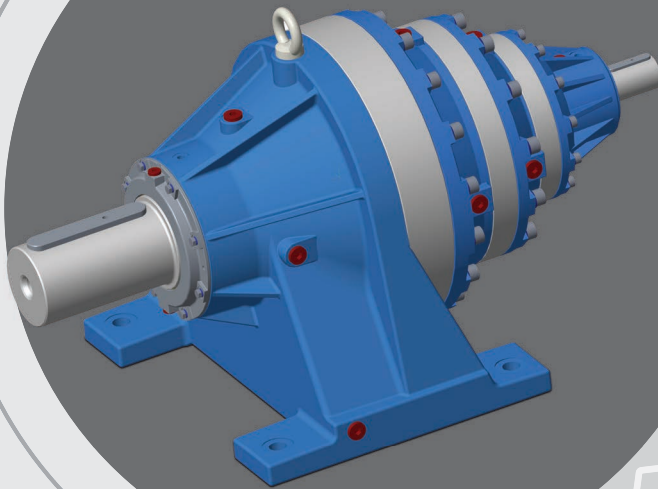


PREMIUM

Your addition in transmission

GEAREDUP

for Innovation



**Small Planetary
Gearbox**

premium-transmission.com



CONTENTS

1. INTRODUCTION	1
2. SPECIFICATIONS	1
3. FEATURES	2
3.1 DESIGN FEATURES	2
3.1.1 Gears	2
3.1.2 Planet Carrier	2
3.1.3 Bearings	2
3.1.4 Housing	2
3.1.5 Lubrication	2
4. APPLICATION	2
5. SYMBOLS AND UNITS OF MEASURE	3
6. GENERAL INFORMATION	4
6.1 OUTPUT TORQUE	4
6.1.1 Reference Torque M_{2ref} (Nm)	4
6.1.2 Rated Torque M_{n2} (Nm)	4
6.1.3 Required Torque M_{r2} (Nm)	4
6.2 POWER	4
6.2.1 Input Rated Power P_{n1} [kW]	4
6.2.2 Output Power P_2 [kW]	5
6.2.3 Thermal Power P_t [kW]	5
6.3 EFFICIENCY	5
6.4 REDUCTION RATIO i	5
6.5 ANGULAR SPEED	5
6.5.1 Input Speed n_1 (min^{-1})	5
6.5.2 Output Speed n_2 (min^{-1})	5
6.6 SERVICE FACTOR f_s	5
6.7 SERVICE FACTOR REQUESTED BY APPLICATION f_2	5
6.8 LIFE FACTOR F_{h1}, F_{h2}	5



CONTENTS

7. GEARBOX SELECTION PROCEDURE	6
7.1 GEARBOX SELECTION FLOW-CHART	6
7.2 GEARBOX SELECTION BY TORQUE REQUESTED BY APPLICATION	7
7.3 VERIFICATION FOR THERMAL POWER	10
7.4 VERIFICATION FOR OVERHUNG LOADS	11
8. ORDERING LOGIC	12
9. OVERHUNG LOAD CAPACITY	13
9.1 OVERHUNG LOAD CAPACITY LOW SPEED SHAFT (OUTPUT)	13
9.2 OVERHUNG LOAD CAPACITY HIGH SPEED SHAFT (INPUT)	14
10. MECHANICAL RATING CHARTS	15
11. DIMENSIONS CHART	63
11.1 DIMENSIONS OF FOOT MOUNTED UNIT	63
11.2 DIMENSIONS OF FLANGE MOUNTED UNIT	64
11.3 MOTOR MOUNTING DETAILS (AS PER IEC)	66
11.4 AVAILABLE IEC MOTOR FRAME SIZES AS PER MODEL & L1 DISTANCE	67
12. OIL QUANTITY	68
13. WEIGHT CHART	69
13.1 FOOT MOUNTING (WEIGHT IN Kgs)	69
13.2 FLANGE MOUNTING (WEIGHT IN Kgs)	70
14. LUBRICATION	71

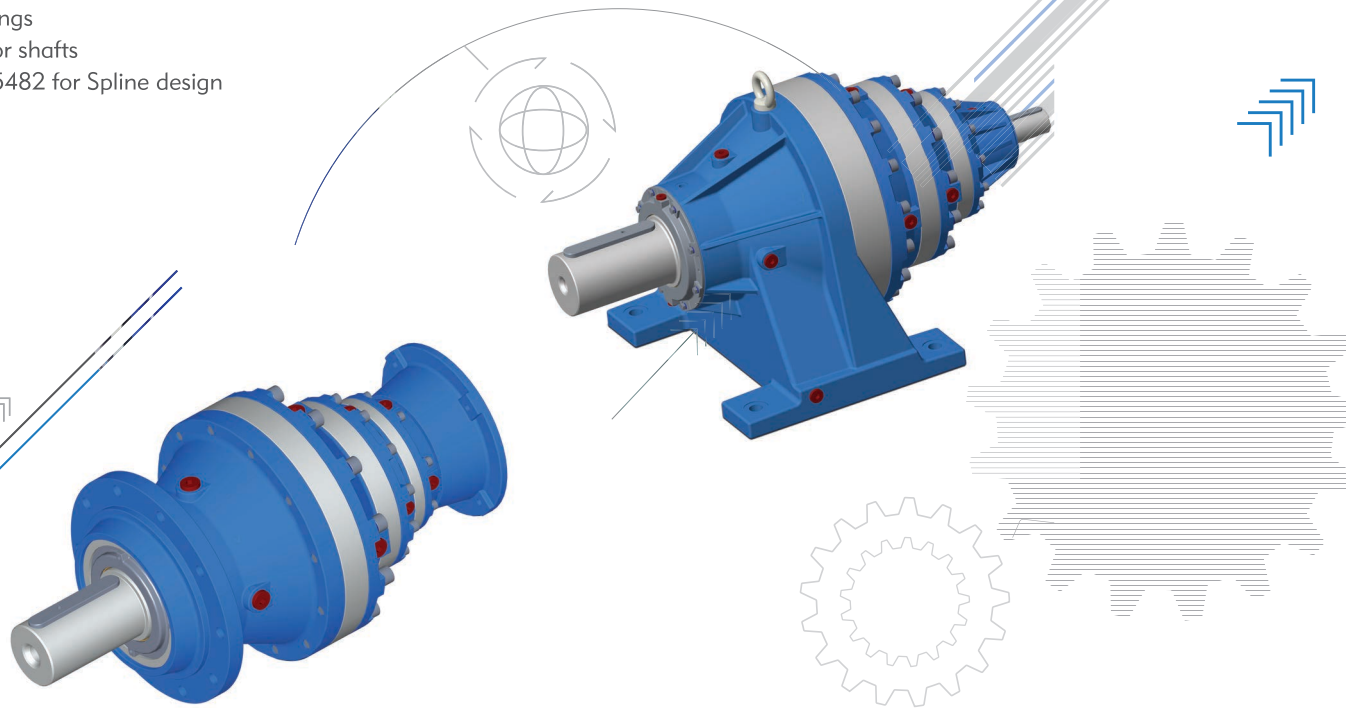


1. INTRODUCTION

This catalogue presents Premium Transmission Pvt. Ltd.'s range of Small Planetary Gearbox Series having modularity to increase flexibility in internal production so as to ensure quick availability of products in the sizes and types requested either from the customer or from the wide dealer network spread around the world.

The gearboxes are designed in conformity with the following standards:

- ISO 6336: 2006 – Method B for gears
- ISO 281 for bearings
- DIN 743: 2012 for shafts
- DIN 5480 / DIN 5482 for Spline design



2. SPECIFICATIONS

The Small Planetary series consist of multi-purpose planetary gearboxes that can be operated by electric motors. Following are the specification of the series;

Small Planetary Gearbox series Range:



Single Stage Models:	SP1-10L to SP1-18L, 9 Sizes
Double Stage Models:	SP2-10L to SP2-21L, 12 Sizes
Triple Stage Models:	SP3-10L to SP3-21L, 12 Sizes
Quadruple Stage Models:	SP4-10L to SP4-21L, 12 Sizes

Reduction Ratio Range:	
Single Stage Ratios Range:	3.89:1 to 7.5:1, 5 Ratios
Double Stage Ratios Range:	15.12:1 to 56.25:1, 13 Ratios
Triple Stage Ratios Range:	58.82:1 to 348.75:1, 23 Ratios
Quadruple Ratios Range:	228.75:1 to 3164.06:1, 42 Ratios

Mounting Configurations:	Foot & Flange
Output torque	up to 72250 Nm
Versions:	In-Line
Input mounting configuration:	Solid, Hollow input shaft

Motor mounting directly to gearbox is available for 12 frame sizes ranging from 063 to 250 as per IEC.



3. FEATURES

- Wide range of Ratios & Torque selection.
- Modular construction.
- High Efficiency.
- Available in Wide frame Size Range.
- High Radial & Axial Load carrying capacities.
- Interchangeability of components.
- Easy for maintenance.
- Inner parts are coupled through splined connections rather than keys

3.1. DESIGN FEATURES

3.1.1. Gears

External gear pair made of casehardened and hardened steel; internal gear made of nitride through hardened steel; Cylindrical spur gears with ground/shaved profile and flank modification;

3.1.2. Planet Carrier

Floating planet carrier in through hardened steel or Spheroidal Graphite Cast Iron according to gear reducer size;

3.1.3. Bearings

Low speed shaft: According to gear reducer size: taper roller bearings or ball bearings for cylindrical and splined shaft end

High speed shaft: Ball bearings according to sizes

Planet gears: According to gear reducer size: Needle rollers & full complement cylindrical roller bearings for the highest load carrying capacity with increased bearing life

3.1.4. Housing

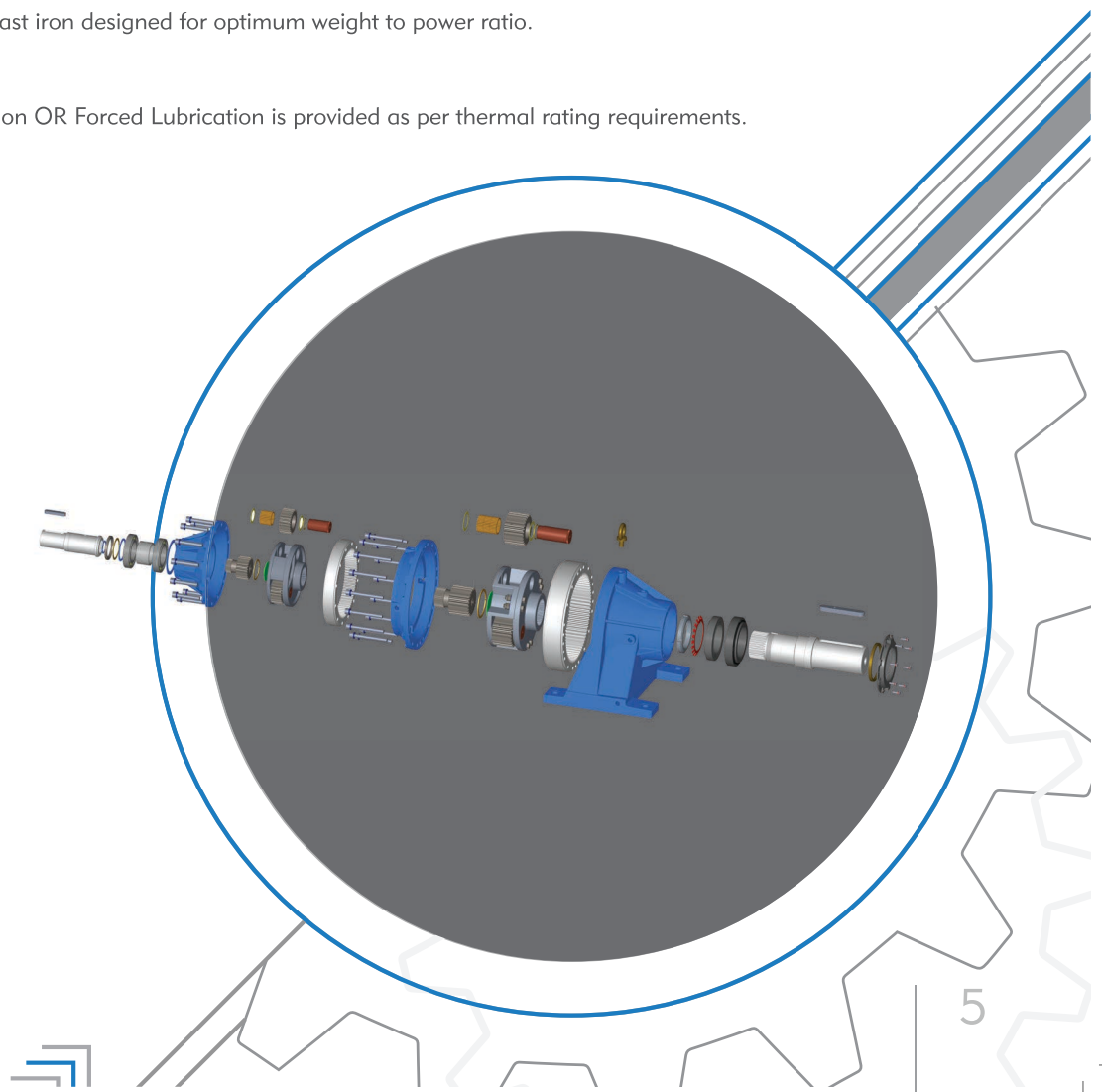
Is made of grey cast iron designed for optimum weight to power ratio.

3.1.5. Lubrication

Oil Bath Lubrication OR Forced Lubrication is provided as per thermal rating requirements.

4. APPLICATION

- Construction.
- Material Handling.
- Waste & Sewage Treatment.
- Sugar Industry.
- Mine & Quarry Machines.
- Steel Processing Machines
- Rubber Industry.



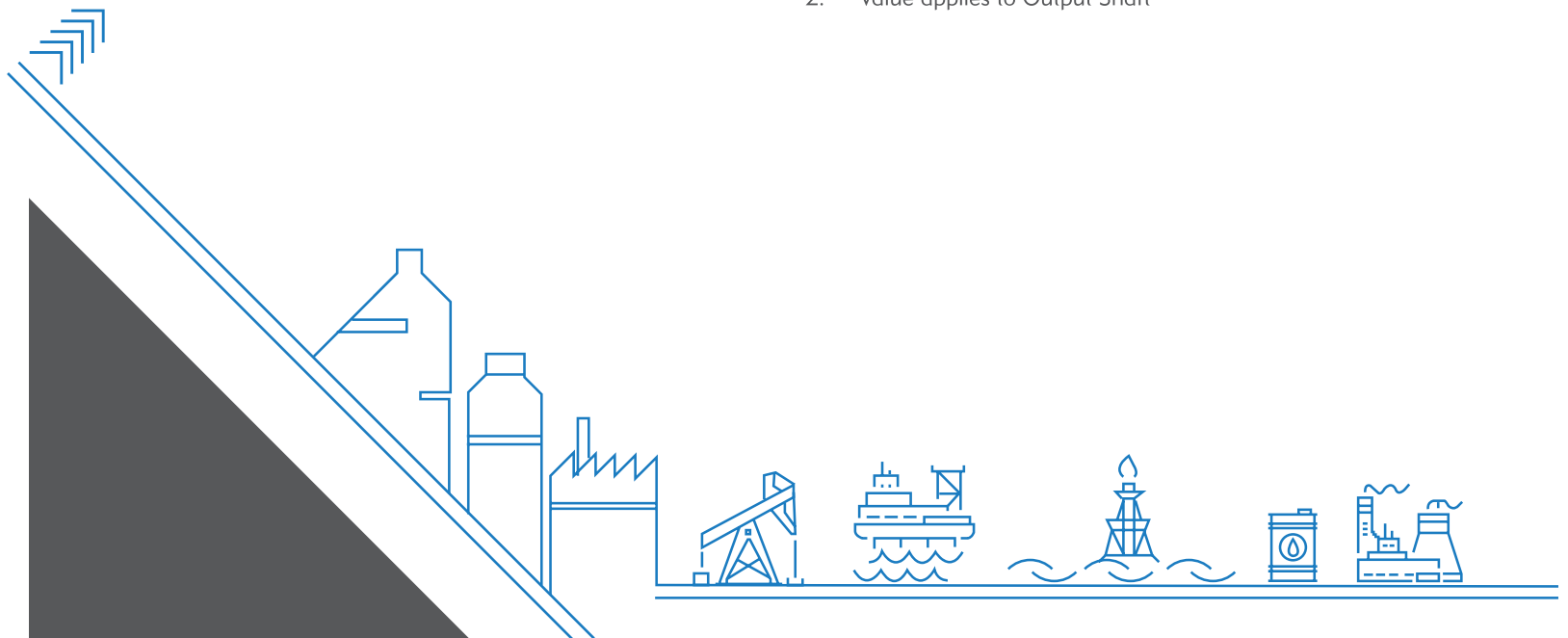


5. SYMBOLS AND UNITS OF MEASURE

Symbols	Units of measure	Description
d	[mm]	PCD of transmission element (sprocket, gear, pulley, etc.)
$F_{h1,2}$	-	Lifetime factor for bearing calculation
$f_{h1,2}$	-	Load corrective factor on shafts
f_s	-	Service factor
f_1	-	Service factor based on prime mover
f_2	-	Service factor based on load classification by application
f_3	-	Thermal Factor
f_4	-	Utilization Factor
h	[h]	Lifetime in hours
i	-	Reduction ratio
K_r	-	Radial load factor
M_{c2}	[Nm]	Calculated torque at gearbox output
M_{2REF}	[Nm]	Reference torque
M_{n2}	[Nm]	Gearbox rated output torque

Symbols	Units of measure	Description
$M_{r1,2}$	[Nm]	Required torque at gearbox
$n_{1,2}$	[min ⁻¹]	Angular speed
P_1	[kW]	Max transmissible power at gearbox input
P_2	[kW]	Transmitted power at gearbox output
P_{n1}	[kW]	Gearbox rated power
P_t	[kW]	Gearbox thermal capacity
$R_{cl,2}$	[N]	Calculated radial load
$R_{x1,2}$	[N]	Rated radial load at gearbox; re-calculated with respect to different load application points
t_a	[°C]	Ambient temperature
t_s	[°C]	Surface temperature
t_o	[°C]	Oil temperature
X	[mm]	Load application distance from shaft shoulder
n_d	-	Dynamic efficiency

1. Value applies to Input Shaft
2. Value applies to Output Shaft

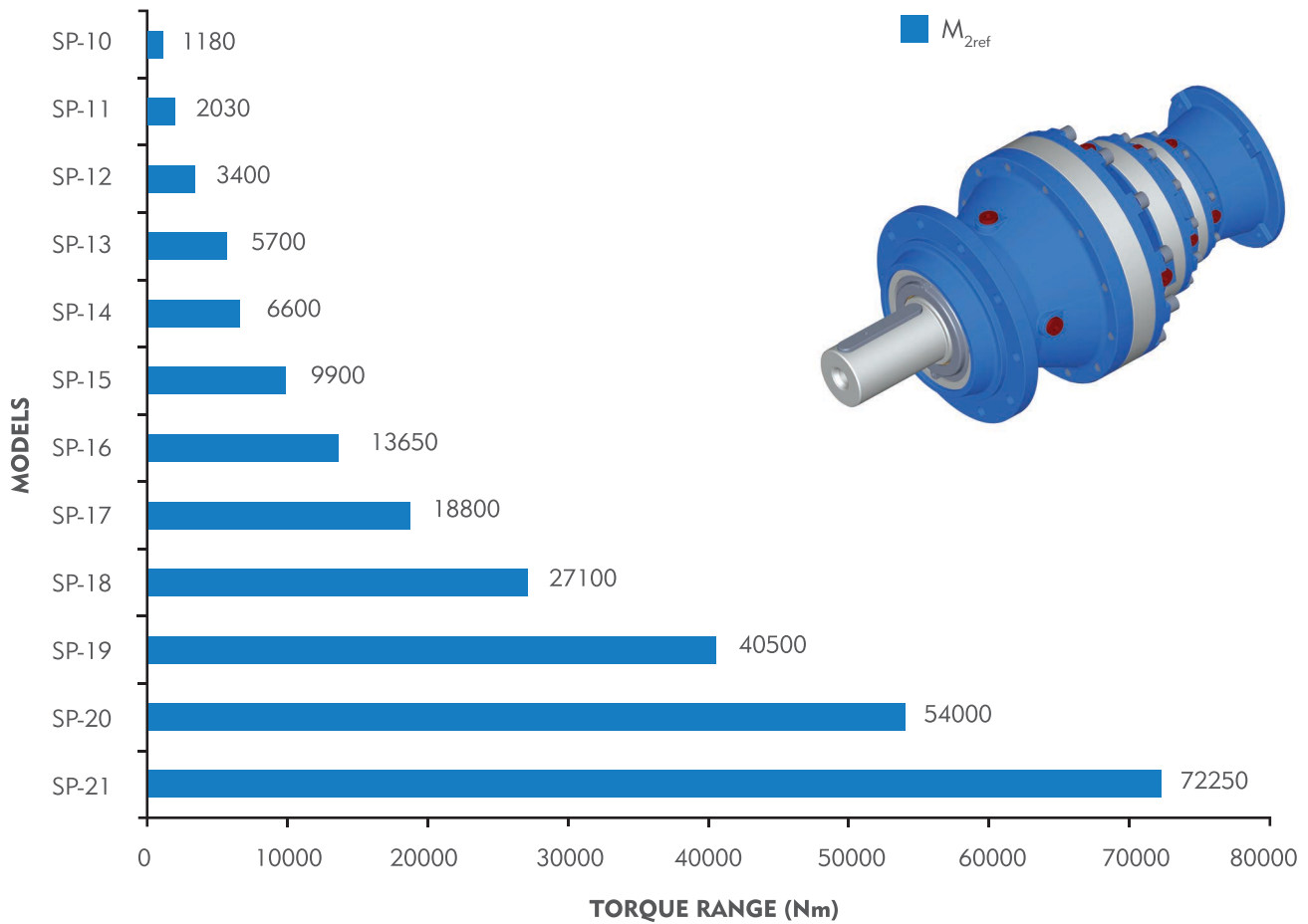




6. GENERAL INFORMATION

6.1. OUTPUT TORQUE

Model wise Torque Ratings (Nm):



6.1.1. Reference Torque M_{2ref} (Nm)

It is the reference value used for basic selection of the gearbox size, the value derived for different models re calculated for $n_2 \times h = 10^5$ load cycles.

6.1.2. Rated Torque M_{n2} (Nm)

It is the output torque which the gearbox can transmit with steady load under working condition specified in calculation method.

6.1.3. Required Torque M_{r2} (Nm)

It is the torque drawn by the application. It must always be equal to or less than rated output torque M_{n2} for the gearbox under study.

6.2. POWER

6.2.1 Input Rated Power P_{n1} [kW]

P_{n1} is the maximum power that can be safely applied to the gearbox when the same is operated: -

- At a n_1 drive speed
- Yielding a theoretical lifetime of 10,000 hours
- Service factor $f_s = 1$



6.2.2. Output Power P_2 [kW]

This value is the net power delivered to the output shaft. It can be calculated through the following formulas: Efficiency values are listed in Table: 1

$$P_2 = P_1 \times \eta_d$$

$$P_2 = \frac{M_{r2} \times n_2}{9550}$$

6.2.3. Thermal Power P_t [kW]

This parameter is linked to the gearbox thermal limit. Values for the thermal capacity are listed within the thermal capacity charts of gearboxes and represent the mechanical power that can be transmitted continuously at an Input speed n_1 and at an ambient temperature of 25°C, without the lubricant exceeding the temperature of 95°C and the gear case the temperature of 75-80°C, without the use a supplementary cooling system.

6.3 EFFICIENCY

Dynamic Efficiency η_d

The parameter is defined as the relationship of the net power delivered to the output shaft P_2 to the power applied to the Input Shaft P_1 :

$$\eta_d = \frac{P_2}{P_1}$$

Indicative values for the efficiency are listed in the chart here after.

Table: 1

No. of reductions	Planetary (In-Line Configuration)
1	0.97
2	0.94
3	0.91
4	0.88

6.4. REDUCTION RATIO i

It is defined as the relationship of the speed the input shaft is driven at and the speed delivered at the output shaft of a gearbox.

$$i = \frac{n_1}{n_2}$$

6.5. ANGULAR SPEED

6.5.1. Input Speed n_1 (min^{-1})

- The speed of the gearbox is driven at.
- The value is coincident with the motor speed if this is directly connected to the gearbox.

6.5.2. Output Speed n_2 (min^{-1})

It is calculated from the drive speed n_1 and gear ratio i , as per the following equation:

$$n_2 = \frac{n_1}{i}$$

6.6. SERVICE FACTOR f_s

This is the relationship of the gear unit rated power to the power of the electric motor actually driving the unit.

$$f_s = \frac{P_{n1}}{P_1}$$

6.7. SERVICE FACTOR REQUESTED BY APPLICATION f_2

It is a coefficient that represents the severity of the application. This factor takes into account, although approximately, the type of load the gearbox operates with, the specific duty cycle as well as the operating daily hours. The Table: 3 is of reference when determining the appropriate service factor for the application.

6.7. LIFE FACTOR F_{h1} , F_{h2}

Factor resulting by multiplying angular speed at input (n_1) or output (n_2) by actual operating working hours (h), break times excluded.

$$F_{h1} = (n_1 \times h)$$

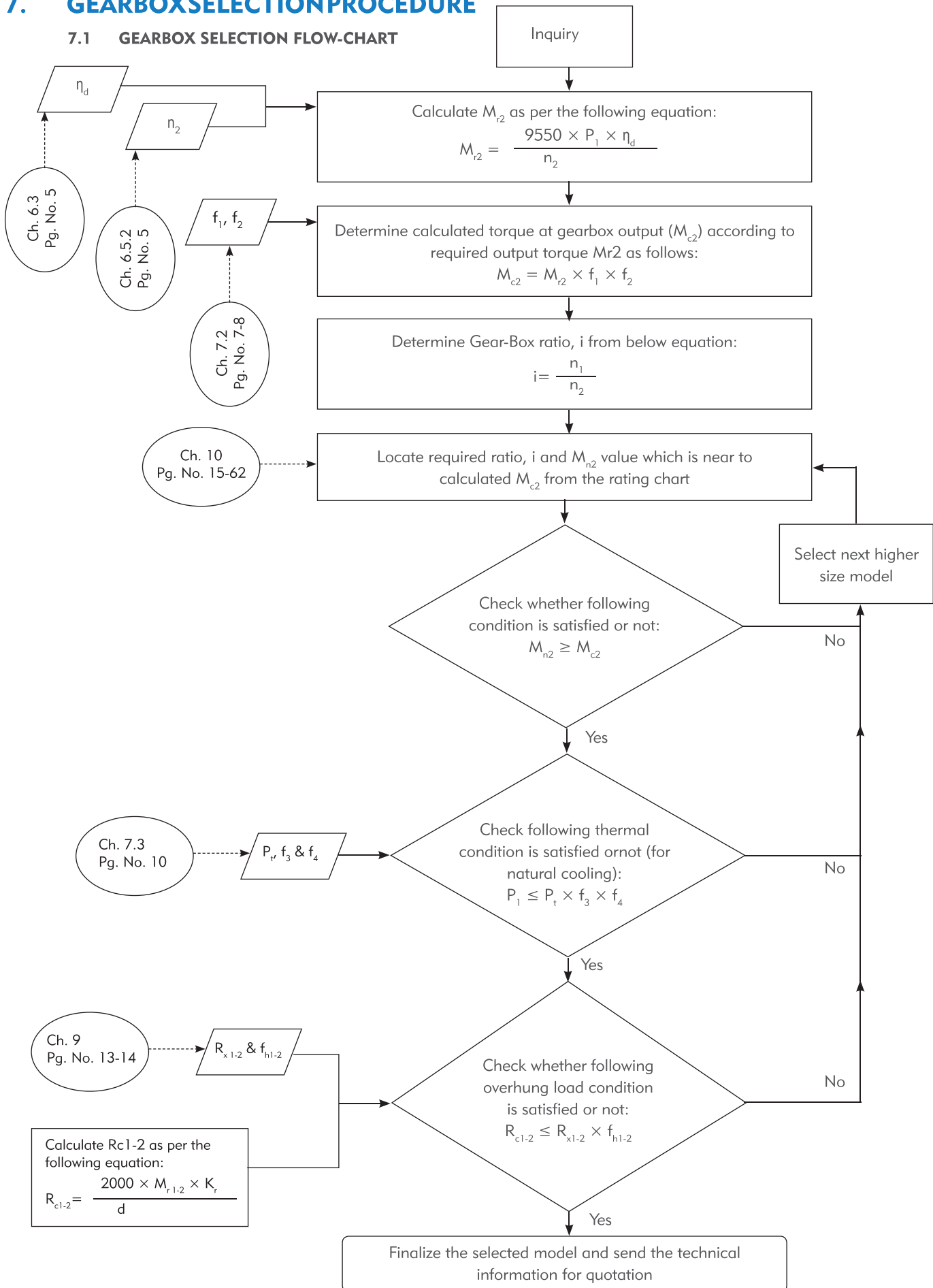
$$F_{h2} = (n_2 \times h)$$

Life factor is directly proportional to gearbox rpms during the whole duty time.



