600	5		6300	0.587	2060
			3500	19		1140	0.369	830	20		2940	1.01	1410	20		2940	1.01	1410	19		4360	1.45	1620
1	8	0	1750	9	182.9	1170	0.187	850	10	169.7	3260	0.561	1600	10	169.7	3260	0.561	1600	9	176.2	5620	0.932	2010
			1160	6		1170	0.124	850	6		3260	0.372	1600	6		3260	0.372	1600	6		6300	0.692	2060
			875	4		1170	0.093	850	5		3260	0.28	1600	5		3260	0.28	1600	4		6300	0.522	2060
			3500	17		1140	0.333	850	17		3100	0.92	1490	17		3100	0.92	1490	17		4630	1.32	1690
2	0	0	1750	8	203.3	1170	0.169	850	8	197.8	3260	0.482	1600	8	197.8	3260	0.482	1600	8	204.9	6000	0.854	2060
			1160	5		1170	0.112	850	5		3260	0.319	1600	5		3260	0.319	1600	5		6300	0.595	2060
			875	4		1170	0.084	850	4		3260	0.241	1600	4		3260	0.241	1600	4		6300	0.448	2060
			3500	14		1140	0.276	850	15		3210	0.859	1540	15		3210	0.859	1540	15		4880	1.23	1750
2	2	5	1750	7	244.8	1170	0.14	850	7	219.8	3260	0.434	1600	7	219.8	3260	0.434	1600	7	232.5	6300	0.792	2060
			1160	4		1170	0.093	850	5		3260	0.288	1600	5		3260	0.288	1600	4		6300	0.525	2060
			875	3		1170	0.07	850	3		3260	0.217	1600	3		3260	0.217	1600	3		6300	0.396	2060
			3500	12		1150	0.243	850	13		3260	0.721	1580	13		3260	0.721	1580	13		5120	1.14	1820
2	8	0	1750	6	280.6	1170	0.122	850	6	264.7	3260	0.36	1600	6	264.7	3260	0.36	1600	6	264.3	5660	0.626	2060
			1160	4		1170	0.081	850	4		3260	0.238	1600	4		3260	0.238	1600	4		5900	0.433	2060
			875	3		1170	0.061	850	3		3260	0.18	1600	3		3260	0.18	1600	3		6070	0.336	2060
			3500	10		1170	0.216	850	11		3260	0.63	1600	11		3260	0.63	1600					
3	1	5	1750	5	318.8	1170	0.108	850	5	303.4	3260	0.314	1600	5	303.4	3260	0.314	1600					
			1160	3		1170	0.071	850	3		3260	0.208	1600	3		3260	0.208	1600					
			875	2		1170	0.054	850	2		3260	0.157	1600	2		3260	0.157	1600					
			3500						10		3260	0.555	1600	10		3260	0.555	1600					
3	6	0	1750						5	344.8	3260	0.277	1600	5	344.8	3260	0.277	1600					
			1160						3		3260	0.184	1600	3		3260	0.184	1600					
			875						2		3260	0.138	1600	2		3260	0.138	1600					

SERIES F

TRIPLE REDUCTION RATINGS

SIZES F06 - F08

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input speed N1 (rpm)	F0632					F0732					F0832				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	
			3500															
8	0	.	1750															
			1160															
			875															
			3500															
9	0	.	1750															
			1160															
			875															
			3500	34		4890	2.82	2540	32		8910	4.81	3820	30		26600	13.7	4430
1	0	0	1750	17	101.4	5740	1.65	2540	16	108.6	10500	2.83	3820	15	114.2	30000	7.65	4430
			1160	11		6560	1.24	2540	10		11800	2.09	3820	10		30000	5.06	4430
			875	8		7280	1.04	2540	8		13100	1.75	3820	7		30000	3.82	4430
			3500	31		4720	2.47	2540	30		8550	4.33	3820	28		25500	12	4430
1	1	2	1750	15	111.6	5540	1.44	2540	15	115.7	10100	2.54	3820	14	124.9	30000	6.99	4430
			1160	10		6420	1.11	2540	10		11400	1.89	3820	9		30000	4.62	4430
			875	7		7140	0.927	2540	7		12600	1.58	3820	7		30000	3.48	4430
			3500	27		4880	2.22	2540	25		8950	3.82	3820	24		26300	10.9	4430
1	2	5	1750	13	128.4	5810	1.32	2540	12	137.1	10500	2.23	3820	12	141.3	30000	6.18	4430
			1160	9		6770	1.01	2540	8		12200	1.71	3820	8		30000	4.09	4430
			875	6		7540	0.851	2540	6		13500	1.43	3820	6		30000	3.08	4430
			3500	25		4990	2.09	2540	23		9120	3.65	3820	21		27200	9.99	4430
1	6	0	1750	12	139.6	6010	1.25	2540	11	146.4	10700	2.13	3820	10	159.5	30000	5.48	4430
			1160	8		7010	0.966	2540	7		12500	1.64	3820	7		30000	3.62	4430
			875	6		7800	0.811	2540	5		13900	1.37	3820	5		30000	2.73	4430
			3500	20		5240	1.83	2540	19		9660	3.11	3820	18		28600	8.65	4430
1	8	0	1750	10	167.6	6470	1.12	2540	9	181.7	11700	1.87	3820	9	193.4	30000	4.52	4430
			1160	6		7550	0.868	2540	6		13600	1.44	3820	5		30000	2.99	4430
			875	5		8120	0.704	2540	4		15100	1.21	3820	4		30100	2.26	4430
			3500	17		5440	1.58	2540	16		10100	2.75	3820	15		29800	7.73	4430
2	0	0	1750	8	201.1	6900	1	2540	8	214.2	12500	1.7	3820	7	225.5	30000	3.88	4430
			1160	5		8060	0.774	2540	5		14500	1.31	3820	5		30000	2.57	4430
			875	4		8120	0.587	2540	4		16200	1.1	3820	3		30100	1.94	4430
			3500	15		5610	1.45	2540	14		10300	2.57	3820	14		30000	7.09	4430
2	2	5	1750	7	226.6	7240	0.932	2540	7	234.6	12900	1.61	3820	7	247.7	30000	3.53	4430
			1160	5		8120	0.692	2540	4		15100	1.24	3820	4		30100	2.34	4430
			875	3		8120	0.522	2540	3		16800	1.04	3820	3		30100	1.77	4430
			3500	13		5960	1.32	2540	12		10800	2.21	3820	11		30000	5.78	4430
2	8	0	1750	6	263.4	7730	0.854	2540	6	287.5	14000	1.42	3820	5	303.6	30000	2.88	4430
			1160	4		8120	0.595	2540	4		16300	1.1	3820	3		30100	1.91	4430
			875	3		8120	0.448	2540	3		18200	0.923	3820	2		30100	1.44	4430
			3500	11		6280	1.23	2540	10		11500	2.11	3820	10		30000	5.3	4430
3	1	5	1750	5	298.9	8090	0.789	2540	5	320.4	14900	1.36	3820	5	331.5	30000	2.64	4430
			1160	3		8120	0.525	2540	3		17400	1.05	3820	3		30100	1.75	4430
			875	2		8120	0.396	2540	2		18700	0.853	3820	2		30100	1.32	4430
			3500	10		6600	1.14	2540	9		12000	1.97	3820	9		30000	4.62	4430
3	6	0	1750	5	339.8	7280	0.626	2540	4	359.4	15600	1.27	3820	4	381.8	30100	2.31	4430
			1160	3		7590	0.433	2540	3		15700	0.847	3820	3		30100	1.53	4430
			875	2		7820	0.336	2540	2		15700	0.639	3820	2		30100	1.15	4430

SERIES F

TRIPLE REDUCTION RATINGS

SIZES F09 - F10

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input rpm	F0931					F1031				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	
			3500	688		13300	151	5910	685		18000	203	8660
5	.	0	1750	344	5.085	16400	92.4	6440	342	5.107	22200	124	9470
			1160	228		18600	69.2	6890	227		22600	83.9	9700
			875	172		20200	56.7	7170	171		22600	63.3	9700
			3500	533		15400	135	6020	544		20500	184	8890
6	.	3	1750	266	6.567	19000	82.9	6660	272	6.433	25300	113	9700
			1160	176		21500	62.1	7110	180		28500	83.9	9700
			875	133		23400	50.9	7200	136		28500	63.3	9700
			3500	500		15900	131	5990	490		21700	175	8890
7	.	1	1750	250	7	19600	80.1	6640	245	7.133	26800	107	9700
			1160	165		22200	60	7090	162		30300	80.3	9700
			875	125		24200	49.2	7200	122		31700	63.3	9700
			3500	446		16900	124	6020	451		22700	168	8940
8	.	0	1750	223	7.846	20800	75.9	6710	225	7.758	28000	103	9700
			1160	147		23600	56.8	7160	149		31600	77.1	9700
			875	111		25700	46.6	7200	112		34400	63.3	9700
			3500	397		17900	117	6090	397		24200	158	9020
9	.	0	1750	198	8.807	22100	71.7	6790	198	8.812	29800	96.7	9700
			1160	131		25000	53.7	7160	131		33800	72.4	9700
			875	99		27200	44	7200	99		36700	59.4	9700
			3500	345		19300	110	6230	358		25600	151	9200
1	0	.	1750	172	10.13	23800	67.3	6940	179	9.772	31600	92.6	9700
			1160	114		26900	50.4	7200	118		35700	69.3	9700
			875	86		29300	41.3	7200	89		38900	56.9	9700
			3500	308		20300	103	6250	304		27400	137	9330
1	1	.	1750	154	11.35	25000	63	6950	152	11.48	33800	84.2	9700
			1160	102		28300	47.1	7200	101		38300	63	9700
			875	77		30800	38.7	7200	76		41700	51.7	9700
			3500	276		21200	96	6330	282		28300	131	9430
1	2	.	1750	138	12.68	26200	59.1	7100	141	12.39	34900	80.5	9700
			1160	91		29700	44.2	7200	93		39500	60.3	9700
			875	69		32300	36.3	7200	70		43000	49.4	9700
			3500	238		23000	90.3	6470	242		30800	122	9690
1	4	.	1750	119	14.66	28400	55.4	7150	121	14.46	37900	75.1	9700
			1160	79		32100	41.5	7200	80		42900	56.2	9700
			875	59		34900	34	7200	60		46700	46.1	9700
			3500	213		24100	84.6	6560	224		31700	117	9700
1	6	.	1750	106	16.37	29700	51.9	7200	112	15.61	39100	71.7	9700
			1160	70		33600	38.8	7200	74		44200	53.7	9700
			875	53		36500	31.9	7200	56		48100	44	9700
			3500	199		23800	77.6	6630	193		33400	106	9700
1	8	.	1750	99	17.58	30100	48.9	7200	96	18.07	41100	64.9	9700
			1160	65		34200	36.7	7200	64		46500	48.6	9700
			875	49		37100	30	7200	48		50000	39.4	9700
			3500	174		24700	70.5	7130	171		35000	98	9700
2	0	.	1750	87	20.04	31200	44.4	7200	85	20.46	43100	60.1	9700
			1160	57		35800	33.8	7200	56		48800	45	9700
			875	43		37500	26.7	7200	42		49500	34.5	9700
			3500	154		27600	69.9	7200	153		37200	93.8	9700
2	2	.	1750	77	22.7	34000	42.9	7200	76	22.76	45800	57.5	9700
			1160	51		38500	32.1	7200	50		51800	43.1	9700
			875	38		41600	26.2	7200	38		56400	35.4	9700
			3500	135		29100	64.5	7200	135		38900	86.8	9700
2	5	.	1750	67	25.88	35800	39.6	7200	67	25.77	47900	53.2	9700
			1160	44		40500	29.6	7200	45		54200	39.9	9700
			875	33		42000	23.2	7200	33		59000	32.7	9700
			3500	123		26700	53.9	7200	124		39600	80.8	9700
2	8	.	1750	61	28.41	33800	34	7200	62	28.04	48700	49.6	9700
			1160	40		37500	25	7200	41		52100	35.1	9700
			875	30		37500	18.8	7200	31		52100	26.5	9700
			3500	110		27000	49	7200	112		41100	75.5	9700
3	2	.	1750	55	31.56	34100	30.9	7200	56	31.16	50600	46.4	9700
			1160	36		37500	22.5	7200	37		51300	31.1	9700
			875	27		37500	17	7200	28		51300	23.5	9700
			3500	95		33100	51.8	7200	99		43900	71.4	9700
3	6	.	1750	47	36.69	40800	31.8	7200	49	35.32	54000	43.8	9700
			1160	31		42900	22.1	7200	32		61100	32.8	9700
			875	23		42900	16.7	7200	24		61400	24.8	9700

