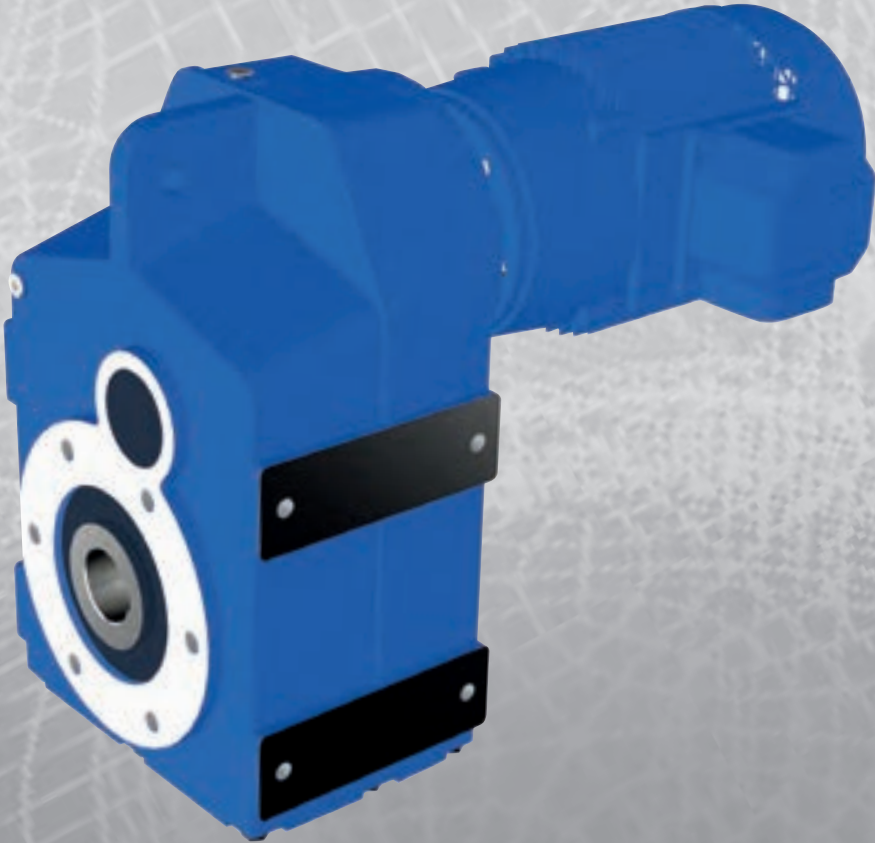


# F Series Shaft Mounted Gear Units



# ATEX Compliance Assured



Total compliance with the ATEX Directive safeguarding the use of industrial equipment in potentially explosive atmospheres is assured for users of our geared products.

Certification is available for standard gearboxes and geared motors with badging displaying the CE Mark and the Ex mark, name and location of the manufacturer, designation of series or type, serial number, year of manufacture, Ex symbol and equipment group/category.

ATEX directive 94/9/EC (also known as ATEX 95 or ATEX 100A) and the CE Marking Directive are enforced in all EC member states. Compliance is compulsory for designers, manufacturers or suppliers of electrical and non-electrical equipment for use in potentially explosive atmospheres created by the presence of flammable gases, vapours, mists or dusts.

Ex compliant standard gearboxes can be supplied against Groups 2 or 3 for surface industries in designated hazardous location Zones 1 and 2 for gases, vapours and mists; and in Zones 21 and 22 for dusts.

General Description_____	1
Unit Designation_____	2
Explanation And Use Of Ratings And Service Factors_____	3
Load Classification By Applications_____	4
Selection Procedure For Motorised Units_____	5-6
Output Options_____	7-8
Motor Adapters_____	9-10
Lubrication_____	12
Mounting Posistions_____	13
<b>MOTORISED</b>	
Motor Performance_____	15
Motor Details_____	16
Additional Motor Features_____	17
Additional Gearbox Features_____	18
Exact Ratios_____	19
Selection Tables- Geared Motors_____	20-65
Dimension Table- Geared Motors_____	66-68
Motorised Backstop Module_____	69
Motorised Options _____	70
<b>REDUCER</b>	
Overhung & Axial Loads On Shafts_____	73
Thermal Power Ratings_____	74
Ratings - Input Power / Output Torque_____	75-81
Dimension Sheets - Speed Reducer_____	82-83
Fan Cooled Units_____	84
Reducer Backstop Module_____	85
<b>OUTPUT OPTIONS</b>	
Dimensions - Torque Bushes & Output Flange_____	86
Dimensions - B14 (C) Flange Units_____	87
Dimensions - Assmembly / Disassmbly_____	88-89
Dimensions - KIBO bushing _____	90
Shipping Specifications_____	91
Safety Information_____	92

# F SERIES

## GENERAL DESCRIPTION

### F Series

F Series right angle drive helical bevel helical geared motors offer ratios from 5:1 to 100:1 in two stages, up to 320:1 in three stages and 5000:1 in four stages.

Motors are available up to 45kW with an output torque capacity of up to 8000.Nm.

The F Series geared motor is primarily designed as a shaft mounted unit incorporating an integral torque reaction bracket, and can be supplied with rubber torque bushes to cushion the torque reaction.

Shaft mounted units are supplied with a hollow bore and keyway or alternatively with a KIBO sleeve and KIBO bushings

Units may also be supplied with a single extended output shaft, side tappings are provided to attach feet for base mounting,

Units may also be supplied with an output flange suitable for mounting horizontally or vertically.

All variants can be fitted with a motor of your preference or with a standard own brand motor, alternatively they can be supplied with an input shaft assembly.

Adding to the range of geared motors this product takes advantage of our many years of accumulated design expertise together with the use of high quality materials and components. The end result is a series of speed reducing geared motors offering high load carrying capacities, increased efficiency, quiet running and reliability.

### The Range Includes:

9 Sizes of Units:

F02, F03, F04, F05, F06, F07, F08, F09 & F10

- Version T - standard unit with torque bushes
- Version W - standard unit without torque bushes
- Version F - standard unit with output flange

### Unit Types:

- Unit type M - Motorised with IEC standard motor
- Unit type D - Motorised with Compact motor
- Unit type N - Motorised with NEMA standard motor
- Unit type H - Motorised with high efficiency motor (IE3)
- Unit type E - Motorised with NEMA high efficiency motor (PREMIUM)
- Unit type G - Unit to allow fitting of IEC motor
- Unit type A - Unit to allow fitting of NEMA motor \*
- Unit type R - Reducer unit
- Unit type S - Reducer unit with fan kit
- Unit type W - Reducer unit with backstop CCW rotation
- Unit type X - Reducer unit with backstop CW rotation
- Unit type Y - Reducer unit with fan and backstop CW rotation
- Unit type Z - Reducer unit with fan and backstop CCW rotation

### Design Features Include:

Patented standard motor connection (IEC or NEMA)

Ability to fit double oil seals, on output shaft or reducer input shaft as required.

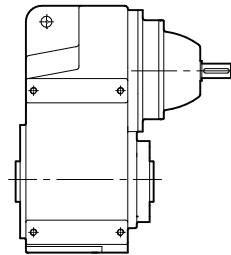
All units are dimensionally interchangeable with other major European manufacturers.

Braked geared motors are available as standard.

Units are manufactured and assembled from a family of modular kits for distributor friendliness minimising inventory and maximising availability.

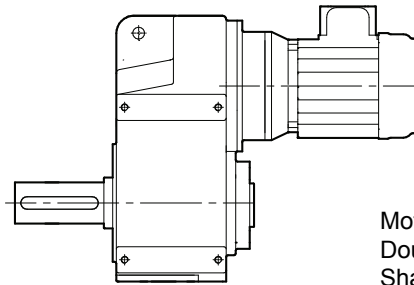
Motorised units can be fitted with a backstop module and reducer units can be fitted with a backstop and fan.

*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. Certified drawings will be sent on request.*



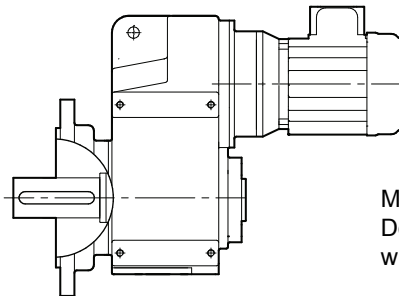
Shaft Mounted Reducer  
Double / Triple Reduction

F 0 4 2 3 5 0 . T R H - 1 - - - - -



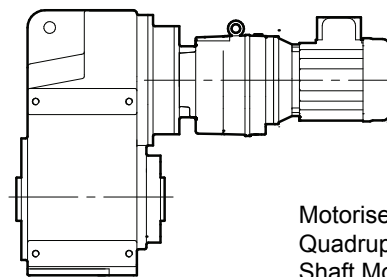
Motorised -  
Double / Triple Reduction  
Shaft Mounted

F 0 4 2 3 5 0 . T M H - 1 D . 7 5 A - - -



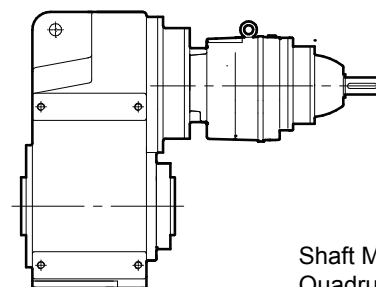
Motorised  
Double / Triple Reduction  
with Output Shaft and Flange

F 0 4 2 3 5 0 . F M C - 1 D . 7 5 A - - -



Motorised  
Quadruple Reduction  
Shaft Mounted

F 0 6 4 3 5 0 0 T M H - 1 D . 1 2 A - - -



Shaft Mounted Reducer  
Quadruple Reduction

F 0 6 4 3 5 0 0 T R H - 1 - - - - -

# F SERIES

## 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	0	8	2	3	5	0	.	T	M	C	G	1	D	4	.	0	A	-	-

Example

\*\* Looking on Input shaft Mounting Position 1 (See unit handings page)  
 \*\*\* Non Standard and Handing - Consult Application Engineering

**20 - Additional Gearbox Features**  
 Double Oil Seal, Motorized Backstop etc

e.g.

**19 - Additional Motor Features**

e.g.

For Types Without Motor Enter

**18 - No of Motor Poles**

No motor

	50 Hz	60 Hz
4 Pole (Std) 1800 rpm	<input type="text" value="A"/> 1500 rpm	<input type="text" value="B"/>
4 Pole (High) 1800 rpm	<input type="text" value="K"/> 1500 rpm	<input type="text" value="L"/>
6 Pole (Std) 1200 rpm	<input type="text" value="C"/> 1000 rpm	<input type="text" value="D"/>
6 Pole (High) 1200 rpm	<input type="text" value="M"/> 1000 rpm	<input type="text" value="N"/>
2 Pole 3600 rpm	<input type="text" value="E"/> 3000 rpm	<input type="text" value="F"/>
8 Pole 900 rpm	<input type="text" value="G"/> 750 rpm	<input type="text" value="H"/>

Dual speed or special motor

**15, 16, 17 - Geared Motor Powers**

Motor HP required (For 50 Hz enter kW)

e.g.

For reducer and non standard

motor types enter

**13, 14 - Mounting Position**

e.g.

**12 - Motor Adaptor For Unit Types**  
 Column 10 Entries M, N, H, E, G or A  
 See Pages 9 and 10

For All Other Types Enter

**1 - F Series**

Range

**2, 3 - Size of Unit**

-

**4 - No of Reductions**

**5 - Revision Version**

**6, 7, 8 - Nominal Overall Ratio**

e.g.

**9 - Unit Version**

STD with Torque Bush

STD without Torque Bush

STD with Output Flange

**10 - Type of Unit**

- Motorized with IEC standard motor (IE2)
- Motorised with Compact Motor
- Motorized with NEMA standard motor
- 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

**11 - OUTPUT SHAFT**

Standard Single Extension

Standard Hollow Shaft

Shrink Disc

KIBO Bushing

\* Dependant on bore size see KIBO dimesion page

# F SERIES

## EXPLANATION & USE OF RATINGS & SERVICE FACTORS

Gear unit selection is made by comparing actual loads with catalogue ratings. Catalogue 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 catalogue 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.

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

The unit selected must therefore have a catalogue 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 engineering.

**Table 1. Mechanical Service Factor (Fm)**

Prime Mover	Duration of Service Hours per day	Load Classification-Driven Machine		
		Uniform mass acceleration factor $\leq 0.2$	Moderate mass acceleration factor $\leq 3$	Heavy mass acceleration factor $\leq 10$
Electric Motor, Steam Turbine or Hydraulic Motor	< 3	0.80	1.00	1.50
	3 - 10	1.00	1.25	1.75
	> 10	1.25	1.50	2.00
Multi-cylinder Internal Combustion Engine	< 3	1.00	1.25	1.75
	3 - 10	1.25	1.50	2.00
	> 10	1.50	1.75	2.25
Single-cylinder Internal Combustion Engine	< 3	1.25	1.50	2.00
	3 - 10	1.50	1.75	2.25
	> 10	1.75	2.00	2.50

Mass acceleration factor =  $\frac{\text{all external moments of inertia} *}{\text{moment of inertia of driving motor}}$

\* 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	$\geq 200$
Factor Fs	1.00	1.03	1.06	1.10	1.15	1.20

Note: Intermediate values are obtained by linear interpolation

# F SERIES

## LOAD CLASSIFICATION BY APPLICATIONS

**Load Classifications - U =Uniform Load M =Moderate Shock Load H =Heavy Shock Load † =Consult our Engineers**

<b>Agitators</b>		<b>Elevators</b>		<b>Machine Tools</b>		<b>Pumps</b>	
Pure liquids	U	Bucket - Uniform load	U	Bending roll	M	Centrifugal proportioning	U
Liquids and solids	M	Bucket - Heavy load	M	Punch press	H	Proportioning	M
Liquids variable density	M	Bucket - Continuous	U	Notching press	H	Reciprocating	M
		Centrifugal discharge	U	Plate planer	H	Single acting 3+ cylinders	M
<b>Blowers</b>		Escalators	U	Other machine tools		Double acting 2+ cylinders	M
Centrifugal	U	Freight	M	Main drive	M	Single acting 1 & 2 cylinders	†
Lobe	M	Gravity discharge	U	Aux drive	U	Double acting 1 cylinder	†
Vane	U	Passenger lifts	†			Rotary- gear type	U
				<b>Metal mills</b>		Rotary- lobe type/ vane	U
<b>Brewing &amp; distilling</b>		<b>Fans</b>		Carriage/main drive	M		
Bottling machinery	M	Centrifugal	U	Draw bench	M	<b>Sand muller</b>	M
Brew Kettles	M	Cooling towers		Dryer	M		
Cookers	M	Induced draft	†	Flattening machinery	M	<b>Sewage treatment</b>	
Mash tubs	M	Forced draft	†	Pinch drive	M	Bar screen	U
Scale hopper	M	Fan - Large diameter induced draft	M	Reversing slitters	M	Chemical feeder	U
		Fan - Light, small diameter	M	Scrubber rolls	M	Collector	U
<b>Can filling machinery</b>	M			Table conveyors		Dewatering screw	M
		<b>Feeders</b>		Group drives	H	Mixers	M
<b>Crane knife</b>	M	Apron	M	Individual drives	H	Scum breaker	M
		Belt	U	Table conveyors- reversing	H	Thickness	M
<b>Car dumper</b>	M	Disc	U	Wire draw	M	Vacuum filters	M
		Reciprocating	H	Wire roll	M		
<b>Car puller</b>	M	Screw	M			<b>Screens</b>	
				<b>Mills</b>		Air washing	U
<b>Clarifier</b>	U	<b>Food industry</b>		Cement kiln	H	Rotary, stone or gravel	U
		Cereal cooker	U	Dryer, Cooler	H	Traveling water intake	U
<b>Classifier</b>	M	Dough mixer	M	Kiln (other)	H		
		Meat grinder	M	Rod plain	H	<b>Slab pushers</b>	M
<b>Clay wokring machinery</b>		Meat slicer	M	Rod wedge bar	H		
Brick press	H			Rotary/ Ball	H	<b>Slewing</b>	H
Briquette machine	H	<b>Generators - not welding</b>	U	Tumbling barrel	H		
Clay working machinery	M					<b>Steering gear</b>	†
Plug mill	M	<b>Hammer mills</b>	H				
				<b>Mixers</b>		<b>Stokers</b>	U
<b>Compressors</b>		<b>Hoists</b>		Concrete	M		
Centrifugal	U	Heavy duty	H	Constant density	U	<b>Sugar industry</b>	
Lobe	M	Medium duty	M	Variable density	M	Can knife	M
Reciprocating		Skip hoist	M			Crusher	M
Multi cylinder	M			<b>Oil industry</b>		Mills	M
Single cylinder	H	<b>Laundry</b>		Chiller's	M		
		Tumbler	M	Oil well pump	M	<b>Textile industry</b>	
<b>Conveyors- Light duty uniform load</b>		Washer	M	Filter press	M	Batchers	M
Apron	U			Rotary kiln	M	Calenders	M
Assembly	U	<b>Line shafts</b>				Cards	M
Belt	U	Heavy duty	M	<b>Paper industry</b>		Dry cans	M
Bucket	U	Light duty	U	Agitator (mixer)	M	Dryers	M
Chain	U			Barker (hydraulic)	M	Dyeing machinery	M
Flight	U	<b>Lumber industry</b>		Barker (mechanical)	H	Knitting machinery	M
Oven	U	Barkers	M	Barking drum	H	Looms	M
Screw	U	Burner conveyor	H	Beater & Pulper	M	Mangles	M
		Chain/ Drag saw	H	Bleacher	U	Nappers	M
<b>Conveyors - Heavy duty uniform load</b>		Chain transfer	H	Calendnders	M	Pads	M
Apron	M	Chain way transfer	H	Calenders- super	H	Range drive	M
Assembly	M	De- barking drum	H	Converting machine	M	Slashers	M
Belt	M	Edger feed	H	Conveyors	U	Soapers	M
Bucket	M	Gang feed	M	Couch	M	Spinners	M
Chain	M	Green chain	M	Cutters - plates	H	Tenter frame	M
Flight	M	Live roll	H	Cylinders	M	Washers	M
Live roll	†	Log deck	H	Dryers	M	Winders	M
Oven	M	Log deck	H	Felt stretcher	M		
Reciprocating	M	Log haul	H	Felt whipper	H	<b>Windlass</b>	†
Screw	M	Log turning	H	Jordans	M		
Shaker	M	Log conveyoyr	H	Log haul	H		
		Of bearing roll	M	Machine real	M		
<b>Cranes</b>	†	Planer feed chaines	M	Presses	M		
		Planer hoist	M	Stock chest	M		
<b>Crusher</b>		Re-saw conveyoyr	M	Suction roll	M		
Ore	H	Roll cases	H	Washers & thickeners	M		
Stone	H	Slab conveyoyr	H	Winders	M		
Sugar	H	Sorting table - triple hoist	M				
		Triple hoist - Drive /conveyoyr	M	<b>Printing presses</b>	†		
<b>Dredger</b>		Transfer conveyoyr	M				
Cable reals	M	Transfer roll	M	<b>Pullers</b>			
Conveyoyrs	M	Tray drive	M	Barge haul	H		
Cutter head drive	H	Trimmer feed	M				
Pumps	M	Waster conveyoyr	M				
Screen drive	H	Small waste conveyoyr (belt)	U				
Stackers	M	Small waste conveyoyr (chain)	U				
Winches	M						

# F SERIES

## SELECTION PROCEDURE FOR MOTORISED UNITS

### EXAMPLE APPLICATION DETAILS

Absorbed power of driven machine = 0.7kW  
 Output speed of gearbox or Input speed of machine = 63 rev/min  
 Application = Uniformly loaded belt conveyor  
 Duration of service (hours per day) = 24hrs  
 Mounting position = 1  
 Ambient temperature = 25°C  
 Running time (%) = 100%

### 1 DETERMINE MECHANICAL SERVICE FACTOR (Fm)

Refer to Load Classification by Application, table 3.

Application = Uniformly loaded belt conveyor

Conveyors-uniformly loaded or fed		U = Uniform load
apron	U	
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 Shock
Electric motor, steam turbine or hydraulic motor	< 3	0.80	1.00
	3 - 10	1.00	1.25
	> 10	1.25	1.50

Therefore mechanical service factor (Fm) = 1.25

### 2 DETERMINE REQUIRED OUTPUT TORQUE AT GEARBOX OUTPUTSHAFT

$$\text{Absorbed output torque} = \frac{\text{Absorbed power} \times 9550}{\text{Gearbox output speed}}$$

$$\frac{0.7 \times 9550}{63} = 106 \text{ Nm}$$

### 3 SELECT GEARED MOTOR

Refer to selection table one motor size larger than absorbed power.  
 Absorbed power = 0.7 kW, therefore refer to 0.75 kW selection table.

Always select from 4 POLE selection table in the first instance as this offers a more economical solution.

Required output speed of gearbox = 63 rev/min

0.75 kW 4 POLE	N2 R/MIN	i	M2 Nm	Fm	N	Unit Designation	kg Kg	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	
	72.29	19.64	97	3.83	5715	F0423 20. M .75A --	37	
65.18	21.79	107	3.50	5854	F0423 22. M .75A --	37	80	
57.37	24.75	122	3.15	6013	F0423 25. M .75A --	37	80	
50.50	28.12	138	2.83	6324	F0423 28. M .75A --	37	80	
45.86	30.97	152	2.60	6400	F0423 32. M .75A --	37	80	
39.87	35.62	175	2.31	6400	F0423 36. M .75A --	37	80	
36.67	38.72	190	2.15	6400	F0423 40. M .75A --	37	80	
30.55	46.49	229	1.84	6400	F0423 50. M .75A --	37	80	

Go to point 4



# F SERIES

## SELECTION PROCEDURE FOR MOTORISED UNITS

### 4 CHECK OUTPUT TORQUE

Output torque (M2) of selected unit must be equal or more than required output torque at gearbox outputshaft.

Required output torque at gearbox outputshaft = 106 Nm

0.75 kW 4 POLE	N2 R/MIN	i	M2 Nm	Fm	N	Unit Designation	kg	
	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 of base mount unit	Motor Size
	72.29	19.64	97	3.83	5715	F0423 20. M .75A --	37	80
	65.18	21.79	107	3.50	5854	F0423 22. M .75A --	37	80
	57.37	24.75	122	3.15	6013	F0423 25. M .75A --	37	80
	50.50	28.12	138	2.83	6324	F0423 28. M .75A --	37	80
	45.86	30.97	152	2.60	6400	F0423 32. M .75A --	37	80
	39.87	35.62	175	2.31	6400	F0423 36. M .75A --	37	80
	36.67	38.72	190	2.15	6400	F0423 40. M .75A --	37	80
	30.55	46.49	229	1.84	6400	F0423 50. M .75A --	37	80

Selected unit's output torque (M2) = 107 Nm, therefore unit is acceptable

### 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

0.75 kW 4 POLE	N2 R/MIN	i	M2 Nm	Fm	N	Unit Designation	kg	
	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 of base mount unit	Motor Size
	72.29	19.64	97	3.83	5715	F0423 20. M .75A --	37	80
	65.18	21.79	107	3.50	5854	F0423 22. M .75A --	37	80
	57.37	24.75	122	3.15	6013	F0423 25. M .75A --	37	80
	50.50	28.12	138	2.83	6324	F0423 28. M .75A --	37	80
	45.86	30.97	152	2.60	6400	F0423 32. M .75A --	37	80
	39.87	35.62	175	2.31	6400	F0423 36. M .75A --	37	80
	36.67	38.72	190	2.15	6400	F0423 40. M .75A --	37	80
	30.55	46.49	229	1.84	6400	F0423 50. M .75A --	37	80

Selected unit's service factor (Fm) = 3.5 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 (N) of selected unit

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

0.75 kW 4 POLE	N2 R/MIN	i	M2 Nm	Fm	N	Unit Designation	kg	
	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 of base mount unit	Motor Size
	72.29	19.64	97	3.83	5715	F0423 20. M .75A --	37	80
	65.18	21.79	107	3.50	5854	F0423 22. M .75A --	37	80
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	36.67	38.72	190	2.15	6400	F0423 40. M .75A --	37	80
	30.55	46.49	229	1.84	6400	F0423 50. M .75A --	37	80

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

- a) Inertia of the Driven Machine (Referred to motor speed) >10      b) Ambient temperature is above 40°C  
 Inertia of Gear Unit plus Motor

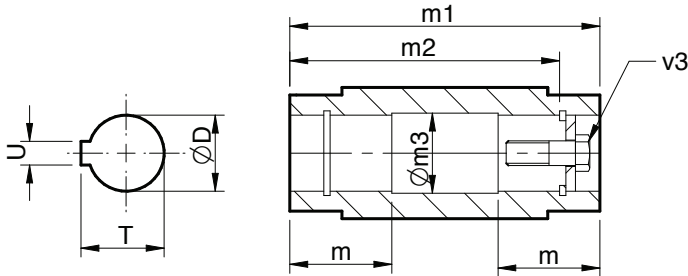
# F SERIES

## OUTPUT BORE OPTIONS

### Column 11 Entry

Standard Hollow Shaft H

Inch Hollow Shaft A



Size	Type of Bore	Column 11 Entry	Dimensions in mm (inch shaft in inches)							
			Ø D	m	m1	m2	Øm3	T	U	v3
F02	Standard	H	25.021 / 25.000	45.5	117.5	89	25.5	28.3	8	M10x50
	Inch	A	1.001" / 1.000"	1.80"	4.63"	3.5"	1.02"	1.11"	0.250"	0.375" UNF x 2"
F03	Standard	H	30.021 / 30.000	52	120	105	30.5	33.3	8	M10x50
	Inch	A	1.251 / 1.250	2.00"	4.72"	4.13"	1.27"	1.37"	0.250"	0.375" UNF x 2"
F04	Standard	H	35.025 / 35.000	65	150	132	35.5	38.3	10	M12x55
	Inch	A	1.376" / 1.375"	2.56"	5.91"	5.20"	1.39"	1.53"	0.3125"	0.50" UNF x 2.25"
F05	Standard	H	40.025 / 40.000	65	166	142	40.5	43.3	12	M16x70
	Inch	A	1.501" / 1.500"	2.56"	6.54"	5.59"	1.52"	1.67"	0.375"	0.625" UNF x 2.75
F06	Standard	H	40.025 / 40.000	90	200	156	40.5	43.3	12	M16x70
	Inch	A	1.501" / 1.500"	3.54"	7.87"	6.14"	1.52"	1.67"	0.375"	0.625" UNF x 2.75
F07	Standard	H	50.025 / 50.000	105	235	183	50.5	53.8	14	M16x70
	Inch	A	2.001" / 2.000"	4.13"	9.25"	7.20"	2.02"	2.22"	0.500"	0.625" UNF X 2.75
F08	Standard	H	60.030 / 60.000	117	265	210	60.5	64.4	18	M20x80
	Inch	A	2.3762" / 2.3750"	4.60"	10.43"	8.27"	2.40"	2.65"	0.625"	0.75" UNF X 3.25
F09	Standard	H	70.030 / 70.000	147	330	270	70.5	74.9	20	M20x80
	Inch	A	2.7512" / 2.7500"	5.80"	12.99"	10.63"	2.77"	3.03"	0.625"	0.75" UNF X 3.25
F10	Standard	H	90.035 / 90.000	165	370	313	90.5	95.4	25	M24x80
	Inch	A	3.6264" / 3.6250"	6.50"	14.57"	12.32"	3.64"	4.01"	0.875"	0.75" UNF X 4.25

# F SERIES

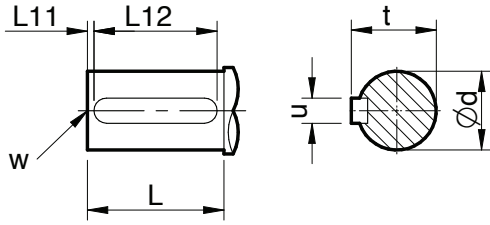
## OUTPUT SHAFT OPTIONS

### Column 11 Entry

Metric Single Extension



Inch Single Extension



Size	Type of Output Shaft	Column 11 Entry	Dimensions in mm (inch shaft in inches)						
			ø d	L	L11	L12	t	u	W
F02	Metric	C	-	-	-	-	-	-	-
	Inch	N	-	-	-	-	-	-	-
F03	Metric	C	25.015 / 25.002	47	3	40	28	8	M10 x 1.5 x 22
	Inch	N	1.0000" / 0.9995"	1.85"	*	1.69"	1.11"	0.250"	0.375" x 0.75"
F04	Metric	C	30.015 / 30.002	56	3	50	33	8	M12 x 1.75 x 28
	Inch	N	1.2500" / 1.2495"	2.20"	*	2.13"	1.36"	0.250"	0.5" UNF x 1.13"
F05	Metric	C	35.018 / 35.002	66	3	60	38	10	M16 x 2.0 x 36
	Inch	N	1.3750" / 1.3745"	2.60"	*	2.50"	1.51"	0.3125"	0.625 UNF x 1.5"
F06	Metric	C	40.018 / 40.002	76	3	70	43	12	M16 x 2.0 x 36
	Inch	N	1.625" / 1.624"	3.00"	*	2.50"	1.78"	0.375"	0.625" UNF x 1.5"
F07	Metric	C	50.018 / 50.002	95	3	80	53.5	14	M16 x 2.0 x 36
	Inch	N	2.000" / 1.999"	3.74"	*	3.00"	2.23"	0.500"	0.625" UNF x 1.5"
F08	Metric	C	60.030 / 60.011	114	3	100	64	18	M20 x 2.5 x 42
	Inch	N	2.3750" / 2.3740"	4.488"	*	4.00"	2.65"	0.625"	0.75" UNF x 1.65"
F09	Metric	C	70.030 / 70.011	135	3	110	74.5	20	M20 x 2.5 x 42
	Inch	N	2.875" / 2.874"	5.315"	*	5.00"	3.20"	0.750"	0.75" UNF x 1.65"
F10	Metric	C	90.035 / 90.013	172	5	140	95	25	M24 x 3.0 x 50
	Inch	N	3.625" / 3.624"	6.772"	*	6.38"	4.01"	0.875"	0.75" UNF x 1.65"

\* Inch shaft has an open ended keyway, therefore no 'L11' dimension is required

# F SERIES

## MOTOR ADAPTERS IEC & NEMA

### Double Reduction Units

#### Compact Motor 4 Pole - Column 12 Entry - D

Power	F0223		F0323		F0423		F0523		F0623		F0723		F0823	
	5.0 - 14.	16 - 90.	6.3 - 16.	20. - 100	6.3 - 25.	28. - 100	6.3 - 20.	22. - 100	6.3 - 20.	22. - 100	6.3 - 16.	20. - 100	6.3 - 25.	28. - 100
0.25 Kw	•	•	•	•	-	•	-	-	-	-	-	-	-	-
0.37 Kw	•	•	•	•	-	•	-	-	-	-	-	-	-	-
0.55 Kw	•	•	•	•	•	•	-	-	-	•	-	-	-	-
0.75 Kw	•	•	•	•	•	•	-	-	-	•	-	-	-	-
1.1 Kw	•	-	•	-	•	-	•	•	•	•	•	-	-	-
1.5 Kw	•	-	•	-	•	-	•	•	•	•	•	-	-	-
2.2 Kw	-	-	-	-	-	-	•	•	•	•	•	-	-	•
3.0 Kw	-	-	-	-	-	-	•	•	•	•	•	-	-	•
4.0 Kw	-	-	-	-	-	-	•	-	-	-	•	-	-	•
5.5 Kw	-	-	-	-	-	-	•	-	-	-	•	-	-	•
7.5 Kw	-	-	-	-	-	-	-	-	-	-	•	-	-	•

#### Standard Motor IEC B14- Column 12 entry

Motor	F0223		F0323		F0423		F0523		F0623		F0723	
	5.0 - 14.	16 - 90.	6.3 - 16.	20. - 100	6.3 - 25.	28. - 100	6.3 - 20.	22. - 100	6.3 - 20.	22. - 100	6.3 - 16.	20. - 100
71	H	H	H	H	-	H	-	-	-	-	-	-
80	B	K	B	K	B	K	-	G	-	G	-	G
90	D	R	D	R	D	R	Z	J	Z	J	-	J
100	E	S	E	S	E	S	B	L	B	L	B	L
112	E	S	E	S	E	S	B	L	B	L	B	L
132	-	-	-	-	-	-	-	-	-	-	D	Z

#### Standard Motor IEC B5- Column 12 entry

Motor	F0223		F0323		F0423		F0523		F0623		F0723		F0823		F0923		F1023	
	5.0 - 14.	16 - 90.	6.3 - 16.	20. - 100	6.3 - 25.	28. - 100	6.3 - 20.	22. - 100	6.3 - 20.	22. - 100	6.3 - 16.	20. - 100	6.3 - 25.	28. - 100	6.3 - 25.	28. - 100	6.3 - 25.	28. - 100
63	F	F	F	F	-	F	-	V	-	V	-	-	-	-	-	-	-	-
71	G	G	G	G	-	G	-	D	-	D	-	-	-	-	-	-	-	-
80	A	J	A	J	A	J	W	F	W	F	-	-	D	-	F	-	-	-
90	C	Q	C	Q	C	Q	Y	H	Y	H	A	H	E	-	F	-	-	-
100	-	-	-	-	-	-	A	K	A	K	A	K	F	-	G	-	-	F
112	-	-	-	-	-	-	A	K	A	K	A	K	F	-	G	-	-	F
132	-	-	-	-	-	-	Z	P	Z	P	C	M	B	G	H	-	-	F
160	-	-	-	-	-	-	-	-	-	-	E	P	C	H	A	J	A	G
180	-	-	-	-	-	-	-	-	-	-	-	-	B	K	J	B	H	J
200	-	-	-	-	-	-	-	-	-	-	-	-	C	L	L	C	J	K
225	-	-	-	-	-	-	-	-	-	-	-	-	D	M	D	D	-	-
250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
315	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### NEMA Motor C Face- Column 12 entry

Motor	F0223		F0323		F0423		F0523		F0623		F0723		F0823		F0923		F1023	
	5.0 - 14.	16 - 90.	6.3 - 16.	20. - 100	6.3 - 25.	28. - 100	6.3 - 20.	22. - 100	6.3 - 20.	22. - 100	6.3 - 16.	20. - 100	6.3 - 25.	28. - 100	6.3 - 25.	28. - 100	6.3 - 25.	28. - 100
56C	T	U	T	U	T	U	-	Q	-	Q	-	Q	M	-	-	-	-	-
143/145TC	V	W	V	W	V	W	-	R	-	R	-	R	N	-	-	-	-	-
182/184TC	X	-	X	-	X	-	S	T	S	T	S	T	J	P	S	-	-	P
213/215TC	-	-	-	-	-	-	U	-	U	-	U	V	K	Q	T	-	-	Q
254/256TC	-	-	-	-	-	-	-	-	-	-	W	-	L	U	U	-	-	R
284/286TC	-	-	-	-	-	-	-	-	-	-	-	-	-	Q	V	M	-	S
324/326TC	-	-	-	-	-	-	-	-	-	-	-	-	R	W	N	-	-	T
364/365TC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
404/405TC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
444/445TC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

# F SERIES

## MOTOR ADAPTERS IEC & NEMA

### Triple Reduction Units

#### Compact Motor 4 Pole - Column 12 Entry - D

Power	F0233	F0333	F0433	F0533	F0633	F0733	F0833	F0933
	80. - 320	71. - 360	71. - 360	100 - 360	100 - 360	80 - 360	100 - 360	100 - 360
0.25 Kw	•	•	•	•	•	•	•	•
0.37 Kw	•	•	•	•	•	•	•	•
0.55 Kw	•	•	•	•	•	•	•	•
0.75 Kw	•	•	•	•	•	•	•	•
1.1 Kw	-	-	-	-	-	•	•	•
1.5 Kw	-	-	-	-	-	•	•	•
2.2 Kw	-	-	-	-	-	•	•	•
3.0 Kw	-	-	-	-	-	•	•	•
4.0 Kw	-	-	-	-	-	•	•	•
5.5 Kw	-	-	-	-	-	•	•	•
7.5 Kw	-	-	-	-	-	•	•	•

#### Standard Motor IEC B14- Column 12 entry

Motor	F0233	F0333	F0433	F0533	F0633	F0733	F0833
	80. - 320	71. - 360	71. - 360	100 - 360	100 - 360	80 - 360	100 - 360
71	H	H	H	H	H	-	-
80	K	K	K	K	K	G	G
90	R	R	R	R	R	J	J
100	S	S	S	S	S	L	L
112	S	S	S	S	S	L	L
132	-	-	-	-	-	-	N

#### Standard Motor IEC B5- Column 12 entry

Motor	F0233	F0333	F0433	F0533	F0633	F0733	F0833	F0933	F1033
	80. - 320	71. - 360	71. - 360	100 - 360	100 - 360	80 - 360	100 - 360	100 - 360	100 - 360
63	F	F	F	F	F	V	-	-	-
71	G	G	G	G	G	D	-	-	-
80	J	J	J	J	J	F	F	D	E
90	Q	Q	Q	Q	Q	H	H	E	F
100	-	-	-	-	-	K	K	F	G
112	-	-	-	-	-	K	K	F	G
132	-	-	-	-	-	-	M	G	H
160	-	-	-	-	-	-	P	H	J
180	-	-	-	-	-	-	-	-	K
200	-	-	-	-	-	-	-	-	L
225	-	-	-	-	-	-	-	-	M

#### NEMA Motor C Face- Column 12 entry

Motor	F0233	F0333	F0433	F0533	F0633	F0733	F0833	F0933	F1033
	80. - 320	71. - 360	71. - 360	100 - 360	100 - 360	80 - 360	100 - 360	100 - 360	100 - 360
56C	U	U	U	U	U	Q	Q	M	-
143/145TC	W	W	W	W	W	R	R	N	-
182/184TC	-	-	-	-	-	T	T	P	S
213/215TC	-	-	-	-	-	-	V	Q	T
254/256TC	-	-	-	-	-	-	-	U	U
284/286TC	-	-	-	-	-	-	-	-	V
324/326TC	-	-	-	-	-	-	-	-	W

# F SERIES

## MOTOR ADAPTERS IEC & NEMA

### Quadruple Reduction Units

#### Compact Motor 4 Pole - Column 12 Entry - D

Power	F0343	F0443	F0543	F0643	F0743	F0843	F0943	F1043
	400 +	400 +	400 +	400 +	400 +	400 +	400 +	400 +
0.25 Kw	•	•	•	•	•	-	-	-
0.37 Kw	•	•	•	•	•	-	-	-
0.55 Kw	•	•	•	•	•	•	•	-
0.75 Kw	•	•	•	•	•	•	•	-
1.1 Kw	-	-	-	-	-	•	•	•
1.5 Kw	-	-	-	-	-	•	•	•
2.2 Kw	-	-	-	-	-	•	•	•
3.0 Kw	-	-	-	-	-	•	•	•
4.0 Kw	-	-	-	-	-	-	-	•
5.5 Kw	-	-	-	-	-	-	-	•
7.5 Kw	-	-	-	-	-	-	-	•

#### Standard Motor IEC B14- Column 12 entry

	F0343	F0443	F0543	F0643	F0743	F0843	F0943	F1043
Motor	400 +	400 +	400 +	400 +	400 +	400 +	400 +	400 +
71	H	H	H	H	H	-	-	-
80	K	K	K	K	K	G	G	G
90	R	R	R	R	R	J	J	J
100	S	S	S	S	S	L	L	L
112	S	S	S	S	S	L	L	L
132	-	-	-	-	-	-	-	N

#### Standard Motor IEC B5- Column 12 entry

Motor	F0343	F0443	F0543	F0643	F0743	F0843	F0943	F1043
	400 +	400 +	400 +	400 +	400 +	400 +	400 +	400 +
63	F	F	F	F	F	V	V	-
71	G	G	G	G	G	D	D	-
80	J	J	J	J	J	F	F	F
90	Q	Q	Q	Q	Q	H	H	H
100	-	-	-	-	-	K	K	K
112	-	-	-	-	-	K	K	K
132	-	-	-	-	-	P	P	M
160	-	-	-	-	-	-	-	P

#### NEMA Motor C Face- Column 12 entry

	F0343	F0443	F0543	F0643	F0743	F0843	F0943	F1043
Motor	80 - 320	71 - 360	71 - 360	100 - 360	100 - 360	80 - 360	100 - 360	100 - 360
56C	U	U	U	U	U	Q	Q	Q
143/145TC	W	W	W	W	W	R	R	R
182/184TC	-	-	-	-	-	T	T	T
213/215TC	-	-	-	-	-	-	-	V

# F SERIES

## LUBRICATION

F02, F03, F04, F05, F06 & F07 Units & Primary Units used for Quintuple Reduction, are supplied factory filled with EP mineral oil (Grade 6E) appropriate to the intended mounting position. If the unit is supplied without lubricant the unit must be filled with the correct lubricant and quantity as listed below:

F08, F09, & F10 Units require filling with EP mineral oil (Grade 6E)

Lubricant quantities are approximate fill until oil escapes from the level plug hole, fit ventilator plug (when supplied) in the appropriate position for the required mounting position (see installation and maintenance instructions)

### Temperature Limitations

The standard lubricant is suitable for operation in ambient temperatures of 0° to 35°C, outside of this consult Table 1 or consult Application Engineering.

**Table 1 Oil Grades**

Lubricant	Ambient temperature range		
	-5°C - 20°C (E) -30°C - 20°C (H)	0°C - 35°C	20°C - 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)

### Lubricant Quantities (Litres)

Double Reduction										
Size		F0223	F0323	F0423	F0523	F0623	F0723	F0823	F0923	F1023
Mounting Position	1	0.80	1.20	1.70	2.30	4.70	8.50	12.50	21.00	36.00
	2	0.40	0.60	1.10	1.80	2.50	4.50	9.00	15.00	22.50
	3	0.40	0.60	1.40	1.80	3.90	7.50	11.00	17.50	29.00
	4	0.50	0.75	1.20	2.00	2.60	7.50	10.50	17.00	29.00
	5	1.10	1.20	2.80	2.80	3.90	7.50	14.00	26.00	45.00
	6	1.30	1.50	2.10	3.20	5.00	8.50	15.00	26.00	45.00

Triple Reduction										
Size		F0233	F0333	F0433	F0533	F0633	F0733	F0833	F0933	F1033
Mounting Position	1	0.80	1.20	1.70	2.30	4.70	8.50	12.50	21.00	34.0
	2	0.40	0.60	1.15	1.85	2.60	4.60	9.20	17.00	24.0
	3	0.40	0.60	1.45	1.85	4.00	7.60	11.20	19.50	29.0
	4	0.50	0.75	1.25	2.05	2.70	7.60	10.70	19.00	29.0
	5	1.10	1.20	2.80	2.80	3.90	7.50	14.00	26.00	45.0
	6	1.30	1.50	2.15	3.25	5.10	8.70	15.20	28.00	47.0

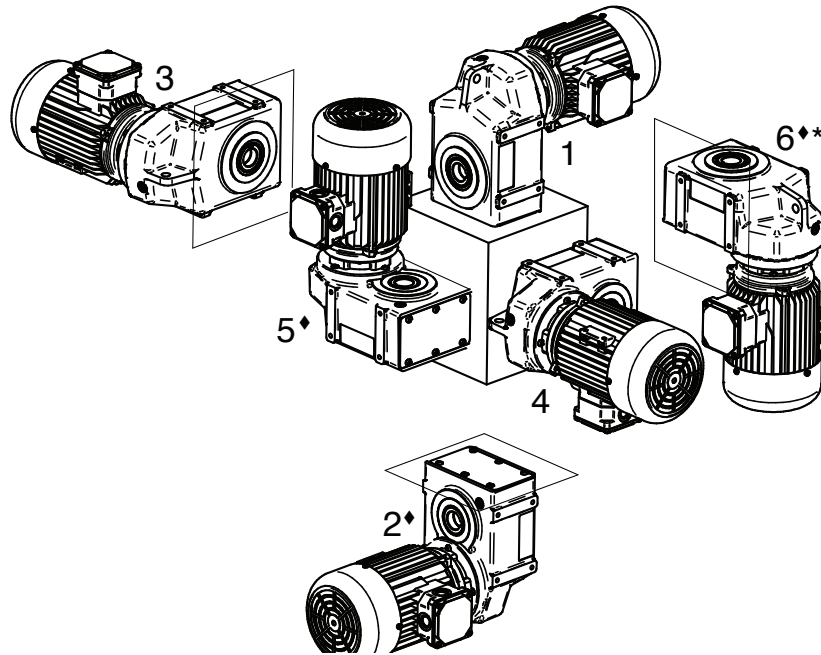
Quadruple Reduction										
Size		F0343		F0443		F0543		F0643		
		Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
		R0122	F0323	R0122	F0423	R0322	F0523	R0322	F0623	
Mounting Position	1	0.50	1.20	0.50	1.70	0.80	2.30	0.80	4.70	
	2	0.50	0.60	0.50	1.10	0.80	1.80	0.80	2.50	
	3	0.50	0.60	0.50	1.40	0.80	1.80	0.80	3.90	
	4	0.50	0.75	0.50	1.20	0.80	2.00	0.80	2.60	
	5	0.70	1.20	0.70	2.80	1.10	2.80	1.10	3.90	
	6	1.00	1.50	1.00	2.10	1.40	3.20	1.40	5.00	

Quadruple Reduction										
Size		F0743		F0843		F0943		F1043		
		Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
		R0322	F0723	R0522	F0823	R0522	F0923	R0722	F1023	
Mounting Position	1	0.80	8.50	1.50	12.50	1.50	21.00	2.60	36.00	
	2	0.80	4.50	1.50	9.00	1.50	15.00	2.60	22.50	
	3	0.80	7.50	1.50	11.00	1.50	17.50	2.60	29.00	
	4	0.80	7.50	1.50	10.50	1.50	17.00	2.60	29.00	
	5	1.10	7.50	2.00	14.00	2.00	26.00	3.20	45.00	
	6	1.40	8.50	2.60	15.00	2.60	26.00	4.70	45.00	

# F SERIES

## MOUNTING POSITIONS

Column 13 entry



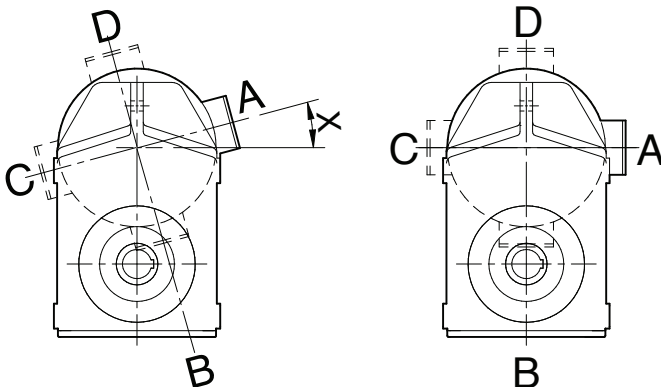
\* Not Recommended for Geared Motors - Consult Application Engineering

† Gear Units selected for use in mounting positions 5 and 6 should only be used with overall ratios greater or equal to those shown in the table below

Size	Input Speed (rpm)			
	< 1000	< 1500	< 1800	> 1800
F08	All	All	All	Consult Application Engineering
F09	All	11.0	14.0	
F10	11.0	20	25.0	

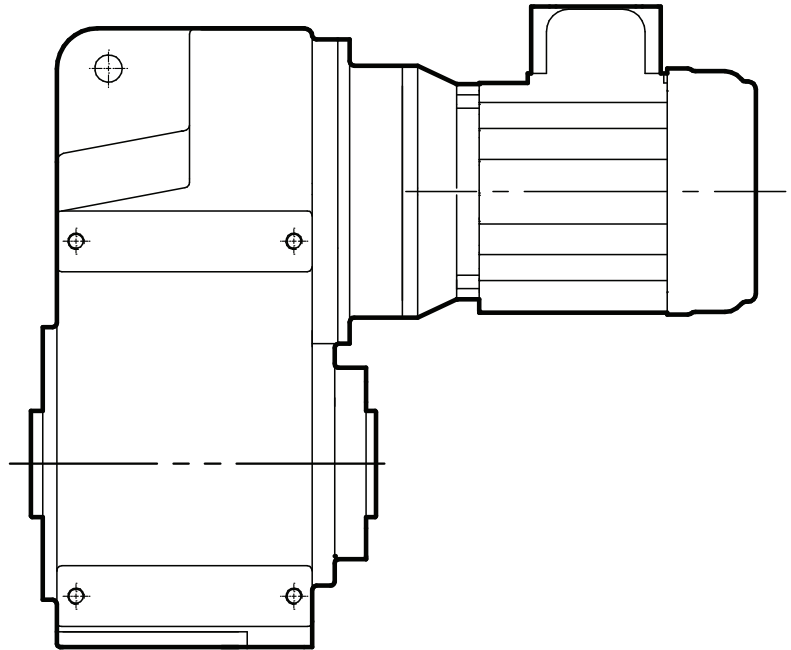
Mounting Positions - shown as motorised - applies also for reducers

Column 14 entry



Column 14 entry	Terminal Box Position (X)	
	F02	F03 - F10
A	15°	0°
B	105°	90°
C	195°	180°
D	285°	270°
-	Reducer or no motor fitted	





**MOTORISED  
F SERIES**

# F SERIES

## MOTOR

### PERFORMANCE DATA

**TEFC Squirrel Cage 3 Phase Motors**  
**4 poles = 1500 rpm 400V, 50Hz, S1**  
**IP55, Class F**  
**IE2 Efficiency Class**

P (kW)	Frame Size	n RPM	I (A)	Ist / I	Tst / T	J (kgm <sup>2</sup> )
0.12	63	1360	0.6	2.6	2.5	0.0004
0.18	63	1370	0.72	3.0	2.2	0.0005
0.25	71	1370	0.65	3.5	2.0	0.0007
0.37	71	1380	0.88	4.0	2.1	0.0009
0.55	80	1420	1.45	5.0	2.0	0.0015
0.75	80	1420	1.8	5.3	2.7	0.0020
1.1	90S	1430	2.4	6.2	2.7	0.0045
1.5	90L	1430	3.3	6.3	2.7	0.0053
2.2	100L	1450	4.7	6.4	2.9	0.0085
3.0	100L	1450	6.3	7.7	2.9	0.0110
4.0	112M	1450	8.2	7.0	2.9	0.0125
5.5	132S	1450	11.1	5.9	2.0	0.033
7.5	132M	1450	14.8	5.6	2.0	0.036
11	160M	1460	21	6.7	2.2	0.081
15	160L	1460	28.5	7.1	2.6	0.099
18.5	180M	1470	35	7.2	2.6	0.166
22	180L	1470	41	7.3	2.6	0.195
30	200L	1470	56	6.7	2.2	0.31
37	225S	1470	68	7.1	2.6	0.36
45	225M	1480	83	7.5	2.7	0.44
55	250M	1480	98	7.5	2.6	0.77
75	280S	1480	134	6.8	2.5	1.25
90.0	280M	1480	160	7.1	2.5	1.50
110	315S	1480	195	7.7	2.4	2.30
132	315M	1480	232	7.2	2.4	2.60
160	315L	1480	284	7.2	2.4	2.90

**TEFC Squirrel Cage 3 Phase Motors**  
**6 poles = 1000 rpm 400V, 50Hz, S1**  
**IP55, Class F**  
**IE2 Efficiency Class**

P (kW)	Frame Size	n RPM	I (A)	Ist / I	Tst / T	J (kgm <sup>2</sup> )
0.12	63	900	0.57	2.1	2.1	0.0007
0.18	71	900	0.6	3.1	2	0.0009
0.25	71	920	0.77	3.4	2.1	0.0011
0.37	80	920	1.09	3.6	2.2	0.0019
0.55	80	920	1.51	3.8	1.8	0.0024
0.75	90S	930	2.36	4.5	1.8	0.005
1.1	90L	930	3	4	2.3	0.006
1.5	100L	940	3.8	4	1.9	0.009
2.2	112M	940	5.5	4.5	1.7	0.0125
3	132S	960	8	5.5	1.8	0.033
4	132M	960	10	4.6	1.7	0.038
5.5	132M	960	12.9	5.1	2	0.045
7.5	160M	970	15.4	7.4	1.7	0.087
11	160L	970	23	7.5	1.9	0.114
15	180L	970	31	6.5	1.8	0.192
18.5	200L	980	36	6.7	2.2	0.380
22	200L	980	43	6.6	2.2	0.440
30	225M	985	56	7	2.6	0.660
37	250M	985	69	6.8	2.7	1.16
45	280S	985	85	7	2.5	1.85
55	280M	985	100	7	2.7	2.20
75	315S	985	139	7.4	2.4	3.20
90	315M	985	163	7.5	2.4	4.10
110	315L	985	201	7.4	2.5	4.90
132	315L	985	240	7.5	2.7	5.60

**Key**

I = Nominal current	Ist/I = Starting current factor	Tst/T = Starting torque factor	J = Motor moment of inertia
P = Rated output power	n = Motor speed	T = Rated output torque	

**Recalculation Factors Fv**

Recalculation factors for current at rated voltages other than 400V, 50 Hz.

50 Hz	Fv
220V	1.82
230V	1.74
415V	0,96
500V	0,80
660V	0,61
690V	0,58

**60 Hz Operation**

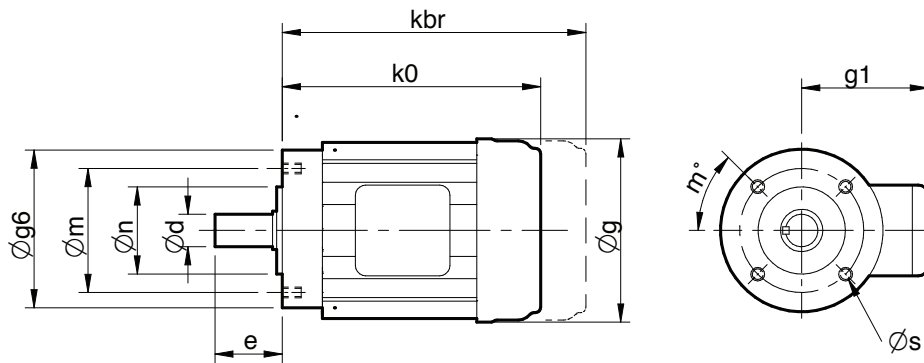
Motors wound for a certain voltage at 50 Hz can be operated at 60 Hz, without any modifications, subject to the following changes in their data

60 Hz	P (kW)	n (rpm)	I (A)	Ist (I)	T (Nm)	Tst (T)
380V	100%	120%	100%	80%	83%	66%
400V	100%	120%	98%	83%	83%	70%
415V	105%	120%	100%	8%8	86%	78%
440V	110%	120%	100%	95%	91%	85%
460V	115%	120%	100%	100%	96%	95%
480V	120%	120%	100%	105%	100%	100%

# F SERIES

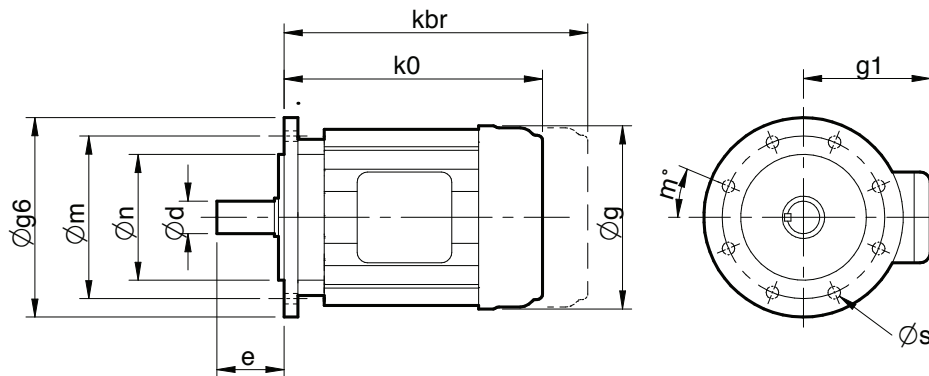
## MOTOR DETAILS

B14 'C' face



Size	$\varnothing g6$	$\varnothing m$	$\varnothing n$	$\varnothing d$	e	$k0$	kbr	$\varnothing g$	g1	m	$\varnothing s$
71	105	85	70	14	30	220	270	140	105	45 deg	4xM6
80	120	100	80	19	40	240	290	158	122	45 deg	4xM6
90S	140	115	95	24	50	260	310	180	129	45 deg	4xM8
90L	140	115	95	24	50	280	330	180	129	45 deg	4xM8
100L	160	130	110	28	60	310	375	198	152	45 deg	4xM8
112M	160	130	110	28	60	330	405	222	165	45 deg	4xM8
132S	200	165	130	38	80	380	475	260	185	45 deg	4xM10
132M	200	165	130	38	80	420	505	260	185	45 deg	4xM10

B5 'D' face



Size	$\varnothing g6$	$\varnothing m$	$\varnothing n$	$\varnothing d$	e	$k0$	kbr	$\varnothing g$	g1	m	$\varnothing s$
63	140	115	95	11	23	195	260	125	100	45 deg	4x9 (M8)
71	160	130	110	14	30	220	270	140	105	45 deg	4x9 (M8)
80	200	165	130	19	40	240	290	158	122	45 deg	4x11 (M10)
90S	200	165	130	24	50	260	310	180	129	45 deg	4x11 (M10)
90L	200	165	130	24	50	280	330	180	129	45 deg	4x11 (M10)
100L	250	215	180	28	60	310	375	198	152	45 deg	4x14 (M12)
112M	250	215	180	28	60	330	405	222	165	45 deg	4x14 (M12)
132S	300	265	230	38	80	380	475	260	185	45 deg	4x14 (M12)
132M	300	265	230	38	80	420	505	260	185	45 deg	4x14 (M12)
160M	350	300	250	42	110	480	565	320	264	45 deg	4x18 (M16)
160L	350	300	250	42	110	530	615	320	264	45 deg	4x18 (M16)
180M	350	300	250	48	110	560	-	360	279	45 deg	4x18 (M16)
180L	350	300	250	48	110	595	-	360	279	45 deg	4x18 (M16)
200L	400	350	300	55	110	660	-	400	317	45 deg	4x18 (M16)
225S	450	400	350	60	140	680	-	450	385	22.5 deg	8x18 (M16)
225M	450	400	350	60	140	715	-	450	385	22.5 deg	8x18 (M16)
250M	550	500	450	65	140	770	-	500	405	22.5 deg	8x18 (M16)
280S	550	500	450	75	140	850	-	560	480	22.5 deg	8x18 (M16)
280M	550	500	450	75	140	930	-	560	480	22.5 deg	8x18 (M16)
315S	660	600	550	80	170	1100	-	630	530	22.5 deg	8x22 (M20)
315M	660	600	550	80	170	1260	-	630	530	22.5 deg	8x22 (M20)
315L	660	600	550	80	170	1400	-	630	530	22.5 deg	8x22 (M20)

\* Motor lengths for own brand standard motors. These lengths may vary if alternative motor is fitted.