7. GEARBOX SELECTION PROCEDURE

7.1 GEARBOX SELECTION FLOW-CHART





7.2. GEARBOX SELECTION BY TORQUE REQUESTED BY APPLICATION

Based on application type, it should be defined:

- a) Required service factor f_1 and f_2 (see Table:2 & Table:3)
- b) Determine M_{r2} as per the following equation

$$M_{r2} = \frac{9550 \times P_1 \times \eta d}{n_2}$$

- c) Determine calculated torque according to required output torque M_{r2} as follows:

$$M_{c2} = M_{r2} \times f_1 \times f_2$$

- d) Determine gear ratio from required output speed n_2 and drive speed n_1 :

$$i = \frac{n_1}{n_2}$$

- e) Once M_{c2} and i are determined, locate the gearbox rating chart for the drive speed n_1 and select a gearbox featuring the ratio i nearest to calculated ratio that also satisfies the condition:

$$M_{n2} \geq M_{c2}$$

If the IEC- motor is to be fitted onto the gearbox, check availability of the suitable frame size for particular model. (Refer Ch. 11.4, Page No.67)

Service factor based on Prime mover f_1 :

Table: 2

Factor for prime mover	f_1
Electric motors, hydraulic motors, turbines	1.0
Piston engines 4-6 cylinders cyclic variation 1:100 to 1:200	1.25
Piston engines 1-3 cylinders cyclic variation up to 1:100	1.5

Table: 3

LOAD CLASSIFICATION BY APPLICATION SERVICE FACTOR							
Application	Total Operation			Application	Total Operation		
	up to 3 hrs. per day	3 to 10 hrs. per day	Over 10 hrs. per day		up to 3 hrs. per day	3 to 10 hrs. per day	Over 10 hrs. per day
Agitators (mixers)				Fans			
Pure liquids	1.00	1.00	1.25	Centrifugal	1.00	1.00	1.25
Liquids and solids	1.00	1.25	1.50	Cooling towers	2.00	2.00	2.00
Liquids - variable density	1.00	1.25	1.50	Forced draft	1.25	1.25	1.25
Blowers				Induced draft	1.50	1.50	1.50
Centrifugal	1.00	1.00	1.25	Industrial & mine	1.50	1.50	1.50
Lobe	1.00	1.25	1.50	Feeders			
Vane	1.00	1.25	1.50	Apron	1.00	1.25	1.50
Brewing and distilling				Belt	1.00	1.25	1.50
Bottling machinery	1.00	1.00	1.25	Disc	1.00	1.00	1.25
Brew kettles - continuous duty	1.25	1.25	1.25	Reciprocating	1.50	1.75	
Cookers - continuous duty	1.25	1.25	1.25	Screw	1.00	1.25	1.50
Mash tubs - continuous duty	1.25	1.25	1.25	Food industry			
Scale hopper - frequent starts	1.25	1.25	1.50	Cereal cooker	1.00	1.00	1.25
Can filling machines	1.00	1.00	1.25	Dough mixer	1.25	1.25	1.50
Car dumpers	1.50	1.75	2.00	Meat grinders	1.25	1.25	1.50
Car pullers	1.00	1.25	1.50	Slicers	1.25	1.25	1.50
Clarifiers	1.00	1.00	1.25	Generators and exciters	1.00	1.00	1.25
Classifiers	1.00	1.25	1.50	Hammer mills	1.75	1.75	2.00
Clay working machinery				Hoists			
Brick press	1.50	1.75	2.00	Heavy duty	1.75	1.75	2.00
Briquette machine	1.50	1.75	2.00	Medium duty	1.25	1.25	1.50
Pug mill	1.00	1.25	1.50	Skip hoist	1.25	1.25	1.50
Compactors	2.00	2.00	2.00	Laundry			
Compressors				Tumblers	1.25	1.25	1.50
Centrifugal	1.00	1.00	1.25	Washers	1.50	1.50	2.00
Lobe	1.00	1.25	1.50	Lumber industry			
Reciprocating, multi-cylinder	1.50	1.50	1.75	Barkers - spindle feed	1.25	1.25	1.50
Reciprocating, single - cylinder	1.75	1.75	2.00	Main drive	1.75	1.75	1.75
Cranes 1)				Conveyors - burner	1.25	1.25	1.50
Dry dock				Main or heavy duty	1.50	1.50	1.50
Main hoist	2.50	2.50	2.50	Main log	1.75	1.75	2.00
Auxiliary hoist	2.50	2.50	3.00	Re-saw, merry-go-round	1.25	1.25	1.50
Boom hoist	2.50	2.50	3.00	Conveyors			
Slewing drive	2.50	2.50	3.00	Slab	1.75	1.75	2.00
Traction drive	3.00	3.00	3.00	Transfer	1.25	1.25	1.50
Container				Chains			
Main hoist	3.00	3.00	3.00	Floor	1.50	1.50	1.50
Boom hoist	2.00	2.00	2.00	Green	1.50	1.50	1.75
Trolley drive				Cut-off saws			
Gantry drive	3.00	3.00	3.00	Chain	1.50	1.50	1.75
Traction drive	2.00	2.00	2.00	Drag	1.50	1.50	1.75
Mill duty				Debarking drums	1.75	1.75	2.00
Main hoist	3.50	3.50	3.50	Feeds			
Auxiliary	3.50	3.50	3.50	Edger	1.25	1.25	1.50
Bridge	2.50	3.00	3.00	Gang	1.75	1.75	1.75
Trolley travel	2.50	3.00	3.00	Trimmer	1.25	1.25	1.50
Industrial duty				Log deck	1.75	1.75	1.75
Main	2.50	2.50	3.00	Log hauls - incline - well type	1.75	1.75	1.75
Auxiliary	2.50	2.50	3.00	Log turning devices	1.75	1.75	1.75
Bridge	2.50	3.00	3.00	Planer feed	1.25	1.25	1.50
Trolley travel	2.50	3.00	3.00	Planer tilting hoists	1.50	1.50	1.50
Crusher				Rolls - live-off bearing - roll cases	1.75	1.75	1.75
Stone or ore	1.75	1.75	2.00	Sorting table	1.25	1.25	1.50
Dredges				Tipple hoist	1.25	1.25	1.50
Cable reels	1.25	1.25	1.50	Transfers			
Conveyors	1.25	1.25	1.50	Chain	1.50	1.50	1.75
Cutter head drives	2.00	2.00	2.00	Crane way	1.50	1.50	1.75
Pumps	2.00	2.00	2.00	Tray drives	1.25	1.25	1.50
Screen drives	1.75	1.75	2.00	Veneer lathe drives	1.25	1.25	1.50
Stackers	1.25	1.25	1.50	Metal mills			
Winches	1.25	1.25	1.50	Draw bench carriage and main drive	1.25	1.25	1.50
Elevators				Run out table			
Bucket	1.00	1.25	1.50	Non-reversing			
Centrifugal discharge	1.00	1.00	1.25	Group drives	1.50	1.50	1.50
Escalators	1.00	1.00	1.25	Individual drives	2.00	2.00	2.00
Freight	1.00	1.25	1.50	Reversing	2.00	2.00	2.00
Gravity discharge	1.00	1.00	1.25	Slab pushers	1.50	1.50	1.50
Extruders				Shears	2.00	2.00	2.00
General	1.50	1.50	1.50	Wire drawing	1.25	1.25	1.50
Plastics				Wire winding machine	1.25	1.50	1.50
Variable speed drive	1.50	1.50	1.50	Metal strip processing machinery			
Fixed speed drive	1.75	1.75	1.75	Bridles	1.25	1.25	1.50
Rubber				Coilers & uncoilers	1.00	1.00	1.25
Continuous screw operation	1.75	1.75	1.75	Edge trimmers	1.00	1.25	1.50
Intermittent screw operation	1.75	1.75	1.75	Flatteners	1.25	1.25	1.50

Table: 3

LOAD CLASSIFICATION BY APPLICATION SERVICE FACTOR								f_2
Application	Total Operation			Application	Total Operation			f_2
	up to 3 hrs. per day	3 to 10 hrs. per day	Over 10 hrs. per day		up to 3 hrs. per day	3 to 10 hrs. per day	Over 10 hrs. per day	
Metal strip processing machinery (continued)				Secondary processing				
Loopers (accumulators)	1.00	1.00	1.25	Blow molders	1.50	1.50	1.50	
Pinch rolls	1.25	1.25	1.50	Coating	1.25	1.25	1.25	
Scrap choppers	1.25	1.25	1.50	Film	1.25	1.25	1.25	
Shears	2.00	2.00	2.00	Pipe	1.25	1.25	1.25	
Slitters	1.00	1.25	1.50	Pre-plasticizers	1.50	1.50	1.50	
Mills, rotary type				Rods	1.25	1.25	1.25	
Ball & rod				Sheet	1.25	1.25	1.25	
Spur ring gear	2.00	2.00	2.00	Tubing	1.25	1.25	1.50	
Helical ring gear	1.50	1.50	1.50	Pullers - barge haul	1.25	1.25	1.50	
Direct connected	2.00	2.00	2.00	Pumps				
Cement kilns	1.50	1.50	1.50	Centrifugal	1.00	1.00	1.25	
Dryers & coolers	1.50	1.50	1.50	Proportioning	1.25	1.25	1.50	
Mixers				Reciprocating				
Concrete	1.25	1.25	1.50	Single acting, 3 or more cylinders	1.25	1.25	1.50	
Paper mills				Double acting, 2 or more cylinders	1.25	1.25	1.50	
Agitator (mixer)	1.50	1.50	1.50	Rotary				
Agitator for pure liquors	1.25	1.25	1.25	Gear type	1.00	1.00	1.25	
Barking drums	2.00	2.00	2.00	Lobe	1.00	1.00	1.25	
Barkers - mechanical	2.00	2.00	2.00	Vane	1.00	1.00	1.25	
Beater	1.50	1.50	1.50	Rubber industry				
Breaker stack	1.25	1.25	1.25	Intensive internal mixers				
Calendar	1.25	1.25	1.25	Batch mixers	1.75	1.75	1.75	
Chipper	2.00	2.00	2.00	Continuous mixers	1.50	1.50	1.50	
Chip feeder								
Coating rolls	1.25	1.25	1.25	Mixing mill - 2 smooth rolls (if corrugated rolls are used, then use the same service	1.50	1.50	1.50	
Conveyors				factors that are used for a cracker warmer)				
Chip, bark, chemical	1.25	1.25	1.25	Batch drop mill - 2 smooth rolls	1.50	1.50	1.50	
Log (including slab)	2.00	2.00	2.00	Cracker warmer - 2 rolls; 1 corrugated roll	1.75	1.75	1.75	
Couch rolls	1.25	1.25	1.25	Cracker - 2 corrugated rolls	2.00	2.00	2.00	
Cutter	2.00	2.00	2.00	Holding, feed & blend mill - 2 rolls	1.25	1.25	1.25	
Cylinder molds	1.25	1.25	1.25	Refiner - 2 rolls	1.50	1.50	1.50	
Dryers				Calendars	1.50	1.50	1.50	
Paper machine	1.25	1.25	1.25	Sand muller	1.25	1.25	1.50	
Conveyor type	1.25	1.25	1.25	Sewage disposal equipment				
Embosses	1.25	1.25	1.25	Bar screens	1.25	1.25	1.25	
Extruder	1.50	1.50	1.50	Chemical feeders	1.25	1.25	1.25	
Fourdrinier rolls (includes lump breaker, dandy roll, wire turning, and return rolls)	1.25	1.25	1.25	Dewatering screens	1.50	1.50	1.50	
Jordan	1.50	1.50	1.50	Scum breakers	1.50	1.50	1.50	
Kiln drive	1.50	1.50	1.50	Slow or rapid mixers	1.50	1.50	1.50	
Mt. Hope roll	1.25	1.25	1.25	Sludge collectors	1.25	1.25	1.25	
Paper rolls	1.25	1.25	1.25	Thickeners	1.50	1.50	1.50	
Platter	1.50	1.50	1.50	Vacuum filters	1.50	1.50	1.50	
Presses - felt & suction	1.25	1.25	1.25	Screens				
Pulper	2.00	2.00	2.00	Air washing	1.00	1.00	1.25	
Pumps - vacuum	1.50	1.50	1.50	Rotary - stone or gravel	1.25	1.25	1.50	
Reel (surface type)	1.25	1.25	1.25	Traveling water intake	1.00	1.00	1.25	
Screens				Sugar industry				
Chip	1.50	1.50	1.50	Beet slicer	2.00	2.00	2.00	
Rotary	1.50	1.50	1.50	Cane knives	1.50	1.50	1.50	
Vibrating	2.00	2.00	2.00	Crushers	1.50	1.50	1.50	
Size press	1.25	1.25	1.25	Mills (low speed end)	1.75	1.75	1.75	
Super calender 4)	1.25	1.25	1.25	Textile industry				
Thickener (AC motor)	1.50	1.50	1.50	Batchers	1.25	1.25	1.50	
(DC motor)	1.25	1.25	1.25	Calendars	1.25	1.25	1.50	
Washer (AC motor)	1.50	1.50	1.50	Cards	1.25	1.25	1.50	
(DC motor)	1.25	1.25	1.25	Dry cans	1.25	1.25	1.50	
Wind and unwind stand	1.00	1.00	1.00	Dryers	1.25	1.25	1.50	
Winders (surface type)	1.25	1.25	1.25	Dyeing machinery	1.25	1.25	1.50	
Yankee dryers 3)	1.25	1.25	1.25	Looms	1.25	1.25	1.50	
Plastics industry				Mangles	1.25	1.25	1.50	
Primary processing				Nappers	1.25	1.25	1.50	
Intensive internal mixers				Pads	1.25	1.25	1.50	
Batch mixers	1.75	1.75	1.75	Slashers	1.25	1.25	1.50	
Continuous mixers	1.50	1.50	1.50	Soapers	1.25	1.25	1.50	
Batch drop mill - 2 smooth rolls	1.25	1.25	1.25	Spinners	1.25	1.25	1.50	
Continuous feed, holding & blend mill	1.25	1.25	1.25	Tenter frames	1.25	1.25	1.50	
Compounding mill	1.25	1.25	1.25	Washers	1.25	1.25	1.50	
Calendars	1.50	1.50	1.50	Winders	1.25	1.25	1.50	

After selecting the drive units, please check gearbox for following conditions:



7.3 VERIFICATION FOR THERMAL POWER

Make sure that the thermal capacity of the gearbox is equal to or greater than the mechanical power required by the application, as per equation.

If this is not the case, provide a supplementary cooling system or select a larger gearbox.

When the duty cycle is formed by short operating periods and rest time is long enough for the unit to cool down, the thermal capacity is hardly significant and it may be omitted from calculation.

For ambient temperatures other than 25°C, continuous duty and utilization factor other than 100% listed in the rating charts, P_1 is to be adjusted through thermal factor f_4 and utilization factor f_5 as listed in table.

Finally, make sure that the following condition is always satisfied:

$$P_1 \leq P_i \times f_3 \times f_4$$

Where

$$\text{Utilization in \%} = \frac{P_2}{P_{nl}} \times 100$$

Refer below Tables for Thermal Factor (f_3) & Utilization Factor (f_4)

Table: 4

Thermal factor f_3					
Without auxiliary cooling					
Ambient Temp	Operating cycle per hour (ED) in %				
	100	80	60	40	20
10°C	1.14	1.20	1.32	1.54	2.04
20°C	1.00	1.06	1.16	1.35	1.79
30°C	0.87	0.93	1.00	1.18	1.56
40°C	0.71	0.75	0.82	0.96	1.27
50°C	0.55	0.58	0.84	0.74	0.98

Table: 5

Utilization factor							f_4
30%	40%	50%	60%	70%	80%	90%	100%
0.66	0.77	0.83	0.90	0.90	0.95	1.0	1.0

The relevant thermal capacity (P_i) in (kW) is listed in the chart here after.

Double Stage Thermal Capacity (P_i) in (kW)

	Air Velocity (m/s)	GEAR UNIT SIZES											
		SP2-10L	SP2-11L	SP2-12L	SP2-13L	SP2-14L	SP2-15L	SP2-16L	SP2-17L	SP2-18L	SP2-19L	SP2-20L	SP2-21L
Large indoor space	$\geq 1.4 - 3.7$	8.5	10	11	12.5	17.5	20	29	39	45	60	77	120

Triple Stage Thermal Capacity (P_i) in (kW)

	Air Velocity (m/s)	GEAR UNIT SIZES											
		SP3-10L	SP3-11L	SP3-12L	SP3-13L	SP3-14L	SP3-15L	SP3-16L	SP3-17L	SP3-18L	SP3-19L	SP3-20L	SP3-21L
Large indoor space	$\geq 1.4 - 3.7$	5	6.3	7.5	8.4	12	12.5	15	19.5	24	29	39	57

Quadruple Stage Thermal Capacity (P_i) in (kW)

	Air Velocity (m/s)	GEAR UNIT SIZES											
		SP4-10L	SP4-11L	SP4-12L	SP4-13L	SP4-14L	SP4-15L	SP4-16L	SP4-17L	SP4-18L	SP4-19L	SP4-20L	SP4-21L
Large indoor space	$\geq 1.4 - 3.7$	4	4.2	5.5	5.7	7.7	8	10.5	12	14.5	17	26	36

NOTE: FOR THERMAL CAPACITY (P_i) IN (kW) OF SINGLE STAGE GEARBOX, KINDLY CONTACT PTPL.



7.4. VERIFICATION FOR OVERHUNG LOADS

Examine the application and establish:

- Overhung load applying to input and/or output shaft through the following formula:

$$R_{C\ 1-2} = \frac{2000 \times M_{r\ 1-2} \times K_r}{d}$$

$R_{C\ 1-2}$ = Overhung load (N) 1 = for input shaft

2 = for output shaft

$M_{r\ 1-2}$ = Torque at the shaft (Nm)

d = P.C.D [mm] of transmission element (sprocket, gear, pulley, etc.) $K_r = 1$ chain transmission

$K_r = 1.25$ gear transmission

$K_r = 1.5-2.5$ V-belt transmission

- Define the load position X onto shaft. Check this value with the chart indicating the load $R_{x\ 1-2}$ bearable by the gearbox. Check that the following is satisfied:

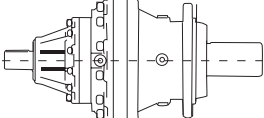
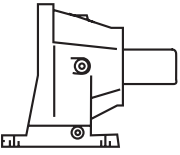
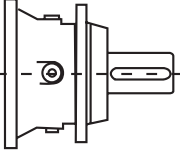
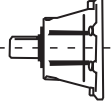
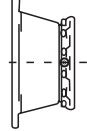
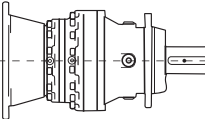
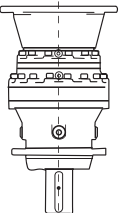
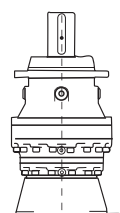
$$R_{C\ 1-2} \leq R_{x\ 1-2} \times f_{h\ 1-2}$$

Where $f_{h\ 1-2}$ are the radial load corrective factor depending on the required life factor Fh1 and Fh2 (refers to radial loads in the next chapter).

Where there are pure Thrust (Axial) load or in case of combined Radial & Axial Load, Kindly contact PTPL for a proper checking procedure.



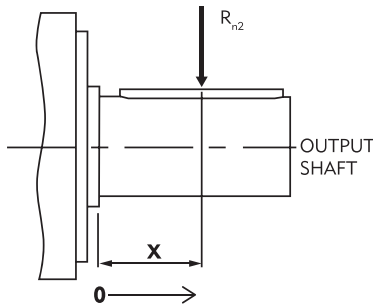
8. ORDERING LOGIC

	SP	3	19	L	1482	MC	P225	H1													
<p>SMALLER PLANETARY SERIES</p> <p>NO. OF STAGES: 1,2,3,4</p> <p>GEARBOX SIZES: SP-10 TO SP-21</p> <div style="text-align: center;"> <p>DESIGN</p>  <p>L - INLINE</p> </div> <p>REDUCTION RATIO Fill in the value of the transmission ratio from the selection chart E.g. 1/4.25=0004, 1/18.06=0018, 1/204.89=0204, 1/1482=1482</p>	GEARBOX SIZES		DESIGN		REDUCTION RATIO		OUTPUT CONFIGURATION														
				INPUT CONFIGURATION		INPUT CONFIGURATION		ORIENTATION													
				<p>OUTPUT CONFIGURATION:-</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>PC : Foot base with solid keyed shaft</p> </div> <div style="text-align: center;">  <p>MC : Solid keyed shaft</p> </div> </div>																	
				<p>INPUT CONFIGURATION:-</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Solid shaft with key - P0SI</p> </div> <div style="text-align: center;">  <p>Hollow electric motor connection (frame size)</p> </div> </div>																	
				<table border="1" style="margin: auto;"> <tr> <td>P063</td><td>P071</td><td>P080</td><td>P090</td><td>P100</td><td>P112</td></tr> <tr> <td>P132</td><td>P160</td><td>P180</td><td>P200</td><td>P225</td><td>P250</td></tr> </table>		P063	P071	P080	P090	P100	P112	P132	P160	P180	P200	P225	P250				
P063	P071	P080	P090	P100	P112																
P132	P160	P180	P200	P225	P250																
				<p>ORIENTATION:-</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>H1 - HORIZONTAL</p> </div> <div style="text-align: center;">  <p>V2 - VERTICAL DOWNWARD</p> </div> <div style="text-align: center;">  <p>V2 - VERTICAL UPWARD</p> </div> </div>																	



9. OVERHUNG LOAD CAPACITY

9.1 LOAD CAPACITY LOW SPEED SHAFT (OUTPUT)



For verification of overhanging load, calculate the overhung load as per selection procedure. Check the distance 'X' (the distance from collar face) where the actual load acts on the shaft.

Below overhung load values are calculated for load cycles $n_2 \cdot h = 10^5$.

For $n_2 \cdot h$ other than 10^5 load cycle, please contact PTPL.

If condition does not fulfilled then check possibility to reduce dimension 'X' or try to increase the pitch diameter or go for next higher model or consult PTPL.

LOW SPEED SHAFT (OUTPUT) OVERHUNG LOAD CAPACITY IN (N) FOR LOAD CYCLES OF $n_2 \cdot h = 10^5$

MODEL – SP1-10L/SP2-10L/SP3-10L/SP4-10L

Distance 'X' in (mm)	0	15	30	45	58
Overhung Load in (N)	6560	5335	4490	3880	3470

MODEL – SP1-11L/SP2-11L/SP3-11L/SP4-11L

Distance 'X' in (mm)	0	20	40	60	82
Overhung Load in (N)	7500	5960	4940	4220	3630

MODEL – SP1-12L/SP2-12L/SP3-12L/SP4-12L

Distance 'X' in (mm)	0	20	40	60	80	105
Overhung Load in (N)	80400	65800	53300	44750	38600	31300

MODEL – SP1-13L/SP2-13L/SP3-13L/SP4-13L

Distance 'X' in (mm)	0	20	40	60	80	105
Overhung Load in (N)	80400	65000	45800	35300	28700	23200

MODEL – SP1-14L/SP2-14L/SP3-14L/SP4-14L

Distance 'X' in (mm)	0	20	40	60	80	100	120	130
Overhung Load in (N)	104800	90600	74400	58100	47600	40300	35000	32800

MODEL – SP1-15L/SP2-15L/SP3-15L/SP4-15L

Distance 'X' in (mm)	0	20	40	60	80	100	120	130
Overhung Load in (N)	104800	65000	47100	36700	30000	25500	22100	20700

MODEL – SP1-16L/SP2-16L/SP3-16L/SP4-16L

Distance 'X' in (mm)	0	20	40	60	80	100	120	130
Overhung Load in (N)	125400	109700	97400	86500	70200	59500	52100	48900

MODEL – SP1-17L/SP2-17L/SP3-17L/SP4-17L

Distance 'X' in (mm)	0	20	40	60	80	100	120	140	165
Overhung Load in (N)	97500	85500	76200	68700	62500	57400	53000	49300	45300

MODEL – SP1-18L/SP2-18L/SP3-18L/SP4-18L

Distance 'X' in (mm)	0	20	40	60	80	100	120	140	165
Overhung Load in (N)	118500	105500	94800	86300	79100	73000	67800	63200	58400

MODEL – SP2-19L/SP3-19L/SP4-19L

Distance 'X' in (mm)	0	20	40	60	80	100	120	140	165
Overhung Load in (N)	153300	137000	124000	113300	104200	96500	90000	84200	77900

MODEL – SP2-20L/SP3-20L/SP4-20L

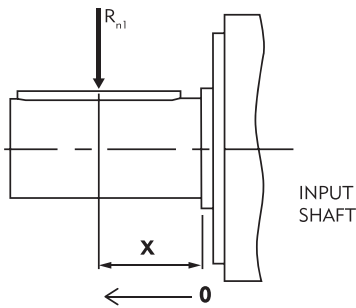
Distance 'X' in (mm)	0	25	50	75	100	125	150	175	200
Overhung Load in (N)	185500	163000	145500	136500	119400	110000	101500	94350	85500

MODEL – SP2-21L/SP3-21L/SP4-21L

Distance 'X' in (mm)	0	30	60	90	120	150	180	210	240
Overhung Load in (N)	256300	222100	197500	176500	160800	147500	135600	125800	117200



9.2 OVERHUNG LOAD CAPACITY HIGH SPEED SHAFT (INPUT)



For verification of overhanging load, calculate the overhung load as per procedure. Check the distance 'X' (the distance from collar face) where the actual load acts on shaft. Then w.r.to drive speed & desired life in hours calculate $n_1 \cdot h$. Select the overhung load factor w.r.to. Load cycles from table below & multiply the values by load corrective factors (F_{h1}). If condition does not fulfilled then check possibility to reduce dimension 'X' or try to increase the pitch diameter or go for next higher model or consult PTPL.