Column Entry			input speed N1 (rpm)	F0932					F1031				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	
			3500	85		34300	48.3	7200	89		45500	66.6	9700
4	0	.	1750	42	40.76	42300	29.7	7200	44	39.25	56000	40.9	9700
			1160	28		42300	19.7	7200	29		60500	29.2	9700
			875	21		42300	14.8	7200	22		60500	22.1	9700
			3500	78		28700	37	7200	78		46700	60.1	9700
4	5	.	1750	39	44.58	36300	23.3	7200	39	44.43	53500	34.4	9700
			1160	26		37500	16	7200	26		53500	22.8	9700
			875	19		37500	12	7200	19		53500	17.2	9700
			3500	71		29100	33.9	7200	68		49000	54.8	9700
5	0	.	1750	35	49.22	36700	21.3	7200	34	51.19	53800	30.1	9700
			1160	23		37500	14.5	7200	22		53800	19.9	9700
			875	17		37500	10.9	7200	17		53800	15	9700
			3500	60		37100	37	7200	62		51600	52.9	9700
5	6	.	1750	30	57.58	43100	21.5	7200	31	55.97	62400	31.9	9700
			1160	20		43100	14.2	7200	20		62400	21.2	9700
			875	15		43100	10.7	7200	15		62400	16	9700
			3500	55		37500	33.9	7200	54		54100	48.2	9700
6	3	.	1750	27	63.56	43100	19.4	7200	27	64.49	62600	27.9	9700
			1160	18		43100	12.9	7200	17		62600	18.5	9700
			875	13		43100	9.71	7200	13		62600	13.9	9700
			3500	51		30000	25.5	7200	50		53700	44.6	9700
7	1	.	1750	25	67.71	35000	14.8	7200	25	69.24	54100	22.4	9700
			1160	17		35000	9.82	7200	16		54100	14.9	9700
			875	12		35000	7.41	7200	12		54100	11.2	9700
			3500	45		30000	22.7	7200	47		49600	38.3	9700
8	0	.	1750	22	76.14	32400	12.2	7200	23	74.39	49600	19.2	9700

SERIES F

TRIPLE REDUCTION RATINGS

SIZES F09 - F10

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			input rpm	F0931					F1031				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8		(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)
			3500	34		36900	21	7200	34		47600	27.1	9700
1	0	0	1750	17	102.5	37500	10.6	7200	17	102.8	54100	15.3	9700
			1160	11		37500	7.03	7200	11		54100	10.1	9700
			875	8		37500	5.29	7200	8		54100	7.61	9700
			3500	30		37500	19.2	7200	30		48600	24.9	9700
1	1	2	1750	15	113.9	37500	9.57	7200	15	114.2	54100	13.7	9700
			1160	10		37500	6.33	7200	10		54100	9.09	9700
			875	7		37500	4.77	7200	7		54100	6.85	9700
			3500	26		43100	19.1	7200	27		59900	27.1	9700
1	2	5	1750	13	132.3	43100	9.47	7200	13	129.5	60500	13.6	9700
			1160	8		43100	6.26	7200	8		60500	8.98	9700
			875	6		43100	4.72	7200	6		60500	6.77	9700
			3500	23		43100	17.2	7200	24		60400	24.6	9700
1	4	0	1750	11	147	43100	8.53	7200	12	143.9	60500	12.2	9700
			1160	7		43100	5.64	7200	8		60500	8.09	9700
			875	5		43100	4.25	7200	6		60500	6.09	9700
			3500	21		37500	13.6	7200	21		53500	19.1	9700
1	6	0	1750	10	160.8	37500	6.78	7200	10	162.9	54100	9.64	9700
			1160	7		37500	4.49	7200	7		54100	6.38	9700
			875	5		37500	3.38	7200	5		54100	4.81	9700
			3500	19		37500	12.3	7200	18		54100	16.8	9700
1	8	0	1750	9	177.5	37500	6.14	7200	9	187.7	54100	8.37	9700
			1160	6		37500	4.06	7200	6		54100	5.54	9700
			875	4		37500	3.06	7200	4		54100	4.18	9700
			3500	16		43100	12.1	7200	17		60400	17.2	9700
2	0	0	1750	8	207.7	43100	6.04	7200	8	205.2	60500	8.57	9700
			1160	5		43100	4	7200	5		60500	5.67	9700
			875	4		43100	3.01	7200	4		60500	4.27	9700
			3500	15		43100	11	7200	14		60500	15	9700
2	2	5	1750	7	229.3	43100	5.47	7200	7	236.4	60500	7.45	9700
			1160	5		43100	3.62	7200	4		60500	4.93	9700
			875	3		43100	2.73	7200	3		60500	3.71	9700
			3500	14		37500	8.97	7200	13		54100	12.4	9700
2	5	0	1750	7	244.2	37500	4.47	7200	6	253.9	54100	6.2	9700
			1160	4		37500	2.96	7200	4		54100	4.11	9700
			875	3		37500	2.23	7200	3		54100	3.09	9700
			3500	12		37500	7.99	7200	12		54100	11.6	9700
2	8	0	1750	6	274.6	37500	3.98	7200	6	272.7	54100	5.78	9700
			1160	4		37500	2.64	7200	4		54100	3.83	9700
			875	3		37500	1.99	7200	3		54100	2.89	9700
			3500	11		43100	8	7200	10		60500	11.1	9700
3	1	5	1750	5	315.4	43100	3.98	7200	5	319.8	60500	5.52	9700
			1160	3		43100	2.64	7200	3		60500	3.65	9700
			875	2		43100	1.99	7200	2		60500	2.75	9700
			3500	9		43100	7.13	7200	10		60500	10.3	9700
3	6	0	1750	4	354.7	43100	3.55	7200	5	343.6	60500	5.14	9700
			1160	3		43100	2.35	7200	3		60500	3.4	9700
			875	2		43100	1.77	7200	2		60500	2.57	9700

SERIES F

QUADRUPLE REDUCTION RATINGS

SIZES F03 - F06

Note: Input Power, Pm may exceed thermal limit. Check thermal power page 48

Column Entry			Input Speed N1 (rpm)	F0342					F0442					F0542					F0642						
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra		
6	7	8	(rpm)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)		
3	2	0	3500											11.13	314	5761	1.07								
			1750												5.57	314	5761	0.54							
			1160												3.69	314	5761	0.36							
			875												2.78	314	5761	0.27							
3	6	0	3500											9.95	352	6009	1.00								
			1750												4.98	352	6009	0.50							
			1160												3.30	352	6009	0.33							
			875												2.49	352	6009	0.25							
4	0	0	3500	8.54		3319	0.47		8.54	410	3319	0.47		8.48	413	6009	0.85		8.66			7416	1.07		
			1750	4.27	410	3319	0.24	1600	4.27	410	3319	0.24	1600	4.24	413	6009	0.43	2060	4.33	404		7416	0.54	2540	
			1160	2.83		3319	0.16		2.83	410	3319	0.16		2.81	413	6009	0.28		2.87			7416	0.36		
			875	2.13		3319	0.12		2.13	410	3319	0.12		2.12	413	6009	0.21		2.16			7416	0.27		
4	5	0	3500	7.67		3319	0.43		7.67	456	3319	0.43		7.88	444	6009	0.79		7.86			7416	0.97		
			1750	3.84	456	3319	0.21	1600	3.84	456	3319	0.21	1600	3.94	444	6009	0.40	2060	3.93	445		7416	0.49	2540	
			1160	2.54		3319	0.14		2.54	456	3319	0.14		2.61	444	6009	0.26		2.61			7416	0.32		
			875	1.92		3319	0.11		1.92	456	3319	0.11		1.97	444	6009	0.20		1.97			7416	0.24		
5	0	0	3500	6.96		3319	0.39		6.96	503	3319	0.39		7.15	489	6009	0.72		7.03			7797	0.92		
			1750	3.48	503	3319	0.19	1600	3.48	503	3319	0.19	1600	3.58	489	6009	0.36	2060	3.51	498		7797	0.46	2540	
			1160	2.31		3319	0.13		2.31	503	3319	0.13		2.37	489	6009	0.24		2.33			7797	0.30		
			875	1.74		3319	0.10		1.74	503	3319	0.10		1.79	489	6009	0.18		1.76			7797	0.23		
5	6	0	3500	6.06		3478	0.35		6.06	578	3478	0.35		6.22	563	6009	0.62		6.13			7903	0.81		
			1750	3.03	578	3478	0.18	1600	3.03	578	3478	0.18	1600	3.11	563	6009	0.31	2060	3.06	571		7903	0.40	2540	
			1160	2.01		3478	0.12		2.01	578	3478	0.12		2.06	563	6009	0.21		2.03			7903	0.27		
			875	1.51		3478	0.09		1.51	578	3478	0.09		1.55	563	6009	0.16		1.53			7903	0.20		
6	3	0	3500	5.49		3478	0.32		5.49	637	3478	0.32		5.72	612	6009	0.57		5.56			7903	0.73		
			1750	2.75	637	3478	0.16	1600	2.75	637	3478	0.16	1600	2.86	612	6009	0.29	2060	2.78	629		7903	0.37	2540	
			1160	1.82		3478	0.11		1.82	637	3478	0.11		1.90	612	6009	0.19		1.84			7903	0.24		
			875	1.37		3478	0.08		1.37	637	3478	0.08		1.43	612	6009	0.14		1.39			7903	0.18		
7	0	0	3500	4.99		3478	0.29		4.99	701	3478	0.29		5.04	694	6009	0.51		4.84			7903	0.64		
			1750	2.50	701	3478	0.15	1600	2.50	701	3478	0.15	1600	2.52	694	6009	0.25	2060	2.42	724		7903	0.32	2540	
			1160	1.65		3478	0.10		1.65	701	3478	0.10		1.67	694	6009	0.17		1.60			7903	0.21		
			875	1.25		3478	0.07		1.25	701	3478	0.07		1.26	694	6009	0.13		1.26			7903	0.17		
8	0	0	3500	4.26		3478	0.25		4.26	821	3478	0.25		4.18	837	6009	0.42		4.45			7903	0.59		
			1750	2.13	821	3478	0.12	1600	2.13	821	3478	0.12	1600	2.09	837	6009	0.21	2060	2.22	787		7903	0.29	2540	
			1160	1.41		3478	0.08		1.41	821	3478	0.08		1.39	837	6009	0.14		1.47			7903	0.19		
			875	1.07		3478	0.06		1.07	821	3478	0.06		1.05	837	6009	0.10		1.11			7903	0.15		
9	0	0	3500	3.83		3469	0.22		3.83	915	3469	0.22		3.76	932	5974	0.37		3.92			8027	0.53		
			1750	1.91	915	3469	0.11	1600	1.91	915	3469	0.11	1600	1.88	932	5974	0.19	2060	1.96	892		8027	0.26	2540	
			1160	1.27		3469	0.07		1.27	915	3469	0.07		1.25	932	5974	0.12		1.30			8027	0.17		
			875	0.96		3469	0.06		0.96	915	3469	0.06		0.94	932	5974	0.09		0.98			8027	0.13		
1	0	C	3500	3.51		3558	0.21		3.51	998	3558	0.21		3.41	1026	6009	0.34		3.56			8027	0.48		
			1750	1.75	998	3558	0.10	1600	1.75	998	3558	0.10	1600	1.71	1026	6009	0.17	2060	1.78	983		8027	0.24	2540	
			1160	1.16		3558	0.07		1.16	998	3558	0.07		1.13	1026	6009	0.11		1.18			8027	0.16		
			875	0.88		3558	0.05		0.88	998	3558	0.05		0.85	1026	6009	0.09		0.89			8027	0.12		
1	1	C	3500	3.19		3558	0.19		3.19	1098	3558	0.19		3.05	1148	6009	0.31		3.10			8027	0.42		
			1750	1.59	1098	3558	0.09	1600	1.59	1098	3558	0.09	1600	1.52	1148	6009	0.15	2060	1.55	1130		8027	0.21	2540	
			1160	1.06		3558	0.06		1.06	1098	3558	0.06		1.01	1148	6009	0.10		1.03			8027	0.14		
			875	0.80		3558	0.05		0.80	1098	3558	0.05		0.76	1148	6009	0.08		0.77			8027	0.10		
1	2	C	3500	2.83		3558	0.17		2.83	1237	3558	0.17		2.97	1180	6009	0.30		2.83			8027	0.38		
			1750	1.41	1237	3558	0.08	1600	1.41	1237	3558	0.08	1600	1.48	1180	6009	0.15	2060	1.41	1238		8027	0.19	2540	
			1160	0.94		3558	0.06		0.94	1237	3558	0.06		0.98	1180	6009	0.10		0.94			8027	0.13		
			875	0.71		3558	0.04		0.71	1237	3558	0.04		0.74	1180	6009	0.07		0.71			8027	0.09		
1	4	C	3500	2.41		3558	0.14		2.41	1449	3558	0.14		2.54	1377	6009	0.26		2.60			8027	0.35		
			1750	1.21	1449	3558	0.07	1600	1.21	1449	3558	0.07	1600	1.27	1377	6009	0.13	2060	1.30	1346		8027	0.17	2540	
			1160	0.80		3558	0.05		0.80	1449	3558	0.05		0.84	1377	6009	0.08		0.86			8027	0.12		
			875	0.60		3558	0.04		0.60	1449	3558	0.04		0.64	1377	6009	0.06		0.65			8027	0.09		
1	6	C	3500	2.27		3558	0.13		2.27	1543	3558	0.13		2.26	1552	6009	0.23		2.17			8027	0.29		
			1750	1.13	1543	3558	0.07	1600	1.13	1543	3558	0.07	1600	1.13	1552	6009	0.11	2060	1.08	1615		8027	0.15	2540	
			1160	0.75		3558	0.04		0.75	1543	3558	0.04		0.75	1552	6009	0.08		0.72			8027	0.10		
			875	0.57		3558	0.03																		