# F SERIES

## ADDITIONAL MOTOR FEATURES

### Additional Motor Features - column 19 entry

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

Please refer to Application Engineering for details of the following additional motor features

- PGF encoder flange
- Wash down
- Customised brake torque
- Separate brake supply
- Aluminium fan
- Anti Condensation heater
- Bi-metal temperature detectors, Thermostat
- EExEII T3
- Ex nA II T3
- IP56
- IP65
- Metal fan cover
- Rain cowl
- Separate terminal box

# F SERIES

## ADDITIONAL GEARBOX FEATURES

### Additional Gearbox Features - column 20 entry

Column 20 Entry	Double Oil Seals on Output Shaft	Oil Level Glass F06- F10	* Motorised Backstop		Special
			CW Rotation	CCW Rotation	
-					
A	•				
B		•			
C	•	•			
D			•		
E	•		•		
F		•	•		
G	•	•	•		
H				•	
I	•			•	
J		•		•	
K	•	•		•	
L					•

Please refer to Application Engineering for details of the special additional gearbox features for example :-

- Prime paint only
- Wash down
- BISSC compatible
- Special oil (food compatible, bio-degradable, different viscosities etc)

\* IEC Frame Sizes 100-200, NEMA frame sizes 182TC - 326TC

# F SERIES

## EXACT RATIOS

### Exact Ratios - Double Reduction

Column Entry			F0223	F0323	F0423	F0523	F0623	F0723	F0823	F0923	F1023
6	7	8									
5.0			5.90	-	-	-	-	-	-	-	-
6.3			7.97	6.65	6.32	6.31	6.27	6.42	6.24	6.57	6.43
9.0			9.07	8.98	8.86	8.87	8.82	8.89	8.85	9.04	8.99
10			10.27	10.21	9.77	9.95	9.89	9.99	9.83	10.13	9.77
12			13.14	11.57	11.09	11.16	11.10	10.98	10.93	11.37	11.10
14			14.16	14.80	14.09	14.18	14.09	14.35	14.14	14.66	14.46
16			17.88	15.95	16.01	16.07	15.98	16.31	15.87	16.37	15.61
20			20.27	20.14	19.64	19.17	19.05	19.81	19.46	20.45	20.05
22			23.16	22.83	21.79	22.07	21.94	21.79	21.93	22.70	22.76
25			25.77	26.09	24.75	25.67	25.52	25.04	25.53	25.88	25.77
28			28.41	29.02	28.12	28.72	28.55	28.39	28.32	29.11	29.07
32			31.26	31.99	30.97	30.61	30.43	31.32	30.99	32.96	32.30
36			36.63	35.21	35.62	36.28	36.06	35.86	35.06	36.69	35.32
40			43.94	41.25	38.72	38.74	38.50	40.55	39.58	40.76	39.25
50			51.22	49.49	46.49	48.07	47.78	47.01	47.98	49.85	46.38
56			56.91	57.69	55.79	56.68	56.34	56.07	55.95	57.58	55.97
63			68.54	64.10	62.86	62.06	61.69	61.40	61.46	63.56	64.49
71			78.56	77.19	73.07	76.06	75.60	73.68	75.32	77.26	74.83
90			89.28	88.47	82.94	84.78	84.26	84.78	82.25	87.44	87.21
100			-	100.5	94.29	95.08	94.50	94.20	94.71	98.32	93.70

### Exact Ratios - Triple Reduction

Column Entry			F0233	F0333	F0433	F0533	F0633	F0733	F0833	F0933	F1033
6	7	8									
63			63.9	-	-	-	-	-	-	-	-
71			72.4	71.9	69.7	-	-	-	-	-	-
80			82.7	81.5	79.0	-	-	78.99	-	-	-
90			92.0	93.2	90.3	-	-	91.87	-	-	-
100			101.5	103.6	100.4	102.8	102.2	102.8	102.4	105.3	104.9
112			111.6	114.3	110.7	113.2	112.5	109.6	112.1	115.2	118.7
125			130.8	125.7	121.9	130.2	129.4	129.8	126.8	130.3	132.1
160			156.9	147.3	142.8	141.6	140.7	138.6	143.1	147.1	146.8
180			182.9	176.7	171.3	169.9	168.9	172.0	173.5	178.3	179.6
200			203.3	206.0	199.7	203.9	202.7	202.9	202.3	208.0	207.4
225			244.8	228.9	221.8	229.8	228.4	222.1	222.2	228.4	228.9
280			280.6	275.7	267.1	267.1	265.5	272.2	272.3	279.9	278.3
320			318.8	316.0	306.2	303.2	301.3	303.4	297.4	305.7	314.9
360			-	359.1	348.0	344.7	342.6	340.3	342.4	352.0	354.1

### Exact Ratios - Quadruple Reduction

Column Entry			F0343	F0443	F0543	F0643	F0743	F0843	F0943	F1043
6	7	8								
400			399.9	398.8	409.9	407.4	399.8	388.5	413.2	411.3
450			453.4	455.7	451.4	448.6	453.3	439.5	459.9	457.9
500			518.1	506.9	505.0	502.0	499.2	496.2	511.0	508.7
560			576.3	558.8	564.5	561.0	550.5	577.1	573.0	565.6
630			635.4	615.0	631.5	627.7	624.3	601.5	637.9	622.2
710			699.3	707.4	699.2	729.3	713.0	701.4	708.7	715.0
800			819.3	828.8	808.1	803.2	793.1	815.8	807.1	810.7
900			893.1	901.1	909.8	904.3	899.3	912.7	896.7	894.2
10C			982.9	994.4	1025	1019	992.0	1003	1002	1024
11C			1146	1159	1149	1086	1118	1098	1113	1140
12C			1273	1260	1270	1262	1280	1231	1267	1256
14C			1382	1400	1442	1433	1447	1352	1398	1386
16C			1610	1686	1607	1629	1678	1657	1605	1601
18C			1796	1778	1824	1813	1776	1801	1761	1794
20C			2086	1933	1994	1982	2001	1979	2030	2025
22C			2155	2196	2264	2250	2214	2167	2241	2236
25C			2512	2429	2573	2558	2517	2425	2487	2481
28C			2807	2784	2923	3016	2892	2655	2772	2796
32C			3272	3164	3323	3303	3002	3254	3109	3261
36C			3636	3565	3582	3560	3470	3627	3720	3752
40C			-	4145	3992	4048	3945	4067	4172	4168
45C			-	4704	4539	-	4539	4442	4722	4718
50C			-	5348	-	-	5043	5114	5310	5305

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.12 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
230.4	5.903	4.85	12.99	2978	F0223 5.0_M_...12A--	20	63
170.6	7.974	6.55	11.19	3178	F0223 6.3_M_...12A--	20	63
150.0	9.069	7.45	10.45	3256	F0223 9.0_M_...12A--	20	63
132.4	10.27	8.44	9.77	3329	F0223 10_M_...12A--	20	63
103.5	13.14	10.8	8.44	3489	F0223 12_M_...12A--	20	63
96.04	14.16	11.6	8.04	3532	F0223 14_M_...12A--	20	63
76.07	17.88	14.7	6.88	3673	F0223 16_M_...12A--	20	63
67.10	20.27	16.7	6.37	3764	F0223 20_M_...12A--	20	63
58.72	23.16	19.0	5.78	3843	F0223 22_M_...12A--	20	63
52.78	25.77	21.2	5.39	3850	F0223 25_M_...12A--	20	63
47.88	28.41	23.3	5.01	3850	F0223 28_M_...12A--	20	63
43.50	31.26	25.7	4.71	3850	F0223 32_M_...12A--	20	63
37.13	36.63	30.1	4.32	3850	F0223 36_M_...12A--	20	63
30.95	43.94	36.1	3.60	3850	F0223 40_M_...12A--	20	63
26.55	51.22	42.1	3.09	3850	F0223 50_M_...12A--	20	63
23.90	56.91	46.8	2.78	3850	F0223 56_M_...12A--	20	63
19.84	68.54	56.3	2.31	3850	F0223 63_M_...12A--	20	63
17.31	78.56	64.5	1.95	3850	F0223 71_M_...12A--	20	63
15.23	89.28	73.3	1.54	3850	F0223 90_M_...12A--	20	63
16.44	82.72	67.3	1.93	3850	F0233 80_M_...12A--	21	63
14.78	92.02	74.8	1.74	3850	F0233 90_M_...12A--	21	63
13.41	101.45	82.5	1.58	3850	F0233 100_M_...12A--	21	63
12.18	111.65	90.8	1.43	3850	F0233 112_M_...12A--	21	63
10.40	130.81	106	1.25	3850	F0233 125_M_...12A--	21	63
8.67	156.93	128	1.10	3850	F0233 160_M_...12A--	21	63
7.43	182.93	149	0.97	3850	F0233 180_M_...12A--	21	63
6.69	203.26	165	0.89	3850	F0233 200_M_...12A--	21	63
23.58	57.69	47.4	4.00	5000	F0323 56_M_...12A--	22	63
21.22	64.10	52.7	3.39	5000	F0323 63_M_...12A--	22	63
17.62	77.19	63.4	2.35	5000	F0323 71_M_...12A--	22	63
15.37	88.47	72.7	1.76	5000	F0323 90_M_...12A--	22	63
13.53	100.55	82.6	1.54	5000	F0323 100_M_...12A--	22	63
16.68	81.53	66.3	3.77	5000	F0333 80_M_...12A--	23	63
14.60	93.16	75.8	3.30	5000	F0333 90_M_...12A--	23	63
13.12	103.64	84.3	2.97	5000	F0333 100_M_...12A--	23	63
11.90	114.26	92.9	2.69	5000	F0333 112_M_...12A--	23	63
10.82	125.74	102	2.45	5000	F0333 125_M_...12A--	23	63
9.23	147.32	120	2.09	5000	F0333 160_M_...12A--	23	63
7.69	176.75	144	1.74	5000	F0333 180_M_...12A--	23	63
6.60	206.03	168	1.49	5000	F0333 200_M_...12A--	23	63
5.94	228.92	186	1.34	5000	F0333 225_M_...12A--	23	63
4.93	275.67	224	1.12	5000	F0333 280_M_...12A--	23	63
4.30	315.97	257	0.97	5000	F0333 320_M_...12A--	23	63
3.79	359.10	292	0.86	5000	F0333 360_M_...12A--	23	63
9.53	142.76	116	3.62	6400	F0433 160_M_...12A--	29	63
7.94	171.28	139	3.02	6400	F0433 180_M_...12A--	29	63
6.81	199.65	162	2.59	6400	F0433 200_M_...12A--	29	63
6.13	221.84	180	2.33	6400	F0433 225_M_...12A--	29	63
5.09	267.14	217	1.93	6400	F0433 280_M_...12A--	29	63
4.44	306.20	249	1.69	6400	F0433 320_M_...12A--	29	63
3.91	347.99	283	1.48	6400	F0433 360_M_...12A--	29	63
3.41	398.75	319	1.32	6400	F0443 400_M_...12A--	37	63
2.98	455.67	365	1.15	6400	F0443 450_M_...12A--	37	63
2.68	506.89	406	1.04	6400	F0443 500_M_...12A--	37	63
2.43	558.85	447	0.94	6400	F0443 560_M_...12A--	37	63
5.92	229.77	187	3.75	9000	F0533 225_M_...12A--	39	63
5.09	267.11	217	3.22	9000	F0533 280_M_...12A--	39	63
4.49	303.17	247	2.84	9000	F0533 320_M_...12A--	39	63
3.95	344.65	280	2.50	9000	F0533 360_M_...12A--	39	63
3.32	409.90	328	2.13	9000	F0543 400_M_...12A--	49	63
3.01	451.39	361	1.94	9000	F0543 450_M_...12A--	49	63
2.69	505.02	404	1.73	9000	F0543 500_M_...12A--	49	63
2.41	564.47	452	1.55	9000	F0543 560_M_...12A--	49	63
2.15	631.55	506	1.38	9000	F0543 630_M_...12A--	49	63
1.95	699.15	560	1.25	9000	F0543 710_M_...12A--	49	63
1.68	808.08	647	1.08	9000	F0543 800_M_...12A--	49	63
1.49	909.80	728	0.96	9000	F0543 900_M_...12A--	49	63
1.33	1025.12	821	0.85	9000	F0543 10C_M_...12A--	49	63

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.12 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> - <input type="text" value="20"/> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
4.51	301.33	245	3.67	14500	F0633 320 M _ _ _ _ .12A --	52	63
3.97	342.56	279	3.23	14500	F0633 360 M _ _ _ _ .12A --	52	63
3.34	407.41	326	2.76	14500	F0643 400 M _ _ _ _ .12A --	63	63
3.03	448.65	359	2.51	14500	F0643 450 M _ _ _ _ .12A --	63	63
2.71	501.96	402	2.24	14500	F0643 500 M _ _ _ _ .12A --	63	63
2.42	561.05	449	2.00	14500	F0643 560 M _ _ _ _ .12A --	63	63
2.17	627.72	502	1.79	14500	F0643 630 M _ _ _ _ .12A --	63	63
1.86	729.32	584	1.54	14500	F0643 710 M _ _ _ _ .12A --	63	63
1.69	803.17	643	1.40	14500	F0643 800 M _ _ _ _ .12A --	63	63
1.50	904.28	724	1.24	14500	F0643 900 M _ _ _ _ .12A --	63	63
1.33	1018.90	816	1.10	14500	F0643 10C M _ _ _ _ .12A --	63	63
1.25	1085.98	869	1.04	14500	F0643 11C M _ _ _ _ .12A --	63	63
1.08	1262.45	1011	0.89	14004	F0643 12C M _ _ _ _ .12A --	63	63
2.47	550.54	441	3.86	16000	F0743 560 M _ _ _ _ .12A --	88	63
2.18	624.29	500	3.40	16000	F0743 630 M _ _ _ _ .12A --	88	63
1.91	712.98	571	2.98	16000	F0743 710 M _ _ _ _ .12A --	88	63
1.71	793.09	635	2.68	16000	F0743 800 M _ _ _ _ .12A --	88	63
1.51	899.34	720	2.36	16000	F0743 900 M _ _ _ _ .12A --	88	63
1.37	991.96	794	2.14	16000	F0743 10C M _ _ _ _ .12A --	88	63
1.22	1117.71	895	1.90	16000	F0743 11C M _ _ _ _ .12A --	88	63
1.06	1280.01	1025	1.66	16000	F0743 12C M _ _ _ _ .12A --	88	63
0.94	1447.23	1159	1.47	16000	F0743 14C M _ _ _ _ .12A --	88	63
0.81	1677.90	1343	1.27	16000	F0743 16C M _ _ _ _ .12A --	88	63
0.77	1776.16	1422	1.20	16000	F0743 18C M _ _ _ _ .12A --	88	63
0.68	2001.30	1602	1.06	16000	F0743 20C M _ _ _ _ .12A --	88	63
0.61	2213.90	1772	0.96	16000	F0743 22C M _ _ _ _ .12A --	88	63
0.54	2516.86	2015	0.84	16000	F0743 25C M _ _ _ _ .12A --	88	63
1.36	1002.59	803	3.80	18000	F0843 10C M _ _ _ _ .12A --	135	63
1.24	1098.17	879	3.47	18000	F0843 11C M _ _ _ _ .12A --	135	63
1.10	1230.95	985	3.10	18000	F0843 12C M _ _ _ _ .12A --	135	63
1.01	1352.15	1082	2.82	18000	F0843 14C M _ _ _ _ .12A --	135	63
0.82	1657.05	1326	2.30	18000	F0843 16C M _ _ _ _ .12A --	135	63
0.76	1801.24	1442	2.12	18000	F0843 18C M _ _ _ _ .12A --	135	63
0.69	1978.59	1584	1.93	18000	F0843 20C M _ _ _ _ .12A --	135	63
0.63	2166.52	1734	1.76	18000	F0843 22C M _ _ _ _ .12A --	135	63
0.56	2424.74	1941	1.57	18000	F0843 25C M _ _ _ _ .12A --	135	63
0.51	2655.05	2125	1.44	18000	F0843 28C M _ _ _ _ .12A --	135	63
0.42	3253.85	2605	1.17	18000	F0843 32C M _ _ _ _ .12A --	135	63
0.37	3626.68	2903	1.05	18000	F0843 36C M _ _ _ _ .12A --	135	63
0.33	4067.31	3256	0.94	18000	F0843 40C M _ _ _ _ .12A --	135	63
0.31	4441.50	3555	0.82	18000	F0843 45C M _ _ _ _ .12A --	135	63
0.97	1398.38	1119	4.02	35000	F0943 14C M _ _ _ _ .12A --	200	63
0.85	1604.88	1285	3.50	35000	F0943 16C M _ _ _ _ .12A --	200	63
0.77	1760.86	1410	3.19	35000	F0943 18C M _ _ _ _ .12A --	200	63
0.67	2029.56	1625	2.77	35000	F0943 20C M _ _ _ _ .12A --	200	63
0.61	2240.58	1794	2.51	35000	F0943 22C M _ _ _ _ .12A --	200	63
0.55	2487.29	1991	2.26	35000	F0943 25C M _ _ _ _ .12A --	200	63
0.49	2772.29	2219	2.03	35000	F0943 28C M _ _ _ _ .12A --	200	63
0.44	3109.11	2489	1.81	35000	F0943 32C M _ _ _ _ .12A --	200	63
0.37	3719.83	2978	1.51	35000	F0943 36C M _ _ _ _ .12A --	200	63
0.33	4171.78	3340	1.35	35000	F0943 40C M _ _ _ _ .12A --	200	63
0.29	4721.79	3780	1.19	35000	F0943 45C M _ _ _ _ .12A --	200	63
0.26	5309.53	4250	1.06	35000	F0943 50C M _ _ _ _ .12A --	200	63

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering



# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.12 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> - <input type="text" value="20"/> Blanks to be filled when entering order	Weight of base mount unit	
152.5	5.903	7.3	9.28	3122	F0223 5.0 M _ _ _ _ .12C --	20	63
112.9	7.974	9.9	7.98	2872	F0223 6.3 M _ _ _ _ .12C --	20	63
99.23	9.069	11.3	7.46	2942	F0223 9.0 M _ _ _ _ .12C --	20	63
87.59	10.27	12.8	6.90	2999	F0223 10. M _ _ _ _ .12C --	20	63
68.49	13.14	16.3	5.95	3141	F0223 12. M _ _ _ _ .12C --	20	63
63.55	14.16	17.6	5.69	3184	F0223 14. M _ _ _ _ .12C --	20	63
50.34	17.88	22.2	4.96	3330	F0223 16. M _ _ _ _ .12C --	20	63
44.40	20.27	25.2	4.61	3416	F0223 20. M _ _ _ _ .12C --	20	63
38.86	23.16	28.8	4.28	3511	F0223 22. M _ _ _ _ .12C --	20	63
34.93	25.77	32.0	4.03	3586	F0223 25. M _ _ _ _ .12C --	20	63
31.68	28.41	35.3	3.69	3850	F0223 28. M _ _ _ _ .12C --	20	63
28.79	31.26	38.8	3.35	3850	F0223 32. M _ _ _ _ .12C --	20	63
24.57	36.63	45.5	2.86	3850	F0223 36. M _ _ _ _ .12C --	20	63
20.48	43.94	54.6	2.38	3850	F0223 40. M _ _ _ _ .12C --	20	63
17.57	51.22	63.6	2.04	3850	F0223 50. M _ _ _ _ .12C --	20	63
15.81	56.91	70.7	1.84	3850	F0223 56. M _ _ _ _ .12C --	20	63
13.13	68.54	85.1	1.53	3850	F0223 63. M _ _ _ _ .12C --	20	63
11.46	78.56	97.5	1.29	3850	F0223 71. M _ _ _ _ .12C --	20	63
10.08	89.28	111	1.02	3850	F0223 90. M _ _ _ _ .12C --	20	63
10.88	82.72	102	1.33	3850	F0233 80. M _ _ _ _ .12C --	21	63
9.78	92.02	113	1.21	3850	F0233 90. M _ _ _ _ .12C --	21	63
8.87	101.45	125	1.12	3850	F0233 100 M _ _ _ _ .12C --	21	63
8.06	111.65	137	1.04	3850	F0233 112 M _ _ _ _ .12C --	21	63
6.88	130.81	161	0.91	3850	F0233 125 M _ _ _ _ .12C --	21	63
15.60	57.69	72	2.78	5000	F0323 56. M _ _ _ _ .12C --	22	63
14.04	64.10	80	2.35	5000	F0323 63. M _ _ _ _ .12C --	22	63
11.66	77.19	96	1.55	5000	F0323 71. M _ _ _ _ .12C --	22	63
10.17	88.47	110	1.17	5000	F0323 90. M _ _ _ _ .12C --	22	63
8.95	100.55	125	1.01	5000	F0323 100 M _ _ _ _ .12C --	22	63
12.51	71.91	88	2.83	5000	F0333 71. M _ _ _ _ .12C --	23	63
11.04	81.53	100	2.50	5000	F0333 80. M _ _ _ _ .12C --	23	63
9.66	93.16	114	2.18	5000	F0333 90. M _ _ _ _ .12C --	23	63
8.68	103.64	127	1.96	5000	F0333 100 M _ _ _ _ .12C --	23	63
7.88	114.26	140	1.78	5000	F0333 112 M _ _ _ _ .12C --	23	63
7.16	125.74	155	1.62	5000	F0333 125 M _ _ _ _ .12C --	23	63
6.11	147.32	181	1.38	5000	F0333 160 M _ _ _ _ .12C --	23	63
5.09	176.75	217	1.15	5000	F0333 180 M _ _ _ _ .12C --	23	63
4.37	206.03	253	0.99	5000	F0333 200 M _ _ _ _ .12C --	23	63
3.93	228.92	281	0.89	5000	F0333 225 M _ _ _ _ .12C --	23	63
12.32	73.07	91	3.65	6400	F0423 71. M _ _ _ _ .12C --	27	63
10.85	82.94	103	2.89	6400	F0423 90. M _ _ _ _ .12C --	27	63
9.55	94.29	117	2.27	6400	F0423 100 M _ _ _ _ .12C --	27	63
9.97	90.28	111	3.79	6400	F0433 90. M _ _ _ _ .12C --	29	63
8.96	100.43	123	3.40	6400	F0433 100 M _ _ _ _ .12C --	29	63
8.13	110.72	136	3.09	6400	F0433 112 M _ _ _ _ .12C --	29	63
7.39	121.85	150	2.81	6400	F0433 125 M _ _ _ _ .12C --	29	63
6.30	142.76	175	2.39	6400	F0433 160 M _ _ _ _ .12C --	29	63
5.25	171.28	210	2.00	6400	F0433 180 M _ _ _ _ .12C --	29	63
4.51	199.65	245	1.71	6400	F0433 200 M _ _ _ _ .12C --	29	63
4.06	221.84	273	1.54	6400	F0433 225 M _ _ _ _ .12C --	29	63
3.37	267.14	328	1.28	6400	F0433 280 M _ _ _ _ .12C --	29	63
2.94	306.20	376	1.12	6400	F0433 320 M _ _ _ _ .12C --	29	63
2.59	347.99	428	0.98	6400	F0433 360 M _ _ _ _ .12C --	29	63
6.36	141.55	174	4.00	9000	F0533 160 M _ _ _ _ .12C --	39	63
5.30	169.93	209	3.35	9000	F0533 180 M _ _ _ _ .12C --	39	63
4.41	203.92	251	2.79	9000	F0533 200 M _ _ _ _ .12C --	39	63
3.92	229.77	282	2.48	9000	F0533 225 M _ _ _ _ .12C --	39	63
3.37	267.11	328	2.13	9000	F0533 280 M _ _ _ _ .12C --	39	63
2.97	303.17	373	1.88	9000	F0533 320 M _ _ _ _ .12C --	39	63
2.61	344.65	423	1.65	9000	F0533 360 M _ _ _ _ .12C --	39	63
2.20	409.90	496	1.41	9000	F0543 400 M _ _ _ _ .12C --	49	63
1.99	451.39	546	1.28	9000	F0543 450 M _ _ _ _ .12C --	49	63
1.78	505.02	611	1.15	9000	F0543 500 M _ _ _ _ .12C --	49	63
1.59	564.47	683	1.03	9000	F0543 560 M _ _ _ _ .12C --	49	63
1.43	631.55	764	0.92	9000	F0543 630 M _ _ _ _ .12C --	49	63
1.29	699.15	846	0.83	9000	F0543 710 M _ _ _ _ .12C --	49	63

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.12 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> - <input type="text" value="20"/> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
4.44	202.68	249	3.61	14500	F0633200_M_---.12C--	52	63
3.94	228.38	281	3.21	14500	F0633225_M_---.12C--	52	63
3.39	265.49	326	2.76	14500	F0633280_M_---.12C--	52	63
2.99	301.33	370	2.43	14500	F0633320_M_---.12C--	52	63
2.63	342.56	421	2.14	14500	F0633360_M_---.12C--	52	63
2.21	407.41	493	1.83	14500	F0643400_M_---.12C--	63	63
2.01	448.65	543	1.66	14500	F0643450_M_---.12C--	63	63
1.79	501.96	607	1.48	14500	F0643500_M_---.12C--	63	63
1.60	561.05	679	1.33	14500	F0643560_M_---.12C--	63	63
1.43	627.72	759	1.19	14500	F0643630_M_---.12C--	63	63
1.23	729.32	882	1.02	14500	F0643710_M_---.12C--	63	63
1.12	803.17	972	0.93	14500	F0643800_M_---.12C--	63	63
1.00	904.28	1094	0.82	14500	F0643900_M_---.12C--	63	63
2.25	399.78	484	3.52	16000	F0743400_M_---.12C--	88	63
1.99	453.34	548	3.10	16000	F0743450_M_---.12C--	88	63
1.80	499.22	604	2.82	16000	F0743500_M_---.12C--	88	63
1.63	550.54	666	2.55	16000	F0743560_M_---.12C--	88	63
1.44	624.29	755	2.25	16000	F0743630_M_---.12C--	88	63
1.26	712.98	862	1.97	16000	F0743710_M_---.12C--	88	63
1.13	793.09	959	1.77	16000	F0743800_M_---.12C--	88	63
1.00	899.34	1088	1.56	16000	F0743900_M_---.12C--	88	63
0.91	991.96	1200	1.42	16000	F074310C_M_---.12C--	88	63
0.81	1117.71	1352	1.26	16000	F074311C_M_---.12C--	88	63
0.70	1280.01	1548	1.10	16000	F074312C_M_---.12C--	88	63
0.62	1447.23	1751	0.97	16000	F074314C_M_---.12C--	88	63
0.54	1677.90	2030	0.84	16000	F074316C_M_---.12C--	88	63
1.28	701.40	848	3.59	18000	F0843710_M_---.12C--	135	63
1.10	815.79	987	3.09	18000	F0843800_M_---.12C--	135	63
0.99	912.72	1104	2.76	18000	F0843900_M_---.12C--	135	63
0.90	1002.59	1213	2.51	18000	F084310C_M_---.12C--	135	63
0.82	1098.17	1328	2.30	18000	F084311C_M_---.12C--	135	63
0.73	1230.95	1489	2.05	18000	F084312C_M_---.12C--	135	63
0.67	1352.15	1636	1.86	18000	F084314C_M_---.12C--	135	63
0.54	1657.05	2004	1.52	18000	F084316C_M_---.12C--	135	63
0.50	1801.24	2179	1.40	18000	F084318C_M_---.12C--	135	63
0.45	1978.59	2393	1.27	18000	F084320C_M_---.12C--	135	63
0.42	2166.52	2621	1.16	18000	F084322C_M_---.12C--	135	63
0.37	2424.74	2933	1.04	18000	F084325C_M_---.12C--	135	63
0.34	2655.05	3212	0.95	18000	F084328C_M_---.12C--	135	63
0.90	1001.59	1212	3.56	35000	F094310C_M_---.12C--	208	63
0.81	1112.77	1346	3.20	35000	F094311C_M_---.12C--	208	63
0.71	1266.68	1532	2.81	35000	F094312C_M_---.12C--	208	63
0.64	1398.38	1692	2.55	35000	F094314C_M_---.12C--	208	63
0.56	1604.88	1941	2.22	35000	F094316C_M_---.12C--	208	63
0.51	1760.86	2130	2.02	35000	F094318C_M_---.12C--	208	63
0.44	2029.56	2455	1.76	35000	F094320C_M_---.12C--	208	63
0.40	2240.58	2710	1.59	35000	F094322C_M_---.12C--	208	63
0.36	2487.29	3009	1.43	35000	F094325C_M_---.12C--	208	63
0.32	2772.29	3354	1.29	35000	F094328C_M_---.12C--	208	63
0.29	3109.11	3761	1.15	35000	F094332C_M_---.12C--	208	63
0.24	3719.83	4500	0.96	34551	F094336C_M_---.12C--	208	63
0.22	4171.78	5046	0.85	33382	F094340C_M_---.12C--	208	63

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.18 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
232.1	5.903	7.2	8.72	2643	F0223 5.0 M _ _ _ _ .18A --	20	63
171.8	7.974	9.8	7.51	2820	F0223 6.3 M _ _ _ _ .18A --	20	63
151.1	9.069	11.1	7.02	2889	F0223 9.0 M _ _ _ _ .18A --	20	63
133.3	10.27	12.6	6.56	2954	F0223 10. M _ _ _ _ .18A --	20	63
104.3	13.14	16.1	5.67	3096	F0223 12. M _ _ _ _ .18A --	20	63
96.74	14.16	17.3	5.40	3134	F0223 14. M _ _ _ _ .18A --	20	63
76.63	17.88	21.9	4.62	3260	F0223 16. M _ _ _ _ .18A --	20	63
67.59	20.27	24.8	4.27	3340	F0223 20. M _ _ _ _ .18A --	20	63
59.15	23.16	28.3	3.88	3410	F0223 22. M _ _ _ _ .18A --	20	63
53.17	25.77	31.5	3.62	3471	F0223 25. M _ _ _ _ .18A --	20	63
48.23	28.41	34.8	3.37	3512	F0223 28. M _ _ _ _ .18A --	20	63
43.82	31.26	38.2	3.16	3574	F0223 32. M _ _ _ _ .18A --	20	63
37.40	36.63	44.8	2.90	3703	F0223 36. M _ _ _ _ .18A --	20	63
31.18	43.94	53.8	2.42	3767	F0223 40. M _ _ _ _ .18A --	20	63
26.75	51.22	62.7	2.07	3784	F0223 50. M _ _ _ _ .18A --	20	63
24.07	56.91	69.6	1.87	3823	F0223 56. M _ _ _ _ .18A --	20	63
19.99	68.54	83.8	1.55	3844	F0223 63. M _ _ _ _ .18A --	20	63
17.44	78.56	96.1	1.31	3850	F0223 71. M _ _ _ _ .18A --	20	63
15.35	89.28	109	1.03	3767	F0223 90. M _ _ _ _ .18A --	20	63
16.56	82.72	100	1.30	3850	F0233 80. M _ _ _ _ .18A --	21	63
14.89	92.02	111	1.17	3850	F0233 90. M _ _ _ _ .18A --	21	63
13.50	101.45	123	1.06	3850	F0233 100 M _ _ _ _ .18A --	21	63
12.27	111.65	135	0.96	3850	F0233 112 M _ _ _ _ .18A --	21	63
10.47	130.81	158	0.84	3850	F0233 125 M _ _ _ _ .18A --	21	63
27.68	49.49	60.5	3.59	5000	F0323 50. M _ _ _ _ .18A --	22	63
23.75	57.69	70.6	2.69	5000	F0323 56. M _ _ _ _ .18A --	22	63
21.37	64.10	78.4	2.28	5000	F0323 63. M _ _ _ _ .18A --	22	63
17.75	77.19	94.4	1.58	5000	F0323 71. M _ _ _ _ .18A --	22	63
15.49	88.47	108	1.18	5000	F0323 90. M _ _ _ _ .18A --	22	63
13.63	100.55	123	1.03	5000	F0323 100 M _ _ _ _ .18A --	22	63
19.05	71.91	87.1	2.87	5000	F0333 71. M _ _ _ _ .18A --	23	63
16.80	81.53	98.7	2.53	5000	F0333 80. M _ _ _ _ .18A --	23	63
14.71	93.16	113	2.22	5000	F0333 90. M _ _ _ _ .18A --	23	63
13.22	103.64	125	1.99	5000	F0333 100 M _ _ _ _ .18A --	23	63
11.99	114.26	138	1.81	5000	F0333 112 M _ _ _ _ .18A --	23	63
10.90	125.74	152	1.64	5000	F0333 125 M _ _ _ _ .18A --	23	63
9.30	147.32	178	1.40	5000	F0333 160 M _ _ _ _ .18A --	23	63
7.75	176.75	214	1.17	5000	F0333 180 M _ _ _ _ .18A --	23	63
6.65	206.03	249	1.00	5000	F0333 200 M _ _ _ _ .18A --	23	63
5.98	228.92	277	0.90	8000	F0333 225 M _ _ _ _ .18A --	23	63
18.75	73.07	89.4	3.58	6400	F0423 71. M _ _ _ _ .18A --	27	63
16.52	82.94	101	2.83	6400	F0423 90. M _ _ _ _ .18A --	27	63
14.53	94.29	115	2.23	6400	F0423 100 M _ _ _ _ .18A --	27	63
15.17	90.28	109	3.78	6400	F0433 90. M _ _ _ _ .18A --	29	63
13.64	100.43	122	3.45	6400	F0433 100 M _ _ _ _ .18A --	29	63
12.37	110.72	134	3.13	6400	F0433 112 M _ _ _ _ .18A --	29	63
11.24	121.85	148	2.85	6400	F0433 125 M _ _ _ _ .18A --	29	63
9.60	142.76	173	2.43	6400	F0433 160 M _ _ _ _ .18A --	29	63
8.00	171.28	207	2.03	6400	F0433 180 M _ _ _ _ .18A --	29	63
6.86	199.65	242	1.74	6400	F0433 200 M _ _ _ _ .18A --	29	63
6.18	221.84	269	1.56	6400	F0433 225 M _ _ _ _ .18A --	29	63
5.13	267.14	323	1.30	6400	F0433 280 M _ _ _ _ .18A --	29	63
4.47	306.20	371	1.13	6400	F0433 320 M _ _ _ _ .18A --	29	63
3.94	347.99	421	1.00	6394	F0433 360 M _ _ _ _ .18A --	29	63
10.52	130.20	158	3.89	9000	F0533 125 M _ _ _ _ .18A --	39	63
9.68	141.55	171	3.70	9000	F0533 160 M _ _ _ _ .18A --	39	63
8.06	169.93	206	3.37	9000	F0533 180 M _ _ _ _ .18A --	39	63
6.72	203.92	247	2.84	9000	F0533 200 M _ _ _ _ .18A --	39	63
5.96	229.77	278	2.52	9000	F0533 225 M _ _ _ _ .18A --	39	63
5.13	267.11	323	2.16	9000	F0533 280 M _ _ _ _ .18A --	39	63
4.52	303.17	367	1.91	9000	F0533 320 M _ _ _ _ .18A --	39	63
3.98	344.65	417	1.68	9000	F0533 360 M _ _ _ _ .18A --	39	63
3.34	409.90	489	1.43	9000	F0543 400 M _ _ _ _ .18A --	49	63
3.04	451.39	538	1.30	9000	F0543 450 M _ _ _ _ .18A --	49	63
2.71	505.02	602	1.16	9000	F0543 500 M _ _ _ _ .18A --	49	63
2.43	564.47	673	1.04	9000	F0543 560 M _ _ _ _ .18A --	49	63
2.17	631.55	753	0.93	8806	F0543 630 M _ _ _ _ .18A --	49	63
1.96	699.15	833	0.84	8541	F0543 710 M _ _ _ _ .18A --	49	63

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.18 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
6.76	202.68	245	3.67	14500	F0633200_M_---.18A--	52	63
6.00	228.38	277	3.25	14500	F0633225_M_---.18A--	52	63
5.16	265.49	321	2.80	14500	F0633280_M_---.18A--	52	63
4.55	301.33	365	2.47	14500	F0633320_M_---.18A--	52	63
4.00	342.56	415	2.17	14500	F0633360_M_---.18A--	52	63
3.36	407.41	486	1.85	14500	F0643400_M_---.18A--	63	63
3.05	448.65	535	1.68	14500	F0643450_M_---.18A--	63	63
2.73	501.96	598	1.50	14500	F0643500_M_---.18A--	63	63
2.44	561.05	669	1.35	14500	F0643560_M_---.18A--	63	63
2.18	627.72	748	1.20	14500	F0643630_M_---.18A--	63	63
1.88	729.32	869	1.04	14500	F0643710_M_---.18A--	63	63
1.71	803.17	957	0.94	14500	F0643800_M_---.18A--	63	63
1.52	904.28	1078	0.83	14500	F0643900_M_---.18A--	63	63
3.43	399.78	477	3.57	16000	F0743400_M_---.18A--	88	63
3.02	453.34	540	3.15	16000	F0743450_M_---.18A--	88	63
2.74	499.22	595	2.86	16000	F0743500_M_---.18A--	88	63
2.49	550.54	656	2.59	16000	F0743560_M_---.18A--	88	63
2.19	624.29	744	2.28	16000	F0743630_M_---.18A--	88	63
1.92	712.98	850	2.00	16000	F0743710_M_---.18A--	88	63
1.73	793.09	945	1.80	16000	F0743800_M_---.18A--	88	63
1.52	899.34	1072	1.59	16000	F0743900_M_---.18A--	88	63
1.38	991.96	1182	1.44	16000	F074310C_M_---.18A--	88	63
1.23	1117.71	1332	1.28	16000	F074311C_M_---.18A--	88	63
1.07	1280.01	1526	1.11	16000	F074312C_M_---.18A--	88	63
0.95	1447.23	1725	0.99	16000	F074314C_M_---.18A--	88	63
0.82	1677.90	2000	0.85	16000	F074316C_M_---.18A--	88	63
0.77	1776.16	2117	0.80	16000	F074318C_M_---.18A--	88	63
1.95	701.40	836	3.65	18000	F0843710_M_---.18A--	135	63
1.68	815.79	972	3.14	18000	F0843800_M_---.18A--	135	63
1.50	912.72	1088	2.80	18000	F0843900_M_---.18A--	135	63
1.37	1002.59	1195	2.55	18000	F084310C_M_---.18A--	135	63
1.25	1098.17	1309	2.33	18000	F084311C_M_---.18A--	135	63
1.11	1230.95	1467	2.08	18000	F084312C_M_---.18A--	135	63
1.01	1352.15	1612	1.89	18000	F084314C_M_---.18A--	135	63
0.83	1657.05	1975	1.54	18000	F084316C_M_---.18A--	135	63
0.76	1801.24	2147	1.42	18000	F084318C_M_---.18A--	135	63
0.69	1978.59	2358	1.29	18000	F084320C_M_---.18A--	135	63
0.63	2166.52	2583	1.18	18000	F084322C_M_---.18A--	135	63
0.57	2424.74	2890	1.06	18000	F084325C_M_---.18A--	135	63
0.52	2655.05	3165	0.96	18000	F084328C_M_---.18A--	135	63
1.37	1001.59	1194	3.77	35000	F094310C_M_---.18A--	208	63
1.23	1112.77	1326	3.39	35000	F094311C_M_---.18A--	208	63
1.08	1266.68	1510	2.98	35000	F094312C_M_---.18A--	208	63
0.98	1398.38	1667	2.70	35000	F094314C_M_---.18A--	208	63
0.85	1604.88	1913	2.35	35000	F094316C_M_---.18A--	208	63
0.78	1760.86	2099	2.14	35000	F094318C_M_---.18A--	208	63
0.68	2029.56	2419	1.86	35000	F094320C_M_---.18A--	208	63
0.61	2240.58	2671	1.68	35000	F094322C_M_---.18A--	208	63
0.55	2487.29	2965	1.52	35000	F094325C_M_---.18A--	208	63
0.49	2772.29	3305	1.36	35000	F094328C_M_---.18A--	208	63
0.44	3109.11	3706	1.21	35000	F094332C_M_---.18A--	208	63
0.37	3719.83	4434	1.01	35000	F094336C_M_---.18A--	208	63
0.33	4171.78	4973	0.90	35000	F094340C_M_---.18A--	208	63

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.18 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
152.5	5.90	11.0	6.19	2764	F0223 5.0 M _ _ _ _ .18C --	22	71
112.9	7.97	14.8	5.32	2543	F0223 6.3 M _ _ _ _ .18C --	22	71
99.23	9.07	16.9	4.97	2605	F0223 9.0 M _ _ _ _ .18C --	22	71
87.59	10.27	19.1	4.60	2655	F0223 10. M _ _ _ _ .18C --	22	71
68.49	13.14	24.5	3.96	2781	F0223 12. M _ _ _ _ .18C --	22	71
63.55	14.16	26.4	3.79	2819	F0223 14. M _ _ _ _ .18C --	22	71
50.34	17.88	33.3	3.30	2948	F0223 16. M _ _ _ _ .18C --	22	71
44.40	20.27	37.7	3.07	3025	F0223 20. M _ _ _ _ .18C --	22	71
38.86	23.16	43.1	2.85	3109	F0223 22. M _ _ _ _ .18C --	22	71
34.93	25.77	48.0	2.69	3175	F0223 25. M _ _ _ _ .18C --	22	71
31.68	28.41	52.9	2.46	3746	F0223 28. M _ _ _ _ .18C --	22	71
28.79	31.26	58.2	2.23	3767	F0223 32. M _ _ _ _ .18C --	22	71
24.57	36.63	68.2	1.91	3786	F0223 36. M _ _ _ _ .18C --	22	71
20.48	43.94	81.8	1.59	3850	F0223 40. M _ _ _ _ .18C --	22	71
17.57	51.22	95.4	1.36	3850	F0223 50. M _ _ _ _ .18C --	22	71
15.81	56.91	106	1.23	3850	F0223 56. M _ _ _ _ .18C --	22	71
13.13	68.54	128	1.02	3850	F0223 63. M _ _ _ _ .18C --	22	71
11.46	78.56	146	0.86	3850	F0223 71. M _ _ _ _ .18C --	22	71
10.88	82.72	152	0.89	3850	F0233 80. M _ _ _ _ .18C --	23	71
9.78	92.02	170	0.81	3850	F0233 90. M _ _ _ _ .18C --	23	71
25.56	35.21	65.6	3.81	5000	F0323 36. M _ _ _ _ .18C --	24	71
21.82	41.25	76.8	3.25	5000	F0323 40. M _ _ _ _ .18C --	24	71
18.19	49.49	92.2	2.47	5000	F0323 50. M _ _ _ _ .18C --	24	71
15.60	57.69	107	1.85	5000	F0323 56. M _ _ _ _ .18C --	24	71
14.04	64.10	119	1.57	5000	F0323 63. M _ _ _ _ .18C --	24	71
11.66	77.19	144	1.04	5000	F0323 71. M _ _ _ _ .18C --	24	71
12.51	71.91	132.5	1.89	5000	F0333 71. M _ _ _ _ .18C --	25	71
11.04	81.53	150.3	1.66	5000	F0333 80. M _ _ _ _ .18C --	25	71
9.66	93.16	171.7	1.46	5000	F0333 90. M _ _ _ _ .18C --	25	71
8.68	103.64	191.0	1.31	5000	F0333 100 M _ _ _ _ .18C --	25	71
7.88	114.26	210.6	1.19	5000	F0333 112 M _ _ _ _ .18C --	25	71
7.16	125.74	231.8	1.08	5000	F0333 125 M _ _ _ _ .18C --	25	71
6.11	147.32	271.5	0.92	5000	F0333 160 M _ _ _ _ .18C --	25	71
14.32	62.86	117	3.26	6400	F0423 63. M _ _ _ _ .18C --	30	71
12.32	73.07	136	2.43	6400	F0423 71. M _ _ _ _ .18C --	30	71
10.85	82.94	154	1.93	6400	F0423 90. M _ _ _ _ .18C --	30	71
9.55	94.29	176	1.51	6400	F0423 100 M _ _ _ _ .18C --	30	71
12.91	69.69	128.4	3.22	6400	F0433 71. M _ _ _ _ .18C --	32	71
11.39	79.00	145.6	2.88	6400	F0433 80. M _ _ _ _ .18C --	32	71
9.97	90.28	166.4	2.52	6400	F0433 90. M _ _ _ _ .18C --	32	71
8.96	100.43	185.1	2.27	6400	F0433 100 M _ _ _ _ .18C --	32	71
8.13	110.72	204.1	2.06	6400	F0433 112 M _ _ _ _ .18C --	32	71
7.39	121.85	224.6	1.87	6400	F0433 125 M _ _ _ _ .18C --	32	71
6.30	142.76	263.1	1.60	6400	F0433 160 M _ _ _ _ .18C --	32	71
5.25	171.28	315.7	1.33	6400	F0433 180 M _ _ _ _ .18C --	32	71
4.51	199.65	368.0	1.14	6400	F0433 200 M _ _ _ _ .18C --	32	71
4.06	221.84	408.9	1.03	6400	F0433 225 M _ _ _ _ .18C --	32	71
3.37	267.14	492.4	0.85	6400	F0433 280 M _ _ _ _ .18C --	32	71
9.47	95.08	177	2.72	9000	F0523 100 M _ _ _ _ .18C --	39	71
8.76	102.79	189.5	3.69	9000	F0533 100 M _ _ _ _ .18C --	42	71
7.95	113.20	208.6	3.36	9000	F0533 112 M _ _ _ _ .18C --	42	71
6.91	130.20	240.0	2.92	9000	F0533 125 M _ _ _ _ .18C --	42	71
6.36	141.55	260.9	2.68	9000	F0533 160 M _ _ _ _ .18C --	42	71
5.30	169.93	313.2	2.23	9000	F0533 180 M _ _ _ _ .18C --	42	71
4.41	203.92	375.9	1.86	9000	F0533 200 M _ _ _ _ .18C --	42	71
3.92	229.77	423.5	1.65	9000	F0533 225 M _ _ _ _ .18C --	42	71
3.37	267.11	492.3	1.42	9000	F0533 280 M _ _ _ _ .18C --	42	71
2.97	303.17	558.8	1.25	9000	F0533 320 M _ _ _ _ .18C --	42	71
2.61	344.65	635.2	1.10	9000	F0533 360 M _ _ _ _ .18C --	42	71
2.20	409.90	744	0.94	9000	F0543 400 M _ _ _ _ .18C --	52	71
1.99	451.39	819	0.85	9000	F0543 450 M _ _ _ _ .18C --	52	71
6.95	129.41	238.5	3.77	14500	F0633 125 M _ _ _ _ .18C --	55	71
6.40	140.70	259.3	3.47	14500	F0633 160 M _ _ _ _ .18C --	55	71
5.33	168.90	311.3	2.89	14500	F0633 180 M _ _ _ _ .18C --	55	71
4.44	202.68	373.6	2.41	14500	F0633 200 M _ _ _ _ .18C --	55	71
3.94	228.38	420.9	2.14	14500	F0633 225 M _ _ _ _ .18C --	55	71
3.39	265.49	489.3	1.84	14500	F0633 280 M _ _ _ _ .18C --	55	71
2.99	301.33	555.4	1.62	14500	F0633 320 M _ _ _ _ .18C --	55	71
2.63	342.56	631.4	1.43	14500	F0633 360 M _ _ _ _ .18C --	55	71

**NOTE**

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# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.18 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> - <input type="text" value="20"/> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
2.21	407.41	739.3	1.22	14500	F0643400_M_---.18C--	66	71
2.01	448.65	814.1	1.11	14500	F0643450_M_---.18C--	66	71
1.79	501.96	910.8	0.99	14500	F0643500_M_---.18C--	66	71
1.60	561.05	1018.0	0.88	14500	F0643560_M_---.18C--	66	71
3.31	272.22	501.7	3.39	16000	F0733280_M_---.18C--	81	71
2.97	303.41	559.2	3.04	16000	F0733320_M_---.18C--	81	71
2.64	340.28	627.2	2.71	16000	F0733360_M_---.18C--	81	71
2.25	399.78	725.4	2.34	16000	F0743400_M_---.18C--	91	71
1.99	453.34	822.6	2.07	16000	F0743450_M_---.18C--	91	71
1.80	499.22	905.8	1.88	16000	F0743500_M_---.18C--	91	71
1.63	550.54	998.9	1.70	16000	F0743560_M_---.18C--	91	71
1.44	624.29	1132.8	1.50	16000	F0743630_M_---.18C--	91	71
1.26	712.98	1293.7	1.31	16000	F0743710_M_---.18C--	91	71
1.13	793.09	1439.1	1.18	16000	F0743800_M_---.18C--	91	71
1.00	899.34	1631.9	1.04	16000	F0743900_M_---.18C--	91	71
0.91	991.96	1799.9	0.94	16000	F074310C_M_---.18C--	91	71
0.81	1117.71	2028.1	0.84	16000	F074311C_M_---.18C--	91	71
2.05	439.55	797.6	3.82	18000	F0843450_M_---.18C--	138	71
1.81	496.15	900.3	3.39	18000	F0843500_M_---.18C--	138	71
1.56	577.06	1047.1	2.91	18000	F0843560_M_---.18C--	138	71
1.50	601.45	1091.3	2.79	18000	F0843630_M_---.18C--	138	71
1.28	701.40	1272.7	2.40	18000	F0843710_M_---.18C--	138	71
1.10	815.79	1480.2	2.06	18000	F0843800_M_---.18C--	138	71
0.99	912.72	1656.1	1.84	18000	F0843900_M_---.18C--	138	71
0.90	1002.59	1819.2	1.68	18000	F084310C_M_---.18C--	138	71
0.82	1098.17	1992.6	1.53	18000	F084311C_M_---.18C--	138	71
0.73	1230.95	2233.6	1.37	18000	F084312C_M_---.18C--	138	71
0.67	1352.15	2453.5	1.24	18000	F084314C_M_---.18C--	138	71
0.54	1657.05	3006.7	1.01	18000	F084316C_M_---.18C--	138	71
0.50	1801.24	3268.3	0.93	18000	F084318C_M_---.18C--	138	71
0.45	1978.59	3590.1	0.85	18000	F084320C_M_---.18C--	138	71
1.41	637.88	1157.4	3.72	35000	F0943630_M_---.18C--	211	71
1.27	708.68	1285.9	3.35	35000	F0943710_M_---.18C--	211	71
1.12	807.14	1464.6	2.94	35000	F0943800_M_---.18C--	211	71
1.00	896.74	1627.1	2.65	35000	F0943900_M_---.18C--	211	71
0.90	1001.59	1817.4	2.37	35000	F094310C_M_---.18C--	211	71
0.81	1112.77	2019.1	2.13	35000	F094311C_M_---.18C--	211	71
0.71	1266.68	2298.4	1.88	35000	F094312C_M_---.18C--	211	71
0.64	1398.38	2537.4	1.70	35000	F094314C_M_---.18C--	211	71
0.56	1604.88	2912.1	1.48	35000	F094316C_M_---.18C--	211	71
0.51	1760.86	3195.1	1.35	35000	F094318C_M_---.18C--	211	71
0.44	2029.56	3682.6	1.17	35000	F094320C_M_---.18C--	211	71
0.40	2240.58	4065.5	1.06	35000	F094322C_M_---.18C--	211	71
0.36	2487.29	4513.2	0.95	35000	F094325C_M_---.18C--	211	71
0.32	2772.29	5030.3	0.86	35000	F094328C_M_---.18C--	211	71

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.25 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
232.1	5.90	10.0	6.28	2395	F0223 5.0 M _ _ _ .25A --	22	71
171.8	7.97	13.5	5.41	2556	F0223 6.3 M _ _ _ .25A --	22	71
151.1	9.07	15.4	5.06	2618	F0223 9.0 M _ _ _ .25A --	22	71
133.3	10.27	17.5	4.73	2677	F0223 10. M _ _ _ .25A --	22	71
104.3	13.14	22.3	4.08	2806	F0223 12. M _ _ _ .25A --	22	71
96.74	14.16	24.1	3.89	2840	F0223 14. M _ _ _ .25A --	22	71
76.63	17.88	30.4	3.32	2954	F0223 16. M _ _ _ .25A --	22	71
67.59	20.27	34.4	3.08	3026	F0223 20. M _ _ _ .25A --	22	71
59.15	23.16	39.4	2.80	3090	F0223 22. M _ _ _ .25A --	22	71
53.17	25.77	43.8	2.60	3145	F0223 25. M _ _ _ .25A --	22	71
48.23	28.41	48.3	2.42	3182	F0223 28. M _ _ _ .25A --	22	71
43.82	31.26	53.1	2.28	3239	F0223 32. M _ _ _ .25A --	22	71
37.40	36.63	62.2	2.09	3355	F0223 36. M _ _ _ .25A --	22	71
31.18	43.94	74.7	1.74	3413	F0223 40. M _ _ _ .25A --	22	71
26.75	51.22	87.0	1.49	3429	F0223 50. M _ _ _ .25A --	22	71
24.07	56.91	96.7	1.34	3464	F0223 56. M _ _ _ .25A --	22	71
19.99	68.54	116.5	1.12	3483	F0223 63. M _ _ _ .25A --	22	71
17.44	78.56	133.5	0.95	3510	F0223 71. M _ _ _ .25A --	22	71
16.56	82.72	139.1	0.93	3733	F0233 80. M _ _ _ .25A --	23	71
14.89	92.02	154.7	0.84	3654	F0233 90. M _ _ _ .25A --	23	71
33.21	41.25	70.1	3.54	5000	F0323 40. M _ _ _ .25A --	24	71
27.68	49.49	84.1	2.58	5000	F0323 50. M _ _ _ .25A --	24	71
23.75	57.69	98.0	1.94	5000	F0323 56. M _ _ _ .25A --	24	71
21.37	64.10	108.9	1.64	5000	F0323 63. M _ _ _ .25A --	24	71
17.75	77.19	131.2	1.14	5000	F0323 71. M _ _ _ .25A --	24	71
15.49	88.47	150.3	0.85	5000	F0323 90. M _ _ _ .25A --	24	71
19.05	71.91	120.9	2.07	5000	F0333 71. M _ _ _ .25A --	25	71
16.80	81.53	137.1	1.82	5000	F0333 80. M _ _ _ .25A --	25	71
14.71	93.16	156.7	1.60	5000	F0333 90. M _ _ _ .25A --	25	71
13.22	103.64	174.3	1.43	5000	F0333 100 M _ _ _ .25A --	25	71
11.99	114.26	192.1	1.30	5000	F0333 112 M _ _ _ .25A --	25	71
10.90	125.74	211.5	1.18	5000	F0333 125 M _ _ _ .25A --	25	71
9.30	147.32	247.8	1.01	5000	F0333 160 M _ _ _ .25A --	25	71
7.75	176.75	297.2	0.84	5000	F0333 180 M _ _ _ .25A --	25	71
21.80	62.86	106.8	3.44	6400	F0423 63. M _ _ _ .25A --	30	71
18.75	73.07	124.2	2.58	6400	F0423 71. M _ _ _ .25A --	30	71
16.52	82.94	140.9	2.04	6400	F0423 90. M _ _ _ .25A --	30	71
14.53	94.29	160.2	1.61	6400	F0423 100 M _ _ _ .25A --	30	71
19.66	69.69	117.2	3.23	6400	F0433 71. M _ _ _ .25A --	32	71
17.34	79.00	132.9	2.97	6400	F0433 80. M _ _ _ .25A --	32	71
15.17	90.28	151.8	2.72	6400	F0433 90. M _ _ _ .25A --	32	71
13.64	100.43	168.9	2.49	6400	F0433 100 M _ _ _ .25A --	32	71
12.37	110.72	186.2	2.26	6400	F0433 112 M _ _ _ .25A --	32	71
11.24	121.85	204.9	2.05	6400	F0433 125 M _ _ _ .25A --	32	71
9.60	142.76	240.1	1.75	6400	F0433 160 M _ _ _ .25A --	32	71
8.00	171.28	288.0	1.46	6400	F0433 180 M _ _ _ .25A --	32	71
6.86	199.65	335.8	1.25	6400	F0433 200 M _ _ _ .25A --	32	71
6.18	221.84	373.1	1.13	6400	F0433 225 M _ _ _ .25A --	32	71
5.13	267.14	449.3	0.93	6400	F0433 280 M _ _ _ .25A --	32	71
4.47	306.20	514.9	0.82	6400	F0433 320 M _ _ _ .25A --	32	71
13.33	102.79	172.9	3.30	9000	F0533 100 M _ _ _ .25A --	42	71
12.10	113.20	190.4	3.07	9000	F0533 112 M _ _ _ .25A --	42	71
10.52	130.20	219.0	2.80	9000	F0533 125 M _ _ _ .25A --	42	71
9.68	141.55	238.1	2.67	9000	F0533 160 M _ _ _ .25A --	42	71
8.06	169.93	285.8	2.43	9000	F0533 180 M _ _ _ .25A --	42	71
6.72	203.92	342.9	2.04	9000	F0533 200 M _ _ _ .25A --	42	71
5.96	229.77	386.4	1.81	9000	F0533 225 M _ _ _ .25A --	42	71
5.13	267.11	449.2	1.56	9000	F0533 280 M _ _ _ .25A --	42	71
4.52	303.17	509.8	1.37	9000	F0533 320 M _ _ _ .25A --	42	71
3.98	344.65	579.6	1.21	9000	F0533 360 M _ _ _ .25A --	42	71
3.34	409.90	678.6	1.03	9000	F0543 400 M _ _ _ .25A --	52	71
3.04	451.39	747.3	0.94	9000	F0543 450 M _ _ _ .25A --	52	71
2.71	505.02	836.1	0.84	9000	F0543 500 M _ _ _ .25A --	52	71

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.25 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
9.74	140.70	236.6	3.80	14500	F0633 160_M_---.25A--	55	71
8.11	168.90	284.0	3.17	14500	F0633 180_M_---.25A--	55	71
6.76	202.68	340.9	2.64	14500	F0633 200_M_---.25A--	55	71
6.00	228.38	384.1	2.34	14500	F0633 225_M_---.25A--	55	71
5.16	265.49	446.5	2.02	14500	F0633 280_M_---.25A--	55	71
4.55	301.33	506.7	1.78	14500	F0633 320_M_---.25A--	55	71
4.00	342.56	576.1	1.56	14500	F0633 360_M_---.25A--	55	71
3.36	407.41	674.5	1.33	14500	F0643 400_M_---.25A--	66	71
3.05	448.65	742.8	1.21	14500	F0643 450_M_---.25A--	66	71
2.73	501.96	831.0	1.08	14500	F0643 500_M_---.25A--	66	71
2.44	561.05	928.9	0.97	14500	F0643 560_M_---.25A--	66	71
2.18	627.72	1039.2	0.87	14500	F0643 630_M_---.25A--	66	71
5.03	272.22	457.8	3.71	16000	F0733 280_M_---.25A--	81	71
4.52	303.41	510.3	3.33	16000	F0733 320_M_---.25A--	81	71
4.03	340.28	572.2	2.97	16000	F0733 360_M_---.25A--	81	71
3.43	399.78	661.9	2.57	16000	F0743 400_M_---.25A--	91	71
3.02	453.34	750.5	2.27	16000	F0743 450_M_---.25A--	91	71
2.74	499.22	826.5	2.06	16000	F0743 500_M_---.25A--	91	71
2.49	550.54	911.5	1.87	16000	F0743 560_M_---.25A--	91	71
2.19	624.29	1033.6	1.64	16000	F0743 630_M_---.25A--	91	71
1.92	712.98	1180.4	1.44	16000	F0743 710_M_---.25A--	91	71
1.73	793.09	1313.0	1.29	16000	F0743 800_M_---.25A--	91	71
1.52	899.34	1488.9	1.14	16000	F0743 900_M_---.25A--	91	71
1.38	991.96	1642.3	1.04	16000	F0743 10C_M_---.25A--	91	71
1.23	1117.71	1850.4	0.92	16000	F0743 11C_M_---.25A--	91	71
1.07	1280.01	2119.1	0.80	16000	F0743 12C_M_---.25A--	91	71
2.76	496.15	821.4	3.71	18000	F0843 500_M_---.25A--	138	71
2.37	577.06	955.4	3.19	18000	F0843 560_M_---.25A--	138	71
2.28	601.45	995.7	3.06	18000	F0843 630_M_---.25A--	138	71
1.95	701.40	1161.2	2.63	18000	F0843 710_M_---.25A--	138	71
1.68	815.79	1350.6	2.26	18000	F0843 800_M_---.25A--	138	71
1.50	912.72	1511.1	2.02	18000	F0843 900_M_---.25A--	138	71
1.37	1002.59	1659.9	1.84	18000	F0843 10C_M_---.25A--	138	71
1.25	1098.17	1818.1	1.68	18000	F0843 11C_M_---.25A--	138	71
1.11	1230.95	2037.9	1.50	18000	F0843 12C_M_---.25A--	138	71
1.01	1352.15	2238.6	1.36	18000	F0843 14C_M_---.25A--	138	71
0.83	1657.05	2743.4	1.11	18000	F0843 16C_M_---.25A--	138	71
0.76	1801.24	2982.1	1.02	18000	F0843 18C_M_---.25A--	138	71
0.69	1978.59	3275.7	0.93	18000	F0843 20C_M_---.25A--	138	71
0.63	2166.52	3586.8	0.85	18000	F0843 22C_M_---.25A--	138	71
1.93	708.68	1173.3	3.84	35000	F0943 710_M_---.25A--	211	71
1.70	807.14	1336.3	3.37	35000	F0943 800_M_---.25A--	211	71
1.53	896.74	1484.6	3.03	35000	F0943 900_M_---.25A--	211	71
1.37	1001.59	1658.2	2.71	35000	F0943 10C_M_---.25A--	211	71
1.23	1112.77	1842.3	2.44	35000	F0943 11C_M_---.25A--	211	71
1.08	1266.68	2097.1	2.15	35000	F0943 12C_M_---.25A--	211	71
0.98	1398.38	2315.1	1.94	35000	F0943 14C_M_---.25A--	211	71
0.85	1604.88	2657.0	1.69	35000	F0943 16C_M_---.25A--	211	71
0.78	1760.86	2915.2	1.54	35000	F0943 18C_M_---.25A--	211	71
0.68	2029.56	3360.1	1.34	35000	F0943 20C_M_---.25A--	211	71
0.61	2240.58	3709.4	1.21	35000	F0943 22C_M_---.25A--	211	71
0.55	2487.29	4117.9	1.09	35000	F0943 25C_M_---.25A--	211	71
0.49	2772.29	4589.7	0.98	35000	F0943 28C_M_---.25A--	211	71
0.44	3109.11	5147.3	0.87	35000	F0943 32C_M_---.25A--	211	71