HIGH SPEED SHAFT (INPUT) OVERHUNG LOAD CAPACITY IN (N) FOR LOAD CYCLES OF $n_1 \cdot h = 10^7$

MODEL – SP3-10L/SP4-10L/SP4-11L/SP4-12L

Distance 'X' in (mm)	0	10	20	30	42
Overhung Load in (N)	3255	2905	2620	2385	2158

MODEL – SP1-10L/SP1-11L/SP2-10L/SP2-11L/SP2-12L/SP2-13L/SP3-11L/SP3-12L/SP3-13L/SP3-14L/SP3-15L/SP3-16L/SP4-13L/SP4-14L/SP4-15L/SP4-16L/SP4-17L/SP4-18L/SP4-19L

Distance 'X' in (mm)	0	15	30	45	58
Overhung Load in (N)	3255	2755	2385	2105	1909

MODEL – SP1-12L/SP1-13L/SP2-14L/SP2-15L/SP2-16L/SP3-17L/SP3-18L/SP3-19L/SP4-20L/SP4-21L

Distance 'X' in (mm)	0	20	40	60	82	105
Overhung Load in (N)	4180	3440	2925	2545	2225	31300

MODEL – SP1-14L/SP1-15L/SP2-17L/SP2-18L/SP3-20L/SP3-21L

Distance 'X' in (mm)	0	20	40	60	80	105
Overhung Load in (N)	5845	4992	4355	3865	3470	3082

MODEL – SP1-16L/SP2-19L

Distance 'X' in (mm)	0	20	40	60	80	105
Overhung Load in (N)	5835	4982	4345	3855	3460	3072

MODEL – SP1-17L/SP2-20L

Distance 'X' in (mm)	0	20	40	60	80	100	120	130
Overhung Load in (N)	9130	7980	7090	6375	5795	5310	4900	4715

MODEL – SP1-18L/SP2-21L

Distance 'X' in (mm)	0	20	40	60	80	100	120	130
Overhung Load in (N)	10340	9080	8090	7300	6650	6105	5640	5435

Load Corrective Factor f_{h1} for I/P shaft	$F_{h1} = n_1 \times h$	100000	250000	500000	1000000	5000000	7500000	10000000	15000000
	f_{h1}	4.64	3.42	2.71	2.15	1.26	1.10	1	0.87



10. MECHANICAL RATING CHARTS

MODEL: SP-10 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-10L	1500	3.89	386.10	644	26.00	63...132		
		1500	4.25	352.94	655	24.20	63...132		
		1500	5.33	281.43	686	20.20	63...132		
		1500	6.20	241.94	671	16.99	63...132		
		1500	7.50	200.00	518	10.85	63...132		
Double	SP2-10L	1500	15.12	99.21	968	10.05	63...132		
		1500	16.53	90.75	987	9.38	63...132		
		1500	18.06	83.04	1012	8.80	63...132		
		1500	20.73	72.36	851	6.44	63...132		
		1500	22.65	66.22	1075	7.45	63...132		
		1500	26.35	56.93	1083	6.46	63...132		
		1500	28.41	52.80	864	4.77	63...132		
		1500	31.88	47.05	1093	5.39	63...132		
		1500	33.05	45.39	874	4.15	63...132		
		1500	38.44	39.02	728	2.98	63...132		
		1500	39.97	37.53	879	3.45	63...132		
		1500	46.50	32.26	736	2.49	63...132		
		1500	56.25	26.67	575	1.61	63...132		
		Triple	SP3-10L	1500	58.82	25.50	1180	3.15	63...132
				1500	64.28	23.34	1132	2.76	63...132
1500	70.25			21.35	1138	2.54	63...132		
1500	76.77			19.54	1143	2.34	63...132		
1500	88.10			17.03	1151	2.05	63...132		
1500	96.27			15.58	1157	1.88	63...132		
1500	111.99			13.39	1166	1.63	63...132		
1500	120.74			12.42	1171	1.52	63...132		
1500	135.47			11.07	1178	1.37	63...132		
1500	140.45			10.68	1180	1.32	63...132		
1500	151.42			9.91	942	0.98	63...132		
1500	163.37			9.18	1190	1.14	63...132		
1500	169.89			8.83	1193	1.10	63...132		
1500	176.14			8.52	950	0.85	63...132		
1500	197.63			7.59	1219	0.97	63...132		
1500	204.89			7.32	958	0.74	63...132		
1500	213.07			7.04	961	0.71	63...132		
1500	238.33			6.29	811	0.53	63...132		
1500	239.06			6.27	1259	0.83	63...132		
1500	247.85			6.05	974	0.62	63...132		
1500	288.30			5.20	823	0.45	63...132		
1500	299.81			5.00	1007	0.53	63...132		
1500	348.75			4.30	850	0.38	63...132		
Quadruple	SP4-10L			1500	228.75	6.56	1219	0.84	63...132
				1500	249.98	6.00	1267	0.80	63...132
		1500	273.18	5.49	1269	0.73	63...132		
		1500	298.54	5.02	1272	0.67	63...132		
		1500	326.25	4.60	1274	0.61	63...132		
		1500	342.60	4.38	1275	0.59	63...132		
		1500	374.41	4.01	1278	0.54	63...132		
		1500	409.16	3.67	1280	0.49	63...132		
		1500	469.55	3.19	1283	0.43	63...132		
		1500	475.95	3.15	1284	0.42	63...132		
		1500	513.14	2.92	1286	0.39	63...132		
		1500	575.74	2.61	1289	0.35	63...132		
		1500	596.89	2.51	1290	0.34	63...132		
		1500	643.53	2.33	1292	0.32	63...132		
		1500	694.32	2.16	1294	0.29	63...132		
		1500	722.05	2.08	1295	0.28	63...132		
		1500	748.57	2.00	1296	0.27	63...132		
		1500	807.07	1.86	1161	0.23	63...132		
		1500	839.91	1.79	1298	0.24	63...132		
		1500	870.76	1.72	1300	0.23	63...132		
		1500	905.53	1.66	1306	0.23	63...132		
		1500	938.80	1.60	1180	0.20	63...132		
		1500	1012.89	1.48	1324	0.21	63...132		
		1500	1016.02	1.48	1324	0.21	63...132		
		1500	1053.34	1.42	1196	0.18	63...132		
		1500	1092.04	1.37	1201	0.17	63...132		
		1500	1135.65	1.32	1206	0.17	63...132		
		1500	1225.28	1.22	1355	0.17	63...132		
		1500	1270.29	1.18	1222	0.15	63...132		
		1500	1274.20	1.18	1360	0.17	63...132		
		1500	1321.01	1.14	1226	0.15	63...132		
		1500	1477.63	1.02	1093	0.12	63...132		
		1500	1482.00	1.01	1386	0.15	63...132		
		1500	1536.64	0.98	1248	0.13	63...132		
		1500	1598.00	0.94	1253	0.12	63...132		
		1500	1787.46	0.84	1131	0.10	63...132		
		1500	1792.97	0.84	1416	0.13	63...132		
		1500	1858.84	0.81	1275	0.11	63...132		
		1500	2162.25	0.69	1172	0.09	63...132		
		1500	2248.00	0.67	1302	0.09	63...132		
1500	2615.62	0.57	1212	0.07	63...132				
1500	3164.06	0.47	941	0.05	63...132				



MODEL: SP-10 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-10L	1000	3.89	257.40	727	19.58	63...132		
		1000	4.25	235.29	741	18.25	63...132		
		1000	5.33	187.62	774	15.20	63...132		
		1000	6.20	161.29	685	11.57	63...132		
		1000	7.50	133.33	530	7.40	63...132		
Double	SP2-10L	1000	15.12	66.14	1093	7.57	63...132		
		1000	16.53	60.50	1080	6.84	63...132		
		1000	18.06	55.36	1085	6.29	63...132		
		1000	20.73	48.24	868	4.38	63...132		
		1000	22.65	44.15	1097	5.07	63...132		
		1000	26.35	37.95	1105	4.39	63...132		
		1000	28.41	35.20	881	3.24	63...132		
		1000	31.88	31.37	1115	3.66	63...132		
		1000	33.05	30.26	892	2.83	63...132		
		1000	38.44	26.01	744	2.03	63...132		
		1000	39.97	25.02	897	2.35	63...132		
		1000	46.50	21.51	751	1.69	63...132		
		1000	56.25	17.78	588	1.09	63...132		
		Triple	SP3-10L	1000	58.82	17.00	1190	2.12	63...132
				1000	64.28	15.56	1157	1.88	63...132
1000	70.25			14.24	1162	1.73	63...132		
1000	76.77			13.03	1168	1.59	63...132		
1000	88.10			11.35	1176	1.40	63...132		
1000	96.27			10.39	1182	1.28	63...132		
1000	111.99			8.93	1192	1.11	63...132		
1000	120.74			8.28	1201	1.04	63...132		
1000	135.47			7.38	1225	0.95	63...132		
1000	140.45			7.12	1233	0.92	63...132		
1000	151.42			6.60	964	0.66	63...132		
1000	163.37			6.12	1265	0.81	63...132		
1000	169.89			5.89	1268	0.78	63...132		
1000	176.14			5.68	986	0.59	63...132		
1000	197.63			5.06	1272	0.67	63...132		
1000	204.89			4.88	1012	0.52	63...132		
1000	213.07			4.69	1019	0.50	63...132		
1000	238.33			4.20	854	0.38	63...132		
1000	239.06			4.18	1276	0.56	63...132		
1000	247.85			4.03	1043	0.44	63...132		
1000	288.30			3.47	882	0.32	63...132		
1000	299.81			3.34	1081	0.38	63...132		
1000	348.75			2.87	912	0.27	63...132		
Quadruple	SP4-10L			1000	228.75	4.37	1234	0.57	63...132
				1000	249.98	4.00	1278	0.54	63...132
		1000	273.18	3.66	1280	0.49	63...132		
		1000	298.54	3.35	1282	0.45	63...132		
		1000	326.25	3.07	1284	0.41	63...132		
		1000	342.60	2.92	1286	0.39	63...132		
		1000	374.41	2.67	1288	0.36	63...132		
		1000	409.16	2.44	1290	0.33	63...132		
		1000	469.55	2.13	1294	0.29	63...132		
		1000	475.95	2.10	1294	0.29	63...132		
		1000	513.14	1.95	1296	0.27	63...132		
		1000	575.74	1.74	1299	0.24	63...132		
		1000	596.89	1.68	1304	0.23	63...132		
		1000	643.53	1.55	1317	0.21	63...132		
		1000	694.32	1.44	1328	0.20	63...132		
		1000	722.05	1.38	1335	0.19	63...132		
		1000	748.57	1.34	1340	0.19	63...132		
		1000	807.07	1.24	1215	0.16	63...132		
		1000	839.91	1.19	1359	0.17	63...132		
		1000	870.76	1.15	1364	0.16	63...132		
		1000	905.53	1.10	1372	0.16	63...132		
		1000	938.80	1.07	1235	0.14	63...132		
		1000	1012.89	0.99	1389	0.14	63...132		
		1000	1016.02	0.98	1391	0.14	63...132		
		1000	1053.34	0.95	1252	0.13	63...132		
		1000	1092.04	0.92	1256	0.12	63...132		
		1000	1135.65	0.88	1263	0.12	63...132		
		1000	1225.28	0.82	1421	0.12	63...132		
		1000	1270.29	0.79	1278	0.11	63...132		
		1000	1274.20	0.78	1429	0.12	63...132		
		1000	1321.01	0.76	1284	0.10	63...132		
		1000	1477.63	0.68	1175	0.08	63...132		
		1000	1482.00	0.67	1455	0.10	63...132		
		1000	1536.64	0.65	1307	0.09	63...132		
		1000	1598.00	0.63	1311	0.09	63...132		
		1000	1787.46	0.56	1216	0.07	63...132		
		1000	1792.97	0.56	1487	0.09	63...132		
		1000	1858.84	0.54	1334	0.08	63...132		
		1000	2162.25	0.46	1259	0.06	63...132		
		1000	2248.00	0.44	1365	0.06	63...132		
1000	2615.62	0.38	1302	0.05	63...132				
1000	3164.06	0.32	1008	0.03	63...132				



MODEL: SP-10 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-10L	750	3.89	193.05	793	16.02	63...132		
		750	4.25	176.47	806	14.90	63...132		
		750	5.33	140.71	823	12.13	63...132		
		750	6.20	120.97	695	8.81	63...132		
		750	7.50	100.00	538	5.63	63...132		
Double	SP2-10L	750	15.12	49.60	1167	6.06	63...132		
		750	16.53	45.38	1095	5.20	63...132		
		750	18.06	41.52	1100	4.78	63...132		
		750	20.73	36.18	880	3.33	63...132		
		750	22.65	33.11	1112	3.85	63...132		
		750	26.35	28.46	1121	3.34	63...132		
		750	28.41	26.40	894	2.47	63...132		
		750	31.88	23.53	1132	2.79	63...132		
		750	33.05	22.70	901	2.14	63...132		
		750	38.44	19.51	763	1.56	63...132		
		750	39.97	18.76	910	1.77	63...132		
		750	46.50	16.13	770	1.30	63...132		
		750	56.25	13.33	597	0.83	63...132		
		Triple	SP3-10L	750	58.82	12.75	1198	1.60	63...132
				750	64.28	11.67	1175	1.44	63...132
750	70.25			10.68	1180	1.32	63...132		
750	76.77			9.77	1186	1.21	63...132		
750	88.10			8.51	1196	1.06	63...132		
750	96.27			7.79	1214	0.99	63...132		
750	111.99			6.70	1245	0.87	63...132		
750	120.74			6.21	1262	0.82	63...132		
750	135.47			5.54	1269	0.74	63...132		
750	140.45			5.34	1270	0.71	63...132		
750	151.42			4.95	1009	0.52	63...132		
750	163.37			4.59	1274	0.61	63...132		
750	169.89			4.41	1275	0.59	63...132		
750	176.14			4.26	1036	0.46	63...132		
750	197.63			3.80	1279	0.51	63...132		
750	204.89			3.66	1063	0.41	63...132		
750	213.07			3.52	1071	0.40	63...132		
750	238.33			3.15	897	0.30	63...132		
750	239.06			3.14	1284	0.42	63...132		
750	247.85			3.03	1099	0.35	63...132		
750	288.30			2.60	928	0.25	63...132		
750	299.81			2.50	1136	0.30	63...132		
750	348.75			2.15	959	0.22	63...132		
Quadruple	SP4-10L			750	228.75	3.28	1244	0.43	63...132
				750	249.98	3.00	1285	0.40	63...132
				750	273.18	2.75	1287	0.37	63...132
				750	298.54	2.51	1290	0.34	63...132
				750	326.25	2.30	1292	0.31	63...132
				750	342.60	2.19	1293	0.30	63...132
				750	374.41	2.00	1296	0.27	63...132
		750	409.16	1.83	1298	0.25	63...132		
		750	469.55	1.60	1312	0.22	63...132		
		750	475.95	1.58	1314	0.22	63...132		
		750	513.14	1.46	1326	0.20	63...132		
		750	575.74	1.30	1345	0.18	63...132		
		750	596.89	1.26	1350	0.18	63...132		
		750	643.53	1.17	1361	0.17	63...132		
		750	694.32	1.08	1375	0.16	63...132		
		750	722.05	1.04	1381	0.15	63...132		
		750	748.57	1.00	1387	0.15	63...132		
		750	807.07	0.93	1255	0.12	63...132		
		750	839.91	0.89	1407	0.13	63...132		
		750	870.76	0.86	1412	0.13	63...132		
		750	905.53	0.83	1418	0.12	63...132		
		750	938.80	0.80	1276	0.11	63...132		
		750	1012.89	0.74	1438	0.11	63...132		
		750	1016.02	0.74	1438	0.11	63...132		
		750	1053.34	0.71	1294	0.10	63...132		
		750	1092.04	0.69	1298	0.09	63...132		
		750	1135.65	0.66	1304	0.09	63...132		
		750	1225.28	0.61	1472	0.09	63...132		
		750	1270.29	0.59	1321	0.08	63...132		
		750	1274.20	0.59	1477	0.09	63...132		
		750	1321.01	0.57	1326	0.08	63...132		
		750	1477.63	0.51	1236	0.07	63...132		
		750	1482.00	0.51	1503	0.08	63...132		
		750	1536.64	0.49	1349	0.07	63...132		
		750	1598.00	0.47	1355	0.07	63...132		
		750	1787.46	0.42	1279	0.06	63...132		
		750	1792.97	0.42	1539	0.07	63...132		
		750	1858.84	0.40	1380	0.06	63...132		
		750	2162.25	0.35	1322	0.05	63...132		
		750	2248.00	0.33	1410	0.05	63...132		
750	2615.62	0.29	1367	0.04	63...132				
750	3164.06	0.24	1062	0.03	63...132				



MODEL: SP-10 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-10L	500	3.89	128.70	894	12.04	63...132		
		500	4.25	117.65	912	11.23	63...132		
		500	5.33	93.81	840	8.24	63...132		
		500	6.20	80.65	709	5.99	63...132		
		500	7.50	66.67	549	3.83	63...132		
Double	SP2-10L	500	15.12	33.07	1174	4.06	63...132		
		500	16.53	30.25	1118	3.54	63...132		
		500	18.06	27.68	1122	3.25	63...132		
		500	20.73	24.12	899	2.27	63...132		
		500	22.65	22.07	1136	2.62	63...132		
		500	26.35	18.98	1145	2.28	63...132		
		500	28.41	17.60	914	1.68	63...132		
		500	31.88	15.68	1156	1.90	63...132		
		500	33.05	15.13	921	1.46	63...132		
		500	38.44	13.01	779	1.06	63...132		
		500	39.97	12.51	930	1.22	63...132		
		500	46.50	10.75	787	0.89	63...132		
		500	56.25	8.89	610	0.57	63...132		
		500	58.82	8.50	1210	1.08	63...132		
		Triple	SP3-10L	500	64.28	7.78	1214	0.99	63...132
500	70.25			7.12	1232	0.92	63...132		
500	76.77			6.51	1251	0.85	63...132		
500	88.10			5.68	1269	0.75	63...132		
500	96.27			5.19	1271	0.69	63...132		
500	111.99			4.46	1275	0.60	63...132		
500	120.74			4.14	1277	0.55	63...132		
500	135.47			3.69	1280	0.50	63...132		
500	140.45			3.56	1281	0.48	63...132		
500	151.42			3.30	1083	0.37	63...132		
500	163.37			3.06	1285	0.41	63...132		
500	169.89			2.94	1286	0.40	63...132		
500	176.14			2.84	1111	0.33	63...132		
500	197.63			2.53	1289	0.34	63...132		
500	204.89			2.44	1141	0.29	63...132		
500	213.07			2.35	1149	0.28	63...132		
500	238.33			2.10	963	0.21	63...132		
500	239.06			2.09	1295	0.28	63...132		
500	247.85			2.02	1155	0.24	63...132		
500	288.30			1.73	996	0.18	63...132		
500	299.81			1.67	1175	0.21	63...132		
500	348.75			1.43	1030	0.15	63...132		
Quadruple	SP4-10L			500	228.75	2.19	1260	0.29	63...132
				500	249.98	2.00	1296	0.27	63...132
				500	273.18	1.83	1298	0.25	63...132
		500	298.54	1.67	1305	0.23	63...132		
		500	326.25	1.53	1319	0.21	63...132		
		500	342.60	1.46	1326	0.20	63...132		
		500	374.41	1.34	1340	0.19	63...132		
		500	409.16	1.22	1355	0.17	63...132		
		500	469.55	1.06	1378	0.15	63...132		
		500	475.95	1.05	1379	0.15	63...132		
		500	513.14	0.97	1392	0.14	63...132		
		500	575.74	0.87	1410	0.13	63...132		
		500	596.89	0.84	1416	0.13	63...132		
		500	643.53	0.78	1429	0.12	63...132		
		500	694.32	0.72	1443	0.11	63...132		
		500	722.05	0.69	1450	0.11	63...132		
		500	748.57	0.67	1455	0.10	63...132		
		500	807.07	0.62	1314	0.09	63...132		
		500	839.91	0.60	1474	0.09	63...132		
		500	870.76	0.57	1484	0.09	63...132		
		500	905.53	0.55	1490	0.09	63...132		
		500	938.80	0.53	1337	0.07	63...132		
		500	1012.89	0.49	1510	0.08	63...132		
		500	1016.02	0.49	1510	0.08	63...132		
		500	1053.34	0.47	1355	0.07	63...132		
		500	1092.04	0.46	1359	0.07	63...132		
		500	1135.65	0.44	1365	0.06	63...132		
		500	1225.28	0.41	1543	0.07	63...132		
		500	1270.29	0.39	1384	0.06	63...132		
		500	1274.20	0.39	1552	0.06	63...132		
		500	1321.01	0.38	1388	0.06	63...132		
		500	1477.63	0.34	1329	0.05	63...132		
		500	1482.00	0.34	1578	0.06	63...132		
		500	1536.64	0.33	1410	0.05	63...132		
		500	1598.00	0.31	1420	0.05	63...132		
		500	1787.46	0.28	1375	0.04	63...132		
		500	1792.97	0.28	1615	0.05	63...132		
		500	1858.84	0.27	1443	0.04	63...132		
		500	2162.25	0.23	1413	0.03	63...132		
		500	2248.00	0.22	1476	0.03	63...132		
500	2615.62	0.19	1446	0.03	63...132				
500	3164.06	0.16	1142	0.02	63...132				



MODEL: SP-11 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-11L	1500	3.89	386.10	1002	40.50	63...132		
		1500	4.25	352.94	1020	37.70	63...132		
		1500	5.33	281.43	1063	31.30	63...132		
		1500	6.20	241.94	1150	29.13	63...132		
		1500	7.50	200.00	888	18.61	63...132		
Double	SP2-11L	1500	15.12	99.21	1512	15.70	63...132		
		1500	16.53	90.75	1526	14.50	63...132		
		1500	18.06	83.04	1575	13.70	63...132		
		1500	20.73	72.36	1458	11.04	63...132		
		1500	22.65	66.22	1688	11.70	63...132		
		1500	26.35	56.93	1736	10.35	63...132		
		1500	28.41	52.80	1480	8.17	63...132		
		1500	31.88	47.05	1873	9.23	63...132		
		1500	33.05	45.39	1492	7.09	63...132		
		1500	38.44	39.02	1261	5.15	63...132		
		1500	39.97	37.53	1506	5.91	63...132		
		1500	46.50	32.26	1273	4.30	63...132		
		1500	56.25	26.67	986	2.75	63...132		
		1500	58.82	25.50	2023	5.40	63...132		
		Triple	SP3-11L	1500	64.28	23.34	1941	4.74	63...132
1500	70.25			21.35	1950	4.36	63...132		
1500	76.77			19.54	1959	4.01	63...132		
1500	88.10			17.03	1973	3.52	63...132		
1500	96.27			15.58	1983	3.23	63...132		
1500	111.99			13.39	1999	2.80	63...132		
1500	120.74			12.42	2007	2.61	63...132		
1500	135.46			11.07	2019	2.34	63...132		
1500	140.45			10.68	2023	2.26	63...132		
1500	151.66			9.89	1615	1.67	63...132		
1500	163.37			9.18	2040	1.96	63...132		
1500	169.89			8.83	2045	1.89	63...132		
1500	176.14			8.52	1629	1.45	63...132		
1500	197.63			7.59	2090	1.66	63...132		
1500	204.89			7.32	1642	1.26	63...132		
1500	213.07			7.04	1646	1.21	63...132		
1500	238.33			6.29	1390	0.92	63...132		
1500	239.06			6.27	2159	1.42	63...132		
1500	247.85			6.05	1671	1.06	63...132		
1500	288.30			5.20	1410	0.77	63...132		
1500	299.81			5.00	1727	0.91	63...132		
1500	348.75			4.30	1457	0.66	63...132		
Quadruple	SP4-11L			1500	228.75	6.56	2090	1.44	63...132
				1500	249.98	6.00	2172	1.36	63...132
				1500	273.18	5.49	2176	1.25	63...132
		1500	298.54	5.02	2180	1.15	63...132		
		1500	326.25	4.60	2184	1.05	63...132		
		1500	342.60	4.38	2186	1.00	63...132		
		1500	374.41	4.01	2190	0.92	63...132		
		1500	409.16	3.67	2194	0.84	63...132		
		1500	469.55	3.19	2200	0.74	63...132		
		1500	475.95	3.15	2200	0.73	63...132		
		1500	513.14	2.92	2204	0.67	63...132		
		1500	575.74	2.61	2209	0.60	63...132		
		1500	596.89	2.51	2211	0.58	63...132		
		1500	643.53	2.33	2214	0.54	63...132		
		1500	694.32	2.16	2218	0.50	63...132		
		1500	722.05	2.08	2219	0.48	63...132		
		1500	748.57	2.00	2221	0.47	63...132		
		1500	807.07	1.86	1990	0.39	63...132		
		1500	839.91	1.79	2226	0.42	63...132		
		1500	870.76	1.72	2229	0.40	63...132		
		1500	905.53	1.66	2239	0.39	63...132		
		1500	938.80	1.60	2024	0.34	63...132		
		1500	1012.89	1.48	2270	0.35	63...132		
		1500	1016.02	1.48	2270	0.35	63...132		
		1500	1053.34	1.42	2051	0.31	63...132		
		1500	1092.04	1.37	2059	0.30	63...132		
		1500	1135.65	1.32	2068	0.29	63...132		
		1500	1225.28	1.22	2322	0.30	63...132		
		1500	1270.29	1.18	2095	0.26	63...132		
		1500	1274.20	1.18	2332	0.29	63...132		
		1500	1321.01	1.14	2103	0.25	63...132		
		1500	1477.63	1.02	1874	0.20	63...132		
		1500	1482.00	1.01	2375	0.25	63...132		
		1500	1536.64	0.98	2139	0.22	63...132		
		1500	1598.00	0.94	2149	0.21	63...132		
		1500	1787.46	0.84	1940	0.17	63...132		
		1500	1792.97	0.84	2428	0.21	63...132		
		1500	1858.84	0.81	2185	0.19	63...132		
		1500	2162.25	0.69	2009	0.15	63...132		
		1500	2248.00	0.67	2233	0.16	63...132		
1500	2615.62	0.57	2078	0.12	63...132				
1500	3164.06	0.47	1613	0.08	63...132				



MODEL: SP-11 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-11L	1000	3.89	257.40	1133	30.50	63...132		
		1000	4.25	235.29	1144	28.20	63...132		
		1000	5.33	187.62	1197	23.50	63...132		
		1000	6.20	161.29	1175	19.84	63...132		
		1000	7.50	133.33	908	12.68	63...132		
Double	SP2-11L	1000	15.12	66.14	1690	11.70	63...132		
		1000	16.53	60.50	1736	11.00	63...132		
		1000	18.06	55.36	1777	10.30	63...132		
		1000	20.73	48.24	1487	7.51	63...132		
		1000	22.65	44.15	1879	8.68	63...132		
		1000	26.35	37.95	1893	7.53	63...132		
		1000	28.41	35.20	1511	5.56	63...132		
		1000	31.88	31.37	1912	6.28	63...132		
		1000	33.05	30.26	1523	4.82	63...132		
		1000	38.44	26.01	1288	3.51	63...132		
		1000	39.97	25.02	1538	4.03	63...132		
		1000	46.50	21.51	1300	2.93	63...132		
		1000	56.25	17.78	1008	1.88	63...132		
		1000	58.82	17.00	2040	3.63	63...132		
		Triple	SP3-11L	1000	64.28	15.56	1983	3.23	63...132
1000	70.25			14.24	1992	2.97	63...132		
1000	76.77			13.03	2002	2.73	63...132		
1000	88.10			11.35	2017	2.40	63...132		
1000	96.27			10.39	2026	2.20	63...132		
1000	111.99			8.93	2043	1.91	63...132		
1000	120.74			8.28	2060	1.78	63...132		
1000	135.46			7.38	2100	1.62	63...132		
1000	140.45			7.12	2113	1.58	63...132		
1000	151.66			6.59	1652	1.14	63...132		
1000	163.37			6.12	2168	1.39	63...132		
1000	169.89			5.89	2173	1.34	63...132		
1000	176.14			5.68	1690	1.00	63...132		
1000	197.63			5.06	2180	1.16	63...132		
1000	204.89			4.88	1734	0.89	63...132		
1000	213.07			4.69	1746	0.86	63...132		
1000	238.33			4.20	1463	0.64	63...132		
1000	239.06			4.18	2188	0.96	63...132		
1000	247.85			4.03	1792	0.76	63...132		
1000	288.30			3.47	1512	0.55	63...132		
1000	299.81			3.34	1852	0.65	63...132		
1000	348.75			2.87	1563	0.47	63...132		
Quadruple	SP4-11L			1000	228.75	4.37	2115	0.97	63...132
				1000	249.98	4.00	2190	0.92	63...132
				1000	273.18	3.66	2194	0.84	63...132
		1000	298.54	3.35	2198	0.77	63...132		
		1000	326.25	3.07	2202	0.71	63...132		
		1000	342.60	2.92	2204	0.67	63...132		
		1000	374.41	2.67	2208	0.62	63...132		
		1000	409.16	2.44	2212	0.57	63...132		
		1000	469.55	2.13	2218	0.50	63...132		
		1000	475.95	2.10	2219	0.49	63...132		
		1000	513.14	1.95	2222	0.45	63...132		
		1000	575.74	1.74	2227	0.41	63...132		
		1000	596.89	1.68	2236	0.39	63...132		
		1000	643.53	1.55	2257	0.37	63...132		
		1000	694.32	1.44	2277	0.34	63...132		
		1000	722.05	1.38	2288	0.33	63...132		
		1000	748.57	1.34	2297	0.32	63...132		
		1000	807.07	1.24	2083	0.27	63...132		
		1000	839.91	1.19	2329	0.29	63...132		
		1000	870.76	1.15	2339	0.28	63...132		
		1000	905.53	1.10	2351	0.27	63...132		
		1000	938.80	1.07	2118	0.24	63...132		
		1000	1012.89	0.99	2381	0.25	63...132		
		1000	1016.02	0.98	2384	0.25	63...132		
		1000	1053.34	0.95	2146	0.21	63...132		
		1000	1092.04	0.92	2154	0.21	63...132		
		1000	1135.65	0.88	2165	0.20	63...132		
		1000	1225.28	0.82	2435	0.21	63...132		
		1000	1270.29	0.79	2191	0.18	63...132		
		1000	1274.20	0.78	2450	0.20	63...132		
		1000	1321.01	0.76	2201	0.18	63...132		
		1000	1477.63	0.68	2014	0.14	63...132		
		1000	1482.00	0.67	2495	0.18	63...132		
		1000	1536.64	0.65	2240	0.15	63...132		
		1000	1598.00	0.63	2248	0.15	63...132		
		1000	1787.46	0.56	2084	0.12	63...132		
		1000	1792.97	0.56	2549	0.15	63...132		
		1000	1858.84	0.54	2287	0.13	63...132		
		1000	2162.25	0.46	2158	0.10	63...132		
		1000	2248.00	0.44	2341	0.11	63...132		
1000	2615.62	0.38	2233	0.09	63...132				
1000	3164.06	0.32	1728	0.06	63...132				



MODEL: SP-11 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-11L	750	3.89	193.05	1227	24.80	63...132		
		750	4.25	176.47	1255	23.20	63...132		
		750	5.33	140.71	1311	19.30	63...132		
		750	6.20	120.97	1192	15.10	63...132		
		750	7.50	100.00	922	9.65	63...132		
Double	SP2-11L	750	15.12	49.60	1858	9.65	63...132		
		750	16.53	45.38	1877	8.92	63...132		
		750	18.06	41.52	1885	8.20	63...132		
		750	20.73	36.18	1509	5.71	63...132		
		750	22.65	33.11	1907	6.61	63...132		
		750	26.35	28.46	1922	5.73	63...132		
		750	28.41	26.40	1533	4.23	63...132		
		750	31.88	23.53	1940	4.78	63...132		
		750	33.05	22.70	1545	3.67	63...132		
		750	38.44	19.51	1307	2.67	63...132		
		750	39.97	18.76	1561	3.06	63...132		
		750	46.50	16.13	1321	2.23	63...132		
		750	56.25	13.33	1023	1.43	63...132		
		750	58.82	12.75	2054	2.74	63...132		
		Trip	SP3-11L	750	64.28	11.67	2013	2.46	63...132
750	70.25			10.68	2023	2.26	63...132		
750	76.77			9.77	2033	2.08	63...132		
750	88.10			8.51	2050	1.83	63...132		
750	96.27			7.79	2081	1.70	63...132		
750	111.99			6.70	2135	1.50	63...132		
750	120.74			6.21	2163	1.41	63...132		
750	135.46			5.54	2176	1.26	63...132		
750	140.45			5.34	2178	1.22	63...132		
750	151.66			4.95	1730	0.90	63...132		
750	163.37			4.59	2184	1.05	63...132		
750	169.89			4.41	2186	1.00	63...132		
750	176.14			4.26	1776	0.79	63...132		
750	197.63			3.80	2192	0.87	63...132		
750	204.89			3.66	1823	0.70	63...132		
750	213.07			3.52	1835	0.68	63...132		
750	238.33			3.15	1538	0.51	63...132		
750	239.06			3.14	2201	0.72	63...132		
750	247.85			3.03	1884	0.60	63...132		
750	288.30			2.60	1590	0.43	63...132		
750	299.81			2.50	1948	0.51	63...132		
750	348.75			2.15	1644	0.37	63...132		
Quadruple	SP4-11L			750	228.75	3.28	2133	0.73	63...132
				750	249.98	3.00	2203	0.69	63...132
				750	273.18	2.75	2207	0.64	63...132
		750	298.54	2.51	2211	0.58	63...132		
		750	326.25	2.30	2215	0.53	63...132		
		750	342.60	2.19	2217	0.51	63...132		
		750	374.41	2.00	2221	0.47	63...132		
		750	409.16	1.83	2225	0.43	63...132		
		750	469.55	1.60	2248	0.38	63...132		
		750	475.95	1.58	2252	0.37	63...132		
		750	513.14	1.46	2273	0.35	63...132		
		750	575.74	1.30	2305	0.31	63...132		
		750	596.89	1.26	2314	0.31	63...132		
		750	643.53	1.17	2334	0.29	63...132		
		750	694.32	1.08	2357	0.27	63...132		
		750	722.05	1.04	2367	0.26	63...132		
		750	748.57	1.00	2378	0.25	63...132		
		750	807.07	0.93	2151	0.21	63...132		
		750	839.91	0.89	2412	0.23	63...132		
		750	870.76	0.86	2421	0.22	63...132		
		750	905.53	0.83	2432	0.21	63...132		
		750	938.80	0.80	2188	0.18	63...132		
		750	1012.89	0.74	2465	0.19	63...132		
		750	1016.02	0.74	2465	0.19	63...132		
		750	1053.34	0.71	2218	0.17	63...132		
		750	1092.04	0.69	2225	0.16	63...132		
		750	1135.65	0.66	2237	0.16	63...132		
		750	1225.28	0.61	2523	0.16	63...132		
		750	1270.29	0.59	2264	0.14	63...132		
		750	1274.20	0.59	2533	0.16	63...132		
		750	1321.01	0.57	2273	0.14	63...132		
		750	1477.63	0.51	2119	0.11	63...132		
		750	1482.00	0.51	2577	0.14	63...132		
		750	1536.64	0.49	2313	0.12	63...132		
		750	1598.00	0.47	2323	0.11	63...132		
		750	1787.46	0.42	2194	0.10	63...132		
		750	1792.97	0.42	2637	0.12	63...132		
		750	1858.84	0.40	2366	0.10	63...132		
		750	2162.25	0.35	2266	0.08	63...132		
		750	2248.00	0.33	2418	0.08	63...132		
		750	2615.62	0.29	2343	0.07	63...132		
		750	3164.06	0.24	1820	0.05	63...132		