SERIES F

QUADRUPLE REDUCTION RATINGS

SIZES F03 - F06

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			Input Speed N1 (rpm)	F0342					F0442					F0542					F0642					
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	
6	7	8	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)		
			3500	1.45		3558	0.09		1.45				1.45					5974	0.14		1.38			
2	5	C	1750	0.73	2407	3558	0.04	1600	0.73	2407	3558	0.04	1600	0.72	2421	5974	0.07	2060	0.69	2539	8027	0.09	2540	
			1160	0.48		3558	0.03		0.48		3558	0.03		0.48		5974	0.05		0.46		8027	0.06		
			875	0.36		3558	0.02		0.36		3558	0.02		0.36		5974	0.04		0.34		8027	0.05		
			3500	1.27		3558	0.08		1.27		3558	0.08		1.27		5974	0.13		1.21		8027	0.16		
2	8	C	1750	0.63	2759	3558	0.04	1600	0.63	2759	3558	0.04	1600	0.64	2747	5974	0.06	2060	0.61	2882	8027	0.08	2540	
			1160	0.42		3558	0.02		0.42		3558	0.02		0.42		5974	0.04		0.40		8027	0.05		
			875	0.32		3558	0.02		0.32		3558	0.02		0.32		5974	0.03		0.30		8027	0.04		
			3500	1.11		3336	0.06		1.11		3336	0.06		1.12		5974	0.11		1.12		7691	0.14		
3	2	C	1750	0.56	3153	3336	0.03	1600	0.49	3153	3336	0.03	1600	0.56	3123	5974	0.06	2060	0.56	3112	7691	0.07	2540	
			1160	0.37		3336	0.02		0.32		3336	0.02		0.37		5974	0.04		0.37		7691	0.05		
			875	0.28		3336	0.02		0.24		3336	0.01		0.28		5974	0.03		0.28		7691	0.04		
			3500	0.98		3000	0.05		0.98		3000	0.05		1.01		4531	0.08		0.99		7691	0.13		
3	6	C	1750	0.49	3578	3000	0.02	1600	0.49	3578	3000	0.02	1600	0.50	3481	4531	0.04	2060	0.50	3532	7691	0.06	2540	
			1160	0.32		3000	0.02		0.32		3000	0.02		0.33		4531	0.03		0.33		7691	0.04		
			875	0.24		3000	0.01		0.24		3000	0.01		0.25		4531	0.02		0.25		7691	0.03		
			3500	0.85		3000	0.04		0.85		3000	0.04		0.90		3230	0.05		0.89		5841	0.09		
4	0	C	1750	0.43	4102	3000	0.02	1600	0.43	4102	3000	0.02	1600	0.45	3904	3230	0.02	2060	0.44	3937	5841	0.04	2540	
			1160	0.28		3000	0.01		0.28		3000	0.01		0.30		3230	0.02		0.29		5841	0.03		
			875	0.21		3000	0.01		0.21		3000	0.01		0.22		3230	0.01		0.22		5841	0.02		
			3500	0.75		2673	0.03		0.75		2673	0.03							0.79		4160	0.06		
4	5	C	1750	0.38	4663	2673	0.02	1600	0.38	4663	2673	0.02	1600						0.40		4415	4160	0.03	2540
			1160	0.25		2673	0.01		0.25		2673	0.01							0.26		4160	0.02		
			875	0.19		2673	0.01		0.19		2673	0.01							0.20		4160	0.01		
			3500	0.66		2673	0.03		0.66		2673	0.03							0.70		4160	0.05		
5	0	C	1750	0.33	5299	2673	0.01	1600	0.33	5299	2673	0.01	1600						0.35		5019	4160	0.02	2540
			1160	0.22		2673	0.01		0.22		2673	0.01							0.23		4160	0.02		
			875	0.17		2673	0.01		0.17		2673	0.01							0.17		4160	0.01		

SERIES F

QUADRUPLE REDUCTION RATINGS

SIZES F07 - F10

Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			Input Speed N1 (rpm)	F0742					F0842					F0941					F1041				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	
			3500	8.66																			
4	0	0	1750	4.33	404	14072	2.04	3800	8.84	396	23895	3.53	4430	8.85	396	37436	7200	8.73	401	4230	3.42	9700	
			1160	2.87		14072	1.02		4.42		23895	1.76		4.42		396	37436		4.37		4230	1.71	
			875	2.17		14072	0.67		2.93		23895	1.17		2.21		396	37436		2.89		4230	1.13	
			3500	7.54		14072	0.51		2.21		23895	0.88		2.21		396	37436		2.18		4230	0.85	
4	5	0	1750	3.77	464	15222	1.92	3800	7.60	460	23895	3.03	4430	7.61	460	37436	7200	7.86	445	4230	2.94	9700	
			1160	2.50		15222	0.96		3.80		23895	1.52		2.52		460	37436		3.93		4230	1.47	
			875	1.88		15222	0.64		2.52		23895	1.01		1.90		460	37436		2.61		4230	0.97	
			3500	6.55		15222	0.48		1.90		23895	0.76		1.90		460	37436		1.96		4230	0.73	
5	0	0	1750	3.28	534	15222	1.67	3800	7.14	490	24515	2.92	4430	6.85	511	37436	7200	7.15	490	4230	2.65	9700	
			1160	2.17		15222	0.83		3.57		24515	1.46		3.42		511	37436		3.57		4230	1.32	
			875	1.64		15222	0.55		2.37		24515	0.97		2.27		511	37436		2.37		4230	0.88	
			3500	6.03		15222	0.42		1.79		24515	0.73		1.71		511	37436		1.79		4230	0.66	
5	6	0	1750	3.01	581	15222	1.53	3800	6.14	570	24515	2.51	4430	5.89	594	37436	7200	6.22	563	4230	2.28	9700	
			1160	2.00		15222	0.77		3.07		24515	1.26		2.94		594	37436		3.11		4230	1.14	
			875	1.51		15222	0.51		2.04		24515	0.83		1.95		594	37436		2.06		4230	0.75	
			3500	5.32		15222	0.38		1.54		24515	0.63		1.47		594	37436		1.55		4230	0.56	
6	3	0	1750	2.66	658	16461	1.46	3800	5.49	638	24515	2.25	4430	5.26	665	37436	7200	5.48	638	64163	5.88	9700	
			1160	1.76		16461	0.73		2.74		24515	1.12		2.63		665	37436		2.74		64163	2.94	
			875	1.33		16461	0.48		1.82		24515	0.74		1.74		665	37436		1.82		64163	1.95	
			3500	4.82		16461	0.37		1.37		24515	0.56		1.32		665	37436		1.37		64163	1.47	
7	0	0	1750	2.41	726	16727	1.35	3800	5.15	680	24515	2.11	4430	4.94	709	37436	7200	4.97	704	64163	5.33	9700	
			1160	1.60		16727	0.67		2.57		24515	1.05		2.47		709	37436		2.49		64163	2.66	
			875	1.20		16727	0.45		1.71		24515	0.70		1.64		709	37436		1.65		64163	1.77	
			3500	4.21		16727	0.34		1.29		24515	0.53		1.23		709	37436		1.24		64163	1.33	
8	0	0	1750	2.10	832	16727	1.18	3800	4.35	806	24515	1.78	4430	4.17	840	37436	7200	4.34	806	64163	4.65	9700	
			1160	1.39		16727	0.59		2.17		24515	0.89		2.08		840	37436		2.17		64163	2.33	
			875	1.05		16727	0.39		1.44		24515	0.59		1.38		840	37436		1.44		64163	1.54	
			3500	3.71		16727	0.29		1.09		24515	0.44		1.04		840	37436		1.09		64163	1.16	
9	0	0	1750	1.85	944	16727	1.04	3800	3.85	910	28320	1.82	4430	3.78	927	37436	7200	3.78	925	64163	4.06	9700	
			1160	1.23		16727	0.52		1.92		28320	0.91		1.89		927	37436		1.89		64163	2.03	
			875	0.93		16727	0.34		1.28		28320	0.60		1.25		927	37436		1.25		64163	1.34	
			3500	3.37		16727	0.26		0.96		28320	0.46		0.94		927	37436		0.95		64163	1.01	
1	0	C	1750	1.68	1040	16727	0.94	3800	3.44	1018	28320	1.83	4430	3.38	1037	37436	7200	3.34	1049	64163	3.58	9700	
			1160	1.12		16727	0.47		1.72		28320	0.61		1.69		1037	37436		1.67		64163	1.79	
			875	0.84		16727	0.31		1.14		28320	0.54		1.12		1037	37436		1.11		64163	1.19	
			3500	3.21		16727	0.24		0.86		28320	0.41		0.84		1037	37436		0.83		64163	0.89	
1	0	C	1750	1.61	1090	16727	0.90	3800	3.23	1085	28320	1.53	4430	3.17	1105	37436	7200	3.03	1157	64163	3.24	9700	
			1160	1.06		16727	0.45		1.61		28320	0.76		1.58		1105	37436		1.51		64163	1.62	
			875	0.80		16727	0.30		1.07		28320	0.51		1.05		1105	37436		1.00		64163	1.07	
			3500	2.93		16727	0.22		0.81		28320	0.38		0.79		1105	37436		0.76		64163	0.81	
1	1	C	1750	1.46	1196	16727	0.82	3800	2.94	1191	28320	1.39	4430	2.97	1177	37436	7200	2.64	1325	64163	2.83	9700	
			1160	0.97		16727	0.41		1.47		28320	0.69		1.49		1177	37436		1.32		64163	1.42	
			875	0.73		16727	0.27		0.97		28320	0.46		0.99		1177	37436		0.88		64163	0.94	
			3500	2.59		16727	0.20		0.73		28320	0.35		0.74		1177	37436		0.66		64163	0.71	
1	2	C	1750	1.30	1350	16727	0.72	3800	2.48	1412	28320	1.17	4430	2.51	1395	37436	7200	2.34	1498	64163	2.50	9700	
			1160	0.86		16727	0.36		1.24		28320	0.59		1.25		1395	37436		1.17		64163	1.25	
			875	0.65		16727	0.24		0.82		28320	0.39		0.83		1395	37436		0.77		64163	0.83	
			3500	2.23		16727	0.18		0.62		28320	0.29		0.63		1395	37436		0.58		64163	0.63	
1	4	C	1750	1.11	1571	16727	0.62	3800	2.20	1594	28320	1.04	4430	2.30	1520	37436	7200	2.24	1564	64163	2.40	9700	
			1160	0.74		16727	0.31		1.10		28320	0.52		1.15		1520	37436		1.12		64163	1.20	
			875	0.56		16727	0.21		0.73		28320	0.34		0.76		1520	37436		0.74		64163	0.79	
			3500	1.98		16727	0.16		0.55		28320	0.26		0.58		1520	37436		0.56		64163	0.60	
1	6	C	1750	0.99	1770	16727	0.55	3800	1.85	1890	28320	0.88	4430	1.94	1802	37436	7200	1.95	1792	64163	2.09	9700	
			1160	0.66		16727	0.28		0.93		28320	0.44		0.97		1802	37436		0.98		64163	1.05	
			875	0.49		16727	0.18		0.61		28320	0.29		0.64		1802	37436		0.65		64163	0.69	
			3500	1.71		16727	0.14		0.46		28320	0.22		0.49		1802	37436		0.49		64163	0.52	
1	8	C	1750	0.85	2052	16727	0.48	3800	1.73	2017	28320	0.82	4430	1.82	1924	37436	7200	1.73	2026	64163	1.85	9700	
			1160	0.57		16727	0.24		0.87		28320	0.41		0.91		1924	37436		0.86		64163	0.93	
			875	0.43</																			