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering



# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.25 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	
155.9	5.90	14.9	4.55	2521	F0223 5.0 M . . . . .25C --	22	71
115.4	7.97	20.2	3.92	2319	F0223 6.3 M . . . . .25C --	22	71
101.4	9.07	22.9	3.66	2376	F0223 9.0 M . . . . .25C --	22	71
89.54	10.27	26.0	3.38	2422	F0223 10. M . . . . .25C --	22	71
70.01	13.14	33.2	2.92	2537	F0223 12. M . . . . .25C --	22	71
64.97	14.16	35.8	2.79	2571	F0223 14. M . . . . .25C --	22	71
51.46	17.88	45.2	2.43	2689	F0223 16. M . . . . .25C --	22	71
45.39	20.27	51.3	2.26	2759	F0223 20. M . . . . .25C --	22	71
39.72	23.16	58.6	2.10	2835	F0223 22. M . . . . .25C --	22	71
35.71	25.77	65.2	1.98	2896	F0223 25. M . . . . .25C --	22	71
32.39	28.41	71.9	1.81	3416	F0223 28. M . . . . .25C --	22	71
29.43	31.26	79.1	1.64	3436	F0223 32. M . . . . .25C --	22	71
25.12	36.63	92.7	1.40	3453	F0223 36. M . . . . .25C --	22	71
20.94	43.94	111.2	1.17	3532	F0223 40. M . . . . .25C --	22	71
17.96	51.22	129.6	1.00	3573	F0223 50. M . . . . .25C --	22	71
16.17	56.91	144.0	0.90	3617	F0223 56. M . . . . .25C --	22	71
35.27	26.09	66.0	3.79	5000	F0323 25. M . . . . .25C --	24	71
31.70	29.02	73.4	3.40	5000	F0323 28. M . . . . .25C --	24	71
28.76	31.99	80.9	3.09	5000	F0323 32. M . . . . .25C --	24	71
26.13	35.21	89.1	2.81	5000	F0323 36. M . . . . .25C --	24	71
22.30	41.25	104.4	2.40	5000	F0323 40. M . . . . .25C --	24	71
18.59	49.49	125.2	1.82	5000	F0323 50. M . . . . .25C --	24	71
15.95	57.69	146.0	1.36	5000	F0323 56. M . . . . .25C --	24	71
14.35	64.10	162.2	1.15	5000	F0323 63. M . . . . .25C --	24	71
12.79	71.91	180.1	1.39	5000	F0333 71. M . . . . .25C --	25	71
11.28	81.53	204.2	1.22	5000	F0333 80. M . . . . .25C --	25	71
9.88	93.16	233.3	1.07	5000	F0333 90. M . . . . .25C --	25	71
8.88	103.64	259.5	0.96	5000	F0333 100 M . . . . .25C --	25	71
8.05	114.26	286.1	0.87	5000	F0333 112 M . . . . .25C --	25	71
19.79	46.49	117.6	3.57	6400	F0423 50. M . . . . .25C --	30	71
16.49	55.79	141.2	2.98	6400	F0423 56. M . . . . .25C --	30	71
14.64	62.86	159.0	2.40	6400	F0423 63. M . . . . .25C --	30	71
12.59	73.07	184.9	1.79	6400	F0423 71. M . . . . .25C --	30	71
11.09	82.94	209.8	1.42	6400	F0423 90. M . . . . .25C --	30	71
9.76	94.29	238.6	1.12	6400	F0423 100 M . . . . .25C --	30	71
13.20	69.69	174.5	2.37	6400	F0433 71. M . . . . .25C --	32	71
11.64	79.00	197.8	2.12	6400	F0433 80. M . . . . .25C --	32	71
10.19	90.28	226.1	1.86	6400	F0433 90. M . . . . .25C --	32	71
9.16	100.43	251.5	1.67	6400	F0433 100 M . . . . .25C --	32	71
8.31	110.72	277.3	1.51	6400	F0433 112 M . . . . .25C --	32	71
7.55	121.85	305.2	1.38	6400	F0433 125 M . . . . .25C --	32	71
6.44	142.76	357.5	1.17	6400	F0433 160 M . . . . .25C --	32	71
5.37	171.28	428.9	0.98	6400	F0433 180 M . . . . .25C --	32	71
4.61	199.65	500.0	0.84	6400	F0433 200 M . . . . .25C --	32	71
12.10	76.06	192.5	3.54	9000	F0523 71. M . . . . .25C --	39	71
10.85	84.78	214.5	2.95	9000	F0523 90. M . . . . .25C --	39	71
9.68	95.08	240.6	2.00	9000	F0523 100 M . . . . .25C --	39	71
8.95	102.79	257.4	2.72	9000	F0533 100 M . . . . .25C --	42	71
8.13	113.20	283.5	2.47	9000	F0533 112 M . . . . .25C --	42	71
7.07	130.20	326.1	2.15	9000	F0533 125 M . . . . .25C --	42	71
6.50	141.55	354.5	1.97	9000	F0533 160 M . . . . .25C --	42	71
5.41	169.93	425.6	1.64	9000	F0533 180 M . . . . .25C --	42	71
4.51	203.92	510.7	1.37	9000	F0533 200 M . . . . .25C --	42	71
4.00	229.77	575.4	1.22	9000	F0533 225 M . . . . .25C --	42	71
3.44	267.11	668.9	1.05	9000	F0533 280 M . . . . .25C --	42	71
3.03	303.17	759.2	0.92	9000	F0533 320 M . . . . .25C --	42	71
2.67	344.65	863.1	0.81	9000	F0533 360 M . . . . .25C --	42	71
10.92	84.26	213.2	3.12	14500	F0623 90. M . . . . .25C --	53	71
9.74	94.50	239.1	2.02	14500	F0623 100 M . . . . .25C --	53	71
9.00	102.17	255.9	3.52	14500	F0633 100 M . . . . .25C --	55	71
8.18	112.51	281.8	3.19	14500	F0633 112 M . . . . .25C --	55	71
7.11	129.41	324.1	2.78	14500	F0633 125 M . . . . .25C --	55	71
6.54	140.70	352.3	2.55	14500	F0633 160 M . . . . .25C --	55	71
5.45	168.90	423.0	2.13	14500	F0633 180 M . . . . .25C --	55	71
4.54	202.68	507.6	1.77	14500	F0633 200 M . . . . .25C --	55	71
4.03	228.38	571.9	1.57	14500	F0633 225 M . . . . .25C --	55	71
3.47	265.49	664.9	1.35	14500	F0633 280 M . . . . .25C --	55	71
3.05	301.33	754.6	1.19	14500	F0633 320 M . . . . .25C --	55	71
2.69	342.56	857.9	1.05	14500	F0633 360 M . . . . .25C --	55	71

**NOTE**

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# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.25 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
5.35	172.03	430.8	3.95	16000	F0733 180_M_---.25C--	81	71
4.54	202.86	508.0	3.35	16000	F0733 200_M_---.25C--	81	71
4.14	222.12	556.3	3.06	16000	F0733 225_M_---.25C--	81	71
3.38	272.22	681.7	2.49	16000	F0733 280_M_---.25C--	81	71
3.03	303.41	759.8	2.24	16000	F0733 320_M_---.25C--	81	71
2.70	340.28	852.1	1.99	16000	F0733 360_M_---.25C--	81	71
2.30	399.78	985.6	1.72	16000	F0743 400_M_---.25C--	91	71
2.03	453.34	1117.6	1.52	16000	F0743 450_M_---.25C--	91	71
1.84	499.22	1230.8	1.38	16000	F0743 500_M_---.25C--	91	71
1.67	550.54	1357.3	1.25	16000	F0743 560_M_---.25C--	91	71
1.47	624.29	1539.1	1.10	16000	F0743 630_M_---.25C--	91	71
1.29	712.98	1757.7	0.97	16000	F0743 710_M_---.25C--	91	71
1.16	793.09	1955.3	0.87	16000	F0743 800_M_---.25C--	91	71
2.37	388.52	957.8	3.18	18000	F0843 400_M_---.25C--	138	71
2.09	439.55	1083.6	2.81	18000	F0843 450_M_---.25C--	138	71
1.85	496.15	1223.2	2.49	18000	F0843 500_M_---.25C--	138	71
1.59	577.06	1422.7	2.14	18000	F0843 560_M_---.25C--	138	71
1.53	601.45	1482.8	2.06	18000	F0843 630_M_---.25C--	138	71
1.31	701.40	1729.2	1.76	18000	F0843 710_M_---.25C--	138	71
1.13	815.79	2011.2	1.52	18000	F0843 800_M_---.25C--	138	71
1.01	912.72	2250.2	1.36	18000	F0843 900_M_---.25C--	138	71
0.92	1002.59	2471.7	1.23	18000	F0843 10C_M_---.25C--	138	71
0.84	1098.17	2707.4	1.13	18000	F0843 11C_M_---.25C--	138	71
0.75	1230.95	3034.7	1.01	18000	F0843 12C_M_---.25C--	138	71
0.68	1352.15	3333.5	0.91	18000	F0843 14C_M_---.25C--	138	71
2.00	459.91	1133.9	3.80	35000	F0943 450_M_---.25C--	211	71
1.80	510.96	1259.7	3.42	35000	F0943 500_M_---.25C--	211	71
1.61	573.03	1412.7	3.05	35000	F0943 560_M_---.25C--	211	71
1.44	637.88	1572.6	2.74	35000	F0943 630_M_---.25C--	211	71
1.30	708.68	1747.1	2.47	35000	F0943 710_M_---.25C--	211	71
1.14	807.14	1989.9	2.17	35000	F0943 800_M_---.25C--	211	71
1.03	896.74	2210.8	1.95	35000	F0943 900_M_---.25C--	211	71
0.92	1001.59	2469.3	1.75	35000	F0943 10C_M_---.25C--	211	71
0.83	1112.77	2743.4	1.57	35000	F0943 11C_M_---.25C--	211	71
0.73	1266.68	3122.8	1.38	35000	F0943 12C_M_---.25C--	211	71
0.66	1398.38	3447.5	1.25	35000	F0943 14C_M_---.25C--	211	71
0.57	1604.88	3956.6	1.09	35000	F0943 16C_M_---.25C--	211	71
0.52	1760.86	4341.1	0.99	35000	F0943 18C_M_---.25C--	211	71
0.45	2029.56	5003.6	0.86	35000	F0943 20C_M_---.25C--	211	71

**0.37 kW**

4 POLE

233.8	5.90	15	4.28	2134	F0223 5.0_M_---.37A--	22	71
173.1	7.97	20	3.68	2277	F0223 6.3_M_---.37A--	22	71
152.2	9.07	23	3.44	2332	F0223 9.0_M_---.37A--	22	71
134.3	10.27	26	3.22	2385	F0223 10_M_---.37A--	22	71
105.0	13.14	33	2.78	2500	F0223 12_M_---.37A--	22	71
97.45	14.16	35	2.64	2530	F0223 14_M_---.37A--	22	71
77.19	17.88	45	2.26	2632	F0223 16_M_---.37A--	22	71
68.09	20.27	51	2.09	2696	F0223 20_M_---.37A--	22	71
59.58	23.16	58	1.90	2753	F0223 22_M_---.37A--	22	71
53.56	25.77	64	1.77	2802	F0223 25_M_---.37A--	22	71
48.58	28.41	71	1.65	2835	F0223 28_M_---.37A--	22	71
44.14	31.26	78	1.55	2886	F0223 32_M_---.37A--	22	71
37.68	36.63	91	1.42	2989	F0223 36_M_---.37A--	22	71
31.41	43.94	110	1.19	3041	F0223 40_M_---.37A--	22	71
26.94	51.22	128	1.02	3055	F0223 50_M_---.37A--	22	71
24.25	56.91	142	0.91	3087	F0223 56_M_---.37A--	22	71
52.90	26.09	65	3.84	5000	F0323 25_M_---.37A--	24	71
47.56	29.02	72	3.45	5000	F0323 28_M_---.37A--	24	71
43.14	31.99	80	3.13	5000	F0323 32_M_---.37A--	24	71
39.20	35.21	88	2.84	5000	F0323 36_M_---.37A--	24	71
33.45	41.25	103	2.41	5000	F0323 40_M_---.37A--	24	71
27.89	49.49	124	1.76	5000	F0323 50_M_---.37A--	24	71
23.92	57.69	144	1.32	5000	F0323 56_M_---.37A--	24	71
21.53	64.10	160	1.12	5000	F0323 63_M_---.37A--	24	71
19.19	71.91	178	1.41	5000	F0333 71_M_---.37A--	25	71
16.93	81.53	201	1.24	5000	F0333 80_M_---.37A--	25	71
14.81	93.16	230	1.09	5000	F0333 90_M_---.37A--	25	71
13.32	103.64	256	0.98	5000	F0333 100_M_---.37A--	25	71
12.08	114.26	282	0.89	5000	F0333 112_M_---.37A--	25	71
10.97	125.74	311	0.80	5000	F0333 125_M_---.37A--	25	71

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.37 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> - <input type="text" value="20"/> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
29.69	46.49	116	3.62	6400	F0423 50. M _ _ _ _ .37A --	30	71
24.74	55.79	139	2.98	6400	F0423 56. M _ _ _ _ .37A --	30	71
21.95	62.86	157	2.34	6400	F0423 63. M _ _ _ _ .37A --	30	71
18.89	73.07	182	1.76	6400	F0423 71. M _ _ _ _ .37A --	30	71
16.64	82.94	207	1.39	6400	F0423 90. M _ _ _ _ .37A --	30	71
14.64	94.29	235	1.09	6400	F0423 100 M _ _ _ _ .37A --	30	71
19.80	69.69	172	2.20	6400	F0433 71. M _ _ _ _ .37A --	32	71
17.47	79.00	195	2.02	6400	F0433 80. M _ _ _ _ .37A --	32	71
15.29	90.28	223	1.85	6400	F0433 90. M _ _ _ _ .37A --	32	71
13.74	100.43	248	1.69	6400	F0433 100 M _ _ _ _ .37A --	32	71
12.46	110.72	274	1.54	6400	F0433 112 M _ _ _ _ .37A --	32	71
11.32	121.85	301	1.39	6400	F0433 125 M _ _ _ _ .37A --	32	71
9.67	142.76	353	1.19	6400	F0433 160 M _ _ _ _ .37A --	32	71
8.06	171.28	423	0.99	6400	F0433 180 M _ _ _ _ .37A --	32	71
6.91	199.65	493	0.85	6400	F0433 200 M _ _ _ _ .37A --	32	71
18.14	76.06	190	3.38	9000	F0523 71. M _ _ _ _ .37A --	39	71
16.28	84.78	212	2.99	9000	F0523 90. M _ _ _ _ .37A --	39	71
14.51	95.08	237	2.03	9000	F0523 100 M _ _ _ _ .37A --	39	71
13.43	102.79	254	2.24	9000	F0533 100 M _ _ _ _ .37A --	42	71
12.19	113.20	280	2.09	9000	F0533 112 M _ _ _ _ .37A --	42	71
10.60	130.20	322	1.91	9000	F0533 125 M _ _ _ _ .37A --	42	71
9.75	141.55	350	1.82	9000	F0533 160 M _ _ _ _ .37A --	42	71
8.12	169.93	420	1.65	9000	F0533 180 M _ _ _ _ .37A --	42	71
6.77	203.92	504	1.39	9000	F0533 200 M _ _ _ _ .37A --	42	71
6.01	229.77	568	1.23	9000	F0533 225 M _ _ _ _ .37A --	42	71
5.17	267.11	660	1.06	9000	F0533 280 M _ _ _ _ .37A --	42	71
4.55	303.17	749	0.93	9000	F0533 320 M _ _ _ _ .37A --	42	71
4.00	344.65	852	0.82	9000	F0533 360 M _ _ _ _ .37A --	42	71
16.38	84.26	210	3.17	14500	F0623 90. M _ _ _ _ .37A --	53	71
14.60	94.50	236	2.04	14500	F0623 100 M _ _ _ _ .37A --	53	71
13.51	102.17	252	3.57	14500	F0633 100 M _ _ _ _ .37A --	55	71
12.27	112.51	278	3.24	14500	F0633 112 M _ _ _ _ .37A --	55	71
10.66	129.41	320	2.81	14500	F0633 125 M _ _ _ _ .37A --	55	71
9.81	140.70	348	2.59	14500	F0633 160 M _ _ _ _ .37A --	55	71
8.17	168.90	417	2.16	14500	F0633 180 M _ _ _ _ .37A --	55	71
6.81	202.68	501	1.80	14500	F0633 200 M _ _ _ _ .37A --	55	71
6.04	228.38	564	1.59	14500	F0633 225 M _ _ _ _ .37A --	55	71
5.20	265.49	656	1.37	14500	F0633 280 M _ _ _ _ .37A --	55	71
4.58	301.33	745	1.21	14500	F0633 320 M _ _ _ _ .37A --	55	71
4.03	342.56	846	1.06	14500	F0633 360 M _ _ _ _ .37A --	55	71
3.39	407.41	991	0.91	14500	F0643 400 M _ _ _ _ .37A --	66	71
3.08	448.65	1091	0.82	14500	F0643 450 M _ _ _ _ .37A --	66	71
8.02	172.03	425	4.00	16000	F0733 180 M _ _ _ _ .37A --	81	71
6.80	202.86	501	3.39	16000	F0733 200 M _ _ _ _ .37A --	81	71
6.21	222.12	549	3.10	16000	F0733 225 M _ _ _ _ .37A --	81	71
5.07	272.22	673	2.53	16000	F0733 280 M _ _ _ _ .37A --	81	71
4.55	303.41	750	2.27	16000	F0733 320 M _ _ _ _ .37A --	81	71
4.06	340.28	841	2.02	16000	F0733 360 M _ _ _ _ .37A --	81	71
3.45	399.78	972	1.75	16000	F0743 400 M _ _ _ _ .37A --	91	71
3.04	453.34	1103	1.54	16000	F0743 450 M _ _ _ _ .37A --	91	71
2.76	499.22	1214	1.40	16000	F0743 500 M _ _ _ _ .37A --	91	71
2.51	550.54	1339	1.27	16000	F0743 560 M _ _ _ _ .37A --	91	71
2.21	624.29	1519	1.12	16000	F0743 630 M _ _ _ _ .37A --	91	71
1.94	712.98	1734	0.98	16000	F0743 710 M _ _ _ _ .37A --	91	71
1.74	793.09	1929	0.88	16000	F0743 800 M _ _ _ _ .37A --	91	71
3.55	388.52	945	3.23	18000	F0843 400 M _ _ _ _ .37A --	138	71
3.14	439.55	1069	2.85	18000	F0843 450 M _ _ _ _ .37A --	138	71
2.78	496.15	1207	2.53	18000	F0843 500 M _ _ _ _ .37A --	138	71
2.39	577.06	1404	2.17	18000	F0843 560 M _ _ _ _ .37A --	138	71
2.29	601.45	1463	2.08	18000	F0843 630 M _ _ _ _ .37A --	138	71
1.97	701.40	1706	1.79	18000	F0843 710 M _ _ _ _ .37A --	138	71
1.69	815.79	1984	1.54	18000	F0843 800 M _ _ _ _ .37A --	138	71
1.51	912.72	2220	1.37	18000	F0843 900 M _ _ _ _ .37A --	138	71
1.38	1002.59	2439	1.25	18000	F0843 10C M _ _ _ _ .37A --	138	71
1.26	1098.17	2671	1.14	18000	F0843 11C M _ _ _ _ .37A --	138	71
1.12	1230.95	2994	1.02	18000	F0843 12C M _ _ _ _ .37A --	138	71
1.02	1352.15	3289	0.93	18000	F0843 14C M _ _ _ _ .37A --	138	71

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.37 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
2.70	510.96	1243	3.62	35000	F0943500_M_...37A--	211	71
2.41	573.03	1394	3.23	35000	F0943560_M_...37A--	211	71
2.16	637.88	1552	2.90	35000	F0943630_M_...37A--	211	71
1.95	708.68	1724	2.61	35000	F0943710_M_...37A--	211	71
1.71	807.14	1963	2.29	35000	F0943800_M_...37A--	211	71
1.54	896.74	2181	2.06	35000	F0943900_M_...37A--	211	71
1.38	1001.59	2436	1.85	35000	F094310C_M_...37A--	211	71
1.24	1112.77	2707	1.66	35000	F094311C_M_...37A--	211	71
1.09	1266.68	3081	1.46	35000	F094312C_M_...37A--	211	71
0.99	1398.38	3402	1.32	35000	F094314C_M_...37A--	211	71
0.86	1604.88	3904	1.15	35000	F094316C_M_...37A--	211	71
0.78	1760.86	4283	1.05	35000	F094318C_M_...37A--	211	71
0.68	2029.56	4937	0.91	35000	F094320C_M_...37A--	211	71
0.62	2240.58	5450	0.83	35000	F094322C_M_...37A--	211	71

**0.37 kW**

6 POLE

155.9	5.90	22.1	3.08	2241	F0223 5.0_M_...37C--	29	80
115.4	7.97	29.9	2.65	2062	F0223 6.3_M_...37C--	29	80
101.4	9.07	34.0	2.47	2113	F0223 9.0_M_...37C--	29	80
89.54	10.27	38.5	2.29	2153	F0223 10_M_...37C--	29	80
70.01	13.14	49.2	1.97	2255	F0223 12_M_...37C--	29	80
64.97	14.16	53.0	1.89	2286	F0223 14_M_...37C--	29	80
51.46	17.88	67.0	1.64	2391	F0223 16_M_...37C--	29	80
45.39	20.27	75.9	1.53	2453	F0223 20_M_...37C--	29	80
39.72	23.16	86.7	1.42	2521	F0223 22_M_...37C--	29	80
35.71	25.77	96.5	1.34	2575	F0223 25_M_...37C--	29	80
32.39	28.41	106.4	1.22	3037	F0223 28_M_...37C--	29	80
29.43	31.26	117.1	1.11	3055	F0223 32_M_...37C--	29	80
25.12	36.63	137.2	0.95	3070	F0223 36_M_...37C--	29	80
57.68	15.95	59.7	3.88	5000	F0323 16_M_...37C--	31	80
45.69	20.14	75.4	3.17	5000	F0323 20_M_...37C--	31	80
40.30	22.83	85.5	2.88	5000	F0323 22_M_...37C--	31	80
35.27	26.09	97.7	2.56	5000	F0323 25_M_...37C--	31	80
31.70	29.02	108.7	2.30	5000	F0323 28_M_...37C--	31	80
28.76	31.99	119.8	2.09	5000	F0323 32_M_...37C--	31	80
26.13	35.21	131.8	1.90	5000	F0323 36_M_...37C--	31	80
22.30	41.25	154.5	1.62	5000	F0323 40_M_...37C--	31	80
18.59	49.49	185.3	1.23	5000	F0323 50_M_...37C--	31	80
15.95	57.69	216.0	0.92	5000	F0323 56_M_...37C--	31	80
12.79	71.91	266.5	0.94	5000	F0333 71_M_...37C--	32	80
11.28	81.53	302.2	0.83	5000	F0333 80_M_...37C--	32	80
32.72	28.12	105.3	3.89	6400	F0423 28_M_...37C--	37	80
29.71	30.97	116.0	3.62	6400	F0423 32_M_...37C--	37	80
25.83	35.62	133.4	3.15	6400	F0423 36_M_...37C--	37	80
23.76	38.72	145.0	2.90	6400	F0423 40_M_...37C--	37	80
19.79	46.49	174.1	2.41	6400	F0423 50_M_...37C--	37	80
16.49	55.79	208.9	2.01	6400	F0423 56_M_...37C--	37	80
14.64	62.86	235.4	1.62	6400	F0423 63_M_...37C--	37	80
12.59	73.07	273.6	1.21	6400	F0423 71_M_...37C--	37	80
11.09	82.94	310.6	0.96	6400	F0423 90_M_...37C--	37	80
13.20	69.69	258.3	1.60	6400	F0433 71_M_...37C--	39	80
11.64	79.00	292.8	1.43	6400	F0433 80_M_...37C--	39	80
10.19	90.28	334.6	1.26	6400	F0433 90_M_...37C--	39	80
9.16	100.43	372.2	1.13	6400	F0433 100_M_...37C--	39	80
8.31	110.72	410.4	1.02	6400	F0433 112_M_...37C--	39	80
7.55	121.85	451.6	0.93	6400	F0433 125_M_...37C--	39	80
19.14	48.07	180.0	3.54	9000	F0523 50_M_...37C--	45	80
16.23	56.68	212.3	3.08	9000	F0523 56_M_...37C--	45	80
14.82	62.06	232.4	2.84	9000	F0523 63_M_...37C--	45	80
12.10	76.06	284.8	2.39	9000	F0523 71_M_...37C--	45	80
10.85	84.78	317.5	1.99	9000	F0523 90_M_...37C--	45	80
9.68	95.08	356.0	1.35	9000	F0523 100_M_...37C--	45	80
8.95	102.79	381.0	1.84	9000	F0533 100_M_...37C--	48	80
8.13	113.20	419.5	1.67	9000	F0533 112_M_...37C--	48	80
7.07	130.20	482.6	1.45	9000	F0533 125_M_...37C--	48	80
6.50	141.55	524.6	1.33	9000	F0533 160_M_...37C--	48	80
5.41	169.93	629.8	1.11	9000	F0533 180_M_...37C--	48	80
4.51	203.92	755.8	0.93	9000	F0533 200_M_...37C--	48	80
4.00	229.77	851.6	0.82	9000	F0533 225_M_...37C--	48	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.37 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
14.91	61.69	231.0	3.90	14500	F0623 63_ M _ _ _ _ .37C --	60	80
12.17	75.60	283.1	3.09	14500	F0623 71_ M _ _ _ _ .37C --	60	80
10.92	84.26	315.5	2.11	14500	F0623 90_ M _ _ _ _ .37C --	60	80
9.74	94.50	353.9	1.36	14500	F0623 100_ M _ _ _ _ .37C --	60	80
9.00	102.17	378.7	2.38	14500	F0633 100_ M _ _ _ _ .37C --	62	80
8.18	112.51	417.0	2.16	14500	F0633 112_ M _ _ _ _ .37C --	62	80
7.11	129.41	479.6	1.88	14500	F0633 125_ M _ _ _ _ .37C --	62	80
6.54	140.70	521.5	1.73	14500	F0633 160_ M _ _ _ _ .37C --	62	80
5.45	168.90	626.0	1.44	14500	F0633 180_ M _ _ _ _ .37C --	62	80
4.54	202.68	751.2	1.20	14500	F0633 200_ M _ _ _ _ .37C --	62	80
4.03	228.38	846.4	1.06	14500	F0633 225_ M _ _ _ _ .37C --	62	80
3.47	265.49	984.0	0.91	14500	F0633 280_ M _ _ _ _ .37C --	62	80
3.05	301.33	1116.8	0.81	14500	F0633 320_ M _ _ _ _ .37C --	62	80
10.85	84.78	317.5	3.84	16000	F0723 90_ M _ _ _ _ .37C --	84	80
9.77	94.20	352.7	2.95	16000	F0723 100_ M _ _ _ _ .37C --	84	80
11.65	78.99	292.8	5.16	16000	F0733 80_ M _ _ _ _ .37C --	88	80
10.01	91.87	340.5	4.67	16000	F0733 90_ M _ _ _ _ .37C --	88	80
8.95	102.79	381.0	4.46	16000	F0733 100_ M _ _ _ _ .37C --	88	80
8.40	109.56	406.1	4.19	16000	F0733 112_ M _ _ _ _ .37C --	88	80
7.09	129.84	481.2	3.53	16000	F0733 125_ M _ _ _ _ .37C --	88	80
6.64	138.63	513.8	3.31	16000	F0733 160_ M _ _ _ _ .37C --	88	80
5.35	172.03	637.6	2.67	16000	F0733 180_ M _ _ _ _ .37C --	88	80
4.54	202.86	751.9	2.26	16000	F0733 200_ M _ _ _ _ .37C --	88	80
4.14	222.12	823.3	2.06	16000	F0733 225_ M _ _ _ _ .37C --	88	80
3.38	272.22	1008.9	1.68	16000	F0733 280_ M _ _ _ _ .37C --	88	80
3.03	303.41	1124.5	1.51	16000	F0733 320_ M _ _ _ _ .37C --	88	80
2.70	340.28	1261.2	1.35	16000	F0733 360_ M _ _ _ _ .37C --	88	80
2.30	399.78	1458.7	1.17	16000	F0743 400_ M _ _ _ _ .37C --	97	80
2.03	453.34	1654.1	1.03	16000	F0743 450_ M _ _ _ _ .37C --	97	80
1.84	499.22	1821.5	0.93	16000	F0743 500_ M _ _ _ _ .37C --	97	80
1.67	550.54	2008.8	0.85	16000	F0743 560_ M _ _ _ _ .37C --	97	80
4.14	222.21	810.8	3.76	18000	F0833 225_ M _ _ _ _ .37C --	127	80
3.38	272.31	993.6	3.07	18000	F0833 280_ M _ _ _ _ .37C --	127	80
3.09	297.37	1085.0	2.81	18000	F0833 320_ M _ _ _ _ .37C --	127	80
2.69	342.42	1249.4	2.43	18000	F0833 360_ M _ _ _ _ .37C --	127	80
2.37	388.52	1417.6	2.15	18000	F0843 400_ M _ _ _ _ .37C --	144	80
2.09	439.55	1603.8	1.90	18000	F0843 450_ M _ _ _ _ .37C --	144	80
1.85	496.15	1810.3	1.68	18000	F0843 500_ M _ _ _ _ .37C --	144	80
1.59	577.06	2105.5	1.45	18000	F0843 560_ M _ _ _ _ .37C --	144	80
1.53	601.45	2194.5	1.39	18000	F0843 630_ M _ _ _ _ .37C --	144	80
1.31	701.40	2559.2	1.19	18000	F0843 710_ M _ _ _ _ .37C --	144	80
1.13	815.79	2976.6	1.02	18000	F0843 800_ M _ _ _ _ .37C --	144	80
1.01	912.72	3330.3	0.92	18000	F0843 900_ M _ _ _ _ .37C --	144	80
0.92	1002.59	3658.2	0.83	18000	F0843 10C_ M _ _ _ _ .37C --	144	80
2.23	413.16	1507.5	2.86	35000	F0943 400_ M _ _ _ _ .37C --	217	80
2.00	459.91	1678.1	2.57	35000	F0943 450_ M _ _ _ _ .37C --	217	80
1.80	510.96	1864.4	2.31	35000	F0943 500_ M _ _ _ _ .37C --	217	80
1.61	573.03	2090.8	2.06	35000	F0943 560_ M _ _ _ _ .37C --	217	80
1.44	637.88	2327.4	1.85	35000	F0943 630_ M _ _ _ _ .37C --	217	80
1.30	708.68	2585.8	1.67	35000	F0943 710_ M _ _ _ _ .37C --	217	80
1.14	807.14	2945.0	1.46	35000	F0943 800_ M _ _ _ _ .37C --	217	80
1.03	896.74	3271.9	1.32	35000	F0943 900_ M _ _ _ _ .37C --	217	80
0.92	1001.59	3654.5	1.18	35000	F0943 10C_ M _ _ _ _ .37C --	217	80
0.83	1112.77	4060.2	1.06	35000	F0943 11C_ M _ _ _ _ .37C --	217	80
0.73	1266.68	4621.8	0.93	35000	F0943 12C_ M _ _ _ _ .37C --	217	80
0.66	1398.38	5102.3	0.84	35000	F0943 14C_ M _ _ _ _ .37C --	217	80
1.63	565.64	2063.9	3.88	43000	F1043 560_ M _ _ _ _ .37C --	305	80
1.48	622.20	2270.2	3.52	43000	F1043 630_ M _ _ _ _ .37C --	305	80
1.29	714.97	2608.7	3.07	43000	F1043 710_ M _ _ _ _ .37C --	305	80
1.13	810.75	2958.2	2.70	43000	F1043 800_ M _ _ _ _ .37C --	305	80
1.03	894.25	3262.9	2.45	43000	F1043 900_ M _ _ _ _ .37C --	305	80
0.90	1024.10	3736.7	2.14	43000	F1043 10C_ M _ _ _ _ .37C --	305	80
0.81	1140.17	4160.2	1.92	43000	F1043 11C_ M _ _ _ _ .37C --	305	80
0.73	1256.39	4584.2	1.75	43000	F1043 12C_ M _ _ _ _ .37C --	305	80
0.66	1385.78	5056.3	1.58	43000	F1043 14C_ M _ _ _ _ .37C --	305	80
0.57	1601.19	5842.3	1.37	43000	F1043 16C_ M _ _ _ _ .37C --	305	80
0.51	1794.35	6547.1	1.22	43000	F1043 18C_ M _ _ _ _ .37C --	305	80
0.45	2025.13	7389.1	1.08	43000	F1043 20C_ M _ _ _ _ .37C --	305	80
0.41	2235.69	8157.4	0.98	43000	F1043 22C_ M _ _ _ _ .37C --	305	80
0.37	2481.31	9053.6	0.88	43000	F1043 25C_ M _ _ _ _ .37C --	305	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.55 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
240.57	5.90	21	2.96	1911	F0223 5.0 M . . . . .55A --	29	80
178.09	7.97	29	2.55	2039	F0223 6.3 M . . . . .55A --	29	80
156.57	9.07	33	2.38	2089	F0223 9.0 M . . . . .55A --	29	80
138.20	10.27	37	2.23	2136	F0223 10. M . . . . .55A --	29	80
108.06	13.14	47	1.92	2239	F0223 12. M . . . . .55A --	29	80
100.27	14.16	51	1.83	2266	F0223 14. M . . . . .55A --	29	80
79.42	17.88	64	1.57	2357	F0223 16. M . . . . .55A --	29	80
70.06	20.27	73	1.45	2415	F0223 20. M . . . . .55A --	29	80
61.31	23.16	84	1.32	2465	F0223 22. M . . . . .55A --	29	80
55.11	25.77	93	1.23	2509	F0223 25. M . . . . .55A --	29	80
49.99	28.41	102	1.14	2539	F0223 28. M . . . . .55A --	29	80
45.42	31.26	113	1.07	2584	F0223 32. M . . . . .55A --	29	80
38.77	36.63	132	0.98	2677	F0223 36. M . . . . .55A --	29	80
32.32	43.94	158	0.82	2723	F0223 40. M . . . . .55A --	29	80
89.03	15.95	58	3.95	5000	F0323 16. M . . . . .55A --	31	80
70.52	20.14	73	3.29	5000	F0323 20. M . . . . .55A --	31	80
62.21	22.83	82	2.99	5000	F0323 22. M . . . . .55A --	31	80
54.44	26.09	94	2.66	5000	F0323 25. M . . . . .55A --	31	80
48.94	29.02	105	2.39	5000	F0323 28. M . . . . .55A --	31	80
44.39	31.99	115	2.17	5000	F0323 32. M . . . . .55A --	31	80
40.33	35.21	127	1.97	5000	F0323 36. M . . . . .55A --	31	80
34.42	41.25	149	1.67	5000	F0323 40. M . . . . .55A --	31	80
28.69	49.49	178	1.22	5000	F0323 50. M . . . . .55A --	31	80
24.62	57.69	208	0.91	5000	F0323 56. M . . . . .55A --	31	80
19.75	71.91	257	0.97	5000	F0333 71. M . . . . .55A --	32	80
17.42	81.53	291	0.86	5000	F0333 80. M . . . . .55A --	32	80
50.50	28.12	101	3.86	6400	F0423 28. M . . . . .55A --	37	80
45.86	30.97	112	3.55	6400	F0423 32. M . . . . .55A --	37	80
39.87	35.62	128	3.15	6400	F0423 36. M . . . . .55A --	37	80
36.67	38.72	140	2.94	6400	F0423 40. M . . . . .55A --	37	80
30.55	46.49	168	2.51	6400	F0423 50. M . . . . .55A --	37	80
25.45	55.79	201	2.06	6400	F0423 56. M . . . . .55A --	37	80
22.59	62.86	227	1.62	6400	F0423 63. M . . . . .55A --	37	80
19.43	73.07	264	1.22	6400	F0423 71. M . . . . .55A --	37	80
17.12	82.94	299	0.96	6400	F0423 90. M . . . . .55A --	37	80
20.38	69.69	249	1.52	6400	F0433 71. M . . . . .55A --	39	80
17.97	79.00	282	1.40	6400	F0433 80. M . . . . .55A --	39	80
15.73	90.28	322	1.28	6400	F0433 90. M . . . . .55A --	39	80
14.14	100.43	358	1.17	6400	F0433 100 M . . . . .55A --	39	80
12.82	110.72	395	1.06	6400	F0433 112 M . . . . .55A --	39	80
11.65	121.85	435	0.97	6400	F0433 125 M . . . . .55A --	39	80
9.95	142.76	510	0.82	6400	F0433 160 M . . . . .55A --	39	80
29.54	48.07	173	3.46	7460	F0523 50. M . . . . .55A --	45	80
25.05	56.68	204	3.00	7761	F0523 56. M . . . . .55A --	45	80
22.88	62.06	224	2.78	7922	F0523 63. M . . . . .55A --	45	80
18.67	76.06	274	2.34	8307	F0523 71. M . . . . .55A --	45	80
16.75	84.78	306	2.07	8669	F0523 90. M . . . . .55A --	45	80
14.94	95.08	343	1.40	9000	F0523 100 M . . . . .55A --	45	80
13.81	102.79	367	1.55	8480	F0533 100 M . . . . .55A --	48	80
12.54	113.20	404	1.45	8671	F0533 112 M . . . . .55A --	48	80
10.91	130.20	465	1.32	8997	F0533 125 M . . . . .55A --	48	80
10.03	141.55	505	1.26	9000	F0533 160 M . . . . .55A --	48	80
8.36	169.93	607	1.14	9000	F0533 180 M . . . . .55A --	48	80
6.96	203.92	728	0.96	9000	F0533 200 M . . . . .55A --	48	80
6.18	229.77	820	0.85	9000	F0533 225 M . . . . .55A --	48	80
23.02	61.69	222	4.05	14500	F0623 63. M . . . . .55A --	60	80
18.78	75.60	273	3.22	14500	F0623 71. M . . . . .55A --	60	80
16.85	84.26	304	2.19	14500	F0623 90. M . . . . .55A --	60	80
15.03	94.50	341	1.41	14500	F0623 100 M . . . . .55A --	60	80
13.90	102.17	365	2.47	14500	F0633 100 M . . . . .55A --	62	80
12.62	112.51	402	2.24	14500	F0633 112 M . . . . .55A --	62	80
10.97	129.41	462	1.95	14500	F0633 125 M . . . . .55A --	62	80
10.09	140.70	502	1.79	14500	F0633 160 M . . . . .55A --	62	80
8.41	168.90	603	1.49	14500	F0633 180 M . . . . .55A --	62	80
7.01	202.68	723	1.24	14500	F0633 200 M . . . . .55A --	62	80
6.22	228.38	815	1.10	14500	F0633 225 M . . . . .55A --	62	80
5.35	265.49	948	0.95	14500	F0633 280 M . . . . .55A --	62	80
4.71	301.33	1076	0.84	14500	F0633 320 M . . . . .55A --	62	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.55 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
16.75	84.78	306	4.00	16000	F0723 90_ M _ _ _ .55A --	84	80
15.07	94.20	340	3.07	16000	F0723 100_ M _ _ _ .55A --	84	80
17.98	78.99	282	4.93	16000	F0733 80_ M _ _ _ .55A --	88	80
15.46	91.87	328	4.45	16000	F0733 90_ M _ _ _ .55A --	88	80
13.81	102.79	367	4.25	16000	F0733 100_ M _ _ _ .55A --	88	80
12.96	109.56	391	3.99	16000	F0733 112_ M _ _ _ .55A --	88	80
10.94	129.84	463	3.50	16000	F0733 125_ M _ _ _ .55A --	88	80
10.24	138.63	495	3.33	16000	F0733 160_ M _ _ _ .55A --	88	80
8.25	172.03	614	2.77	16000	F0733 180_ M _ _ _ .55A --	88	80
7.00	202.86	724	2.35	16000	F0733 200_ M _ _ _ .55A --	88	80
6.39	222.12	793	2.14	16000	F0733 225_ M _ _ _ .55A --	88	80
5.22	272.22	972	1.75	16000	F0733 280_ M _ _ _ .55A --	88	80
4.68	303.41	1083	1.57	16000	F0733 320_ M _ _ _ .55A --	88	80
4.17	340.28	1215	1.40	16000	F0733 360_ M _ _ _ .55A --	88	80
3.55	399.78	1405	1.21	16000	F0743 400_ M _ _ _ .55A --	97	80
3.13	453.34	1593	1.07	16000	F0743 450_ M _ _ _ .55A --	97	80
2.84	499.22	1754	0.97	16000	F0743 500_ M _ _ _ .55A --	97	80
2.58	550.54	1935	0.88	16000	F0743 560_ M _ _ _ .55A --	97	80
6.39	222.21	781	3.91	18000	F0833 225_ M _ _ _ .55A --	127	80
5.21	272.31	957	3.19	18000	F0833 280_ M _ _ _ .55A --	127	80
4.78	297.37	1045	2.92	18000	F0833 320_ M _ _ _ .55A --	127	80
3.65	388.52	1365	2.23	18000	F0843 400_ M _ _ _ .55A --	144	80
3.23	439.55	1545	1.97	18000	F0843 450_ M _ _ _ .55A --	144	80
2.86	496.15	1743	1.75	18000	F0843 500_ M _ _ _ .55A --	144	80
2.46	577.06	2028	1.50	18000	F0843 560_ M _ _ _ .55A --	144	80
2.36	601.45	2114	1.44	18000	F0843 630_ M _ _ _ .55A --	144	80
2.02	701.40	2465	1.24	18000	F0843 710_ M _ _ _ .55A --	144	80
1.74	815.79	2867	1.06	18000	F0843 800_ M _ _ _ .55A --	144	80
1.56	912.72	3207	0.95	18000	F0843 900_ M _ _ _ .55A --	144	80
1.42	1002.59	3523	0.87	18000	F0843 10C_ M _ _ _ .55A --	144	80
3.44	413.16	1452	3.10	35000	F0943 400_ M _ _ _ .55A --	217	80
3.09	459.91	1616	2.78	35000	F0943 450_ M _ _ _ .55A --	217	80
2.78	510.96	1796	2.51	35000	F0943 500_ M _ _ _ .55A --	217	80
2.48	573.03	2014	2.23	35000	F0943 560_ M _ _ _ .55A --	217	80
2.23	637.88	2241	2.01	35000	F0943 630_ M _ _ _ .55A --	217	80
2.00	708.68	2490	1.81	35000	F0943 710_ M _ _ _ .55A --	217	80
1.76	807.14	2836	1.59	35000	F0943 800_ M _ _ _ .55A --	217	80
1.58	896.74	3151	1.43	35000	F0943 900_ M _ _ _ .55A --	217	80
1.42	1001.59	3520	1.28	35000	F0943 10C_ M _ _ _ .55A --	217	80
1.28	1112.77	3910	1.15	35000	F0943 11C_ M _ _ _ .55A --	217	80
1.12	1266.68	4451	1.01	35000	F0943 12C_ M _ _ _ .55A --	217	80
1.02	1398.38	4914	0.92	35000	F0943 14C_ M _ _ _ .55A --	217	80
2.51	565.64	1988	4.02	43000	F1043 560_ M _ _ _ .55A --	305	80
2.28	622.20	2186	3.66	43000	F1043 630_ M _ _ _ .55A --	305	80
1.99	714.97	2512	3.18	43000	F1043 710_ M _ _ _ .55A --	305	80
1.75	810.75	2849	2.81	43000	F1043 800_ M _ _ _ .55A --	305	80
1.59	894.25	3142	2.55	43000	F1043 900_ M _ _ _ .55A --	305	80
1.39	1024.10	3599	2.22	43000	F1043 10C_ M _ _ _ .55A --	305	80
1.25	1140.17	4007	2.00	43000	F1043 11C_ M _ _ _ .55A --	305	80
1.13	1256.39	4415	1.81	43000	F1043 12C_ M _ _ _ .55A --	305	80
1.02	1385.78	4870	1.64	43000	F1043 14C_ M _ _ _ .55A --	305	80
0.89	1601.19	5627	1.42	43000	F1043 16C_ M _ _ _ .55A --	305	80
0.79	1794.35	6305	1.27	43000	F1043 18C_ M _ _ _ .55A --	305	80
0.70	2025.13	7116	1.12	43000	F1043 20C_ M _ _ _ .55A --	305	80
0.64	2235.69	7856	1.02	43000	F1043 22C_ M _ _ _ .55A --	305	80
0.57	2481.31	8719	0.92	43000	F1043 25C_ M _ _ _ .55A --	305	80
0.51	2795.99	9825	0.81	43000	F1043 28C_ M _ _ _ .55A --	305	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.55 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
155.9	5.90	32.9	2.07	1990	F0223 5.0 _ M _ _ _ .55C --	29	80
115.4	7.97	44.4	1.78	1831	F0223 6.3 _ M _ _ _ .55C --	29	80
101.4	9.07	50.5	1.66	1876	F0223 9.0 _ M _ _ _ .55C --	29	80
89.54	10.27	57.2	1.54	1912	F0223 10. _ M _ _ _ .55C --	29	80
70.01	13.14	73.1	1.33	2003	F0223 12. _ M _ _ _ .55C --	29	80
64.97	14.16	78.8	1.27	2030	F0223 14. _ M _ _ _ .55C --	29	80
51.46	17.88	99.5	1.11	2123	F0223 16. _ M _ _ _ .55C --	29	80
45.39	20.27	112.8	1.03	2178	F0223 20. _ M _ _ _ .55C --	29	80
39.72	23.16	128.9	0.95	2238	F0223 22. _ M _ _ _ .55C --	29	80
35.71	25.77	143.4	0.90	2286	F0223 25. _ M _ _ _ .55C --	29	80
32.39	28.41	158.1	0.82	2697	F0223 28. _ M _ _ _ .55C --	29	80
102.4	8.98	50.0	3.88	5000	F0323 9.0 _ M _ _ _ .55C --	31	80
90.07	10.21	56.9	3.61	5000	F0323 10. _ M _ _ _ .55C --	31	80
79.50	11.57	64.4	3.35	5000	F0323 12. _ M _ _ _ .55C --	31	80
62.17	14.80	82.4	2.71	5000	F0323 14. _ M _ _ _ .55C --	31	80
57.68	15.95	88.8	2.61	5000	F0323 16. _ M _ _ _ .55C --	31	80
45.69	20.14	112.1	2.13	5000	F0323 20. _ M _ _ _ .55C --	31	80
40.30	22.83	127.1	1.94	5000	F0323 22. _ M _ _ _ .55C --	31	80
35.27	26.09	145.2	1.72	5000	F0323 25. _ M _ _ _ .55C --	31	80
31.70	29.02	161.5	1.55	5000	F0323 28. _ M _ _ _ .55C --	31	80
28.76	31.99	178.1	1.40	5000	F0323 32. _ M _ _ _ .55C --	31	80
26.13	35.21	196.0	1.28	5000	F0323 36. _ M _ _ _ .55C --	31	80
22.30	41.25	229.6	1.09	5000	F0323 40. _ M _ _ _ .55C --	31	80
18.59	49.49	275.5	0.83	5000	F0323 50. _ M _ _ _ .55C --	31	80
46.84	19.64	109.3	3.60	6400	F0423 20. _ M _ _ _ .55C --	37	80
42.23	21.79	121.3	3.30	6400	F0423 22. _ M _ _ _ .55C --	37	80
37.17	24.75	137.8	2.95	6400	F0423 25. _ M _ _ _ .55C --	37	80
32.72	28.12	156.5	2.62	6400	F0423 28. _ M _ _ _ .55C --	37	80
29.71	30.97	172.4	2.44	6400	F0423 32. _ M _ _ _ .55C --	37	80
25.83	35.62	198.3	2.12	6400	F0423 36. _ M _ _ _ .55C --	37	80
23.76	38.72	215.6	1.95	6400	F0423 40. _ M _ _ _ .55C --	37	80
19.79	46.49	258.8	1.62	6400	F0423 50. _ M _ _ _ .55C --	37	80
16.49	55.79	310.5	1.35	6400	F0423 56. _ M _ _ _ .55C --	37	80
14.64	62.86	349.9	1.09	6400	F0423 63. _ M _ _ _ .55C --	37	80
12.59	73.07	406.8	0.81	6400	F0423 71. _ M _ _ _ .55C --	37	80
13.20	69.69	383.9	1.08	6400	F0433 71. _ M _ _ _ .55C --	39	80
11.64	79.00	435.3	0.96	6400	F0433 80. _ M _ _ _ .55C --	39	80
10.19	90.28	497.4	0.84	6400	F0433 90. _ M _ _ _ .55C --	39	80
32.03	28.72	159.9	3.70	7213	F0523 28. _ M _ _ _ .55C --	45	80
30.05	30.61	170.4	3.50	7327	F0523 32. _ M _ _ _ .55C --	45	80
25.36	36.28	201.9	3.03	7642	F0523 36. _ M _ _ _ .55C --	45	80
23.75	38.74	215.6	2.86	7773	F0523 40. _ M _ _ _ .55C --	45	80
19.14	48.07	267.6	2.38	8160	F0523 50. _ M _ _ _ .55C --	45	80
16.23	56.68	315.5	2.07	8471	F0523 56. _ M _ _ _ .55C --	45	80
14.82	62.06	345.5	1.91	8638	F0523 63. _ M _ _ _ .55C --	45	80
12.10	76.06	423.4	1.61	9000	F0523 71. _ M _ _ _ .55C --	45	80
10.85	84.78	471.9	1.34	9000	F0523 90. _ M _ _ _ .55C --	45	80
9.68	95.08	529.2	0.91	9000	F0523 100 _ M _ _ _ .55C --	45	80
8.95	102.79	566.3	1.24	9000	F0533 100 _ M _ _ _ .55C --	48	80
8.13	113.20	623.6	1.12	9000	F0533 112 _ M _ _ _ .55C --	48	80
7.07	130.20	717.3	0.98	9000	F0533 125 _ M _ _ _ .55C --	48	80
6.50	141.55	779.9	0.90	9000	F0533 160 _ M _ _ _ .55C --	48	80
19.26	47.78	265.9	3.38	14500	F0623 50. _ M _ _ _ .55C --	60	80
16.33	56.34	313.6	2.87	14500	F0623 56. _ M _ _ _ .55C --	60	80
14.91	61.69	343.4	2.62	14500	F0623 63. _ M _ _ _ .55C --	60	80
12.17	75.60	420.8	2.08	14500	F0623 71. _ M _ _ _ .55C --	60	80
10.92	84.26	469.0	1.42	14500	F0623 90. _ M _ _ _ .55C --	60	80
9.74	94.50	526.0	0.92	14500	F0623 100 _ M _ _ _ .55C --	60	80
9.00	102.17	562.9	1.60	14500	F0633 100 _ M _ _ _ .55C --	62	80
8.18	112.51	619.9	1.45	14500	F0633 112 _ M _ _ _ .55C --	62	80
7.11	129.41	713.0	1.26	14500	F0633 125 _ M _ _ _ .55C --	62	80
6.54	140.70	775.1	1.16	14500	F0633 160 _ M _ _ _ .55C --	62	80
5.45	168.90	930.6	0.97	14500	F0633 180 _ M _ _ _ .55C --	62	80
4.54	202.68	1116.7	0.81	14500	F0633 200 _ M _ _ _ .55C --	62	80
12.49	73.68	410.2	3.80	16000	F0723 71. _ M _ _ _ .55C --	84	80
10.85	84.78	471.9	2.59	16000	F0723 90. _ M _ _ _ .55C --	84	80
9.77	94.20	524.3	1.98	16000	F0723 100 _ M _ _ _ .55C --	84	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering



# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.55 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
11.65	78.99	435.2	3.47	16000	F0733 80_ M _ _ _ .55C --	88	80
10.01	91.87	506.2	3.14	16000	F0733 90_ M _ _ _ .55C --	88	80
8.95	102.79	566.3	3.00	16000	F0733 100_ M _ _ _ .55C --	88	80
8.40	109.56	603.6	2.82	16000	F0733 112_ M _ _ _ .55C --	88	80
7.09	129.84	715.4	2.38	16000	F0733 125_ M _ _ _ .55C --	88	80
6.64	138.63	763.8	2.23	16000	F0733 160_ M _ _ _ .55C --	88	80
5.35	172.03	947.8	1.79	16000	F0733 180_ M _ _ _ .55C --	88	80
4.54	202.86	1117.6	1.52	16000	F0733 200_ M _ _ _ .55C --	88	80
4.14	222.12	1223.8	1.39	16000	F0733 225_ M _ _ _ .55C --	88	80
3.38	272.22	1499.8	1.13	16000	F0733 280_ M _ _ _ .55C --	88	80
3.03	303.41	1671.6	1.02	16000	F0733 320_ M _ _ _ .55C --	88	80
2.70	340.28	1874.7	0.91	16000	F0733 360_ M _ _ _ .55C --	88	80
6.43	143.09	788.4	3.87	18000	F0833 160_ M _ _ _ .55C --	127	80
5.30	173.46	955.7	3.19	18000	F0833 180_ M _ _ _ .55C --	127	80
4.55	202.29	1114.5	2.74	18000	F0833 200_ M _ _ _ .55C --	127	80
4.14	222.21	1224.2	2.49	18000	F0833 225_ M _ _ _ .55C --	127	80
3.38	272.31	1500.3	2.03	18000	F0833 280_ M _ _ _ .55C --	127	80
3.09	297.37	1638.3	1.86	18000	F0833 320_ M _ _ _ .55C --	127	80
2.69	342.42	1886.5	1.62	18000	F0833 360_ M _ _ _ .55C --	127	80
2.37	388.52	2107.2	1.45	18000	F0843 400_ M _ _ _ .55C --	144	80
2.09	439.55	2384.0	1.28	18000	F0843 450_ M _ _ _ .55C --	144	80
1.85	496.15	2691.0	1.13	18000	F0843 500_ M _ _ _ .55C --	144	80
1.59	577.06	3129.9	0.97	18000	F0843 560_ M _ _ _ .55C --	144	80
1.53	601.45	3262.1	0.93	18000	F0843 630_ M _ _ _ .55C --	144	80
1.31	701.40	3804.3	0.80	18000	F0843 710_ M _ _ _ .55C --	144	80
4.42	207.96	1145.8	3.93	35000	F0933 200_ M _ _ _ .55C --	201	80
4.03	228.44	1258.6	3.58	35000	F0933 225_ M _ _ _ .55C --	201	80
3.29	279.95	1542.4	2.92	35000	F0933 280_ M _ _ _ .55C --	201	80
3.01	305.71	1684.3	2.67	35000	F0933 320_ M _ _ _ .55C --	201	80
2.61	352.02	1939.4	2.32	35000	F0933 360_ M _ _ _ .55C --	201	80
2.23	413.16	2240.9	1.92	35000	F0943 400_ M _ _ _ .55C --	217	80
2.00	459.91	2494.5	1.73	35000	F0943 450_ M _ _ _ .55C --	217	80
1.80	510.96	2771.4	1.56	35000	F0943 500_ M _ _ _ .55C --	217	80
1.61	573.03	3108.0	1.39	35000	F0943 560_ M _ _ _ .55C --	217	80
1.44	637.88	3459.7	1.25	35000	F0943 630_ M _ _ _ .55C --	217	80
1.30	708.68	3843.7	1.12	35000	F0943 710_ M _ _ _ .55C --	217	80
1.14	807.14	4377.8	0.98	35000	F0943 800_ M _ _ _ .55C --	217	80
1.03	896.74	4863.7	0.89	35000	F0943 900_ M _ _ _ .55C --	217	80
0.92	1001.59	5432.4	0.79	35000	F0943 10C_ M _ _ _ .55C --	217	80
2.24	411.35	2231.0	3.59	43000	F1043 400_ M _ _ _ .55C --	305	80
2.01	457.90	2483.5	3.22	43000	F1043 450_ M _ _ _ .55C --	305	80
1.81	508.73	2759.2	2.90	43000	F1043 500_ M _ _ _ .55C --	305	80
1.63	565.64	3067.9	2.61	43000	F1043 560_ M _ _ _ .55C --	305	80
1.48	622.20	3374.7	2.37	43000	F1043 630_ M _ _ _ .55C --	305	80
1.29	714.97	3877.8	2.06	43000	F1043 710_ M _ _ _ .55C --	305	80
1.13	810.75	4397.3	1.82	43000	F1043 800_ M _ _ _ .55C --	305	80
1.03	894.25	4850.2	1.65	43000	F1043 900_ M _ _ _ .55C --	305	80
0.90	1024.10	5554.5	1.44	43000	F1043 10C_ M _ _ _ .55C --	305	80
0.81	1140.17	6184.0	1.29	43000	F1043 11C_ M _ _ _ .55C --	305	80
0.73	1256.39	6814.4	1.17	43000	F1043 12C_ M _ _ _ .55C --	305	80
0.66	1385.78	7516.2	1.06	43000	F1043 14C_ M _ _ _ .55C --	305	80
0.57	1601.19	8684.5	0.92	43000	F1043 16C_ M _ _ _ .55C --	305	80
0.51	1794.35	9732.1	0.82	43000	F1043 18C_ M _ _ _ .55C --	305	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.75 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
240.57	5.90	29	2.17	1741	F0223 5.0 M .75A --	29	80
178.09	7.97	39	1.87	1858	F0223 6.3 M .75A --	29	80
156.57	9.07	45	1.75	1903	F0223 9.0 M .75A --	29	80
138.20	10.27	51	1.63	1946	F0223 10. M .75A --	29	80
108.06	13.14	65	1.41	2040	F0223 12. M .75A --	29	80
100.27	14.16	70	1.34	2065	F0223 14. M .75A --	29	80
79.42	17.88	88	1.15	2147	F0223 16. M .75A --	29	80
70.06	20.27	100	1.06	2200	F0223 20. M .75A --	29	80
61.31	23.16	114	0.97	2246	F0223 22. M .75A --	29	80
55.11	25.77	127	0.90	2286	F0223 25. M .75A --	29	80
49.99	28.41	140	0.84	2314	F0223 28. M .75A --	29	80
139.02	10.21	50	3.76	4360	F0323 10. M .75A --	31	80
122.71	11.57	57	3.53	4410	F0323 12. M .75A --	31	80
95.95	14.80	73	3.02	4543	F0323 14. M .75A --	31	80
89.03	15.95	78	2.89	4580	F0323 16. M .75A --	31	80
70.52	20.14	99	2.41	4689	F0323 20. M .75A --	31	80
62.21	22.83	112	2.19	4859	F0323 22. M .75A --	31	80
54.44	26.09	128	1.95	4984	F0323 25. M .75A --	31	80
48.94	29.02	143	1.75	5000	F0323 28. M .75A --	31	80
44.39	31.99	157	1.59	5000	F0323 32. M .75A --	31	80
40.33	35.21	173	1.44	5000	F0323 36. M .75A --	31	80
34.42	41.25	203	1.22	5000	F0323 40. M .75A --	31	80
28.69	49.49	243	0.89	5000	F0323 50. M .75A --	31	80
72.29	19.64	97	3.83	5715	F0423 20. M .75A --	37	80
65.18	21.79	107	3.50	5854	F0423 22. M .75A --	37	80
57.37	24.75	122	3.15	6013	F0423 25. M .75A --	37	80
50.50	28.12	138	2.83	6324	F0423 28. M .75A --	37	80
45.86	30.97	152	2.60	6400	F0423 32. M .75A --	37	80
39.87	35.62	175	2.31	6400	F0423 36. M .75A --	37	80
36.67	38.72	190	2.15	6400	F0423 40. M .75A --	37	80
30.55	46.49	229	1.84	6400	F0423 50. M .75A --	37	80
25.45	55.79	274	1.51	6400	F0423 56. M .75A --	37	80
22.59	62.86	309	1.19	6400	F0423 63. M .75A --	37	80
19.43	73.07	359	0.89	6400	F0423 71. M .75A --	37	80
20.38	69.69	339	1.11	6400	F0433 71. M .75A --	39	80
17.97	79.00	385	1.03	6400	F0433 80. M .75A --	39	80
15.73	90.28	439	0.94	6400	F0433 90. M .75A --	39	80
14.14	100.43	489	0.86	6400	F0433 100 M .75A --	39	80
49.44	28.72	141	3.94	5916	F0523 28. M .75A --	45	80
46.39	30.61	151	3.73	6028	F0523 32. M .75A --	45	80
39.14	36.28	178	3.23	6311	F0523 36. M .75A --	45	80
36.66	38.74	190	3.05	6428	F0523 40. M .75A --	45	80
29.54	48.07	236	2.54	6797	F0523 50. M .75A --	45	80
25.05	56.68	279	2.20	7072	F0523 56. M .75A --	45	80
22.88	62.06	305	2.04	7218	F0523 63. M .75A --	45	80
18.67	76.06	374	1.71	7569	F0523 71. M .75A --	45	80
16.75	84.78	417	1.52	7898	F0523 90. M .75A --	45	80
14.94	95.08	468	1.03	8693	F0523 100 M .75A --	45	80
13.81	102.79	500	1.14	7726	F0533 100 M .75A --	48	80
12.54	113.20	551	1.06	7901	F0533 112 M .75A --	48	80
10.91	130.20	634	0.97	8198	F0533 125 M .75A --	48	80
10.03	141.55	689	0.92	8353	F0533 160 M .75A --	48	80
8.36	169.93	827	0.84	8538	F0533 180 M .75A --	48	80
29.72	47.78	235	3.83	14500	F0623 50. M .75A --	60	80
25.21	56.34	277	3.25	14500	F0623 56. M .75A --	60	80
23.02	61.69	303	2.97	14500	F0623 63. M .75A --	60	80
18.78	75.60	372	2.36	14500	F0623 71. M .75A --	60	80
16.85	84.26	414	1.61	14500	F0623 90. M .75A --	60	80
15.03	94.50	465	1.04	14500	F0623 100 M .75A --	60	80
13.90	102.17	497	1.81	14500	F0633 100 M .75A --	62	80
12.62	112.51	548	1.64	14500	F0633 112 M .75A --	62	80
10.97	129.41	630	1.43	14500	F0633 125 M .75A --	62	80
10.09	140.70	685	1.31	14500	F0633 160 M .75A --	62	80
8.41	168.90	822	1.09	14500	F0633 180 M .75A --	62	80
7.01	202.68	987	0.91	14500	F0633 200 M .75A --	62	80
6.22	228.38	1112	0.81	14500	F0633 225 M .75A --	62	80
16.75	84.78	417	2.93	16000	F0723 90. M .75A --	84	80
15.07	94.20	463	2.25	16000	F0723 100 M .75A --	84	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.75 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
17.98	78.99	384	3.62	16000	F0733 80_M_...75A--	88	80
15.46	91.87	447	3.26	16000	F0733 90_M_...75A--	88	80
13.81	102.79	500	3.12	16000	F0733 100_M_...75A--	88	80
12.96	109.56	533	2.93	16000	F0733 112_M_...75A--	88	80
10.94	129.84	632	2.56	16000	F0733 125_M_...75A--	88	80
10.24	138.63	675	2.45	16000	F0733 160_M_...75A--	88	80
8.25	172.03	837	2.03	16000	F0733 180_M_...75A--	88	80
7.00	202.86	987	1.72	16000	F0733 200_M_...75A--	88	80
6.39	222.12	1081	1.57	16000	F0733 225_M_...75A--	88	80
5.22	272.22	1325	1.28	16000	F0733 280_M_...75A--	88	80
4.68	303.41	1477	1.15	16000	F0733 320_M_...75A--	88	80
4.17	340.28	1656	1.03	16000	F0733 360_M_...75A--	88	80
8.19	173.46	844	3.61	18000	F0833 180_M_...75A--	127	80
7.02	202.29	985	3.10	18000	F0833 200_M_...75A--	127	80
6.39	222.21	1082	2.82	18000	F0833 225_M_...75A--	127	80
5.21	272.31	1325	2.30	18000	F0833 280_M_...75A--	127	80
4.78	297.37	1447	2.11	18000	F0833 320_M_...75A--	127	80
4.15	342.42	1667	1.82	18000	F0833 360_M_...75A--	127	80
3.65	388.52	1862	1.64	18000	F0843 400_M_...75A--	144	80
3.23	439.55	2106	1.45	18000	F0843 450_M_...75A--	144	80
2.86	496.15	2377	1.28	18000	F0843 500_M_...75A--	144	80
2.46	577.06	2765	1.10	18000	F0843 560_M_...75A--	144	80
2.36	601.45	2882	1.06	18000	F0843 630_M_...75A--	144	80
2.02	701.40	3361	0.91	18000	F0843 710_M_...75A--	144	80
5.07	279.95	1363	3.30	35000	F0933 280_M_...75A--	201	80
4.64	305.71	1488	3.02	35000	F0933 320_M_...75A--	201	80
4.03	352.02	1713	2.63	35000	F0933 360_M_...75A--	201	80
3.44	413.16	1980	2.27	35000	F0943 400_M_...75A--	217	80
3.09	459.91	2204	2.04	35000	F0943 450_M_...75A--	217	80
2.78	510.96	2448	1.84	35000	F0943 500_M_...75A--	217	80
2.48	573.03	2746	1.64	35000	F0943 560_M_...75A--	217	80
2.23	637.88	3057	1.47	35000	F0943 630_M_...75A--	217	80
2.00	708.68	3396	1.33	35000	F0943 710_M_...75A--	217	80
1.76	807.14	3868	1.16	35000	F0943 800_M_...75A--	217	80
1.58	896.74	4297	1.05	35000	F0943 900_M_...75A--	217	80
1.42	1001.59	4799	0.94	35000	F0943 10C_M_...75A--	217	80
3.10	457.90	2194	3.65	43000	F1043 450_M_...75A--	305	80
2.79	508.73	2438	3.28	43000	F1043 500_M_...75A--	305	80
2.51	565.64	2710	2.95	43000	F1043 560_M_...75A--	305	80
2.28	622.20	2981	2.68	43000	F1043 630_M_...75A--	305	80
1.99	714.97	3426	2.34	43000	F1043 710_M_...75A--	305	80
1.75	810.75	3885	2.06	43000	F1043 800_M_...75A--	305	80
1.59	894.25	4285	1.87	43000	F1043 900_M_...75A--	305	80
1.39	1024.10	4907	1.63	43000	F1043 10C_M_...75A--	305	80
1.25	1140.17	5463	1.46	43000	F1043 11C_M_...75A--	305	80
1.13	1256.39	6020	1.33	43000	F1043 12C_M_...75A--	305	80
1.02	1385.78	6640	1.20	43000	F1043 14C_M_...75A--	305	80
0.89	1601.19	7673	1.04	43000	F1043 16C_M_...75A--	305	80
0.79	1794.35	8598	0.93	43000	F1043 18C_M_...75A--	305	80
0.70	2025.13	9704	0.82	43000	F1043 20C_M_...75A--	305	80