MODEL: SP-11 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-11L	500	3.89	128.70	1395	18.80	63...132		
		500	4.25	117.65	1420	17.50	63...132		
		500	5.33	93.81	1439	14.13	63...132		
		500	6.20	80.65	1216	10.27	63...132		
		500	7.50	66.67	941	6.57	63...132		
Double	SP2-11L	500	15.12	33.07	2013	6.97	63...132		
		500	16.53	30.25	1915	6.07	63...132		
		500	18.06	27.68	1924	5.58	63...132		
		500	20.73	24.12	1540	3.89	63...132		
		500	22.65	22.07	1947	4.50	63...132		
		500	26.35	18.98	1962	3.90	63...132		
		500	28.41	17.60	1566	2.88	63...132		
		500	31.88	15.68	1982	3.26	63...132		
		500	33.05	15.13	1579	2.50	63...132		
		500	38.44	13.01	1336	1.82	63...132		
		500	39.97	12.51	1595	2.09	63...132		
		500	46.50	10.75	1350	1.52	63...132		
		500	56.25	8.89	1046	0.97	63...132		
		500	58.82	8.50	2075	1.85	63...132		
		Triple	SP3-11L	500	64.28	7.78	2081	1.70	63...132
500	70.25			7.12	2112	1.57	63...132		
500	76.77			6.51	2145	1.46	63...132		
500	88.10			5.68	2175	1.29	63...132		
500	96.27			5.19	2179	1.19	63...132		
500	111.99			4.46	2185	1.02	63...132		
500	120.74			4.14	2189	0.95	63...132		
500	135.46			3.69	2194	0.85	63...132		
500	140.45			3.56	2196	0.82	63...132		
500	151.66			3.30	1856	0.63	63...132		
500	163.37			3.06	2202	0.71	63...132		
500	169.89			2.94	2204	0.68	63...132		
500	176.14			2.84	1905	0.57	63...132		
500	197.63			2.53	2211	0.59	63...132		
500	204.89			2.44	1956	0.50	63...132		
500	213.07			2.35	1970	0.48	63...132		
500	238.33			2.10	1651	0.36	63...132		
500	239.06			2.09	2219	0.49	63...132		
500	247.85			2.02	1980	0.42	63...132		
500	288.30			1.73	1707	0.31	63...132		
500	299.81			1.67	2014	0.35	63...132		
500	348.75			1.43	1765	0.26	63...132		
Quadruple	SP4-11L			500	228.75	2.19	2160	0.50	63...132
				500	249.98	2.00	2221	0.47	63...132
				500	273.18	1.83	2225	0.43	63...132
		500	298.54	1.67	2237	0.39	63...132		
		500	326.25	1.53	2260	0.36	63...132		
		500	342.60	1.46	2273	0.35	63...132		
		500	374.41	1.34	2296	0.32	63...132		
		500	409.16	1.22	2322	0.30	63...132		
		500	469.55	1.06	2362	0.26	63...132		
		500	475.95	1.05	2364	0.26	63...132		
		500	513.14	0.97	2387	0.24	63...132		
		500	575.74	0.87	2418	0.22	63...132		
		500	596.89	0.84	2428	0.21	63...132		
		500	643.53	0.78	2450	0.20	63...132		
		500	694.32	0.72	2473	0.19	63...132		
		500	722.05	0.69	2486	0.18	63...132		
		500	748.57	0.67	2495	0.18	63...132		
		500	807.07	0.62	2252	0.15	63...132		
		500	839.91	0.60	2527	0.16	63...132		
		500	870.76	0.57	2543	0.15	63...132		
		500	905.53	0.55	2554	0.15	63...132		
		500	938.80	0.53	2292	0.13	63...132		
		500	1012.89	0.49	2589	0.13	63...132		
		500	1016.02	0.49	2589	0.13	63...132		
		500	1053.34	0.47	2323	0.11	63...132		
		500	1092.04	0.46	2329	0.11	63...132		
		500	1135.65	0.44	2341	0.11	63...132		
		500	1225.28	0.41	2645	0.11	63...132		
		500	1270.29	0.39	2373	0.10	63...132		
		500	1274.20	0.39	2661	0.11	63...132		
		500	1321.01	0.38	2380	0.10	63...132		
		500	1477.63	0.34	2278	0.08	63...132		
		500	1482.00	0.34	2705	0.10	63...132		
		500	1536.64	0.33	2418	0.08	63...132		
		500	1598.00	0.31	2435	0.08	63...132		
		500	1787.46	0.28	2358	0.07	63...132		
		500	1792.97	0.28	2768	0.08	63...132		
		500	1858.84	0.27	2473	0.07	63...132		
		500	2162.25	0.23	2423	0.06	63...132		
		500	2248.00	0.22	2531	0.06	63...132		
500	2615.62	0.19	2479	0.05	63...132				
500	3164.06	0.16	1958	0.03	63...132				



PREMIUM



MODEL: SP-12 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-12L	1500	3.89	386.10	1857	75.00	100...200		
		1500	4.25	352.94	1894	70.00	100...200		
		1500	5.33	281.43	1986	58.50	100...200		
		1500	6.20	241.94	1808	45.81	100...200		
		1500	7.50	200.00	1407	29.46	100...200		
Double	SP2-12L	1500	15.12	99.21	2512	26.10	63...132		
		1500	16.53	90.75	2746	26.10	63...132		
		1500	18.06	83.04	2794	24.30	63...132		
		1500	20.73	72.36	2323	17.60	63...132		
		1500	22.65	66.22	2981	20.66	63...132		
		1500	26.35	56.93	2858	17.04	63...132		
		1500	28.41	52.80	2358	13.02	63...132		
		1500	31.88	47.05	2202	10.85	63...132		
		1500	33.05	45.39	2376	11.29	63...132		
		1500	38.44	39.02	1983	8.10	63...132		
		1500	39.97	37.53	2400	9.43	63...132		
		1500	46.50	32.26	2001	6.76	63...132		
		1500	56.25	26.67	1594	4.45	63...132		
		1500	58.82	25.50	3231	8.63	63...132		
		Triple	SP3-12L	1500	64.28	23.34	3087	7.54	63...132
1500	70.25			21.35	3150	7.04	63...132		
1500	76.77			19.54	3164	6.48	63...132		
1500	88.10			17.03	3186	5.68	63...132		
1500	96.27			15.58	3201	5.22	63...132		
1500	111.99			13.39	3227	4.53	63...132		
1500	120.74			12.42	3240	4.21	63...132		
1500	135.47			11.07	3260	3.78	63...132		
1500	140.45			10.68	3266	3.65	63...132		
1500	151.70			9.89	2570	2.66	63...132		
1500	163.37			9.18	3127	3.00	63...132		
1500	169.89			8.83	3300	3.05	63...132		
1500	176.14			8.52	2591	2.31	63...132		
1500	197.63			7.59	3158	2.51	63...132		
1500	204.89			7.32	2612	2.00	63...132		
1500	213.07			7.04	2618	1.93	63...132		
1500	238.33			6.29	2183	1.44	63...132		
1500	239.06			6.27	2445	1.61	63...132		
1500	247.85			6.05	2658	1.68	63...132		
1500	288.30			5.20	2212	1.21	63...132		
1500	299.81			5.00	2745	1.44	63...132		
1500	348.75			4.30	2285	1.03	63...132		
Quadruple	SP4-12L			1500	228.75	6.56	3285	2.26	63...132
				1500	249.98	6.00	3279	2.06	63...132
				1500	273.18	5.49	3356	1.93	63...132
		1500	298.54	5.02	3362	1.77	63...132		
		1500	326.25	4.60	3368	1.62	63...132		
		1500	342.60	4.38	3372	1.55	63...132		
		1500	374.41	4.01	3378	1.42	63...132		
		1500	409.16	3.67	3384	1.30	63...132		
		1500	469.55	3.19	3394	1.13	63...132		
		1500	475.95	3.15	3395	1.12	63...132		
		1500	513.14	2.92	3400	1.04	63...132		
		1500	575.74	2.61	3408	0.93	63...132		
		1500	596.89	2.51	3410	0.90	63...132		
		1500	643.53	2.33	3415	0.83	63...132		
		1500	694.32	2.16	3420	0.77	63...132		
		1500	722.05	2.08	3423	0.75	63...132		
		1500	748.57	2.00	3426	0.72	63...132		
		1500	807.07	1.86	3106	0.61	63...132		
		1500	839.91	1.79	3434	0.64	63...132		
		1500	870.76	1.72	3438	0.62	63...132		
		1500	905.53	1.66	3454	0.60	63...132		
		1500	938.80	1.60	3167	0.53	63...132		
		1500	1012.89	1.48	3447	0.53	63...132		
		1500	1016.02	1.48	3500	0.54	63...132		
		1500	1053.34	1.42	3515	0.51	63...132		
		1500	1092.04	1.37	3221	0.46	63...132		
		1500	1135.65	1.32	3236	0.45	63...132		
		1500	1225.28	1.22	3495	0.45	63...132		
		1500	1270.29	1.18	3276	0.41	63...132		
		1500	1274.20	1.18	3594	0.44	63...132		
		1500	1321.01	1.14	3291	0.39	63...132		
		1500	1477.63	1.02	2933	0.31	63...132		
		1500	1482.00	1.01	3612	0.38	63...132		
		1500	1536.64	0.98	3347	0.34	63...132		
		1500	1598.00	0.94	3362	0.33	63...132		
		1500	1787.46	0.84	3032	0.27	63...132		
		1500	1792.97	0.84	2791	0.25	63...132		
		1500	1858.84	0.81	3420	0.29	63...132		
		1500	2162.25	0.69	3135	0.23	63...132		
		1500	2248.00	0.67	3493	0.25	63...132		
1500	2615.62	0.57	3241	0.19	63...132				
1500	3164.06	0.47	2534	0.13	63...132				



MODEL: SP-12 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-12L	1000	3.89	257.40	2098	56.50	100...200		
		1000	4.25	235.29	2131	52.50	100...200		
		1000	5.33	187.62	2220	43.59	100...200		
		1000	6.20	161.29	1848	31.21	100...200		
		1000	7.50	133.33	1438	20.08	100...200		
Double	SP2-12L	1000	15.12	66.14	2830	19.60	63...132		
		1000	16.53	60.50	2951	18.70	63...132		
		1000	18.06	55.36	2959	17.16	63...132		
		1000	20.73	48.24	2369	11.96	63...132		
		1000	22.65	44.15	3039	14.04	63...132		
		1000	26.35	37.95	2917	11.59	63...132		
		1000	28.41	35.20	2406	8.86	63...132		
		1000	31.88	31.37	2251	7.40	63...132		
		1000	33.05	30.26	2424	7.68	63...132		
		1000	38.44	26.01	2023	5.51	63...132		
		1000	39.97	25.02	2448	6.41	63...132		
		1000	46.50	21.51	2043	4.60	63...132		
		1000	56.25	17.78	1628	3.03	63...132		
		1000	58.82	17.00	3217	5.73	63...132		
		Triple	SP3-12L	1000	64.28	15.56	3077	5.01	63...132
1000	70.25			14.24	3217	4.80	63...132		
1000	76.77			13.03	3232	4.41	63...132		
1000	88.10			11.35	3256	3.87	63...132		
1000	96.27			10.39	3271	3.56	63...132		
1000	111.99			8.93	3298	3.09	63...132		
1000	120.74			8.28	3323	2.88	63...132		
1000	135.47			7.38	3336	2.58	63...132		
1000	140.45			7.12	3339	2.49	63...132		
1000	151.70			6.59	2627	1.81	63...132		
1000	163.37			6.12	3193	2.05	63...132		
1000	169.89			5.89	3352	2.06	63...132		
1000	176.14			5.68	2687	1.60	63...132		
1000	197.63			5.06	3225	1.71	63...132		
1000	204.89			4.88	2756	1.41	63...132		
1000	213.07			4.69	2775	1.36	63...132		
1000	238.33			4.20	2295	1.00	63...132		
1000	239.06			4.18	2498	1.09	63...132		
1000	247.85			4.03	2847	1.20	63...132		
1000	288.30			3.47	2371	0.86	63...132		
1000	299.81			3.34	2942	1.03	63...132		
1000	348.75			2.87	2450	0.74	63...132		
Quadruple	SP4-12L			1000	228.75	4.37	3370	1.54	63...132
				1000	249.98	4.00	3378	1.41	63...132
				1000	273.18	3.66	3384	1.30	63...132
		1000	298.54	3.35	3390	1.19	63...132		
		1000	326.25	3.07	3396	1.09	63...132		
		1000	342.60	2.92	3400	1.04	63...132		
		1000	374.41	2.67	3406	0.95	63...132		
		1000	409.16	2.44	3412	0.87	63...132		
		1000	469.55	2.13	3421	0.76	63...132		
		1000	475.95	2.10	3422	0.75	63...132		
		1000	513.14	1.95	3428	0.70	63...132		
		1000	575.74	1.74	3435	0.63	63...132		
		1000	596.89	1.68	3450	0.60	63...132		
		1000	643.53	1.55	3480	0.57	63...132		
		1000	694.32	1.44	3510	0.53	63...132		
		1000	722.05	1.38	3527	0.51	63...132		
		1000	748.57	1.34	3542	0.49	63...132		
		1000	807.07	1.24	3259	0.42	63...132		
		1000	839.91	1.19	3589	0.45	63...132		
		1000	870.76	1.15	3604	0.43	63...132		
		1000	905.53	1.10	3621	0.42	63...132		
		1000	938.80	1.07	3315	0.37	63...132		
		1000	1012.89	0.99	3625	0.38	63...132		
		1000	1016.02	0.98	3669	0.38	63...132		
		1000	1053.34	0.95	3616	0.36	63...132		
		1000	1092.04	0.92	3371	0.33	63...132		
		1000	1135.65	0.88	3386	0.31	63...132		
		1000	1225.28	0.82	3749	0.32	63...132		
		1000	1270.29	0.79	3429	0.28	63...132		
		1000	1274.20	0.78	3767	0.31	63...132		
		1000	1321.01	0.76	3444	0.27	63...132		
		1000	1477.63	0.68	3148	0.22	63...132		
		1000	1482.00	0.67	3834	0.27	63...132		
		1000	1536.64	0.65	3503	0.24	63...132		
		1000	1598.00	0.63	3519	0.23	63...132		
		1000	1787.46	0.56	3255	0.19	63...132		
		1000	1792.97	0.56	2998	0.18	63...132		
		1000	1858.84	0.54	3579	0.20	63...132		
		1000	2162.25	0.46	3366	0.16	63...132		
		1000	2248.00	0.44	3656	0.17	63...132		
1000	2615.62	0.38	3480	0.14	63...132				
1000	3164.06	0.32	2722	0.09	63...132				



PREMIUM



MODEL: SP-12 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-12L	750	3.89	193.05	2288	46.20	100...200		
		750	4.25	176.47	2327	43.00	100...200		
		750	5.33	140.71	2251	33.15	100...200		
		750	6.20	120.97	1875	23.75	100...200		
		750	7.50	100.00	1460	15.29	100...200		
Double	SP2-12L	750	15.12	49.60	3081	16.00	63...132		
		750	16.53	45.38	3033	14.42	63...132		
		750	18.06	41.52	2999	13.04	63...132		
		750	20.73	36.18	2403	9.10	63...132		
		750	22.65	33.11	3081	10.68	63...132		
		750	26.35	28.46	2958	8.82	63...132		
		750	28.41	26.40	2441	6.74	63...132		
		750	31.88	23.53	2285	5.63	63...132		
		750	33.05	22.70	2460	5.84	63...132		
		750	38.44	19.51	2054	4.20	63...132		
		750	39.97	18.76	2485	4.88	63...132		
		750	46.50	16.13	2074	3.50	63...132		
		750	56.25	13.33	1653	2.31	63...132		
		750	58.82	12.75	3237	4.33	63...132		
		Triple	SP3-12L	750	64.28	11.67	3200	3.91	63...132
750	70.25			10.68	3266	3.65	63...132		
750	76.77			9.77	3282	3.36	63...132		
750	88.10			8.51	3308	2.95	63...132		
750	96.27			7.79	3332	2.72	63...132		
750	111.99			6.70	3343	2.35	63...132		
750	120.74			6.21	3348	2.18	63...132		
750	135.47			5.54	3356	1.95	63...132		
750	140.45			5.34	3358	1.88	63...132		
750	151.70			4.94	2750	1.43	63...132		
750	163.37			4.59	3241	1.56	63...132		
750	169.89			4.41	3371	1.56	63...132		
750	176.14			4.26	2821	1.26	63...132		
750	197.63			3.80	3274	1.30	63...132		
750	204.89			3.66	2895	1.11	63...132		
750	213.07			3.52	2914	1.07	63...132		
750	238.33			3.15	2411	0.80	63...132		
750	239.06			3.14	2537	0.83	63...132		
750	247.85			3.03	2991	0.95	63...132		
750	288.30			2.60	2491	0.68	63...132		
750	299.81			2.50	3085	0.81	63...132		
750	348.75			2.15	2574	0.58	63...132		
Quadruple	SP4-12L			750	228.75	3.28	3398	1.17	63...132
				750	249.98	3.00	3318	1.04	63...132
				750	273.18	2.75	3404	0.98	63...132
		750	298.54	2.51	3410	0.90	63...132		
		750	326.25	2.30	3416	0.82	63...132		
		750	342.60	2.19	3419	0.79	63...132		
		750	374.41	2.00	3426	0.72	63...132		
		750	409.16	1.83	3432	0.66	63...132		
		750	469.55	1.60	3469	0.58	63...132		
		750	475.95	1.58	3474	0.58	63...132		
		750	513.14	1.46	3505	0.54	63...132		
		750	575.74	1.30	3551	0.48	63...132		
		750	596.89	1.26	3567	0.47	63...132		
		750	643.53	1.17	3599	0.44	63...132		
		750	694.32	1.08	3630	0.41	63...132		
		750	722.05	1.04	3647	0.40	63...132		
		750	748.57	1.00	3662	0.38	63...132		
		750	807.07	0.93	3366	0.33	63...132		
		750	839.91	0.89	3711	0.35	63...132		
		750	870.76	0.86	3727	0.34	63...132		
		750	905.53	0.83	3744	0.33	63...132		
		750	938.80	0.80	3424	0.29	63...132		
		750	1012.89	0.74	3793	0.29	63...132		
		750	1016.02	0.74	3794	0.29	63...132		
		750	1053.34	0.71	3744	0.28	63...132		
		750	1092.04	0.69	3483	0.25	63...132		
		750	1135.65	0.66	3498	0.24	63...132		
		750	1225.28	0.61	3878	0.25	63...132		
		750	1270.29	0.59	3542	0.22	63...132		
		750	1274.20	0.59	3896	0.24	63...132		
		750	1321.01	0.57	3558	0.21	63...132		
		750	1477.63	0.51	3311	0.18	63...132		
		750	1482.00	0.51	3965	0.21	63...132		
		750	1536.64	0.49	3618	0.19	63...132		
		750	1598.00	0.47	3635	0.18	63...132		
		750	1787.46	0.42	3424	0.15	63...132		
		750	1792.97	0.42	3154	0.14	63...132		
		750	1858.84	0.40	3697	0.15	63...132		
		750	2162.25	0.35	3540	0.13	63...132		
		750	2248.00	0.33	3777	0.13	63...132		
750	2615.62	0.29	3660	0.11	63...132				
750	3164.06	0.24	2865	0.07	63...132				



MODEL: SP-12 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-12L	500	3.89	128.70	2607	35.10	100...200		
		500	4.25	117.65	2638	32.50	100...200		
		500	5.33	93.81	2295	22.53	100...200		
		500	6.20	80.65	1912	16.15	100...200		
		500	7.50	66.67	1490	10.40	100...200		
Double	SP2-12L	500	15.12	33.07	3217	10.99	63...132		
		500	16.53	30.25	3094	9.80	63...132		
		500	18.06	27.68	3060	8.87	63...132		
		500	20.73	24.12	2452	6.19	63...132		
		500	22.65	22.07	3144	7.26	63...132		
		500	26.35	18.98	3017	5.99	63...132		
		500	28.41	17.60	2492	4.58	63...132		
		500	31.88	15.68	2332	3.83	63...132		
		500	33.05	15.13	2512	3.98	63...132		
		500	38.44	13.01	2098	2.86	63...132		
		500	39.97	12.51	2538	3.32	63...132		
		500	46.50	10.75	2119	2.38	63...132		
		500	56.25	8.89	1690	1.58	63...132		
		500	58.82	8.50	3309	2.95	63...132		
		500	64.28	7.78	3281	2.68	63...132		
Triple	SP3-12L	500	70.25	7.12	3338	2.49	63...132		
		500	76.77	6.51	3345	2.28	63...132		
		500	88.10	5.68	3354	2.00	63...132		
		500	96.27	5.19	3360	1.83	63...132		
		500	111.99	4.46	3370	1.57	63...132		
		500	120.74	4.14	3376	1.46	63...132		
		500	135.47	3.69	3384	1.31	63...132		
		500	140.45	3.56	3386	1.26	63...132		
		500	151.70	3.30	2947	1.02	63...132		
		500	163.37	3.06	3312	1.06	63...132		
		500	169.89	2.94	3399	1.05	63...132		
		500	176.14	2.84	3024	0.90	63...132		
		500	197.63	2.53	3347	0.89	63...132		
		500	204.89	2.44	3086	0.79	63...132		
		500	213.07	2.35	3088	0.76	63...132		
		500	238.33	2.10	2585	0.57	63...132		
		500	239.06	2.09	2594	0.57	63...132		
		500	247.85	2.02	3098	0.66	63...132		
		500	288.30	1.73	2672	0.49	63...132		
		500	299.81	1.67	3151	0.55	63...132		
		500	348.75	1.43	2762	0.41	63...132		
		Quadruple	SP4-12L	500	228.75	2.19	3441	0.79	63...132
				500	249.98	2.00	3345	0.70	63...132
				500	273.18	1.83	3432	0.66	63...132
				500	298.54	1.67	3449	0.61	63...132
500	326.25			1.53	3485	0.56	63...132		
500	342.60			1.46	3505	0.54	63...132		
500	374.41			1.34	3541	0.49	63...132		
500	409.16			1.22	3578	0.46	63...132		
500	469.55			1.06	3636	0.40	63...132		
500	475.95			1.05	3642	0.40	63...132		
500	513.14			0.97	3674	0.37	63...132		
500	575.74			0.87	3723	0.34	63...132		
500	596.89			0.84	3739	0.33	63...132		
500	643.53			0.78	3773	0.37	63...132		
500	694.32			0.72	3805	0.29	63...132		
500	722.05			0.69	3823	0.28	63...132		
500	748.57			0.67	3839	0.27	63...132		
500	807.07			0.62	3523	0.23	63...132		
500	839.91			0.60	3891	0.24	63...132		
500	870.76			0.57	3907	0.23	63...132		
500	905.53			0.55	3925	0.23	63...132		
500	938.80			0.53	3584	0.20	63...132		
500	1012.89			0.49	3979	0.20	63...132		
500	1016.02			0.49	3978	0.21	63...132		
500	1053.34			0.47	3933	0.20	63...132		
500	1092.04			0.46	3644	0.18	63...132		
500	1135.65			0.44	3661	0.17	63...132		
500	1225.28			0.41	4065	0.18	63...132		
500	1270.29			0.39	3707	0.15	63...132		
500	1274.20			0.39	4084	0.17	63...132		
500	1321.01			0.38	3723	0.15	63...132		
500	1477.63			0.34	3556	0.13	63...132		
500	1482.00			0.34	4156	0.15	63...132		
500	1536.64			0.33	3787	0.13	63...132		
500	1598.00			0.31	3804	0.12	63...132		
500	1787.46			0.28	3677	0.11	63...132		
500	1792.97			0.28	3390	0.10	63...132		
500	1858.84			0.27	3869	0.11	63...132		
500	2162.25			0.23	3802	0.09	63...132		
500	2248.00			0.22	3953	0.09	63...132		
500	2615.62	0.19	3913	0.08	63...132				
500	3164.06	0.16	3080	0.05	63...132				



PREMIUM



MODEL: SP-13 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-13L	1500	3.89	386.10	2723	110.00	100...200		
		1500	4.25	352.94	2828	104.50	100...200		
		1500	5.33	281.43	2884	85.00	100...200		
		1500	6.20	241.94	3013	76.34	100...200		
		1500	7.50	200.00	2345	49.11	100...200		
Double	SP2-13L	1500	15.12	99.21	4100	42.50	63...132		
		1500	16.53	90.75	4210	40.00	63...132		
		1500	18.06	83.04	4312	37.50	63...132		
		1500	20.73	72.36	3872	29.32	63...132		
		1500	22.65	66.22	4617	32.00	63...132		
		1500	26.35	56.93	4899	29.20	63...132		
		1500	28.41	52.80	3931	21.71	63...132		
		1500	31.88	47.05	3775	18.61	63...132		
		1500	33.05	45.39	3962	18.82	63...132		
		1500	38.44	39.02	3303	13.50	63...132		
		1500	39.97	37.53	3999	15.70	63...132		
		1500	46.50	32.26	3336	11.27	63...132		
		1500	56.25	26.67	2656	7.42	63...132		
		1500	58.82	25.50	5386	14.38	63...132		
		1500	64.28	23.34	5226	12.77	63...132		
Triple	SP3-13L	1500	70.25	21.35	5249	11.74	63...132		
		1500	76.77	19.54	5273	10.79	63...132		
		1500	88.10	17.03	5311	9.47	63...132		
		1500	96.27	15.58	5336	8.70	63...132		
		1500	111.99	13.39	5378	7.54	63...132		
		1500	120.74	12.42	5400	7.02	63...132		
		1500	135.47	11.07	5433	6.30	63...132		
		1500	140.45	10.68	5443	6.08	63...132		
		1500	151.42	9.91	4283	4.44	63...132		
		1500	163.37	9.18	5361	5.16	63...132		
		1500	169.89	8.83	5500	5.08	63...132		
		1500	176.36	8.51	4318	3.85	63...132		
		1500	197.63	7.59	5413	4.30	63...132		
		1500	204.89	7.32	4354	3.34	63...132		
		1500	213.07	7.04	4363	3.21	63...132		
		1500	238.33	6.29	3638	2.40	63...132		
		1500	239.06	6.27	4191	2.75	63...132		
		1500	247.85	6.05	4429	2.81	63...132		
		1500	288.30	5.20	3687	2.00	63...132		
		1500	299.81	5.00	4574	2.40	63...132		
		1500	348.75	4.30	3809	1.72	63...132		
		Quadruple	SP4-13L	1500	228.75	6.56	5553	3.81	63...132
				1500	249.98	6.00	5584	3.51	63...132
				1500	273.18	5.49	5594	3.22	63...132
				1500	298.54	5.02	5604	2.93	63...132
1500	326.25			4.60	5614	2.70	63...132		
1500	342.60			4.38	5620	2.58	63...132		
1500	374.41			4.01	5630	2.36	63...132		
1500	409.16			3.67	5640	2.17	63...132		
1500	469.55			3.19	5656	1.89	63...132		
1500	475.95			3.15	5657	1.87	63...132		
1500	513.14			2.92	5666	1.73	63...132		
1500	575.74			2.61	5679	1.55	63...132		
1500	596.89			2.51	5684	1.49	63...132		
1500	643.53			2.33	5692	1.39	63...132		
1500	694.32			2.16	5701	1.29	63...132		
1500	722.05			2.08	5705	1.24	63...132		
1500	748.57			2.00	5710	1.20	63...132		
1500	807.07			1.86	5188	1.01	63...132		
1500	839.91			1.79	5723	1.07	63...132		
1500	870.76			1.72	5731	1.03	63...132		
1500	905.53			1.66	5754	1.00	63...132		
1500	938.80			1.60	5779	0.97	63...132		
1500	1012.89			1.48	5832	0.90	63...132		
1500	1016.02			1.48	5831	0.90	63...132		
1500	1053.34			1.42	5860	0.87	63...132		
1500	1092.04			1.37	5369	0.77	63...132		
1500	1135.65			1.32	5392	0.75	63...132		
1500	1225.28			1.22	5964	0.76	63...132		
1500	1270.29			1.18	5460	0.67	63...132		
1500	1274.20			1.18	5988	0.74	63...132		
1500	1321.01			1.14	5481	0.65	63...132		
1500	1477.63			1.02	4884	0.52	63...132		
1500	1482.00			1.01	6097	0.64	63...132		
1500	1536.64			0.98	5575	0.57	63...132		
1500	1598.00			0.94	5602	0.55	63...132		
1500	1787.46			0.84	5052	0.44	63...132		
1500	1792.97			0.84	4786	0.42	63...132		
1500	1858.84			0.81	5696	0.48	63...132		
1500	2162.25			0.69	5229	0.38	63...132		
1500	2248.59			0.67	5819	0.41	63...132		
1500	2615.62	0.57	5407	0.32	63...132				