SERIES F

QUADRUPLE REDUCTION RATINGS

SIZES F07 - F10

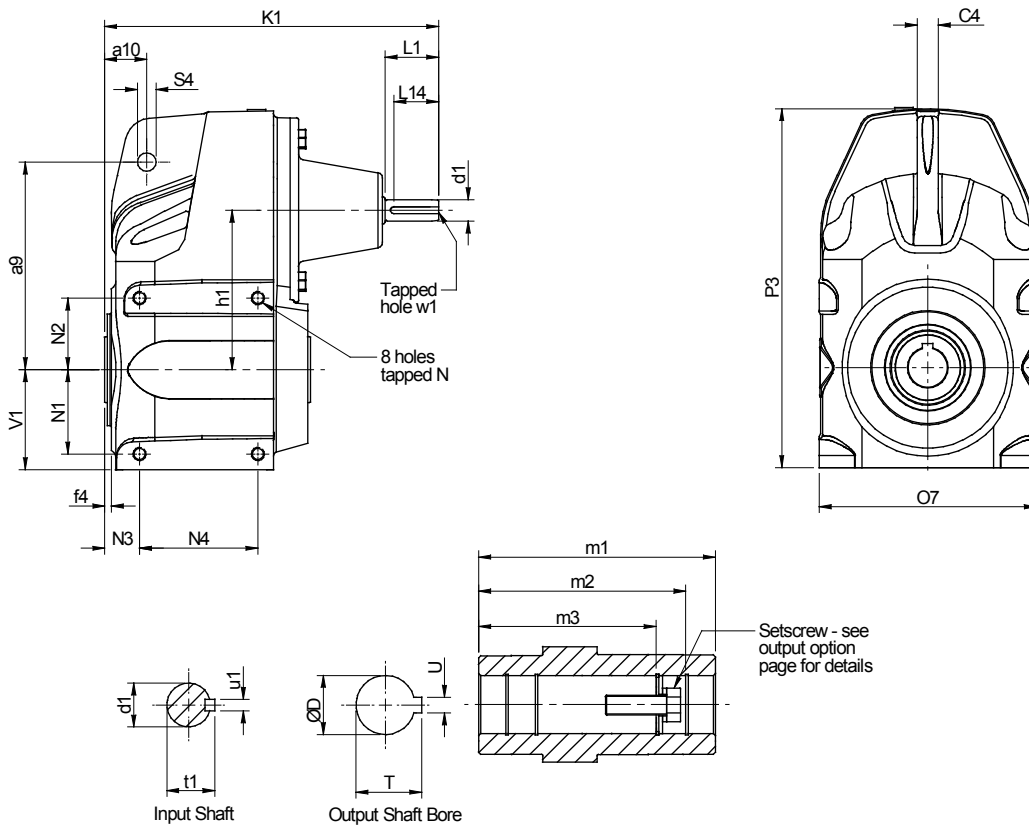
Note: Input Power, Pm may exceed thermal limit, Check thermal power page 48

Column Entry			Input Speed N1 (rpm)	F0742					F0842					F0941					F1041				
				N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra	N2	i	M2	Pm	fra
6	7	8	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	(rpm)	(:1)	(lb.in)	(HP)	(lbf)	
			3500	1.26				1.29		28320	0.61		1.24		37436	0.78		1.25		64163	1.34		
2	5	C	1750	0.63	2785	16727	0.18	3800	0.65	2703	28320	0.31	4430	0.62	2815	37436	0.39	7200	0.62	2801	64163	0.67	9700
			1160	0.42		16727	0.12		0.43		28320	0.20		0.41		37436	0.26		0.41		64163	0.44	
			875	0.31		16727	0.09		0.32		28320	0.15		0.31		37436	0.19		0.31		64163	0.33	
			3500	1.09		14603	0.26		1.08		28320	0.51		1.14		37436	0.71		1.14		64163	1.22	
2	8	C	1750	0.54	3225	14603	0.13	3800	0.54	3232	28320	0.26	4430	0.57	3082	37436	0.35	7200	0.57	3068	64163	0.61	9700
			1160	0.36		14603	0.09		0.36		28320	0.17		0.38		37436	0.24		0.38		64163	0.41	
			875	0.27		14603	0.07		0.27		28320	0.13		0.28		37436	0.18		0.29		64163	0.31	
			3500	0.96		14603	0.23		0.96		28320	0.46		0.96		37436	0.60		0.95		64163	1.02	
3	2	C	1750	0.48	3660	14603	0.12	3800	0.48	3628	28320	0.23	4430	0.48	3656	37436	0.30	7200	0.48	3681	64163	0.51	9700
			1160	0.32		14603	0.08		0.32		28320	0.15		0.32		37436	0.20		0.32		64163	0.34	
			875	0.24		14603	0.06		0.24		28320	0.11		0.24		37436	0.15		0.24		64163	0.25	
			3500	0.84		14603	0.21		0.88		28320	0.42		0.93		37436	0.58		0.83		64163	0.89	
3	6	C	1750	0.42	4161	14603	0.10	3800	0.44	3961	28320	0.21	4430	0.46	3777	37436	0.29	7200	0.41	4235	64163	0.44	9700
			1160	0.28		14603	0.07		0.29		28320	0.14		0.31		37436	0.19		0.27		64163	0.29	
			875	0.21		14603	0.05		0.22		28320	0.10		0.23		37436	0.14		0.21		64163	0.22	
			3500	0.75		11417	0.14		0.79		28320	0.37		0.83		37436	0.52		0.77		62393	0.80	
4	0	C	1750	0.37	4679	11417	0.07	3800	0.40	4415	28320	0.19	4430	0.42	4210	37436	0.26	7200	0.38	4550	62393	0.40	9700
			1160	0.25		11417	0.05		0.26		28320	0.12		0.28		37436	0.17		0.25		62393	0.27	
			875	0.19		11417	0.04		0.20		28320	0.09		0.21		37436	0.13		0.19		62393	0.20	
			3500	0.66		9735	0.11		0.71		28320	0.33		0.74		37436	0.46		0.74		64163	0.80	
4	5	C	1750	0.33	5319	9735	0.05	3800	0.35	4952	28320	0.17	4430	0.37	4722	37436	0.23	7200	0.37	4706	64163	0.40	9700
			1160	0.22		9735	0.04		0.23		28320	0.11		0.25		37436	0.15		0.25		64163	0.26	
			875	0.16		9735	0.03		0.18		28320	0.08		0.19		37436	0.12		0.19		64163	0.20	
			3500						0.61		26019	0.27		0.66		37347	0.41		0.69		62393	0.72	
5	0	C	1750						0.31	5702	26019	0.13	4430	0.33	5310	37347	0.21	7200	0.35	5056	62393	0.36	9700
			1160						0.20		26019	0.09		0.22		37347	0.14		0.23		62393	0.24	
			875						0.15		26019	0.07		0.16		37347	0.10		0.17		62393	0.18	

SERIES F

DIMENSIONS

REDUCER



UNIT SIZE	a9	a10	C4	f4	h1	K1	N	N1	N2	N3	N4	O7	P3	S4	V1
F0222 F0232	5.51	0.98	0.59	0.20	3.77	9.09 9.69	M8 x 1.25p 0.39 deep	1.89	1.50	0.96	2.68	5.67	8.82	0.59	2.32
F0322 F0332	6.22	1.26	0.63	0.20	4.78	9.92 10.43	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99
F0422 F0432	6.69	1.26	0.63	0.20	4.78	9.92 10.43	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99
F0522 F0532	7.80	1.61	0.63	0.20	5.69	11.34 11.65	M10 x 1.50p 0.63 deep	2.56	2.95	1.08	4.59	7.88	12.52	0.59	3.15
F0622 F0632	8.58	1.61	0.63	0.24	6.51	11.77 12.09	M12 x 1.75p 0.67 deep	3.37	3.52	1.34	4.72	8.86	14.37	0.59	3.98
F0722 F0732	10.94	1.97	0.79	0.28	7.87	13.27 13.74	M16 x 2.00p 0.79 deep	4.31	3.64	1.42	5.75	10.87	17.40	0.94	5.00
F0822 F0832	13.62	2.44	1.02	0.12	9.57	16.46 15.87	M16 x 2.00p 0.79 deep	5.22	4.63	1.75	6.61	13.39	21.10	0.94	6.14
F0921 F0931	15.55	2.76	1.18	0.20	10.77	19.33 19.41	M16 x 2.00p 0.94 deep	4.92	8.86	1.50	8.46	15.75	24.09	1.06	6.89
F1021 F1031	19.09	3.46	1.42	0.22	13.05	22.68 22.76	M20 x 2.50p 1.06 deep	6.22	10.71	1.63	9.84	18.48	29.45	1.06	8.50