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.75 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
157.6	5.90	44	1.53	1819	F0223 5.0 M .75C --	37	90S
116.6	7.97	60	1.32	1674	F0223 6.3 M .75C --	37	90S
102.5	9.07	68	1.23	1715	F0223 9.0 M .75C --	37	90S
90.51	10.27	77	1.14	1748	F0223 10. M .75C --	37	90S
70.77	13.14	99	0.98	1831	F0223 12. M .75C --	37	90S
65.67	14.16	106	0.94	1855	F0223 14. M .75C --	37	90S
52.02	17.88	134	0.82	1940	F0223 16. M .75C --	37	90S
139.90	6.65	50	3.35	4439	F0323 6.3 M .75C --	39	90S
103.56	8.98	67	2.88	4586	F0323 9.0 M .75C --	39	90S
91.05	10.21	77	2.67	4660	F0323 10. M .75C --	39	90S
80.37	11.57	87	2.49	4718	F0323 12. M .75C --	39	90S
62.84	14.80	111	2.01	4930	F0323 14. M .75C --	39	90S
58.31	15.95	120	1.94	4963	F0323 16. M .75C --	39	90S
46.19	20.14	151	1.58	5000	F0323 20. M .75C --	39	90S
40.74	22.83	171	1.44	5000	F0323 22. M .75C --	39	90S
35.65	26.09	196	1.28	5000	F0323 25. M .75C --	39	90S
32.05	29.02	218	1.15	5000	F0323 28. M .75C --	39	90S
29.07	31.99	240	1.04	5000	F0323 32. M .75C --	39	90S
26.41	35.21	264	0.95	4917	F0323 36. M .75C --	39	90S
22.55	41.25	310	0.81	4689	F0323 40. M .75C --	39	90S
66.01	14.09	106	3.54	5813	F0423 14. M .75C --	45	90S
58.11	16.01	120	3.18	5970	F0423 16. M .75C --	45	90S
47.35	19.64	147	2.67	6231	F0423 20. M .75C --	45	90S
42.69	21.79	164	2.45	6368	F0423 22. M .75C --	45	90S
37.58	24.75	186	2.19	6400	F0423 25. M .75C --	45	90S
33.07	28.12	211	1.94	6400	F0423 28. M .75C --	45	90S
30.03	30.97	233	1.81	6400	F0423 32. M .75C --	45	90S
26.11	35.62	267	1.57	6400	F0423 36. M .75C --	45	90S
24.02	38.72	291	1.44	6400	F0423 40. M .75C --	45	90S
20.01	46.49	349	1.20	6400	F0423 50. M .75C --	45	90S
16.67	55.79	419	1.00	6105	F0423 56. M .75C --	45	90S
14.80	62.86	472	0.81	6006	F0423 63. M .75C --	45	90S
48.52	19.17	144	3.88	5901	F0523 20. M .75C --	54	90S
42.14	22.07	166	3.43	6153	F0523 22. M .75C --	54	90S
36.23	25.67	193	3.01	6405	F0523 25. M .75C --	54	90S
32.38	28.72	216	2.74	6593	F0523 28. M .75C --	54	90S
30.38	30.61	230	2.60	6698	F0523 32. M .75C --	54	90S
25.63	36.28	272	2.25	6986	F0523 36. M .75C --	54	90S
24.01	38.74	291	2.12	7105	F0523 40. M .75C --	54	90S
19.35	48.07	361	1.76	7459	F0523 50. M .75C --	54	90S
16.41	56.68	426	1.53	7743	F0523 56. M .75C --	54	90S
14.98	62.06	466	1.42	7896	F0523 63. M .75C --	54	90S
12.23	76.06	571	1.19	8233	F0523 71. M .75C --	54	90S
10.97	84.78	637	0.99	8496	F0523 90. M .75C --	54	90S
9.05	102.79	764	0.92	8280	F0533 100 M .75C --	57	90S
8.22	113.20	841	0.83	8044	F0533 112 M .75C --	57	90S
30.57	30.43	228	3.94	14500	F0623 32. M .75C --	69	90S
25.79	36.06	271	3.32	14500	F0623 36. M .75C --	69	90S
24.16	38.50	289	3.11	14500	F0623 40. M .75C --	69	90S
19.47	47.78	359	2.51	14500	F0623 50. M .75C --	69	90S
16.51	56.34	423	2.13	14500	F0623 56. M .75C --	69	90S
15.08	61.69	463	1.94	14500	F0623 63. M .75C --	69	90S
12.30	75.60	568	1.54	14500	F0623 71. M .75C --	69	90S
11.04	84.26	633	1.05	14500	F0623 90. M .75C --	69	90S
9.10	102.17	759	1.19	14500	F0633 100 M .75C --	71	90S
8.27	112.51	836	1.08	14500	F0633 112 M .75C --	71	90S
7.19	129.41	962	0.94	14500	F0633 125 M .75C --	71	90S
6.61	140.70	1046	0.86	14500	F0633 160 M .75C --	71	90S
15.15	61.40	461	3.69	16000	F0723 63. M .75C --	92	90S
12.62	73.68	553	2.82	16000	F0723 71. M .75C --	92	90S
10.97	84.78	637	1.92	16000	F0723 90. M .75C --	92	90S
9.87	94.20	707	1.47	16000	F0723 100 M .75C --	92	90S

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**0.75 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
11.77	78.99	587	2.57	16000	F0733 80_ M _ .75C --	97	90S
10.12	91.87	683	2.33	16000	F0733 90_ M _ .75C --	97	90S
9.05	102.79	764	2.23	16000	F0733 100_ M _ .75C --	97	90S
8.49	109.56	814	2.09	16000	F0733 112_ M _ .75C --	97	90S
7.16	129.84	965	1.76	16000	F0733 125_ M _ .75C --	97	90S
6.71	138.63	1030	1.65	16000	F0733 160_ M _ .75C --	97	90S
5.41	172.03	1279	1.33	16000	F0733 180_ M _ .75C --	97	90S
4.58	202.86	1508	1.13	16000	F0733 200_ M _ .75C --	97	90S
4.19	222.12	1651	1.03	16000	F0733 225_ M _ .75C --	97	90S
3.42	272.22	2023	0.84	16000	F0733 280_ M _ .75C --	97	90S
9.82	94.71	711	3.70	18000	F0823 100_ M _ .75C --	130	90S
9.08	102.39	761	4.01	18000	F0833 100_ M _ .75C --	135	90S
8.30	112.05	833	3.66	18000	F0833 112_ M _ .75C --	135	90S
7.34	126.77	942	3.24	18000	F0833 125_ M _ .75C --	135	90S
6.50	143.09	1063	2.87	18000	F0833 160_ M _ .75C --	135	90S
5.36	173.46	1289	2.37	18000	F0833 180_ M _ .75C --	135	90S
4.60	202.29	1503	2.03	18000	F0833 200_ M _ .75C --	135	90S
4.19	222.21	1651	1.85	18000	F0833 225_ M _ .75C --	135	90S
3.42	272.31	2024	1.51	18000	F0833 280_ M _ .75C --	135	90S
3.13	297.37	2210	1.38	18000	F0833 320_ M _ .75C --	135	90S
2.72	342.42	2545	1.20	18000	F0833 360_ M _ .75C --	135	90S
2.39	388.52	2843	1.07	18000	F0843 400_ M _ .75C --	152	90S
2.12	439.55	3216	0.95	18000	F0843 450_ M _ .75C --	152	90S
1.87	496.15	3630	0.84	18000	F0843 500_ M _ .75C --	152	90S
5.22	178.33	1325	3.25	35000	F0933 180_ M _ .75C --	209	90S
4.47	207.96	1546	2.79	35000	F0933 200_ M _ .75C --	209	90S
4.07	228.44	1698	2.54	35000	F0933 225_ M _ .75C --	209	90S
3.32	279.95	2081	2.07	35000	F0933 280_ M _ .75C --	209	90S
3.04	305.71	2272	1.90	35000	F0933 320_ M _ .75C --	209	90S
2.64	352.02	2616	1.65	35000	F0933 360_ M _ .75C --	209	90S
2.25	413.16	3071	1.40	35000	F0943 400_ M _ .75C --	209	90S
2.02	459.91	3418	1.26	35000	F0943 450_ M _ .75C --	209	90S
1.82	510.96	3798	1.13	35000	F0943 500_ M _ .75C --	209	90S
1.62	573.03	4259	1.01	35000	F0943 560_ M _ .75C --	209	90S
1.46	637.88	4741	0.91	35000	F0943 630_ M _ .75C --	209	90S
3.34	278.26	2068	3.87	43000	F1033 280_ M _ .75C --	298	90S
2.95	314.94	2341	3.42	43000	F1033 320_ M _ .75C --	298	90S
2.63	354.14	2632	3.04	43000	F1033 360_ M _ .75C --	298	90S
2.26	411.35	3010	2.66	43000	F1043 400_ M _ .75C --	313	90S
2.03	457.90	3350	2.39	43000	F1043 450_ M _ .75C --	313	90S
1.83	508.73	3722	2.15	43000	F1043 500_ M _ .75C --	313	90S
1.64	565.64	4139	1.93	43000	F1043 560_ M _ .75C --	313	90S
1.49	622.20	4552	1.76	43000	F1043 630_ M _ .75C --	313	90S
1.30	714.97	5231	1.53	43000	F1043 710_ M _ .75C --	313	90S
1.15	810.75	5932	1.35	43000	F1043 800_ M _ .75C --	313	90S
1.04	894.25	6543	1.22	43000	F1043 900_ M _ .75C --	313	90S
0.91	1024.10	7493	1.07	43000	F1043 10C_ M _ .75C --	313	90S
0.82	1140.17	8342	0.96	43000	F1043 11C_ M _ .75C --	313	90S
0.74	1256.39	9192	0.87	43000	F1043 12C_ M _ .75C --	313	90S

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**1.1 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
242.27	5.90	42	1.49	1555	F0223 5.0 M _ _ _ _ 1.1A --	37	90S
179.34	7.97	57	1.28	1660	F0223 6.3 M _ _ _ _ 1.1A --	37	90S
157.67	9.07	65	1.20	1700	F0223 9.0 M _ _ _ _ 1.1A --	37	90S
139.17	10.27	74	1.12	1739	F0223 10. M _ _ _ _ 1.1A --	37	90S
108.83	13.14	94	0.97	1822	F0223 12. M _ _ _ _ 1.1A --	37	90S
100.98	14.16	101	0.92	1844	F0223 14. M _ _ _ _ 1.1A --	37	90S
215.11	6.65	48	3.23	3726	F0323 6.3 M _ _ _ _ 1.1A --	39	90S
159.24	8.98	64	2.78	3834	F0323 9.0 M _ _ _ _ 1.1A --	39	90S
140.00	10.21	73	2.58	3895	F0323 10. M _ _ _ _ 1.1A --	39	90S
123.57	11.57	83	2.43	3939	F0323 12. M _ _ _ _ 1.1A --	39	90S
96.63	14.80	106	2.08	4058	F0323 14. M _ _ _ _ 1.1A --	39	90S
89.66	15.95	114	1.99	4092	F0323 16. M _ _ _ _ 1.1A --	39	90S
71.02	20.14	144	1.66	4189	F0323 20. M _ _ _ _ 1.1A --	39	90S
62.64	22.83	164	1.50	4341	F0323 22. M _ _ _ _ 1.1A --	39	90S
54.82	26.09	187	1.34	4452	F0323 25. M _ _ _ _ 1.1A --	39	90S
49.28	29.02	208	1.20	4556	F0323 28. M _ _ _ _ 1.1A --	39	90S
44.70	31.99	229	1.09	4650	F0323 32. M _ _ _ _ 1.1A --	39	90S
40.62	35.21	252	0.99	4728	F0323 36. M _ _ _ _ 1.1A --	39	90S
34.67	41.25	295	0.84	4743	F0323 40. M _ _ _ _ 1.1A --	39	90S
101.50	14.09	101	3.49	4728	F0423 14. M _ _ _ _ 1.1A --	45	90S
89.35	16.01	115	3.13	4873	F0423 16. M _ _ _ _ 1.1A --	45	90S
72.80	19.64	141	2.63	5106	F0423 20. M _ _ _ _ 1.1A --	45	90S
65.64	21.79	156	2.40	5230	F0423 22. M _ _ _ _ 1.1A --	45	90S
57.78	24.75	177	2.17	5372	F0423 25. M _ _ _ _ 1.1A --	45	90S
50.85	28.12	201	1.94	5649	F0423 28. M _ _ _ _ 1.1A --	45	90S
46.18	30.97	222	1.79	5819	F0423 32. M _ _ _ _ 1.1A --	45	90S
40.15	35.62	255	1.59	5881	F0423 36. M _ _ _ _ 1.1A --	45	90S
36.93	38.72	277	1.48	6218	F0423 40. M _ _ _ _ 1.1A --	45	90S
30.76	46.49	333	1.26	6326	F0423 50. M _ _ _ _ 1.1A --	45	90S
25.63	55.79	400	1.04	6331	F0423 56. M _ _ _ _ 1.1A --	45	90S
22.75	62.86	450	0.82	6022	F0423 63. M _ _ _ _ 1.1A --	45	90S
74.60	19.17	137	3.83	4668	F0523 20. M _ _ _ _ 1.1A --	54	90S
64.79	22.07	158	3.40	4878	F0523 22. M _ _ _ _ 1.1A --	54	90S
55.71	25.67	184	2.98	5120	F0523 25. M _ _ _ _ 1.1A --	54	90S
49.79	28.72	206	2.71	5285	F0523 28. M _ _ _ _ 1.1A --	54	90S
46.71	30.61	219	2.56	5385	F0523 32. M _ _ _ _ 1.1A --	54	90S
39.42	36.28	260	2.22	5638	F0523 36. M _ _ _ _ 1.1A --	54	90S
36.92	38.74	277	2.09	5742	F0523 40. M _ _ _ _ 1.1A --	54	90S
29.75	48.07	344	1.74	6072	F0523 50. M _ _ _ _ 1.1A --	54	90S
25.23	56.68	406	1.51	6317	F0523 56. M _ _ _ _ 1.1A --	54	90S
23.04	62.06	445	1.40	6448	F0523 63. M _ _ _ _ 1.1A --	54	90S
18.80	76.06	545	1.18	6762	F0523 71. M _ _ _ _ 1.1A --	54	90S
16.87	84.78	607	1.04	7056	F0523 90. M _ _ _ _ 1.1A --	54	90S
39.66	36.06	258	3.48	13307	F0623 36. M _ _ _ _ 1.1A --	69	90S
37.14	38.50	276	3.26	13518	F0623 40. M _ _ _ _ 1.1A --	69	90S
29.93	47.78	342	2.63	14168	F0623 50. M _ _ _ _ 1.1A --	69	90S
25.38	56.34	404	2.23	14500	F0623 56. M _ _ _ _ 1.1A --	69	90S
23.18	61.69	442	2.04	14500	F0623 63. M _ _ _ _ 1.1A --	69	90S
18.92	75.60	541	1.62	14500	F0623 71. M _ _ _ _ 1.1A --	69	90S
16.97	84.26	604	1.10	14500	F0623 90. M _ _ _ _ 1.1A --	69	90S
14.00	102.17	724	1.24	14500	F0633 100 M _ _ _ _ 1.1A --	71	90S
12.71	112.51	798	1.13	14500	F0633 112 M _ _ _ _ 1.1A --	71	90S
11.05	129.41	917	0.98	14500	F0633 125 M _ _ _ _ 1.1A --	71	90S
10.16	140.70	997	0.90	14500	F0633 160 M _ _ _ _ 1.1A --	71	90S
23.29	61.40	440	3.87	16000	F0723 63. M _ _ _ _ 1.1A --	92	90S
19.41	73.68	528	2.95	16000	F0723 71. M _ _ _ _ 1.1A --	92	90S
16.87	84.78	607	2.01	16000	F0723 90. M _ _ _ _ 1.1A --	92	90S
15.18	94.20	675	1.54	16000	F0723 100 M _ _ _ _ 1.1A --	92	90S
18.10	78.99	560	2.48	16000	F0733 80. M _ _ _ _ 1.1A --	97	90S
15.56	91.87	651	2.24	16000	F0733 90. M _ _ _ _ 1.1A --	97	90S
13.91	102.79	729	2.14	16000	F0733 100 M _ _ _ _ 1.1A --	97	90S
13.05	109.56	777	2.01	16000	F0733 112 M _ _ _ _ 1.1A --	97	90S
11.01	129.84	920	1.76	16000	F0733 125 M _ _ _ _ 1.1A --	97	90S
10.32	138.63	983	1.68	16000	F0733 160 M _ _ _ _ 1.1A --	97	90S
8.31	172.03	1220	1.39	16000	F0733 180 M _ _ _ _ 1.1A --	97	90S
7.05	202.86	1438	1.18	16000	F0733 200 M _ _ _ _ 1.1A --	97	90S
6.44	222.12	1575	1.08	16000	F0733 225 M _ _ _ _ 1.1A --	97	90S
5.25	272.22	1930	0.88	16000	F0733 280 M _ _ _ _ 1.1A --	97	90S

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**1.1 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
12.76	112.05	794	3.84	18000	F0833 112_M_1.1A--	135	90S
11.28	126.77	899	3.39	18000	F0833 125_M_1.1A--	135	90S
9.99	143.09	1014	3.01	18000	F0833 160_M_1.1A--	135	90S
8.24	173.46	1230	2.48	18000	F0833 180_M_1.1A--	135	90S
7.07	202.29	1434	2.13	18000	F0833 200_M_1.1A--	135	90S
6.44	222.21	1575	1.94	18000	F0833 225_M_1.1A--	135	90S
5.25	272.31	1930	1.58	18000	F0833 280_M_1.1A--	135	90S
4.81	297.37	2108	1.45	18000	F0833 320_M_1.1A--	135	90S
4.18	342.42	2427	1.25	18000	F0833 360_M_1.1A--	135	90S
3.68	388.52	2711	1.12	18000	F0843 400_M_1.1A--	152	90S
3.25	439.55	3068	0.99	18000	F0843 450_M_1.1A--	152	90S
2.88	496.15	3463	0.88	18000	F0843 500_M_1.1A--	152	90S
8.02	178.33	1264	3.56	35000	F0933 180_M_1.1A--	209	90S
6.88	207.96	1474	3.05	35000	F0933 200_M_1.1A--	209	90S
6.26	228.44	1619	2.78	35000	F0933 225_M_1.1A--	209	90S
5.11	279.95	1985	2.27	35000	F0933 280_M_1.1A--	209	90S
4.68	305.71	2167	2.08	35000	F0933 320_M_1.1A--	209	90S
4.06	352.02	2496	1.80	35000	F0933 360_M_1.1A--	209	90S
3.46	413.16	2883	1.56	35000	F0943 400_M_1.1A--	225	90S
3.11	459.91	3210	1.40	35000	F0943 450_M_1.1A--	225	90S
2.80	510.96	3566	1.26	35000	F0943 500_M_1.1A--	225	90S
2.50	573.03	3999	1.13	35000	F0943 560_M_1.1A--	225	90S
2.24	637.88	4452	1.01	35000	F0943 630_M_1.1A--	225	90S
2.02	708.68	4946	0.91	35000	F0943 710_M_1.1A--	225	90S
4.54	314.94	2233	3.58	43000	F1033 320_M_1.1A--	298	90S
4.04	354.14	2511	3.19	43000	F1033 360_M_1.1A--	298	90S
3.48	411.35	2871	2.79	43000	F1043 400_M_1.1A--	313	90S
3.12	457.90	3196	2.50	43000	F1043 450_M_1.1A--	313	90S
2.81	508.73	3550	2.25	43000	F1043 500_M_1.1A--	313	90S
2.53	565.64	3948	2.03	43000	F1043 560_M_1.1A--	313	90S
2.30	622.20	4342	1.84	43000	F1043 630_M_1.1A--	313	90S
2.00	714.97	4990	1.60	43000	F1043 710_M_1.1A--	313	90S
1.76	810.75	5658	1.41	43000	F1043 800_M_1.1A--	313	90S
1.60	894.25	6241	1.28	43000	F1043 900_M_1.1A--	313	90S
1.40	1024.10	7147	1.12	43000	F1043 10C_M_1.1A--	313	90S
1.25	1140.17	7957	1.01	43000	F1043 11C_M_1.1A--	313	90S
1.14	1256.39	8768	0.91	43000	F1043 12C_M_1.1A--	313	90S
1.03	1385.78	9671	0.83	43000	F1043 14C_M_1.1A--	313	90S

**1.1 kW**

6 POLE

157.56	5.90	65	1.05	1622	F0223 5.0_M_1.1C--	39	90L
116.63	7.97	88	0.90	1492	F0223 6.3_M_1.1C--	39	90L
102.54	9.07	100	0.84	1528	F0223 9.0_M_1.1C--	39	90L
139.90	6.65	73	2.28	3957	F0323 6.3_M_1.1C--	41	90L
103.56	8.98	99	1.96	4088	F0323 9.0_M_1.1C--	41	90L
91.05	10.21	112	1.82	4154	F0323 10_M_1.1C--	41	90L
80.37	11.57	127	1.69	4206	F0323 12_M_1.1C--	41	90L
62.84	14.80	163	1.37	4394	F0323 14_M_1.1C--	41	90L
58.31	15.95	176	1.32	4424	F0323 16_M_1.1C--	41	90L
46.19	20.14	222	1.08	4602	F0323 20_M_1.1C--	41	90L
40.74	22.83	251	0.98	4699	F0323 22_M_1.1C--	41	90L
35.65	26.09	287	0.87	4796	F0323 25_M_1.1C--	41	90L
147.15	6.32	70	3.95	4742	F0423 6.3_M_1.1C--	47	90L
104.91	8.86	98	3.39	4789	F0423 9.0_M_1.1C--	47	90L
95.21	9.77	108	3.23	4807	F0423 10_M_1.1C--	47	90L
83.84	11.09	122	2.96	4904	F0423 12_M_1.1C--	47	90L
66.01	14.09	155	2.41	5182	F0423 14_M_1.1C--	47	90L
58.11	16.01	176	2.17	5322	F0423 16_M_1.1C--	47	90L
47.35	19.64	216	1.82	5554	F0423 20_M_1.1C--	47	90L
42.69	21.79	240	1.67	5677	F0423 22_M_1.1C--	47	90L
37.58	24.75	273	1.49	5819	F0423 25_M_1.1C--	47	90L
33.07	28.12	310	1.32	6277	F0423 28_M_1.1C--	47	90L
30.03	30.97	341	1.23	6400	F0423 32_M_1.1C--	47	90L
26.11	35.62	392	1.07	6400	F0423 36_M_1.1C--	47	90L
24.02	38.72	426	0.98	6400	F0423 40_M_1.1C--	47	90L
20.01	46.49	512	0.82	6400	F0423 50_M_1.1C--	47	90L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**1.1 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
65.59	14.18	156	3.42	4816	F0523 14. _ M _ _ _ _ 1.1C --	56	90L
57.86	16.07	177	3.07	5000	F0523 16. _ M _ _ _ _ 1.1C --	56	90L
48.52	19.17	211	2.64	5261	F0523 20. _ M _ _ _ _ 1.1C --	56	90L
42.14	22.07	243	2.34	5485	F0523 22. _ M _ _ _ _ 1.1C --	56	90L
36.23	25.67	283	2.06	5710	F0523 25. _ M _ _ _ _ 1.1C --	56	90L
32.38	28.72	316	1.87	5877	F0523 28. _ M _ _ _ _ 1.1C --	56	90L
30.38	30.61	337	1.77	5971	F0523 32. _ M _ _ _ _ 1.1C --	56	90L
25.63	36.28	400	1.53	6228	F0523 36. _ M _ _ _ _ 1.1C --	56	90L
24.01	38.74	427	1.45	6334	F0523 40. _ M _ _ _ _ 1.1C --	56	90L
19.35	48.07	529	1.20	6649	F0523 50. _ M _ _ _ _ 1.1C --	56	90L
16.41	56.68	624	1.05	6903	F0523 56. _ M _ _ _ _ 1.1C --	56	90L
14.98	62.06	684	0.97	7039	F0523 63. _ M _ _ _ _ 1.1C --	56	90L
12.23	76.06	838	0.81	7340	F0523 71. _ M _ _ _ _ 1.1C --	56	90L
48.81	19.05	210	4.29	12522	F0623 20. _ M _ _ _ _ 1.1C --	71	90L
42.39	21.94	242	3.10	13587	F0623 22. _ M _ _ _ _ 1.1C --	71	90L
36.45	25.52	281	3.01	13663	F0623 25. _ M _ _ _ _ 1.1C --	71	90L
32.58	28.55	314	2.82	13791	F0623 28. _ M _ _ _ _ 1.1C --	71	90L
30.57	30.43	335	2.69	13988	F0623 32. _ M _ _ _ _ 1.1C --	71	90L
25.79	36.06	397	2.27	14443	F0623 36. _ M _ _ _ _ 1.1C --	71	90L
24.16	38.50	424	2.12	14500	F0623 40. _ M _ _ _ _ 1.1C --	71	90L
19.47	47.78	526	1.71	14500	F0623 50. _ M _ _ _ _ 1.1C --	71	90L
16.51	56.34	620	1.45	14500	F0623 56. _ M _ _ _ _ 1.1C --	71	90L
15.08	61.69	679	1.32	14500	F0623 63. _ M _ _ _ _ 1.1C --	71	90L
12.30	75.60	833	1.05	14500	F0623 71. _ M _ _ _ _ 1.1C --	71	90L
22.94	40.55	447	3.81	16000	F0723 40. _ M _ _ _ _ 1.1C --	94	90L
19.78	47.01	518	3.28	16000	F0723 50. _ M _ _ _ _ 1.1C --	94	90L
16.59	56.07	618	2.75	16000	F0723 56. _ M _ _ _ _ 1.1C --	94	90L
15.15	61.40	676	2.51	16000	F0723 63. _ M _ _ _ _ 1.1C --	94	90L
12.62	73.68	812	1.92	16000	F0723 71. _ M _ _ _ _ 1.1C --	94	90L
10.97	84.78	934	1.31	16000	F0723 90. _ M _ _ _ _ 1.1C --	94	90L
9.87	94.20	1037	1.00	16000	F0723 100 _ M _ _ _ _ 1.1C --	94	90L
11.77	78.99	861	1.75	16000	F0733 80. _ M _ _ _ _ 1.1C --	99	90L
10.12	91.87	1001	1.59	16000	F0733 90. _ M _ _ _ _ 1.1C --	99	90L
9.05	102.79	1120	1.52	16000	F0733 100 _ M _ _ _ _ 1.1C --	99	90L
8.49	109.56	1194	1.42	16000	F0733 112 _ M _ _ _ _ 1.1C --	99	90L
7.16	129.84	1415	1.20	16000	F0733 125 _ M _ _ _ _ 1.1C --	99	90L
6.71	138.63	1511	1.12	16000	F0733 160 _ M _ _ _ _ 1.1C --	99	90L
5.41	172.03	1875	0.91	16000	F0733 180 _ M _ _ _ _ 1.1C --	99	90L
12.35	75.32	830	3.68	18000	F0823 71. _ M _ _ _ _ 1.1C --	132	90L
11.31	82.25	906	3.26	18000	F0823 90. _ M _ _ _ _ 1.1C --	132	90L
9.82	94.71	1043	2.52	18000	F0823 100 _ M _ _ _ _ 1.1C --	132	90L
9.08	102.39	1116	2.73	18000	F0833 100 _ M _ _ _ _ 1.1C --	137	90L
8.30	112.05	1221	2.50	18000	F0833 112 _ M _ _ _ _ 1.1C --	137	90L
7.34	126.77	1382	2.21	18000	F0833 125 _ M _ _ _ _ 1.1C --	137	90L
6.50	143.09	1560	1.96	18000	F0833 160 _ M _ _ _ _ 1.1C --	137	90L
5.36	173.46	1891	1.61	18000	F0833 180 _ M _ _ _ _ 1.1C --	137	90L
4.60	202.29	2205	1.38	18000	F0833 200 _ M _ _ _ _ 1.1C --	137	90L
4.19	222.21	2422	1.26	18000	F0833 225 _ M _ _ _ _ 1.1C --	137	90L
3.42	272.31	2968	1.03	18000	F0833 280 _ M _ _ _ _ 1.1C --	137	90L
3.13	297.37	3241	0.94	18000	F0833 320 _ M _ _ _ _ 1.1C --	137	90L
2.72	342.42	3733	0.82	18000	F0833 360 _ M _ _ _ _ 1.1C --	137	90L
8.84	105.26	1147	3.76	35000	F0933 100 _ M _ _ _ _ 1.1C --	211	90L
8.07	115.19	1256	3.43	35000	F0933 112 _ M _ _ _ _ 1.1C --	211	90L
7.14	130.32	1421	3.03	35000	F0933 125 _ M _ _ _ _ 1.1C --	211	90L
6.32	147.11	1604	2.69	35000	F0933 160 _ M _ _ _ _ 1.1C --	211	90L
5.22	178.33	1944	2.22	35000	F0933 180 _ M _ _ _ _ 1.1C --	211	90L
4.47	207.96	2267	1.90	35000	F0933 200 _ M _ _ _ _ 1.1C --	211	90L
4.07	228.44	2490	1.73	35000	F0933 225 _ M _ _ _ _ 1.1C --	211	90L
3.32	279.95	3052	1.41	35000	F0933 280 _ M _ _ _ _ 1.1C --	211	90L
3.04	305.71	3332	1.29	35000	F0933 320 _ M _ _ _ _ 1.1C --	211	90L
2.64	352.02	3837	1.12	35000	F0933 360 _ M _ _ _ _ 1.1C --	211	90L
2.25	413.16	4434	0.97	35000	F0943 400 _ M _ _ _ _ 1.1C --	227	90L
2.02	459.91	4935	0.87	35000	F0943 450 _ M _ _ _ _ 1.1C --	227	90L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering



# F SERIES

## SELECTION TABLES

### GEARED MOTORS

#### 1.1 kW

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
4.48	207.38	2260	3.54	43000	F1033200_M_1.1C_--	300	90L
4.06	228.94	2495	3.21	43000	F1033225_M_1.1C_--	300	90L
3.34	278.26	3033	2.64	43000	F1033280_M_1.1C_--	300	90L
2.95	314.94	3433	2.33	43000	F1033320_M_1.1C_--	300	90L
2.63	354.14	3860	2.07	43000	F1033360_M_1.1C_--	300	90L
2.26	411.35	4414	1.81	43000	F1043400_M_1.1C_--	315	90L
2.03	457.90	4914	1.63	43000	F1043450_M_1.1C_--	315	90L
1.83	508.73	5459	1.47	43000	F1043500_M_1.1C_--	315	90L
1.64	565.64	6070	1.32	43000	F1043560_M_1.1C_--	315	90L
1.49	622.20	6677	1.20	43000	F1043630_M_1.1C_--	315	90L
1.30	714.97	7672	1.04	43000	F1043710_M_1.1C_--	315	90L
1.15	810.75	8700	0.92	43000	F1043800_M_1.1C_--	315	90L
1.04	894.25	9596	0.83	43000	F1043900_M_1.1C_--	315	90L

#### 1.5 kW

4 POLE

242.27	5.90	58	1.09	1417	F0223 5.0_M_1.5A_--	39	90L
179.34	7.97	78	0.94	1512	F0223 6.3_M_1.5A_--	39	90L
157.67	9.07	89	0.88	1549	F0223 9.0_M_1.5A_--	39	90L
139.17	10.27	100	0.82	1584	F0223 10_M_1.5A_--	39	90L
215.11	6.65	65	2.37	3395	F0323 6.3_M_1.5A_--	41	90L
159.24	8.98	88	2.04	3493	F0323 9.0_M_1.5A_--	41	90L
140.00	10.21	100	1.89	3549	F0323 10_M_1.5A_--	41	90L
123.57	11.57	113	1.78	3589	F0323 12_M_1.5A_--	41	90L
96.63	14.80	145	1.52	3698	F0323 14_M_1.5A_--	41	90L
89.66	15.95	156	1.46	3728	F0323 16_M_1.5A_--	41	90L
71.02	20.14	197	1.22	3817	F0323 20_M_1.5A_--	41	90L
62.64	22.83	223	1.10	3955	F0323 22_M_1.5A_--	41	90L
54.82	26.09	255	0.98	4057	F0323 25_M_1.5A_--	41	90L
49.28	29.02	283	0.88	4151	F0323 28_M_1.5A_--	41	90L
44.70	31.99	312	0.80	4237	F0323 32_M_1.5A_--	41	90L
226.27	6.32	62	3.94	4284	F0423 6.3_M_1.5A_--	47	90L
161.32	8.86	87	3.37	4119	F0423 9.0_M_1.5A_--	47	90L
146.39	9.77	95	3.22	4132	F0423 10_M_1.5A_--	47	90L
128.92	11.09	108	3.01	4175	F0423 12_M_1.5A_--	47	90L
101.50	14.09	138	2.56	4308	F0423 14_M_1.5A_--	47	90L
89.35	16.01	156	2.30	4440	F0423 16_M_1.5A_--	47	90L
72.80	19.64	192	1.93	4652	F0423 20_M_1.5A_--	47	90L
65.64	21.79	213	1.76	4765	F0423 22_M_1.5A_--	47	90L
57.78	24.75	242	1.59	4894	F0423 25_M_1.5A_--	47	90L
50.85	28.12	275	1.42	5148	F0423 28_M_1.5A_--	47	90L
46.18	30.97	302	1.31	5302	F0423 32_M_1.5A_--	47	90L
40.15	35.62	348	1.16	5359	F0423 36_M_1.5A_--	47	90L
36.93	38.72	378	1.08	5665	F0423 40_M_1.5A_--	47	90L
30.76	46.49	454	0.93	5764	F0423 50_M_1.5A_--	47	90L
100.86	14.18	138	3.63	3829	F0523 14_M_1.5A_--	56	90L
88.97	16.07	157	3.26	3992	F0523 16_M_1.5A_--	56	90L
74.60	19.17	187	2.81	4253	F0523 20_M_1.5A_--	56	90L
64.79	22.07	216	2.49	4445	F0523 22_M_1.5A_--	56	90L
55.71	25.67	251	2.19	4666	F0523 25_M_1.5A_--	56	90L
49.79	28.72	281	1.99	4816	F0523 28_M_1.5A_--	56	90L
46.71	30.61	299	1.88	4906	F0523 32_M_1.5A_--	56	90L
39.42	36.28	354	1.63	5137	F0523 36_M_1.5A_--	56	90L
36.92	38.74	378	1.54	5232	F0523 40_M_1.5A_--	56	90L
29.75	48.07	469	1.28	5533	F0523 50_M_1.5A_--	56	90L
25.23	56.68	554	1.11	5756	F0523 56_M_1.5A_--	56	90L
23.04	62.06	606	1.03	5875	F0523 63_M_1.5A_--	56	90L
18.80	76.06	743	0.86	6161	F0523 71_M_1.5A_--	56	90L
65.19	21.94	214	3.47	11412	F0623 22_M_1.5A_--	71	90L
56.05	25.52	249	3.37	11372	F0623 25_M_1.5A_--	71	90L
50.09	28.55	279	3.17	11495	F0623 28_M_1.5A_--	71	90L
47.00	30.43	297	3.03	11643	F0623 32_M_1.5A_--	71	90L
39.66	36.06	352	2.56	12124	F0623 36_M_1.5A_--	71	90L
37.14	38.50	376	2.39	12317	F0623 40_M_1.5A_--	71	90L
29.93	47.78	467	1.93	12909	F0623 50_M_1.5A_--	71	90L
25.38	56.34	550	1.64	13329	F0623 56_M_1.5A_--	71	90L
23.18	61.69	603	1.49	13535	F0623 63_M_1.5A_--	71	90L
18.92	75.60	738	1.19	14500	F0623 71_M_1.5A_--	71	90L
16.97	84.26	823	0.81	14500	F0623 90_M_1.5A_--	71	90L
14.00	102.17	988	0.91	14500	F0633 100_M_1.5A_--	73	90L
12.71	112.51	1088	0.83	14500	F0633 112_M_1.5A_--	73	90L

#### NOTE

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**1.5 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
30.42	47.01	459	3.70	16000	F0723 50_ M _ _ _ _ 1.5A --	94	90L
25.50	56.07	548	3.10	16000	F0723 56_ M _ _ _ _ 1.5A --	94	90L
23.29	61.40	600	2.83	16000	F0723 63_ M _ _ _ _ 1.5A --	94	90L
19.41	73.68	720	2.16	16000	F0723 71_ M _ _ _ _ 1.5A --	94	90L
16.87	84.78	828	1.48	16000	F0723 90_ M _ _ _ _ 1.5A --	94	90L
15.18	94.20	920	1.13	16000	F0723 100_ M _ _ _ _ 1.5A --	94	90L
18.10	78.99	764	1.82	16000	F0733 80_ M _ _ _ _ 1.5A --	99	90L
15.56	91.87	888	1.64	16000	F0733 90_ M _ _ _ _ 1.5A --	99	90L
13.91	102.79	994	1.57	16000	F0733 100_ M _ _ _ _ 1.5A --	99	90L
13.05	109.56	1059	1.47	16000	F0733 112_ M _ _ _ _ 1.5A --	99	90L
11.01	129.84	1255	1.29	16000	F0733 125_ M _ _ _ _ 1.5A --	99	90L
10.32	138.63	1340	1.23	16000	F0733 160_ M _ _ _ _ 1.5A --	99	90L
8.31	172.03	1663	1.02	16000	F0733 180_ M _ _ _ _ 1.5A --	99	90L
7.05	202.86	1961	0.87	16000	F0733 200_ M _ _ _ _ 1.5A --	99	90L
17.39	82.25	803	3.67	18000	F0823 90_ M _ _ _ _ 1.5A --	132	90L
15.10	94.71	925	2.84	18000	F0823 100_ M _ _ _ _ 1.5A --	132	90L
13.97	102.39	990	3.08	18000	F0833 100_ M _ _ _ _ 1.5A --	137	90L
12.76	112.05	1083	2.82	18000	F0833 112_ M _ _ _ _ 1.5A --	137	90L
11.28	126.77	1225	2.49	18000	F0833 125_ M _ _ _ _ 1.5A --	137	90L
9.99	143.09	1383	2.20	18000	F0833 160_ M _ _ _ _ 1.5A --	137	90L
8.24	173.46	1677	1.82	18000	F0833 180_ M _ _ _ _ 1.5A --	137	90L
7.07	202.29	1956	1.56	18000	F0833 200_ M _ _ _ _ 1.5A --	137	90L
6.44	222.21	2148	1.42	18000	F0833 225_ M _ _ _ _ 1.5A --	137	90L
5.25	272.31	2632	1.16	18000	F0833 280_ M _ _ _ _ 1.5A --	137	90L
4.81	297.37	2875	1.06	18000	F0833 320_ M _ _ _ _ 1.5A --	137	90L
4.18	342.42	3310	0.92	18000	F0833 360_ M _ _ _ _ 1.5A --	137	90L
10.97	130.32	1260	3.57	35000	F0933 125_ M _ _ _ _ 1.5A --	211	90L
9.72	147.11	1422	3.16	35000	F0933 160_ M _ _ _ _ 1.5A --	211	90L
8.02	178.33	1724	2.61	35000	F0933 180_ M _ _ _ _ 1.5A --	211	90L
6.88	207.96	2010	2.24	35000	F0933 200_ M _ _ _ _ 1.5A --	211	90L
6.26	228.44	2208	2.04	35000	F0933 225_ M _ _ _ _ 1.5A --	211	90L
5.11	279.95	2706	1.66	35000	F0933 280_ M _ _ _ _ 1.5A --	211	90L
4.68	305.71	2955	1.52	35000	F0933 320_ M _ _ _ _ 1.5A --	211	90L
4.06	352.02	3403	1.32	35000	F0933 360_ M _ _ _ _ 1.5A --	211	90L
3.46	413.16	3932	1.14	35000	F0943 400_ M _ _ _ _ 1.5A --	227	90L
3.11	459.91	4377	1.03	35000	F0943 450_ M _ _ _ _ 1.5A --	227	90L
2.80	510.96	4863	0.93	35000	F0943 500_ M _ _ _ _ 1.5A --	227	90L
2.50	573.03	5453	0.83	35000	F0943 560_ M _ _ _ _ 1.5A --	227	90L
6.90	207.38	2005	3.99	43000	F1033 200_ M _ _ _ _ 1.5A --	300	90L
6.25	228.94	2213	3.61	43000	F1033 225_ M _ _ _ _ 1.5A --	300	90L
5.14	278.26	2690	2.97	43000	F1033 280_ M _ _ _ _ 1.5A --	300	90L
4.54	314.94	3044	2.63	43000	F1033 320_ M _ _ _ _ 1.5A --	300	90L
4.04	354.14	3423	2.34	43000	F1033 360_ M _ _ _ _ 1.5A --	300	90L
3.48	411.35	3915	2.04	43000	F1043 400_ M _ _ _ _ 1.5A --	315	90L
3.12	457.90	4358	1.84	43000	F1043 450_ M _ _ _ _ 1.5A --	315	90L
2.81	508.73	4841	1.65	43000	F1043 500_ M _ _ _ _ 1.5A --	315	90L
2.53	565.64	5383	1.49	43000	F1043 560_ M _ _ _ _ 1.5A --	315	90L
2.30	622.20	5921	1.35	43000	F1043 630_ M _ _ _ _ 1.5A --	315	90L
2.00	714.97	6804	1.18	43000	F1043 710_ M _ _ _ _ 1.5A --	315	90L
1.76	810.75	7716	1.04	43000	F1043 800_ M _ _ _ _ 1.5A --	315	90L
1.60	894.25	8510	0.94	43000	F1043 900_ M _ _ _ _ 1.5A --	315	90L
1.40	1024.10	9746	0.82	43000	F1043 10C_ M _ _ _ _ 1.5A --	315	90L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**1.5 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
141.40	6.65	99	1.69	3617	F0323 6.3 M _ _ _ _ 1.5C --	55	100L
104.67	8.98	133	1.45	3737	F0323 9.0 M _ _ _ _ 1.5C --	55	100L
92.03	10.21	152	1.35	3798	F0323 10. M _ _ _ _ 1.5C --	55	100L
81.23	11.57	172	1.26	3844	F0323 12. M _ _ _ _ 1.5C --	55	100L
63.52	14.80	220	1.01	4017	F0323 14. M _ _ _ _ 1.5C --	55	100L
58.94	15.95	237	0.98	4044	F0323 16. M _ _ _ _ 1.5C --	55	100L
46.68	20.14	299	0.80	4207	F0323 20. M _ _ _ _ 1.5C --	55	100L
148.74	6.32	94	2.93	4334	F0423 6.3 M _ _ _ _ 1.5C --	59	100L
106.04	8.86	132	2.51	4377	F0423 9.0 M _ _ _ _ 1.5C --	59	100L
96.23	9.77	145	2.40	4394	F0423 10. M _ _ _ _ 1.5C --	59	100L
84.74	11.09	165	2.20	4482	F0423 12. M _ _ _ _ 1.5C --	59	100L
66.72	14.09	209	1.79	4737	F0423 14. M _ _ _ _ 1.5C --	59	100L
58.73	16.01	238	1.61	4865	F0423 16. M _ _ _ _ 1.5C --	59	100L
47.85	19.64	292	1.35	5077	F0423 20. M _ _ _ _ 1.5C --	59	100L
43.15	21.79	324	1.24	5189	F0423 22. M _ _ _ _ 1.5C --	59	100L
37.98	24.75	368	1.11	5319	F0423 25. M _ _ _ _ 1.5C --	59	100L
33.43	28.12	418	0.98	5737	F0423 28. M _ _ _ _ 1.5C --	59	100L
30.36	30.97	460	0.91	5896	F0423 32. M _ _ _ _ 1.5C --	59	100L
105.93	8.87	132	3.78	3742	F0523 9.0 M _ _ _ _ 1.5C --	67	100L
94.51	9.95	148	3.43	3908	F0523 10. M _ _ _ _ 1.5C --	67	100L
84.20	11.16	166	3.10	4074	F0523 12. M _ _ _ _ 1.5C --	67	100L
66.30	14.18	211	2.53	4402	F0523 14. M _ _ _ _ 1.5C --	67	100L
58.48	16.07	239	2.28	4570	F0523 16. M _ _ _ _ 1.5C --	67	100L
49.04	19.17	285	1.96	4809	F0523 20. M _ _ _ _ 1.5C --	67	100L
42.59	22.07	328	1.74	5014	F0523 22. M _ _ _ _ 1.5C --	67	100L
36.62	25.67	381	1.52	5219	F0523 25. M _ _ _ _ 1.5C --	67	100L
32.73	28.72	427	1.39	5372	F0523 28. M _ _ _ _ 1.5C --	67	100L
30.71	30.61	455	1.31	5458	F0523 32. M _ _ _ _ 1.5C --	67	100L
25.91	36.28	539	1.14	5693	F0523 36. M _ _ _ _ 1.5C --	67	100L
24.27	38.74	576	1.07	5790	F0523 40. M _ _ _ _ 1.5C --	67	100L
19.56	48.07	714	0.89	6078	F0523 50. M _ _ _ _ 1.5C --	67	100L
58.84	15.98	237	3.79	10904	F0623 16. M _ _ _ _ 1.5C --	86	100L
49.34	19.05	283	3.18	11446	F0623 20. M _ _ _ _ 1.5C --	86	100L
42.85	21.94	326	2.29	12419	F0623 22. M _ _ _ _ 1.5C --	86	100L
36.84	25.52	379	2.23	12489	F0623 25. M _ _ _ _ 1.5C --	86	100L
32.93	28.55	424	2.09	12606	F0623 28. M _ _ _ _ 1.5C --	86	100L
30.89	30.43	452	1.99	12786	F0623 32. M _ _ _ _ 1.5C --	86	100L
26.07	36.06	536	1.68	13202	F0623 36. M _ _ _ _ 1.5C --	86	100L
24.42	38.50	572	1.57	13404	F0623 40. M _ _ _ _ 1.5C --	86	100L
19.68	47.78	710	1.27	13959	F0623 50. M _ _ _ _ 1.5C --	86	100L
16.69	56.34	837	1.08	14308	F0623 56. M _ _ _ _ 1.5C --	86	100L
15.24	61.69	917	0.98	14471	F0623 63. M _ _ _ _ 1.5C --	86	100L
30.02	31.32	465	3.65	16000	F0723 32. M _ _ _ _ 1.5C --	110	100L
26.21	35.86	533	3.19	16000	F0723 36. M _ _ _ _ 1.5C --	110	100L
23.18	40.55	602	2.82	16000	F0723 40. M _ _ _ _ 1.5C --	110	100L
20.00	47.01	698	2.43	16000	F0723 50. M _ _ _ _ 1.5C --	110	100L
16.76	56.07	833	2.04	16000	F0723 56. M _ _ _ _ 1.5C --	110	100L
15.31	61.40	912	1.86	16000	F0723 63. M _ _ _ _ 1.5C --	110	100L
12.76	73.68	1095	1.42	16000	F0723 71. M _ _ _ _ 1.5C --	110	100L
11.09	84.78	1260	0.97	16000	F0723 90. M _ _ _ _ 1.5C --	110	100L
11.90	78.99	1162	1.30	16000	F0733 80. M _ _ _ _ 1.5C --	114	100L
10.23	91.87	1351	1.18	16000	F0733 90. M _ _ _ _ 1.5C --	114	100L
9.14	102.79	1512	1.12	16000	F0733 100 M _ _ _ _ 1.5C --	114	100L
8.58	109.56	1611	1.06	16000	F0733 112 M _ _ _ _ 1.5C --	114	100L
7.24	129.84	1909	0.89	16000	F0733 125 M _ _ _ _ 1.5C --	114	100L
6.78	138.63	2039	0.83	16000	F0733 160 M _ _ _ _ 1.5C --	114	100L
16.80	55.95	831	3.64	18000	F0823 56. M _ _ _ _ 1.5C --	143	100L
15.29	61.46	913	3.34	18000	F0823 63. M _ _ _ _ 1.5C --	143	100L
12.48	75.32	1119	2.73	18000	F0823 71. M _ _ _ _ 1.5C --	143	100L
11.43	82.25	1222	2.41	18000	F0823 90. M _ _ _ _ 1.5C --	143	100L
9.92	94.71	1407	1.87	18000	F0823 100 M _ _ _ _ 1.5C --	143	100L
9.18	102.39	1506	2.03	18000	F0833 100 M _ _ _ _ 1.5C --	148	100L
8.39	112.05	1648	1.85	18000	F0833 112 M _ _ _ _ 1.5C --	148	100L
7.42	126.77	1864	1.64	18000	F0833 125 M _ _ _ _ 1.5C --	148	100L
6.57	143.09	2104	1.45	18000	F0833 160 M _ _ _ _ 1.5C --	148	100L
5.42	173.46	2551	1.20	18000	F0833 180 M _ _ _ _ 1.5C --	148	100L
4.65	202.29	2975	1.03	18000	F0833 200 M _ _ _ _ 1.5C --	148	100L
4.23	222.21	3268	0.93	18000	F0833 225 M _ _ _ _ 1.5C --	148	100L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**1.5 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
12.17	77.26	1148	3.75	35000	F0923 71_ M _ _ _ _ 1.5C --	212	100L
10.75	87.44	1299	3.32	35000	F0923 90_ M _ _ _ _ 1.5C --	212	100L
9.56	98.32	1461	2.95	35000	F0923 100_ M _ _ _ _ 1.5C --	212	100L
8.93	105.26	1548	2.78	35000	F0933 100_ M _ _ _ _ 1.5C --	222	100L
8.16	115.19	1694	2.54	35000	F0933 112_ M _ _ _ _ 1.5C --	222	100L
7.21	130.32	1917	2.25	35000	F0933 125_ M _ _ _ _ 1.5C --	222	100L
6.39	147.11	2163	1.99	35000	F0933 160_ M _ _ _ _ 1.5C --	222	100L
5.27	178.33	2622	1.64	35000	F0933 180_ M _ _ _ _ 1.5C --	222	100L
4.52	207.96	3058	1.41	35000	F0933 200_ M _ _ _ _ 1.5C --	222	100L
4.11	228.44	3359	1.28	35000	F0933 225_ M _ _ _ _ 1.5C --	222	100L
3.36	279.95	4117	1.05	35000	F0933 280_ M _ _ _ _ 1.5C --	222	100L
3.07	305.71	4496	0.96	35000	F0933 320_ M _ _ _ _ 1.5C --	222	100L
2.67	352.02	5177	0.83	35000	F0933 360_ M _ _ _ _ 1.5C --	222	100L
6.40	146.81	2159	3.71	43000	F1033 160_ M _ _ _ _ 1.5C --	311	100L
5.24	179.56	2641	3.03	43000	F1033 180_ M _ _ _ _ 1.5C --	311	100L
4.53	207.38	3050	2.62	43000	F1033 200_ M _ _ _ _ 1.5C --	311	100L
4.11	228.94	3367	2.38	43000	F1033 225_ M _ _ _ _ 1.5C --	311	100L
3.38	278.26	4092	1.96	43000	F1033 280_ M _ _ _ _ 1.5C --	311	100L
2.98	314.94	4632	1.73	43000	F1033 320_ M _ _ _ _ 1.5C --	311	100L
2.65	354.14	5208	1.54	43000	F1033 360_ M _ _ _ _ 1.5C --	311	100L
2.29	411.35	5955	1.34	43000	F1043 400_ M _ _ _ _ 1.5C --	326	100L
2.05	457.90	6629	1.21	43000	F1043 450_ M _ _ _ _ 1.5C --	326	100L
1.85	508.73	7365	1.09	43000	F1043 500_ M _ _ _ _ 1.5C --	326	100L
1.66	565.64	8189	0.98	43000	F1043 560_ M _ _ _ _ 1.5C --	326	100L
1.51	622.20	9008	0.89	43000	F1043 630_ M _ _ _ _ 1.5C --	326	100L