MODEL: SP-13 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-13L	1000	3.89	257.40	3119	84.00	100...200		
		1000	4.25	235.29	3166	78.00	100...200		
		1000	5.33	187.62	3309	65.00	100...200		
		1000	6.20	161.29	3079	52.01	100...200		
		1000	7.50	133.33	2397	33.47	100...200		
Double	SP2-13L	1000	15.12	66.14	4621	32.00	63...132		
		1000	16.53	60.50	4735	30.00	63...132		
		1000	18.06	55.36	4829	28.00	63...132		
		1000	20.73	48.24	3948	19.93	63...132		
		1000	22.65	44.15	5064	23.40	63...132		
		1000	26.35	37.95	5000	19.87	63...132		
		1000	28.41	35.20	4010	14.76	63...132		
		1000	31.88	31.37	3859	12.68	63...132		
		1000	33.05	30.26	4041	12.80	63...132		
		1000	38.44	26.01	3372	9.19	63...132		
		1000	39.97	25.02	4081	10.68	63...132		
		1000	46.50	21.51	3406	7.67	63...132		
		1000	56.25	17.78	2713	5.05	63...132		
		1000	58.82	17.00	5427	9.66	63...132		
		Triple	SP3-13L	1000	64.28	15.56	5336	8.69	63...132
1000	70.25			14.24	5361	7.99	63...132		
1000	76.77			13.03	5386	7.35	63...132		
1000	88.10			11.35	5426	6.45	63...132		
1000	96.27			10.39	5452	5.93	63...132		
1000	111.99			8.93	5496	5.14	63...132		
1000	120.74			8.28	5539	4.80	63...132		
1000	135.47			7.38	5560	4.30	63...132		
1000	140.45			7.12	5564	4.15	63...132		
1000	151.42			6.60	4379	3.02	63...132		
1000	163.37			6.12	5472	3.51	63...132		
1000	169.89			5.89	5586	3.44	63...132		
1000	176.36			5.67	4478	2.66	63...132		
1000	197.63			5.06	5528	2.93	63...132		
1000	204.89			4.88	4594	2.35	63...132		
1000	213.07			4.69	4625	2.27	63...132		
1000	238.33			4.20	3825	1.68	63...132		
1000	239.06			4.18	4282	1.88	63...132		
1000	247.85			4.03	4745	2.00	63...132		
1000	288.30			3.47	3951	1.44	63...132		
1000	299.81			3.34	4902	1.71	63...132		
1000	348.75			2.87	4083	1.23	63...132		
Quadruple	SP4-13L			1000	228.75	4.37	5616	2.57	63...132
				1000	249.98	4.00	5630	2.36	63...132
				1000	273.18	3.66	5640	2.16	63...132
		1000	298.54	3.35	5650	1.98	63...132		
		1000	326.25	3.07	5660	1.82	63...132		
		1000	342.60	2.92	5666	1.73	63...132		
		1000	374.41	2.67	5676	1.59	63...132		
		1000	409.16	2.44	5687	1.45	63...132		
		1000	469.55	2.13	5702	1.27	63...132		
		1000	475.95	2.10	5704	1.25	63...132		
		1000	513.14	1.95	5713	1.17	63...132		
		1000	575.74	1.74	5726	1.04	63...132		
		1000	596.89	1.68	5746	1.01	63...132		
		1000	643.53	1.55	5800	0.94	63...132		
		1000	694.32	1.44	5850	0.88	63...132		
		1000	722.05	1.38	5879	0.85	63...132		
		1000	748.57	1.34	5900	0.83	63...132		
		1000	807.07	1.24	5430	0.71	63...132		
		1000	839.91	1.19	5982	0.75	63...132		
		1000	870.76	1.15	6006	0.72	63...132		
		1000	905.53	1.10	6037	0.70	63...132		
		1000	938.80	1.07	6056	0.68	63...132		
		1000	1012.89	0.99	6111	0.63	63...132		
		1000	1016.02	0.98	6118	0.63	63...132		
		1000	1053.34	0.95	6141	0.61	63...132		
		1000	1092.04	0.92	5615	0.54	63...132		
		1000	1135.65	0.88	5643	0.52	63...132		
		1000	1225.28	0.82	6247	0.54	63...132		
		1000	1270.29	0.79	5712	0.47	63...132		
		1000	1274.20	0.78	6283	0.51	63...132		
		1000	1321.01	0.76	5737	0.46	63...132		
		1000	1477.63	0.68	5243	0.37	63...132		
		1000	1482.00	0.67	6396	0.45	63...132		
		1000	1536.64	0.65	5839	0.40	63...132		
		1000	1598.00	0.63	5859	0.39	63...132		
		1000	1787.46	0.56	5424	0.32	63...132		
		1000	1792.97	0.56	5134	0.30	63...132		
		1000	1858.84	0.54	5962	0.34	63...132		
		1000	2162.25	0.46	5614	0.27	63...132		
		1000	2248.59	0.44	6101	0.28	63...132		
1000	2615.62	0.38	5806	0.23	63...132				



PREMIUM



MODEL: SP-13 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-13L	750	3.89	193.05	3416	69.00	100...200		
		750	4.25	176.47	3442	63.60	100...200		
		750	5.33	140.71	3597	53.00	100...200		
		750	6.20	120.97	3124	39.58	100...200		
		750	7.50	100.00	2433	25.48	100...200		
Double	SP2-13L	750	15.12	49.60	5006	26.00	63...132		
		750	16.53	45.38	5058	24.03	63...132		
		750	18.06	41.52	5078	22.08	63...132		
		750	20.73	36.18	4006	15.17	63...132		
		750	22.65	33.11	5136	17.80	63...132		
		750	26.35	28.46	5071	15.11	63...132		
		750	28.41	26.40	4069	11.24	63...132		
		750	31.88	23.53	3916	9.65	63...132		
		750	33.05	22.70	4100	9.74	63...132		
		750	38.44	19.51	3423	7.00	63...132		
		750	39.97	18.76	4141	8.13	63...132		
		750	46.50	16.13	3457	5.84	63...132		
		750	56.25	13.33	2754	3.85	63...132		
		750	58.82	12.75	5461	7.29	63...132		
		Triple	SP3-13L	750	64.28	11.67	5418	6.62	63...132
750	70.25			10.68	5443	6.09	63...132		
750	76.77			9.77	5469	5.60	63...132		
750	88.10			8.51	5513	4.91	63...132		
750	96.27			7.79	5554	4.53	63...132		
750	111.99			6.70	5571	3.91	63...132		
750	120.74			6.21	5580	3.63	63...132		
750	135.47			5.54	5593	3.25	63...132		
750	140.45			5.34	5597	3.13	63...132		
750	151.42			4.95	4583	2.37	63...132		
750	163.37			4.59	5556	2.67	63...132		
750	169.89			4.41	5619	2.60	63...132		
750	176.36			4.25	4702	2.09	63...132		
750	197.63			3.80	5613	2.23	63...132		
750	204.89			3.66	4825	1.85	63...132		
750	213.07			3.52	4858	1.79	63...132		
750	238.33			3.15	4018	1.33	63...132		
750	239.06			3.14	4349	1.43	63...132		
750	247.85			3.03	4985	1.58	63...132		
750	288.30			2.60	4152	1.13	63...132		
750	299.81			2.50	5140	1.35	63...132		
750	348.75			2.15	4290	0.97	63...132		
Quadruple	SP4-13L			750	228.75	3.28	5664	1.95	63...132
				750	249.98	3.00	5663	1.78	63...132
				750	273.18	2.75	5673	1.63	63...132
		750	298.54	2.51	5684	1.49	63...132		
		750	326.25	2.30	5694	1.37	63...132		
		750	342.60	2.19	5699	1.31	63...132		
		750	374.41	2.00	5710	1.20	63...132		
		750	409.16	1.83	5720	1.10	63...132		
		750	469.55	1.60	5779	0.97	63...132		
		750	475.95	1.58	5788	0.96	63...132		
		750	513.14	1.46	5841	0.89	63...132		
		750	575.74	1.30	5921	0.81	63...132		
		750	596.89	1.26	5942	0.78	63...132		
		750	643.53	1.17	5993	0.73	63...132		
		750	694.32	1.08	6049	0.68	63...132		
		750	722.05	1.04	6076	0.66	63...132		
		750	748.57	1.00	6104	0.64	63...132		
		750	807.07	0.93	5608	0.55	63...132		
		750	839.91	0.89	6188	0.58	63...132		
		750	870.76	0.86	6212	0.56	63...132		
		750	905.53	0.83	6238	0.54	63...132		
		750	938.80	0.80	6265	0.52	63...132		
		750	1012.89	0.74	6322	0.49	63...132		
		750	1016.02	0.74	6322	0.49	63...132		
		750	1053.34	0.71	6352	0.47	63...132		
		750	1092.04	0.69	5800	0.42	63...132		
		750	1135.65	0.66	5829	0.40	63...132		
		750	1225.28	0.61	6466	0.41	63...132		
		750	1270.29	0.59	5903	0.36	63...132		
		750	1274.20	0.59	6491	0.40	63...132		
		750	1321.01	0.57	5926	0.35	63...132		
		750	1477.63	0.51	5514	0.29	63...132		
		750	1482.00	0.51	6602	0.35	63...132		
		750	1536.64	0.49	6027	0.31	63...132		
		750	1598.00	0.47	6056	0.30	63...132		
		750	1787.46	0.42	5705	0.25	63...132		
		750	1792.97	0.42	5406	0.24	63...132		
		750	1858.84	0.40	6167	0.26	63...132		
		750	2162.25	0.35	5891	0.22	63...132		
		750	2248.59	0.33	6301	0.22	63...132		
750	2615.62	0.29	6089	0.18	63...132				



MODEL: SP-13 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-13L	500	3.89	128.70	3825	51.50	100...200		
		500	4.25	117.65	3880	47.80	100...200		
		500	5.33	93.81	3825	37.55	100...200		
		500	6.20	80.65	3187	26.92	100...200		
		500	7.50	66.67	2483	17.34	100...200		
Double	SP2-13L	500	15.12	33.07	5362	18.56	63...132		
		500	16.53	30.25	5158	16.34	63...132		
		500	18.06	27.68	5180	15.02	63...132		
		500	20.73	24.12	4087	10.32	63...132		
		500	22.65	22.07	5241	12.11	63...132		
		500	26.35	18.98	5172	10.28	63...132		
		500	28.41	17.60	4154	7.65	63...132		
		500	31.88	15.68	2332	3.83	63...132		
		500	33.05	15.13	4187	6.63	63...132		
		500	38.44	13.01	3496	4.76	63...132		
		500	39.97	12.51	4230	5.54	63...132		
		500	46.50	10.75	3533	3.98	63...132		
		500	56.25	8.89	2816	2.62	63...132		
		500	58.82	8.50	5514	4.91	63...132		
		Triple	SP3-13L	500	64.28	7.78	5554	4.53	63...132
500	70.25			7.12	5564	4.15	63...132		
500	76.77			6.51	5574	3.80	63...132		
500	88.10			5.68	5590	3.32	63...132		
500	96.27			5.19	5600	3.04	63...132		
500	111.99			4.46	5617	2.63	63...132		
500	120.74			4.14	5626	2.44	63...132		
500	135.47			3.69	5639	2.18	63...132		
500	140.45			3.56	5643	2.10	63...132		
500	151.42			3.30	4912	1.70	63...132		
500	163.37			3.06	5661	1.82	63...132		
500	169.89			2.94	5665	1.75	63...132		
500	176.36			2.84	5040	1.50	63...132		
500	197.63			2.53	5683	1.51	63...132		
500	204.89			2.44	5144	1.32	63...132		
500	213.07			2.35	5148	1.26	63...132		
500	238.33			2.10	4309	0.95	63...132		
500	239.06			2.09	4447	0.97	63...132		
500	247.85			2.02	5163	1.09	63...132		
500	288.30			1.73	4453	0.81	63...132		
500	299.81			1.67	5252	0.92	63...132		
500	348.75			1.43	4603	0.69	63...132		
Quadruple	SP4-13L			500	228.75	2.19	5735	1.31	63...132
				500	249.98	2.00	5710	1.20	63...132
				500	273.18	1.83	5720	1.10	63...132
		500	298.54	1.67	5750	1.01	63...132		
		500	326.25	1.53	5809	0.93	63...132		
		500	342.60	1.46	5841	0.89	63...132		
		500	374.41	1.34	5899	0.83	63...132		
		500	409.16	1.22	5965	0.76	63...132		
		500	469.55	1.06	6063	0.67	63...132		
		500	475.95	1.05	6070	0.67	63...132		
		500	513.14	0.97	6126	0.62	63...132		
		500	575.74	0.87	6204	0.57	63...132		
		500	596.89	0.84	6229	0.55	63...132		
		500	643.53	0.78	6283	0.51	63...132		
		500	694.32	0.72	6342	0.48	63...132		
		500	722.05	0.69	6374	0.46	63...132		
		500	748.57	0.67	6396	0.45	63...132		
		500	807.07	0.62	5870	0.38	63...132		
		500	839.91	0.60	6478	0.41	63...132		
		500	870.76	0.57	6517	0.39	63...132		
		500	905.53	0.55	6544	0.38	63...132		
		500	938.80	0.53	6572	0.36	63...132		
		500	1012.89	0.49	6633	0.34	63...132		
		500	1016.02	0.49	6632	0.34	63...132		
		500	1053.34	0.47	6665	0.33	63...132		
		500	1092.04	0.46	6070	0.29	63...132		
		500	1135.65	0.44	6101	0.28	63...132		
		500	1225.28	0.41	6772	0.29	63...132		
		500	1270.29	0.39	6184	0.25	63...132		
		500	1274.20	0.39	6811	0.28	63...132		
		500	1321.01	0.38	6202	0.25	63...132		
		500	1477.63	0.34	5921	0.21	63...132		
		500	1482.00	0.34	6921	0.25	63...132		
		500	1536.64	0.33	6301	0.22	63...132		
		500	1598.00	0.31	6346	0.21	63...132		
		500	1787.46	0.28	6127	0.18	63...132		
		500	1792.97	0.28	5810	0.17	63...132		
		500	1858.84	0.27	6445	0.18	63...132		
		500	2162.25	0.23	6343	0.15	63...132		
		500	2248.59	0.22	6595	0.15	63...132		
500	2615.62	0.19	6526	0.13	63...132				



MODEL: SP-14 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-14L	1500	3.89	386.10	3067	124.00	160...250		
		1500	4.25	352.94	3139	116.00	160...250		
		1500	5.33	281.43	3247	95.70	160...250		
		1500	6.20	241.94	3355	85.00	160...250		
		1500	7.50	200.00	2740	57.39	160...250		
Double	SP2-14L	1500	15.12	99.21	5440	56.50	100...200		
		1500	16.53	90.75	5580	53.00	100...200		
		1500	18.06	83.04	4830	42.00	100...200		
		1500	20.73	72.36	4537	34.36	100...200		
		1500	22.65	66.22	5860	40.61	100...200		
		1500	26.35	56.93	5901	35.17	100...200		
		1500	28.41	52.80	4607	25.44	100...200		
		1500	31.88	47.05	5955	29.35	100...200		
		1500	33.05	45.39	4639	22.04	100...200		
		1500	38.44	39.02	3834	15.67	100...200		
		1500	39.97	37.53	4681	18.40	100...200		
		1500	46.50	32.26	3872	13.08	100...200		
		1500	56.25	26.67	3034	8.47	100...200		
		1500	58.82	25.50	6145	16.41	63...132		
		Triple	SP3-14L	1500	64.28	23.34	6159	15.05	63...132
1500	70.25			21.35	6186	13.83	63...132		
1500	76.77			19.54	6214	12.71	63...132		
1500	88.10			17.03	6257	11.15	63...132		
1500	96.27			15.58	6286	10.25	63...132		
1500	111.99			13.39	6335	8.89	63...132		
1500	120.74			12.42	6360	8.26	63...132		
1500	135.47			11.07	6398	7.42	63...132		
1500	140.45			10.68	6410	7.17	63...132		
1500	151.42			9.91	5008	5.19	63...132		
1500	163.37			9.18	6439	6.19	63...132		
1500	169.89			8.83	6445	5.95	63...132		
1500	176.14			8.52	5049	4.50	63...132		
1500	197.63			7.59	6465	5.14	63...132		
1500	204.89			7.32	5091	3.90	63...132		
1500	213.07			7.04	5101	3.76	63...132		
1500	238.33			6.29	4216	2.78	63...132		
1500	239.06			6.27	6491	4.27	63...132		
1500	247.85			6.05	5177	3.28	63...132		
1500	288.30			5.20	4273	2.33	63...132		
1500	299.81			5.00	5345	2.80	63...132		
1500	348.75			4.30	4412	1.99	63...132		
Quadruple	SP4-14L			1500	228.75	6.56	6325	4.35	63...132
				1500	249.98	6.00	6497	4.08	63...132
				1500	273.18	5.49	6508	3.74	63...132
		1500	298.54	5.02	6520	3.43	63...132		
		1500	326.25	4.60	6532	3.15	63...132		
		1500	342.60	4.38	6539	3.00	63...132		
		1500	374.41	4.01	6551	2.74	63...132		
		1500	409.16	3.67	6562	2.52	63...132		
		1500	469.55	3.19	6581	2.20	63...132		
		1500	475.95	3.15	6583	2.17	63...132		
		1500	513.14	2.92	6593	2.02	63...132		
		1500	575.74	2.61	6608	1.81	63...132		
		1500	596.89	2.51	6613	1.74	63...132		
		1500	643.53	2.33	6623	1.62	63...132		
		1500	694.32	2.16	6633	1.50	63...132		
		1500	722.05	2.08	6638	1.45	63...132		
		1500	748.57	2.00	6644	1.39	63...132		
		1500	807.07	1.86	6096	1.19	63...132		
		1500	839.91	1.79	6659	1.25	63...132		
		1500	870.76	1.72	6668	1.20	63...132		
		1500	905.53	1.66	6696	1.16	63...132		
		1500	938.80	1.60	6724	1.13	63...132		
		1500	1012.89	1.48	6786	1.05	63...132		
		1500	1016.02	1.48	6786	1.05	63...132		
		1500	1053.34	1.42	6819	1.01	63...132		
		1500	1092.04	1.37	6313	0.91	63...132		
		1500	1135.65	1.32	6340	0.88	63...132		
		1500	1225.28	1.22	6941	0.89	63...132		
		1500	1270.29	1.18	6422	0.79	63...132		
		1500	1274.20	1.18	6968	0.86	63...132		
		1500	1321.01	1.14	6447	0.77	63...132		
		1500	1477.63	1.02	5641	0.60	63...132		
		1500	1482.00	1.01	7096	0.75	63...132		
		1500	1536.64	0.98	6560	0.67	63...132		
		1500	1598.00	0.94	6591	0.65	63...132		
		1500	1787.46	0.84	5833	0.51	63...132		
		1500	1792.97	0.84	7250	0.64	63...132		
		1500	1858.84	0.81	6704	0.57	63...132		
		1500	2162.25	0.69	6035	0.44	63...132		
		1500	2248.59	0.67	6851	0.48	63...132		
1500	2615.62	0.57	6239	0.37	63...132				



MODEL: SP-14 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-14L	1000	3.89	257.40	3450	93.00	160...250		
		1000	4.25	235.29	3511	86.50	160...250		
		1000	5.33	187.62	3665	72.00	160...250		
		1000	6.20	161.29	3580	60.47	160...250		
		1000	7.50	133.33	2800	39.10	160...250		
Double	SP2-14L	1000	15.12	66.14	6083	42.12	100...200		
		1000	16.53	60.50	5887	37.30	100...200		
		1000	18.06	55.36	5435	31.50	100...200		
		1000	20.73	48.24	4625	23.08	100...200		
		1000	22.65	44.15	5970	27.58	100...200		
		1000	26.35	37.95	6013	23.90	100...200		
		1000	28.41	35.20	4696	17.29	100...200		
		1000	31.88	31.37	6070	19.95	100...200		
		1000	33.05	30.26	4731	14.98	100...200		
		1000	38.44	26.01	3913	10.66	100...200		
		1000	39.97	25.02	4775	12.50	100...200		
		1000	46.50	21.51	3951	8.90	100...200		
		1000	56.25	17.78	3097	5.77	100...200		
		Triple	SP3-14L	1000	58.82	17.00	6189	11.03	63...132
				1000	64.28	15.56	6286	10.24	63...132
1000	70.25			14.24	6315	9.42	63...132		
1000	76.77			13.03	6344	8.65	63...132		
1000	88.10			11.35	6390	7.59	63...132		
1000	96.27			10.39	6420	6.98	63...132		
1000	111.99			8.93	6444	6.03	63...132		
1000	120.74			8.28	6453	5.59	63...132		
1000	135.47			7.38	6469	5.00	63...132		
1000	140.45			7.12	6473	4.82	63...132		
1000	151.42			6.60	5120	3.53	63...132		
1000	163.37			6.12	6493	4.16	63...132		
1000	169.89			5.89	6499	4.00	63...132		
1000	176.14			5.68	5233	3.11	63...132		
1000	197.63			5.06	6519	3.46	63...132		
1000	204.89			4.88	5367	2.74	63...132		
1000	213.07			4.69	5403	2.65	63...132		
1000	238.33			4.20	4430	1.95	63...132		
1000	239.06			4.18	6545	2.87	63...132		
1000	247.85			4.03	5541	2.34	63...132		
1000	288.30			3.47	4575	1.66	63...132		
1000	299.81			3.34	5723	2.00	63...132		
1000	348.75			2.87	4725	1.42	63...132		
Quadruple	SP4-14L			1000	228.75	4.37	6395	2.93	63...132
				1000	249.98	4.00	6551	2.74	63...132
		1000	273.18	3.66	6563	2.52	63...132		
		1000	298.54	3.35	6574	2.31	63...132		
		1000	326.25	3.07	6586	2.12	63...132		
		1000	342.60	2.92	6593	2.02	63...132		
		1000	374.41	2.67	6605	1.85	63...132		
		1000	409.16	2.44	6617	1.69	63...132		
		1000	469.55	2.13	6635	1.48	63...132		
		1000	475.95	2.10	6637	1.46	63...132		
		1000	513.14	1.95	6647	1.36	63...132		
		1000	575.74	1.74	6662	1.21	63...132		
		1000	596.89	1.68	6686	1.18	63...132		
		1000	643.53	1.55	6749	1.10	63...132		
		1000	694.32	1.44	6807	1.03	63...132		
		1000	722.05	1.38	6842	0.99	63...132		
		1000	748.57	1.34	6865	0.96	63...132		
		1000	807.07	1.24	6385	0.83	63...132		
		1000	839.91	1.19	6961	0.87	63...132		
		1000	870.76	1.15	6989	0.84	63...132		
		1000	905.53	1.10	7025	0.81	63...132		
		1000	938.80	1.07	7048	0.79	63...132		
		1000	1012.89	0.99	7113	0.74	63...132		
		1000	1016.02	0.98	7120	0.73	63...132		
		1000	1053.34	0.95	7147	0.71	63...132		
		1000	1092.04	0.92	6607	0.64	63...132		
		1000	1135.65	0.88	6641	0.61	63...132		
		1000	1225.28	0.82	7271	0.62	63...132		
		1000	1270.29	0.79	6723	0.56	63...132		
		1000	1274.20	0.78	7313	0.60	63...132		
		1000	1321.01	0.76	6753	0.54	63...132		
		1000	1477.63	0.68	6051	0.43	63...132		
		1000	1482.00	0.67	7444	0.52	63...132		
		1000	1536.64	0.65	6875	0.47	63...132		
		1000	1598.00	0.63	6900	0.46	63...132		
		1000	1787.46	0.56	6258	0.37	63...132		
		1000	1792.97	0.56	7602	0.45	63...132		
		1000	1858.84	0.54	7023	0.40	63...132		
		1000	2162.25	0.46	6476	0.31	63...132		
		1000	2248.59	0.44	7189	0.33	63...132		
1000	2615.62	0.38	6695	0.27	63...132				



MODEL: SP-14 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-14L	750	3.89	193.05	3809	77.00	160...250		
		750	4.25	176.47	3842	71.00	160...250		
		750	5.33	140.71	4004	59.00	160...250		
		750	6.20	120.97	3631	46.00	160...250		
		750	7.50	100.00	2841	29.75	160...250		
Double	SP2-14L	750	15.12	49.60	6096	31.66	100...200		
		750	16.53	45.38	5965	28.34	100...200		
		750	18.06	41.52	5988	26.04	100...200		
		750	20.73	36.18	4690	17.76	100...200		
		750	22.65	33.11	6055	20.98	100...200		
		750	26.35	28.46	6099	18.18	100...200		
		750	28.41	26.40	4763	13.15	100...200		
		750	31.88	23.53	6156	15.17	100...200		
		750	33.05	22.70	4798	11.40	100...200		
		750	38.44	19.51	3970	8.11	100...200		
		750	39.97	18.76	4845	9.51	100...200		
		750	46.50	16.13	4009	6.77	100...200		
		750	56.25	13.33	3144	4.39	100...200		
		750	58.82	12.75	6225	8.32	63...132		
		Triple	SP3-14L	750	64.28	11.67	6381	7.80	63...132
750	70.25			10.68	6411	7.17	63...132		
750	76.77			9.77	6432	6.58	63...132		
750	88.10			8.51	6450	5.75	63...132		
750	96.27			7.79	6462	5.27	63...132		
750	111.99			6.70	6482	4.55	63...132		
750	120.74			6.21	6492	4.22	63...132		
750	135.47			5.54	6507	3.77	63...132		
750	140.45			5.34	6512	3.64	63...132		
750	151.42			4.95	5354	2.77	63...132		
750	163.37			4.59	6532	3.14	63...132		
750	169.89			4.41	6538	3.02	63...132		
750	176.14			4.26	5492	2.45	63...132		
750	197.63			3.80	6558	2.61	63...132		
750	204.89			3.66	5633	2.16	63...132		
750	213.07			3.52	5672	2.09	63...132		
750	238.33			3.15	4651	1.53	63...132		
750	239.06			3.14	6583	2.16	63...132		
750	247.85			3.03	5818	1.84	63...132		
750	288.30			2.60	4804	1.31	63...132		
750	299.81			2.50	6009	1.58	63...132		
750	348.75			2.15	4962	1.12	63...132		
Quadruple	SP4-14L			750	228.75	3.28	6447	2.21	63...132
				750	249.98	3.00	6589	2.07	63...132
				750	273.18	2.75	6601	1.90	63...132
		750	298.54	2.51	6613	1.74	63...132		
		750	326.25	2.30	6625	1.60	63...132		
		750	342.60	2.19	6631	1.52	63...132		
		750	374.41	2.00	6644	1.39	63...132		
		750	409.16	1.83	6656	1.28	63...132		
		750	469.55	1.60	6724	1.13	63...132		
		750	475.95	1.58	6734	1.11	63...132		
		750	513.14	1.46	6796	1.04	63...132		
		750	575.74	1.30	6890	0.94	63...132		
		750	596.89	1.26	6915	0.91	63...132		
		750	643.53	1.17	6975	0.85	63...132		
		750	694.32	1.08	7040	0.80	63...132		
		750	722.05	1.04	7072	0.77	63...132		
		750	748.57	1.00	7104	0.74	63...132		
		750	807.07	0.93	6599	0.64	63...132		
		750	839.91	0.89	7201	0.67	63...132		
		750	870.76	0.86	7230	0.65	63...132		
		750	905.53	0.83	7260	0.63	63...132		
		750	938.80	0.80	7292	0.61	63...132		
		750	1012.89	0.74	7359	0.57	63...132		
		750	1016.02	0.74	7358	0.57	63...132		
		750	1053.34	0.71	7394	0.55	63...132		
		750	1092.04	0.69	6828	0.49	63...132		
		750	1135.65	0.66	6863	0.47	63...132		
		750	1225.28	0.61	7526	0.48	63...132		
		750	1270.29	0.59	6952	0.43	63...132		
		750	1274.20	0.59	7556	0.47	63...132		
		750	1321.01	0.57	6979	0.42	63...132		
		750	1477.63	0.51	6361	0.34	63...132		
		750	1482.00	0.51	7685	0.41	63...132		
		750	1536.64	0.49	7101	0.36	63...132		
		750	1598.00	0.47	7135	0.35	63...132		
		750	1787.46	0.42	6579	0.29	63...132		
		750	1792.97	0.42	7861	0.35	63...132		
		750	1858.84	0.40	7268	0.30	63...132		
		750	2162.25	0.35	6791	0.25	63...132		
		750	2248.59	0.33	7429	0.26	63...132		
750	2615.62	0.29	7018	0.21	63...132				