SERIES F

DIMENSIONS

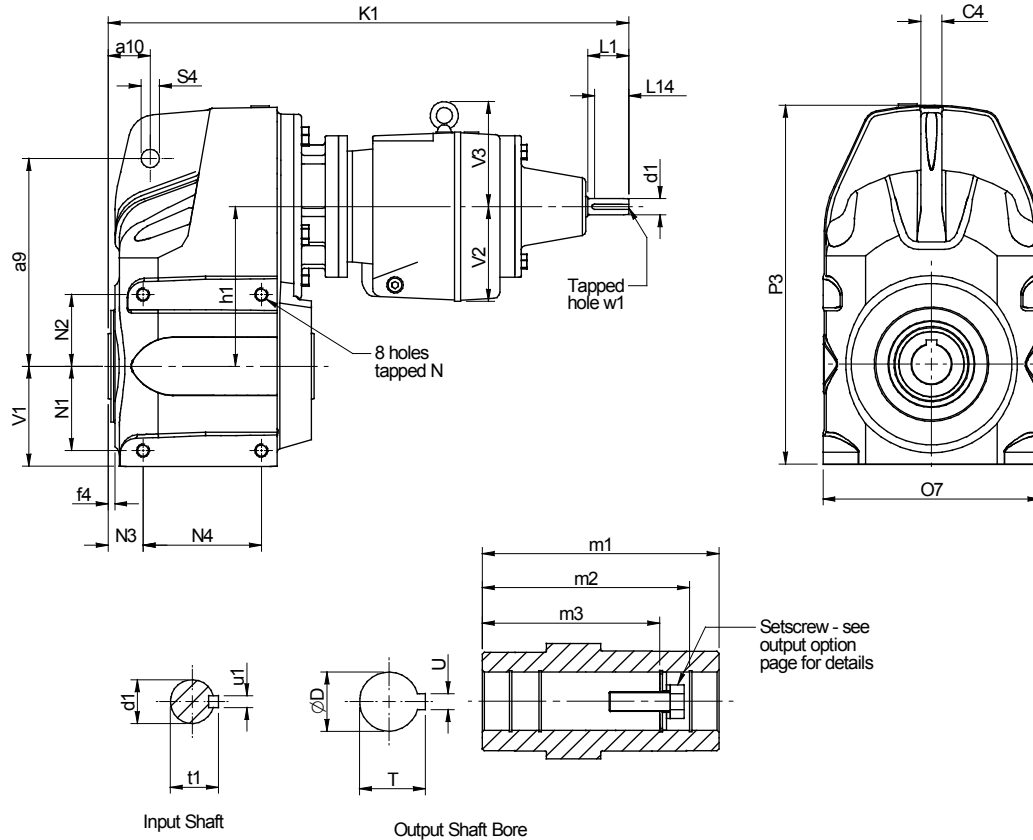
REDUCER

UNIT SIZE	Input Shaft						Hollow Output Bore					
	d1	L1	L14	t1	u1	w1	D	m1	m2	m3	T	U
F0222 F0232	0.625	1.57	1.28	0.71	0.2	0.25UNF	1	4.63	4.13	3.5	1.11	0.25
	0.625	1.57	1.28	0.71	0.2	0.25UNF						
F0322 F0332	0.625	1.57	1.28	0.71	0.2	0.25UNF	1.25	6.16	4.8	4.13	1.37	0.25
	0.625	1.57	1.28	0.71	0.2	0.25UNF						
F0422 F0432	0.625	1.57	1.28	0.71	0.2	0.25UNF	1.38	6.16	5.2	4.8	1.53	0.31
	0.625	1.57	1.28	0.71	0.2	0.25UNF						
F0522 F0532	0.75	1.57	1.28	0.85	0.24	0.25UNF	1.5	7.05	6.85	5.59	1.67	0.38
	0.625	1.57	1.28	0.71	0.2	0.25UNF						
F0622 F0632	0.75	1.57	1.28	0.85	0.24	0.25UNF	1.5	8.07	6.85	6.14	1.67	0.38
	0.625	1.57	1.28	0.71	0.2	0.25UNF						
F0722 F0732	0.875	1.97	1.28	1.06	0.31	0.312UNF	2	9.19	7.8	7.2	2.23	0.5
	0.75	1.57	1.28	0.85	0.24	0.25UNF						
F0822 F0832	1.125	2.36	2	1.22	0.31	0.375UNF	2.38	10.63	9.06	8.27	2.66	0.63
	0.875	1.97	1.28	1.06	0.31	0.312UNF						
F0921 F0931	1.375	3.15	2.4	1.51	0.31	0.50UNF	2.75	12.99	10.63	-	3.04	0.63
	1.125	2.36	2	1.22	0.31	0.375UNF						
F1021 F1031	1.625	4.33	3.69	1.79	0.38	0.625UNF	3.25	14.57	12.32	-	3.59	0.75
	1.375	3.15	3.15	1.51	0.31	0.50UNF						

SERIES F

DIMENSIONS

REDUCER QUAD



UNIT SIZE	a9	a10	C4	f4	h1	K1	N	N1	N2	N3	N4	O7	P3	S4	V1
F0342	6.22	1.26	0.63	0.20	4.78	17.24	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99
F0442	6.69	1.26	0.63	0.20	4.78	17.24	M10 x 1.50p 0.59 deep	2.52	2.09	0.96	3.58	6.50	10.75	0.59	2.99
F0542	7.80	1.61	0.63	0.20	5.69	19.29	M10 x 1.50p 0.63 deep	2.56	2.95	1.08	4.59	7.87	12.52	0.59	3.15
F0642	8.58	1.61	0.63	0.24	6.51	19.72	M12 x 1.75p 0.67 deep	3.37	3.52	1.34	4.72	8.87	14.37	0.59	3.98
F0742	10.94	1.97	0.79	0.28	7.87	21.10	M16 x 2.00p 0.79 deep	4.31	3.64	1.42	5.75	10.87	17.40	0.94	5.00
F0842	13.62	2.44	1.02	0.12	9.57	24.17	M16 x 2.00p 0.79 deep	5.22	4.63	1.75	6.61	13.39	21.10	0.94	6.14
F0941	15.55	2.76	1.18	0.20	10.77	26.10	M16 x 2.00p 0.94 deep	4.92	8.86	1.50	8.46	15.75	24.09	1.06	6.89
F1041	19.09	3.46	1.42	0.22	13.05	29.53	M20 x 2.50p 1.06 deep	6.22	10.71	1.63	9.84	18.48	29.45	1.06	8.50

UNIT SIZE	Input Shaft						Hollow Output Bore					
	d1	L1	L14	t1	u1	w1	D	m1	m2	m3	T	U
F0342	0.625	1.57	1.28	0.71	0.20	0.25UNF	1.25	6.16	4.80	4.13	1.37	0.25
F0442	0.625	1.57	1.28	0.71	0.20	0.25UNF	1.38	6.16	5.20	4.80	1.53	0.31
F0542	0.625	1.57	1.28	0.71	0.20	0.25UNF	1.50	7.05	6.85	5.59	1.67	0.38
F0642	0.625	1.57	1.28	0.71	0.20	0.25UNF	1.50	8.07	6.85	6.14	1.67	0.38
F0742	0.625	1.57	1.28	0.71	0.20	0.25UNF	2.00	9.19	7.80	7.20	2.23	0.50
F0842	0.750	1.57	1.28	0.85	0.24	0.25UNF	2.38	10.63	9.06	8.27	2.66	0.63
F0941	0.750	1.57	1.28	0.85	0.24	0.25UNF	2.75	12.99	10.63	-	3.04	0.63
F1041	0.875	1.57	1.28	1.06	0.31	0.312UNF	3.25	14.57	12.32	-	3.59	0.75

SERIES F

FAN COOLED UNITS

Column 10 Entry

For reducer fan kit modules enter **S** in column 10

or if used in conjunction with a reducer backstop module kit

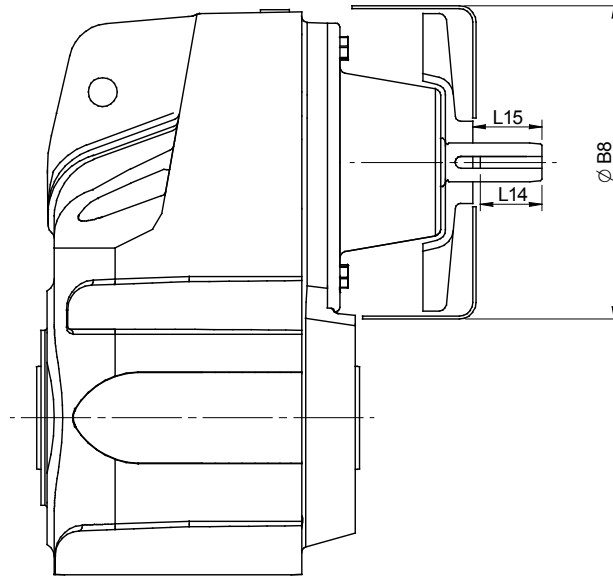
Y

CW rotation

Z

CCW rotation

Dimensions of Fan Cooled Units



UNIT SIZE	ØB8	L14	L15
F0722	8.86	1.28	1.38
F0822	10.43	2.0	1.77
F0921	12.60	2.40	2.56
F1021	14.96	3.69	3.74

SERIES F REDUCER BACKSTOP MODULE

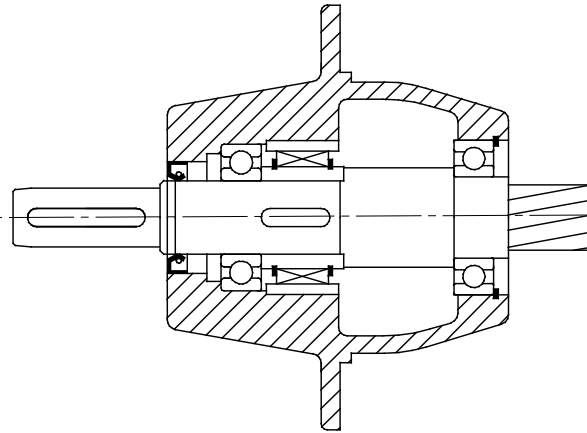
The reducer units listed below can be fitted with an internal backstop, this has no effect of the external unit size. The backstop device incorporates high quality centrifugal lift off sprags which are wear free above the lift off speed (n min). To ensure correct operation input speed must exceed lift off speed.

Suitable for ambient temperature -40°F to + 122°F (-40°C to + 50°C)

Column 10 Entry

For reducer backstop modules enter

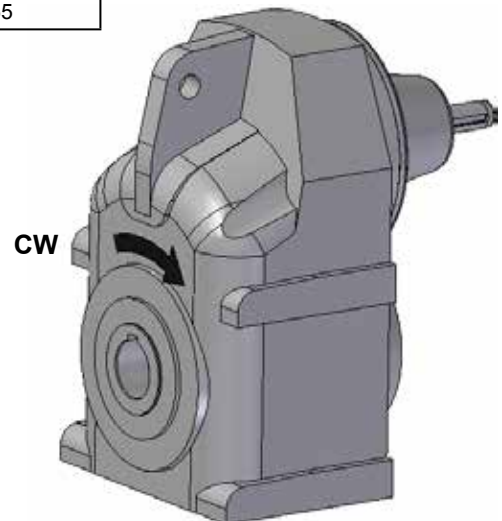
W for CCW rotation (or Z if used in conjunction with a fan kit)
X for CW rotation (or Y if used in conjunction with a fan kit)



Unit Size	Lift Off Speed ('n' min) (at inputshaft) (rev/min)	Rated Locking Torque ('T max') (at input shaft) (lb. in.)
F05	800	885
F06	800	885
F07	670	1505
F08	670	1505
F09	670	2655
F10	670	2655

Rotation of output shaft must be specified when ordering as viewed from the output shaft end (as shown in the diagram)