**2.2 kW**

4 POLE

218.12	6.65	94	1.64	3039	F0323 6.3_ M _ _ _ _ 2.2A --	55	100L
161.47	8.98	127	1.41	3127	F0323 9.0_ M _ _ _ _ 2.2A --	55	100L
141.96	10.21	144	1.31	3177	F0323 10_ M _ _ _ _ 2.2A --	55	100L
125.30	11.57	163	1.23	3213	F0323 12_ M _ _ _ _ 2.2A --	55	100L
97.98	14.80	209	1.05	3310	F0323 14_ M _ _ _ _ 2.2A --	55	100L
90.91	15.95	225	1.01	3337	F0323 16_ M _ _ _ _ 2.2A --	55	100L
72.01	20.14	284	0.84	3417	F0323 20_ M _ _ _ _ 2.2A --	55	100L
229.43	6.32	89	2.72	3835	F0423 6.3_ M _ _ _ _ 2.2A --	59	100L
163.57	8.86	125	2.33	3687	F0423 9.0_ M _ _ _ _ 2.2A --	59	100L
148.44	9.77	138	2.22	3699	F0423 10_ M _ _ _ _ 2.2A --	59	100L
130.72	11.09	157	2.08	3737	F0423 12_ M _ _ _ _ 2.2A --	59	100L
102.92	14.09	199	1.77	3856	F0423 14_ M _ _ _ _ 2.2A --	59	100L
90.60	16.01	226	1.59	3975	F0423 16_ M _ _ _ _ 2.2A --	59	100L
73.82	19.64	278	1.33	4164	F0423 20_ M _ _ _ _ 2.2A --	59	100L
66.56	21.79	308	1.22	4265	F0423 22_ M _ _ _ _ 2.2A --	59	100L
58.59	24.75	350	1.10	4381	F0423 25_ M _ _ _ _ 2.2A --	59	100L
51.56	28.12	397	0.98	4608	F0423 28_ M _ _ _ _ 2.2A --	59	100L
46.82	30.97	437	0.91	4746	F0423 32_ M _ _ _ _ 2.2A --	59	100L
40.71	35.62	503	0.80	4797	F0423 36_ M _ _ _ _ 2.2A --	59	100L
163.40	8.87	125	3.77	2843	F0523 9.0_ M _ _ _ _ 2.2A --	67	100L
145.79	9.95	141	3.41	2991	F0523 10_ M _ _ _ _ 2.2A --	67	100L
129.88	11.16	158	3.09	3142	F0523 12_ M _ _ _ _ 2.2A --	67	100L
102.27	14.18	200	2.51	3427	F0523 14_ M _ _ _ _ 2.2A --	67	100L
90.22	16.07	227	2.25	3574	F0523 16_ M _ _ _ _ 2.2A --	67	100L
75.64	19.17	271	1.94	3808	F0523 20_ M _ _ _ _ 2.2A --	67	100L
65.70	22.07	312	1.72	3979	F0523 22_ M _ _ _ _ 2.2A --	67	100L
56.48	25.67	363	1.51	4176	F0523 25_ M _ _ _ _ 2.2A --	67	100L
50.49	28.72	406	1.37	4311	F0523 28_ M _ _ _ _ 2.2A --	67	100L
47.37	30.61	432	1.30	4392	F0523 32_ M _ _ _ _ 2.2A --	67	100L
39.97	36.28	513	1.12	4598	F0523 36_ M _ _ _ _ 2.2A --	67	100L
37.43	38.74	547	1.06	4683	F0523 40_ M _ _ _ _ 2.2A --	67	100L
30.17	48.07	679	0.88	4953	F0523 50_ M _ _ _ _ 2.2A --	67	100L
102.89	14.09	199	4.10	8734	F0623 14_ M _ _ _ _ 2.2A --	86	100L
90.77	15.98	226	3.83	8811	F0623 16_ M _ _ _ _ 2.2A --	86	100L
76.11	19.05	269	3.34	9107	F0623 20_ M _ _ _ _ 2.2A --	86	100L
66.10	21.94	310	2.40	10216	F0623 22_ M _ _ _ _ 2.2A --	86	100L
56.83	25.52	360	2.33	10180	F0623 25_ M _ _ _ _ 2.2A --	86	100L
50.79	28.55	403	2.19	10290	F0623 28_ M _ _ _ _ 2.2A --	86	100L
47.66	30.43	430	2.09	10422	F0623 32_ M _ _ _ _ 2.2A --	86	100L
40.21	36.06	509	1.77	10854	F0623 36_ M _ _ _ _ 2.2A --	86	100L
37.66	38.50	544	1.65	11026	F0623 40_ M _ _ _ _ 2.2A --	86	100L
30.35	47.78	675	1.33	11556	F0623 50_ M _ _ _ _ 2.2A --	86	100L
25.74	56.34	796	1.13	11932	F0623 56_ M _ _ _ _ 2.2A --	86	100L
23.51	61.69	871	1.03	12116	F0623 63_ M _ _ _ _ 2.2A --	86	100L
19.18	75.60	1068	0.82	13669	F0623 71_ M _ _ _ _ 2.2A --	86	100L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**2.2 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
46.30	31.32	442	3.84	13868	F0723 32_ M _ _ _ 2.2A --	110	100L
40.43	35.86	507	3.36	14523	F0723 36_ M _ _ _ 2.2A --	110	100L
35.76	40.55	573	2.97	15106	F0723 40_ M _ _ _ 2.2A --	110	100L
30.84	47.01	664	2.56	15776	F0723 50_ M _ _ _ 2.2A --	110	100L
25.86	56.07	792	2.15	16000	F0723 56_ M _ _ _ 2.2A --	110	100L
23.61	61.40	867	1.96	16000	F0723 63_ M _ _ _ 2.2A --	110	100L
19.68	73.68	1041	1.49	16000	F0723 71_ M _ _ _ 2.2A --	110	100L
17.10	84.78	1198	1.02	16000	F0723 90_ M _ _ _ 2.2A --	110	100L
18.36	78.99	1116	1.25	16000	F0733 80_ M _ _ _ 2.2A --	114	100L
15.78	91.87	1298	1.12	16000	F0733 90_ M _ _ _ 2.2A --	114	100L
14.11	102.79	1452	1.07	16000	F0733 100_ M _ _ _ 2.2A --	114	100L
13.23	109.56	1548	1.01	16000	F0733 112_ M _ _ _ 2.2A --	114	100L
11.17	129.84	1834	0.88	16000	F0733 125_ M _ _ _ 2.2A --	114	100L
10.46	138.63	1958	0.84	16000	F0733 160_ M _ _ _ 2.2A --	114	100L
25.91	55.95	790	3.83	17658	F0823 56_ M _ _ _ 2.2A --	143	100L
23.59	61.46	868	3.51	17931	F0823 63_ M _ _ _ 2.2A --	143	100L
19.25	75.32	1064	2.87	18000	F0823 71_ M _ _ _ 2.2A --	143	100L
17.63	82.25	1162	2.54	18000	F0823 90_ M _ _ _ 2.2A --	143	100L
15.31	94.71	1338	1.97	18000	F0823 100_ M _ _ _ 2.2A --	143	100L
14.16	102.39	1432	2.13	18000	F0833 100_ M _ _ _ 2.2A --	148	100L
12.94	112.05	1567	1.95	18000	F0833 112_ M _ _ _ 2.2A --	148	100L
11.44	126.77	1773	1.72	18000	F0833 125_ M _ _ _ 2.2A --	148	100L
10.13	143.09	2001	1.52	18000	F0833 160_ M _ _ _ 2.2A --	148	100L
8.36	173.46	2425	1.26	18000	F0833 180_ M _ _ _ 2.2A --	148	100L
7.17	202.29	2829	1.08	18000	F0833 200_ M _ _ _ 2.2A --	148	100L
6.53	222.21	3107	0.98	18000	F0833 225_ M _ _ _ 2.2A --	148	100L
16.58	87.44	1235	3.64	35000	F0923 90_ M _ _ _ 2.2A --	212	100L
14.75	98.32	1389	3.24	35000	F0923 100_ M _ _ _ 2.2A --	212	100L
13.78	105.26	1472	3.06	35000	F0933 100_ M _ _ _ 2.2A --	238	100L
12.59	115.19	1611	2.79	35000	F0933 112_ M _ _ _ 2.2A --	238	100L
11.13	130.32	1822	2.47	35000	F0933 125_ M _ _ _ 2.2A --	238	100L
9.86	147.11	2057	2.19	35000	F0933 160_ M _ _ _ 2.2A --	238	100L
8.13	178.33	2493	1.80	35000	F0933 180_ M _ _ _ 2.2A --	238	100L
6.97	207.96	2908	1.55	35000	F0933 200_ M _ _ _ 2.2A --	238	100L
6.35	228.44	3194	1.41	35000	F0933 225_ M _ _ _ 2.2A --	238	100L
5.18	279.95	3914	1.15	35000	F0933 280_ M _ _ _ 2.2A --	238	100L
4.74	305.71	4275	1.05	35000	F0933 320_ M _ _ _ 2.2A --	238	100L
4.12	352.02	4922	0.91	35000	F0933 360_ M _ _ _ 2.2A --	238	100L
9.88	146.81	2053	3.90	43000	F1033 160_ M _ _ _ 2.2A --	311	100L
8.08	179.56	2511	3.19	43000	F1033 180_ M _ _ _ 2.2A --	311	100L
6.99	207.38	2900	2.76	43000	F1033 200_ M _ _ _ 2.2A --	311	100L
6.33	228.94	3201	2.50	43000	F1033 225_ M _ _ _ 2.2A --	311	100L
5.21	278.26	3891	2.06	43000	F1033 280_ M _ _ _ 2.2A --	311	100L
4.60	314.94	4404	1.82	43000	F1033 320_ M _ _ _ 2.2A --	311	100L
4.09	354.14	4952	1.62	43000	F1033 360_ M _ _ _ 2.2A --	311	100L
3.53	411.35	5662	1.41	43000	F1043 400_ M _ _ _ 2.2A --	326	100L
3.17	457.90	6303	1.27	43000	F1043 450_ M _ _ _ 2.2A --	326	100L
2.85	508.73	7003	1.14	43000	F1043 500_ M _ _ _ 2.2A --	326	100L
2.56	565.64	7786	1.03	43000	F1043 560_ M _ _ _ 2.2A --	326	100L
2.33	622.20	8565	0.93	43000	F1043 630_ M _ _ _ 2.2A --	326	100L
2.03	714.97	9842	0.81	43000	F1043 710_ M _ _ _ 2.2A --	326	100L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**2.2 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
141.40	6.65	145	1.15	3225	F0323 6.3 M _ _ _ _ 2.2C --	61	112M
104.67	8.98	196	0.99	3331	F0323 9.0 M _ _ _ _ 2.2C --	61	112M
92.03	10.21	223	0.92	3385	F0323 10. M _ _ _ _ 2.2C --	61	112M
81.23	11.57	252	0.86	3427	F0323 12. M _ _ _ _ 2.2C --	61	112M
148.74	6.32	138	2.00	3864	F0423 6.3 M _ _ _ _ 2.2C --	65	112M
106.04	8.86	193	1.71	3902	F0423 9.0 M _ _ _ _ 2.2C --	65	112M
96.23	9.77	213	1.63	3917	F0423 10. M _ _ _ _ 2.2C --	65	112M
84.74	11.09	242	1.50	3996	F0423 12. M _ _ _ _ 2.2C --	65	112M
66.72	14.09	307	1.22	4223	F0423 14. M _ _ _ _ 2.2C --	65	112M
58.73	16.01	349	1.10	4337	F0423 16. M _ _ _ _ 2.2C --	65	112M
47.85	19.64	428	0.92	4526	F0423 20. M _ _ _ _ 2.2C --	65	112M
43.15	21.79	475	0.84	4626	F0423 22. M _ _ _ _ 2.2C --	65	112M
148.93	6.31	138	3.46	2917	F0523 6.3 M _ _ _ _ 2.2C --	73	112M
105.93	8.87	193	2.58	3336	F0523 9.0 M _ _ _ _ 2.2C --	73	112M
94.51	9.95	217	2.34	3484	F0523 10. M _ _ _ _ 2.2C --	73	112M
84.20	11.16	243	2.12	3632	F0523 12. M _ _ _ _ 2.2C --	73	112M
66.30	14.18	309	1.73	3924	F0523 14. M _ _ _ _ 2.2C --	73	112M
58.48	16.07	350	1.55	4074	F0523 16. M _ _ _ _ 2.2C --	73	112M
49.04	19.17	418	1.34	4287	F0523 20. M _ _ _ _ 2.2C --	73	112M
42.59	22.07	481	1.18	4470	F0523 22. M _ _ _ _ 2.2C --	73	112M
36.62	25.67	559	1.04	4653	F0523 25. M _ _ _ _ 2.2C --	73	112M
32.73	28.72	626	0.95	4789	F0523 28. M _ _ _ _ 2.2C --	73	112M
30.71	30.61	667	0.89	4865	F0523 32. M _ _ _ _ 2.2C --	73	112M
149.84	6.27	137	3.75	9323	F0623 6.3 M _ _ _ _ 2.2C --	92	112M
106.58	8.82	192	3.49	9342	F0623 9.0 M _ _ _ _ 2.2C --	92	112M
95.09	9.89	215	3.36	9347	F0623 10. M _ _ _ _ 2.2C --	92	112M
84.71	11.10	242	3.00	9620	F0623 12. M _ _ _ _ 2.2C --	92	112M
66.70	14.09	307	2.91	9408	F0623 14. M _ _ _ _ 2.2C --	92	112M
58.84	15.98	348	2.59	9720	F0623 16. M _ _ _ _ 2.2C --	92	112M
49.34	19.05	415	2.17	10203	F0623 20. M _ _ _ _ 2.2C --	92	112M
42.85	21.94	478	1.56	11071	F0623 22. M _ _ _ _ 2.2C --	92	112M
36.84	25.52	556	1.52	11134	F0623 25. M _ _ _ _ 2.2C --	92	112M
32.93	28.55	622	1.43	11238	F0623 28. M _ _ _ _ 2.2C --	92	112M
30.89	30.43	663	1.36	11398	F0623 32. M _ _ _ _ 2.2C --	92	112M
26.07	36.06	786	1.15	11769	F0623 36. M _ _ _ _ 2.2C --	92	112M
24.42	38.50	839	1.07	11949	F0623 40. M _ _ _ _ 2.2C --	92	112M
19.68	47.78	1041	0.86	12444	F0623 50. M _ _ _ _ 2.2C --	92	112M
47.46	19.81	432	3.34	14784	F0723 20. M _ _ _ _ 2.2C --	116	112M
43.14	21.79	475	3.16	14968	F0723 22. M _ _ _ _ 2.2C --	116	112M
37.54	25.04	546	2.99	14997	F0723 25. M _ _ _ _ 2.2C --	116	112M
33.11	28.39	619	2.75	15167	F0723 28. M _ _ _ _ 2.2C --	116	112M
30.02	31.32	682	2.49	15648	F0723 32. M _ _ _ _ 2.2C --	116	112M
26.21	35.86	782	2.18	16000	F0723 36. M _ _ _ _ 2.2C --	116	112M
23.18	40.55	884	1.92	16000	F0723 40. M _ _ _ _ 2.2C --	116	112M
20.00	47.01	1024	1.66	16000	F0723 50. M _ _ _ _ 2.2C --	116	112M
16.76	56.07	1222	1.39	16000	F0723 56. M _ _ _ _ 2.2C --	116	112M
15.31	61.40	1338	1.27	16000	F0723 63. M _ _ _ _ 2.2C --	116	112M
12.76	73.68	1606	0.97	16000	F0723 71. M _ _ _ _ 2.2C --	116	112M
33.19	28.32	617	3.90	18000	F0823 28. M _ _ _ _ 2.2C --	149	112M
30.33	30.99	675	3.42	18000	F0823 32. M _ _ _ _ 2.2C --	149	112M
26.81	35.06	764	3.25	18000	F0823 36. M _ _ _ _ 2.2C --	149	112M
23.75	39.58	863	3.03	18000	F0823 40. M _ _ _ _ 2.2C --	149	112M
19.59	47.98	1046	2.71	18000	F0823 50. M _ _ _ _ 2.2C --	149	112M
16.80	55.95	1219	2.48	18000	F0823 56. M _ _ _ _ 2.2C --	149	112M
15.29	61.46	1339	2.28	18000	F0823 63. M _ _ _ _ 2.2C --	149	112M
12.48	75.32	1641	1.86	18000	F0823 71. M _ _ _ _ 2.2C --	149	112M
11.43	82.25	1792	1.65	18000	F0823 90. M _ _ _ _ 2.2C --	149	112M
9.92	94.71	2064	1.27	18000	F0823 100 M _ _ _ _ 2.2C --	149	112M
9.18	102.39	2231	1.37	18000	F0833 100 M _ _ _ _ 2.2C --	154	112M
8.39	112.05	2442	1.25	18000	F0833 112 M _ _ _ _ 2.2C --	154	112M
7.42	126.77	2763	1.10	18000	F0833 125 M _ _ _ _ 2.2C --	154	112M
6.57	143.09	3118	0.98	18000	F0833 160 M _ _ _ _ 2.2C --	154	112M
5.42	173.46	3780	0.81	18000	F0833 180 M _ _ _ _ 2.2C --	154	112M
18.86	49.85	1086	3.97	35000	F0923 50. M _ _ _ _ 2.2C --	218	112M
16.33	57.58	1255	3.44	35000	F0923 56. M _ _ _ _ 2.2C --	218	112M
14.79	63.56	1385	3.11	35000	F0923 63. M _ _ _ _ 2.2C --	218	112M
12.17	77.26	1684	2.56	35000	F0923 71. M _ _ _ _ 2.2C --	218	112M
10.75	87.44	1906	2.26	35000	F0923 90. M _ _ _ _ 2.2C --	218	112M
9.56	98.32	2143	2.01	35000	F0923 100 M _ _ _ _ 2.2C --	218	112M

**NOTE**

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# F SERIES

## SELECTION TABLES

### GEARED MOTORS

#### 2.2 kW

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
8.93	105.26	2270	1.90	35000	F0933 100_M_2.2C_--	228	112M
8.16	115.19	2485	1.73	35000	F0933 112_M_2.2C_--	228	112M
7.21	130.32	2811	1.53	35000	F0933 125_M_2.2C_--	228	112M
6.39	147.11	3173	1.36	35000	F0933 160_M_2.2C_--	228	112M
5.27	178.33	3846	1.12	35000	F0933 180_M_2.2C_--	228	112M
4.52	207.96	4486	0.96	35000	F0933 200_M_2.2C_--	228	112M
4.11	228.44	4927	0.87	35000	F0933 225_M_2.2C_--	228	112M
10.78	87.21	1901	4.08	43000	F1023 90_M_2.2C_--	298	112M
10.03	93.70	2042	3.45	43000	F1023 100_M_2.2C_--	298	112M
8.96	104.86	2262	3.54	43000	F1033 100_M_2.2C_--	317	112M
7.92	118.71	2560	3.12	43000	F1033 112_M_2.2C_--	317	112M
7.11	132.14	2850	2.81	43000	F1033 125_M_2.2C_--	317	112M
6.40	146.81	3167	2.53	43000	F1033 160_M_2.2C_--	317	112M
5.24	179.56	3873	2.07	43000	F1033 180_M_2.2C_--	317	112M
4.53	207.38	4473	1.79	43000	F1033 200_M_2.2C_--	317	112M
4.11	228.94	4938	1.62	43000	F1033 225_M_2.2C_--	317	112M
3.38	278.26	6002	1.33	43000	F1033 280_M_2.2C_--	317	112M
2.98	314.94	6793	1.18	43000	F1033 320_M_2.2C_--	317	112M
2.65	354.14	7638	1.05	43000	F1033 360_M_2.2C_--	317	112M
2.29	411.35	8734	0.92	43000	F1043 400_M_2.2C_--	332	112M
2.05	457.90	9723	0.82	43000	F1043 450_M_2.2C_--	332	112M

#### 3.0 kW

4 POLE

218.12	6.65	128	1.20	2769	F0323 6.3_M_3.0A_--	55	100L
161.47	8.98	173	1.03	2849	F0323 9.0_M_3.0A_--	55	100L
141.96	10.21	197	0.96	2895	F0323 10_M_3.0A_--	55	100L
125.30	11.57	223	0.90	2928	F0323 12_M_3.0A_--	55	100L
229.43	6.32	122	2.00	3494	F0423 6.3_M_3.0A_--	59	100L
163.57	8.86	171	1.71	3359	F0423 9.0_M_3.0A_--	59	100L
148.44	9.77	188	1.63	3370	F0423 10_M_3.0A_--	59	100L
130.72	11.09	214	1.53	3405	F0423 12_M_3.0A_--	59	100L
102.92	14.09	271	1.30	3514	F0423 14_M_3.0A_--	59	100L
90.60	16.01	308	1.16	3622	F0423 16_M_3.0A_--	59	100L
73.82	19.64	378	0.98	3794	F0423 20_M_3.0A_--	59	100L
66.56	21.79	420	0.89	3886	F0423 22_M_3.0A_--	59	100L
58.59	24.75	477	0.81	3992	F0423 25_M_3.0A_--	59	100L
229.74	6.31	122	3.70	2192	F0523 6.3_M_3.0A_--	67	100L
163.40	8.87	171	2.76	2590	F0523 9.0_M_3.0A_--	67	100L
145.79	9.95	192	2.50	2725	F0523 10_M_3.0A_--	67	100L
129.88	11.16	215	2.26	2862	F0523 12_M_3.0A_--	67	100L
102.27	14.18	273	1.84	3123	F0523 14_M_3.0A_--	67	100L
90.22	16.07	310	1.65	3256	F0523 16_M_3.0A_--	67	100L
75.64	19.17	369	1.42	3469	F0523 20_M_3.0A_--	67	100L
65.70	22.07	425	1.26	3625	F0523 22_M_3.0A_--	67	100L
56.48	25.67	495	1.11	3805	F0523 25_M_3.0A_--	67	100L
50.49	28.72	553	1.01	3928	F0523 28_M_3.0A_--	67	100L
47.37	30.61	590	0.95	4002	F0523 32_M_3.0A_--	67	100L
39.97	36.28	699	0.82	4190	F0523 36_M_3.0A_--	67	100L
164.40	8.82	170	3.81	7930	F0623 9.0_M_3.0A_--	86	100L
146.68	9.89	190	3.61	7818	F0623 10_M_3.0A_--	86	100L
130.67	11.10	214	3.38	7865	F0623 12_M_3.0A_--	86	100L
102.89	14.09	271	3.01	7958	F0623 14_M_3.0A_--	86	100L
90.77	15.98	308	2.81	8028	F0623 16_M_3.0A_--	86	100L
76.11	19.05	367	2.45	8298	F0623 20_M_3.0A_--	86	100L
66.10	21.94	423	1.76	9308	F0623 22_M_3.0A_--	86	100L
56.83	25.52	492	1.71	9276	F0623 25_M_3.0A_--	86	100L
50.79	28.55	550	1.61	9376	F0623 28_M_3.0A_--	86	100L
47.66	30.43	586	1.54	9496	F0623 32_M_3.0A_--	86	100L
40.21	36.06	695	1.30	9889	F0623 36_M_3.0A_--	86	100L
37.66	38.50	742	1.21	10046	F0623 40_M_3.0A_--	86	100L
30.35	47.78	920	0.98	10529	F0623 50_M_3.0A_--	86	100L
25.74	56.34	1085	0.83	10872	F0623 56_M_3.0A_--	86	100L
73.20	19.81	382	3.74	11930	F0723 20_M_3.0A_--	110	100L
66.55	21.79	420	3.54	12030	F0723 22_M_3.0A_--	110	100L
57.91	25.04	482	3.35	11984	F0723 25_M_3.0A_--	110	100L
51.07	28.39	547	3.11	12212	F0723 28_M_3.0A_--	110	100L
46.30	31.32	603	2.82	12635	F0723 32_M_3.0A_--	110	100L
40.43	35.86	691	2.46	13232	F0723 36_M_3.0A_--	110	100L
35.76	40.55	781	2.18	13764	F0723 40_M_3.0A_--	110	100L
30.84	47.01	906	1.88	14375	F0723 50_M_3.0A_--	110	100L
25.86	56.07	1080	1.57	15009	F0723 56_M_3.0A_--	110	100L
23.61	61.40	1183	1.44	15386	F0723 63_M_3.0A_--	110	100L
19.68	73.68	1420	1.10	16000	F0723 71_M_3.0A_--	110	100L

#### NOTE

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**3.0 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
18.36	78.99	1506	0.92	16000	F0733 80. _ M _ _ _ _ 3.0A --	114	100L
15.78	91.87	1752	0.83	16000	F0733 90. _ M _ _ _ _ 3.0A --	114	100L
46.79	30.99	597	3.87	15606	F0823 32. _ M _ _ _ _ 3.0A --	143	100L
41.35	35.06	675	3.67	15659	F0823 36. _ M _ _ _ _ 3.0A --	143	100L
36.64	39.58	762	3.41	15749	F0823 40. _ M _ _ _ _ 3.0A --	143	100L
30.22	47.98	924	3.06	15947	F0823 50. _ M _ _ _ _ 3.0A --	143	100L
25.91	55.95	1078	2.81	16089	F0823 56. _ M _ _ _ _ 3.0A --	143	100L
23.59	61.46	1184	2.58	16338	F0823 63. _ M _ _ _ _ 3.0A --	143	100L
19.25	75.32	1451	2.10	17245	F0823 71. _ M _ _ _ _ 3.0A --	143	100L
17.63	82.25	1585	1.86	18000	F0823 90. _ M _ _ _ _ 3.0A --	143	100L
15.31	94.71	1825	1.44	18000	F0823 100 _ M _ _ _ _ 3.0A --	143	100L
14.16	102.39	1952	1.56	18000	F0833 100 _ M _ _ _ _ 3.0A --	148	100L
12.94	112.05	2136	1.43	18000	F0833 112 _ M _ _ _ _ 3.0A --	148	100L
11.44	126.77	2417	1.26	18000	F0833 125 _ M _ _ _ _ 3.0A --	148	100L
10.13	143.09	2728	1.12	18000	F0833 160 _ M _ _ _ _ 3.0A --	148	100L
8.36	173.46	3307	0.92	18000	F0833 180 _ M _ _ _ _ 3.0A --	148	100L
22.81	63.56	1225	3.67	35000	F0923 63. _ M _ _ _ _ 3.0A --	212	100L
18.77	77.26	1488	3.02	35000	F0923 71. _ M _ _ _ _ 3.0A --	212	100L
16.58	87.44	1685	2.67	35000	F0923 90. _ M _ _ _ _ 3.0A --	212	100L
14.75	98.32	1894	2.38	35000	F0923 100 _ M _ _ _ _ 3.0A --	212	100L
13.78	105.26	2007	2.24	35000	F0933 100 _ M _ _ _ _ 3.0A --	222	100L
12.59	115.19	2196	2.05	35000	F0933 112 _ M _ _ _ _ 3.0A --	222	100L
11.13	130.32	2485	1.81	35000	F0933 125 _ M _ _ _ _ 3.0A --	222	100L
9.86	147.11	2805	1.60	35000	F0933 160 _ M _ _ _ _ 3.0A --	222	100L
8.13	178.33	3400	1.32	35000	F0933 180 _ M _ _ _ _ 3.0A --	222	100L
6.97	207.96	3965	1.13	35000	F0933 200 _ M _ _ _ _ 3.0A --	222	100L
6.35	228.44	4356	1.03	35000	F0933 225 _ M _ _ _ _ 3.0A --	222	100L
5.18	279.95	5338	0.84	35000	F0933 280 _ M _ _ _ _ 3.0A --	222	100L
15.47	93.70	1805	3.90	43000	F1023 100 _ M _ _ _ _ 3.0A --	292	100L
13.83	104.86	1999	4.00	43000	F1033 100 _ M _ _ _ _ 3.0A --	311	100L
12.21	118.71	2263	3.53	43000	F1033 112 _ M _ _ _ _ 3.0A --	311	100L
10.97	132.14	2520	3.18	43000	F1033 125 _ M _ _ _ _ 3.0A --	311	100L
9.88	146.81	2799	2.86	43000	F1033 160 _ M _ _ _ _ 3.0A --	311	100L
8.08	179.56	3424	2.34	43000	F1033 180 _ M _ _ _ _ 3.0A --	311	100L
6.99	207.38	3954	2.02	43000	F1033 200 _ M _ _ _ _ 3.0A --	311	100L
6.33	228.94	4365	1.83	43000	F1033 225 _ M _ _ _ _ 3.0A --	311	100L
5.21	278.26	5306	1.51	43000	F1033 280 _ M _ _ _ _ 3.0A --	311	100L
4.60	314.94	6005	1.33	43000	F1033 320 _ M _ _ _ _ 3.0A --	311	100L
4.09	354.14	6752	1.18	43000	F1033 360 _ M _ _ _ _ 3.0A --	311	100L
3.53	411.35	7721	1.04	43000	F1043 400 _ M _ _ _ _ 3.0A --	326	100L
3.17	457.90	8595	0.93	43000	F1043 450 _ M _ _ _ _ 3.0A --	326	100L
2.85	508.73	9549	0.84	43000	F1043 500 _ M _ _ _ _ 3.0A --	326	100L

**3.0 kW**

6 POLE

152.10	6.31	184	2.59	2675	F0523 6.3 _ M _ _ _ _ 3.0C --	100	132S
108.18	8.87	258	1.93	3059	F0523 9.0 _ M _ _ _ _ 3.0C --	100	132S
96.52	9.95	289	1.75	3195	F0523 10. _ M _ _ _ _ 3.0C --	100	132S
85.99	11.16	325	1.59	3330	F0523 12. _ M _ _ _ _ 3.0C --	100	132S
67.71	14.18	413	1.29	3598	F0523 14. _ M _ _ _ _ 3.0C --	100	132S
59.73	16.07	468	1.16	3736	F0523 16. _ M _ _ _ _ 3.0C --	100	132S
50.08	19.17	558	1.00	3930	F0523 20. _ M _ _ _ _ 3.0C --	100	132S
43.50	22.07	642	0.89	4098	F0523 22. _ M _ _ _ _ 3.0C --	100	132S
37.40	25.67	747	0.78	4266	F0523 25. _ M _ _ _ _ 3.0C --	100	132S
153.03	6.27	183	2.81	8549	F0623 6.3 _ M _ _ _ _ 3.0C --	118	132S
108.84	8.82	257	2.61	8566	F0623 9.0 _ M _ _ _ _ 3.0C --	118	132S
97.11	9.89	288	2.51	8570	F0623 10. _ M _ _ _ _ 3.0C --	118	132S
86.51	11.10	323	2.25	8821	F0623 12. _ M _ _ _ _ 3.0C --	118	132S
68.12	14.09	410	2.18	8626	F0623 14. _ M _ _ _ _ 3.0C --	118	132S
60.09	15.98	465	1.94	8913	F0623 16. _ M _ _ _ _ 3.0C --	118	132S
50.39	19.05	554	1.62	9356	F0623 20. _ M _ _ _ _ 3.0C --	118	132S
43.76	21.94	638	1.17	10152	F0623 22. _ M _ _ _ _ 3.0C --	118	132S
37.62	25.52	742	1.14	10209	F0623 25. _ M _ _ _ _ 3.0C --	118	132S
33.63	28.55	831	1.07	10304	F0623 28. _ M _ _ _ _ 3.0C --	118	132S
31.55	30.43	885	1.02	10451	F0623 32. _ M _ _ _ _ 3.0C --	118	132S
26.62	36.06	1049	0.86	10792	F0623 36. _ M _ _ _ _ 3.0C --	118	132S
24.94	38.50	1120	0.80	10956	F0623 40. _ M _ _ _ _ 3.0C --	118	132S

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering



# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**3.0 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
66.91	14.35	417	4.02	11100	F0723 14. _ M _ _ _ 3.0C --	142	132S
58.85	16.31	475	3.58	11569	F0723 16. _ M _ _ _ 3.0C --	142	132S
48.47	19.81	576	2.50	13556	F0723 20. _ M _ _ _ 3.0C --	142	132S
44.06	21.79	634	2.37	13725	F0723 22. _ M _ _ _ 3.0C --	142	132S
38.34	25.04	729	2.24	13751	F0723 25. _ M _ _ _ 3.0C --	142	132S
33.81	28.39	826	2.06	13907	F0723 28. _ M _ _ _ 3.0C --	142	132S
30.66	31.32	911	1.87	14348	F0723 32. _ M _ _ _ 3.0C --	142	132S
26.77	35.86	1044	1.63	14818	F0723 36. _ M _ _ _ 3.0C --	142	132S
23.68	40.55	1180	1.44	15287	F0723 40. _ M _ _ _ 3.0C --	142	132S
20.42	47.01	1368	1.24	15904	F0723 50. _ M _ _ _ 3.0C --	142	132S
17.12	56.07	1632	1.04	16000	F0723 56. _ M _ _ _ 3.0C --	142	132S
15.63	61.40	1787	0.95	16000	F0723 63. _ M _ _ _ 3.0C --	142	132S
37.60	25.53	743	3.93	14068	F0823 25. _ M _ _ _ 3.0C --	173	132S
33.90	28.32	824	2.92	16972	F0823 28. _ M _ _ _ 3.0C --	173	132S
30.97	30.99	902	2.56	17901	F0823 32. _ M _ _ _ 3.0C --	173	132S
27.38	35.06	1020	2.43	18000	F0823 36. _ M _ _ _ 3.0C --	173	132S
24.26	39.58	1152	2.27	18000	F0823 40. _ M _ _ _ 3.0C --	173	132S
20.01	47.98	1396	2.03	18000	F0823 50. _ M _ _ _ 3.0C --	173	132S
17.16	55.95	1628	1.86	18000	F0823 56. _ M _ _ _ 3.0C --	173	132S
15.62	61.46	1788	1.71	18000	F0823 63. _ M _ _ _ 3.0C --	173	132S
12.75	75.32	2192	1.39	18000	F0823 71. _ M _ _ _ 3.0C --	173	132S
11.67	82.25	2393	1.23	18000	F0823 90. _ M _ _ _ 3.0C --	173	132S
10.14	94.71	2756	0.95	18000	F0823 100 _ M _ _ _ 3.0C --	173	132S
9.38	102.39	2949	1.03	18000	F0833 100 _ M _ _ _ 3.0C --	180	132S
8.57	112.05	3227	0.95	18000	F0833 112 _ M _ _ _ 3.0C --	180	132S
7.57	126.77	3651	0.84	18000	F0833 125 _ M _ _ _ 3.0C --	180	132S
26.17	36.69	1068	4.04	35000	F0923 36. _ M _ _ _ 3.0C --	242	132S
23.55	40.76	1186	3.63	35000	F0923 40. _ M _ _ _ 3.0C --	242	132S
19.26	49.85	1451	2.97	35000	F0923 50. _ M _ _ _ 3.0C --	242	132S
16.67	57.58	1675	2.57	35000	F0923 56. _ M _ _ _ 3.0C --	242	132S
15.10	63.56	1850	2.33	35000	F0923 63. _ M _ _ _ 3.0C --	242	132S
12.43	77.26	2248	1.92	35000	F0923 71. _ M _ _ _ 3.0C --	242	132S
10.98	87.44	2544	1.69	35000	F0923 90. _ M _ _ _ 3.0C --	242	132S
9.76	98.32	2861	1.51	35000	F0923 100 _ M _ _ _ 3.0C --	242	132S
9.12	105.26	3063	1.41	35000	F0933 100 _ M _ _ _ 3.0C --	242	132S
8.33	115.19	3352	1.29	35000	F0933 112 _ M _ _ _ 3.0C --	242	132S
7.37	130.32	3792	1.14	35000	F0933 125 _ M _ _ _ 3.0C --	242	132S
6.53	147.11	4280	1.01	35000	F0933 160 _ M _ _ _ 3.0C --	242	132S
5.38	178.33	5189	0.83	35000	F0933 180 _ M _ _ _ 3.0C --	242	132S
12.83	74.83	2177	3.67	43000	F1023 71. _ M _ _ _ 3.0C --	322	132S
11.01	87.21	2538	3.06	43000	F1023 90. _ M _ _ _ 3.0C --	322	132S
10.25	93.70	2726	2.58	43000	F1023 100 _ M _ _ _ 3.0C --	322	132S
9.15	104.86	2973	2.69	43000	F1033 100 _ M _ _ _ 3.0C --	341	132S
8.09	118.71	3366	2.38	43000	F1033 112 _ M _ _ _ 3.0C --	341	132S
7.26	132.14	3746	2.14	43000	F1033 125 _ M _ _ _ 3.0C --	341	132S
6.54	146.81	4162	1.92	43000	F1033 160 _ M _ _ _ 3.0C --	341	132S
5.35	179.56	5091	1.57	43000	F1033 180 _ M _ _ _ 3.0C --	341	132S
4.63	207.38	5879	1.36	43000	F1033 200 _ M _ _ _ 3.0C --	341	132S
4.19	228.94	6491	1.23	43000	F1033 225 _ M _ _ _ 3.0C --	341	132S
3.45	278.26	7889	1.01	43000	F1033 280 _ M _ _ _ 3.0C --	341	132S
3.05	314.94	8929	0.90	43000	F1033 320 _ M _ _ _ 3.0C --	341	132S
2.71	354.14	10041	0.80	43000	F1033 360 _ M _ _ _ 3.0C --	341	132S

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**4.0 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
229.43	6.32	162	1.50	3544	F0423 6.3 _ M _ _ _ 4.0A --	65	112M
163.57	8.86	228	1.28	3577	F0423 9.0 _ M _ _ _ 4.0A --	65	112M
148.44	9.77	251	1.22	3591	F0423 10. _ M _ _ _ 4.0A --	65	112M
130.72	11.09	285	1.14	3686	F0423 12. _ M _ _ _ 4.0A --	65	112M
102.92	14.09	362	0.97	3947	F0423 14. _ M _ _ _ 4.0A --	65	112M
90.60	16.01	411	0.87	4052	F0423 16. _ M _ _ _ 4.0A --	65	112M
229.74	6.31	162	2.78	2010	F0523 6.3 _ M _ _ _ 4.0A --	73	112M
163.40	8.87	228	2.07	2376	F0523 9.0 _ M _ _ _ 4.0A --	73	112M
145.79	9.95	255	1.87	2500	F0523 10. _ M _ _ _ 4.0A --	73	112M
129.88	11.16	287	1.70	2626	F0523 12. _ M _ _ _ 4.0A --	73	112M
102.27	14.18	364	1.38	2864	F0523 14. _ M _ _ _ 4.0A --	73	112M
90.22	16.07	413	1.24	2987	F0523 16. _ M _ _ _ 4.0A --	73	112M
75.64	19.17	492	1.07	3182	F0523 20. _ M _ _ _ 4.0A --	73	112M
65.70	22.07	567	0.95	3325	F0523 22. _ M _ _ _ 4.0A --	73	112M
56.48	25.67	659	0.83	3491	F0523 25. _ M _ _ _ 4.0A --	73	112M
231.14	6.27	161	3.18	7497	F0623 6.3 _ M _ _ _ 4.0A --	92	112M
164.40	8.82	227	2.86	7275	F0623 9.0 _ M _ _ _ 4.0A --	92	112M
146.68	9.89	254	2.71	7171	F0623 10. _ M _ _ _ 4.0A --	92	112M
130.67	11.10	285	2.53	7215	F0623 12. _ M _ _ _ 4.0A --	92	112M
102.89	14.09	362	2.25	7300	F0623 14. _ M _ _ _ 4.0A --	92	112M
90.77	15.98	410	2.11	7364	F0623 16. _ M _ _ _ 4.0A --	92	112M
76.11	19.05	489	1.84	7611	F0623 20. _ M _ _ _ 4.0A --	92	112M
66.10	21.94	563	1.32	8539	F0623 22. _ M _ _ _ 4.0A --	92	112M
56.83	25.52	655	1.28	8509	F0623 25. _ M _ _ _ 4.0A --	92	112M
50.79	28.55	733	1.21	8601	F0623 28. _ M _ _ _ 4.0A --	92	112M
47.66	30.43	782	1.15	8711	F0623 32. _ M _ _ _ 4.0A --	92	112M
40.21	36.06	926	0.97	9071	F0623 36. _ M _ _ _ 4.0A --	92	112M
37.66	38.50	989	0.91	9216	F0623 40. _ M _ _ _ 4.0A --	92	112M
101.07	14.35	369	4.03	9494	F0723 14. _ M _ _ _ 4.0A --	116	112M
88.89	16.31	419	3.56	9511	F0723 16. _ M _ _ _ 4.0A --	116	112M
73.20	19.81	509	2.81	10943	F0723 20. _ M _ _ _ 4.0A --	116	112M
66.55	21.79	560	2.66	11035	F0723 22. _ M _ _ _ 4.0A --	116	112M
57.91	25.04	643	2.51	10993	F0723 25. _ M _ _ _ 4.0A --	116	112M
51.07	28.39	729	2.33	11202	F0723 28. _ M _ _ _ 4.0A --	116	112M
46.30	31.32	804	2.11	11591	F0723 32. _ M _ _ _ 4.0A --	116	112M
40.43	35.86	921	1.85	12138	F0723 36. _ M _ _ _ 4.0A --	116	112M
35.76	40.55	1042	1.63	12626	F0723 40. _ M _ _ _ 4.0A --	116	112M
30.84	47.01	1208	1.41	13186	F0723 50. _ M _ _ _ 4.0A --	116	112M
25.86	56.07	1440	1.18	13768	F0723 56. _ M _ _ _ 4.0A --	116	112M
23.61	61.40	1577	1.08	14114	F0723 63. _ M _ _ _ 4.0A --	116	112M
19.68	73.68	1893	0.82	15087	F0723 71. _ M _ _ _ 4.0A --	116	112M
51.20	28.32	727	3.31	13436	F0823 28. _ M _ _ _ 4.0A --	149	112M
46.79	30.99	796	2.90	14316	F0823 32. _ M _ _ _ 4.0A --	149	112M
41.35	35.06	901	2.75	14364	F0823 36. _ M _ _ _ 4.0A --	149	112M
36.64	39.58	1017	2.56	14447	F0823 40. _ M _ _ _ 4.0A --	149	112M
30.22	47.98	1232	2.30	14628	F0823 50. _ M _ _ _ 4.0A --	149	112M
25.91	55.95	1437	2.11	14759	F0823 56. _ M _ _ _ 4.0A --	149	112M
23.59	61.46	1579	1.93	14987	F0823 63. _ M _ _ _ 4.0A --	149	112M
19.25	75.32	1935	1.58	15819	F0823 71. _ M _ _ _ 4.0A --	149	112M
17.63	82.25	2113	1.40	17243	F0823 90. _ M _ _ _ 4.0A --	149	112M
15.31	94.71	2433	1.08	18000	F0823 100 _ M _ _ _ 4.0A --	149	112M
14.16	102.39	2603	1.17	18000	F0833 100 _ M _ _ _ 4.0A --	154	112M
12.94	112.05	2849	1.07	18000	F0833 112 _ M _ _ _ 4.0A --	154	112M
11.44	126.77	3223	0.95	18000	F0833 125 _ M _ _ _ 4.0A --	154	112M
10.13	143.09	3638	0.84	18000	F0833 160 _ M _ _ _ 4.0A --	154	112M
29.09	49.85	1281	3.51	35000	F0923 50. _ M _ _ _ 4.0A --	218	112M
25.18	57.58	1479	3.04	35000	F0923 56. _ M _ _ _ 4.0A --	218	112M
22.81	63.56	1633	2.76	35000	F0923 63. _ M _ _ _ 4.0A --	218	112M
18.77	77.26	1984	2.27	35000	F0923 71. _ M _ _ _ 4.0A --	218	112M
16.58	87.44	2246	2.00	35000	F0923 90. _ M _ _ _ 4.0A --	218	112M
14.75	98.32	2526	1.78	35000	F0923 100 _ M _ _ _ 4.0A --	218	112M
13.78	105.26	2676	1.68	35000	F0933 100 _ M _ _ _ 4.0A --	228	112M
12.59	115.19	2929	1.54	35000	F0933 112 _ M _ _ _ 4.0A --	228	112M
11.13	130.32	3313	1.36	35000	F0933 125 _ M _ _ _ 4.0A --	228	112M
9.86	147.11	3740	1.20	35000	F0933 160 _ M _ _ _ 4.0A --	228	112M
8.13	178.33	4534	0.99	35000	F0933 180 _ M _ _ _ 4.0A --	228	112M
6.97	207.96	5287	0.85	35000	F0933 200 _ M _ _ _ 4.0A --	228	112M

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**4.0 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
19.38	74.83	1922	4.16	43000	F1023 71. _ M _ _ _ 4.0A - -	298	112M
16.63	87.21	2240	3.46	43000	F1023 90. _ M _ _ _ 4.0A - -	298	112M
15.47	93.70	2407	2.93	43000	F1023 100 _ M _ _ _ 4.0A - -	298	112M
13.83	104.86	2666	3.00	43000	F1033 100 _ M _ _ _ 4.0A - -	317	112M
12.21	118.71	3018	2.65	43000	F1033 112 _ M _ _ _ 4.0A - -	317	112M
10.97	132.14	3359	2.38	43000	F1033 125 _ M _ _ _ 4.0A - -	317	112M
9.88	146.81	3732	2.14	43000	F1033 160 _ M _ _ _ 4.0A - -	317	112M
8.08	179.56	4565	1.75	43000	F1033 180 _ M _ _ _ 4.0A - -	317	112M
6.99	207.38	5272	1.52	43000	F1033 200 _ M _ _ _ 4.0A - -	317	112M
6.33	228.94	5820	1.37	43000	F1033 225 _ M _ _ _ 4.0A - -	317	112M
5.21	278.26	7074	1.13	43000	F1033 280 _ M _ _ _ 4.0A - -	317	112M
4.60	314.94	8007	1.00	43000	F1033 320 _ M _ _ _ 4.0A - -	317	112M
4.09	354.14	9003	0.89	43000	F1033 360 _ M _ _ _ 4.0A - -	317	112M

**4.0 kW**

6 POLE

152.10	6.31	245	1.94	2454	F0523 6.3 _ M _ _ _ 4.0C - -	105	132M
108.18	8.87	344	1.45	2806	F0523 9.0 _ M _ _ _ 4.0C - -	105	132M
96.52	9.95	386	1.31	2930	F0523 10. _ M _ _ _ 4.0C - -	105	132M
85.99	11.16	433	1.19	3055	F0523 12. _ M _ _ _ 4.0C - -	105	132M
67.71	14.18	550	0.97	3301	F0523 14. _ M _ _ _ 4.0C - -	105	132M
59.73	16.07	624	0.87	3427	F0523 16. _ M _ _ _ 4.0C - -	105	132M
153.03	6.27	243	2.11	7842	F0623 6.3 _ M _ _ _ 4.0C - -	123	132M
108.84	8.82	342	1.96	7857	F0623 9.0 _ M _ _ _ 4.0C - -	123	132M
97.11	9.89	384	1.89	7862	F0623 10. _ M _ _ _ 4.0C - -	123	132M
86.51	11.10	431	1.68	8091	F0623 12. _ M _ _ _ 4.0C - -	123	132M
68.12	14.09	547	1.63	7913	F0623 14. _ M _ _ _ 4.0C - -	123	132M
60.09	15.98	620	1.45	8176	F0623 16. _ M _ _ _ 4.0C - -	123	132M
50.39	19.05	739	1.22	8582	F0623 20. _ M _ _ _ 4.0C - -	123	132M
43.76	21.94	851	0.88	9312	F0623 22. _ M _ _ _ 4.0C - -	123	132M
37.62	25.52	990	0.85	9365	F0623 25. _ M _ _ _ 4.0C - -	123	132M
33.63	28.55	1108	0.80	9452	F0623 28. _ M _ _ _ 4.0C - -	123	132M
107.95	8.89	345	3.91	9953	F0723 9.0 _ M _ _ _ 4.0C - -	147	132M
96.10	9.99	388	3.69	9971	F0723 10. _ M _ _ _ 4.0C - -	147	132M
87.40	10.98	426	3.57	9915	F0723 12. _ M _ _ _ 4.0C - -	147	132M
66.91	14.35	557	3.02	10182	F0723 14. _ M _ _ _ 4.0C - -	147	132M
58.85	16.31	633	2.69	10613	F0723 16. _ M _ _ _ 4.0C - -	147	132M
48.47	19.81	768	1.87	12435	F0723 20. _ M _ _ _ 4.0C - -	147	132M
44.06	21.79	845	1.77	12590	F0723 22. _ M _ _ _ 4.0C - -	147	132M
38.34	25.04	971	1.68	12614	F0723 25. _ M _ _ _ 4.0C - -	147	132M
33.81	28.39	1101	1.54	12757	F0723 28. _ M _ _ _ 4.0C - -	147	132M
30.66	31.32	1215	1.40	13162	F0723 32. _ M _ _ _ 4.0C - -	147	132M
26.77	35.86	1391	1.22	13593	F0723 36. _ M _ _ _ 4.0C - -	147	132M
23.68	40.55	1573	1.08	14023	F0723 40. _ M _ _ _ 4.0C - -	147	132M
20.42	47.01	1824	0.93	14589	F0723 50. _ M _ _ _ 4.0C - -	147	132M
17.12	56.07	2175	0.78	14859	F0723 56. _ M _ _ _ 4.0C - -	147	132M
49.32	19.46	755	3.73	11611	F0823 20. _ M _ _ _ 4.0C - -	178	132M
43.77	21.93	851	3.37	12169	F0823 22. _ M _ _ _ 4.0C - -	178	132M
37.60	25.53	991	2.95	12904	F0823 25. _ M _ _ _ 4.0C - -	178	132M
33.90	28.32	1099	2.19	15568	F0823 28. _ M _ _ _ 4.0C - -	178	132M
30.97	30.99	1202	1.92	16421	F0823 32. _ M _ _ _ 4.0C - -	178	132M
27.38	35.06	1360	1.82	16524	F0823 36. _ M _ _ _ 4.0C - -	178	132M
24.26	39.58	1536	1.70	16650	F0823 40. _ M _ _ _ 4.0C - -	178	132M
20.01	47.98	1861	1.52	16895	F0823 50. _ M _ _ _ 4.0C - -	178	132M
17.16	55.95	2171	1.40	17131	F0823 56. _ M _ _ _ 4.0C - -	178	132M
15.62	61.46	2385	1.28	17119	F0823 63. _ M _ _ _ 4.0C - -	178	132M
12.75	75.32	2922	1.04	17321	F0823 71. _ M _ _ _ 4.0C - -	178	132M
11.67	82.25	3191	0.92	17581	F0823 90. _ M _ _ _ 4.0C - -	178	132M
32.97	29.11	1130	3.82	35000	F0923 28. _ M _ _ _ 4.0C - -	247	132M
29.13	32.96	1279	3.37	35000	F0923 32. _ M _ _ _ 4.0C - -	247	132M
26.17	36.69	1423	3.03	35000	F0923 36. _ M _ _ _ 4.0C - -	247	132M
23.55	40.76	1581	2.73	35000	F0923 40. _ M _ _ _ 4.0C - -	247	132M
19.26	49.85	1934	2.23	35000	F0923 50. _ M _ _ _ 4.0C - -	247	132M
16.67	57.58	2234	1.93	35000	F0923 56. _ M _ _ _ 4.0C - -	247	132M
15.10	63.56	2466	1.75	35000	F0923 63. _ M _ _ _ 4.0C - -	247	132M
12.43	77.26	2997	1.44	35000	F0923 71. _ M _ _ _ 4.0C - -	247	132M
10.98	87.44	3392	1.27	35000	F0923 90. _ M _ _ _ 4.0C - -	247	132M
9.76	98.32	3815	1.13	35000	F0923 100 _ M _ _ _ 4.0C - -	247	132M
9.12	105.26	4084	1.06	35000	F0933 100 _ M _ _ _ 4.0C - -	256	132M
8.33	115.19	4469	0.96	35000	F0933 112 _ M _ _ _ 4.0C - -	256	132M
7.37	130.32	5056	0.85	35000	F0933 125 _ M _ _ _ 4.0C - -	256	132M

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**4.0 kW**  
6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> - <input type="text" value="20"/> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
17.15	55.97	2171	3.68	43000	F1023 56. _ M _ _ _ 4.0C --	327	132M
14.89	64.49	2502	3.20	43000	F1023 63. _ M _ _ _ 4.0C --	327	132M
12.83	74.83	2903	2.76	43000	F1023 71. _ M _ _ _ 4.0C --	327	132M
11.01	87.21	3384	2.29	43000	F1023 90. _ M _ _ _ 4.0C --	327	132M
10.25	93.70	3635	1.94	43000	F1023 100 _ M _ _ _ 4.0C --	327	132M
9.15	104.86	4027	1.99	43000	F1033 100 _ M _ _ _ 4.0C --	346	132M
8.09	118.71	4558	1.76	43000	F1033 112 _ M _ _ _ 4.0C --	346	132M
7.26	132.14	5074	1.58	43000	F1033 125 _ M _ _ _ 4.0C --	346	132M
6.54	146.81	5637	1.42	43000	F1033 160 _ M _ _ _ 4.0C --	346	132M
5.35	179.56	6895	1.16	43000	F1033 180 _ M _ _ _ 4.0C --	346	132M
4.63	207.38	7963	1.00	43000	F1033 200 _ M _ _ _ 4.0C --	346	132M
4.19	228.94	8791	0.91	43000	F1033 225 _ M _ _ _ 4.0C --	346	132M

**5.5 kW**  
4 POLE

229.74	6.31	223	2.02	1827	F0523 6.3 _ M _ _ _ 5.5A --	100	132S
163.40	8.87	313	1.51	2160	F0523 9.0 _ M _ _ _ 5.5A --	100	132S
145.79	9.95	351	1.36	2272	F0523 10. _ M _ _ _ 5.5A --	100	132S
129.88	11.16	394	1.24	2386	F0523 12. _ M _ _ _ 5.5A --	100	132S
102.27	14.18	501	1.00	2603	F0523 14. _ M _ _ _ 5.5A --	100	132S
90.22	16.07	568	0.90	2715	F0523 16. _ M _ _ _ 5.5A --	100	132S
231.14	6.27	222	2.31	6814	F0623 6.3 _ M _ _ _ 5.5A --	118	132S
164.40	8.82	312	2.08	6612	F0623 9.0 _ M _ _ _ 5.5A --	118	132S
146.68	9.89	349	1.97	6518	F0623 10. _ M _ _ _ 5.5A --	118	132S
130.67	11.10	392	1.84	6557	F0623 12. _ M _ _ _ 5.5A --	118	132S
102.89	14.09	498	1.64	6635	F0623 14. _ M _ _ _ 5.5A --	118	132S
90.77	15.98	564	1.53	6693	F0623 16. _ M _ _ _ 5.5A --	118	132S
76.11	19.05	673	1.34	6918	F0623 20. _ M _ _ _ 5.5A --	118	132S
66.10	21.94	775	0.96	7761	F0623 22. _ M _ _ _ 5.5A --	118	132S
56.83	25.52	901	0.93	7733	F0623 25. _ M _ _ _ 5.5A --	118	132S
50.79	28.55	1008	0.88	7817	F0623 28. _ M _ _ _ 5.5A --	118	132S
47.66	30.43	1075	0.84	7917	F0623 32. _ M _ _ _ 5.5A --	118	132S
163.05	8.89	314	3.82	8967	F0723 9.0 _ M _ _ _ 5.5A --	142	132S
145.15	9.99	353	3.60	8811	F0723 10. _ M _ _ _ 5.5A --	142	132S
132.01	10.98	388	3.45	8703	F0723 12. _ M _ _ _ 5.5A --	142	132S
101.07	14.35	507	2.93	8629	F0723 14. _ M _ _ _ 5.5A --	142	132S
88.89	16.31	576	2.59	8644	F0723 16. _ M _ _ _ 5.5A --	142	132S
73.20	19.81	700	2.04	9946	F0723 20. _ M _ _ _ 5.5A --	142	132S
66.55	21.79	770	1.93	10030	F0723 22. _ M _ _ _ 5.5A --	142	132S
57.91	25.04	884	1.83	9991	F0723 25. _ M _ _ _ 5.5A --	142	132S
51.07	28.39	1003	1.70	10181	F0723 28. _ M _ _ _ 5.5A --	142	132S
46.30	31.32	1106	1.54	10535	F0723 32. _ M _ _ _ 5.5A --	142	132S
40.43	35.86	1267	1.34	11032	F0723 36. _ M _ _ _ 5.5A --	142	132S
35.76	40.55	1432	1.19	11475	F0723 40. _ M _ _ _ 5.5A --	142	132S
30.84	47.01	1660	1.02	11985	F0723 50. _ M _ _ _ 5.5A --	142	132S
25.86	56.07	1980	0.86	12514	F0723 56. _ M _ _ _ 5.5A --	142	132S
74.49	19.46	687	3.72	9450	F0823 20. _ M _ _ _ 5.5A --	173	132S
66.11	21.93	775	3.38	9801	F0823 22. _ M _ _ _ 5.5A --	173	132S
56.79	25.53	902	3.06	10001	F0823 25. _ M _ _ _ 5.5A --	173	132S
51.20	28.32	1000	2.41	12212	F0823 28. _ M _ _ _ 5.5A --	173	132S
46.79	30.99	1095	2.11	13012	F0823 32. _ M _ _ _ 5.5A --	173	132S
41.35	35.06	1238	2.00	13055	F0823 36. _ M _ _ _ 5.5A --	173	132S
36.64	39.58	1398	1.86	13131	F0823 40. _ M _ _ _ 5.5A --	173	132S
30.22	47.98	1695	1.67	13296	F0823 50. _ M _ _ _ 5.5A --	173	132S
25.91	55.95	1976	1.53	13414	F0823 56. _ M _ _ _ 5.5A --	173	132S
23.59	61.46	2171	1.41	13621	F0823 63. _ M _ _ _ 5.5A --	173	132S
19.25	75.32	2660	1.15	14378	F0823 71. _ M _ _ _ 5.5A --	173	132S
17.63	82.25	2905	1.02	15672	F0823 90. _ M _ _ _ 5.5A --	173	132S
15.31	94.71	3345	0.79	16747	F0823 100 _ M _ _ _ 5.5A --	173	132S
43.99	32.96	1164	3.87	35000	F0923 32. _ M _ _ _ 5.5A --	242	132S
39.52	36.69	1296	3.47	35000	F0923 36. _ M _ _ _ 5.5A --	242	132S
35.57	40.76	1440	3.13	35000	F0923 40. _ M _ _ _ 5.5A --	242	132S
29.09	49.85	1761	2.56	35000	F0923 50. _ M _ _ _ 5.5A --	242	132S
25.18	57.58	2034	2.21	35000	F0923 56. _ M _ _ _ 5.5A --	242	132S
22.81	63.56	2245	2.00	35000	F0923 63. _ M _ _ _ 5.5A --	242	132S
18.77	77.26	2729	1.65	35000	F0923 71. _ M _ _ _ 5.5A --	242	132S
16.58	87.44	3088	1.46	35000	F0923 90. _ M _ _ _ 5.5A --	242	132S
14.75	98.32	3473	1.30	35000	F0923 100 _ M _ _ _ 5.5A --	242	132S
13.78	105.26	3718	1.21	35000	F0933 100 _ M _ _ _ 5.5A --	251	132S
12.59	115.19	4068	1.11	35000	F0933 112 _ M _ _ _ 5.5A --	251	132S
11.13	130.32	4603	0.98	35000	F0933 125 _ M _ _ _ 5.5A --	251	132S
9.86	147.11	5196	0.87	35000	F0933 160 _ M _ _ _ 5.5A --	251	132S

**NOTE**  
Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**5.5 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
25.91	55.97	1977	4.05	43000	F1023 56. _ M _ _ _ 5.5A --	322	132S
22.49	64.49	2278	3.51	43000	F1023 63. _ M _ _ _ 5.5A --	322	132S
19.38	74.83	2643	3.03	43000	F1023 71. _ M _ _ _ 5.5A --	322	132S
16.63	87.21	3080	2.52	43000	F1023 90. _ M _ _ _ 5.5A --	322	132S
15.47	93.70	3309	2.13	43000	F1023 100 _ M _ _ _ 5.5A --	322	132S
13.83	104.86	3666	2.18	43000	F1033 100 _ M _ _ _ 5.5A --	341	132S
12.21	118.71	4150	1.93	43000	F1033 112 _ M _ _ _ 5.5A --	341	132S
10.97	132.14	4619	1.73	43000	F1033 125 _ M _ _ _ 5.5A --	341	132S
9.88	146.81	5132	1.56	43000	F1033 160 _ M _ _ _ 5.5A --	341	132S
8.08	179.56	6277	1.27	43000	F1033 180 _ M _ _ _ 5.5A --	341	132S
6.99	207.38	7249	1.10	43000	F1033 200 _ M _ _ _ 5.5A --	341	132S
6.33	228.94	8003	1.00	43000	F1033 225 _ M _ _ _ 5.5A --	341	132S
5.21	278.26	9727	0.82	43000	F1033 280 _ M _ _ _ 5.5A --	341	132S

**5.5 kW**

6 POLE

152.10	6.31	337	1.41	2230	F0523 6.3 _ M _ _ _ 5.5C --	105	132M
108.18	8.87	473	1.05	2550	F0523 9.0 _ M _ _ _ 5.5C --	105	132M
96.52	9.95	531	0.96	2663	F0523 10. _ M _ _ _ 5.5C --	105	132M
85.99	11.16	596	0.86	2776	F0523 12. _ M _ _ _ 5.5C --	105	132M
153.03	6.27	335	1.53	7127	F0623 6.3 _ M _ _ _ 5.5C --	123	132M
108.84	8.82	471	1.43	7141	F0623 9.0 _ M _ _ _ 5.5C --	123	132M
97.11	9.89	527	1.37	7145	F0623 10. _ M _ _ _ 5.5C --	123	132M
86.51	11.10	592	1.22	7354	F0623 12. _ M _ _ _ 5.5C --	123	132M
68.12	14.09	752	1.19	7192	F0623 14. _ M _ _ _ 5.5C --	123	132M
60.09	15.98	852	1.06	7431	F0623 16. _ M _ _ _ 5.5C --	123	132M
50.39	19.05	1016	0.89	7800	F0623 20. _ M _ _ _ 5.5C --	123	132M
149.52	6.42	343	3.36	9262	F0723 6.3 _ M _ _ _ 5.5C --	147	132M
107.95	8.89	474	2.85	9046	F0723 9.0 _ M _ _ _ 5.5C --	147	132M
96.10	9.99	533	2.68	9063	F0723 10. _ M _ _ _ 5.5C --	147	132M
87.40	10.98	586	2.59	9011	F0723 12. _ M _ _ _ 5.5C --	147	132M
66.91	14.35	765	2.20	9254	F0723 14. _ M _ _ _ 5.5C --	147	132M
58.85	16.31	870	1.95	9646	F0723 16. _ M _ _ _ 5.5C --	147	132M
48.47	19.81	1057	1.36	11302	F0723 20. _ M _ _ _ 5.5C --	147	132M
44.06	21.79	1162	1.29	11443	F0723 22. _ M _ _ _ 5.5C --	147	132M
38.34	25.04	1336	1.22	11465	F0723 25. _ M _ _ _ 5.5C --	147	132M
33.81	28.39	1515	1.12	11595	F0723 28. _ M _ _ _ 5.5C --	147	132M
30.66	31.32	1671	1.02	11963	F0723 32. _ M _ _ _ 5.5C --	147	132M
26.77	35.86	1913	0.89	12354	F0723 36. _ M _ _ _ 5.5C --	147	132M
87.80	10.93	583	4.03	9615	F0823 12. _ M _ _ _ 5.5C --	178	132M
67.90	14.14	754	3.47	9676	F0823 14. _ M _ _ _ 5.5C --	178	132M
60.48	15.87	847	3.22	9761	F0823 16. _ M _ _ _ 5.5C --	178	132M
49.32	19.46	1038	2.72	10553	F0823 20. _ M _ _ _ 5.5C --	178	132M
43.77	21.93	1170	2.45	11060	F0823 22. _ M _ _ _ 5.5C --	178	132M
37.60	25.53	1362	2.14	11729	F0823 25. _ M _ _ _ 5.5C --	178	132M
33.90	28.32	1511	1.60	14150	F0823 28. _ M _ _ _ 5.5C --	178	132M
30.97	30.99	1653	1.40	14925	F0823 32. _ M _ _ _ 5.5C --	178	132M
27.38	35.06	1870	1.33	15019	F0823 36. _ M _ _ _ 5.5C --	178	132M
24.26	39.58	2111	1.24	15133	F0823 40. _ M _ _ _ 5.5C --	178	132M
20.01	47.98	2559	1.11	15356	F0823 50. _ M _ _ _ 5.5C --	178	132M
17.16	55.95	2985	1.02	15570	F0823 56. _ M _ _ _ 5.5C --	178	132M
15.62	61.46	3279	0.93	15559	F0823 63. _ M _ _ _ 5.5C --	178	132M
32.97	29.11	1553	2.78	35000	F0923 28. _ M _ _ _ 5.5C --	247	132M
29.13	32.96	1758	2.45	35000	F0923 32. _ M _ _ _ 5.5C --	247	132M
26.17	36.69	1957	2.20	35000	F0923 36. _ M _ _ _ 5.5C --	247	132M
23.55	40.76	2174	1.98	35000	F0923 40. _ M _ _ _ 5.5C --	247	132M
19.26	49.85	2659	1.62	35000	F0923 50. _ M _ _ _ 5.5C --	247	132M
16.67	57.58	3071	1.40	35000	F0923 56. _ M _ _ _ 5.5C --	247	132M
15.10	63.56	3391	1.27	35000	F0923 63. _ M _ _ _ 5.5C --	247	132M
12.43	77.26	4121	1.05	35000	F0923 71. _ M _ _ _ 5.5C --	247	132M
10.98	87.44	4665	0.92	35000	F0923 90. _ M _ _ _ 5.5C --	247	132M
9.76	98.32	5245	0.82	35000	F0923 100 _ M _ _ _ 5.5C --	247	132M
24.46	39.25	2094	3.82	43000	F1023 40. _ M _ _ _ 5.5C --	327	132M
20.70	46.38	2474	3.23	43000	F1023 50. _ M _ _ _ 5.5C --	327	132M
17.15	55.97	2986	2.68	43000	F1023 56. _ M _ _ _ 5.5C --	327	132M
14.89	64.49	3440	2.33	43000	F1023 63. _ M _ _ _ 5.5C --	327	132M
12.83	74.83	3992	2.00	43000	F1023 71. _ M _ _ _ 5.5C --	327	132M
11.01	87.21	4653	1.67	43000	F1023 90. _ M _ _ _ 5.5C --	327	132M
10.25	93.70	4999	1.41	43000	F1023 100 _ M _ _ _ 5.5C --	327	132M
9.15	104.86	5537	1.44	43000	F1033 100 _ M _ _ _ 5.5C --	346	132M
8.09	118.71	6268	1.28	43000	F1033 112 _ M _ _ _ 5.5C --	346	132M
7.26	132.14	6977	1.15	43000	F1033 125 _ M _ _ _ 5.5C --	346	132M
6.54	146.81	7751	1.03	43000	F1033 160 _ M _ _ _ 5.5C --	346	132M
5.35	179.56	9480	0.84	43000	F1033 180 _ M _ _ _ 5.5C --	346	132M