MODEL: SP-14 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-14L	500	3.89	128.70	4304	58.00	160...250		
		500	4.25	117.65	4343	53.50	160...250		
		500	5.33	93.81	4483	44.01	160...250		
		500	6.20	80.65	3702	31.27	160...250		
		500	7.50	66.67	2898	20.24	160...250		
Double	SP2-14L	500	15.12	33.07	6123	21.19	100...200		
		500	16.53	30.25	6079	19.26	100...200		
		500	18.06	27.68	6106	17.70	100...200		
		500	20.73	24.12	4783	12.08	100...200		
		500	22.65	22.07	6158	14.22	100...200		
		500	26.35	18.98	6805	13.52	100...200		
		500	28.41	17.60	4860	8.95	100...200		
		500	31.88	15.68	6283	10.32	100...200		
		500	33.05	15.13	4898	7.76	100...200		
		500	38.44	13.01	4055	5.52	100...200		
		500	39.97	12.51	4947	6.48	100...200		
		500	46.50	10.75	4096	4.61	100...200		
		500	56.25	8.89	3213	2.99	100...200		
		500	58.82	8.50	6283	5.60	63...132		
		Triple	SP3-14L	500	64.28	7.78	6462	5.26	63...132
500	70.25			7.12	6473	4.83	63...132		
500	76.77			6.51	6485	4.42	63...132		
500	88.10			5.68	6504	3.86	63...132		
500	96.27			5.19	6516	3.54	63...132		
500	111.99			4.46	6536	3.06	63...132		
500	120.74			4.14	6546	2.84	63...132		
500	135.47			3.69	6561	2.54	63...132		
500	140.45			3.56	6566	2.45	63...132		
500	151.42			3.30	5733	1.98	63...132		
500	163.37			3.06	6586	2.11	63...132		
500	169.89			2.94	6592	2.03	63...132		
500	176.14			2.84	5882	1.75	63...132		
500	197.63			2.53	6612	1.75	63...132		
500	204.89			2.44	6034	1.54	63...132		
500	213.07			2.35	6048	1.48	63...132		
500	238.33			2.10	4983	1.10	63...132		
500	239.06			2.09	6637	1.45	63...132		
500	247.85			2.02	6066	1.28	63...132		
500	288.30			1.73	5149	0.94	63...132		
500	299.81			1.67	6173	1.08	63...132		
500	348.75			1.43	5320	0.80	63...132		
Quadruple	SP4-14L			500	228.75	2.19	6527	1.50	63...132
				500	249.98	2.00	6644	1.39	63...132
				500	273.18	1.83	6656	1.28	63...132
		500	298.54	1.67	6691	1.17	63...132		
		500	326.25	1.53	6759	1.08	63...132		
		500	342.60	1.46	6797	1.04	63...132		
		500	374.41	1.34	6865	0.96	63...132		
		500	409.16	1.22	6941	0.89	63...132		
		500	469.55	1.06	7056	0.78	63...132		
		500	475.95	1.05	7064	0.78	63...132		
		500	513.14	0.97	7129	0.72	63...132		
		500	575.74	0.87	7221	0.66	63...132		
		500	596.89	0.84	7250	0.64	63...132		
		500	643.53	0.78	7313	0.60	63...132		
		500	694.32	0.72	7381	0.56	63...132		
		500	722.05	0.69	7419	0.54	63...132		
		500	748.57	0.67	7444	0.52	63...132		
		500	807.07	0.62	6912	0.45	63...132		
		500	839.91	0.60	7541	0.47	63...132		
		500	870.76	0.57	7586	0.45	63...132		
		500	905.53	0.55	7618	0.44	63...132		
		500	938.80	0.53	7651	0.42	63...132		
		500	1012.89	0.49	7721	0.40	63...132		
		500	1016.02	0.49	7721	0.40	63...132		
		500	1053.34	0.47	7759	0.38	63...132		
		500	1092.04	0.46	7152	0.34	63...132		
		500	1135.65	0.44	7189	0.33	63...132		
		500	1225.28	0.41	7884	0.34	63...132		
		500	1270.29	0.39	7289	0.30	63...132		
		500	1274.20	0.39	7930	0.32	63...132		
		500	1321.01	0.38	7311	0.29	63...132		
		500	1477.63	0.34	6826	0.24	63...132		
		500	1482.00	0.34	8058	0.29	63...132		
		500	1536.64	0.33	7430	0.26	63...132		
		500	1598.00	0.31	7483	0.24	63...132		
		500	1787.46	0.28	7061	0.21	63...132		
		500	1792.97	0.28	8242	0.24	63...132		
		500	1858.84	0.27	7602	0.21	63...132		
		500	2162.25	0.23	7307	0.18	63...132		
		500	2248.59	0.22	7782	0.18	63...132		
500	2615.62	0.19	7555	0.15	63...132				



PREMIUM



MODEL: SP-15 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-15L	1500	3.89	386.10	4230	171.00	160...250		
		1500	4.25	352.94	4356	161.00	160...250		
		1500	5.33	281.43	4547	134.00	160...250		
		1500	6.20	241.94	4579	116.00	160...250		
		1500	7.50	200.00	4110	86.08	160...250		
Double	SP2-15L	1500	15.12	99.21	6403	66.50	100...200		
		1500	16.53	90.75	6418	61.00	100...200		
		1500	18.06	83.04	6554	57.00	100...200		
		1500	20.73	72.36	6810	51.58	100...200		
		1500	22.65	66.22	7215	50.00	100...200		
		1500	26.35	56.93	7380	44.00	100...200		
		1500	28.41	52.80	6910	38.16	100...200		
		1500	31.88	47.05	6106	30.09	100...200		
		1500	33.05	45.39	6960	33.06	100...200		
		1500	38.44	39.02	5754	23.51	100...200		
		1500	39.99	37.51	7022	27.58	100...200		
		1500	46.50	32.26	5808	19.62	100...200		
		1500	56.25	26.67	4550	12.71	100...200		
		1500	58.82	25.50	9356	24.99	63...132		
		Triple	SP3-15L	1500	64.28	23.34	9235	22.57	63...132
1500	70.25			21.35	9280	20.75	63...132		
1500	76.77			19.54	9321	19.07	63...132		
1500	88.10			17.03	9386	16.73	63...132		
1500	96.27			15.58	9429	15.38	63...132		
1500	111.99			13.39	9503	13.33	63...132		
1500	120.74			12.42	9540	12.40	63...132		
1500	135.47			11.07	9360	10.85	63...132		
1500	140.45			10.68	9615	10.75	63...132		
1500	151.70			9.89	7513	7.78	63...132		
1500	163.37			9.18	8427	8.10	63...132		
1500	169.89			8.83	9668	8.93	63...132		
1500	176.14			8.52	7574	6.75	63...132		
1500	197.63			7.59	8508	6.76	63...132		
1500	204.89			7.32	7636	5.85	63...132		
1500	213.07			7.04	7653	5.64	63...132		
1500	238.33			6.29	6323	4.17	63...132		
1500	239.06			6.27	6775	4.45	63...132		
1500	247.85			6.05	7765	4.92	63...132		
1500	288.30			5.20	6409	3.49	63...132		
1500	299.81			5.00	8017	4.20	63...132		
1500	348.75			4.30	6617	2.98	63...132		
Quadruple	SP4-15L			1500	228.75	6.56	9628	6.61	63...132
				1500	249.98	6.00	9745	6.12	63...132
				1500	273.18	5.49	9763	5.61	63...132
		1500	298.54	5.02	9781	5.14	63...132		
		1500	326.25	4.60	9798	4.72	63...132		
		1500	342.60	4.38	9808	4.50	63...132		
		1500	374.41	4.01	9826	4.13	63...132		
		1500	409.16	3.67	9843	3.78	63...132		
		1500	469.55	3.19	9871	3.30	63...132		
		1500	475.95	3.15	9874	3.26	63...132		
		1500	513.14	2.92	9889	3.02	63...132		
		1500	575.74	2.61	9912	2.71	63...132		
		1500	596.89	2.51	9920	2.61	63...132		
		1500	643.53	2.33	9935	2.42	63...132		
		1500	694.32	2.16	9950	2.25	63...132		
		1500	722.05	2.08	9958	2.17	63...132		
		1500	748.57	2.00	9965	2.09	63...132		
		1500	807.07	1.86	9143	1.78	63...132		
		1500	839.91	1.79	9988	1.87	63...132		
		1500	870.76	1.72	10002	1.80	63...132		
		1500	905.53	1.66	10043	1.75	63...132		
		1500	938.80	1.60	10087	1.69	63...132		
		1500	1012.89	1.48	9275	1.44	63...132		
		1500	1016.02	1.48	10178	1.58	63...132		
		1500	1053.34	1.42	10228	1.52	63...132		
		1500	1092.04	1.37	9469	1.36	63...132		
		1500	1135.65	1.32	9510	1.31	63...132		
		1500	1225.28	1.22	9408	1.20	63...132		
		1500	1270.29	1.18	9633	1.19	63...132		
		1500	1274.20	1.18	10452	1.29	63...132		
		1500	1321.01	1.14	9671	1.15	63...132		
		1500	1477.63	1.02	6423	0.69	63...132		
		1500	1482.00	1.01	9715	1.03	63...132		
		1500	1536.64	0.98	9839	1.01	63...132		
		1500	1598.00	0.94	9886	0.97	63...132		
		1500	1787.46	0.84	6644	0.58	63...132		
		1500	1792.97	0.84	7556	0.66	63...132		
		1500	1858.84	0.81	10056	0.85	63...132		
		1500	2162.25	0.69	6877	0.50	63...132		
		1500	2248.59	0.67	10277	0.72	63...132		
		1500	2615.62	0.57	7111	0.42	63...132		



MODEL: SP-15 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-15L	1000	3.89	257.40	4823	130.00	160...250		
		1000	4.25	235.29	4931	121.50	160...250		
		1000	5.33	187.62	5090	100.00	160...250		
		1000	6.20	161.29	5370	90.70	160...250		
		1000	7.50	133.33	4200	58.65	160...250		
Double	SP2-15L	1000	15.12	66.14	7235	50.10	100...200		
		1000	16.53	60.50	7339	46.50	100...200		
		1000	18.06	55.36	7416	43.00	100...200		
		1000	20.73	48.24	6939	35.04	100...200		
		1000	22.65	44.15	8008	37.00	100...200		
		1000	26.35	37.95	7867	31.26	100...200		
		1000	28.41	35.20	7044	25.93	100...200		
		1000	31.88	31.37	6242	20.51	100...200		
		1000	33.05	30.26	7096	22.47	100...200		
		1000	38.44	26.01	5868	15.99	100...200		
		1000	39.97	25.02	7163	18.75	100...200		
		1000	46.50	21.51	5926	13.35	100...200		
		1000	56.25	17.78	4645	8.65	100...200		
		1000	58.82	17.00	9421	16.78	63...132		
		Triple	SP3-15L	1000	64.28	15.56	9428	15.36	63...132
1000	70.25			14.24	9472	14.12	63...132		
1000	76.77			13.03	9516	12.98	63...132		
1000	88.10			11.35	9585	11.39	63...132		
1000	96.27			10.39	9630	10.47	63...132		
1000	111.99			8.93	9666	9.04	63...132		
1000	120.74			8.28	9681	8.39	63...132		
1000	135.47			7.38	9567	7.40	63...132		
1000	140.45			7.12	9710	7.24	63...132		
1000	151.42			6.60	7679	5.30	63...132		
1000	163.37			6.12	8600	5.51	63...132		
1000	169.89			5.89	9748	6.00	63...132		
1000	176.14			5.68	7850	4.66	63...132		
1000	197.63			5.06	8685	4.60	63...132		
1000	204.89			4.88	8050	4.11	63...132		
1000	213.07			4.69	8104	3.98	63...132		
1000	238.33			4.20	6645	2.92	63...132		
1000	239.06			4.18	6919	3.03	63...132		
1000	247.85			4.03	8312	3.51	63...132		
1000	288.30			3.47	6862	2.49	63...132		
1000	299.81			3.34	8503	2.97	63...132		
1000	348.75			2.87	7087	2.13	63...132		
Quadruple	SP4-15L			1000	228.75	4.37	9734	4.45	63...132
				1000	249.98	4.00	9826	4.12	63...132
				1000	273.18	3.66	9844	3.77	63...132
		1000	298.54	3.35	9862	3.46	63...132		
		1000	326.25	3.07	9879	3.18	63...132		
		1000	342.60	2.92	9889	3.02	63...132		
		1000	374.41	2.67	9907	2.77	63...132		
		1000	409.16	2.44	9925	2.54	63...132		
		1000	469.55	2.13	9953	2.22	63...132		
		1000	475.95	2.10	9956	2.19	63...132		
		1000	513.14	1.95	9971	2.04	63...132		
		1000	575.74	1.74	9993	1.82	63...132		
		1000	596.89	1.68	10029	1.76	63...132		
		1000	643.53	1.55	10123	1.64	63...132		
		1000	694.32	1.44	10211	1.54	63...132		
		1000	722.05	1.38	10262	1.48	63...132		
		1000	748.57	1.34	10297	1.45	63...132		
		1000	807.07	1.24	9578	1.24	63...132		
		1000	839.91	1.19	10442	1.30	63...132		
		1000	870.76	1.15	10483	1.26	63...132		
		1000	905.53	1.10	10538	1.21	63...132		
		1000	938.80	1.07	10572	1.18	63...132		
		1000	1012.89	0.99	9748	1.01	63...132		
		1000	1016.02	0.98	10680	1.10	63...132		
		1000	1053.34	0.95	10720	1.07	63...132		
		1000	1092.04	0.92	9911	0.95	63...132		
		1000	1135.65	0.88	9961	0.92	63...132		
		1000	1225.28	0.82	10067	0.86	63...132		
		1000	1270.29	0.79	10085	0.83	63...132		
		1000	1274.20	0.78	10970	0.90	63...132		
		1000	1321.01	0.76	10130	0.81	63...132		
		1000	1477.63	0.68	6895	0.49	63...132		
		1000	1482.00	0.67	10423	0.73	63...132		
		1000	1536.64	0.65	10313	0.70	63...132		
		1000	1598.00	0.63	10350	0.68	63...132		
		1000	1787.46	0.56	7133	0.42	63...132		
		1000	1792.97	0.56	8107	0.48	63...132		
		1000	1858.84	0.54	10534	0.60	63...132		
		1000	2162.25	0.46	7383	0.36	63...132		
		1000	2248.59	0.44	10783	0.50	63...132		
1000	2615.62	0.38	7635	0.30	63...132				



MODEL: SP-15 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-15L	750	3.89	193.05	5268	106.50	160...250		
		750	4.25	176.47	5358	99.00	160...250		
		750	5.33	140.71	5633	83.00	160...250		
		750	6.20	120.97	5447	69.00	160...250		
		750	7.50	100.00	4262	44.63	160...250		
Double	SP2-15L	750	15.12	49.60	7894	41.00	100...200		
		750	16.53	45.38	7891	37.50	100...200		
		750	18.06	41.52	8280	36.00	100...200		
		750	20.73	36.18	7034	26.64	100...200		
		750	22.65	33.11	8660	30.00	100...200		
		750	26.35	28.46	7978	23.78	100...200		
		750	28.41	26.40	7142	19.72	100...200		
		750	31.88	23.53	6335	15.61	100...200		
		750	33.05	22.70	7198	17.10	100...200		
		750	38.44	19.51	5956	12.17	100...200		
		750	39.97	18.76	7267	14.27	100...200		
		750	46.50	16.13	6014	10.16	100...200		
		750	56.25	13.33	4716	6.58	100...200		
		Triple	SP3-15L	750	58.82	12.75	9477	12.66	63...132
				750	64.28	11.67	9570	11.69	63...132
750	70.25			10.68	9616	10.75	63...132		
750	76.77			9.77	9647	9.87	63...132		
750	88.10			8.51	9674	8.62	63...132		
750	96.27			7.79	9693	7.90	63...132		
750	111.99			6.70	9723	6.82	63...132		
750	120.74			6.21	9738	6.33	63...132		
750	135.47			5.54	9710	5.63	63...132		
750	140.45			5.34	9768	5.46	63...132		
750	151.42			4.95	8031	4.16	63...132		
750	163.37			4.59	8729	4.20	63...132		
750	169.89			4.41	9806	4.53	63...132		
750	176.14			4.26	8238	3.67	63...132		
750	197.63			3.80	8816	3.50	63...132		
750	204.89			3.66	8450	3.24	63...132		
750	213.07			3.52	8507	3.13	63...132		
750	238.33			3.15	6976	2.30	63...132		
750	239.06			3.14	7025	2.31	63...132		
750	247.85			3.03	8726	2.76	63...132		
750	288.30			2.60	7206	1.96	63...132		
750	299.81			2.50	8636	2.26	63...132		
750	348.75			2.15	7443	1.68	63...132		
Quadruple	SP4-15L			750	228.75	3.28	9815	3.37	63...132
				750	249.98	3.00	9884	3.11	63...132
		750	273.18	2.75	9901	2.85	63...132		
		750	298.54	2.51	9920	2.61	63...132		
		750	326.25	2.30	9937	2.39	63...132		
		750	342.60	2.19	9947	2.28	63...132		
		750	374.41	2.00	9965	2.09	63...132		
		750	409.16	1.83	9983	1.91	63...132		
		750	469.55	1.60	10086	1.69	63...132		
		750	475.95	1.58	10102	1.67	63...132		
		750	513.14	1.46	10195	1.56	63...132		
		750	575.74	1.30	10335	1.41	63...132		
		750	596.89	1.26	10372	1.37	63...132		
		750	643.53	1.17	10462	1.28	63...132		
		750	694.32	1.08	10560	1.19	63...132		
		750	722.05	1.04	10607	1.16	63...132		
		750	748.57	1.00	10656	1.12	63...132		
		750	807.07	0.93	9899	0.96	63...132		
		750	839.91	0.89	10802	1.01	63...132		
		750	870.76	0.86	10845	0.98	63...132		
		750	905.53	0.83	10891	0.95	63...132		
		750	938.80	0.80	10937	0.92	63...132		
		750	1012.89	0.74	10247	0.79	63...132		
		750	1016.02	0.74	11037	0.86	63...132		
		750	1053.34	0.71	11091	0.82	63...132		
		750	1092.04	0.69	10242	0.74	63...132		
		750	1135.65	0.66	10295	0.71	63...132		
		750	1225.28	0.61	10592	0.68	63...132		
		750	1270.29	0.59	10428	0.64	63...132		
		750	1274.20	0.59	11333	0.70	63...132		
		750	1321.01	0.57	10469	0.62	63...132		
		750	1477.63	0.51	7251	0.39	63...132		
		750	1482.00	0.51	10925	0.58	63...132		
		750	1536.64	0.49	10652	0.55	63...132		
		750	1598.00	0.47	10702	0.53	63...132		
		750	1787.46	0.42	7502	0.33	63...132		
		750	1792.97	0.42	8525	0.37	63...132		
		750	1858.84	0.40	10902	0.46	63...132		
		750	2162.25	0.35	7747	0.28	63...132		
		750	2248.59	0.33	11144	0.39	63...132		
750	2615.62	0.29	8007	0.24	63...132				



MODEL: SP-15 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-15L	500	3.89	128.70	5899	79.50	160...250		
		500	4.25	117.65	6047	74.50	160...250		
		500	5.33	93.81	6312	62.00	160...250		
		500	6.20	80.65	5554	46.90	160...250		
		500	7.50	66.67	4348	30.35	160...250		
Double	SP2-15L	500	15.12	33.07	8665	30.00	100...200		
		500	16.53	30.25	9119	28.89	100...200		
		500	18.06	27.68	9161	26.56	100...200		
		500	20.73	24.12	7175	18.11	100...200		
		500	22.65	22.07	9263	21.40	100...200		
		500	26.35	18.98	8134	16.16	100...200		
		500	28.41	17.60	7291	13.42	100...200		
		500	31.88	15.68	6466	10.62	100...200		
		500	33.05	15.13	7347	11.63	100...200		
		500	38.44	13.01	6082	8.28	100...200		
		500	39.97	12.51	7420	9.71	100...200		
		500	46.50	10.75	6143	6.92	100...200		
		500	56.25	8.89	4819	4.49	100...200		
		Triple	SP3-15L	500	58.82	8.50	9565	8.52	63...132
				500	64.28	7.78	9693	7.90	63...132
500	70.25			7.12	9710	7.24	63...132		
500	76.77			6.51	9728	6.64	63...132		
500	88.10			5.68	9756	5.80	63...132		
500	96.27			5.19	9774	5.31	63...132		
500	111.99			4.46	9804	4.59	63...132		
500	120.74			4.14	9820	4.25	63...132		
500	135.47			3.69	9843	3.80	63...132		
500	140.45			3.56	9850	3.67	63...132		
500	151.42			3.30	8600	2.97	63...132		
500	163.37			3.06	8917	2.86	63...132		
500	169.89			2.94	9887	3.05	63...132		
500	176.14			2.84	8823	2.62	63...132		
500	197.63			2.53	9008	2.39	63...132		
500	204.89			2.44	9052	2.31	63...132		
500	213.07			2.35	9072	2.23	63...132		
500	238.33			2.10	7475	1.64	63...132		
500	239.06			2.09	7180	1.57	63...132		
500	247.85			2.02	9099	1.92	63...132		
500	288.30			1.73	7723	1.40	63...132		
500	299.81			1.67	8826	1.54	63...132		
500	348.75			1.43	7979	1.20	63...132		
Quadruple	SP4-15L			500	228.75	2.19	9935	2.28	63...132
				500	249.98	2.00	9965	2.09	63...132
		500	273.18	1.83	9983	1.91	63...132		
		500	298.54	1.67	10036	1.76	63...132		
		500	326.25	1.53	10139	1.62	63...132		
		500	342.60	1.46	10195	1.56	63...132		
		500	374.41	1.34	10297	1.44	63...132		
		500	409.16	1.22	10411	1.33	63...132		
		500	469.55	1.06	10584	1.17	63...132		
		500	475.95	1.05	10596	1.17	63...132		
		500	513.14	0.97	10693	1.09	63...132		
		500	575.74	0.87	10831	0.99	63...132		
		500	596.89	0.84	10875	0.96	63...132		
		500	643.53	0.78	10969	0.90	63...132		
		500	694.32	0.72	11072	0.83	63...132		
		500	722.05	0.69	11128	0.80	63...132		
		500	748.57	0.67	11166	0.78	63...132		
		500	807.07	0.62	10369	0.67	63...132		
		500	839.91	0.60	11311	0.71	63...132		
		500	870.76	0.57	11379	0.68	63...132		
		500	905.53	0.55	11427	0.66	63...132		
		500	938.80	0.53	11476	0.64	63...132		
		500	1012.89	0.49	11001	0.56	63...132		
		500	1016.02	0.49	11581	0.59	63...132		
		500	1053.34	0.47	11638	0.57	63...132		
		500	1092.04	0.46	10729	0.52	63...132		
		500	1135.65	0.44	10783	0.50	63...132		
		500	1225.28	0.41	11346	0.49	63...132		
		500	1270.29	0.39	10933	0.45	63...132		
		500	1274.20	0.39	11895	0.49	63...132		
		500	1321.01	0.38	10966	0.44	63...132		
		500	1477.63	0.34	7787	0.28	63...132		
		500	1482.00	0.34	11720	0.42	63...132		
		500	1536.64	0.33	11144	0.39	63...132		
		500	1598.00	0.31	11224	0.36	63...132		
		500	1787.46	0.28	8057	0.24	63...132		
		500	1792.97	0.28	9153	0.27	63...132		
		500	1858.84	0.27	11403	0.32	63...132		
		500	2162.25	0.23	8341	0.20	63...132		
		500	2248.59	0.22	11673	0.27	63...132		
500	2615.62	0.19	8627	0.17	63...132				



MODEL: SP-16 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-16L	1500	3.89	386.10	5887	238.00	180...250		
		1500	4.25	352.94	5953	220.00	180...250		
		1500	5.33	281.43	6244	184.00	180...250		
		1500	6.20	241.94	6395	162.00	180...250		
Double	SP2-16L	1500	15.12	99.21	8665	90.00	100...200		
		1500	16.53	90.75	8943	85.00	100...200		
		1500	18.06	83.04	9200	80.00	100...200		
		1500	20.73	72.36	9465	71.68	100...200		
		1500	22.65	66.22	9812	68.00	100...200		
		1500	26.35	56.93	10232	61.00	100...200		
		1500	28.41	52.80	9595	52.99	100...200		
		1500	31.88	47.05	10177	50.15	100...200		
		1500	33.05	45.39	9667	45.92	100...200		
		1500	38.44	39.02	8129	33.22	100...200		
		1500	39.97	37.53	9753	38.30	100...200		
		1500	46.50	32.26	8204	27.71	100...200		
		1500	58.82	25.50	13025	34.79	63...132		
		Triple	SP3-16L	1500	64.28	23.34	12625	30.85	63...132
1500	70.25			21.35	12680	28.36	63...132		
1500	76.77			19.54	12736	26.06	63...132		
1500	88.10			17.03	12824	22.85	63...132		
1500	96.27			15.58	12883	21.00	63...132		
1500	111.99			13.39	12983	18.21	63...132		
1500	120.74			12.42	13034	16.94	63...132		
1500	135.47			11.07	13110	15.20	63...132		
1500	140.45			10.68	13137	14.68	63...132		
1500	151.42			9.91	10424	10.79	63...132		
1500	163.37			9.18	13240	12.73	63...132		
1500	169.89			8.83	13268	12.26	63...132		
1500	176.14			8.52	10508	9.36	63...132		
1500	197.63			7.59	13323	10.59	63...132		
1500	204.89			7.32	10593	8.12	63...132		
1500	213.07			7.04	10615	7.82	63...132		
1500	238.33			6.29	8921	5.88	63...132		
1500	239.06			6.27	11292	7.42	63...132		
Quadruple	SP4-16L			1500	247.85	6.05	10770	6.82	63...132
				1500	288.30	5.20	9041	4.93	63...132
		1500	228.75	6.56	13381	9.19	63...132		
		1500	249.98	6.00	13388	8.41	63...132		
		1500	273.18	5.49	13412	7.71	63...132		
		1500	298.54	5.02	13437	7.06	63...132		
		1500	326.25	4.60	13461	6.48	63...132		
		1500	342.60	4.38	13475	6.18	63...132		
		1500	374.41	4.01	13499	5.67	63...132		
		1500	409.16	3.67	13524	5.20	63...132		
		1500	469.55	3.19	13562	4.53	63...132		
		1500	475.95	3.15	13565	4.47	63...132		
		1500	513.14	2.92	13587	4.15	63...132		
		1500	575.74	2.61	13618	3.72	63...132		
		1500	596.89	2.51	13629	3.58	63...132		
		1500	643.53	2.33	13649	3.33	63...132		
		1500	694.32	2.16	13670	3.09	63...132		
		1500	722.05	2.08	13681	2.98	63...132		
		1500	748.57	2.00	13692	2.87	63...132		
		1500	807.07	1.86	12360	2.41	63...132		
		1500	839.91	1.79	13722	2.57	63...132		
		1500	870.76	1.72	13742	2.48	63...132		
		1500	905.53	1.66	13800	2.40	63...132		
		1500	938.80	1.60	13860	2.32	63...132		
		1500	1012.89	1.48	13990	2.17	63...132		
		1500	1016.02	1.48	13989	2.17	63...132		
		1500	1053.34	1.42	14058	2.09	63...132		
		1500	1092.04	1.37	12797	1.84	63...132		
		1500	1135.65	1.32	12852	1.78	63...132		
		1500	1225.28	1.22	14315	1.83	63...132		
		1500	1274.20	1.18	14372	1.78	63...132		
		1500	1321.01	1.14	13068	1.56	63...132		
1500	1477.63	1.02	11899	1.27	63...132				
1500	1482.00	1.01	14640	1.55	63...132				
1500	1536.64	0.98	13295	1.36	63...132				
1500	1598.00	0.94	13358	1.31	63...132				
1500	1787.46	0.84	12302	1.08	63...132				
1500	1858.84	0.81	13587	1.15	63...132				
1500	2162.25	0.69	12724	0.92	63...132				