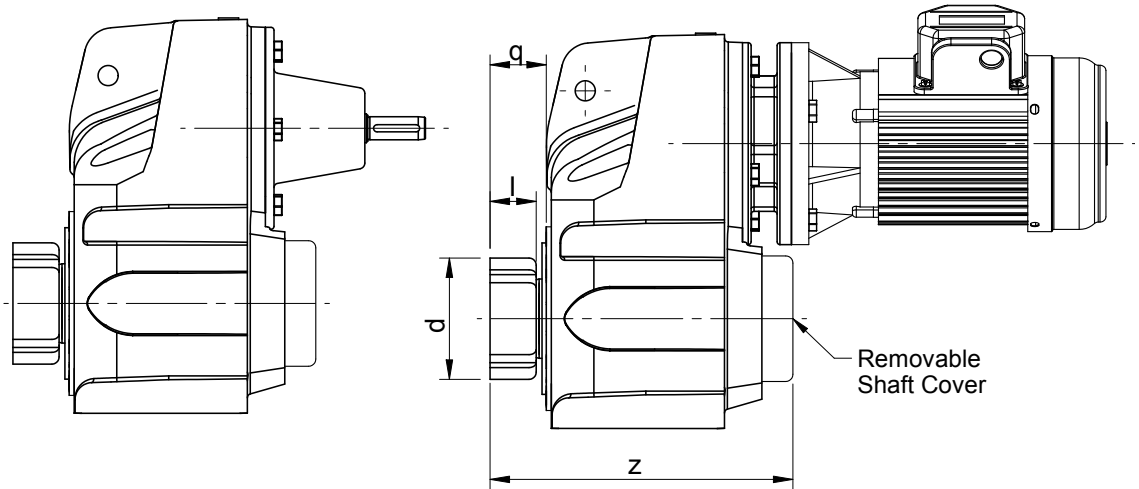
CW	-	Free Rotation	-	Clockwise
		Locked		Counterclockwise
CCW	-	Free Rotation	-	Counterclockwise
		Locked		Clockwise



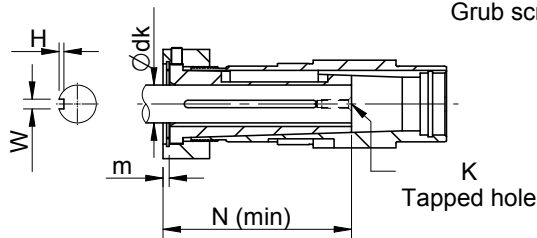
SERIES F

DIMENSIONS (INCHES)

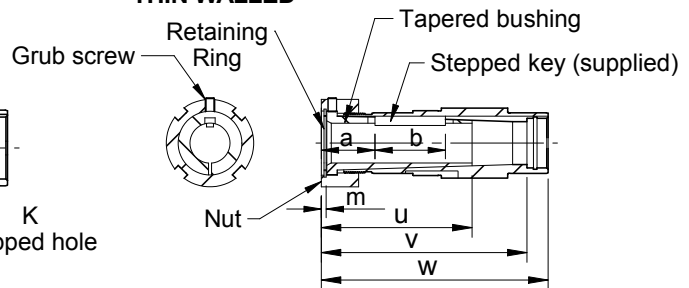
TAPER RELEASE BUSHING



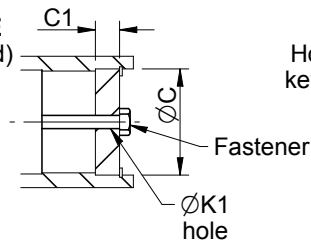
DRIVEN SHAFT



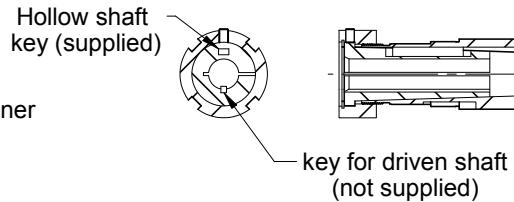
THIN WALLED



END PLATE (not supplied)



THICK WALLED



SIZE	Key		Bush	Hollow Shaft		Nut			Gear Unit	
	a	b	u	v	w	d	l	m	q	z
F04 (107)TR	1.90	2.50	5.00	7.15	7.85	3.31	1.26	0.27	1.89	9.20
F05 (107)TR	1.90	2.50	5.00	7.09	8.74	3.31	1.26	0.27	1.89	10.40
F06 (115)TR	2.10	2.75	5.55	7.89	9.90	4.06	1.46	0.30	2.06	11.50
F07 (203)TR	1.55	3.25	5.55	8.73	10.88	4.31	1.46	0.30	1.97	12.50
F08 (207)TR	1.24	4.25	6.52	10.18	12.53	4.81	1.46	0.30	2.03	14.60
F09 (215)TR	2.09	3.50	7.08	13.00	15.00	5.68	1.76	0.38	2.24	17.60
F10 (307)TR	1.59	5.00	7.39	14.38	16.75	6.06	1.76	0.38	2.41	19.30

- Consult standard unit selection tables for power and torque ratings.
- All other gear unit dimensions may be obtained from the standard unit dimension pages.

SERIES F

DIMENSIONS (INCHES)

TAPER RELEASE BUSHING

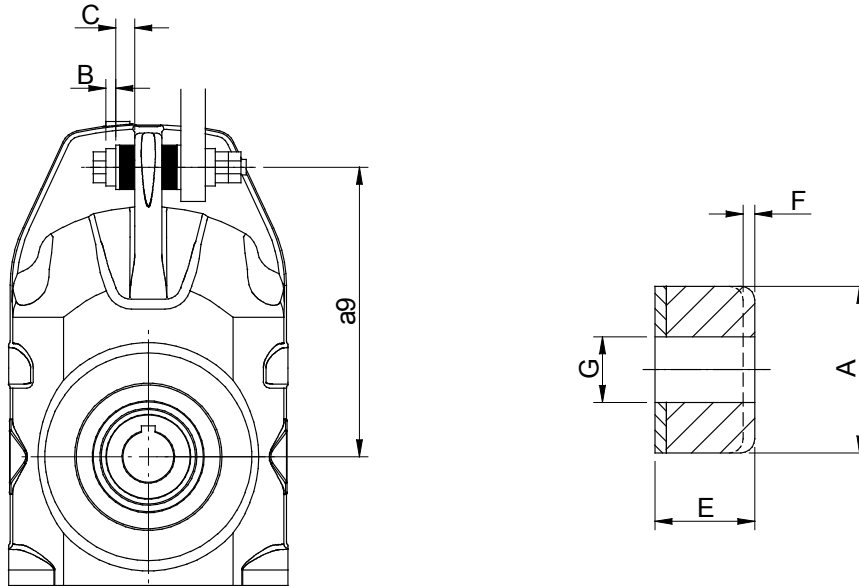
SIZE	Driven shaft diameter * (Ødk)	bushing style	driven shaft keyway			driven shaft			end plate			circlip	bushing weight (lbs)
			width (W)	depth (H)	min length ** (b1)	a1	K	N (min)	ØC	C1	K1		
F04 (107)TR & F05 (107)TR	1.000 / 0.996	Thick	1/4	1/8	2.75	-	1/2 UNC	5	1.64	0.3	5/8 UNC	N1300-0162	2.1
	1.125 / 1.121	Thick	1/4	1/8	2.75	-	1/2 UNC	5	1.64	0.3	5/8 UNC	N1300-0162	1.8
	1.188 / 1.184	Thick	1/4	1/8	2.75	-	1/2 UNC	5	1.64	0.3	5/8 UNC	N1300-0162	1.6
	1.250 / 1.246	Thin	1/4	1/8	2.5	1.89	1/2 UNC	5	1.64	0.3	5/8 UNC	N1300-0162	1.5
	1.438 / 1.434	Thin	3/8	3/16	2.5	1.89	1/2 UNC	5	1.64	0.3	5/8 UNC	N1300-0162	1
F06 (115)TR	1.188 / 1/184	Thick	1/4	1/8	2.75	-	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	4.3
	1.250 / 1.246	Thick	1/4	1/8	2.75	-	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	4.1
	1.438 / 1.434	Thick	3/8	3/16	2.5	-	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	3.5
	1.500 / 1.496	Thick	3/8	3/16	2.5	-	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	3.3
	1.625 / 1.620	Thin	3/8	3/16	2.75	2.1	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	2.9
	1.688 / 1.683	Thin	3/8	3/16	2.75	2.1	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	2.7
	1.750 / 1.745	Thin	3/8	3/16	2.75	2.1	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	2.4
1.938 / 1.933	Thin	1/2	1/4	2.75	2.1	1/2 UNC	5.55	2.25	0.37	5/8 UNC	N1300-0225	1.7	
F07 (203)TR	1.438 / 1.434	Thick	3/8	3/16	2.75	-	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	5
	1.500 / 1.496	Thick	3/8	3/16	2.75	-	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	5.1
	1.625 / 1.620	Thick	3/8	3/16	2.75	-	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	4.6
	1.688 / 1/683	Thick	3/8	3/16	2.75	-	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	4.4
	1.750 / 1.745	Thick	3/8	3/16	2.75	-	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	4.4
	1.875 / 1.870	Thin	1/2	1/4	3.25	1.56	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	3.6
	1.938 / 1.933	Thin	1/2	1/4	3.25	1.56	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	3.3
	2.000 / 1.995	Thin	1/2	1/4	3.25	1.56	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	3
2.188 / 2.183	Thin	1/2	1/4	3.25	1.56	5/8 UNC	5.55	2.43	0.43	3/4 UNC	N1300-0244	3	
F08 (207)TR	1.375 / 1.371	Thick	3/16	5/32	4.75	-	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	7.6
	1.438 / 1.434	Thick	3/8	3/16	3.25	-	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	7.3
	1.500 / 1.496	Thick	3/8	3/16	3.25	-	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	7.1
	1.625 / 1.620	Thick	3/8	3/16	3.25	-	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	6.7
	1.688 / 1/683	Thick	3/8	3/16	3.25	-	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	6.4
	1.750 / 1.745	Thick	3/8	3/16	3.25	-	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	6.1
	1.875 / 1.870	Thick	1/2	1/4	3.25	-	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	5.6
	1.938 / 1.933	Thin	1/2	1/4	4.25	1.24	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	5.3
	2.000 / 1.995	Thin	1/2	1/4	4.25	1.24	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	5
	2.188 / 2.183	Thin	1/2	1/4	4.25	1.24	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	4.4
	2.250 / 2.245	Thin	1/2	1/4	4.25	1.24	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	3.7
	2.438 / 2.433	Thin	5/8	5/16	4.25	1.24	5/8 UNC	6.11	2.83	0.43	3/4 UNC	N1300-0281	2.6
F09 (215)TR	1.938 / 1.933	Thick	1/2	1/4	5.25	-	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	11.4
	2.000 / 1.995	Thick	1/2	1/4	5.25	-	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	11.1
	2.188 / 2.183	Thick	1/2	1/4	5.25	-	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	9.9
	2.250 / 2.245	Thick	1/2	1/4	5.25	-	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	9.5
	2.438 / 2.433	Thin	5/8	5/16	3.50	2.09	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	8.3
	2.500 / 2.495	Thin	5/8	5/16	3.50	2.09	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	7.8
	2.688 / 2.682	Thin	5/8	5/16	3.50	2.09	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	6.5
	2.938 / 2.932	Thin	3/4	3/8	3.50	2.09	7/8 UNC	7.08	3.33	0.50	1 UNC	N1300-0334	4.5
F10 (307)TR	2.000 / 1.995	Thick	1/2	1/4	5.25	-	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	17.8
	2.188 / 2.183	Thick	1/2	1/4	5.25	-	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	16.6
	2.250 / 2.245	Thick	1/2	1/4	5.25	-	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	16.2
	2.438 / 2.433	Thick	5/8	5/16	5.25	-	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	14.9
	2.500 / 2.495	Thick	5/8	5/16	5.25	-	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	14.4
	2.688 / 2.682	Thin	5/8	5/16	5.00	1.59	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	13.0
	2.938 / 2.932	Thin	3/4	3/8	5.00	1.59	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	10.9
	3.000 / 2.994	Thin	3/4	3/8	5.00	1.59	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	10.3
	3.188 / 3.182	Thin	3/4	3/8	5.00	1.59	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	8.6
	3.438 / 3.432	Thin	7/8	7/16	5.00	1.59	1 UNC	7.39	3.74	0.56	1 1/8 UNC	N1300-0375	6.1