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**7.5 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	Motor Size
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	
229.74	6.31	304	1.48	1665	F0523 6.3 _ M _ _ _ 7.5A --	105	132M
163.40	8.87	427	1.10	1968	F0523 9.0 _ M _ _ _ 7.5A --	105	132M
145.79	9.95	479	1.00	2070	F0523 10. _ M _ _ _ 7.5A --	105	132M
129.88	11.16	538	0.91	2174	F0523 12. _ M _ _ _ 7.5A --	105	132M
231.14	6.27	302	1.69	6208	F0623 6.3 _ M _ _ _ 7.5A --	123	132M
164.40	8.82	425	1.52	6024	F0623 9.0 _ M _ _ _ 7.5A --	123	132M
146.68	9.89	476	1.44	5939	F0623 10. _ M _ _ _ 7.5A --	123	132M
130.67	11.10	534	1.35	5975	F0623 12. _ M _ _ _ 7.5A --	123	132M
102.89	14.09	679	1.20	6045	F0623 14. _ M _ _ _ 7.5A --	123	132M
90.77	15.98	769	1.12	6099	F0623 16. _ M _ _ _ 7.5A --	123	132M
76.11	19.05	918	0.98	6303	F0623 20. _ M _ _ _ 7.5A --	123	132M
225.84	6.42	309	3.29	8576	F0723 6.3 _ M _ _ _ 7.5A --	147	132M
163.05	8.89	428	2.80	8170	F0723 9.0 _ M _ _ _ 7.5A --	147	132M
145.15	9.99	481	2.64	8028	F0723 10. _ M _ _ _ 7.5A --	147	132M
132.01	10.98	529	2.53	7929	F0723 12. _ M _ _ _ 7.5A --	147	132M
101.07	14.35	691	2.15	7862	F0723 14. _ M _ _ _ 7.5A --	147	132M
88.89	16.31	786	1.90	7876	F0723 16. _ M _ _ _ 7.5A --	147	132M
73.20	19.81	954	1.50	9063	F0723 20. _ M _ _ _ 7.5A --	147	132M
66.55	21.79	1049	1.42	9139	F0723 22. _ M _ _ _ 7.5A --	147	132M
57.91	25.04	1206	1.34	9103	F0723 25. _ M _ _ _ 7.5A --	147	132M
51.07	28.39	1367	1.24	9277	F0723 28. _ M _ _ _ 7.5A --	147	132M
46.30	31.32	1508	1.13	9599	F0723 32. _ M _ _ _ 7.5A --	147	132M
40.43	35.86	1727	0.98	10052	F0723 36. _ M _ _ _ 7.5A --	147	132M
35.76	40.55	1953	0.87	10456	F0723 40. _ M _ _ _ 7.5A --	147	132M
132.61	10.93	527	3.91	8431	F0823 12. _ M _ _ _ 7.5A --	178	132M
102.56	14.14	681	3.36	8202	F0823 14. _ M _ _ _ 7.5A --	178	132M
91.35	15.87	764	3.13	8376	F0823 16. _ M _ _ _ 7.5A --	178	132M
74.49	19.46	937	2.73	8610	F0823 20. _ M _ _ _ 7.5A --	178	132M
66.11	21.93	1056	2.48	8930	F0823 22. _ M _ _ _ 7.5A --	178	132M
56.79	25.53	1230	2.24	9113	F0823 25. _ M _ _ _ 7.5A --	178	132M
51.20	28.32	1364	1.77	11127	F0823 28. _ M _ _ _ 7.5A --	178	132M
46.79	30.99	1493	1.55	11856	F0823 32. _ M _ _ _ 7.5A --	178	132M
41.35	35.06	1689	1.47	11895	F0823 36. _ M _ _ _ 7.5A --	178	132M
36.64	39.58	1906	1.36	11964	F0823 40. _ M _ _ _ 7.5A --	178	132M
30.22	47.98	2311	1.22	12114	F0823 50. _ M _ _ _ 7.5A --	178	132M
25.91	55.95	2695	1.12	12222	F0823 56. _ M _ _ _ 7.5A --	178	132M
23.59	61.46	2960	1.03	12411	F0823 63. _ M _ _ _ 7.5A --	178	132M
19.25	75.32	3628	0.84	13100	F0823 71. _ M _ _ _ 7.5A --	178	132M
49.80	29.11	1402	3.21	35000	F0923 28. _ M _ _ _ 7.5A --	247	132M
43.99	32.96	1587	2.83	35000	F0923 32. _ M _ _ _ 7.5A --	247	132M
39.52	36.69	1767	2.55	35000	F0923 36. _ M _ _ _ 7.5A --	247	132M
35.57	40.76	1963	2.29	35000	F0923 40. _ M _ _ _ 7.5A --	247	132M
29.09	49.85	2401	1.87	35000	F0923 50. _ M _ _ _ 7.5A --	247	132M
25.18	57.58	2773	1.62	35000	F0923 56. _ M _ _ _ 7.5A --	247	132M
22.81	63.56	3061	1.47	35000	F0923 63. _ M _ _ _ 7.5A --	247	132M
18.77	77.26	3721	1.21	35000	F0923 71. _ M _ _ _ 7.5A --	247	132M
16.58	87.44	4211	1.07	35000	F0923 90. _ M _ _ _ 7.5A --	247	132M
14.75	98.32	4735	0.95	35000	F0923 100 _ M _ _ _ 7.5A --	247	132M
31.26	46.38	2234	3.58	43000	F1023 50. _ M _ _ _ 7.5A --	327	132M
25.91	55.97	2695	2.97	43000	F1023 56. _ M _ _ _ 7.5A --	327	132M
22.49	64.49	3106	2.58	43000	F1023 63. _ M _ _ _ 7.5A --	327	132M
19.38	74.83	3604	2.22	43000	F1023 71. _ M _ _ _ 7.5A --	327	132M
16.63	87.21	4200	1.85	43000	F1023 90. _ M _ _ _ 7.5A --	327	132M
15.47	93.70	4513	1.56	43000	F1023 100 _ M _ _ _ 7.5A --	327	132M
13.83	104.86	4999	1.60	43000	F1033 100 _ M _ _ _ 7.5A --	346	132M
12.21	118.71	5659	1.41	43000	F1033 112 _ M _ _ _ 7.5A --	346	132M
10.97	132.14	6299	1.27	43000	F1033 125 _ M _ _ _ 7.5A --	346	132M
9.88	146.81	6998	1.14	43000	F1033 160 _ M _ _ _ 7.5A --	346	132M
8.08	179.56	8559	0.93	43000	F1033 180 _ M _ _ _ 7.5A --	346	132M
6.99	207.38	9885	0.81	43000	F1033 200 _ M _ _ _ 7.5A --	346	132M

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**7.5 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <input type="text" value="1"/> - <input type="text" value="20"/> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
151.08	6.42	462	2.49	8465	F0723 6.3 M --- 7.5C --	198	160M
109.07	8.89	640	2.11	8268	F0723 9.0 M --- 7.5C --	198	160M
97.10	9.99	719	1.99	8283	F0723 10. M --- 7.5C --	198	160M
88.31	10.98	791	1.92	8236	F0723 12. M --- 7.5C --	198	160M
67.61	14.35	1033	1.63	8458	F0723 14. M --- 7.5C --	198	160M
59.46	16.31	1174	1.45	8816	F0723 16. M --- 7.5C --	198	160M
48.97	19.81	1426	1.01	10330	F0723 20. M --- 7.5C --	198	160M
44.52	21.79	1569	0.96	10459	F0723 22. M --- 7.5C --	198	160M
38.74	25.04	1803	0.90	10479	F0723 25. M --- 7.5C --	198	160M
34.17	28.39	2044	0.83	10598	F0723 28. M --- 7.5C --	198	160M
155.39	6.24	449	3.92	9338	F0823 6.3 M --- 7.5C --	235	160M
109.62	8.85	637	3.34	8905	F0823 9.0 M --- 7.5C --	235	160M
98.68	9.83	708	3.17	8831	F0823 10. M --- 7.5C --	235	160M
88.71	10.93	787	2.99	8788	F0823 12. M --- 7.5C --	235	160M
68.61	14.14	1018	2.57	8844	F0823 14. M --- 7.5C --	235	160M
61.11	15.87	1143	2.39	8921	F0823 16. M --- 7.5C --	235	160M
49.83	19.46	1401	2.01	9645	F0823 20. M --- 7.5C --	235	160M
44.22	21.93	1579	1.82	10109	F0823 22. M --- 7.5C --	235	160M
37.99	25.53	1838	1.59	10720	F0823 25. M --- 7.5C --	235	160M
34.25	28.32	2039	1.18	12933	F0823 28. M --- 7.5C --	235	160M
31.30	30.99	2231	1.04	13641	F0823 32. M --- 7.5C --	235	160M
27.66	35.06	2524	0.98	13727	F0823 36. M --- 7.5C --	235	160M
24.51	39.58	2849	0.92	13831	F0823 40. M --- 7.5C --	235	160M
20.22	47.98	3454	0.82	14035	F0823 50. M --- 7.5C --	235	160M
33.32	29.11	2096	2.06	35000	F0923 28. M --- 7.5C --	301	160M
29.43	32.96	2373	1.82	35000	F0923 32. M --- 7.5C --	301	160M
26.44	36.69	2641	1.63	35000	F0923 36. M --- 7.5C --	301	160M
23.80	40.76	2935	1.47	35000	F0923 40. M --- 7.5C --	301	160M
19.46	49.85	3589	1.20	35000	F0923 50. M --- 7.5C --	301	160M
16.85	57.58	4145	1.04	35000	F0923 56. M --- 7.5C --	301	160M
15.26	63.56	4576	0.94	35000	F0923 63. M --- 7.5C --	301	160M
33.37	29.07	2093	3.20	43000	F1023 28. M --- 7.5C --	383	160M
30.03	32.30	2326	3.20	43000	F1023 32. M --- 7.5C --	383	160M
27.46	35.32	2543	3.15	43000	F1023 36. M --- 7.5C --	383	160M
24.72	39.25	2826	2.83	43000	F1023 40. M --- 7.5C --	383	160M
20.91	46.38	3339	2.40	43000	F1023 50. M --- 7.5C --	383	160M
17.33	55.97	4029	1.99	43000	F1023 56. M --- 7.5C --	383	160M
15.04	64.49	4643	1.72	43000	F1023 63. M --- 7.5C --	383	160M
12.96	74.83	5387	1.49	43000	F1023 71. M --- 7.5C --	383	160M
11.12	87.21	6279	1.24	43000	F1023 90. M --- 7.5C --	383	160M
10.35	93.70	6746	1.04	43000	F1023 100 M --- 7.5C --	383	160M

**11.0 kW**

4 POLE

227.40	6.42	450	2.26	7661	F0723 6.3 M --- 11.A --	198	160M
164.17	8.89	624	1.92	7299	F0723 9.0 M --- 11.A --	198	160M
146.15	9.99	701	1.81	7171	F0723 10. M --- 11.A --	198	160M
132.92	10.98	771	1.74	7083	F0723 12. M --- 11.A --	198	160M
101.76	14.35	1007	1.48	7023	F0723 14. M --- 11.A --	198	160M
89.50	16.31	1144	1.30	7036	F0723 16. M --- 11.A --	198	160M
73.71	19.81	1390	1.03	8096	F0723 20. M --- 11.A --	198	160M
67.01	21.79	1529	0.97	8164	F0723 22. M --- 11.A --	198	160M
58.31	25.04	1756	0.92	8132	F0723 25. M --- 11.A --	198	160M
51.42	28.39	1992	0.85	8287	F0723 28. M --- 11.A --	198	160M
233.89	6.24	438	3.52	8021	F0823 6.3 M --- 11.A --	235	160M
164.99	8.85	621	3.00	7714	F0823 9.0 M --- 11.A --	235	160M
148.52	9.83	690	2.84	7661	F0823 10. M --- 11.A --	235	160M
133.53	10.93	767	2.69	7531	F0823 12. M --- 11.A --	235	160M
103.27	14.14	992	2.31	7327	F0823 14. M --- 11.A --	235	160M
91.98	15.87	1114	2.15	7482	F0823 16. M --- 11.A --	235	160M
75.01	19.46	1366	1.87	7691	F0823 20. M --- 11.A --	235	160M
66.57	21.93	1539	1.70	7978	F0823 22. M --- 11.A --	235	160M
57.19	25.53	1791	1.54	8140	F0823 25. M --- 11.A --	235	160M
51.55	28.32	1987	1.21	9940	F0823 28. M --- 11.A --	235	160M
47.11	30.99	2174	1.06	10591	F0823 32. M --- 11.A --	235	160M
41.64	35.06	2460	1.01	10626	F0823 36. M --- 11.A --	235	160M
36.89	39.58	2777	0.94	10687	F0823 40. M --- 11.A --	235	160M
30.43	47.98	3366	0.84	10822	F0823 50. M --- 11.A --	235	160M

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**11.0 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
89.17	16.37	1149	3.82	35000	F0923 16. _ M _ _ _ _ 11.A --	301	160M
71.40	20.45	1434	3.14	35000	F0923 20. _ M _ _ _ _ 11.A --	301	160M
64.31	22.70	1593	2.83	35000	F0923 22. _ M _ _ _ _ 11.A --	301	160M
56.40	25.88	1816	2.48	35000	F0923 25. _ M _ _ _ _ 11.A --	301	160M
50.15	29.11	2042	2.20	35000	F0923 28. _ M _ _ _ _ 11.A --	301	160M
44.30	32.96	2312	1.95	35000	F0923 32. _ M _ _ _ _ 11.A --	301	160M
39.79	36.69	2574	1.75	35000	F0923 36. _ M _ _ _ _ 11.A --	301	160M
35.82	40.76	2859	1.57	35000	F0923 40. _ M _ _ _ _ 11.A --	301	160M
29.29	49.85	3497	1.29	35000	F0923 50. _ M _ _ _ _ 11.A --	301	160M
25.36	57.58	4039	1.11	35000	F0923 56. _ M _ _ _ _ 11.A --	301	160M
22.97	63.56	4459	1.01	35000	F0923 63. _ M _ _ _ _ 11.A --	301	160M
18.90	77.26	5420	0.83	35000	F0923 71. _ M _ _ _ _ 11.A --	301	160M
50.22	29.07	2039	3.28	43000	F1023 28. _ M _ _ _ _ 11.A --	383	160M
45.20	32.30	2266	3.28	43000	F1023 32. _ M _ _ _ _ 11.A --	383	160M
41.34	35.32	2478	3.23	43000	F1023 36. _ M _ _ _ _ 11.A --	383	160M
37.20	39.25	2753	2.91	43000	F1023 40. _ M _ _ _ _ 11.A --	383	160M
31.48	46.38	3254	2.46	43000	F1023 50. _ M _ _ _ _ 11.A --	383	160M
26.09	55.97	3926	2.04	43000	F1023 56. _ M _ _ _ _ 11.A --	383	160M
22.64	64.49	4524	1.77	43000	F1023 63. _ M _ _ _ _ 11.A --	383	160M
19.51	74.83	5249	1.52	43000	F1023 71. _ M _ _ _ _ 11.A --	383	160M
16.74	87.21	6118	1.27	43000	F1023 90. _ M _ _ _ _ 11.A --	383	160M
15.58	93.70	6573	1.07	43000	F1023 100 _ M _ _ _ _ 11.A --	383	160M
13.92	104.86	7281	1.10	43000	F1033 100 _ M _ _ _ _ 11.A --	400	160M
12.30	118.71	8242	0.97	43000	F1033 112 _ M _ _ _ _ 11.A --	400	160M
11.05	132.14	9175	0.87	43000	F1033 125 _ M _ _ _ _ 11.A --	400	160M

**11.0 kW**

6 POLE

151.08	6.42	678	1.70	7546	F0723 6.3 _ M _ _ _ _ 11.C --	208	160L
109.07	8.89	939	1.44	7370	F0723 9.0 _ M _ _ _ _ 11.C --	208	160L
97.10	9.99	1055	1.36	7384	F0723 10. _ M _ _ _ _ 11.C --	208	160L
88.31	10.98	1160	1.31	7342	F0723 12. _ M _ _ _ _ 11.C --	208	160L
67.61	14.35	1515	1.11	7540	F0723 14. _ M _ _ _ _ 11.C --	208	160L
59.46	16.31	1722	0.99	7859	F0723 16. _ M _ _ _ _ 11.C --	208	160L
155.39	6.24	659	2.67	8324	F0823 6.3 _ M _ _ _ _ 11.C --	245	160L
109.62	8.85	934	2.28	7939	F0823 9.0 _ M _ _ _ _ 11.C --	245	160L
98.68	9.83	1038	2.16	7872	F0823 10. _ M _ _ _ _ 11.C --	245	160L
88.71	10.93	1155	2.04	7834	F0823 12. _ M _ _ _ _ 11.C --	245	160L
68.61	14.14	1493	1.76	7884	F0823 14. _ M _ _ _ _ 11.C --	245	160L
61.11	15.87	1676	1.63	7953	F0823 16. _ M _ _ _ _ 11.C --	245	160L
49.83	19.46	2055	1.37	8598	F0823 20. _ M _ _ _ _ 11.C --	245	160L
44.22	21.93	2316	1.24	9012	F0823 22. _ M _ _ _ _ 11.C --	245	160L
37.99	25.53	2696	1.08	9556	F0823 25. _ M _ _ _ _ 11.C --	245	160L
34.25	28.32	2990	0.81	11529	F0823 28. _ M _ _ _ _ 11.C --	245	160L
95.73	10.13	1070	3.94	35000	F0923 10. _ M _ _ _ _ 11.C --	311	160L
85.29	11.37	1201	3.59	35000	F0923 12. _ M _ _ _ _ 11.C --	311	160L
66.18	14.66	1548	2.79	35000	F0923 14. _ M _ _ _ _ 11.C --	311	160L
59.24	16.37	1729	2.49	35000	F0923 16. _ M _ _ _ _ 11.C --	311	160L
47.44	20.45	2159	2.00	35000	F0923 20. _ M _ _ _ _ 11.C --	311	160L
42.73	22.70	2397	1.80	35000	F0923 22. _ M _ _ _ _ 11.C --	311	160L
37.47	25.88	2733	1.58	35000	F0923 25. _ M _ _ _ _ 11.C --	311	160L
33.32	29.11	3074	1.40	35000	F0923 28. _ M _ _ _ _ 11.C --	311	160L
29.43	32.96	3480	1.24	35000	F0923 32. _ M _ _ _ _ 11.C --	311	160L
26.44	36.69	3874	1.11	35000	F0923 36. _ M _ _ _ _ 11.C --	311	160L
23.80	40.76	4304	1.00	35000	F0923 40. _ M _ _ _ _ 11.C --	311	160L
19.46	49.85	5264	0.82	35000	F0923 50. _ M _ _ _ _ 11.C --	311	160L
48.37	20.05	2118	3.74	43000	F1023 20. _ M _ _ _ _ 11.C --	393	160L
42.61	22.76	2404	3.32	43000	F1023 22. _ M _ _ _ _ 11.C --	393	160L
37.64	25.77	2721	2.91	43000	F1023 25. _ M _ _ _ _ 11.C --	393	160L
33.37	29.07	3070	2.18	43000	F1023 28. _ M _ _ _ _ 11.C --	393	160L
30.03	32.30	3411	2.18	43000	F1023 32. _ M _ _ _ _ 11.C --	393	160L
27.46	35.32	3729	2.15	43000	F1023 36. _ M _ _ _ _ 11.C --	393	160L
24.72	39.25	4144	1.93	43000	F1023 40. _ M _ _ _ _ 11.C --	393	160L
20.91	46.38	4898	1.63	43000	F1023 50. _ M _ _ _ _ 11.C --	393	160L
17.33	55.97	5910	1.35	43000	F1023 56. _ M _ _ _ _ 11.C --	393	160L
15.04	64.49	6809	1.17	43000	F1023 63. _ M _ _ _ _ 11.C --	393	160L
12.96	74.83	7901	1.01	43000	F1023 71. _ M _ _ _ _ 11.C --	393	160L
11.12	87.21	9209	0.84	43000	F1023 90. _ M _ _ _ _ 11.C --	393	160L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering



# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**15.0 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
227.40	6.42	614	1.66	6980	F0723 6.3 M _ _ _ _ 15.A --	208	160L
164.17	8.89	851	1.41	6650	F0723 9.0 M _ _ _ _ 15.A --	208	160L
146.15	9.99	956	1.33	6534	F0723 10. M _ _ _ _ 15.A --	208	160L
132.92	10.98	1051	1.28	6454	F0723 12. M _ _ _ _ 15.A --	208	160L
101.76	14.35	1373	1.08	6399	F0723 14. M _ _ _ _ 15.A --	208	160L
89.50	16.31	1560	0.95	6410	F0723 16. M _ _ _ _ 15.A --	208	160L
233.89	6.24	597	2.58	7308	F0823 6.3 M _ _ _ _ 15.A --	245	160L
164.99	8.85	847	2.20	7028	F0823 9.0 M _ _ _ _ 15.A --	245	160L
148.52	9.83	940	2.08	6981	F0823 10. M _ _ _ _ 15.A --	245	160L
133.53	10.93	1046	1.97	6862	F0823 12. M _ _ _ _ 15.A --	245	160L
103.27	14.14	1353	1.69	6676	F0823 14. M _ _ _ _ 15.A --	245	160L
91.98	15.87	1518	1.57	6817	F0823 16. M _ _ _ _ 15.A --	245	160L
75.01	19.46	1862	1.37	7008	F0823 20. M _ _ _ _ 15.A --	245	160L
66.57	21.93	2098	1.25	7269	F0823 22. M _ _ _ _ 15.A --	245	160L
57.19	25.53	2442	1.13	7417	F0823 25. M _ _ _ _ 15.A --	245	160L
51.55	28.32	2709	0.89	9057	F0823 28. M _ _ _ _ 15.A --	245	160L
161.50	9.04	865	4.00	35000	F0923 9.0 M _ _ _ _ 15.A --	311	160L
144.09	10.13	969	3.77	35000	F0923 10. M _ _ _ _ 15.A --	311	160L
128.37	11.37	1088	3.56	35000	F0923 12. M _ _ _ _ 15.A --	311	160L
99.62	14.66	1402	3.10	35000	F0923 14. M _ _ _ _ 15.A --	311	160L
89.17	16.37	1566	2.80	35000	F0923 16. M _ _ _ _ 15.A --	311	160L
71.40	20.45	1956	2.30	35000	F0923 20. M _ _ _ _ 15.A --	311	160L
64.31	22.70	2172	2.07	35000	F0923 22. M _ _ _ _ 15.A --	311	160L
56.40	25.88	2476	1.82	35000	F0923 25. M _ _ _ _ 15.A --	311	160L
50.15	29.11	2785	1.62	35000	F0923 28. M _ _ _ _ 15.A --	311	160L
44.30	32.96	3153	1.43	35000	F0923 32. M _ _ _ _ 15.A --	311	160L
39.79	36.69	3510	1.28	35000	F0923 36. M _ _ _ _ 15.A --	311	160L
35.82	40.76	3899	1.15	35000	F0923 40. M _ _ _ _ 15.A --	311	160L
29.29	49.85	4769	0.94	35000	F0923 50. M _ _ _ _ 15.A --	311	160L
25.36	57.58	5508	0.82	35000	F0923 56. M _ _ _ _ 15.A --	311	160L
64.14	22.76	2178	3.66	43000	F1023 22. M _ _ _ _ 15.A --	393	160L
56.66	25.77	2465	3.21	43000	F1023 25. M _ _ _ _ 15.A --	393	160L
50.22	29.07	2781	2.40	43000	F1023 28. M _ _ _ _ 15.A --	393	160L
45.20	32.30	3090	2.40	43000	F1023 32. M _ _ _ _ 15.A --	393	160L
41.34	35.32	3379	2.37	43000	F1023 36. M _ _ _ _ 15.A --	393	160L
37.20	39.25	3754	2.13	43000	F1023 40. M _ _ _ _ 15.A --	393	160L
31.48	46.38	4437	1.80	43000	F1023 50. M _ _ _ _ 15.A --	393	160L
26.09	55.97	5354	1.49	43000	F1023 56. M _ _ _ _ 15.A --	393	160L
22.64	64.49	6169	1.30	43000	F1023 63. M _ _ _ _ 15.A --	393	160L
19.51	74.83	7158	1.12	43000	F1023 71. M _ _ _ _ 15.A --	393	160L
16.74	87.21	8343	0.93	43000	F1023 90. M _ _ _ _ 15.A --	393	160L

**15.0 kW**

6 POLE

147.72	6.57	946	3.48	35000	F0923 6.3 M _ _ _ _ 15.C --	356	180L
107.30	9.04	1302	3.06	35000	F0923 9.0 M _ _ _ _ 15.C --	356	180L
95.73	10.13	1459	2.89	35000	F0923 10. M _ _ _ _ 15.C --	356	180L
85.29	11.37	1638	2.63	35000	F0923 12. M _ _ _ _ 15.C --	356	180L
66.18	14.66	2110	2.04	35000	F0923 14. M _ _ _ _ 15.C --	356	180L
59.24	16.37	2358	1.83	35000	F0923 16. M _ _ _ _ 15.C --	356	180L
47.44	20.45	2944	1.46	35000	F0923 20. M _ _ _ _ 15.C --	356	180L
42.73	22.70	3269	1.32	35000	F0923 22. M _ _ _ _ 15.C --	356	180L
37.47	25.88	3727	1.16	35000	F0923 25. M _ _ _ _ 15.C --	356	180L
33.32	29.11	4192	1.03	35000	F0923 28. M _ _ _ _ 15.C --	356	180L
29.43	32.96	4746	0.91	35000	F0923 32. M _ _ _ _ 15.C --	356	180L
26.44	36.69	5283	0.82	35000	F0923 36. M _ _ _ _ 15.C --	356	180L
67.09	14.46	2082	3.67	43000	F1023 14. M _ _ _ _ 15.C --	438	180L
62.14	15.61	2248	3.35	43000	F1023 16. M _ _ _ _ 15.C --	438	180L
48.37	20.05	2888	2.74	43000	F1023 20. M _ _ _ _ 15.C --	438	180L
42.61	22.76	3278	2.44	43000	F1023 22. M _ _ _ _ 15.C --	438	180L
37.64	25.77	3710	2.14	43000	F1023 25. M _ _ _ _ 15.C --	438	180L
33.37	29.07	4186	1.60	43000	F1023 28. M _ _ _ _ 15.C --	438	180L
30.03	32.30	4651	1.60	43000	F1023 32. M _ _ _ _ 15.C --	438	180L
27.46	35.32	5085	1.57	43000	F1023 36. M _ _ _ _ 15.C --	438	180L
24.72	39.25	5651	1.42	43000	F1023 40. M _ _ _ _ 15.C --	438	180L
20.91	46.38	6678	1.20	43000	F1023 50. M _ _ _ _ 15.C --	438	180L
17.33	55.97	8059	0.99	43000	F1023 56. M _ _ _ _ 15.C --	438	180L
15.04	64.49	9285	0.86	43000	F1023 63. M _ _ _ _ 15.C --	438	180L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**18.5 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry <span style="border: 1px solid black; padding: 0 2px;">1</span> - <span style="border: 1px solid black; padding: 0 2px;">20</span> Blanks to be filled when entering order	Weight of base mount unit	Motor Size
223.86	6.57	769	3.82	35000	F0923 6.3 _ M _ _ _ _ 18.A --	366	180M
162.61	9.04	1059	3.27	35000	F0923 9.0 _ M _ _ _ _ 18.A --	366	180M
145.08	10.13	1187	3.08	34756	F0923 10. _ M _ _ _ _ 18.A --	366	180M
129.25	11.37	1333	2.90	34696	F0923 12. _ M _ _ _ _ 18.A --	366	180M
100.30	14.66	1717	2.53	35000	F0923 14. _ M _ _ _ _ 18.A --	366	180M
89.78	16.37	1919	2.29	35000	F0923 16. _ M _ _ _ _ 18.A --	366	180M
71.89	20.45	2396	1.88	35000	F0923 20. _ M _ _ _ _ 18.A --	366	180M
64.76	22.70	2660	1.69	35000	F0923 22. _ M _ _ _ _ 18.A --	366	180M
56.79	25.88	3033	1.48	35000	F0923 25. _ M _ _ _ _ 18.A --	366	180M
50.49	29.11	3412	1.32	35000	F0923 28. _ M _ _ _ _ 18.A --	366	180M
44.60	32.96	3862	1.17	35000	F0923 32. _ M _ _ _ _ 18.A --	366	180M
40.07	36.69	4299	1.05	35000	F0923 36. _ M _ _ _ _ 18.A --	366	180M
36.06	40.76	4776	0.94	35000	F0923 40. _ M _ _ _ _ 18.A --	366	180M
94.17	15.61	1829	4.09	43000	F1023 16. _ M _ _ _ _ 18.A --	448	180M
73.30	20.05	2350	3.36	43000	F1023 20. _ M _ _ _ _ 18.A --	448	180M
64.58	22.76	2667	2.99	43000	F1023 22. _ M _ _ _ _ 18.A --	448	180M
57.05	25.77	3020	2.62	43000	F1023 25. _ M _ _ _ _ 18.A --	448	180M
50.57	29.07	3407	1.96	43000	F1023 28. _ M _ _ _ _ 18.A --	448	180M
45.51	32.30	3785	1.96	43000	F1023 32. _ M _ _ _ _ 18.A --	448	180M
41.62	35.32	4139	1.93	43000	F1023 36. _ M _ _ _ _ 18.A --	448	180M
37.46	39.25	4599	1.74	43000	F1023 40. _ M _ _ _ _ 18.A --	448	180M
31.69	46.38	5435	1.47	43000	F1023 50. _ M _ _ _ _ 18.A --	448	180M
26.27	55.97	6558	1.22	43000	F1023 56. _ M _ _ _ _ 18.A --	448	180M
22.80	64.49	7557	1.06	43000	F1023 63. _ M _ _ _ _ 18.A --	448	180M
19.65	74.83	8768	0.91	43000	F1023 71. _ M _ _ _ _ 18.A --	448	180M

**18.5 kW**

6 POLE

149.24	6.57	1154	2.85	35000	F0923 6.3 _ M _ _ _ _ 18.C --	403	200L
108.41	9.04	1589	2.50	35000	F0923 9.0 _ M _ _ _ _ 18.C --	403	200L
96.72	10.13	1781	2.36	35000	F0923 10. _ M _ _ _ _ 18.C --	403	200L
86.17	11.37	1999	2.16	35000	F0923 12. _ M _ _ _ _ 18.C --	403	200L
66.87	14.66	2576	1.67	35000	F0923 14. _ M _ _ _ _ 18.C --	403	200L
59.85	16.37	2878	1.50	35000	F0923 16. _ M _ _ _ _ 18.C --	403	200L
47.93	20.45	3594	1.20	35000	F0923 20. _ M _ _ _ _ 18.C --	403	200L
43.17	22.70	3990	1.08	35000	F0923 22. _ M _ _ _ _ 18.C --	403	200L
37.86	25.88	4550	0.95	35000	F0923 25. _ M _ _ _ _ 18.C --	403	200L
33.66	29.11	5118	0.84	35000	F0923 28. _ M _ _ _ _ 18.C --	403	200L
109.06	8.99	1579	3.98	43000	F1023 9.0 _ M _ _ _ _ 18.C --	485	200L
100.28	9.77	1718	3.89	43000	F1023 10. _ M _ _ _ _ 18.C --	485	200L
88.29	11.10	1951	3.76	43000	F1023 12. _ M _ _ _ _ 18.C --	485	200L
67.78	14.46	2541	3.00	43000	F1023 14. _ M _ _ _ _ 18.C --	485	200L
62.78	15.61	2744	2.75	43000	F1023 16. _ M _ _ _ _ 18.C --	485	200L
48.87	20.05	3525	2.24	43000	F1023 20. _ M _ _ _ _ 18.C --	485	200L
43.05	22.76	4001	2.00	43000	F1023 22. _ M _ _ _ _ 18.C --	485	200L
38.03	25.77	4529	1.75	43000	F1023 25. _ M _ _ _ _ 18.C --	485	200L
33.71	29.07	5110	1.31	43000	F1023 28. _ M _ _ _ _ 18.C --	485	200L
30.34	32.30	5678	1.31	43000	F1023 32. _ M _ _ _ _ 18.C --	485	200L
27.75	35.32	6208	1.29	43000	F1023 36. _ M _ _ _ _ 18.C --	485	200L
24.97	39.25	6898	1.16	43000	F1023 40. _ M _ _ _ _ 18.C --	485	200L
21.13	46.38	8153	0.98	43000	F1023 50. _ M _ _ _ _ 18.C --	485	200L
17.51	55.97	9837	0.81	43000	F1023 56. _ M _ _ _ _ 18.C --	485	200L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**22.0 kW**

4 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
223.86	6.57	915	3.21	34772	F0923 6.3 M --- 22.A --	366	180L
162.61	9.04	1260	2.75	33579	F0923 9.0 M --- 22.A --	366	180L
145.08	10.13	1412	2.59	32995	F0923 10. M --- 22.A --	366	180L
129.25	11.37	1585	2.44	32939	F0923 12. M --- 22.A --	366	180L
100.30	14.66	2042	2.13	33485	F0923 14. M --- 22.A --	366	180L
89.78	16.37	2282	1.93	34203	F0923 16. M --- 22.A --	366	180L
71.89	20.45	2849	1.58	35000	F0923 20. M --- 22.A --	366	180L
64.76	22.70	3163	1.42	35000	F0923 22. M --- 22.A --	366	180L
56.79	25.88	3607	1.25	35000	F0923 25. M --- 22.A --	366	180L
50.49	29.11	4057	1.11	35000	F0923 28. M --- 22.A --	366	180L
44.60	32.96	4593	0.98	35000	F0923 32. M --- 22.A --	366	180L
40.07	36.69	5113	0.88	35000	F0923 36. M --- 22.A --	366	180L
101.67	14.46	2015	3.62	43000	F1023 14. M --- 22.A --	448	180L
94.17	15.61	2175	3.44	43000	F1023 16. M --- 22.A --	448	180L
73.30	20.05	2795	2.82	43000	F1023 20. M --- 22.A --	448	180L
64.58	22.76	3172	2.51	43000	F1023 22. M --- 22.A --	448	180L
57.05	25.77	3591	2.20	43000	F1023 25. M --- 22.A --	448	180L
50.57	29.07	4051	1.65	43000	F1023 28. M --- 22.A --	448	180L
45.51	32.30	4501	1.65	43000	F1023 32. M --- 22.A --	448	180L
41.62	35.32	4922	1.63	43000	F1023 36. M --- 22.A --	448	180L
37.46	39.25	5469	1.46	43000	F1023 40. M --- 22.A --	448	180L
31.69	46.38	6463	1.24	43000	F1023 50. M --- 22.A --	448	180L
26.27	55.97	7799	1.03	43000	F1023 56. M --- 22.A --	448	180L
22.80	64.49	8986	0.89	43000	F1023 63. M --- 22.A --	448	180L

**22.0 kW**

6 POLE

149.24	6.57	1373	2.40	34056	F0923 6.3 M --- 22.C --	403	200L
108.41	9.04	1890	2.11	33761	F0923 9.0 M --- 22.C --	403	200L
96.72	10.13	2118	1.99	33917	F0923 10. M --- 22.C --	403	200L
86.17	11.37	2377	1.81	34308	F0923 12. M --- 22.C --	403	200L
66.87	14.66	3064	1.41	35000	F0923 14. M --- 22.C --	403	200L
59.85	16.37	3423	1.26	35000	F0923 16. M --- 22.C --	403	200L
47.93	20.45	4274	1.01	35000	F0923 20. M --- 22.C --	403	200L
43.17	22.70	4745	0.91	35000	F0923 22. M --- 22.C --	403	200L
37.86	25.88	5411	0.80	35000	F0923 25. M --- 22.C --	403	200L
152.35	6.43	1345	3.59	43000	F1023 6.3 M --- 22.C --	485	200L
109.06	8.99	1878	3.34	43000	F1023 9.0 M --- 22.C --	485	200L
100.28	9.77	2043	3.28	43000	F1023 10. M --- 22.C --	485	200L
88.29	11.10	2320	3.16	43000	F1023 12. M --- 22.C --	485	200L
67.78	14.46	3022	2.52	43000	F1023 14. M --- 22.C --	485	200L
62.78	15.61	3263	2.31	43000	F1023 16. M --- 22.C --	485	200L
48.87	20.05	4192	1.89	43000	F1023 20. M --- 22.C --	485	200L
43.05	22.76	4758	1.68	43000	F1023 22. M --- 22.C --	485	200L
38.03	25.77	5386	1.47	43000	F1023 25. M --- 22.C --	485	200L
33.71	29.07	6077	1.10	43000	F1023 28. M --- 22.C --	485	200L
30.34	32.30	6752	1.10	43000	F1023 32. M --- 22.C --	485	200L
27.75	35.32	7382	1.08	43000	F1023 36. M --- 22.C --	485	200L
24.97	39.25	8204	0.98	43000	F1023 40. M --- 22.C --	485	200L
21.13	46.38	9695	0.83	43000	F1023 50. M --- 22.C --	485	200L

**30.0 kW**

4 POLE

223.86	6.57	1248	2.36	31683	F0923 6.3 M --- 30.A --	403	200L
162.61	9.04	1718	2.01	30596	F0923 9.0 M --- 30.A --	403	200L
145.08	10.13	1925	1.90	30064	F0923 10. M --- 30.A --	403	200L
129.25	11.37	2161	1.79	30012	F0923 12. M --- 30.A --	403	200L
100.30	14.66	2785	1.56	30510	F0923 14. M --- 30.A --	403	200L
89.78	16.37	3111	1.41	31164	F0923 16. M --- 30.A --	403	200L
71.89	20.45	3886	1.16	32500	F0923 20. M --- 30.A --	403	200L
64.76	22.70	4314	1.04	33016	F0923 22. M --- 30.A --	403	200L
56.79	25.88	4919	0.91	33591	F0923 25. M --- 30.A --	403	200L
50.49	29.11	5533	0.81	32897	F0923 28. M --- 30.A --	403	200L
228.52	6.43	1222	3.93	43000	F1023 6.3 M --- 30.A --	485	200L
163.59	8.99	1708	3.46	43000	F1023 9.0 M --- 30.A --	485	200L
150.42	9.77	1857	3.33	43000	F1023 10. M --- 30.A --	485	200L
132.43	11.10	2109	3.13	43000	F1023 12. M --- 30.A --	485	200L
101.67	14.46	2747	2.66	43000	F1023 14. M --- 30.A --	485	200L
94.17	15.61	2966	2.52	43000	F1023 16. M --- 30.A --	485	200L
73.30	20.05	3811	2.07	43000	F1023 20. M --- 30.A --	485	200L
64.58	22.76	4325	1.84	43000	F1023 22. M --- 30.A --	485	200L
57.05	25.77	4897	1.61	43000	F1023 25. M --- 30.A --	485	200L
50.57	29.07	5524	1.21	43000	F1023 28. M --- 30.A --	485	200L
45.51	32.30	6138	1.21	43000	F1023 32. M --- 30.A --	485	200L
41.62	35.32	6711	1.19	43000	F1023 36. M --- 30.A --	485	200L
37.46	39.25	7458	1.07	43000	F1023 40. M --- 30.A --	485	200L
31.69	46.38	8814	0.91	43000	F1023 50. M --- 30.A --	485	200L

**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## SELECTION TABLES

### GEARED MOTORS

**30.0 kW**

6 POLE

N2 rpm	i	M2 Nm	Fm	N	Unit Designation	kg	
Output Speed	Ratio	Output Torque	Service Factor	Overhung Load	Column Entry 1 - 20 Blanks to be filled when entering order	Weight of base mount unit	Motor Size
150.00	6.57	1862	1.77	31078	F0923 6.3 M --- 30.C --	403	200L
108.96	9.04	2564	1.55	30808	F0923 9.0 M --- 30.C --	403	200L
97.21	10.13	2873	1.47	30951	F0923 10. M --- 30.C --	403	200L
86.61	11.37	3225	1.34	31308	F0923 12. M --- 30.C --	403	200L
67.21	14.66	4156	1.04	32553	F0923 14. M --- 30.C --	403	200L
60.16	16.37	4643	0.93	33053	F0923 16. M --- 30.C --	403	200L
153.13	6.43	1824	2.65	43000	F1023 6.3 M --- 30.C --	485	200L
109.62	8.99	2548	2.46	43000	F1023 9.0 M --- 30.C --	485	200L
100.79	9.77	2771	2.41	43000	F1023 10. M --- 30.C --	485	200L
88.74	11.10	3148	2.33	43000	F1023 12. M --- 30.C --	485	200L
68.13	14.46	4100	1.86	43000	F1023 14. M --- 30.C --	485	200L
63.10	15.61	4427	1.70	43000	F1023 16. M --- 30.C --	485	200L
49.12	20.05	5687	1.39	43000	F1023 20. M --- 30.C --	485	200L
43.27	22.76	6455	1.24	43000	F1023 22. M --- 30.C --	485	200L
38.23	25.77	7308	1.08	43000	F1023 25. M --- 30.C --	485	200L
33.88	29.07	8244	0.81	43000	F1023 28. M --- 30.C --	485	200L
30.49	32.30	9160	0.81	43000	F1023 32. M --- 30.C --	485	200L
27.89	35.32	10016	0.80	43000	F1023 36. M --- 30.C --	485	200L

**37.0 kW**

4 POLE

223.86	6.57	1539	1.91	29751	F0923 6.3 M --- 37.A --	484	225S
162.61	9.04	2119	1.63	28730	F0923 9.0 M --- 37.A --	484	225S
145.08	10.13	2375	1.54	28231	F0923 10. M --- 37.A --	484	225S
129.25	11.37	2666	1.45	28182	F0923 12. M --- 37.A --	484	225S
100.30	14.66	3435	1.26	28650	F0923 14. M --- 37.A --	484	225S
89.78	16.37	3837	1.14	29264	F0923 16. M --- 37.A --	484	225S
71.89	20.45	4792	0.94	30519	F0923 20. M --- 37.A --	484	225S
64.76	22.70	5320	0.85	31003	F0923 22. M --- 37.A --	484	225S
228.52	6.43	1508	3.19	43000	F1023 6.3 M --- 37.A --	567	225S
163.59	8.99	2106	2.81	43000	F1023 9.0 M --- 37.A --	567	225S
150.42	9.77	2290	2.70	43000	F1023 10. M --- 37.A --	567	225S
132.43	11.10	2601	2.54	43000	F1023 12. M --- 37.A --	567	225S
101.67	14.46	3388	2.15	43000	F1023 14. M --- 37.A --	567	225S
94.17	15.61	3658	2.04	43000	F1023 16. M --- 37.A --	567	225S
73.30	20.05	4700	1.68	43000	F1023 20. M --- 37.A --	567	225S
64.58	22.76	5335	1.49	43000	F1023 22. M --- 37.A --	567	225S
57.05	25.77	6039	1.31	43000	F1023 25. M --- 37.A --	567	225S
50.57	29.07	6813	0.98	43000	F1023 28. M --- 37.A --	567	225S
45.51	32.30	7570	0.98	43000	F1023 32. M --- 37.A --	567	225S
41.62	35.32	8277	0.97	43000	F1023 36. M --- 37.A --	567	225S
37.46	39.25	9198	0.87	43000	F1023 40. M --- 37.A --	567	225S
150.00	6.57	2297	1.43	29183	F0923 6.3 M --- 37.C --	517	225M
108.96	9.04	3162	1.26	28930	F0923 9.0 M --- 37.C --	517	225M
97.21	10.13	3544	1.19	29064	F0923 10. M --- 37.C --	517	225M
86.61	11.37	3978	1.08	29399	F0923 12. M --- 37.C --	517	225M
67.21	14.66	5126	0.84	30568	F0923 14. M --- 37.C --	517	225M
153.13	6.43	2250	2.15	43000	F1023 6.3 M --- 37.C --	600	225M
109.62	8.99	3143	2.00	43000	F1023 9.0 M --- 37.C --	600	225M
100.79	9.77	3418	1.96	43000	F1023 10. M --- 37.C --	600	225M
88.74	11.10	3882	1.89	43000	F1023 12. M --- 37.C --	600	225M
68.13	14.46	5057	1.51	43000	F1023 14. M --- 37.C --	600	225M
63.10	15.61	5460	1.38	43000	F1023 16. M --- 37.C --	600	225M
49.12	20.05	7014	1.13	43000	F1023 20. M --- 37.C --	600	225M
43.27	22.76	7962	1.00	43000	F1023 22. M --- 37.C --	600	225M
38.23	25.77	9013	0.88	43000	F1023 25. M --- 37.C --	600	225M

**45.0 kW**

4 POLE

225.38	6.57	1859	1.58	28111	F0923 6.3 M --- 45.A --	517	225M
163.72	9.04	2559	1.35	27147	F0923 9.0 M --- 45.A --	517	225M
146.07	10.13	2869	1.27	26675	F0923 10. M --- 45.A --	517	225M
130.13	11.37	3220	1.20	26629	F0923 12. M --- 45.A --	517	225M
100.98	14.66	4149	1.05	27071	F0923 14. M --- 45.A --	517	225M
90.39	16.37	4636	0.95	27651	F0923 16. M --- 45.A --	517	225M
230.08	6.43	1821	2.64	43000	F1023 6.3 M --- 45.A --	600	225M
164.71	8.99	2544	2.32	43000	F1023 9.0 M --- 45.A --	600	225M
151.45	9.77	2767	2.23	43000	F1023 10. M --- 45.A --	600	225M
133.33	11.10	3143	2.10	43000	F1023 12. M --- 45.A --	600	225M
102.37	14.46	4093	1.78	43000	F1023 14. M --- 45.A --	600	225M
94.81	15.61	4419	1.69	43000	F1023 16. M --- 45.A --	600	225M
73.80	20.05	5678	1.39	43000	F1023 20. M --- 45.A --	600	225M
65.02	22.76	6444	1.24	43000	F1023 22. M --- 45.A --	600	225M
57.44	25.77	7295	1.08	43000	F1023 25. M --- 45.A --	600	225M
50.91	29.07	8230	0.81	43000	F1023 28. M --- 45.A --	600	225M
45.82	32.30	9145	0.81	43000	F1023 32. M --- 45.A --	600	225M
41.90	35.32	9999	0.80	43000	F1023 36. M --- 45.A --	600	225M

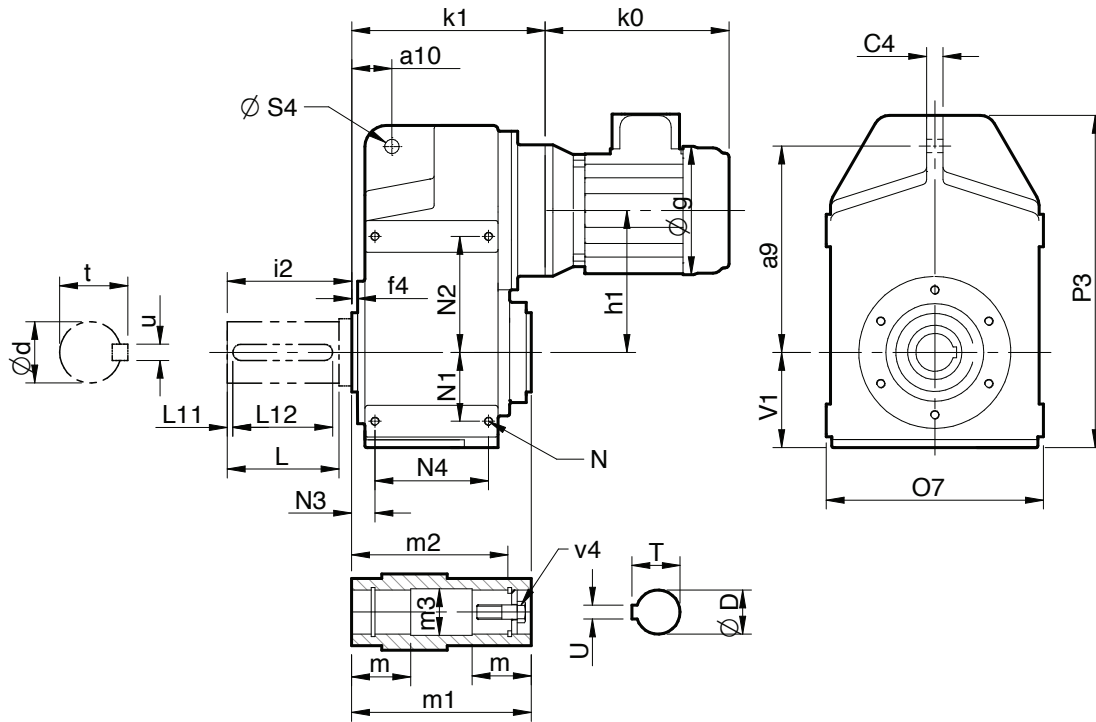
**NOTE**

Other output speeds are available using 2 and 8 pole motors. Consult Application Engineering

# F SERIES

## DIMENSIONS

### DOUBLE / TRIPLE REDUCTION



	a9	a10	C4	f4	h1	N	N1	N2	N3	N4	O7	P3	S4	V1
<b>F0223 - F0233</b>	140	25	10	5	96	M8	48	38	21.5	68	144	225	14	62
<b>F0323 - F0333</b>	158	31.5	12	3	102.8	M8	31	84	22.5	77	165	252	14	77
<b>F0423 - F0433</b>	170	32	12	3	120	M10	50	60	24	90	176	289	14	88
<b>F0523 - F0533</b>	198	40.5	14	3	139.2	M12	55	115	33.5	102	200	327	14	97
<b>F0623 - F0633</b>	218	41	16	2	160	M12	65	85	28	125	236	367	14	110
<b>F0723 - F0733</b>	278	50	20	2	200	M16	85	115	30	150	280	449	22	134
<b>F0823 - F0833</b>	346	62	26	3	226	M16	100	100	35	170	340	526	22	148
<b>F0923 - F0933</b>	395	70	30	5	274	M16	125	225	38	215	400	612	27	175
<b>F1023 - F1033</b>	485	88	36	5.5	332	M20	158	272	41.5	250	470	748	27	216

	D (H7)	m	m1	m2	m3	T	U	v4
<b>F0223 - F0233</b>	25	45	117.5	89	25.2	28.3	8	M10x25
<b>F0323 - F0333</b>	30	52	120	105	30.3	33.3	8	M10x25
<b>F0423 - F0433</b>	35	65	150	132	35.3	38.3	10	M12x30
<b>F0523 - F0533</b>	40	65	166	142	40.3	43.3	12	M16x40
<b>F0623 - F0633</b>	40	90	200	156	40.3	43.3	12	M16x40
<b>F0723 - F0733</b>	50	105	235	183	50.5	53.8	14	M16x45
<b>F0823 - F0833</b>	60	117	265	210	60.5	64.4	18	M20x50
<b>F0923 - F0933</b>	70	147	330	270	70.5	74.9	20	M20x50
<b>F1023 - F1033</b>	90	165	370	313	90.5	95.4	25	M24x60

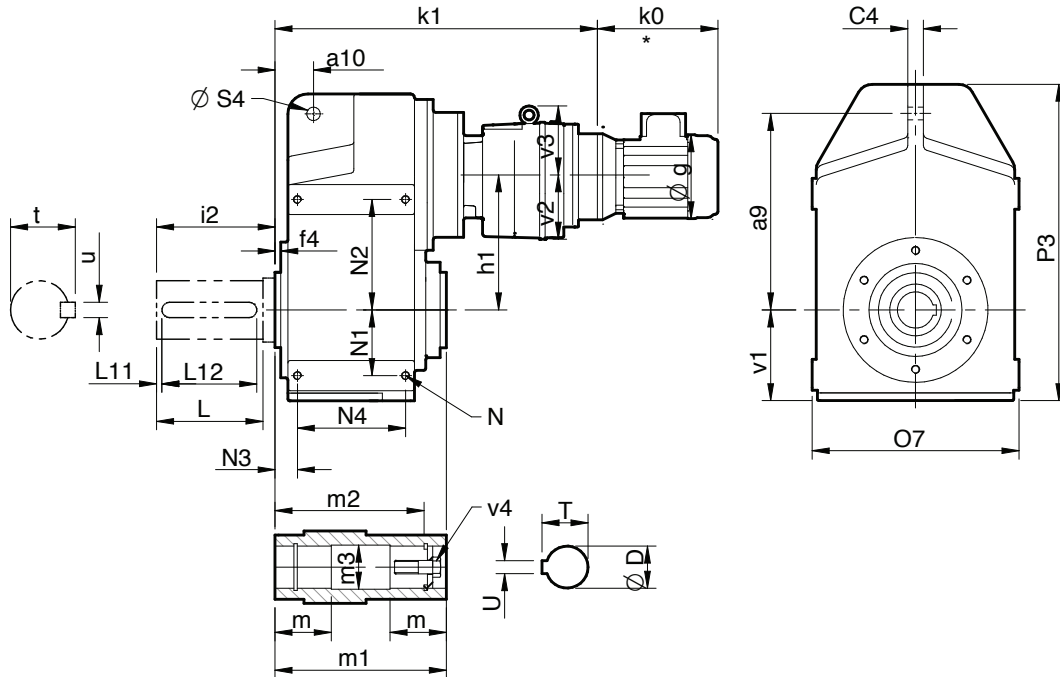
	d	i2	L	L11	L12	t	u
-	-	-	-	-	-	-	-
25 k6	50	47	3	40	28	8	8
30 k6	60	56	3	50	33	8	8
35 k6	70	66	3	60	38	10	10
40 k6	81	76	3	70	43	12	12
50 k6	101	95	3	80	53.5	14	14
60 m6	120	114	3	100	64	18	18
70 m6	141	135	3	110	74.5	20	20
90 m6	172	165	5	140	95	25	25

	F0223	F0233	F0323	F0333	F0423	F0433	F0523	F0533	F0623	F0633	F0723	F0733	F0823	F0833	F0923	F0933	F1023	F1033
<b>63</b>	k0	g	k1	k1	k1	k1	k1	k1	k1	k1	k1	k1	k1	k1	k1	k1	k1	k1
<b>71</b>	195	140	154	169	158	171	171	184	178	208	197	227	-	248	-	-	-	-
<b>80</b>	220	140	158	173	162	175	175	188	184	212	203	231	-	254	-	-	-	-
<b>90S</b>	240	158	171	186	175	188	188	201	202	225	221	244	257	272	330	315	354	407
<b>90L</b>	260	180	181	196	185	198	198	211	212	235	231	254	267	282	330	325	354	407
<b>100L</b>	280	180	181	196	185	198	198	211	212	235	231	254	267	282	330	325	354	407
<b>112M</b>	310	198	189	204	193	206	206	219	239	243	258	262	279	309	336	337	360	413
<b>125S</b>	330	222	189	204	193	206	206	219	239	243	258	262	279	309	336	337	360	413
<b>132S</b>	380	260	-	-	-	-	-	-	239	-	258	-	301	309	336	359	360	413
<b>132M</b>	420	260	-	-	-	-	-	-	239	-	258	-	301	309	336	359	360	413
<b>160M</b>	480	320	-	-	-	-	-	-	-	-	-	-	309	-	366	367	395	443
<b>160L</b>	530	320	-	-	-	-	-	-	-	-	-	-	309	-	366	367	395	443
<b>180M</b>	560	360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	395	-
<b>180L</b>	595	360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	395	-
<b>200L</b>	660	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	395	-
<b>225S</b>	680	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	422	-
<b>225M</b>	715	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	422	-

# F SERIES

## DIMENSIONS

### QUADRUPLE REDUCTION



	a9	a10	C4	f4	h1	N	N1	N2	N3	N4	O7	P3	S4	v1	v2	v3
<b>F0343</b>	158	31.5	12	3	102.8	M8	31	84	22.5	77	165	252	14	77	76	74
<b>F0443</b>	170	32	12	3	120	M10	50	60	24	90	176	289	14	88	76	74
<b>F0543</b>	198	40.5	14	3	139.2	M12	55	115	33.5	102	200	327	14	97	91	90
<b>F0643</b>	218	41	16	2	160	M12	65	85	28	125	236	367	14	110	91	90
<b>F0743</b>	278	50	20	2	200	M16	85	115	30	150	280	449	22	134	91	90
<b>F0843</b>	346	62	26	3	226	M16	100	100	35	170	340	526	22	148	115	93
<b>F0943</b>	395	70	30	5	274	M16	125	225	38	215	400	612	27	175	115	93
<b>F1043</b>	485	88	36	5.5	332	M20	158	272	41.5	250	470	748	27	216	140	155

	D (H7)	m	m1	m2	m3	T	U	v4
<b>F0343</b>	30	52	120	105	30.3	33.3	8	M10x25
<b>F0443</b>	35	65	150	132	35.3	38.3	10	M12x30
<b>F0543</b>	40	65	166	142	40.3	43.3	12	M16x40
<b>F0643</b>	40	90	200	156	40.3	43.3	12	M16x40
<b>F0743</b>	50	105	235	183	50.5	53.8	14	M16x45
<b>F0843</b>	60	117	265	210	60.5	64.4	18	M20x50
<b>F0943</b>	70	147	330	270	70.5	74.9	20	M20x50
<b>F1043</b>	90	165	370	313	90.5	95.4	25	M24x60

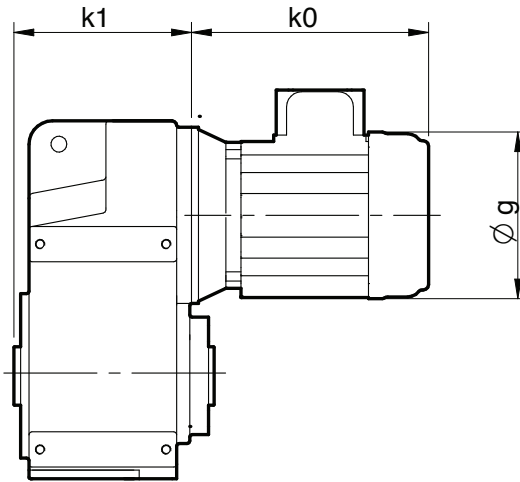
	d (H7)	i2	L	L11	L12	t	u
	25 k6	50	47	3	40	28	8
	30 k6	60	56	3	50	33	8
	35 k6	70	66	3	60	38	10
	40 k6	81	76	3	70	43	12
	50 k6	101	95	3	80	53.5	14
	60 m6	120	114	3	100	64	18
	70 m6	141	135	3	110	74.5	20
	90 m6	172	165	5	140	95	25

			F0343	F0443	F0543	F0643	F0743	F0843	F0943	F1043
	<b>k0</b>	<b>g</b>	<b>k1</b>	<b>k1</b>	<b>k1</b>	<b>k1</b>	<b>k1</b>	<b>k1</b>	<b>k1</b>	<b>k1</b>
<b>63</b>	195	140	344	357	402	421	457	505	564	-
<b>71</b>	220	140	348	361	406	425	461	511	570	-
<b>80</b>	240	158	361	374	419	438	474	529	588	672
<b>90S</b>	260	180	371	384	429	448	484	539	598	682
<b>90L</b>	280	180	371	384	429	448	484	539	598	682
<b>100L</b>	310	198	379	392	437	456	492	566	625	694
<b>112M</b>	330	222	-	-	-	-	-	566	625	694
<b>132S</b>	380	260	-	-	-	-	-	566	625	716
<b>132M</b>	420	260	-	-	-	-	-	566	625	716
<b>160M</b>	480	320	-	-	-	-	-	-	-	724
<b>160L</b>	530	320	-	-	-	-	-	-	-	724

# F SERIES

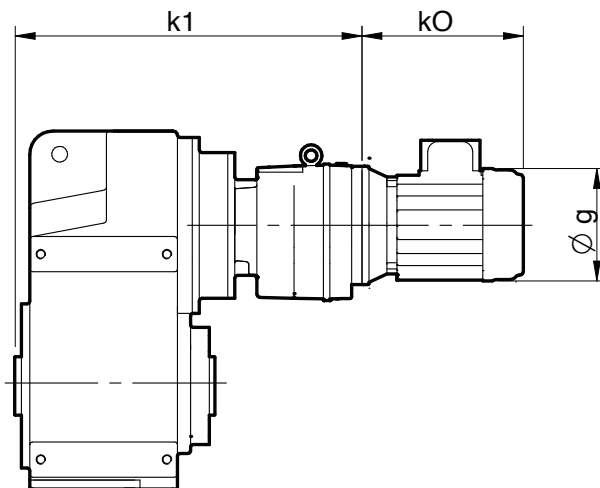
## DIMENSIONS

### UNITS WITH COMPACT MOTOR



#### Double / Triple Reduction

	g	F0223		F0233		F0323		F0333		F0423		F0433		F0523		F0533		F0623		F0633		F0723		F0733		F0823		F0833		F0933		
		K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	
0.25 Kw	140	120	222	135	222	124	222	137	222	137	222	150	222	-	-	174	222	-	-	193	222	-	-	-	-	-	-	-	-	-	-	-
0.37 Kw	140	120	222	135	222	124	222	137	222	137	222	150	222	-	-	174	222	-	-	193	222	-	-	-	-	-	-	-	-	-	-	
0.55 Kw	160	120	277	135	277	124	277	137	277	137	277	150	277	166	262	174	277	185	262	193	277	-	-	264	262	-	-	-	-	-	-	
0.75 Kw	160	120	277	135	277	124	277	137	277	137	277	150	277	166	262	174	277	185	262	193	277	-	-	264	262	-	-	-	-	-	-	
1.1 Kw	180	120	332	135	332	124	332	137	332	137	332	150	332	166	317	174	332	185	317	193	332	220	303	264	317	-	-	278	303	-	-	
1.5 Kw	180	120	332	135	332	124	332	137	332	137	332	150	332	166	317	174	332	185	317	193	332	220	303	264	317	-	-	278	303	-	-	
2.2 Kw	200	-	-	-	-	-	-	-	-	-	-	-	-	166	353	-	-	185	353	-	-	220	339	264	353	248	330	278	339	333	330	
3.0 Kw	200	-	-	-	-	-	-	-	-	-	-	-	-	166	353	-	-	185	353	-	-	220	339	264	353	248	330	278	339	333	330	
4.0 Kw	225	-	-	-	-	-	-	-	-	-	-	-	-	166	385	-	-	185	385	-	-	220	371	264	385	248	362	278	371	333	362	
5.5 Kw	260	-	-	-	-	-	-	-	-	-	-	-	-	166	447	-	-	185	447	-	-	220	433	264	447	248	424	278	433	333	424	
7.5 Kw	260	-	-	-	-	-	-	-	-	-	-	-	-	166	447	-	-	185	447	-	-	220	433	264	447	248	424	278	433	333	424	

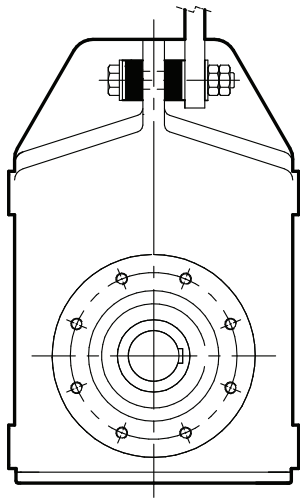


#### Quadruple Reduction

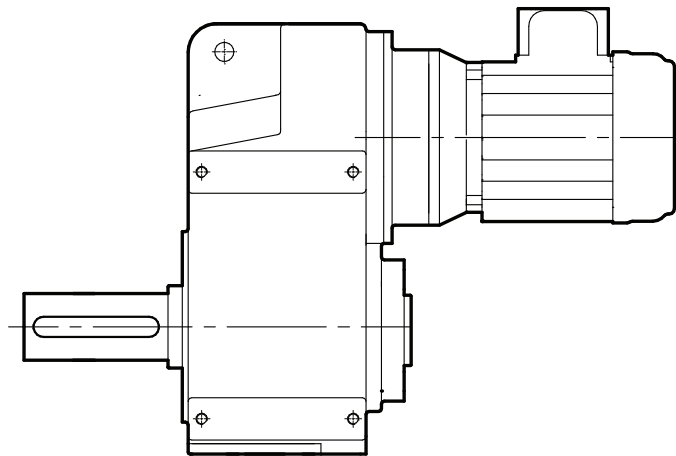
	g	F0343		F0443		F0543		F0643		F0743		F0843		F0943		F1043	
		K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko	K1	Ko
0.25 Kw	140	310	222	323	222	368	222	387	222	423	222	-	-	-	-	-	-
0.37 Kw	140	310	222	323	222	368	222	387	222	423	222	-	-	-	-	-	-
0.55 Kw	160	310	277	323	277	368	277	387	277	423	277	493	262	552	262	-	-
0.75 Kw	160	310	277	323	277	368	277	387	277	423	277	493	262	552	262	-	-
1.1 Kw	180	-	-	-	-	-	-	-	-	-	-	493	317	552	317	635	303
1.5 Kw	180	-	-	-	-	-	-	-	-	-	-	493	317	552	317	635	303
2.2 Kw	200	-	-	-	-	-	-	-	-	-	-	493	353	552	353	635	339
3.0 Kw	200	-	-	-	-	-	-	-	-	-	-	493	353	552	353	635	339
4.0 Kw	225	-	-	-	-	-	-	-	-	-	-	-	-	-	-	635	371
5.5 Kw	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	635	433
7.5 Kw	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	635	433

# F SERIES

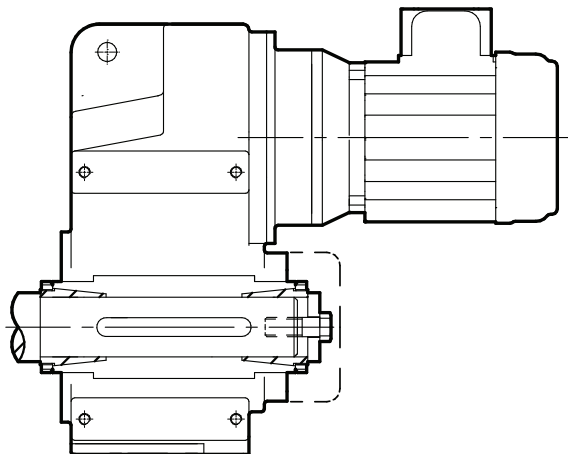
## OPTIONS



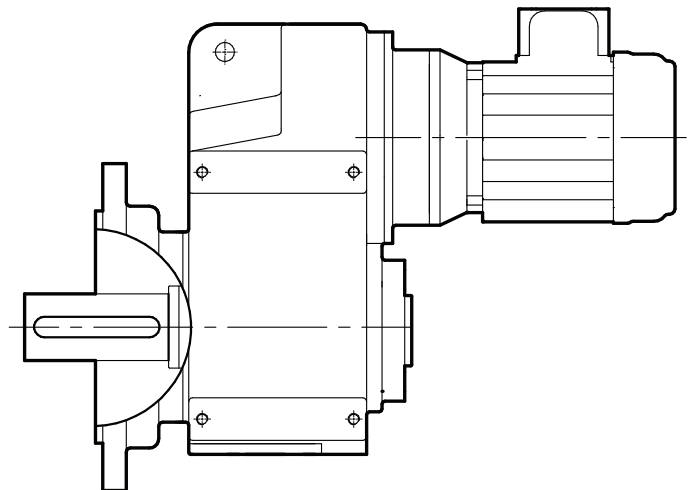
**Torque Bush**



**Output Shaft**

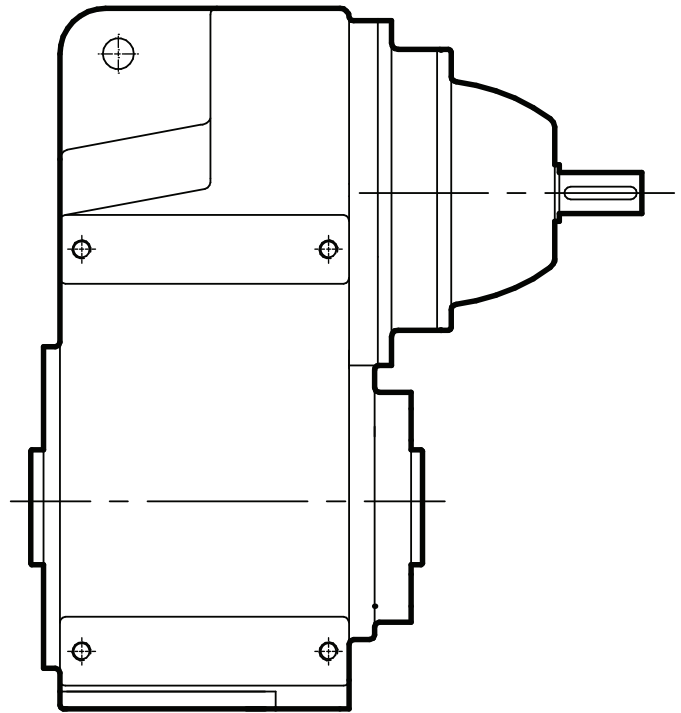


**Kibo Bushing**



**Output Shaft with  
B5 (D) Flange Mounting**





**REDUCER**  
**F SERIES**



# F SERIES

## OVERHUNG & AXIAL LOADS 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 unfavourable 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 favourable 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.