MODEL: SP-16 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-16L	1000	3.89	257.40	6678	180.00	180...250		
		1000	4.25	235.29	6778	167.00	180...250		
		1000	5.33	187.62	7075	139.00	180...250		
Double	SP2-16L	1000	6.20	161.29	7164	121.00	180...250		
		1000	15.12	66.14	9822	68.00	100...200		
		1000	16.53	60.50	10101	64.00	100...200		
		1000	18.06	55.36	10350	60.00	100...200		
		1000	20.73	48.24	9640	48.67	100...200		
		1000	22.65	44.15	11038	51.00	100...200		
		1000	26.35	37.95	11580	46.00	100...200		
		1000	28.41	35.20	9779	36.00	100...200		
		1000	31.88	31.37	10404	34.18	100...200		
		1000	33.05	30.26	9853	31.20	100...200		
		1000	38.44	26.01	8290	22.58	100...200		
		1000	39.97	25.02	9944	26.03	100...200		
		1000	46.50	21.51	8368	18.85	100...200		
		Triple	SP3-16L	1000	58.82	17.00	13107	23.34	63...132
1000	64.28			15.56	12833	20.99	63...132		
1000	70.25			14.24	12941	19.30	63...132		
1000	76.77			13.03	13000	17.74	63...132		
1000	88.10			11.35	13093	15.56	63...132		
1000	96.27			10.39	13154	14.30	63...132		
1000	111.99			8.93	13260	12.40	63...132		
1000	120.74			8.28	13300	11.52	63...132		
1000	135.47			7.38	13330	10.31	63...132		
1000	140.45			7.12	13341	9.94	63...132		
1000	151.42			6.60	10651	7.35	63...132		
1000	163.37			6.12	13383	8.58	63...132		
1000	169.89			5.89	13392	8.25	63...132		
1000	176.14			5.68	10885	6.46	63...132		
1000	197.63			5.06	13435	7.12	63...132		
1000	204.89			4.88	11160	5.70	63...132		
1000	213.07			4.69	11233	5.51	63...132		
1000	238.33			4.20	9370	4.12	63...132		
Quadruple	SP4-16L			1000	239.06	4.18	11529	5.05	63...132
				1000	247.85	4.03	11518	4.86	63...132
		1000	288.30	3.47	9671	3.52	63...132		
		1000	228.75	4.37	13523	6.19	63...132		
		1000	249.98	4.00	13500	5.65	63...132		
		1000	273.18	3.66	13524	5.18	63...132		
		1000	298.54	3.35	13549	4.75	63...132		
		1000	326.25	3.07	13573	4.36	63...132		
		1000	342.60	2.92	13587	4.15	63...132		
		1000	374.41	2.67	13612	3.81	63...132		
		1000	409.16	2.44	13637	3.48	63...132		
		1000	469.55	2.13	13674	3.05	63...132		
		1000	475.95	2.10	13679	3.01	63...132		
		1000	513.14	1.95	13699	2.80	63...132		
		1000	575.74	1.74	13730	2.50	63...132		
		1000	596.89	1.68	13780	2.42	63...132		
		1000	643.53	1.55	13912	2.26	63...132		
		1000	694.32	1.44	14034	2.12	63...132		
		1000	722.05	1.38	14106	2.04	63...132		
		1000	748.57	1.34	14156	1.99	63...132		
		1000	807.07	1.24	12944	1.68	63...132		
		1000	839.91	1.19	14357	1.79	63...132		
		1000	870.76	1.15	14416	1.74	63...132		
		1000	905.53	1.10	14492	1.67	63...132		
		1000	938.80	1.07	14540	1.63	63...132		
		1000	1012.89	0.99	14675	1.52	63...132		
		1000	1016.02	0.98	14692	1.51	63...132		
		1000	1053.34	0.95	14747	1.47	63...132		
		1000	1092.04	0.92	13391	1.29	63...132		
		1000	1135.65	0.88	13459	1.24	63...132		
1000	1225.28	0.82	15007	1.29	63...132				
1000	1274.20	0.78	15096	1.23	63...132				
1000	1321.01	0.76	13685	1.09	63...132				
1000	1477.63	0.68	12756	0.91	63...132				
1000	1482.00	0.67	15372	1.08	63...132				
1000	1536.64	0.65	13931	0.95	63...132				
1000	1598.00	0.63	13981	0.92	63...132				
1000	1787.46	0.56	13189	0.77	63...132				
1000	1858.84	0.54	14228	0.80	63...132				
1000	2162.25	0.46	13643	0.66	63...132				



MODEL: SP-16 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-16L	750	3.89	193.05	7222	146.00	180...250		
		750	4.25	176.47	7414	137.00	180...250		
		750	5.33	140.71	7669	113.00	180...250		
Double	SP2-16L	750	6.20	120.97	7705	97.61	180...250		
		750	15.12	49.60	10783	56.00	100...200		
		750	16.53	45.38	10942	52.00	100...200		
		750	18.06	41.52	11270	49.00	100...200		
		750	20.73	36.18	9769	36.99	100...200		
		750	22.65	33.11	12121	42.00	100...200		
		750	26.35	28.46	12507	37.28	100...200		
		750	28.41	26.40	9919	27.39	100...200		
		750	31.88	23.53	10559	26.02	100...200		
		750	33.05	22.70	9992	23.73	100...200		
		750	38.44	19.51	8409	17.18	100...200		
		750	39.97	18.76	10086	19.80	100...200		
		750	46.50	16.13	8490	14.34	100...200		
		Triple	SP3-16L	750	58.82	12.75	13181	17.60	63...132
750	64.28			11.67	13074	15.98	63...132		
750	70.25			10.68	13136	14.69	63...132		
750	76.77			9.77	13196	13.50	63...132		
750	88.10			8.51	13292	11.84	63...132		
750	96.27			7.79	13316	10.86	63...132		
750	111.99			6.70	13357	9.37	63...132		
750	120.74			6.21	13379	8.69	63...132		
750	135.47			5.54	13410	7.78	63...132		
750	140.45			5.34	13420	7.50	63...132		
750	151.42			4.95	11134	5.76	63...132		
750	163.37			4.59	13462	6.47	63...132		
750	169.89			4.41	13473	6.22	63...132		
750	176.14			4.26	11417	5.08	63...132		
750	197.63			3.80	13514	5.37	63...132		
750	204.89			3.66	11707	4.49	63...132		
750	213.07			3.52	11785	4.34	63...132		
750	238.33			3.15	9831	3.24	63...132		
Quadruple	SP4-16L			750	239.06	3.14	11706	3.85	63...132
				750	247.85	3.03	12086	3.83	63...132
		750	288.30	2.60	10150	2.77	63...132		
		750	228.75	3.28	13632	4.68	63...132		
		750	249.98	3.00	13580	4.27	63...132		
		750	273.18	2.75	13603	3.92	63...132		
		750	298.54	2.51	13629	3.58	63...132		
		750	326.25	2.30	13653	3.29	63...132		
		750	342.60	2.19	13667	3.13	63...132		
		750	374.41	2.00	13692	2.87	63...132		
		750	409.16	1.83	13716	2.63	63...132		
		750	469.55	1.60	13861	2.32	63...132		
		750	475.95	1.58	13881	2.30	63...132		
		750	513.14	1.46	14011	2.14	63...132		
		750	575.74	1.30	14207	1.93	63...132		
		750	596.89	1.26	14260	1.88	63...132		
		750	643.53	1.17	14385	1.76	63...132		
		750	694.32	1.08	14523	1.64	63...132		
		750	722.05	1.04	14589	1.59	63...132		
		750	748.57	1.00	14657	1.53	63...132		
		750	807.07	0.93	13375	1.30	63...132		
		750	839.91	0.89	14862	1.39	63...132		
		750	870.76	0.86	14922	1.34	63...132		
		750	905.53	0.83	14985	1.30	63...132		
		750	938.80	0.80	15051	1.26	63...132		
		750	1012.89	0.74	15191	1.18	63...132		
		750	1016.02	0.74	15190	1.18	63...132		
		750	1053.34	0.71	15266	1.14	63...132		
		750	1092.04	0.69	13837	1.00	63...132		
		750	1135.65	0.66	13907	0.96	63...132		
		750	1225.28	0.61	15544	0.99	63...132		
		750	1274.20	0.59	15606	0.96	63...132		
		750	1321.01	0.57	14141	0.84	63...132		
		750	1477.63	0.51	13404	0.72	63...132		
750	1482.00	0.51	15878	0.85	63...132				
750	1536.64	0.49	14387	0.74	63...132				
750	1598.00	0.47	14455	0.71	63...132				
750	1787.46	0.42	13859	0.61	63...132				
750	1858.84	0.40	14723	0.62	63...132				
750	2162.25	0.35	14302	0.52	63...132				



MODEL: SP-16 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-16L	500	3.89	128.70	8162	110.00	180...250		
		500	4.25	117.65	8361	103.00	180...250		
		500	5.33	93.81	8653	85.00	180...250		
Double	SP2-16L	500	6.20	80.65	7853	66.32	180...250		
		500	15.12	33.07	12130	42.00	100...200		
		500	16.53	30.25	12467	39.50	100...200		
		500	18.06	27.68	12520	36.29	100...200		
		500	20.73	24.12	9963	25.15	100...200		
		500	22.65	22.07	12661	29.25	100...200		
		500	26.35	18.98	12754	25.34	100...200		
		500	28.41	17.60	10119	18.63	100...200		
		500	31.88	15.68	10776	17.70	100...200		
		500	33.05	15.13	10196	16.15	100...200		
		500	38.44	13.01	8584	11.69	100...200		
		500	39.97	12.51	10296	13.48	100...200		
		500	46.50	10.75	8670	9.76	100...200		
		Triple	SP3-16L	500	58.82	8.50	13296	11.84	63...132
				500	64.28	7.78	13316	10.85	63...132
500	70.25			7.12	13341	9.95	63...132		
500	76.77			6.51	13365	9.12	63...132		
500	88.10			5.68	13403	7.96	63...132		
500	96.27			5.19	13427	7.30	63...132		
500	111.99			4.46	13469	6.30	63...132		
500	120.74			4.14	13490	5.84	63...132		
500	135.47			3.69	13521	5.23	63...132		
500	140.45			3.56	13532	5.04	63...132		
500	151.42			3.30	11913	4.11	63...132		
500	163.37			3.06	13573	4.35	63...132		
500	169.89			2.94	13584	4.19	63...132		
500	176.14			2.84	12216	3.63	63...132		
500	197.63			2.53	13626	3.61	63...132		
500	204.89			2.44	12253	3.13	63...132		
500	213.07			2.35	12263	3.01	63...132		
500	238.33			2.10	10526	2.31	63...132		
500	239.06			2.09	11966	2.62	63...132		
Quadruple	SP4-16L			500	247.85	2.02	12301	2.60	63...132
				500	288.30	1.73	10871	1.97	63...132
		500	228.75	2.19	13796	3.16	63...132		
		500	249.98	2.00	13692	2.87	63...132		
		500	273.18	1.83	13716	2.63	63...132		
		500	298.54	1.67	13790	2.41	63...132		
		500	326.25	1.53	13935	2.23	63...132		
		500	342.60	1.46	14012	2.14	63...132		
		500	374.41	1.34	14155	1.99	63...132		
		500	409.16	1.22	14315	1.83	63...132		
		500	469.55	1.06	14556	1.62	63...132		
		500	475.95	1.05	14572	1.60	63...132		
		500	513.14	0.97	14709	1.49	63...132		
		500	575.74	0.87	14902	1.36	63...132		
		500	596.89	0.84	14964	1.32	63...132		
		500	643.53	0.78	15095	1.23	63...132		
		500	694.32	0.72	15240	1.15	63...132		
		500	722.05	0.69	15318	1.11	63...132		
		500	748.57	0.67	15372	1.08	63...132		
		500	807.07	0.62	14007	0.91	63...132		
		500	839.91	0.60	15575	0.98	63...132		
		500	870.76	0.57	15669	0.94	63...132		
		500	905.53	0.55	15736	0.91	63...132		
		500	938.80	0.53	15806	0.88	63...132		
		500	1012.89	0.49	15954	0.82	63...132		
		500	1016.02	0.49	15953	0.82	63...132		
		500	1053.34	0.47	16033	0.79	63...132		
		500	1092.04	0.46	14490	0.70	63...132		
		500	1135.65	0.44	14564	0.67	63...132		
		500	1225.28	0.41	16295	0.70	63...132		
500	1274.20	0.39	16392	0.67	63...132				
500	1321.01	0.38	14809	0.59	63...132				
500	1477.63	0.34	14374	0.51	63...132				
500	1482.00	0.34	16662	0.59	63...132				
500	1536.64	0.33	15048	0.52	63...132				
500	1598.00	0.31	15155	0.49	63...132				
500	1787.46	0.28	14819	0.43	63...132				
500	1858.84	0.27	15396	0.44	63...132				
500	2162.25	0.23	15178	0.37	63...132				



PREMIUM



MODEL: SP-17 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-17L	1500	3.89	386.10	7495	303.00	180...250		
		1500	4.25	352.94	7658	283.00	180...250		
		1500	5.33	281.43	12202	359.37	180...250		
		1500	6.20	241.94	10231	259.22	180...250		
Double	SP2-17L	1500	15.12	99.21	11072	115.00	160...250		
		1500	16.53	90.75	11470	109.00	160...250		
		1500	18.06	83.04	11500	100.00	160...250		
		1500	20.73	72.36	11890	90.00	160...250		
		1500	22.65	66.22	12700	88.00	160...250		
		1500	26.35	56.93	13090	78.00	160...250		
		1500	28.41	52.80	13193	72.86	160...250		
		1500	31.88	47.05	11645	57.39	160...250		
		1500	33.05	45.39	13292	63.14	160...250		
		1500	38.44	39.02	11178	45.68	160...250		
		1500	39.97	37.53	13410	52.66	160...250		
		1500	46.50	32.26	11280	38.11	160...250		
		1500	58.82	25.50	16480	44.00	100...200		
		Triple	SP3-17L	1500	64.28	23.34	17359	42.50	100...200
1500	70.25			21.35	17438	39.00	100...200		
1500	76.77			19.54	17512	35.83	100...200		
1500	88.10			17.03	17634	31.43	100...200		
1500	96.27			15.58	17713	28.88	100...200		
1500	111.99			13.39	17851	25.03	100...200		
1500	120.74			12.42	17922	23.29	100...200		
1500	135.47			11.07	18027	20.76	100...200		
1500	140.45			10.68	18062	20.18	100...200		
1500	151.70			9.89	14333	14.84	100...200		
1500	163.37			9.18	16302	15.67	100...200		
1500	169.89			8.83	18244	16.85	100...200		
1500	176.14			8.52	14444	12.87	100...200		
1500	197.63			7.59	16455	13.08	100...200		
1500	204.89			7.32	14564	11.16	100...200		
1500	213.07			7.04	14595	10.74	100...200		
1500	238.33			6.29	12266	8.08	100...200		
1500	239.06			6.27	12891	8.48	100...200		
1500	247.85			6.05	14809	9.38	100...200		
1500	288.30			5.20	12430	6.77	100...200		
Quadruple	SP4-17L			1500	228.75	6.56	18399	12.64	63...132
				1500	249.98	6.00	18408	11.57	63...132
		1500	273.18	5.49	18442	10.60	63...132		
		1500	298.54	5.02	18476	9.71	63...132		
		1500	326.25	4.60	18509	8.92	63...132		
		1500	342.60	4.38	18528	8.50	63...132		
		1500	374.41	4.01	18561	7.79	63...132		
		1500	409.16	3.67	18595	7.15	63...132		
		1500	469.55	3.19	18648	6.23	63...132		
		1500	475.95	3.15	18653	6.15	63...132		
		1500	513.14	2.92	18682	5.71	63...132		
		1500	575.74	2.61	18725	5.12	63...132		
		1500	596.89	2.51	18740	4.93	63...132		
		1500	643.53	2.33	18768	4.58	63...132		
		1500	694.32	2.16	18797	4.25	63...132		
		1500	722.05	2.08	18811	4.10	63...132		
		1500	748.57	2.00	18826	3.94	63...132		
		1500	807.07	1.86	16994	3.31	63...132		
		1500	839.91	1.79	18868	3.54	63...132		
		1500	870.76	1.72	18895	3.40	63...132		
		1500	905.53	1.66	18975	3.30	63...132		
		1500	938.80	1.60	19058	3.19	63...132		
		1500	1012.89	1.48	17914	2.78	63...132		
		1500	1016.02	1.48	19234	2.98	63...132		
		1500	1053.34	1.42	19330	2.87	63...132		
		1500	1092.04	1.37	17596	2.52	63...132		
		1500	1135.65	1.32	17671	2.44	63...132		
		1500	1225.28	1.22	18169	2.32	63...132		
		1500	1274.20	1.18	19761	2.44	63...132		
		1500	1321.01	1.14	17969	2.15	63...132		
		1500	1477.63	1.02	16361	1.75	63...132		
		1500	1482.00	1.01	18755	1.98	63...132		
1500	1536.64	0.98	18281	1.88	63...132				
1500	1598.00	0.94	18368	1.81	63...132				
1500	1787.46	0.84	16915	1.49	63...132				
1500	1858.84	0.81	18682	1.58	63...132				
1500	2162.25	0.69	17496	1.26	63...132				



MODEL: SP-17 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-17L	1000	3.89	257.40	8441	227.50	180...250		
		1000	4.25	235.29	8645	213.00	180...250		
		1000	5.33	187.62	12453	244.51	180...250		
		1000	6.20	161.29	10449	176.48	180...250		
Double	SP2-17L	1000	15.12	66.14	12570	87.00	160...250		
		1000	16.53	60.50	12950	82.00	160...250		
		1000	18.06	55.36	13280	77.00	160...250		
		1000	20.73	48.24	13255	66.92	160...250		
		1000	22.65	44.15	14300	66.00	160...250		
		1000	26.35	37.95	14600	58.00	160...250		
		1000	28.41	35.20	13446	49.50	160...250		
		1000	31.88	31.37	11907	39.10	160...250		
		1000	33.05	30.26	13548	42.91	160...250		
		1000	38.44	26.01	11398	31.05	160...250		
		1000	39.97	25.02	13673	35.79	160...250		
		1000	46.50	21.51	11506	25.91	160...250		
		1000	58.82	17.00	18025	32.09	100...200		
		Triple	SP3-17L	1000	64.28	15.56	17714	28.90	100...200
1000	70.25			14.24	17796	26.54	100...200		
1000	76.77			13.03	17875	24.39	100...200		
1000	88.10			11.35	18005	21.40	100...200		
1000	96.27			10.39	18089	19.66	100...200		
1000	111.99			8.93	18232	17.05	100...200		
1000	120.74			8.28	18287	15.84	100...200		
1000	135.47			7.38	18330	14.17	100...200		
1000	140.45			7.12	18344	13.68	100...200		
1000	151.42			6.60	14646	10.10	100...200		
1000	163.37			6.12	16631	10.66	100...200		
1000	169.89			5.89	18417	11.34	100...200		
1000	176.14			5.68	14967	8.89	100...200		
1000	197.63			5.06	16791	8.90	100...200		
1000	204.89			4.88	15345	7.84	100...200		
1000	213.07			4.69	15446	7.59	100...200		
1000	238.33			4.20	12883	5.67	100...200		
1000	239.06			4.18	13162	5.76	100...200		
Quadruple	SP4-17L			1000	247.85	4.03	15838	6.68	100...200
				1000	288.30	3.47	13299	4.83	100...200
		1000	228.75	4.37	18595	8.51	63...132		
		1000	249.98	4.00	18562	7.78	63...132		
		1000	273.18	3.66	18596	7.13	63...132		
		1000	298.54	3.35	18630	6.54	63...132		
		1000	326.25	3.07	18663	6.00	63...132		
		1000	342.60	2.92	18682	5.71	63...132		
		1000	374.41	2.67	18716	5.23	63...132		
		1000	409.16	2.44	18750	4.79	63...132		
		1000	469.55	2.13	18802	4.19	63...132		
		1000	475.95	2.10	18806	4.14	63...132		
		1000	513.14	1.95	18836	3.85	63...132		
		1000	575.74	1.74	18879	3.44	63...132		
		1000	596.89	1.68	18948	3.33	63...132		
		1000	643.53	1.55	19129	3.10	63...132		
		1000	694.32	1.44	19297	2.91	63...132		
		1000	722.05	1.38	19396	2.80	63...132		
		1000	748.57	1.34	19464	2.73	63...132		
		1000	807.07	1.24	17798	2.31	63...132		
		1000	839.91	1.19	19741	2.46	63...132		
		1000	870.76	1.15	19821	2.39	63...132		
		1000	905.53	1.10	19926	2.30	63...132		
		1000	938.80	1.07	19992	2.24	63...132		
		1000	1012.89	0.99	18819	1.95	63...132		
		1000	1016.02	0.98	20202	2.07	63...132		
		1000	1053.34	0.95	20277	2.02	63...132		
		1000	1092.04	0.92	18412	1.77	63...132		
		1000	1135.65	0.88	18506	1.71	63...132		
		1000	1225.28	0.82	19427	1.67	63...132		
		1000	1274.20	0.78	20757	1.70	63...132		
		1000	1321.01	0.76	18818	1.50	63...132		
1000	1477.63	0.68	17540	1.25	63...132				
1000	1482.00	0.67	20103	1.41	63...132				
1000	1536.64	0.65	19156	1.30	63...132				
1000	1598.00	0.63	19224	1.27	63...132				
1000	1787.46	0.56	18135	1.06	63...132				
1000	1858.84	0.54	19564	1.11	63...132				
1000	2162.25	0.46	18760	0.90	63...132				



MODEL: SP-17 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES		
Single	SP1-17L	750	3.89	193.05	9152	185.00	180...250		
		750	4.25	176.47	9449	174.60	180...250		
		750	5.33	140.71	12853	126.18	180...250		
		750	6.20	120.97	10595	134.21	180...250		
Double	SP2-17L	750	15.12	49.60	13670	71.00	160...250		
		750	16.53	45.38	14100	67.00	160...250		
		750	18.06	41.52	14260	62.00	160...250		
		750	20.73	36.18	13433	50.87	160...250		
		750	22.65	33.11	15450	53.50	160...250		
		750	26.35	28.46	15455	46.07	160...250		
		750	28.41	26.40	13638	37.66	160...250		
		750	31.88	23.53	12075	29.75	160...250		
		750	33.05	22.70	13738	32.63	160...250		
		750	38.44	19.51	11562	23.62	160...250		
		750	39.97	18.76	13869	27.23	160...250		
		750	46.50	16.13	11673	19.72	160...250		
		750	58.82	12.75	15968	24.20	100...200		
		Triple	SP3-17L	750	64.28	11.67	17977	21.97	100...200
750	70.25			10.68	18062	20.20	100...200		
750	76.77			9.77	18145	18.56	100...200		
750	88.10			8.51	18276	16.29	100...200		
750	96.27			7.79	18310	14.94	100...200		
750	111.99			6.70	18368	12.89	100...200		
750	120.74			6.21	18397	11.94	100...200		
750	135.47			5.54	18439	10.70	100...200		
750	140.45			5.34	18453	10.32	100...200		
750	151.42			4.95	15310	7.94	100...200		
750	163.37			4.59	16874	8.11	100...200		
750	169.89			4.41	18526	8.55	100...200		
750	176.14			4.26	15697	6.99	100...200		
750	197.63			3.80	17040	6.78	100...200		
750	204.89			3.66	16097	6.17	100...200		
750	213.07			3.52	16204	5.97	100...200		
750	238.33			3.15	13518	4.46	100...200		
750	239.06			3.14	13361	4.39	100...200		
750	247.85			3.03	16618	5.26	100...200		
750	288.30			2.60	13957	3.80	100...200		
Quadruple	SP4-17L			750	228.75	3.28	18744	6.44	63...132
				750	249.98	3.00	18672	5.87	63...132
				750	273.18	2.75	18705	5.39	63...132
				750	298.54	2.51	18740	4.93	63...132
		750	326.25	2.30	18773	4.52	63...132		
		750	342.60	2.19	18791	4.31	63...132		
		750	374.41	2.00	18826	3.94	63...132		
		750	409.16	1.83	18860	3.61	63...132		
		750	469.55	1.60	19058	3.19	63...132		
		750	475.95	1.58	19087	3.16	63...132		
		750	513.14	1.46	19265	2.95	63...132		
		750	575.74	1.30	19535	2.66	63...132		
		750	596.89	1.26	19607	2.59	63...132		
		750	643.53	1.17	19780	2.42	63...132		
		750	694.32	1.08	19968	2.26	63...132		
		750	722.05	1.04	20060	2.18	63...132		
		750	748.57	1.00	20153	2.11	63...132		
		750	807.07	0.93	18390	1.79	63...132		
		750	839.91	0.89	20435	1.90	63...132		
		750	870.76	0.86	20518	1.85	63...132		
		750	905.53	0.83	20605	1.79	63...132		
		750	938.80	0.80	20695	1.73	63...132		
		750	1012.89	0.74	19767	1.53	63...132		
		750	1016.02	0.74	20886	1.62	63...132		
		750	1053.34	0.71	20990	1.56	63...132		
		750	1092.04	0.69	19025	1.37	63...132		
		750	1135.65	0.66	19122	1.32	63...132		
		750	1225.28	0.61	20427	1.30	63...132		
		750	1274.20	0.59	21458	1.33	63...132		
		750	1321.01	0.57	19444	1.16	63...132		
		750	1477.63	0.51	18430	0.98	63...132		
		750	1482.00	0.51	21061	1.12	63...132		
		750	1536.64	0.49	19782	1.02	63...132		
		750	1598.00	0.47	19875	0.98	63...132		
		750	1787.46	0.42	19056	0.84	63...132		
		750	1858.84	0.40	20244	0.85	63...132		
750	2162.25	0.35	19665	0.72	63...132				



MODEL: SP-17 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES
Single	SP1-17L	500	3.89	128.70	10389	140.00	180...250
		500	4.25	117.65	16127	198.69	180...250
		500	5.33	93.81	12853	126.18	180...250
Double	SP2-17L	500	6.20	80.65	10797	91.18	180...250
		500	15.12	33.07	15600	54.00	160...250
		500	16.53	30.25	15780	50.00	160...250
		500	18.06	27.68	16213	47.00	160...250
		500	20.73	24.12	13698	34.58	160...250
		500	22.65	22.07	17410	40.22	160...250
		500	26.35	18.98	15751	31.30	160...250
		500	28.41	17.60	13911	25.61	160...250
		500	31.88	15.68	12318	20.24	160...250
		500	33.05	15.13	14020	22.20	160...250
		500	38.44	13.01	11803	16.08	160...250
		500	39.97	12.51	14158	18.53	160...250
		500	46.50	10.75	11921	13.42	160...250
		500	58.82	8.50	18284	16.27	100...200
		Triple	SP3-17L	500	64.28	7.78	18309
500	70.25			7.12	18344	13.68	100...200
500	76.77			6.51	18377	12.53	100...200
500	88.10			5.68	18431	10.94	100...200
500	96.27			5.19	18464	10.03	100...200
500	111.99			4.46	18521	8.67	100...200
500	120.74			4.14	18550	8.04	100...200
500	135.47			3.69	18593	7.18	100...200
500	140.45			3.56	18606	6.94	100...200
500	151.42			3.30	16380	5.65	100...200
500	163.37			3.06	17232	5.52	100...200
500	169.89			2.94	18680	5.75	100...200
500	176.14			2.84	16797	5.00	100...200
500	197.63			2.53	17406	2.53	100...200
500	204.89			2.44	16849	4.31	100...200
500	213.07			2.35	16863	4.13	100...200
500	238.33			2.10	14473	3.18	100...200
500	239.06			2.09	13654	2.99	100...200
500	247.85			2.02	16914	3.58	100...200
500	288.30			1.73	14948	2.71	100...200
Quadruple	SP4-17L			500	228.75	2.19	18970
		500	249.98	2.00	18827	3.94	63...132
		500	273.18	1.83	18860	3.61	63...132
		500	298.54	1.67	18961	3.32	63...132
		500	326.25	1.53	19160	3.07	63...132
		500	342.60	1.46	19267	2.95	63...132
		500	374.41	1.34	19465	2.73	63...132
		500	409.16	1.22	19683	2.51	63...132
		500	469.55	1.06	20015	2.22	63...132
		500	475.95	1.05	20037	2.20	63...132
		500	513.14	0.97	20225	2.05	63...132
		500	575.74	0.87	20490	1.87	63...132
		500	596.89	0.84	20575	1.81	63...132
		500	643.53	0.78	20756	1.70	63...132
		500	694.32	0.72	20954	1.58	63...132
		500	722.05	0.69	21062	1.52	63...132
		500	748.57	0.67	21136	1.48	63...132
		500	807.07	0.62	19259	1.25	63...132
		500	839.91	0.60	21415	1.35	63...132
		500	870.76	0.57	21545	1.29	63...132
		500	905.53	0.55	21637	1.25	63...132
		500	938.80	0.53	21733	1.21	63...132
		500	1012.89	0.49	21208	1.09	63...132
		500	1016.02	0.49	21935	1.13	63...132
		500	1053.34	0.47	22045	1.09	63...132
		500	1092.04	0.46	19924	0.96	63...132
		500	1135.65	0.44	20025	0.92	63...132
		500	1225.28	0.41	21862	0.94	63...132
		500	1274.20	0.39	22539	0.92	63...132
		500	1321.01	0.38	20362	0.81	63...132
		500	1477.63	0.34	19764	0.70	63...132
		500	1482.00	0.34	22576	0.80	63...132
		500	1536.64	0.33	20692	0.72	63...132
500	1598.00	0.31	20839	0.68	63...132		
500	1787.46	0.28	20376	0.60	63...132		
500	1858.84	0.27	21169	0.60	63...132		
500	2162.25	0.23	20869	0.50	63...132		