* Check strength of driven shaft

** Check strength and length of key (when key not supplied - i.e. thick wall bushing)

SERIES F TORQUE BUSHINGS

RUBBER BUSHINGS FOR TORQUE ARM



UNIT SIZE	A	B	C	a9	E	F	G
F02	1.57	0.08	0.73	5.51	0.79	0.06	0.51/0.49
F03	1.57	0.08	0.71	6.22	0.79	0.08	0.51/0.49
F04	1.57	0.08	0.71	6.69	0.79	0.08	0.51/0.49
F05	1.57	0.08	0.71	7.80	0.79	0.08	0.51/0.49
F06	1.57	0.08	0.71	8.58	0.79	0.08	0.51/0.49
F07	2.44	0.39	1.18	10.94	1.30	0.12	0.90/0.84
F08	2.44	0.39	1.14	13.62	1.30	0.16	0.90/0.84
F09	3.23	0.47	1.57	15.55	1.73	0.16	1.00/0.98
F10	3.23	0.47	1.50	19.09	1.73	0.20	1.00/0.98

SERIES F DIMENSIONS D (B5) FLANGE

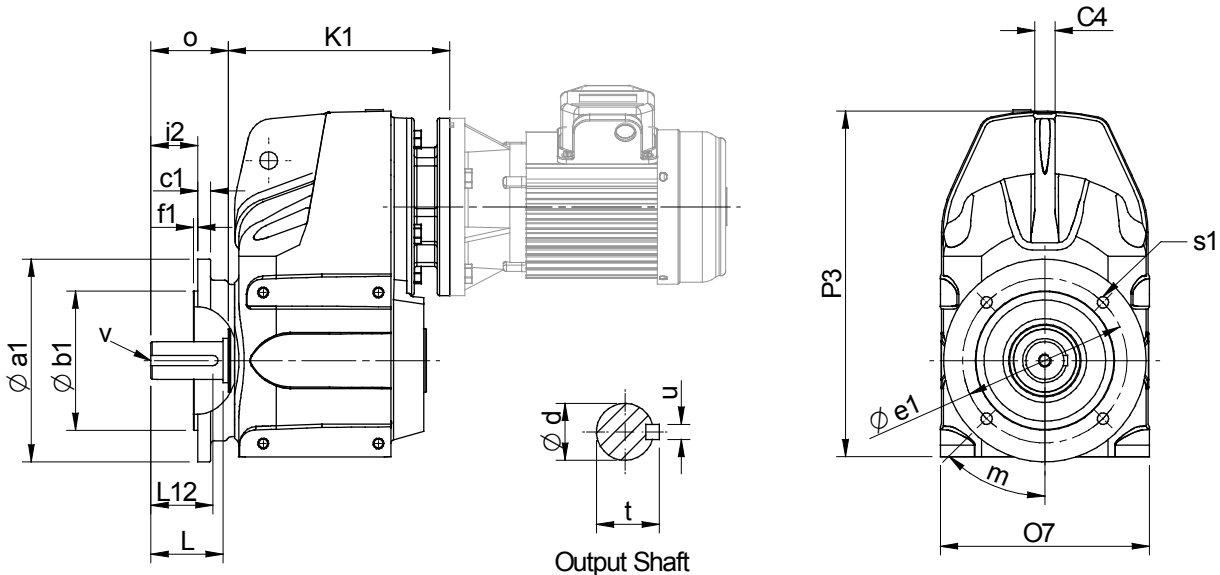
Column 9 Entry

F B5 (D) Output Flange

Column 11 Entry

N with Inch Shaft

A without Shaft



UNIT SIZE	a1	b1	c1	C4	e1	f1	K1	m	o	O7	P3	s1	Output Shaft						
													d	i2	L	L12	t	u	v
F02	6.30	4.33 (110 j6)	0.39	0.59	5.12	0.14	See Motorized or Reducer Dimension Pages	45	-	5.67	8.82	4x0.35	-	-	-	-	-	-	
F03	6.30	4.33 (110 j6)	0.39	0.63	5.12	0.14		45	1.97	6.50	10.75	4x0.35	1.00	1.02	1.85	1.57	1.11	0.250	3/8 UNFx0.75
F04	6.30	4.33 (110 j6)	0.39	0.63	5.12	0.14		45	2.36	6.50	10.75	4x0.35	1.25	1.42	2.20	2.00	1.36	0.250	1/2 UNFx1.13
F05	9.84	7.09 (180 j6)	0.63	0.63	8.46	0.16		45	2.76	7.87	12.52	4x0.55	13.75	1.73	2.60	2.38	1.51	0.313	5/8 UNFx1.5
F06	9.84	7.09 (180 j6)	0.71	0.63	8.46	0.16		45	3.19	8.87	14.37	4x0.55	1.625	1.57	2.99	2.38	1.78	0.375	5/8 UNFx1.5
F07	11.81	9.06 (230 j6)	0.71	0.79	10.43	0.16		45	3.98	10.87	17.40	4x0.55	2.00	2.40	3.74	2.75	2.23	0.500	5/8 UNFx1.5
F08	13.78	9.84 (250 h6)	0.71	1.02	11.81	0.20		45	4.72	13.37	21.10	4x0.71	2.375	2.87	4.49	3.69	2.65	0.625	3/4 UNFx1.65
F09	17.72	13.78 (350 h6)	0.79	1.18	15.75	0.20		22.5	5.55	15.75	24.09	8x0.71	2.875	3.54	5.32	4.63	3.20	0.750	3/4 UNFx1.65
F10	17.72	13.78 (350 h6)	.87	1.42	15.75	0.20		22.5	6.77	18.50	29.45	8x0.71	3.625	4.41	6.77	5.94	4.01	0.875	3/4 UNFx1.65

SERIES F DIMENSIONS C (B14) FLANGE

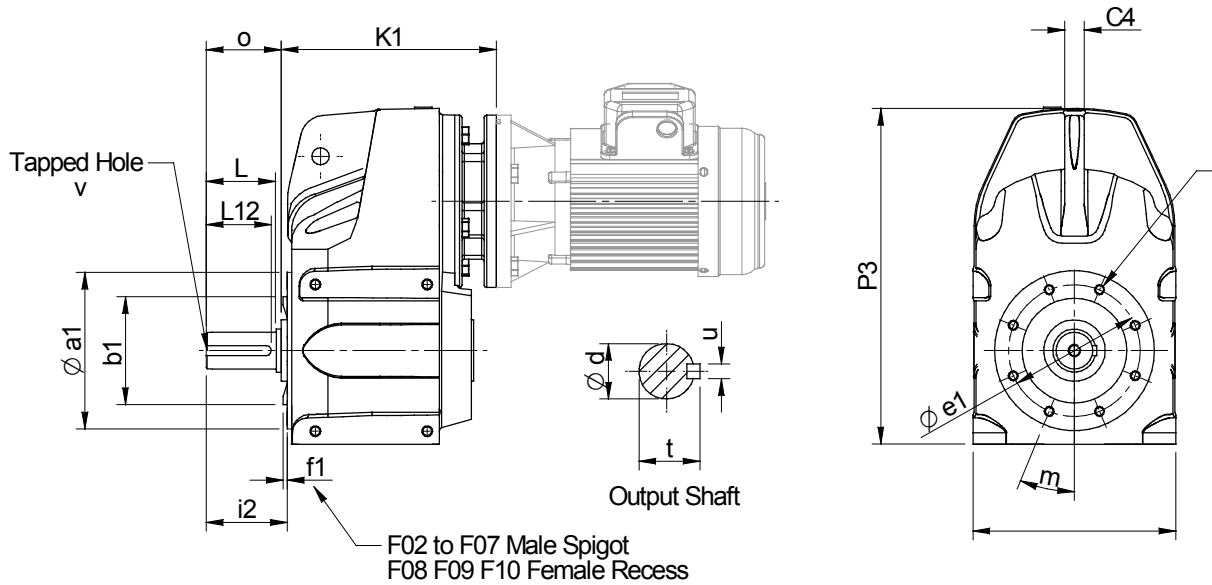
Column 9 Entry

T or W B14 (C) Flange (see page 2 for further details).

Column 11 Entry

N with Inch Shaft

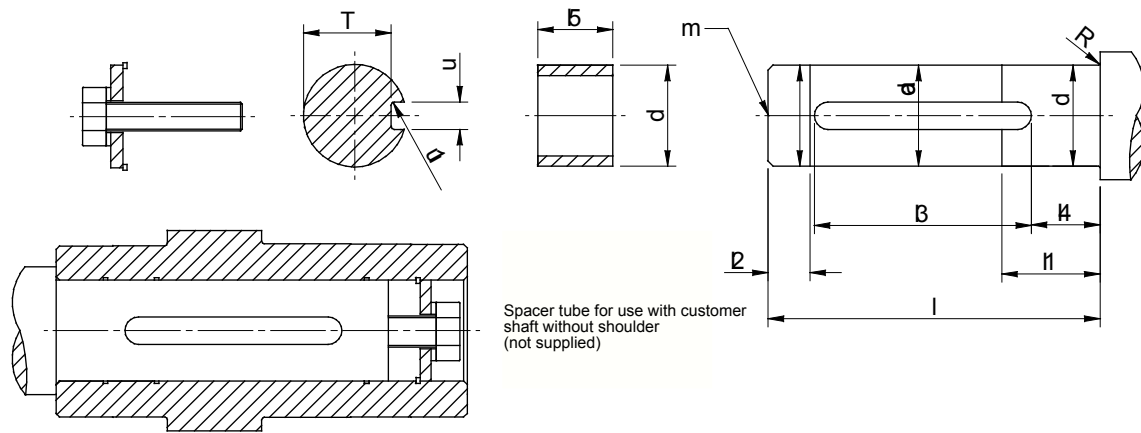
A without Shaft



UNIT SIZE	a1	b1	C4	e1	f1 Male	F1	K1	m	o	O7	P3	s1	Output Shaft						
													d	i2	L	L12	t	u	v
F02	4.61	3.35 (85 i6)	0.59	4.21	0.12	-	See Motorized or Reducer Dimension Pages	67.5	-	5.91	8.82	4 - M8x0.47	-	-	-	-	-	-	
F03	4.69	3.35 (85 i6)	0.63	4.21	0.12	-		22.5	1.97	6.73	10.75	4 - M8x0.47	1.00	2.16	1.85	1.57	1.11	0.250	3/8 UNFx0.75
F04	4.69	3.35 (85 i6)	0.47	4.21	0.12	-		22.5	2.36	6.73	10.75	4 - M8x0.47	1.25	2.56	2.20	2.00	1.36	0.250	1/2 UNFx1.13
F05	5.59	4.13 (105 i6)	0.63	4.92	0.12	-		30	2.76	8.11	12.52	6 - M10x0.67	1.375	2.95	2.60	2.38	1.51	0.313	5/8 UNFx1.5
F06	7.13	5.12 (130 i6)	0.63	5.91	0.16	-		0	3.19	9.09	14.37	8 - M10x0.79	1.625	3.43	2.99	2.38	1.78	0.375	5/8 UNFx1.5
F07	7.13	5.12 (130 i6)	0.79	5.91	0.16	-		0	3.98	11.10	17.40	8 - M10x0.79	2.00	4.25	3.74	2.75	2.23	0.500	5/8 UNFx1.5
F08	8.90	5.91 (150 H7)	1.02	7.68	-	-0.20		22.5	4.72	13.62	21.10	8 - M12x0.79	2.375	4.84	4.49	3.69	2.65	0.625	3/4 UNFx1.65
F09	11.02	7.09 (180 H7)	1.18	9.06	-	-0.24		0	5.55	15.75	24.09	6 - M16x1.06	2.875	5.75	5.31	4.63	3.20	0.750	3/4 UNFx1.65
F10	12.20	8.27 (210 H7)	1.42	11.02	-	-0.28		0	6.77	18.50	29.45	10 - M16x1.06	3.625	6.99	6.77	5.94	4.01	0.875	3/4 UNFx1.65