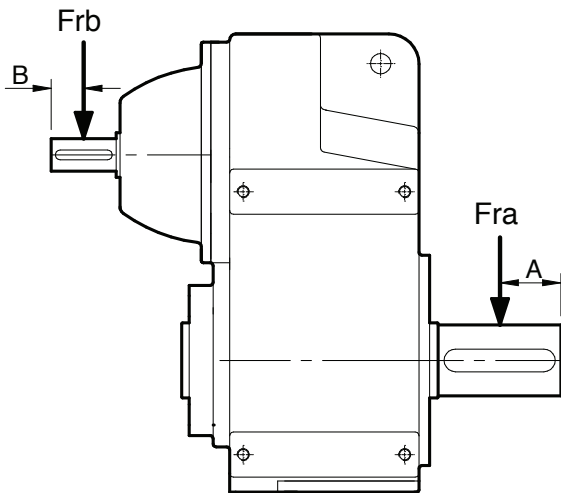
### Overhung Load (Newtons)

$$P = \frac{\text{kW} \times 9,500,000 \times K}{N \times R}$$

Where

- P = equivalent overhung load (Newtons)
- kW = power transmitted by the shaft (kilowatts)
- N = speed of shaft (rev/min)
- R = pitch radius of sprocket, etc. (mm)
- K = factor

Note: 1 Newton = 0.101972 kp = 0.227809 lbf.



### 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	Dimension A (mm)	Dimension B (mm)
F02	2	-	20
	3	-	20
F03	2	24	20
	3	24	20
	4	24	20
F04	2	28	20
	3	28	20
	4	28	20
F05	2	33	20
	3	33	20
	4	33	20
F06	2	38	20
	3	38	20
	4	38	20
F07	2	48	25
	3	48	20
	4	48	20
F08	2	55	30
	3	55	25
	4	55	20
F09	2	68	40
	3	68	30
	4	68	20
F10	2	85	55
	3	85	40
	4	95	25

### Inputshaft Overhung Loads, Frb (kN) 1450 rpm

Two, Three and Four Stage Units

	F02	F03	F04	F05	F06	F07	F08	F09	F10
2 Stage	1.50	1.50	1.25	1.05	2.10	2.10	3.10	3.50	4.50
3 Stage	1.50	1.50	1.50	1.50	1.50	1.80	2.25	3.50	4.20
4 Stage	-	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.80

### For Output Shaft Overhung Loads (Fra) Consult the Ratings Tables

### Axial Thrust Capacities (Newtons)

No check or calculation is required if the axial thrust load (FA) towards or away from the unit is under 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 our Application Engineers.

## THERMAL POWER RATING

### Thermal Ratings kW

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 rating are based on an ambient temperature of 25°C, where units are to operate in other ambient temperatures thermal ratings must be adjusted by the following factors

### Ambient Temp Modifying Factor Ft

-20°C	-10°C	0°C	10°C	20°C	25°C	35°C	40°C	45°C	50°C
1.54	1.42	1.30	1.18	1.06	1.00	0.88	0.82	0.76	0.70

### Units without additional cooling

n1 (rpm)	iN (:1)	F0223	F0323	F0423	F0523	F0623	F0723	F0823	F0923	F1023
2900	≥ 16	5.2	7.9	9.7	14	20	29	46	66	98
1750		4.7	7.1	8.9	13	18	26	41	59	88
1450		3.5	5.3	6.6	9.4	14	19	31	44	66
960		4.9	6.8	8.6	13	17	26	40	55	78
2900	20 - 22	4.2	6.0	7.4	11	15	23	35	49	70
1750		3.8	5.4	6.6	10	14	21	31	45	63
1450		2.8	4.0	5.0	7.6	10	15	24	33	47
960		4.2	5.8	7.1	11	15	22	33	48	69
2900	25 - 28	3.6	5.0	6.2	9.4	12	19	28	42	61
1750		3.2	4.5	5.5	8.4	11	17	25	37	53
1450		2.4	3.3	4.1	6.2	8.2	12	19	28	40
960		3.6	5.0	6.1	9.2	13	19	29	41	60
2900	32 - 36	3.0	4.2	5.2	7.8	11	16	25	35	51
1750		2.6	3.7	4.6	6.9	9.3	14	22	31	45
1450		2.0	2.7	3.4	5.1	6.8	10	16	23	33
960		2.9	4.1	5.2	7.8	11	16	22	34	49
2900	40 - 50	2.4	3.4	4.3	6.4	8.6	13	18	28	39
1750		2.1	3.0	3.8	5.6	7.6	11	16	25	35
1450		1.5	2.2	2.8	4.1	5.6	8.4	12	18	26
960		2.2	3.1	3.9	5.9	7.8	12	18	26	37

n1 (rpm)	iN (:1)	F0233	F0333	F0433	F0533	F0633	F0733	F0833	F0933	F1033
2900	≥ 160	1.9	2.6	3.3	4.8	6.7	10	15	22	32
1750		1.3	1.8	2.4	3.5	4.8	7.5	11	16	23
1450		1.1	1.6	2.0	3.0	4.1	6.4	9.4	14	20
960		0.8	1.1	1.4	2.1	2.9	4.5	6.5	9.7	14
2900	≥ 180	1.6	2.2	2.8	4.2	5.7	8.8	13	19	27
1750		1.1	1.5	1.8	2.8	3.8	5.9	8.6	13	18
1450		0.9	1.2	1.6	2.4	3.2	5.0	7.3	11	15
960		0.6	0.9	1.1	1.6	2.2	3.4	5.0	7.5	11

### Units with fan cooling

n1 (rpm)	iN (:1)	F0723	F0823	F0923	F1023
2900	≥ 16	-	-	-	-
1750		43	64	91	132
1450		40	60	85	123
960		35	53	75	108
2900	20 - 22	-	-	-	-
1750		34	49	69	95
1450		32	46	65	89
960		28	40	57	78
2900	25 - 28	-	-	-	-
1750		28	40	57	80
1450		26	37	53	75
960		23	32	47	66

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

# F SERIES

## RATINGS

**Key:** Pm= Input Power (kW) M2= Output Torque (Nm) i= Exact Ratio n2= Output Speed (rpm) Fra = Overhung load (kN)

			n1 = 1450				n1 = 960				n1 = 2900				n1 = 725			
	in	i	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra
<b>F0223</b>	5.0	5.903	245.7	63	1.66	1.38	162.6	68	1.19	1.60	491.3	52	2.74	1.07	122.8	72	0.95	1.78
	6.3	7.974	181.8	73	1.43	1.54	120.4	79	1.02	1.54	363.7	61	2.38	1.19	90.9	84	0.82	1.98
	9.0	9.069	159.9	78	1.34	1.61	105.9	84	0.95	1.61	319.8	65	2.23	1.25	79.9	89	0.76	2.08
	10.	10.27	141.1	83	1.25	1.68	93.4	88	0.88	1.68	282.2	68	2.06	1.31	70.6	94	0.71	2.17
	12.	13.14	110.3	91	1.08	1.84	73.1	97	0.76	1.84	220.7	75	1.78	1.43	55.2	104	0.62	2.37
	14.	14.16	102.4	94	1.03	1.89	67.8	100	0.73	1.89	204.8	76	1.67	1.47	51.2	108	0.59	2.44
	16.	17.88	81.1	101	0.88	2.06	53.7	110	0.63	2.06	162.2	85	1.48	1.6	40.6	120	0.52	2.67
	20.	20.27	71.5	106	0.81	2.16	47.4	116	0.59	2.16	143.1	89	1.37	1.68	35.8	127	0.49	2.8
	22.	23.16	62.6	110	0.74	2.27	41.4	123	0.55	2.27	125.2	93	1.25	1.76	31.3	129	0.43	2.93
	25.	25.77	56.3	114	0.69	2.36	37.3	129	0.52	2.36	112.6	96	1.16	1.83	28.1	130	0.39	3.04
	28.	28.41	51.0	117	0.64	2.44	33.8	130	0.47	2.44	102.1	99	1.09	1.89	25.5	130	0.36	3.17
	32.	31.26	46.4	121	0.60	2.53	30.7	130	0.43	2.53	92.8	102	1.02	1.97	23.2	130	0.32	3.26
	36.	36.63	39.6	130	0.55	2.69	26.2	130	0.37	3.12	79.2	107	0.91	2.08	19.8	130	0.28	3.5
	40.	43.94	33.0	130	0.46	2.89	21.8	130	0.31	3.37	66.0	112	0.79	2.23	16.5	130	0.23	3.73
	50.	51.22	28.3	130	0.40	3.04	18.7	130	0.26	3.57	56.6	117	0.71	2.36	14.2	130	0.20	3.91
	56.	56.91	25.5	130	0.36	3.17	16.9	130	0.24	3.73	51.0	122	0.67	2.46	12.7	130	0.18	4.14
	63.	68.54	21.2	130	0.30	3.37	14.0	130	0.20	3.85	42.3	130	0.59	2.62	10.6	130	0.15	3.85
	71.	78.56	18.5	126	0.25	3.57	12.2	126	0.17	3.85	36.9	127	0.50	2.77	9.23	127	0.13	3.85
	90.	89.28	16.2	113	0.20	3.73	10.8	113	0.13	3.85	32.5	113	0.39	2.89	8.12	113	0.10	3.85
	<b>F0233</b>	80.	82.72	17.5	130	0.25	3.81	11.6	135	0.17	3.85	35.1	128	0.49	2.93	8.76	141	0.13
90.		92.02	15.8	130	0.22	3.85	10.4	137	0.16	3.85	31.5	130	0.44	3.04	7.88	144	0.12	3.85
100		101.5	14.3	130	0.20	3.85	9.46	139	0.14	3.85	28.6	130	0.40	3.17	7.15	146	0.11	3.85
112		111.6	13.0	130	0.18	3.85	8.60	143	0.13	3.85	26.0	130	0.37	3.32	6.49	147	0.10	3.85
125		130.8	11.1	133	0.16	3.85	7.34	147	0.12	3.85	22.2	130	0.31	3.57	5.54	147	0.088	3.85
160		156.9	9.24	141	0.14	3.85	6.12	147	0.098	3.85	18.5	130	0.26	3.81	4.62	147	0.074	3.85
180		182.9	7.93	144	0.12	3.85	5.25	147	0.084	3.85	15.9	130	0.22	3.85	3.96	147	0.063	3.85
200		203.3	7.13	147	0.11	3.85	4.72	147	0.075	3.85	14.3	130	0.20	3.85	3.57	147	0.057	3.85
225		244.8	5.92	147	0.094	3.85	3.92	147	0.063	3.85	11.8	132	0.17	3.85	2.96	147	0.047	3.85
280		280.6	5.17	147	0.082	3.85	3.42	147	0.055	3.85	10.3	132	0.15	3.85	2.58	147	0.041	3.85
320		318.8	4.55	147	0.073	3.85	3.01	147	0.048	3.85	9.10	138	0.14	3.85	2.27	147	0.036	3.85
<b>F0323</b>		6.3	6.648	218.1	154	3.61	2.62	144.4	167	2.59	3.09	436.2	129	6.04	2.44	109.0	177	2.07
	9.0	8.980	161.5	179	3.10	2.82	106.9	194	2.23	3.34	322.9	154	5.34	2.13	80.73	201	1.74	3.77
	10.	10.21	142.0	189	2.88	2.93	93.99	205	2.07	3.47	283.9	164	5.00	2.22	70.98	204	1.56	4.00
	12.	11.57	125.3	201	2.70	3.02	82.96	216	1.92	3.59	250.6	174	4.68	2.26	62.65	216	1.45	4.13
	14.	14.80	98.0	220	2.31	3.26	64.87	223	1.55	4.00	195.9	192	4.04	2.44	48.99	223	1.17	4.60
	16.	15.95	90.9	227	2.22	3.33	60.19	232	1.50	4.07	181.8	198	3.87	2.48	45.46	232	1.13	4.67
	20.	20.14	72.0	239	1.85	3.60	47.68	239	1.22	4.50	144.0	215	3.33	2.67	36.01	339	1.31	5.00
	22.	22.83	63.5	246	1.68	3.84	42.05	246	1.11	4.73	127.0	225	3.07	2.79	31.76	246	0.84	5.00
	25.	26.09	55.6	250	1.49	4.08	36.80	250	0.99	5.00	111.1	234	2.79	2.94	27.79	250	0.75	5.00
	28.	29.02	50.0	250	1.34	4.31	33.08	250	0.89	5.00	99.94	236	2.53	3.09	24.98	250	0.67	5.00
	32.	31.99	45.3	250	1.22	4.53	30.01	250	0.81	5.00	90.65	240	2.34	3.33	22.66	250	0.61	5.00
	36.	35.21	41.2	250	1.11	4.74	27.27	250	0.73	5.00	82.37	243	2.15	3.37	20.59	250	0.55	5.00
	40.	41.25	35.2	248	0.94	5.00	23.27	250	0.62	5.00	70.30	232	1.75	3.76	17.58	250	0.47	5.00
	50.	49.49	29.3	217	0.68	5.00	19.40	228	0.47	5.00	58.60	204	1.28	4.37	14.65	230	0.36	5.00
	56.	57.69	25.1	190	0.51	5.00	16.64	199	0.36	5.00	50.27	178	0.96	4.92	12.57	205	0.28	5.00
	63.	64.10	22.6	179	0.43	5.00	14.98	187	0.30	5.00	45.24	168	0.82	5.00	11.31	186	0.23	5.00
	71.	77.19	18.8	149	0.30	5.00	12.44	149	0.20	5.00	37.57	149	0.60	5.00	9.39	149	0.15	5.00
	90.	88.47	16.4	128	0.23	5.00	10.85	128	0.15	5.00	32.78	128	0.45	5.00	8.19	128	0.11	5.00
100	100.5	14.4	127	0.20	5.00	9.55	126	0.13	5.00	28.84	126	0.39	5.00	7.21	126	0.10	5.00	
<b>F0333</b>	71.	71.91	20.2	250	0.55	5.00	13.35	250	0.36	5.00	40.33	220	0.96	5.00	10.08	250	0.27	5.00
	80.	81.53	17.8	250	0.48	5.00	11.78	250	0.32	5.00	35.57	235	0.91	5.00	8.89	250	0.24	5.00
	90.	93.16	15.6	250	0.42	5.00	10.30	250	0.28	5.00	31.13	245	0.83	5.00	7.78	250	0.21	5.00
	100	103.6	14.0	250	0.38	5.00	9.26	250	0.25	5.00	27.98	250	0.76	5.00	7.00	250	0.19	5.00
	112	114.3	12.7	250	0.34	5.00	8.40	250	0.23	5.00	25.38	250	0.69	5.00	6.35	250	0.17	5.00
	125	125.7	11.5	250	0.31	5.00	7.63	250	0.21	5.00	23.06	250	0.63	5.00	5.77	250	0.16	5.00
	160	147.3	9.8	250	0.27	5.00	6.52	250	0.18	5.00	19.68	250	0.53	5.00	4.92	250	0.13	5.00
	180	176.7	8.2	250	0.22	5.00	5.43	250	0.15	5.00	16.41	250	0.45	5.00	4.10	250	0.11	5.00
	200	206.0	7.0	250	0.19	5.00	4.66	250	0.13	5.00	14.08	250	0.38	5.00	3.52	250	0.095	5.00
	225	228.9	6.3	250	0.17	5.00	4.19	250	0.11	5.00	12.67	250	0.34	5.00	3.17	250	0.086	5.00
	280	275.7	5.3	250	0.14	5.00	3.48	250	0.094	5.00	10.52	250	0.29	5.00	2.63	250	0.071	5.00
	320	316.0	4.6	250	0.12	5.00	3.04	250	0.082	5.00	9.18	250	0.25	5.00	2.29	250	0.062	5.00
	360	359.1	4.0	250	0.11	5.00	2.67	250	0.073	5.00	8.08	250	0.22	5.00	2.02	250	0.055	5.00

**Note:** Input power Pm may exceed thermal power rating

# F SERIES

## RATINGS

**Key:** Pm= Input Power (kW) M2= Output Torque (Nm) i= Exact Ratio n2= Output Speed (rpm) Fra = Overhung load (kN)

			n1 = 1450				n1 = 960				n1 = 2900				n1 = 725			
	in	i	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra
<b>F0343</b>	400	399.9	3.6	250	0.10	5.00	2.40	250	0.066	5.00	7.25	250	0.200	5.00	1.81	250	0.050	5.00
	450	453.4	3.2	250	0.088	5.00	2.12	250	0.058	5.00	6.40	250	0.176	5.00	1.60	250	0.044	5.00
	500	518.1	2.8	250	0.077	5.00	1.85	250	0.051	5.00	5.60	250	0.154	5.00	1.40	250	0.039	5.00
	560	576.3	2.5	250	0.069	5.00	1.67	250	0.046	5.00	5.03	250	0.139	5.00	1.26	250	0.035	5.00
	630	635.4	2.3	250	0.063	5.00	1.51	250	0.042	5.00	4.56	250	0.126	5.00	1.14	250	0.031	5.00
	720	699.3	2.1	250	0.057	5.00	1.37	250	0.038	5.00	4.15	250	0.114	5.00	1.04	250	0.029	5.00
	800	819.3	1.8	250	0.049	5.00	1.17	250	0.032	5.00	3.54	250	0.098	5.00	0.88	250	0.024	5.00
	900	893.1	1.6	250	0.045	5.00	1.07	250	0.030	5.00	3.25	250	0.089	5.00	0.81	250	0.022	5.00
	10c	982.9	1.5	250	0.041	5.00	0.98	250	0.027	5.00	2.95	250	0.081	5.00	0.74	250	0.020	5.00
	11c	1146	1.3	250	0.035	5.00	0.84	250	0.023	5.00	2.53	250	0.070	5.00	0.63	250	0.017	5.00
	12c	1273	1.1	250	0.031	5.00	0.75	250	0.021	5.00	2.28	250	0.063	5.00	0.57	250	0.016	5.00
	14c	1382	1.0	250	0.029	5.00	0.69	250	0.019	5.00	2.10	250	0.058	5.00	0.52	250	0.014	5.00
	16c	1610	0.90	250	0.025	5.00	0.60	250	0.016	5.00	1.80	250	0.050	5.00	0.45	250	0.012	5.00
	18c	1796	0.81	250	0.022	5.00	0.53	250	0.015	5.00	1.61	250	0.044	5.00	0.40	250	0.011	5.00
	20c	2086	0.70	245	0.019	5.00	0.46	245	0.012	5.00	1.39	245	0.038	5.00	0.35	245	0.009	5.00
	22c	2155	0.67	245	0.018	5.00	0.45	245	0.012	5.00	1.35	245	0.036	5.00	0.34	245	0.009	5.00
	25c	2512	0.58	245	0.016	5.00	0.38	245	0.010	5.00	1.15	245	0.031	5.00	0.29	245	0.008	5.00
	28c	2791	0.52	245	0.014	5.00	0.34	245	0.009	5.00	1.04	245	0.028	5.00	0.26	245	0.007	5.00
	32c	3199	0.45	245	0.012	5.00	0.30	245	0.008	5.00	0.91	245	0.024	5.00	0.23	245	0.006	5.00
	36c	3852	0.38	190	0.008	5.00	0.25	190	0.005	5.00	0.75	190	0.016	5.00	0.19	190	0.004	5.00
<b>F0423</b>	6.3	6.320	229.4	243	5.99	2.84	151.9	275	4.49	3.14	458.8	197	9.71	2.50	114.7	299	3.68	3.47
	9.0	8.864	163.5	292	5.13	2.86	108.3	331	3.85	3.32	327.1	237	8.33	2.50	81.79	360	3.16	3.68
	10.	9.768	148.4	307	4.89	2.91	98.28	348	3.67	3.38	296.8	249	7.94	2.50	74.22	370	2.95	3.81
	12.	11.09	130.7	326	4.58	3.00	86.55	362	3.36	3.54	261.4	264	7.41	2.50	65.36	377	2.65	4.05
	14.	14.09	102.9	352	3.89	3.25	68.14	374	2.74	3.98	205.8	295	6.52	2.50	51.46	391	2.16	4.53
	16.	16.01	90.60	359	3.49	3.46	59.98	382	2.46	4.22	181.2	313	6.09	2.50	45.30	398	1.94	4.80
	20.	19.64	73.82	370	2.93	3.82	48.87	394	2.07	4.64	147.6	335	5.31	2.70	36.91	410	1.63	5.28
	22.	21.79	66.56	375	2.68	4.02	44.07	400	1.89	4.87	133.1	340	4.86	2.84	33.28	416	1.49	5.54
	25.	24.75	58.59	384	2.42	4.26	38.79	407	1.70	5.16	117.2	346	4.35	3.05	29.29	420	1.32	5.86
	28.	28.12	51.56	391	2.17	4.63	34.14	410	1.50	5.77	103.1	252	2.79	3.25	25.78	420	1.16	6.40
	32.	30.97	46.82	396	1.99	4.89	31.00	420	1.40	6.06	93.65	358	3.60	3.40	23.41	420	1.06	6.40
	36.	35.62	40.71	405	1.77	5.12	26.95	420	1.22	6.35	81.42	365	3.19	3.65	20.35	420	0.92	6.40
	40.	38.72	37.44	410	1.65	5.53	24.79	420	1.12	6.61	74.89	369	2.97	3.80	18.72	420	0.84	6.40
	50.	46.49	31.19	420	1.41	5.90	20.65	420	0.93	6.44	62.38	380	2.55	4.11	15.60	420	0.70	6.40
	56.	55.79	25.99	415	1.16	6.26	17.21	420	0.78	6.10	51.98	374	2.09	4.64	13.00	420	0.59	6.40
	63.	62.86	23.07	368	0.91	6.40	15.27	382	0.63	6.40	46.14	342	1.69	5.22	11.53	393	0.49	6.40
	71.	73.07	19.84	320	0.68	6.40	13.14	331	0.47	6.40	39.69	296	1.26	6.00	9.92	341	0.36	6.40
	90.	82.94	17.48	287	0.54	6.40	11.58	298	0.37	6.40	34.97	267	1.00	6.40	8.74	307	0.29	6.40
	100	94.29	15.38	258	0.43	6.40	10.18	266	0.29	6.40	30.76	238	0.79	6.40	7.69	273	0.23	6.40
	<b>F0433</b>	71.	69.69	20.81	378	0.85	6.40	13.78	413	0.62	6.40	41.61	324	1.46	6.00	10.40	420	0.47
80.		79.00	18.35	395	0.79	6.40	12.15	420	0.55	6.40	36.71	340	1.35	6.25	9.18	420	0.42	6.40
90.		90.28	16.06	413	0.72	6.40	10.63	420	0.48	6.40	32.12	356	1.24	6.40	8.03	420	0.37	6.40
100		100.4	14.44	420	0.66	6.40	9.56	420	0.44	6.40	28.88	368	1.15	6.40	7.22	420	0.33	6.40
112		110.7	13.10	420	0.60	6.40	8.67	420	0.40	6.40	26.19	375	1.07	6.40	6.55	420	0.30	6.40
125		121.9	11.90	420	0.54	6.40	7.88	420	0.36	6.40	23.80	391	1.01	6.40	5.95	420	0.27	6.40
160		142.8	10.16	420	0.46	6.40	6.72	420	0.31	6.40	20.31	404	0.89	6.40	5.08	420	0.23	6.40
180		171.3	8.47	420	0.39	6.40	5.60	420	0.26	6.40	16.93	420	0.77	6.40	4.23	420	0.19	6.40
200		199.7	7.26	420	0.33	6.40	4.81	420	0.22	6.40	14.53	420	0.66	6.40	3.63	420	0.17	6.40
225		221.8	6.54	420	0.30	6.40	4.33	420	0.20	6.40	13.07	420	0.60	6.40	3.27	420	0.15	6.40
280		267.1	5.43	420	0.25	6.40	3.59	420	0.16	6.40	10.86	420	0.49	6.40	2.71	420	0.12	6.40
320		306.2	4.74	420	0.22	6.40	3.14	420	0.14	6.40	9.47	420	0.43	6.40	2.37	420	0.11	6.40
360		348.0	4.17	420	0.19	6.40	2.76	420	0.13	6.40	8.33	420	0.38	6.40	2.08	420	0.095	6.40
<b>F0443</b>		400	398.8	3.64	420	0.17	6.40	2.41	420	0.11	6.40	7.27	420	0.34	6.40	1.82	420	0.084
	450	455.7	3.18	420	0.15	6.40	2.11	420	0.098	6.40	6.36	420	0.29	6.40	1.59	420	0.074	6.40
	500	506.9	2.86	420	0.13	6.40	1.89	420	0.088	6.40	5.72	420	0.26	6.40	1.43	420	0.066	6.40
	560	558.8	2.59	420	0.12	6.40	1.72	420	0.080	6.40	5.19	420	0.24	6.40	1.30	420	0.060	6.40
	630	615.0	2.36	420	0.11	6.40	1.56	420	0.072	6.40	4.72	420	0.22	6.40	1.18	420	0.055	6.40
	710	707.4	2.05	420	0.095	6.40	1.36	420	0.063	6.40	4.10	420	0.19	6.40	1.02	420	0.047	6.40
	800	828.8	1.75	420	0.081	6.40	1.16	420	0.054	6.40	3.50	420	0.16	6.40	0.87	420	0.040	6.40
	900	901.1	1.61	420	0.074	6.40	1.07	420	0.049	6.40	3.22	420	0.15	6.40	0.80	420	0.037	6.40
	10C	994.4	1.46	420	0.068	6.40	0.97	420	0.045	6.40	2.92	420	0.14	6.40	0.73	420	0.034	6.40
	11C	1159	1.25	420	0.058	6.40	0.83	420	0.038	6.40	2.50	420	0.12	6.40	0.63	420	0.029	6.40
	12C	1260	1.15	420	0.053	6.40	0.76	420	0.035	6.40	2.30	420	0.11	6.40	0.58	420	0.027	6.40
	14C	1400	1.04	420	0.048	6.40	0.69	420	0.032	6.40	2.07	420	0.096	6.40	0.52	420	0.024	6.40
	16C	1686	0.86	420	0.040	6.40	0.57	420	0.026	6.40	1.72	420	0.080	6.40	0.43	420	0.020	6.40
	18C	1778	0.82	420	0.038	6.40	0.54	420	0.025	6.40	1.63	420	0.076	6.40	0.41	420	0.019	6.40
	20C	1933	0.75	420	0.035	6.40	0.50	420	0.023	6.40	1.50	420	0.069	6.40	0.38	420	0.017	6.40
	22C	2196	0.66	420	0.031	6.40	0.44	420	0.020	6.40	1.32	420	0.061	6.40	0.33	420	0.015	6.40
	25C	2429	0.60	420	0.028	6.40	0.40	420	0.018	6.40	1.19	420	0.055	6.40	0.30	420	0.014	6.40
	28C	2784	0.52	420	0.024	6.40	0.34	420	0.016	6.40	1.04	420	0.048	6.40	0.26	420	0.012	6.40
	32C	3164	0.46	420	0.021	6.40	0.30	420	0.014									

# F SERIES

## RATINGS

**Key:** Pm= Input Power (kW) M2= Output Torque (Nm) i= Exact Ratio n2= Output Speed (rpm) Fra = Overhung load (kN)

			n1 = 1450				n1 = 960				n1 = 2900				n1 = 725			
	in	i	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra
<b>F0523</b>	6.3	6.312	229.74	450	11.10	1.48	152.10	476	7.78	2.01	459.47	447	22.06	1.50	114.87	496	6.12	2.42
	9.0	8.874	163.40	472	8.28	1.91	108.18	499	5.80	2.51	326.80	440	15.44	1.18	81.70	519	4.55	2.99
	10.	9.946	145.79	479	7.50	2.07	96.52	507	5.26	2.70	291.57	438	13.72	1.20	72.89	529	4.14	3.18
	12.	11.16	129.88	487	6.79	2.24	85.99	515	4.76	2.90	259.76	442	12.33	1.34	64.94	538	3.75	3.40
	14.	14.18	102.27	503	5.52	2.60	67.71	534	3.88	3.33	204.54	457	10.04	1.62	51.14	556	3.05	3.89
	16.	16.07	90.22	512	4.96	2.80	59.73	544	3.49	3.57	180.43	465	9.01	1.78	45.11	566	2.74	4.17
	20.	19.17	75.64	526	4.27	3.12	50.08	558	3.00	3.93	151.29	477	7.75	2.01	37.82	581	2.36	4.57
	22.	22.07	65.70	537	3.79	3.38	43.50	569	2.66	4.25	131.39	486	6.86	2.22	32.85	593	2.09	4.92
	25.	25.67	56.48	548	3.32	3.69	37.40	581	2.33	4.60	112.97	497	6.03	2.45	28.24	606	1.84	5.31
	28.	28.72	50.49	557	3.02	3.92	33.42	592	2.13	4.87	100.97	504	5.47	2.62	25.24	616	1.67	5.61
	32.	30.61	47.37	562	2.86	4.06	31.36	597	2.01	5.03	94.73	508	5.17	2.73	23.68	621	1.58	5.97
	36.	36.28	39.97	576	2.47	4.44	26.46	612	1.74	5.48	79.94	521	4.47	3.02	19.98	637	1.37	6.29
	40.	38.74	37.43	581	2.34	4.60	24.78	617	1.64	5.67	74.87	527	4.24	3.13	18.72	643	1.29	6.49
	50.	48.07	30.17	600	1.94	5.14	19.97	637	1.37	6.29	60.33	543	3.52	3.55	15.08	663	1.07	7.19
	56.	56.68	25.58	614	1.69	5.58	16.94	653	1.19	6.81	51.16	556	3.06	3.89	12.79	679	0.93	7.77
	63.	62.06	23.36	622	1.56	5.83	15.47	661	1.10	7.11	46.73	563	2.83	4.09	11.68	689	0.86	8.10
71.	76.06	19.06	641	1.31	6.44	12.62	681	0.92	7.81	38.13	580	2.37	4.55	9.53	709	0.73	8.50	
90.	84.78	17.10	633	1.16	6.97	11.32	633	0.77	8.51	34.21	590	2.17	4.81	8.55	633	0.58	8.83	
100	95.08	15.25	481	0.79	8.62	10.10	481	0.52	9.00	30.50	474	1.55	5.50	7.63	481	0.39	9.00	
<b>F0533</b>	100	102.8	14.11	570	0.87	7.43	9.34	700	0.71	8.50	28.21	606	1.86	5.30	7.05	700	0.54	9.00
	112	113.2	12.81	585	0.81	7.76	8.48	700	0.64	8.50	25.62	614	1.71	5.58	6.40	700	0.49	9.00
	125	130.2	11.14	613	0.74	8.28	7.37	700	0.56	9.00	22.27	627	1.52	5.97	5.57	700	0.42	9.00
	160	141.6	10.24	635	0.71	8.56	6.78	700	0.52	9.00	20.49	635	1.41	6.22	5.12	700	0.39	9.00
	180	169.9	8.53	694	0.64	9.00	5.65	700	0.43	9.00	17.07	652	1.21	6.79	4.27	700	0.32	9.00
	200	203.9	7.11	700	0.54	9.00	4.71	700	0.36	9.00	14.22	669	1.03	7.39	3.56	700	0.27	9.00
	225	229.8	6.31	700	0.48	9.00	4.18	700	0.32	9.00	12.62	681	0.93	7.81	3.16	700	0.24	9.00
	280	267.1	5.43	700	0.41	9.00	3.59	700	0.27	9.00	10.86	696	0.82	8.37	2.71	700	0.21	9.00
	320	303.2	4.78	700	0.36	9.00	3.17	700	0.24	9.00	9.57	700	0.73	8.51	2.39	700	0.18	9.00
	360	344.7	4.21	700	0.32	9.00	2.79	700	0.21	9.00	8.41	700	0.64	8.56	2.10	700	0.16	9.00
	<b>F0543</b>	400	409.9	3.54	700	0.27	9.00	2.34	700	0.18	9.00	7.07	700	0.55	9.00	1.77	700	0.14
450		451.4	3.21	700	0.25	9.00	2.13	700	0.16	9.00	6.42	700	0.50	9.00	1.61	700	0.12	9.00
500		505.0	2.87	700	0.22	9.00	1.90	700	0.15	9.00	5.74	700	0.44	9.00	1.44	700	0.11	9.00
560		564.5	2.57	700	0.20	9.00	1.70	700	0.13	9.00	5.14	700	0.40	9.00	1.28	700	0.099	9.00
630		631.5	2.30	700	0.18	9.00	1.52	700	0.12	9.00	4.59	700	0.35	9.00	1.15	700	0.089	9.00
710		699.2	2.07	700	0.16	9.00	1.37	700	0.11	9.00	4.15	700	0.32	9.00	1.04	700	0.080	9.00
800		808.1	1.79	700	0.14	9.00	1.19	700	0.092	9.00	3.59	700	0.28	9.00	0.90	700	0.069	9.00
900		909.8	1.59	700	0.12	9.00	1.06	700	0.081	9.00	3.19	700	0.25	9.00	0.80	700	0.061	9.00
10C		1025	1.41	700	0.11	9.00	0.94	700	0.072	9.00	2.83	700	0.22	9.00	0.71	700	0.055	9.00
11C		1149	1.26	700	0.097	9.00	0.84	700	0.064	9.00	2.52	700	0.19	9.00	0.63	700	0.049	9.00
12C		1270	1.14	700	0.088	9.00	0.76	700	0.058	9.00	2.28	700	0.18	9.00	0.57	700	0.044	9.00
14C		1442	1.01	700	0.078	9.00	0.67	700	0.051	9.00	2.01	700	0.16	9.00	0.50	700	0.039	9.00
16C		1607	0.90	700	0.070	9.00	0.60	700	0.046	9.00	1.80	700	0.14	9.00	0.45	700	0.035	9.00
18C		1824	0.79	700	0.061	9.00	0.53	700	0.041	9.00	1.59	700	0.12	9.00	0.40	700	0.031	9.00
20C		1994	0.73	700	0.056	9.00	0.48	700	0.037	9.00	1.45	700	0.11	9.00	0.36	700	0.028	9.00
22C		2264	0.64	700	0.049	9.00	0.42	700	0.033	9.00	1.28	700	0.099	9.00	0.32	700	0.025	9.00
25C		2573	0.56	700	0.043	9.00	0.37	700	0.029	9.00	1.13	700	0.087	9.00	0.28	700	0.022	9.00
28C		2923	0.50	700	0.038	9.00	0.33	700	0.025	9.00	0.99	700	0.077	9.00	0.25	700	0.019	9.00
32C		3323	0.44	700	0.034	9.00	0.29	700	0.022	9.00	0.87	700	0.067	9.00	0.22	700	0.017	9.00
36C	3582	0.40	700	0.031	9.00	0.27	700	0.021	9.00	0.81	700	0.062	9.00	0.20	700	0.016	9.00	
40C	3992	0.36	665	0.027	9.00	0.24	665	0.018	9.00	0.73	665	0.053	9.00	0.18	665	0.013	9.00	
45C	4539	0.32	665	0.023	9.00	0.21	665	0.016	9.00	0.64	665	0.047	9.00	0.16	665	0.012	9.00	
<b>F0623</b>	6.3	6.27	231.1	512	12.71	5.30	153.0	513	8.43	6.27	462.3	433	21.50	4.80	115.6	513	6.37	7.17
	9.0	8.82	164.4	647	11.42	5.31	108.8	671	7.84	6.42	328.8	525	18.54	4.80	82.20	671	5.92	7.45
	10.	9.89	146.7	687	10.82	5.32	97.11	723	7.54	6.50	293.3	558	17.58	4.80	73.34	723	5.69	7.57
	12.	11.10	130.7	722	10.13	5.46	86.51	725	6.74	6.92	261.3	591	16.59	4.80	65.34	725	5.09	8.00
	14.	14.09	102.9	816	9.02	5.72	68.12	893	6.53	6.83	205.8	663	14.65	4.80	51.45	893	4.93	8.05
	16.	15.98	90.77	864	8.42	5.89	60.09	900	5.81	7.31	181.5	701	13.67	4.80	45.38	900	4.39	8.57
	20.	19.05	76.11	900	7.36	6.34	50.39	900	4.87	8.09	152.2	744	12.16	4.90	38.05	900	3.68	9.43
	22.	21.94	66.10	743	5.27	7.86	43.76	748	3.52	9.68	132.2	746	10.59	5.30	33.05	748	2.65	11.10
	25.	25.52	56.83	839	5.12	7.90	37.62	845	3.41	9.82	113.7	808	9.86	5.40	28.41	845	2.58	11.30
	28.	28.55	50.79	885	4.83	8.13	33.63	888	3.21	10.10	101.6	835	9.11	5.65	25.40	888	2.42	11.70
	32.	30.43	47.66	900	4.61	8.35	31.55	900	3.05	10.40	95.31	852	8.72	5.80	23.83	900	2.30	12.00
	36.	36.06	40.21	900	3.89	9.15	26.62	900	2.57	11.30	80.42	873	7.54	6.30	20.11	900	1.94	13.00
	40.	38.50	37.66	900	3.64	9.48	24.94	900	2.41	11.70	75.32	883	7.14	6.50	18.83	900	1.82	13.40
	50.	47.78	30.35	900	2.93	10.60	20.09	900	1.94	13.00	60.70	900	5.87	7.30	15.18	900	1.47	14.50
	56.	56.34	25.74	900	2.49	11.50	17.04	900	1.65	14.00	51.48	900	4.98	8.00	12.87	900	1.24	14.50
	63.	61.69	23.51	900	2.27	12.00	15.56	900	1.50	14.50	47.01	900	4.54	8.60	11.75	900	1.14	14.50
71.	75.60	19.18	877	1.81	14.50	12.70	876	1.19	14.50	38.36	875	3.60	10.70	9.59	876	0.90	14.50	
90.	84.26	17.21	666	1.23	14.50	11.39	666	0.81	14.50	34.42	664	2.45	11.80	8.60	666	0.62	14.50	
100	94.50	15.34	482	0.79	14.50	10.16	482	0.53	14.50	30.69	480	1.58	13.20	7.67	482	0.40	14.50	

# F SERIES

## RATINGS

**Key:** Pm= Input Power (kW) M2= Output Torque (Nm) i= Exact Ratio n2= Output Speed (rpm) Fra = Overhung load (kN)

			n1 = 1450				n1 = 960				n1 = 2900				n1 = 725			
	in	i	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra
<b>F0633</b>	100	102.2	14.19	900	1.39	14.50	9.40	900	0.92	14.50	28.38	800	2.46	11.60	7.10	900	0.69	14.50
	112	112.5	12.89	900	1.26	14.50	8.53	900	0.83	14.50	25.78	810	2.27	12.10	6.44	900	0.63	14.50
	125	129.4	11.20	900	1.09	14.50	7.42	900	0.72	14.50	22.41	834	2.03	12.70	5.60	900	0.55	14.50
	160	140.7	10.31	900	1.01	14.50	6.82	900	0.67	14.50	20.61	855	1.91	13.10	5.15	900	0.50	14.50
	180	168.9	8.58	900	0.84	14.50	5.68	900	0.56	14.50	17.17	900	1.68	14.00	4.29	900	0.42	14.50
	200	202.7	7.15	900	0.70	14.50	4.74	900	0.46	14.50	14.31	900	1.40	14.50	3.58	900	0.35	14.50
	225	228.4	6.35	900	0.62	14.50	4.20	900	0.41	14.50	12.70	900	1.24	14.50	3.17	900	0.31	14.50
	280	265.5	5.46	900	0.53	14.50	3.62	900	0.35	14.50	10.92	900	1.07	14.50	2.73	900	0.27	14.50
	320	301.3	4.81	900	0.47	14.50	3.19	900	0.31	14.50	9.62	900	0.94	14.50	2.41	900	0.23	14.50
	360	342.6	4.23	900	0.41	14.50	2.80	900	0.27	14.50	8.47	900	0.83	14.50	2.12	900	0.21	14.50
<b>F0643</b>	400	407.4	3.56	900	0.35	14.50	2.36	900	0.23	14.50	7.12	900	0.71	14.50	1.78	900	0.18	14.50
	450	448.6	3.23	900	0.32	14.50	2.14	900	0.21	14.50	6.46	900	0.64	14.50	1.62	900	0.16	14.50
	500	502.0	2.89	900	0.29	14.50	1.91	900	0.19	14.50	5.78	900	0.57	14.50	1.44	900	0.14	14.50
	560	561.0	2.58	900	0.26	14.50	1.71	900	0.17	14.50	5.17	900	0.51	14.50	1.29	900	0.13	14.50
	630	627.7	2.31	900	0.23	14.50	1.53	900	0.15	14.50	4.62	900	0.46	14.50	1.15	900	0.11	14.50
	710	729.3	1.99	900	0.20	14.50	1.32	900	0.13	14.50	3.98	900	0.39	14.50	0.99	900	0.099	14.50
	800	803.2	1.81	900	0.18	14.50	1.20	900	0.12	14.50	3.61	900	0.36	14.50	0.90	900	0.090	14.50
	900	904.3	1.60	900	0.16	14.50	1.06	900	0.11	14.50	3.21	900	0.32	14.50	0.80	900	0.080	14.50
	10C	1019	1.42	900	0.14	14.50	0.94	900	0.093	14.50	2.85	900	0.28	14.50	0.71	900	0.071	14.50
	11C	1086	1.34	900	0.13	14.50	0.88	900	0.088	14.50	2.67	900	0.26	14.50	0.67	900	0.066	14.50
	12C	1262	1.15	900	0.11	14.50	0.76	900	0.075	14.50	2.30	900	0.23	14.50	0.57	900	0.057	14.50
	14C	1433	1.01	900	0.10	14.50	0.67	900	0.066	14.50	2.02	900	0.20	14.50	0.51	900	0.050	14.50
	16C	1629	0.89	900	0.088	14.50	0.59	900	0.058	14.50	1.78	900	0.18	14.50	0.45	900	0.044	14.50
	18C	1813	0.80	900	0.079	14.50	0.53	900	0.053	14.50	1.60	900	0.16	14.50	0.40	900	0.040	14.50
	20C	1982	0.73	900	0.073	14.50	0.48	900	0.048	14.50	1.46	900	0.15	14.50	0.37	900	0.036	14.50
	22C	2250	0.64	900	0.064	14.50	0.43	900	0.042	14.50	1.29	900	0.13	14.50	0.32	900	0.032	14.50
	25C	2558	0.57	900	0.056	14.50	0.38	900	0.037	14.50	1.13	900	0.11	14.50	0.28	900	0.028	14.50
	28C	3016	0.48	900	0.048	14.50	0.32	900	0.032	14.50	0.96	900	0.095	14.50	0.24	900	0.024	14.50
	32C	3303	0.44	900	0.044	14.50	0.29	900	0.029	14.50	0.88	900	0.087	14.50	0.22	900	0.022	14.50
	36C	3560	0.41	870	0.039	14.50	0.27	870	0.026	14.50	0.81	870	0.078	14.50	0.20	870	0.020	14.50
40C	4048	0.36	870	0.034	14.50	0.24	870	0.023	14.50	0.72	870	0.069	14.50	0.18	870	0.017	14.50	
<b>F0723</b>	6.3	6.42	225.84	1017	24.67	6.00	149.52	1150	18.47	6.44	451.68	868	42.11	5.60	112.92	1200	14.55	7.20
	9.0	8.89	163.05	1199	20.99	6.00	107.95	1350	15.65	6.61	326.09	1030	36.07	5.60	81.52	1410	12.34	7.63
	10.	9.99	145.15	1270	19.80	6.00	96.10	1430	14.76	6.74	290.29	1090	33.98	5.60	72.57	1500	11.69	7.80
	12.	10.98	132.01	1340	19.00	6.00	87.40	1520	14.27	6.77	264.01	1150	32.61	5.60	66.00	1580	11.20	7.85
	14.	14.35	101.07	1485	16.12	6.25	66.91	1680	12.07	7.31	202.13	1270	27.57	5.60	50.53	1700	9.23	9.50
	16.	16.31	88.89	1490	14.22	6.50	58.85	1700	10.74	7.89	177.78	1330	25.39	5.60	44.45	1700	8.11	12.00
	20.	19.81	73.20	1428	11.22	8.03	48.47	1440	7.50	10.30	146.41	1440	22.64	5.86	36.60	1440	5.66	12.30
	22.	21.79	66.55	1488	10.63	8.23	44.06	1500	7.10	10.60	133.10	1480	21.16	6.08	33.27	1500	5.36	12.70
	25.	25.04	57.91	1615	10.04	8.34	38.34	1630	6.71	10.80	115.83	1520	18.91	6.51	28.96	1630	5.07	13.20
	28.	28.39	51.07	1700	9.32	8.69	33.81	1700	6.17	11.20	102.14	1600	17.55	6.74	25.54	1700	4.66	13.90
	32.	31.32	46.30	1700	8.45	9.26	30.66	1700	5.60	11.90	92.61	1600	15.91	7.19	23.15	1700	4.23	15.00
	36.	35.86	40.43	1700	7.38	10.10	26.77	1700	4.89	12.80	80.86	1670	14.50	7.58	20.22	1700	3.69	15.90
	40.	40.55	35.76	1700	6.53	10.90	23.68	1700	4.32	13.70	71.52	1690	12.98	8.18	17.88	1700	3.26	16.00
	50.	47.01	30.84	1700	5.63	11.90	20.42	1700	3.73	14.90	61.69	1700	11.26	8.94	15.42	1700	2.82	16.00
	56.	56.07	25.86	1700	4.72	13.10	17.12	1700	3.13	16.00	51.72	1700	9.44	10.00	12.93	1700	2.36	16.00
	63.	61.40	23.61	1700	4.31	13.80	15.63	1700	2.85	16.00	47.23	1700	8.62	10.60	11.81	1700	2.16	16.00
	71.	73.68	19.68	1556	3.29	16.00	13.03	1560	2.18	16.00	39.36	1560	6.59	13.30	9.84	1560	1.65	16.00
90.	84.78	17.10	1222	2.24	16.00	11.32	1220	1.48	16.00	34.21	1220	4.48	15.50	8.55	1220	1.12	16.00	
100	94.20	15.39	1042	1.72	16.00	10.19	1040	1.14	16.00	30.79	1040	3.44	16.00	7.70	1040	0.86	16.00	
<b>F0733</b>	80.	78.99	18.36	1390	2.77	16.00	12.15	1510	1.99	16.00	36.71	1260	5.02	14.50	9.18	1620	1.61	16.00
	90.	91.87	15.78	1460	2.50	16.00	10.45	1590	1.80	16.00	31.56	1320	4.52	15.30	7.89	1700	1.46	16.00
	100	102.8	14.11	1560	2.39	16.00	9.34	1700	1.72	16.00	28.21	1410	4.32	15.60	7.05	1700	1.30	16.00
	112	109.6	13.23	1560	2.24	16.00	8.76	1700	1.62	16.00	26.47	1410	4.05	16.00	6.62	1700	1.22	16.00
	125	129.8	11.17	1620	1.96	16.00	7.39	1700	1.36	16.00	22.33	1470	3.56	16.00	5.58	1700	1.03	16.00
	160	138.6	10.46	1650	1.87	16.00	6.92	1700	1.28	16.00	20.92	1500	3.40	16.00	5.23	1700	0.96	16.00
	180	172.0	8.43	1700	1.55	16.00	5.58	1700	1.03	16.00	16.86	1600	2.93	16.00	4.21	1700	0.78	16.00
	200	202.9	7.15	1700	1.32	16.00	4.73	1700	0.873	16.00	14.30	1670	2.59	16.00	3.57	1700	0.66	16.00
	225	222.1	6.53	1700	1.20	16.00	4.32	1700	0.797	16.00	13.06	1700	2.41	16.00	3.26	1700	0.60	16.00
	280	272.2	5.33	1700	0.983	16.00	3.53	1700	0.651	16.00	10.65	1700	1.97	16.00	2.66	1700	0.49	16.00
	320	303.4	4.78	1700	0.882	16.00	3.16	1700	0.584	16.00	9.56	1700	1.76	16.00	2.39	1700	0.44	16.00
	360	340.3	4.26	1700	0.786	16.00	2.82	1700	0.520	16.00	8.52	1700	1.57	16.00	2.13	1700	0.39	16.00

**Note:** Input power Pm may exceed thermal power rating



# F SERIES

## RATINGS

**Key:** Pm= Input Power (kW) M2= Output Torque (Nm) i= Exact Ratio n2= Output Speed (rpm) Fra = Overhung load (kN)

			n1 = 1450				n1 = 960				n1 = 2900				n1 = 725			
	in	i	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra
<b>F0743</b>	400	399.8	3.63	1700	0.680	16.00	2.40	1700	0.450	16.00	7.25	1700	1.36	16.00	1.81	1700	0.34	16.00
	450	453.3	3.20	1700	0.599	16.00	2.12	1700	0.397	16.00	6.40	1700	1.20	16.00	1.60	1700	0.30	16.00
	500	499.2	2.90	1700	0.544	16.00	1.92	1700	0.360	16.00	5.81	1700	1.09	16.00	1.45	1700	0.27	16.00
	560	550.5	2.63	1700	0.494	16.00	1.74	1700	0.327	16.00	5.27	1700	0.987	16.00	1.32	1700	0.25	16.00
	630	624.3	2.32	1700	0.435	16.00	1.54	1700	0.288	16.00	4.65	1700	0.870	16.00	1.16	1700	0.22	16.00
	710	713.0	2.03	1700	0.381	16.00	1.35	1700	0.252	16.00	4.07	1700	0.762	16.00	1.02	1700	0.19	16.00
	800	793.1	1.83	1700	0.343	16.00	1.21	1700	0.227	16.00	3.66	1700	0.685	16.00	0.91	1700	0.17	16.00
	900	899.3	1.61	1700	0.302	16.00	1.07	1700	0.200	16.00	3.22	1700	0.604	16.00	0.81	1700	0.15	16.00
	10C	992.0	1.46	1700	0.274	16.00	0.97	1700	0.181	16.00	2.92	1700	0.548	16.00	0.73	1700	0.14	16.00
	11C	1118	1.30	1700	0.243	16.00	0.86	1700	0.161	16.00	2.59	1700	0.486	16.00	0.65	1700	0.12	16.00
	12C	1280	1.13	1700	0.212	16.00	0.75	1700	0.141	16.00	2.27	1700	0.425	16.00	0.57	1700	0.11	16.00
	14C	1447	1.00	1700	0.188	16.00	0.66	1700	0.124	16.00	2.00	1700	0.375	16.00	0.50	1700	0.094	16.00
	16C	1678	0.86	1700	0.162	16.00	0.57	1700	0.107	16.00	1.73	1700	0.324	16.00	0.43	1700	0.081	16.00
	18C	1776	0.82	1700	0.153	16.00	0.54	1700	0.101	16.00	1.63	1700	0.306	16.00	0.41	1700	0.076	16.00
	20C	2001	0.72	1700	0.136	16.00	0.48	1700	0.090	16.00	1.45	1700	0.272	16.00	0.36	1700	0.068	16.00
	22C	2214	0.65	1700	0.123	16.00	0.43	1700	0.081	16.00	1.31	1700	0.245	16.00	0.33	1700	0.061	16.00
	25C	2517	0.58	1700	0.108	16.00	0.38	1700	0.071	16.00	1.15	1700	0.216	16.00	0.29	1700	0.054	16.00
	28C	2892	0.50	1700	0.094	16.00	0.33	1700	0.062	16.00	1.00	1700	0.188	16.00	0.25	1700	0.047	16.00
	32C	3002	0.48	1700	0.091	16.00	0.32	1700	0.060	16.00	0.97	1700	0.181	16.00	0.24	1700	0.045	16.00
	36C	3470	0.42	1415	0.065	16.00	0.28	1415	0.043	16.00	0.84	1415	0.130	16.00	0.21	1415	0.033	16.00
40C	3945	0.37	1415	0.057	16.00	0.24	1415	0.038	16.00	0.74	1415	0.115	16.00	0.18	1415	0.029	16.00	
45C	4539	0.32	1160	0.041	16.00	0.21	1160	0.027	16.00	0.64	1160	0.082	16.00	0.16	1160	0.020	16.00	
50C	5043	0.29	1160	0.037	16.00	0.19	1160	0.024	16.00	0.58	1160	0.074	16.00	0.14	1160	0.018	16.00	
<b>F0823</b>	6.3	6.24	232.29	1540	38.42	5.50	153.79	1760	29.07	6.20	464.58	1310	65.36	5.30	116.15	1840	22.95	7.30
	9.0	8.85	163.86	1860	32.73	5.55	108.49	2130	24.82	6.20	327.73	1590	55.96	5.30	81.93	2220	19.53	7.30
	10	9.83	147.51	1960	31.06	5.60	97.66	2240	23.49	6.25	295.01	1680	53.23	5.30	73.75	2340	18.53	7.40
	12	10.93	132.61	2060	29.33	5.60	87.80	2350	22.16	6.33	265.23	1760	50.13	5.30	66.31	2460	17.52	7.50
	14	14.14	102.56	2290	25.23	5.70	67.90	2620	19.11	6.66	205.12	1960	43.18	5.30	51.28	2730	15.03	7.94
	16	15.87	91.35	2390	23.45	5.95	60.48	2730	17.73	6.87	182.70	2050	40.22	5.30	45.68	2850	13.98	8.23
	20	19.46	74.49	2560	20.48	6.37	49.32	2820	14.94	7.82	148.99	2190	35.04	5.48	37.25	2920	11.68	9.38
	22	21.93	66.11	2620	18.60	6.80	43.77	2870	13.49	8.45	132.22	2250	31.95	5.85	33.05	2960	10.51	10.10
	25	25.53	56.79	2760	16.83	7.15	37.60	2920	11.79	9.33	113.59	2360	28.79	6.15	28.40	3020	9.21	11.00
	28	28.32	51.20	2410	13.25	9.38	33.90	2410	8.77	12.30	102.40	2410	26.50	6.53	25.60	2410	6.63	14.60
	32	30.99	46.79	2310	11.61	10.40	30.97	2310	7.68	13.50	93.57	2310	23.21	7.50	23.39	2310	5.80	15.80
	36	35.06	41.35	2480	11.01	10.60	27.38	2480	7.29	13.80	82.71	2480	22.03	7.51	20.68	2480	5.51	16.20
	40	39.58	36.64	2600	10.23	10.90	24.26	2610	6.80	14.20	73.27	2590	20.38	7.74	18.32	2610	5.13	16.70
	50	47.98	30.22	2830	9.18	11.40	20.01	2830	6.08	14.90	60.44	2650	17.20	8.76	15.11	2830	4.59	17.60
	56	55.95	25.91	3030	8.43	11.80	17.16	3030	5.58	15.50	51.83	2710	15.08	9.59	12.96	3030	4.22	18.00
	63	61.46	23.59	3050	7.73	12.30	15.62	3050	5.12	15.90	47.18	2770	14.04	10.00	11.80	3050	3.86	18.00
71	75.32	19.25	3050	6.31	13.80	12.75	3050	4.17	17.10	38.50	2830	11.70	11.30	9.63	3050	3.15	18.00	
90	82.25	17.63	2950	5.58	15.60	11.67	2950	3.70	18.00	35.26	2950	11.17	11.90	8.81	2950	2.79	18.00	
100	94.71	15.31	2630	4.32	18.00	10.14	2630	2.86	18.00	30.62	2630	8.65	15.20	7.65	2630	2.16	18.00	
<b>F0833</b>	100	102.4	14.16	3050	4.69	17.30	9.38	3050	3.10	18.00	28.32	3020	9.28	11.10	7.08	3050	2.34	18.00
	112	112.1	12.94	3050	4.28	18.00	8.57	3050	2.84	18.00	25.88	3050	8.57	11.70	6.47	3050	2.14	18.00
	125	126.8	11.44	3050	3.79	18.00	7.57	3050	2.51	18.00	22.88	3050	7.57	12.80	5.72	3050	1.89	18.00
	160	143.1	10.13	3050	3.35	18.00	6.71	3050	2.22	18.00	20.27	3050	6.71	13.80	5.07	3050	1.68	18.00
	180	173.5	8.36	3050	2.77	18.00	5.53	3050	1.83	18.00	16.72	3050	5.53	15.70	4.18	3050	1.38	18.00
	200	202.3	7.17	3050	2.37	18.00	4.75	3050	1.57	18.00	14.34	3050	4.74	17.20	3.58	3050	1.19	18.00
	225	222.2	6.53	3050	2.16	18.00	4.32	3050	1.43	18.00	13.05	3050	4.32	18.00	3.26	3050	1.08	18.00
	280	272.3	5.32	3050	1.76	18.00	3.53	3050	1.17	18.00	10.65	3050	3.52	18.00	2.66	3050	0.881	18.00
320	297.4	4.88	3050	1.61	18.00	3.23	3050	1.07	18.00	9.75	3050	3.23	18.00	2.44	3050	0.807	18.00	
360	342.4	4.23	3040	1.40	18.00	2.80	3050	0.928	18.00	8.47	3050	2.80	18.00	2.12	3050	0.701	18.00	
<b>F0843</b>	400	388.5	3.73	3050	1.25	18.00	2.47	3050	0.831	18.00	7.46	3050	2.51	18.00	1.87	3050	0.627	18.00
	450	439.5	3.30	3050	1.11	18.00	2.18	3050	0.734	18.00	6.60	3050	2.22	18.00	1.65	3050	0.555	18.00
	500	496.2	2.92	3050	0.982	18.00	1.93	3050	0.650	18.00	5.85	3050	1.96	18.00	1.46	3050	0.491	18.00
	560	577.1	2.51	3050	0.845	18.00	1.66	3050	0.559	18.00	5.03	3050	1.69	18.00	1.26	3050	0.422	18.00
	630	601.5	2.41	3050	0.810	18.00	1.60	3050	0.537	18.00	4.82	3050	1.62	18.00	1.21	3050	0.405	18.00
	710	701.4	2.07	3050	0.695	18.00	1.37	3050	0.460	18.00	4.13	3050	1.39	18.00	1.03	3050	0.347	18.00
	800	815.8	1.78	3050	0.598	18.00	1.18	3050	0.396	18.00	3.55	3050	1.20	18.00	0.89	3050	0.299	18.00
	900	912.7	1.59	3050	0.534	18.00	1.05	3050	0.354	18.00	3.18	3050	1.07	18.00	0.79	3050	0.267	18.00
	10C	1003	1.45	3050	0.486	18.00	0.96	3050	0.322	18.00	2.89	3050	0.972	18.00	0.72	3050	0.243	18.00
	11C	1098	1.32	3050	0.444	18.00	0.87	3050	0.294	18.00	2.64	3050	0.888	18.00	0.66	3050	0.222	18.00
	12C	1231	1.18	3050	0.396	18.00	0.78	3050	0.262	18.00	2.36	3050	0.792	18.00	0.59	3050	0.198	18.00
	14C	1352	1.07	3050	0.361	18.00	0.71	3050	0.239	18.00	2.14	3050	0.721	18.00	0.54	3050	0.180	18.00
	16C	1657	0.88	3050	0.294	18.00	0.58	3050	0.195	18.00	1.75	3050	0.588	18.00	0.44	3050	0.147	18.00
	18C	1801	0.81	3050	0.271	18.00	0.53	3050	0.179	18.00	1.61	3050	0.541	18.00	0.40	3050	0.135	18.00
	20C	1979	0.73	3050	0.246	18.00	0.49	3050	0.163	18.00	1.47	3050	0.493	18.00	0.37	3050	0.123	18.00
	22C	2167	0.6															