SERIES F DIMENSIONS STANDARD BORE ASSEMBLY

ASSEMBLY ONTO SHAFT - CUSTOMER SHAFT DETAIL



Size	d	da	l	l1	l2	l3	l4	l5	m	N	R	T	u	u1
F02	0.9996 / 0.9990	0.98	3.23	1.57	0.51	3.00	0.12	0.91	3/8 x UNF 0.875 deep	12 lb.ft	0.03	0.859 0.853	0.2520 / 0.2500	0.010
F03	1.2496 / 1.2490	1.23	3.23	1.77	0.59	3.00	0.12	0.91	3/8 x UNF 0.875 deep	12 lb.ft	0.03	1.112 1.106	0.2520 / 0.2500	0.010
F04	1.3746 / 1.3740	1.36	4.29	2.36	0.79	3.56	0.12	0.91	1/2 x UNF 1.25 deep	15 lb.ft	0.03	1.201 1.195	0.3145 / 0.3125	0.010
F05	1.4996 / 1.4990	1.48	4.41	2.36	0.79	3.63	0.12	1.18	5/8 x UNF 1.42 deep	35 lb.ft	0.03	1.289 1.283	0.3770 / 0.3750	0.010
F06	1.4996 / 1.4990	1.48	4.96	2.95	0.98	4.00	0.12	1.18	5/8 x UNF 1.42 deep	35 lb.ft	0.03	1.289 1.283	0.3770 / 0.3750	0.010
F07	1.9996 / 1.9990	1.98	6.02	3.54	1.18	5.00	0.12	1.18	5/8 x UNF 1.42 deep	35 lb.ft	0.03	1.718 1.712	0.5020 / 0.5000	0.020
F08	2.3746 / 2.3739	2.36	6.81	3.54	1.18	5.00	0.12	1.45	3/4 x UNF 1.65 deep	60 lb.ft	0.03	2.021 2.006	0.6270 / 0.6250	0.020
F09	2.7496 / 2.7489	2.73	9.13	4.13	1.38	5.35	0.12	1.50	3/4 x UNF 1.65 deep	60 lb.ft	0.03	2.402 2.387	0.6270 / 0.6250	0.020
F10	3.2495 / 3.2486	3.23	10.83	4.72	1.57	6.75	0.20	1.45	3/4 x UNF 1.65 deep	60 lb.ft	0.03	2.831 2.816	0.7520 / 0.7500	0.020

Assembly Instructions

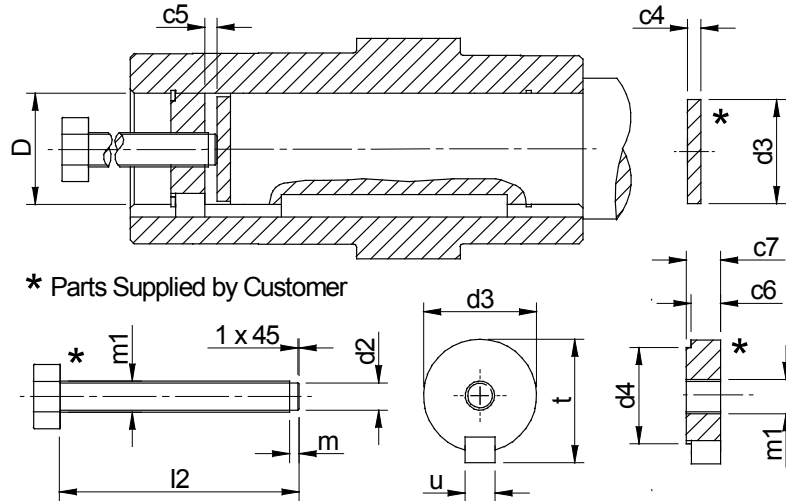
1. Spray the hollow shaft bore and mating diameter of the output shaft with Rocol DFSM or equivalent anti-scuffing spray.
2. Fit key into shaft.
3. Fit the circlip into the output sleeve.
4. Fit the spacer tube only if the output shaft has no shoulder, then fit the output shaft into the output sleeve.
5. Secure in place with the washer and bolt. Torque tighten to the values stated in column N of the above table.
6. Fit plastic protective cover.

SERIES F

DIMENSIONS

STANDARD BORE DISASSEMBLY

DISASSEMBLY METHOD FROM SHAFT



Size	c4	c5	c6	c7	D	d2	d3	d4	l2	m	m1	t (max)	u (max)
F02	0.20	0.12	0.60	0.65	1.000	0.38	0.995	0.65	5.00	0.20	1/2"x 20 UNF	1.09	0.250
F03	0.20	0.12	0.60	0.65	1.250	0.50	1.245	0.88	6.00	0.20	5/8"x 18 UNF	1.35	0.250
F04	0.20	0.12	0.60	0.65	1.375	0.50	1.370	1.000	6.00	0.20	5/8"x 18 UNF	1.50	0.3125
F05	0.20	0.16	0.80	0.90	1.500	0.85	1.495	1.13	7.00	0.20	1"x 12 UNF	1.65	0.375
F06	0.20	0.16	0.80	0.90	1.500	0.85	1.495	1.13	7.00	0.20	1"x 12 UNF	1.65	0.375
F07	0.20	0.16	0.80	0.90	2.000	0.81	1.995	1.59	8.50	0.20	1"x 12 UNF	2.20	0.500
F08	0.31	0.20	1.0	1.10	2.375	1.05	2.370	1.90	10.00	0.20	1 1/4"x 12 UNF	2.63	0.625
F09	0.31	0.24	1.0	1.10	2.750	1.05	2.745	2.18	12.50	0.20	1 1/4"x 12 UNF	3.01	0.625
F10	0.31	0.24	1.0	1.10	3.250	1.05	3.245	2.65	14.00	0.20	1 1/4"x 12 UNF	3.57	0.750

SERIES F

SHIPPING SPECIFICATION

SHIPPING WEIGHT (LBS.)

UNIT SIZE & NO. OF REDUCTIONS		F0222	F0232	F0322	F0332	F0342	F0422	F0432	F0442	F0522	F0532	F0542	
REDUCER VERSION		29	31	44	46	66	46	49	68	68	68	37	
OUTPUT SHAFT		N/A	N/A	1.8	1.8	1.8	2.6	2.6	2.6	3.1	3.1	3.1	
OUTPUT FLANGE		3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.3	3.3	3.3	
MOTORIZED	56C	Without Motor	31	34	47	49	69	47	49	69	63	66	32
		With Motor	56	59	72	74	34	72	74	34	88	91	117
	143TC	Without Motor	31	34	47	49	69	47	49	69	63	66	32
		With Motor	61	64	77	79	99	77	79	99	93	96	122
	145TC	Without Motor	31	34	47	49	69	47	49	69	63	66	32
		With Motor	71	74	87	89	103	87	89	103	103	106	132
	182TC	Without Motor	33		49			52			68		
		With Motor	88		104			107			123		
	184TC	Without Motor	33		49			52			68		
		With Motor	110		126			129			145		
	213TC	Without Motor									68		
		With Motor									184		
	215TC	Without Motor									68		
		With Motor									225		
	254TC	Without Motor											
		With Motor											
	256TC	Without Motor											
		With Motor											
	284TC	Without Motor											
		With Motor											
	286TC	Without Motor											
		With Motor											
	324TC	Without Motor											
		With Motor											
326TC	Without Motor												
	With Motor												

Product Safety Information

General - The following information is important in ensuring safety. It **must** be brought to the attention of personnel involved in the selection of transmission equipment, those responsible for the design of the machinery in which it is to be incorporated and those involved in its installation, use and maintenance.

This equipment will operate safely provided it is selected, installed, used and maintained properly. As with any power transmission equipment **proper precautions must** be taken as indicated in the following paragraphs, to ensure safety.

Potential Hazards - these are **not** necessarily listed in any order of severity as the degree of danger varies in individual circumstances. It is important therefore that the list is studied in its entirety.

- 1) Fire/Explosion -
 - (a) Oil mists and vapor are generated within gear units. It is therefore dangerous to use naked lights in the proximity of gearbox openings, due to the risk of fire or explosion.
 - (b) In the event of fire or serious overheating (over 300 °C), certain materials (rubber, plastics, etc.) may decompose and produce fumes. Care should be taken to avoid exposure to the fumes, and the remains of burned or overheated plastic/rubber materials should be handled with rubber gloves.
- 2) Guards - Rotating shafts and couplings must be guarded to eliminate the possibility of physical contact or entanglement of clothing. It should be of rigid construction and firmly secured.
- 3) Noise - High speed gearboxes and gearbox driven machinery may produce noise levels which are damaging to the hearing with prolonged exposure. Ear defenders should be provided for personnel in these circumstances. Reference should be made to the Department of Employment Code of Practice for reducing exposure of employed persons to noise.
- 4) Lifting - Where provided (on larger units) only the lifting points or eyebolts must be used for lifting operations (see maintenance manual or general arrangement drawing for lifting point positions). Failure to use the lifting points provided may result in personal injury and/or damage to the product or surrounding equipment. Keep clear of raised equipment.
- 5) Lubricants and Lubrication
 - (a) Prolonged contact with lubricants can be detrimental to the skin. The manufacturer's instructions must be followed when handling lubricants.
 - (b) The lubrication status of the equipment must be checked before commissioning. Read and carry out all instructions on the lubricant plate and in the installation and maintenance literature. Heed all warning tags. Failure to do so could result in mechanical damage and in extreme cases risk of injury to personnel.
- 6) Electrical Equipment - Observe hazard warnings on electrical equipment and isolate power before working on the gearbox or associated equipment, in order to prevent the machinery being started.
- 7) Installation, Maintenance and Storage
 - (a) In the event that equipment is to be held in storage, for a period exceeding 6 months, prior to installation or commissioning, local engineering staff must be consulted regarding special preservation requirements. Unless otherwise agreed, equipment must be stored in a building protected from extremes of temperature and humidity to prevent deterioration.
The rotating components (gears and shafts) must be turned a few revolutions once a month (to prevent bearings brinelling).
 - (b) External gearbox components may be supplied with preservative materials applied, in the form of a "waxed" tape overwrap or wax film preservative. Gloves should be worn when removing these materials. The former can be removed manually, the latter using white spirit as a solvent.

Preservatives applied to the internal parts of the gear units do not require removal prior to operation.
 - (c) Installation must be performed in accordance with the manufacturer's instructions and be undertaken by suitably qualified personnel.
 - (d) Before working on a gearbox or associated equipment, ensure that the load has been removed from the system to eliminate the possibility of any movement of the machinery and isolate power supply. Where necessary, provide mechanical means to ensure the machinery cannot move or rotate. Ensure removal of such devices after work is complete.
 - (e) Ensure the proper maintenance of gearboxes in operation. Use only the correct tools and Textron Fluid & Power approved spare parts for repair and maintenance. Consult the Maintenance Manual before dismantling or performing maintenance work.
- 8) Hot Surfaces and Lubricants
 - (a) During operation, gear units may become sufficiently hot to cause skin burns. Care must be taken to avoid accidental contact.
 - (b) After extended running the lubricant in gear units and lubrication systems may reach temperatures sufficient to cause burns. Allow equipment to cool before servicing or performing adjustments.
- 9) Selection and Design
 - (a) Where gear units provide a backstop facility, ensure that back-up systems are provided if failure of the backstop device would endanger personnel or result in damage.
 - (b) The driving and driven equipment must be correctly selected to ensure that the complete machinery installation will perform satisfactorily, avoiding system critical speeds, system torsional vibration, etc.
 - (c) The equipment must not be operated in an environment or at speeds, powers, torques or with external loads beyond those for which it was designed.
 - (d) As improvements in design are being made continually the contents of this catalog are not to be regarded as binding in detail, and drawings and capacities are subject to alterations without notice.

The above guidance is based on the current state of knowledge and our best assessment of the potential hazards in the operation of the gear units.

Any further information or clarification required may be obtained by contacting an Application Engineer.

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