# F SERIES

## RATINGS

**Key:** Pm= Input Power (kW) M2= Output Torque (Nm) i= Exact Ratio n2= Output Speed (rpm) Fra = Overhung load (kN)

			n1 = 1450				n1 = 960				n1 = 2900				n1 = 725			
	in	i	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra
<b>F0923</b>	6.3	6.57	220.81	2940	69.72	24.50	146.19	3290	51.66	26.20	441.63	2330	110.5	20.50	110.41	3290	39.01	28.90
	9.0	9.04	160.40	3459	59.59	24.80	106.19	3980	45.39	27.00	320.80	2740	94.40	20.50	80.20	4260	36.69	29.60
	10.	10.13	143.11	3657	56.21	24.80	94.75	4210	42.84	27.60	286.22	2900	89.14	20.50	71.55	4310	33.12	31.00
	12.	11.37	127.49	3870	52.99	25.20	84.41	4310	39.07	28.70	254.98	3060	83.80	20.50	63.75	4310	29.51	32.60
	14.	14.66	98.94	4345	46.16	26.70	65.50	4310	30.32	32.20	197.87	3440	73.10	21.90	49.47	4310	22.90	35.00
	16.	16.37	88.56	4393	41.78	28.10	58.63	4310	27.14	33.80	177.12	3550	67.53	22.70	44.28	4310	20.50	35.00
	20.	20.45	70.91	4500	34.27	31.10	46.95	4310	21.73	35.00	141.83	3820	58.18	24.10	35.46	4310	16.41	35.00
	22.	22.70	63.87	4500	30.87	32.60	42.29	4310	19.57	35.00	127.75	3970	54.47	24.80	31.94	4310	14.78	35.00
	25.	25.88	56.02	4500	27.07	34.50	37.09	4310	17.17	35.00	112.04	4120	49.57	25.80	28.01	4310	12.96	35.00
	28.	29.11	49.80	4500	24.07	35.00	32.97	4310	15.26	35.00	99.61	4310	46.11	26.60	24.90	4310	11.53	35.00
	32.	32.96	43.99	4500	21.26	35.00	29.13	4310	13.48	35.00	87.99	4310	40.73	28.20	22.00	4310	10.18	35.00
	36.	36.69	39.52	4500	19.10	35.00	26.17	4310	12.11	35.00	79.04	4310	36.59	29.60	19.76	4310	9.15	35.00
	40.	40.76	35.57	4500	17.19	35.00	23.55	4310	10.90	35.00	71.15	4310	32.93	31.10	17.79	4310	8.23	35.00
	50.	49.85	29.09	4500	14.06	35.00	19.26	4310	8.91	35.00	58.17	4310	26.93	33.90	14.54	4310	6.73	35.00
	56.	57.58	25.18	4500	12.17	35.00	16.67	4310	7.72	35.00	50.37	4310	23.31	35.00	12.59	4310	5.83	35.00
	63.	63.56	22.81	4500	11.02	35.00	15.10	4310	6.99	35.00	45.62	4310	21.12	35.00	11.41	4310	5.28	35.00
71.	77.26	18.77	4500	9.07	35.00	12.43	4310	5.75	35.00	37.54	4310	17.38	35.00	9.38	4310	4.34	35.00	
90.	87.44	16.58	4500	8.01	35.00	10.98	4310	5.08	35.00	33.17	4310	15.35	35.00	8.29	4310	3.84	35.00	
100	98.32	14.75	4500	7.13	35.00	9.76	4310	4.52	35.00	29.49	4310	13.65	35.00	7.37	4310	3.41	35.00	
<b>F0933</b>	100	105.3	13.78	4500	6.73	35.00	9.12	4310	4.27	35.00	27.55	4310	12.88	35.00	6.89	4310	3.22	35.00
	112	115.2	12.59	4500	6.15	35.00	8.33	4310	3.90	35.00	25.18	4310	11.77	35.00	6.29	4310	2.94	35.00
	125	130.3	11.13	4500	5.43	35.00	7.37	4310	3.45	35.00	22.25	4310	10.41	35.00	5.56	4310	2.60	35.00
	160	147.1	9.86	4500	4.81	35.00	6.53	4310	3.05	35.00	19.71	4310	9.22	35.00	4.93	4310	2.30	35.00
	180	178.3	8.13	4500	3.97	35.00	5.38	4310	2.52	35.00	16.26	4310	7.61	35.00	4.07	4310	1.90	35.00
	200	208.0	6.97	4500	3.40	35.00	4.62	4310	2.16	35.00	13.94	4310	6.52	35.00	3.49	4310	1.63	35.00
	225	228.4	6.35	4500	3.10	35.00	4.20	4310	1.97	35.00	12.69	4310	5.94	35.00	3.17	4310	1.48	35.00
	280	279.9	5.18	4500	2.53	35.00	3.43	4310	1.60	35.00	10.36	4310	4.84	35.00	2.59	4310	1.21	35.00
	320	305.7	4.74	4500	2.32	35.00	3.14	4310	1.47	35.00	9.49	4310	4.44	35.00	2.37	4310	1.11	35.00
	360	352.0	4.12	4500	2.01	35.00	2.73	4310	1.28	35.00	8.24	4310	3.85	35.00	2.06	4310	0.963	35.00
<b>F0943</b>	400	413.2	3.51	4500	1.74	35.00	2.32	4310	1.10	35.00	7.02	4310	3.33	35.00	1.75	4310	0.834	35.00
	450	459.9	3.15	4500	1.56	35.00	2.09	4310	0.99	35.00	6.31	4310	3.00	35.00	1.58	4310	0.749	35.00
	500	511.0	2.84	4500	1.41	35.00	1.88	4310	0.893	35.00	5.68	4310	2.70	35.00	1.42	4310	0.674	35.00
	560	573.0	2.53	4500	1.26	35.00	1.68	4310	0.796	35.00	5.06	4310	2.40	35.00	1.27	4310	0.601	35.00
	630	637.9	2.27	4500	1.13	35.00	1.50	4310	0.715	35.00	4.55	4310	2.16	35.00	1.14	4310	0.540	35.00
	710	708.7	2.05	4500	1.015	35.00	1.35	4310	0.644	35.00	4.09	4310	1.94	35.00	1.02	4310	0.486	35.00
	800	807.1	1.80	4500	0.891	35.00	1.19	4310	0.565	35.00	3.59	4310	1.71	35.00	0.90	4310	0.427	35.00
	900	896.7	1.62	4500	0.802	35.00	1.07	4310	0.509	35.00	3.23	4310	1.54	35.00	0.81	4310	0.384	35.00
	10C	1002	1.45	4500	0.718	35.00	0.96	4310	0.455	35.00	2.90	4310	1.38	35.00	0.72	4310	0.344	35.00
	11C	1113	1.30	4500	0.646	35.00	0.86	4310	0.410	35.00	2.61	4310	1.24	35.00	0.65	4310	0.310	35.00
	12C	1267	1.14	4500	0.568	35.00	0.76	4310	0.360	35.00	2.29	4310	1.09	35.00	0.57	4310	0.272	35.00
	14C	1398	1.04	4500	0.514	35.00	0.69	4310	0.326	35.00	2.07	4310	0.99	35.00	0.52	4310	0.246	35.00
	16C	1605	0.90	4500	0.448	35.00	0.60	4310	0.284	35.00	1.81	4310	0.858	35.00	0.45	4310	0.215	35.00
	18C	1761	0.82	4500	0.408	35.00	0.55	4310	0.259	35.00	1.65	4310	0.782	35.00	0.41	4310	0.196	35.00
	20C	2030	0.71	4500	0.354	35.00	0.47	4310	0.225	35.00	1.43	4310	0.679	35.00	0.36	4310	0.170	35.00
	22C	2241	0.65	4500	0.321	35.00	0.43	4310	0.204	35.00	1.29	4310	0.615	35.00	0.32	4310	0.154	35.00
	25C	2487	0.58	4500	0.289	35.00	0.39	4310	0.183	35.00	1.17	4310	0.554	35.00	0.29	4310	0.138	35.00
	28C	2772	0.52	4500	0.259	35.00	0.35	4310	0.165	35.00	1.05	4310	0.497	35.00	0.26	4310	0.124	35.00
32C	3109	0.47	4500	0.231	35.00	0.31	4310	0.147	35.00	0.93	4310	0.443	35.00	0.23	4310	0.111	35.00	
36C	3720	0.39	4500	0.193	35.00	0.26	4310	0.123	35.00	0.78	4310	0.370	35.00	0.19	4310	0.093	35.00	
40C	4172	0.35	4500	0.172	35.00	0.23	4310	0.109	35.00	0.70	4310	0.330	35.00	0.17	4310	0.083	35.00	
45C	4722	0.31	4500	0.152	35.00	0.20	4310	0.097	35.00	0.61	4310	0.292	35.00	0.15	4310	0.073	35.00	
50C	5310	0.27	4500	0.135	35.00	0.18	4310	0.086	35.00	0.55	4310	0.259	35.00	0.14	4310	0.065	35.00	
<b>F1023</b>	6.3	6.43	225.41	4808	116.4	43.00	149.24	4830	77.41	43.00	450.83	4220	204.3	36.00	112.71	4830	58.46	43.00
	9.0	8.99	161.37	5913	102.5	43.00	106.84	6280	72.06	43.00	322.73	5060	175.4	36.90	80.68	6290	54.50	43.00
	10.	9.77	148.38	6181	98.49	43.00	98.24	6690	70.58	43.00	296.75	5280	168.3	38.00	74.19	6690	53.30	43.00
	12.	11.10	130.63	6595	92.52	43.00	86.49	7340	68.18	43.00	261.26	5600	157.1	39.20	65.32	7340	51.49	43.00
	14.	14.46	100.29	7297	78.59	43.00	66.40	7630	54.41	43.00	200.58	6250	134.6	39.50	50.15	7630	41.09	43.00
	16.	15.61	92.89	7479	74.62	43.00	61.50	7540	49.80	43.00	185.79	6350	126.7	39.90	46.45	7540	37.61	43.00
	20.	20.05	72.30	7892	61.28	43.00	47.87	7910	40.67	43.00	144.61	7000	108.7	40.00	36.15	7910	30.71	43.00
	22.	22.76	63.70	7969	54.52	43.00	42.17	7990	36.19	43.00	127.40	7270	99.47	40.60	31.85	7990	27.33	43.00
	25.	25.77	56.27	7902	47.75	43.00	37.26	7926	31.71	43.00	112.54	7440	89.93	41.00				

# F SERIES

## RATINGS

**Key:** Pm= Input Power (kW) M2= Output Torque (Nm) i= Exact Ratio n2= Output Speed (rpm) Fra = Overhung load (kN)

			n1 = 1450				n1 = 960				n1 = 2900				n1 = 725			
	in	i	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra	n2	M2	Pm	Fra
<b>F1033</b>	100	104.9	13.83	8000	12.00	43.00	9.15	8000	7.95	43.00	27.65	8000	24.01	43.00	6.91	8000	6.00	43.00
	112	118.7	12.21	8000	10.60	43.00	8.09	8000	7.02	43.00	24.43	8000	21.21	43.00	6.11	8000	5.30	43.00
	125	132.1	10.97	8000	9.53	43.00	7.26	8000	6.31	43.00	21.95	8000	19.05	43.00	5.49	8000	4.76	43.00
	160	146.8	9.88	8000	8.57	43.00	6.54	8000	5.68	43.00	19.75	8000	17.15	43.00	4.94	8000	4.29	43.00
	180	179.6	8.08	8000	7.01	43.00	5.35	8000	4.64	43.00	16.15	8000	14.02	43.00	4.04	8000	3.51	43.00
	200	207.4	6.99	8000	6.07	43.00	4.63	8000	4.02	43.00	13.98	8000	12.14	43.00	3.50	8000	3.03	43.00
	225	228.9	6.33	8000	5.50	43.00	4.19	8000	3.64	43.00	12.67	8000	11.00	43.00	3.17	8000	2.75	43.00
	280	278.3	5.21	8000	4.52	43.00	3.45	8000	2.99	43.00	10.42	8000	9.05	43.00	2.61	8000	2.26	43.00
	320	314.9	4.60	8000	4.00	43.00	3.05	8000	2.65	43.00	9.21	8000	7.99	43.00	2.30	8000	2.00	43.00
	360	354.1	4.09	8000	3.55	43.00	2.71	8000	2.35	43.00	8.19	8000	7.11	43.00	2.05	8000	1.78	43.00
<b>F1043</b>	400	411.3	3.53	8000	3.11	43.00	2.33	8000	2.06	43.00	7.05	8000	6.22	43.00	1.76	8000	1.55	43.00
	450	457.9	3.17	8000	2.79	43.00	2.10	8000	1.85	43.00	6.33	8000	5.58	43.00	1.58	8000	1.40	43.00
	500	508.7	2.85	8000	2.51	43.00	1.89	8000	1.66	43.00	5.70	8000	5.03	43.00	1.43	8000	1.26	43.00
	560	565.6	2.56	8000	2.26	43.00	1.70	8000	1.50	43.00	5.13	8000	4.52	43.00	1.28	8000	1.13	43.00
	630	622.2	2.33	8000	2.05	43.00	1.54	8000	1.36	43.00	4.66	8000	4.11	43.00	1.17	8000	1.03	43.00
	710	715.0	2.03	8000	1.79	43.00	1.34	8000	1.18	43.00	4.06	8000	3.58	43.00	1.01	8000	0.894	43.00
	800	810.7	1.79	8000	1.58	43.00	1.18	8000	1.04	43.00	3.58	8000	3.15	43.00	0.89	8000	0.789	43.00
	900	894.2	1.62	8000	1.43	43.00	1.07	8000	0.947	43.00	3.24	8000	2.86	43.00	0.81	8000	0.715	43.00
	10C	1024	1.42	8000	1.25	43.00	0.937	8000	0.827	43.00	2.83	8000	2.50	43.00	0.71	8000	0.624	43.00
	11C	1140	1.27	8000	1.12	43.00	0.842	8000	0.742	43.00	2.54	8000	2.24	43.00	0.64	8000	0.561	43.00
	12C	1256	1.15	8000	1.02	43.00	0.764	8000	0.674	43.00	2.31	8000	2.04	43.00	0.58	8000	0.509	43.00
	14C	1386	1.05	8000	0.923	43.00	0.693	8000	0.611	43.00	2.09	8000	1.85	43.00	0.52	8000	0.461	43.00
	16C	1601	0.906	8000	0.799	43.00	0.600	8000	0.529	43.00	1.81	8000	1.60	43.00	0.45	8000	0.399	43.00
	18C	1794	0.808	8000	0.713	43.00	0.535	8000	0.472	43.00	1.62	8000	1.43	43.00	0.40	8000	0.356	43.00
	20C	2025	0.716	8000	0.631	43.00	0.474	8000	0.418	43.00	1.43	8000	1.26	43.00	0.36	8000	0.316	43.00
	22C	2236	0.649	8000	0.572	43.00	0.429	8000	0.379	43.00	1.30	8000	1.14	43.00	0.32	8000	0.286	43.00
	25C	2481	0.584	8000	0.515	43.00	0.387	8000	0.341	43.00	1.17	8000	1.03	43.00	0.29	8000	0.258	43.00
	28C	2796	0.519	8000	0.457	43.00	0.343	8000	0.303	43.00	1.04	8000	0.915	43.00	0.26	8000	0.229	43.00
	32C	3261	0.445	8000	0.392	43.00	0.294	8000	0.260	43.00	0.89	8000	0.784	43.00	0.22	8000	0.196	43.00
	36C	3752	0.386	8000	0.341	43.00	0.256	8000	0.226	43.00	0.77	8000	0.682	43.00	0.19	8000	0.170	43.00
40C	4168	0.348	8000	0.307	43.00	0.230	8000	0.203	43.00	0.70	8000	0.613	43.00	0.17	8000	0.153	43.00	
45C	4718	0.307	7750	0.263	43.00	0.203	7750	0.174	43.00	0.61	7750	0.525	43.00	0.15	7750	0.131	43.00	
50C	5305	0.273	7040	0.212	43.00	0.181	7040	0.140	43.00	0.55	7040	0.424	43.00	0.14	7040	0.106	43.00	

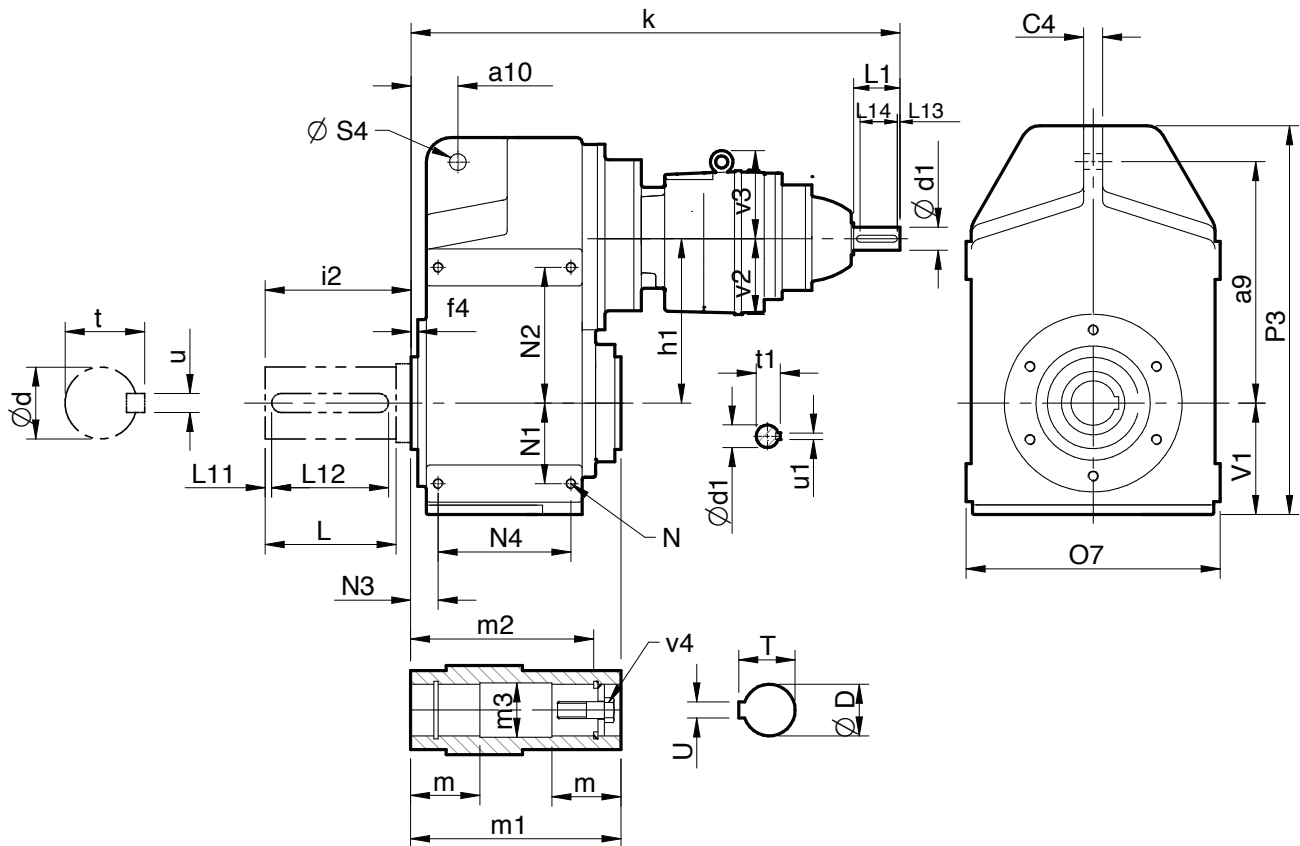
**Note:** Input power Pm may exceed thermal power rating



# F SERIES

## DIMENSIONS

### QUADRUPLE REDUCTION



	a9	a10	C4	f4	h1	N	N1	N2	N3	N4	O7	P3	S4	v1	v2	v3
<b>F0343</b>	158	31.5	12	3	102.8	M8	31	84	22.5	77	165	252	14	77	76	74
<b>F0443</b>	170	32	12	3	120	M10	50	60	24	90	176	289	14	88	76	74
<b>F0543</b>	198	40.5	14	3	139.2	M12	55	115	33.5	102	200	327	14	97	91	90
<b>F0643</b>	218	41	16	2	160	M12	65	85	28	125	236	367	14	110	91	90
<b>F0743</b>	278	50	20	2	200	M16	85	115	30	150	280	449	22	134	91	90
<b>F0843</b>	346	62	26	3	226	M16	100	100	35	170	340	526	22	148	115	93
<b>F0943</b>	395	70	30	5	274	M16	125	225	38	215	400	612	27	175	115	93
<b>F1043</b>	485	88	36	5.5	332	M20	158	272	41.5	250	470	748	27	216	140	155

	k	d1(k6)	L1	L13	L14	t1	u1	D (H7)	m	m1	m2	m3	T	U	v4	d	i2	L	L11	L12	t	u
<b>F0343</b>	421	16	40	4	32	18	5	30	52	120	105	30.3	33.3	8	M10x25	25 k6	50	47	3	40	28	8
<b>F0443</b>	434	16	40	4	32	18	5	35	65	150	132	35.3	38.3	10	M12x30	30 k6	60	56	3	50	33	8
<b>F0543</b>	479	16	40	4	32	18	5	40	65	166	142	40.3	43.3	12	M16x40	35 k6	70	66	3	60	38	10
<b>F0643</b>	498	16	40	4	32	18	5	40	90	200	156	40.3	43.3	12	M16x40	40 k6	81	76	3	70	43	12
<b>F0743</b>	534	16	40	4	32	18	5	50	105	235	183	50.5	53.8	14	M16x45	50 k6	101	95	3	80	53.5	14
<b>F0843</b>	604	19	40	4	32	21.5	6	60	117	265	210	60.5	64.4	18	M20x50	60 m6	120	114	3	100	64	18
<b>F0943</b>	663	19	40	4	32	21.5	6	70	147	330	270	70.5	74.9	20	M20x50	70 m6	141	135	3	110	74.5	20
<b>F1043</b>	750	24	50	5	40	27	8	90	165	370	313	90.5	95.4	25	M24x60	90 m6	172	165	5	140	95	25

# F SERIES

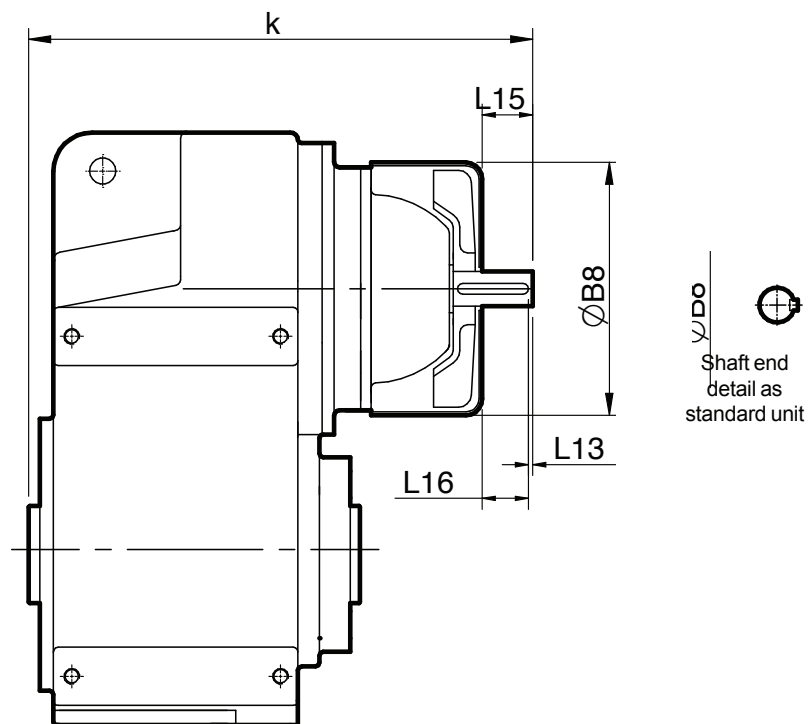
## FAN COOLED UNITS

### 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



	$\text{Ø}B8$	$k$	$L13$	$L15$	$L16$
<b>F0723</b>	225	335	5	35	30
<b>F0823</b>	265	408	5	45	40
<b>F0923</b>	320	491	5	65	60
<b>F1023</b>	380	576	10	95	85

# F SERIES REDUCER BACKSTOP MODULE

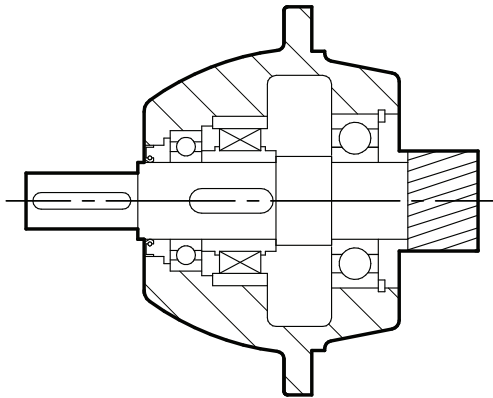
The reducer units listed below can be fitted with an internal backstop, this has no effect of the external unit size. The backstop device incorporates high quality centrifugal lift off sprags which are wear free above the lift off speed (n min). To ensure correct operation input speed must exceed lift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

Suitable for ambient temperature -40°C to + 50°C

### Column 10 Entry

For reducer backstop modules enter:

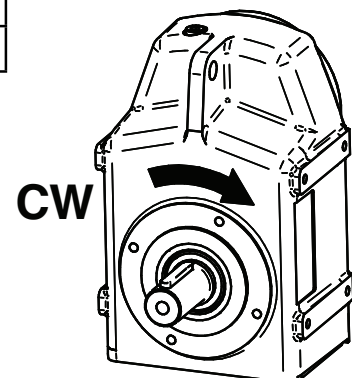
W for CCW rotation      (or  Z if used in conjunction with a fan kit)  
 X for CW rotation        (or  Y if used in conjunction with a fan kit)



Size	Lift off Speed ('n' min) (at inputshaft) (rev/min)	Rated Locking Torque ('T max') (at inputshaft) (Nm)
F0523	800	100
F0623	800	100
F0723	670	170
K0733	800	100
F0823	670	300
F0833	670	170
F0843	800	100
F0923	670	940
F0933	670	300
F0943	800	100
F1023	670	1280
F1033	610	940
F1043	670	170

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

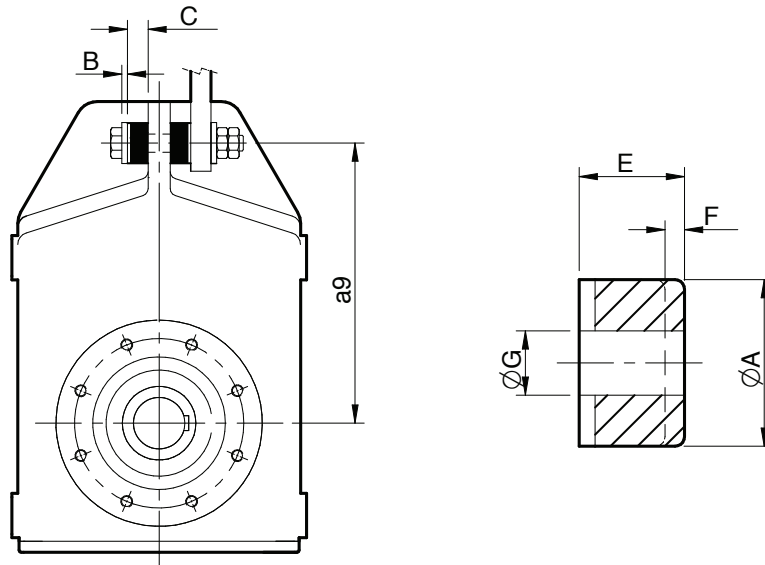
CW    -    Free Rotation    -    Clockwise  
        -    Locked             -    Anticlockwise  
  
 AC    -    Free Rotation    -    Anticlockwise  
        -    Locked             -    Clockwise



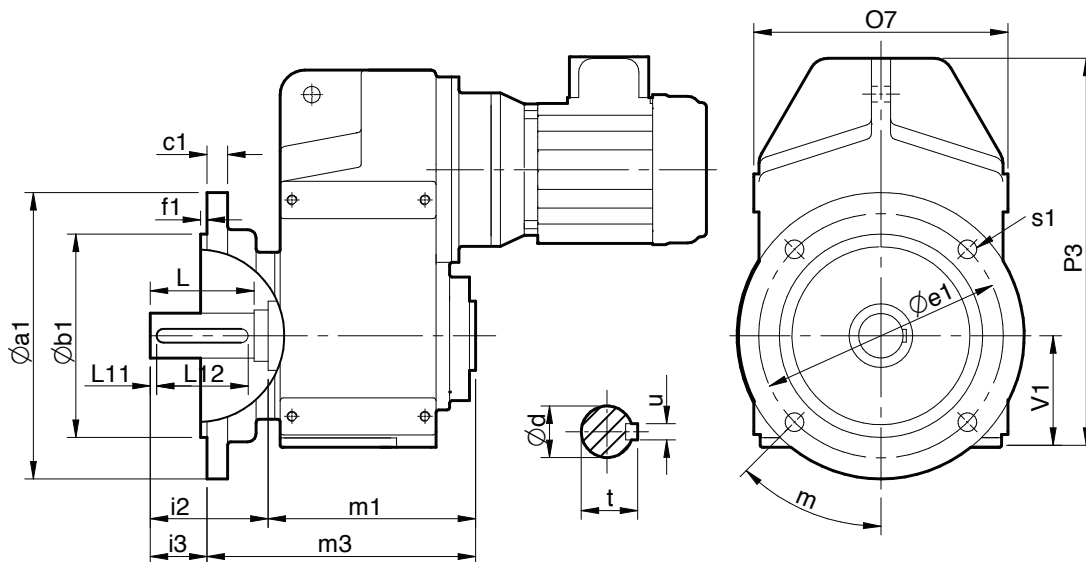
# F SERIES

## DIMENSIONS

### TORQUE BUSHES & OUTPUT FLANGE



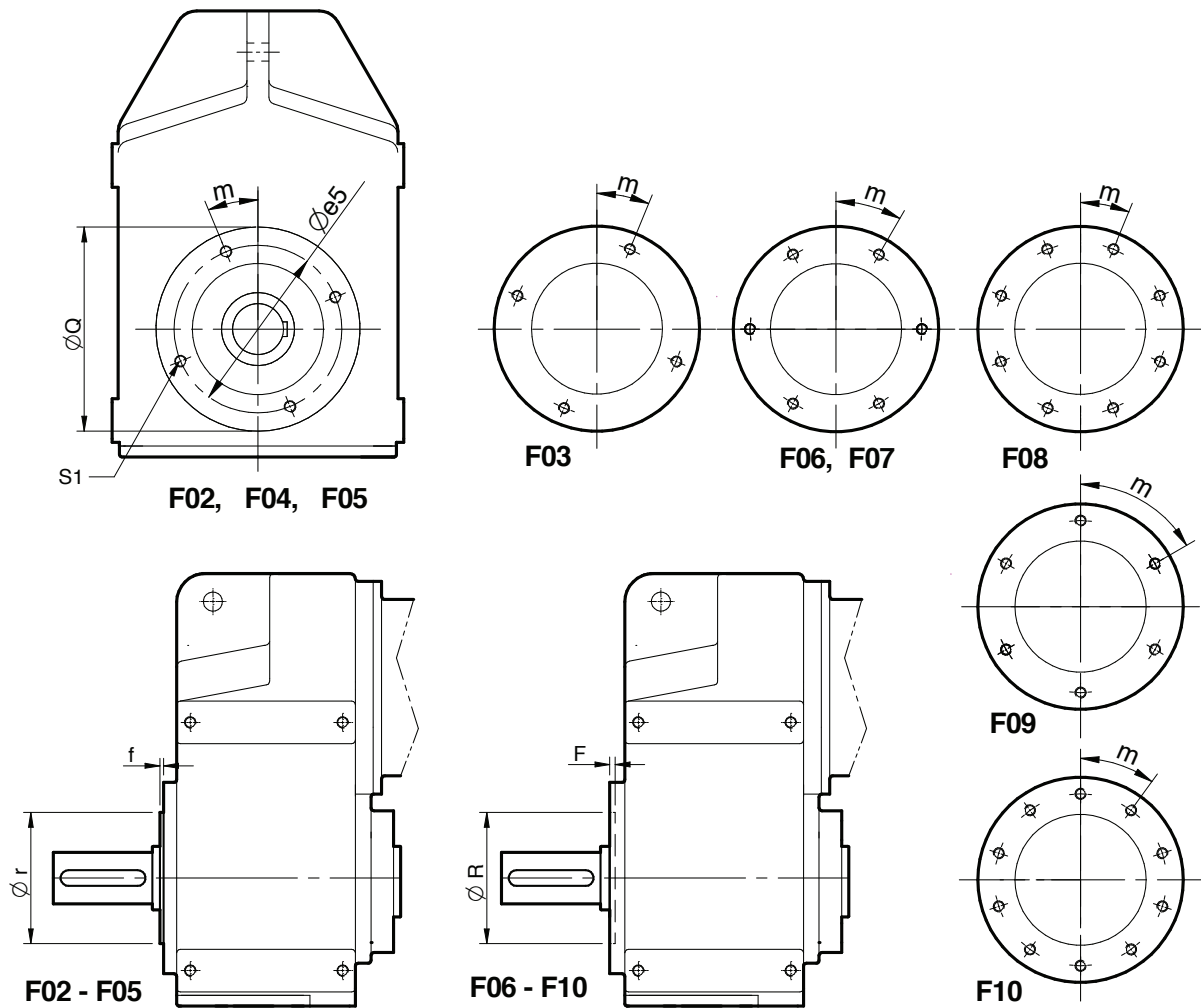
	A	B (min)	C	a9	E	F	G
<b>F02</b>	40	2	18.5	140	20	1.5	13
<b>F03</b>	40	2	18	158	20	2	13
<b>F04</b>	40	2	18	170	20	2	13
<b>F05</b>	40	2	18	198	20	2	13
<b>F06</b>	40	2	18	218	20	2	13
<b>F07</b>	62	10	30	278	33	3	23
<b>F08</b>	62	10	29	346	33	4	23
<b>F09</b>	82	12	40	395	44	4	26
<b>F10</b>	82	12	39	485	44	5	26



	a1	b1	c1	e1	f1	m	m1	m3	O7	P3	s1	V1	d	i2	i3	L	L11	L12	t	u
<b>F02</b>	160	110 j6	10	130	4	45°	117.5	141.5	144	225	9 (x4)	62	-	-	-	-	-	-	-	-
<b>F03</b>	160	110 j6	10	130	4	45°	120	146	165	252	9 (x4)	77	25 k6	50	24	47	3	40	28	8
<b>F04</b>	200	130 j6	12	165	4	45°	150	192	176	289	11 (x4)	88	30 k6	60	18	56	3	50	33	8
<b>F05</b>	200	130 j6	12	165	4	45°	166	208	200	327	11 (x4)	97	35 k6	70	28	66	3	60	38	10
<b>F06</b>	250	180 j6	12	215	4	45°	200	239.5	236	367	14 (x4)	110	40 k6	81	41.5	76	3	70	43	12
<b>F07</b>	250	180 j6	12	215	4	45°	235	274.5	280	449	14 (x4)	134	50 k6	101	61.5	95	3	80	53.5	14
<b>F08</b>	350	250 h6	18	300	5	45°	265	312	340	526	18 (x4)	148	60 m6	120	73	114	3	100	64	18
<b>F09</b>	450	350 h6	20	400	5	22.5°	330	381	400	612	18 (x8)	175	70 m6	141	90	135	3	110	74.5	20
<b>F10</b>	450	350 h6	22	400	5	22.5°	370	430	470	748	18 (x8)	216	90 m6	172	112	165	5	140	95	25



# F SERIES DIMENSIONS C (B14) FLANGE



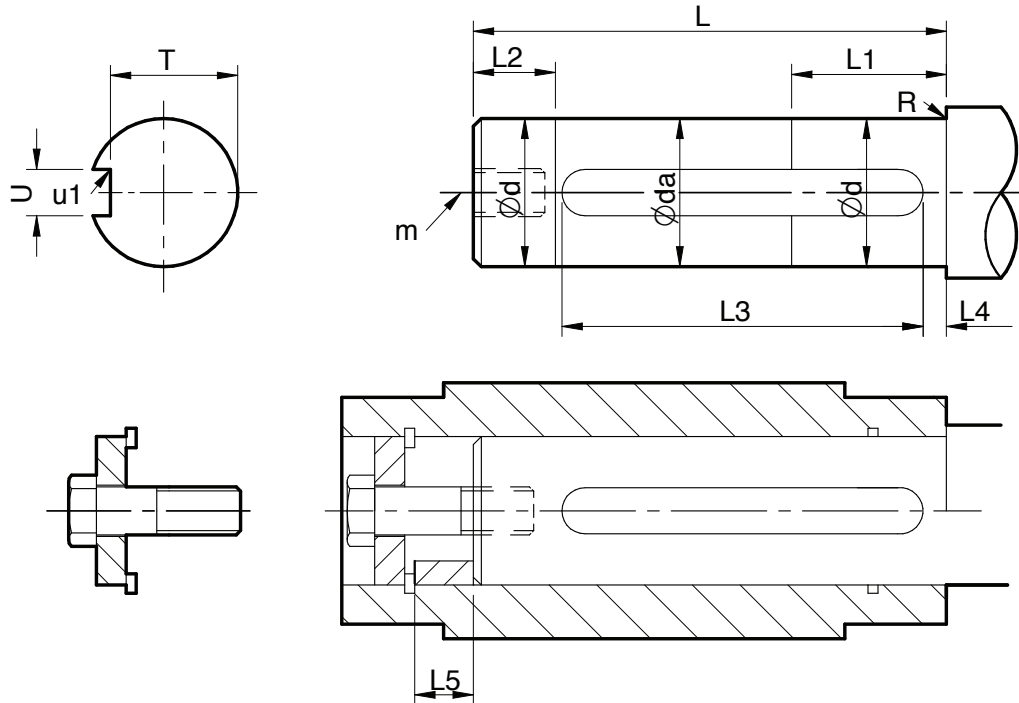
	e5	f	F	m	Q	r (j6)	R (H7)	S1
<b>F02</b>	107	3	-	22.5°	122	85	-	4 - M8 x 12
<b>F03</b>	107	3	-	22.5°	122	85	-	4 - M8 x 12
<b>F04</b>	130	3	-	22.5°	146	105	-	4 - M8 x 12
<b>F05</b>	130	3	-	22.5°	146	105	-	4 - M8 x 12
<b>F06</b>	150	-	4.5	30°	180	-	130	6 - M12 x 20
<b>F07</b>	150	-	4.5	30°	180	-	130	6 - M12 x 20
<b>F08</b>	195	-	5	22.5°	230	-	150	8 - M12 x 20
<b>F09</b>	230	-	6	60°	280	-	180	6 - M16 x 27
<b>F10</b>	280	-	7	36°	310	-	210	10 - M16 x 27

# F SERIES

## DIMENSIONS

### STANDARD BORE ASSEMBLY

#### Assembly Onto Shaft - Customers Shaft Detail



	d	da	L	L1	L2	L3	L4	L5	m	N	R	T	U	u1
<b>F02</b>	24.993/ 24.980	24.6	82	40	13	70.3 70.0	3	23	M10x1.5x22	15Nm	0.8R	21.0 20.8	8.000/ 7.964	0.16 0.25R
<b>F03</b>	29.993/ 29.980	29.6	82	45	15	70.3 70.0	3	23	M10x1.5x22	15Nm	0.8R	26.0 25.8	8.000/ 7.964	0.16 0.25R
<b>F04</b>	34.991/ 34.975	34.6	109	60	20	90.5 90.0	3	23	M12x1.75x30	20Nm	0.8R	30.0 29.8	10.000/ 9.964	0.16 0.25R
<b>F05</b>	39.991/ 39.975	39.6	112	60	20	92.5 92.0	3	30	M16x2x38	45Nm	0.8R	35.0 34.8	12.000/ 11.957	0.4 0.25R
<b>F06</b>	39.991/ 39.975	39.6	126	75	25	100.5 100.0	3	30	M16x2x38	45Nm	0.8R	35.0 34.8	12.000/ 11.957	0.4 0.25R
<b>F07</b>	49.991/ 49.975	49.6	153	90	30	130.5 130.0	3	30	M16x2x38	45Nm	0.8R	44.0 44.3	14.000/ 13.957	0.4 0.25R
<b>F08</b>	59.990/ 59.971	59.6	173	90	30	148.5 148.0	3	37	M20x2.5x42	85Nm	0.8R	53.0 52.8	18.000/ 17.957	0.4 0.25R
<b>F09</b>	69.991/ 69.975	69.6	232	105	35	161.5 161.0	3	38	M20x2.5x42	85Nm	0.8R	62.5 62.3	20.000/ 19.948	0.6 0.4R
<b>F10</b>	89.988/ 89.966	89.6	275	135	40	188.5 188.0	5	38	M24x3.0x50	200Nm	0.8R	81.0 80.8	25.000/ 24.948	0.6 0.4R

#### Assembly Instructions

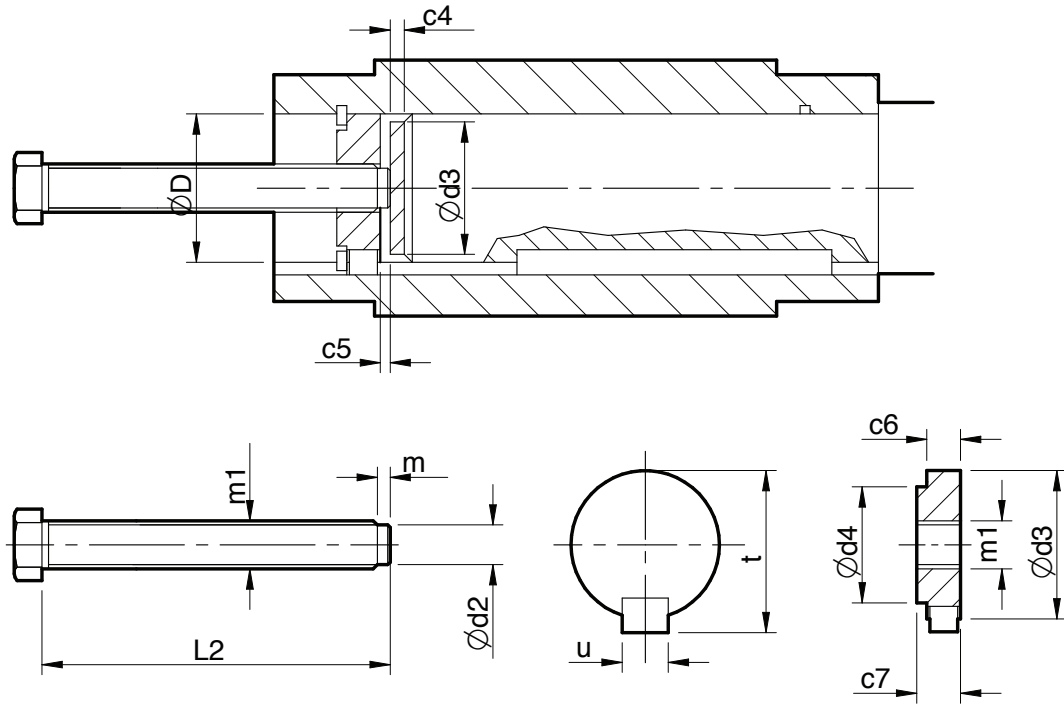
1. Spray the hollow shaft bore and mating diameter of the output shaft with Rocol DFSM or equivalent anti-scuffing spray.
2. Fit key into shaft.
3. Fit the circlip into the output sleeve.
4. Fit the spacer tube only if the output shaft has no shoulder, then fit the output shaft into the output sleeve.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

# F SERIES

## DIMENSIONS

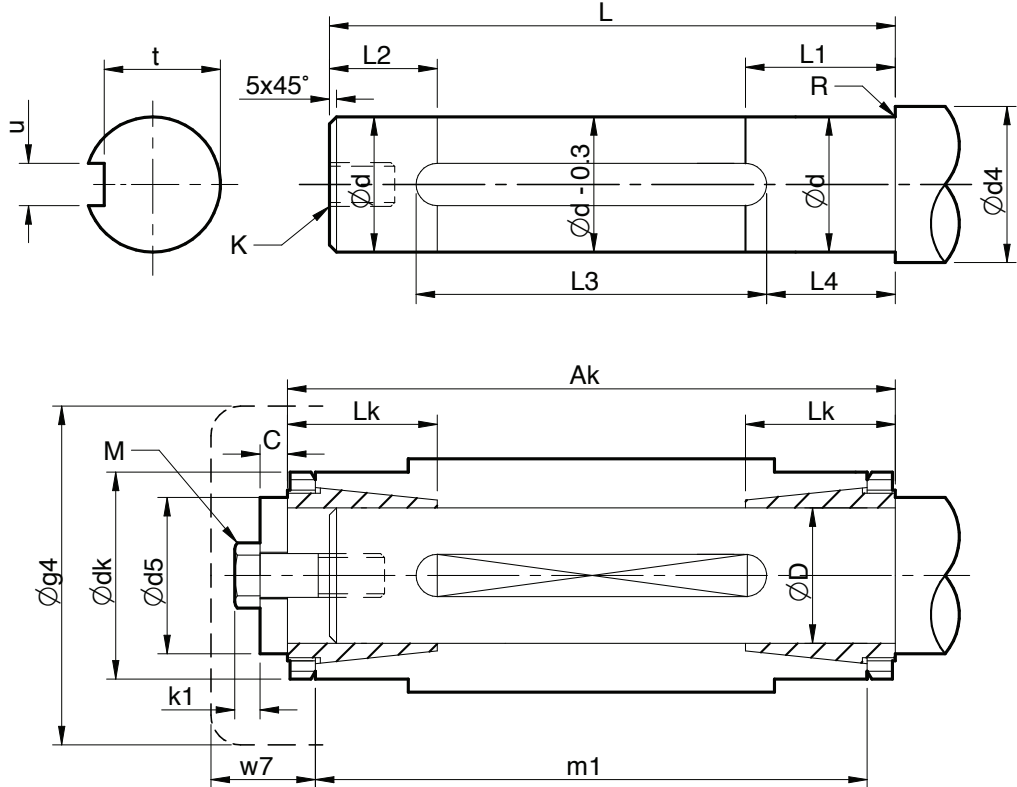
### STANDARD BORE DISASSEMBLY

#### Disassembly Method from Shaft



	c4	c5	c6	c7	D	d2	d3	d4	L2	m	m1	t	u
F02	5	3	15	17	25	10	24.9	16	120	3	M12 x 1.75	28	8
F03	5	3	15	17	30	13	29.9	20	130	3	M16 x 2.0	33	8
F04	5	3	15	17	35	13	34.9	25	160	3	M16 x 2.0	38	10
F05	5	4	20	23	40	20	39.9	29	190	3	M24 x 2.5	43	12
F06	5	4	20	23	40	20	39.9	29	190	3	M24 x 3.0	43	12
F07	5	4	20	23	50	20	49.9	39	220	3	M24 x 3.0	53.5	14
F08	8	5	24	27	60	25	59.9	47	250	5	M30 x 3.5	64	18
F09	8	6	24	27	70	25	69.9	53	310	5	M30 x 3.5	74.5	20
F10	8	6	24	27	90	25	89.9	72	360	5	M30 x 3.5	95	25

# F SERIES DIMENSIONS KIBO BUSHING



	d (h8)	Kibo	Col 11	d4	K	L	L1	L2	L3	L4	R	t	u (N9)	dk	m1	Ak	Lk	d5	C	M	e	k1	Nm	g4	w7
F04	35	C38214-S1	1	40-42	M12x28	168	40	36	60	60	1.2	30	10	65	150	174	40	45	10	M12	22	8	56	80	35
	30	C38214-S3	2	35-42	M10x22							26	8							M10	20	7	40		
	25	C38214-S4	3	30-42	M10x22							21	8							M10	20	7	40		
F05	35	C38214-S1	1	40-42	M12x28	185	40	36	60	60	1.2	30	10	65	166	190	40	45	10	M12	22	8	56	85	45
	30	C38214-S3	2	35-42	M10x22							26	8							M10	20	7	40		
	25	C38214-S4	3	30-42	M10x22							21	8							M10	20	7	40		
F06	40	C38364-S2	1	45-51	M16x36	220	50	45	77	78	1.2	35	12	75	200	228	50	55	12	M16	28	10	124	85	45
	35	C38364-S3	2	40-51	M12x28							30	10							M12	22	8	56		
	30	C38364-S4	3	35-51	M10x22							26	8							M10	20	7	40		
F07	50	C38464-S9	1	55-61	M16x36	258	58	52	79	93	1.2	44.5	14	80	235	266	58	65	14	M16	28	10	124	120	45
	45	C38464-S10	2	50-61								39.5	14							M16	28	10	124		
	40	C38464-S11	3	45-61								35	12							M16	28	10	124		
F08	60	C38614-S2	1	66-71	M20x42	288	61	52	108	97	1.6	53	18	98	265	298	61	75	16	M20	35	13	240	145	55
	55	C38614-S3	2	61-71								49	16							M20	35	13	240		
	50	C38614-S4	3	56-71								M16x36	44.5							14	M16	28	10		
F09	70	C38684-S2	1	76-81	M20x42	340	70	50	131	75	1.6	62.5	20	110	330	369	67.5	85	20	M20	35	13	240	175	60
	65	C38684-S3	2	71-81								58	18							M20	35	13	240		
	60	C38684-S4	3	66-81								53	18							M20	35	13	240		
F10	80	B38834-S2	1	88-96	M20x42	390	70	60	141	115	1.6	71	22	125	370	410	52	95	22	M20	35	13	240	200	70
	75	B38834-S3	2	83-96								67.5	20							M20	35	13	240		
	70	B38834-S4	3	78-96								62.5	20							M20	35	13	240		

# F SERIES

## SHIPPING SPECIFICATION

### Weight (kg)

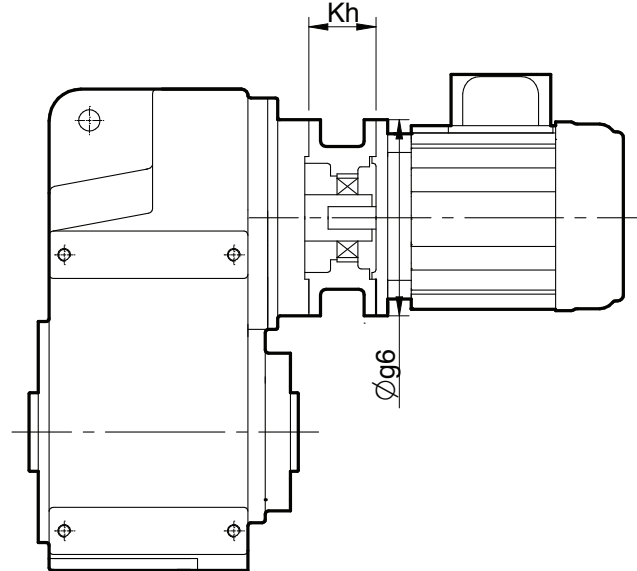
Unit size & no of reductions	F0223	F0233	F0323	F0333	F0343	F0423	F0433	F0443	F0523	F0533	F0543	F0623	F0633	F0643	F0723	F0733	F0743	F0823	F0833	F0843	F0923	F0933	F0943	F1023	F1033	F1043	
<b>Reducer version</b>	13	14	15	16	23	19	21	29	29	32	42	43	45	56	70	72	83	102	109	124	171	180	173	261	270	295	
<b>Output shaft</b>	N/A		0.7			1.1			1.3			1.8			3.5			7.0			11			19			
<b>Output flange</b>	1.4		3.0			3.0			3.0			4.0			8.0			13			15			26			
<b>63</b>	Without Motor	12	13	14	15	24	19	21	29	28	31	41	42	44	55		70	80			127			200			
	With Motor	20	21	22	23	32	27	29	37	36	39	49	50	52	63		78	88			135			208			
<b>71</b>	Without Motor	11	12	13	14	23	19	21	29	28	31	41	42	44	55		70	80			127			200			
	With Motor	22	23	24	25	34	30	32	40	39	42	52	53	55	66		81	91			138			211			
<b>80</b>	Without Motor	12	13	14	15	24	20	22	30	28	31	41	43	45	56	67	71	80	105	110	127	174	184	200		273	288
	With Motor	29	30	31	32	41	37	39	47	45	48	58	60	62	73	84	88	97	122	127	144	191	201	217		290	305
<b>90S</b>	Without Motor	12	13	14	15	24	20	22	30	29	32	42	44	46	57	67	72	80	105	110	127	174	184	200		273	288
	With Motor	37	38	39	40	49	45	47	55	54	57	67	69	71	82	92	97	105	130	135	152	199	209	225		298	313
<b>90L</b>	Without Motor	12	13	14	15	24	20	22	30	29	32	42	44	46	57	67	72	80	105	110	127	174	184	200		273	288
	With Motor	39	40	41	42	51	47	49	57	56	59	69	71	73	84	94	99	107	132	137	154	201	211	227		300	315
<b>100L</b>	Without Motor	15	16	17	18	27	21	23	31	29	32	42	48	50	61	72	76	85	105	110	127	174	184	200	254	273	288
	With Motor	53	54	55	56	65	59	61	69	67	70	80	86	88	99	110	114	123	143	148	165	212	222	238	292	311	326
<b>112M</b>	Without Motor	15	16	17	18	27	21	23	31	29	32	42	48	50	61	72	76	85	105	110	127	174	184	200	254	273	288
	With Motor	59	60	61	62	71	65	67	75	73	76	86	92	94	105	116	120	129	149	154	171	218	228	244	298	317	332
<b>132S</b>	Without Motor									32			50		74	78		105	112	127	174	183	200	254	273	288	
	With Motor								100			118			142	146		173	180	195	242	251	268	322	341	356	
<b>132M</b>	Without Motor								32			50			74	78		105	112	127	174	183	200	254	273	288	
	With Motor							105			123				147	151		178	185	200	247	256	273	327	346	361	
<b>160M</b>	Without Motor														78			115	122		181	183		263	280	297	
	With Motor														198			235	242		301	303		383	400	417	
<b>160L</b>	Without Motor														78			115	122		181	183		263	280	297	
	With Motor														208			245	252		311	313		393	410	427	
<b>180M</b>	Without Motor																				181			263	280		
	With Motor																				356			438	455		
<b>180L</b>	Without Motor																				181			263	280		
	With Motor																				366			448	565		
<b>200L</b>	Without Motor																				181			263	281		
	With Motor																				403			485	503		
<b>225S</b>	Without Motor																				195			278	296		
	With Motor																				484			567	585		
<b>225M</b>	Without Motor																				195			278	296		
	With Motor																				517			600	618		

All weights exclude lubricant and are for standard shaft mount units, for flange or base mount units add weight of flange / shaft (shown at top of table) to the figures shown above

# F SERIES MOTORISED BACKSTOP MODULE

Motorised 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°C to + 50°C



## IEC B5 Flange

Size	Lift off Speed ('n' min) (rev/min)	Rated Locking Torque ('T max') (at motor) (Nm)	øg6	Kh
100	670	170	250	70
112	670	170	250	70
132	620	940	300	95
160	620	940	350	130
180	620	940	350	130
200	550	1260	400	130

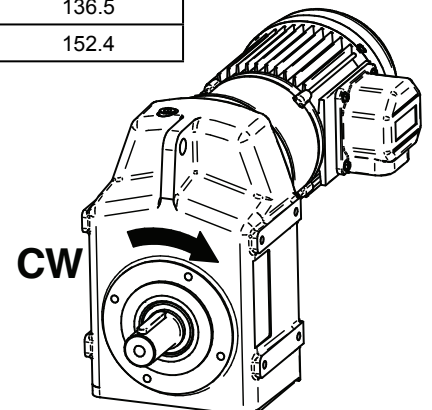
## NEMA C Flange

Size	Lift off Speed ('n' min) (rev/min)	Rated Locking Torque ('T max') (at motor) (Nm)	øg6	Kh
182TC / 184TC	670	300	228	95.25
213TC / 215TC	670	300	228	95.25
254TC / 256TC	620	940	228	120.65
284TC / 286TC	620	940	280	136.5
324TC / 326TC	550	1260	330	152.4

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

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

CW	-	Free Rotation	-	Clockwise
		Locked	-	Anticlockwise
AC	-	Free Rotation	-	Anticlockwise
		Locked	-	Clockwise



## Warning

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

## IMPORTANT

### 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 the 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.

The 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 vapour 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 instruction 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, application engineering 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 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 catalogue 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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