PREMIUM



MODEL: SP-18 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES
Single	SP1-18L	1500	3.89	386.10	10141	410.00	180...250
		1500	4.25	352.94	10147	375.00	180...250
		1500	5.33	281.43	10791	318.00	180...250
Double	SP2-18L	1500	6.20	241.94	10973	278.00	180...250
		1500	15.12	99.21	14731	153.00	160...250
		1500	16.53	90.75	14994	142.50	160...250
		1500	18.06	83.04	15397	133.90	160...250
		1500	20.73	72.36	15686	118.80	160...250
		1500	22.65	66.22	16494	114.30	160...250
		1500	26.35	56.93	17261	102.90	160...250
		1500	28.41	52.80	17239	95.20	160...250
		1500	31.88	47.05	17480	86.14	160...250
		1500	33.05	45.39	18104	86.00	160...250
		1500	38.44	39.02	15858	64.80	160...250
		1500	39.97	37.53	19458	76.41	160...250
		1500	46.50	32.26	15994	54.03	160...250
		1500	58.82	25.50	22091	59.00	100...200
		Triple	SP3-18L	1500	64.28	23.34	22587
1500	70.25			21.35	23209	51.90	100...200
1500	76.77			19.54	23800	48.70	100...200
1500	88.10			17.03	24691	44.00	100...200
1500	96.27			15.58	25123	40.97	100...200
1500	111.99			13.39	25315	35.51	100...200
1500	120.74			12.42	25414	33.02	100...200
1500	135.47			11.07	25410	29.47	100...200
1500	140.45			10.68	25617	28.63	100...200
1500	151.70			9.89	20784	21.52	100...200
1500	163.37			9.18	24442	23.50	100...200
1500	169.89			8.83	25869	23.90	100...200
1500	176.14			8.52	20950	18.66	100...200
1500	197.63			7.59	24682	19.62	100...200
1500	204.89			7.32	21117	16.18	100...200
1500	213.07			7.04	21162	15.58	100...200
1500	238.33			6.29	17392	11.46	100...200
1500	239.06			6.27	19344	12.71	100...200
1500	247.85			6.05	21467	13.60	100...200
1500	288.30			5.20	17624	9.60	100...200
Quadruple	SP4-18L			1500	228.75	6.56	26469
		1500	249.98	6.00	26582	16.70	63...132
		1500	273.18	5.49	26630	15.31	63...132
		1500	298.54	5.02	26679	14.03	63...132
		1500	326.25	4.60	26728	12.88	63...132
		1500	342.60	4.38	26755	12.27	63...132
		1500	374.41	4.01	26803	11.26	63...132
		1500	409.16	3.67	26852	10.32	63...132
		1500	469.55	3.19	26929	9.00	63...132
		1500	475.95	3.15	26936	8.89	63...132
		1500	513.14	2.92	26978	8.25	63...132
		1500	575.74	2.61	27040	7.39	63...132
		1500	596.89	2.51	27061	7.11	63...132
		1500	643.53	2.33	27102	6.61	63...132
		1500	694.32	2.16	27144	6.14	63...132
		1500	722.05	2.08	27165	5.92	63...132
		1500	748.57	2.00	27186	5.69	63...132
		1500	807.07	1.86	24014	4.68	63...132
		1500	839.91	1.79	27248	5.11	63...132
		1500	870.76	1.72	27287	4.91	63...132
		1500	905.53	1.66	27405	4.76	63...132
		1500	938.80	1.60	27527	4.61	63...132
		1500	1012.89	1.48	26873	4.17	63...132
		1500	1016.02	1.48	27788	4.31	63...132
		1500	1053.34	1.42	27933	4.15	63...132
		1500	1092.04	1.37	24857	3.57	63...132
		1500	1135.65	1.32	24962	3.45	63...132
		1500	1225.28	1.22	27255	3.48	63...132
		1500	1274.20	1.18	28565	3.53	63...132
		1500	1321.01	1.14	25378	3.03	63...132
		1500	1477.63	1.02	23142	2.47	63...132
		1500	1482.00	1.01	28135	2.97	63...132
		1500	1536.64	0.98	25815	2.65	63...132
1500	1598.00	0.94	25936	2.55	63...132		
1500	1787.46	0.84	23918	2.10	63...132		
1500	1858.84	0.81	26376	2.24	63...132		
1500	2162.25	0.69	24733	1.79	63...132		



MODEL: SP-18 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES		
Single	SP1-18L	1000	3.89	257.40	11316	305.00	180...250		
		1000	4.25	235.29	11568	285.00	180...250		
		1000	5.33	187.62	12114	238.00	180...250		
Double	SP2-18L	1000	6.20	161.29	12316	208.00	180...250		
		1000	15.12	66.14	16608	115.00	160...250		
		1000	16.53	60.50	16951	107.40	160...250		
		1000	18.06	55.36	17386	100.80	160...250		
		1000	20.73	48.24	17707	89.40	160...250		
		1000	22.65	44.15	18615	86.00	160...250		
		1000	26.35	37.95	19501	77.50	160...250		
		1000	28.41	35.20	19517	71.85	160...250		
		1000	31.88	31.37	17852	58.65	160...250		
		1000	33.05	30.26	19656	62.25	160...250		
		1000	38.44	26.01	16163	44.03	160...250		
		1000	39.97	25.02	19831	51.91	160...250		
		1000	46.50	21.51	16321	36.76	160...250		
		Triple	SP3-18L	1000	58.82	17.00	24992	44.50	100...200
1000	64.28			15.56	25127	40.94	100...200		
1000	70.25			14.24	25237	37.62	100...200		
1000	76.77			13.03	25351	34.58	100...200		
1000	88.10			11.35	25534	30.33	100...200		
1000	96.27			10.39	25649	27.88	100...200		
1000	111.99			8.93	25851	24.18	100...200		
1000	120.74			8.28	26049	22.57	100...200		
1000	135.47			7.38	25980	20.08	100...200		
1000	140.45			7.12	26487	19.74	100...200		
1000	151.70			6.59	21235	14.66	100...200		
1000	163.37			6.12	24946	15.99	100...200		
1000	169.89			5.89	26593	16.38	100...200		
1000	176.14			5.68	21695	12.88	100...200		
1000	197.63			5.06	25186	13.35	100...200		
1000	204.89			4.88	22237	11.36	100...200		
1000	213.07			4.69	22382	10.99	100...200		
1000	238.33			4.20	18258	8.02	100...200		
1000	239.06			4.18	19742	8.65	100...200		
1000	247.85			4.03	22943	9.69	100...200		
1000	288.30			3.47	18842	6.84	100...200		
1000	299.81			3.34	23657	8.26	100...200		
1000	348.75			2.87	19447	5.84	100...200		
Quadruple	SP4-18L			1000	228.75	4.37	26742	12.24	63...132
				1000	249.98	4.00	26805	11.23	63...132
				1000	273.18	3.66	26855	10.29	63...132
		1000	298.54	3.35	26902	9.44	63...132		
		1000	326.25	3.07	26950	8.66	63...132		
		1000	342.60	2.92	26978	8.25	63...132		
		1000	374.41	2.67	27027	7.56	63...132		
		1000	409.16	2.44	27077	6.92	63...132		
		1000	469.55	2.13	27152	6.06	63...132		
		1000	475.95	2.10	27160	5.97	63...132		
		1000	513.14	1.95	27200	5.55	63...132		
		1000	575.74	1.74	27263	4.97	63...132		
		1000	596.89	1.68	27365	4.81	63...132		
		1000	643.53	1.55	27632	4.49	63...132		
		1000	694.32	1.44	27881	4.20	63...132		
		1000	722.05	1.38	28027	4.05	63...132		
		1000	748.57	1.34	28128	3.95	63...132		
		1000	807.07	1.24	25139	3.26	63...132		
		1000	839.91	1.19	28537	3.56	63...132		
		1000	870.76	1.15	28655	3.45	63...132		
		1000	905.53	1.10	28810	3.32	63...132		
		1000	938.80	1.07	28907	3.24	63...132		
		1000	1012.89	0.99	28226	2.93	63...132		
		1000	1016.02	0.98	29218	3.00	63...132		
		1000	1053.34	0.95	29328	2.92	63...132		
		1000	1092.04	0.92	25999	2.50	63...132		
		1000	1135.65	0.88	26130	2.41	63...132		
		1000	1225.28	0.82	29138	2.50	63...132		
		1000	1274.20	0.78	30039	2.45	63...132		
		1000	1321.01	0.76	26566	2.11	63...132		
		1000	1477.63	0.68	24795	1.77	63...132		
		1000	1482.00	0.67	30175	2.12	63...132		
1000	1536.64	0.65	27039	1.84	63...132				
1000	1598.00	0.63	27134	1.79	63...132				
1000	1787.46	0.56	25630	1.50	63...132				
1000	1858.84	0.54	27610	1.56	63...132				
1000	2162.25	0.46	26506	1.28	63...132				



MODEL: SP-18 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES
Single	SP1-18L	750	3.89	193.05	12367	250.00	180...250
		750	4.25	176.47	12717	235.00	180...250
		750	5.33	140.71	13235	195.00	180...250
		750	6.20	120.97	13579	172.00	180...250
Double	SP2-18L	750	15.12	49.60	18100	94.00	160...250
		750	16.53	45.38	18476	87.80	160...250
		750	18.06	41.52	18996	82.60	160...250
		750	20.73	36.18	19331	73.20	160...250
		750	22.65	33.11	20289	70.30	160...250
		750	26.35	28.46	21237	63.00	160...250
		750	28.41	26.40	19786	54.63	160...250
		750	31.88	23.53	18113	44.63	160...250
		750	33.05	22.70	19931	47.34	160...250
		750	38.44	19.51	16400	33.51	160...250
		750	39.97	18.76	20118	39.50	160...250
		750	46.50	16.13	16558	27.97	160...250
		750	58.82	12.75	26089	34.84	100...200
		Triple	SP3-18L	750	64.28	11.67	25497
750	70.25			10.68	25612	28.64	100...200
750	76.77			9.77	25730	26.33	100...200
750	88.10			8.51	25932	23.11	100...200
750	96.27			7.79	26304	21.45	100...200
750	111.99			6.70	26521	18.60	100...200
750	120.74			6.21	26564	17.26	100...200
750	135.47			5.54	26369	15.29	100...200
750	140.45			5.34	26646	14.89	100...200
750	151.42			4.95	22186	11.49	100...200
750	163.37			4.59	25311	12.17	100...200
750	169.89			4.41	26751	12.36	100...200
750	176.14			4.26	22741	10.13	100...200
750	197.63			3.80	25560	10.16	100...200
750	204.89			3.66	23314	8.93	100...200
750	213.07			3.52	23468	8.64	100...200
750	238.33			3.15	19147	6.31	100...200
750	239.06			3.14	20042	6.58	100...200
750	247.85			3.03	23705	7.51	100...200
750	288.30			2.60	19766	5.39	100...200
750	299.81			2.50	23797	6.23	100...200
750	348.75			2.15	20405	4.60	100...200
750	228.75			3.28	26953	9.26	63...132
750	249.98			3.00	26964	8.47	63...132
750	273.18			2.75	27012	7.78	63...132
750	298.54			2.51	27061	7.11	63...132
750	326.25			2.30	27109	6.53	63...132
750	342.60			2.19	27136	6.22	63...132
750	374.41	2.00	27186	5.69	63...132		
750	409.16	1.83	27235	5.22	63...132		
750	469.55	1.60	27528	4.61	63...132		
750	475.95	1.58	27570	4.56	63...132		
750	513.14	1.46	27834	4.26	63...132		
750	575.74	1.30	28232	3.84	63...132		
750	596.89	1.26	28339	3.74	63...132		
750	643.53	1.17	28593	3.50	63...132		
750	694.32	1.08	28872	3.27	63...132		
750	722.05	1.04	29007	3.16	63...132		
750	748.57	1.00	29146	3.05	63...132		
750	807.07	0.93	25968	2.53	63...132		
750	839.91	0.89	29561	2.76	63...132		
750	870.76	0.86	29685	2.67	63...132		
750	905.53	0.83	29813	2.59	63...132		
750	938.80	0.80	29947	2.51	63...132		
750	1012.89	0.74	29652	2.30	63...132		
750	1016.02	0.74	30230	2.34	63...132		
750	1053.34	0.71	30385	2.26	63...132		
750	1092.04	0.69	26856	1.94	63...132		
750	1135.65	0.66	26992	1.87	63...132		
750	1225.28	0.61	30643	1.96	63...132		
750	1274.20	0.59	31075	1.92	63...132		
750	1321.01	0.57	27442	1.64	63...132		
750	1477.63	0.51	26044	1.39	63...132		
750	1482.00	0.51	31590	1.69	63...132		
750	1536.64	0.49	27914	1.43	63...132		
750	1598.00	0.47	28045	1.38	63...132		
750	1787.46	0.42	26922	1.18	63...132		
750	1858.84	0.40	28560	1.20	63...132		
750	2162.25	0.35	27777	1.02	63...132		



MODEL: SP-18 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES
Single	SP1-18L	500	3.89	128.70	13876	187.00	180...250
		500	4.25	117.65	14043	173.00	180...250
		500	5.33	93.81	14863	146.00	180...250
Double	SP2-18L	500	6.20	80.65	15331	129.47	180...250
		500	15.12	33.07	20450	70.80	160...250
		500	16.53	30.25	20865	66.10	160...250
		500	18.06	27.68	21457	62.20	160...250
		500	20.73	24.12	19890	50.21	160...250
		500	22.65	22.07	22944	53.00	160...250
		500	26.35	18.98	23625	46.95	160...250
		500	28.41	17.60	20182	37.15	160...250
		500	31.88	15.68	18477	30.35	160...250
		500	33.05	15.13	20335	32.20	160...250
		500	38.44	13.01	16739	22.80	160...250
		500	39.97	12.51	20533	26.88	160...250
		500	46.50	10.75	16905	19.04	160...250
		500	58.82	8.50	26306	23.42	100...200
		Triple	SP3-18L	500	64.28	7.78	26307
500	70.25			7.12	26485	19.74	100...200
500	76.77			6.51	26535	18.10	100...200
500	88.10			5.68	26613	15.81	100...200
500	96.27			5.19	26661	14.49	100...200
500	111.99			4.46	26742	12.50	100...200
500	120.74			4.14	26785	11.60	100...200
500	135.47			3.69	26850	10.38	100...200
500	140.45			3.56	26867	10.01	100...200
500	151.42			3.30	23664	8.17	100...200
500	163.37			3.06	25847	8.28	100...200
500	169.89			2.94	26973	8.31	100...200
500	176.14			2.84	23735	7.05	100...200
500	197.63			2.53	26109	6.92	100...200
500	204.89			2.44	23809	6.08	100...200
500	213.07			2.35	23829	5.85	100...200
500	238.33			2.10	20491	4.51	100...200
500	239.06			2.09	20480	4.49	100...200
500	247.85			2.02	23900	5.05	100...200
500	288.30			1.73	21156	3.84	100...200
500	299.81			1.67	24314	4.24	100...200
500	348.75			1.43	21847	3.28	100...200
500	228.75			2.19	27270	6.25	63...132
500	249.98			2.00	27186	5.69	63...132
500	273.18			1.83	27236	5.22	63...132
500	298.54			1.67	27384	4.79	63...132
500	326.25			1.53	27678	4.43	63...132
500	342.60	1.46	27835	4.26	63...132		
500	374.41	1.34	28128	3.95	63...132		
500	409.16	1.22	28450	3.63	63...132		
500	469.55	1.06	28941	3.21	63...132		
500	475.95	1.05	28974	3.19	63...132		
500	513.14	0.97	29252	2.97	63...132		
500	575.74	0.87	29644	2.70	63...132		
500	596.89	0.84	29770	2.62	63...132		
500	643.53	0.78	30037	2.45	63...132		
500	694.32	0.72	30330	2.29	63...132		
500	722.05	0.69	30490	2.20	63...132		
500	748.57	0.67	30599	2.15	63...132		
500	807.07	0.62	27183	1.76	63...132		
500	839.91	0.60	31012	1.95	63...132		
500	870.76	0.57	31205	1.86	63...132		
500	905.53	0.55	31341	1.81	63...132		
500	938.80	0.53	31483	1.75	63...132		
500	1012.89	0.49	31785	1.63	63...132		
500	1016.02	0.49	31782	1.63	63...132		
500	1053.34	0.47	28045	1.38	63...132		
500	1092.04	0.46	28113	1.35	63...132		
500	1135.65	0.44	28254	1.30	63...132		
500	1225.28	0.41	32480	1.39	63...132		
500	1274.20	0.39	32677	1.33	63...132		
500	1321.01	0.38	28725	1.14	63...132		
500	1477.63	0.34	27915	0.99	63...132		
500	1482.00	0.34	33227	1.18	63...132		
500	1536.64	0.33	29186	1.01	63...132		
500	1598.00	0.31	29391	0.95	63...132		
500	1787.46	0.28	28860	0.85	63...132		
500	1858.84	0.27	29853	0.84	63...132		
500	2162.25	0.23	29852	0.72	63...132		



MODEL: SP-19 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES
Double	SP2-19L	1500	16.53	90.75	20202	192.00	180...250
		1500	18.06	83.04	20813	181.00	180...250
		1500	20.73	72.36	21232	160.80	180...250
		1500	22.65	66.22	22222	154.00	180...250
		1500	26.35	56.93	23233	138.50	180...250
		1500	28.41	52.80	23269	128.50	180...250
		1500	33.05	45.39	24356	115.70	180...250
		1500	38.44	39.02	23716	96.91	180...250
Triple	SP3-19L	1500	64.28	23.34	30280	74.00	100...200
		1500	70.25	21.35	31213	69.80	100...200
		1500	76.77	19.54	32255	66.00	100...200
		1500	88.10	17.03	33390	59.50	100...200
		1500	96.27	15.58	34282	55.90	100...200
		1500	111.99	13.39	35789	50.20	100...200
		1500	120.74	12.42	36710	47.70	100...200
		1500	135.47	11.07	37872	43.90	100...200
		1500	140.45	10.68	38549	43.09	100...200
		1500	151.42	9.91	31230	32.34	100...200
		1500	163.37	9.18	34522	33.22	100...200
		1500	169.90	8.83	38929	35.97	100...200
		1500	176.14	8.52	31476	28.04	100...200
		1500	197.63	7.59	34868	27.71	100...200
		1500	204.89	7.32	31724	24.31	100...200
		1500	213.07	7.04	31792	23.41	100...200
		1500	238.33	6.29	25998	17.14	100...200
		1500	247.85	6.05	32250	20.43	100...200
		1500	288.30	5.20	26340	14.35	100...200
		Quadruple	SP4-19L	1500	249.98	6.00	39723
1500	273.18			5.49	39796	22.88	63...132
1500	298.54			5.02	39870	20.96	63...132
1500	326.25			4.60	39941	19.24	63...132
1500	342.60			4.38	39983	18.34	63...132
1500	374.41			4.01	40057	16.78	63...132
1500	409.16			3.67	40130	15.38	63...132
1500	469.55			3.19	40243	13.44	63...132
1500	475.95			3.15	40252	13.28	63...132
1500	513.14			2.92	40316	12.33	63...132
1500	575.74			2.61	40409	11.04	63...132
1500	596.89			2.51	40439	10.63	63...132
1500	643.53			2.33	40504	9.88	63...132
1500	694.32			2.16	40563	9.18	63...132
1500	722.05			2.08	40598	8.84	63...132
1500	748.57			2.00	40627	8.51	63...132
1500	807.07			1.86	35945	6.96	63...132
1500	839.91			1.79	40721	7.63	63...132
1500	870.76			1.72	40772	7.34	63...132
1500	905.53			1.66	40971	7.08	63...132
1500	938.80			1.60	36561	6.13	63...132
1500	1012.89			1.48	37915	5.88	63...132
1500	1016.02			1.48	41542	6.44	63...132
1500	1053.34			1.42	41727	6.20	63...132
1500	1092.04			1.37	37189	5.33	63...132
1500	1135.65			1.32	37356	5.16	63...132
1500	1225.28			1.22	38423	4.91	63...132
1500	1270.29			1.18	37827	4.67	63...132
1500	1274.20			1.18	42704	5.28	63...132
1500	1321.01			1.14	37998	4.50	63...132
1500	1477.63			1.02	34542	3.69	63...132
1500	1482.00			1.01	39656	4.19	63...132
1500	1536.64	0.98	38650	3.97	63...132		
1500	1598.00	0.94	38823	3.82	63...132		
1500	1787.46	0.84	35669	3.14	63...132		
1500	1858.84	0.81	39489	3.35	63...132		
1500	2162.25	0.69	36836	2.66	63...132		



MODEL: SP-19 L

MODEL		n ₁ (RPM)	RATIO i	n ₂ (RPM)	M _{n2} (Nm)	P _{n1} (kW)	MOTOR FRAME SIZES
Double	SP2-19L	1000	16.53	60.50	22885	145.00	180....250
		1000	18.06	55.36	23496	136.22	180....250
		1000	20.73	48.24	23965	121.00	180....250
		1000	22.65	44.15	25108	116.00	180....250
		1000	26.35	37.95	26295	104.50	180....250
		1000	28.41	35.20	26293	96.80	180....250
		1000	33.05	30.26	27440	86.90	180....250
		1000	38.44	26.01	24179	65.87	180....250
Triple	SP3-19L	1000	64.28	15.56	34372	56.00	100....200
		1000	70.25	14.24	35216	52.50	100....200
		1000	76.77	13.03	36286	49.50	100....200
		1000	88.10	11.35	37795	44.90	100....200
		1000	96.27	10.39	38598	41.96	100....200
		1000	111.99	8.93	38903	36.38	100....200
		1000	120.74	8.28	39194	33.95	100....200
		1000	135.47	7.38	39548	30.57	100....200
		1000	140.45	7.12	39581	29.50	100....200
		1000	151.42	6.60	31900	22.02	100....200
		1000	163.37	6.12	35219	22.58	100....200
		1000	169.90	5.89	39737	24.48	100....200
		1000	176.14	5.68	32585	19.35	100....200
		1000	197.63	5.06	35563	18.84	100....200
		1000	204.89	4.88	33391	17.06	100....200
		1000	213.07	4.69	33608	16.50	100....200
		1000	238.33	4.20	27280	11.99	100....200
		1000	247.85	4.03	34442	14.54	100....200
		1000	288.30	3.47	28144	10.22	100....200
		Quadruple	SP4-19L	1000	249.98	4.00	40057
1000	273.18			3.66	40130	15.38	63....132
1000	298.54			3.35	40203	14.10	63....132
1000	326.25			3.07	40275	12.95	63....132
1000	342.60			2.92	40317	12.33	63....132
1000	374.41			2.67	40390	11.29	63....132
1000	409.16			2.44	40463	10.34	63....132
1000	469.55			2.13	40576	9.05	63....132
1000	475.95			2.10	40587	8.93	63....132
1000	513.14			1.95	40650	8.30	63....132
1000	575.74			1.74	40744	7.42	63....132
1000	596.89			1.68	40911	7.15	63....132
1000	643.53			1.55	41294	6.70	63....132
1000	694.32			1.44	41667	6.28	63....132
1000	722.05			1.38	41869	6.05	63....132
1000	748.57			1.34	42056	5.86	63....132
1000	807.07			1.24	37630	4.89	63....132
1000	839.91			1.19	42642	5.31	63....132
1000	870.76			1.15	42833	5.16	63....132
1000	905.53			1.10	43040	4.96	63....132
1000	938.80			1.07	38275	4.25	63....132
1000	1012.89			0.99	39819	4.13	63....132
1000	1016.02			0.98	43639	4.48	63....132
1000	1053.34			0.95	43834	4.36	63....132
1000	1092.04			0.92	38932	3.73	63....132
1000	1135.65			0.88	39107	3.61	63....132
1000	1225.28			0.82	41105	3.53	63....132
1000	1270.29			0.79	39600	3.28	63....132
1000	1274.20			0.78	44860	3.69	63....132
1000	1321.01			0.76	39778	3.17	63....132
1000	1477.63			0.68	36991	2.63	63....132
1000	1482.00			0.67	42439	2.98	63....132
1000	1536.64	0.65	40460	2.75	63....132		
1000	1598.00	0.63	40642	2.66	63....132		
1000	1787.46	0.56	38204	2.24	63....132		
1000	1858.84	0.54	41338	2.34	63....132		
1000	2162.25	0.46	39459	1.90	63....132		



MODEL: SP-19 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES
Double	SP2-19L	750	16.53	45.38	24937	118.50	180...250
		750	18.06	41.52	25597	111.30	180...250
		750	20.73	36.18	26012	98.50	180...250
		750	22.65	33.11	27417	95.00	180...250
		750	26.35	28.46	28584	85.20	180...250
		750	28.41	26.40	28611	79.00	180...250
		750	33.05	22.70	29962	71.17	180...250
		750	38.44	19.51	24530	50.12	180...250
Triple	SP3-19L	750	64.28	11.67	37481	45.80	100...200
		750	70.25	10.68	38542	43.10	100...200
		750	76.77	9.77	38719	39.61	100...200
		750	88.10	8.51	39020	34.77	100...200
		750	96.27	7.79	39507	32.21	100...200
		750	111.99	6.70	39632	27.80	100...200
		750	120.74	6.21	39696	25.79	100...200
		750	135.47	5.54	39786	23.07	100...200
		750	140.45	5.34	39819	22.25	100...200
		750	151.42	4.95	33316	17.25	100...200
		750	163.37	4.59	35736	17.18	100...200
		750	169.90	4.41	39975	18.47	100...200
		750	176.14	4.26	34142	15.21	100...200
		750	197.63	3.80	36082	14.34	100...200
		750	204.89	3.66	34993	13.41	100...200
		750	213.07	3.52	35222	12.97	100...200
		750	238.33	3.15	28596	9.43	100...200
		750	247.85	3.03	35466	11.23	100...200
		750	288.30	2.60	29510	8.04	100...200
		Quadruple	SP4-19L	750	249.98	3.00	40294
750	273.18			2.75	40366	11.62	63...132
750	298.54			2.51	40440	10.63	63...132
750	326.25			2.30	40512	9.76	63...132
750	342.60			2.19	40554	9.30	63...132
750	374.41			2.00	40627	8.51	63...132
750	409.16			1.83	40700	7.80	63...132
750	469.55			1.60	41153	6.90	63...132
750	475.95			1.58	41214	6.82	63...132
750	513.14			1.46	41599	6.36	63...132
750	575.74			1.30	42178	5.75	63...132
750	596.89			1.26	42367	5.59	63...132
750	643.53			1.17	42763	5.20	63...132
750	694.32			1.08	43150	4.88	63...132
750	722.05			1.04	43358	4.72	63...132
750	748.57			1.00	43552	4.56	63...132
750	807.07			0.93	38873	3.79	63...132
750	839.91			0.89	44159	4.12	63...132
750	870.76			0.86	44356	4.00	63...132
750	905.53			0.83	44570	3.87	63...132
750	938.80			0.80	39539	3.31	63...132
750	1012.89			0.74	41781	3.24	63...132
750	1016.02			0.74	45191	3.50	63...132
750	1053.34			0.71	45393	3.37	63...132
750	1092.04			0.69	40217	2.91	63...132
750	1135.65			0.66	40400	2.79	63...132
750	1225.28			0.61	43140	2.76	63...132
750	1270.29			0.59	40906	2.53	63...132
750	1274.20			0.59	46454	2.87	63...132
750	1321.01			0.57	41091	2.45	63...132
750	1477.63			0.51	38840	2.08	63...132
750	1482.00			0.51	44548	2.38	63...132
750	1536.64			0.49	41795	2.15	63...132
750	1598.00			0.47	41983	2.07	63...132
750	1787.46			0.42	40118	1.76	63...132
750	1858.84			0.40	42702	1.79	63...132
750	2162.25	0.35	41439	1.52	63...132		



MODEL: SP-19 L

MODEL		n ₁ (RPM)	RATIO i	n ₂ (RPM)	M _{n2} (Nm)	P _{n1} (kW)	MOTOR FRAME SIZES		
Double	SP2-19L	500	16.53	30.25	28094	89.00	180....250		
		500	18.06	27.68	28895	83.76	180....250		
		500	20.73	24.12	29511	74.50	180....250		
		500	22.65	22.07	30952	71.50	180....250		
		500	26.35	18.98	32309	64.20	180....250		
		500	28.41	17.60	30329	55.83	180....250		
		500	33.05	15.13	30557	48.39	180....250		
		500	38.44	13.01	25025	34.09	180....250		
Triple	SP3-19L	500	64.28	7.78	39508	32.18	100....200		
		500	70.25	7.12	39578	29.50	100....200		
		500	76.77	6.51	39652	27.05	100....200		
		500	88.10	5.68	39769	23.62	100....200		
		500	96.27	5.19	39838	21.65	100....200		
		500	111.99	4.46	39962	18.69	100....200		
		500	120.74	4.14	40027	17.34	100....200		
		500	135.47	3.69	40119	15.51	100....200		
		500	140.45	3.56	40150	14.96	100....200		
		500	151.42	3.30	35405	12.22	100....200		
		500	163.37	3.06	36482	11.69	100....200		
		500	169.90	2.94	40307	12.42	100....200		
		500	176.14	2.84	35512	10.55	100....200		
		500	197.63	2.53	36846	9.76	100....200		
		500	204.89	2.44	35624	9.10	100....200		
		500	213.07	2.35	35653	8.75	100....200		
		500	238.33	2.10	30586	6.72	100....200		
		500	247.85	2.02	35759	7.55	100....200		
		Quadruple	SP4-19L	500	288.30	1.73	31572	5.74	100....200
				500	249.98	2.00	40628	8.51	63....132
500	273.18			1.83	40700	7.80	63....132		
500	298.54			1.67	40910	7.20	63....132		
500	326.25			1.53	41353	6.63	63....132		
500	342.60			1.46	41603	6.36	63....132		
500	374.41			1.34	42054	5.86	63....132		
500	409.16			1.22	42511	5.43	63....132		
500	469.55			1.06	43230	4.80	63....132		
500	475.95			1.05	43295	4.76	63....132		
500	513.14			0.97	43700	4.44	63....132		
500	575.74			0.87	44307	4.04	63....132		
500	596.89			0.84	44506	3.92	63....132		
500	643.53			0.78	44921	3.67	63....132		
500	694.32			0.72	45326	3.42	63....132		
500	722.05			0.69	45546	3.00	63....132		
500	748.57			0.67	45750	3.21	63....132		
500	807.07			0.62	40694	2.64	63....132		
500	839.91			0.60	46386	2.89	63....132		
500	870.76			0.57	46594	2.78	63....132		
500	905.53			0.55	46819	2.70	63....132		
500	938.80			0.53	41391	2.30	63....132		
500	1012.89			0.49	44735	2.30	63....132		
500	1016.02			0.49	47471	2.44	63....132		
500	1053.34			0.47	47683	2.35	63....132		
500	1092.04			0.46	42100	2.03	63....132		
500	1135.65			0.44	42290	1.95	63....132		
500	1225.28			0.41	46201	1.98	63....132		
500	1270.29			0.39	42822	1.75	63....132		
500	1274.20			0.39	48798	1.99	63....132		
500	1321.01			0.38	43014	1.71	63....132		
500	1477.63			0.34	41614	1.48	63....132		
500	1482.00			0.34	47721	1.70	63....132		
500	1536.64			0.33	43752	1.51	63....132		
500	1598.00			0.31	43948	1.43	63....132		
500	1787.46			0.28	42987	1.26	63....132		
500	1858.84			0.27	44701	1.26	63....132		
500	2162.25			0.23	44406	1.07	63....132		



MODEL: SP-20 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES
Double	SP2-20L	1500	16.53	90.75	31776	302.00	180...250
		1500	18.06	83.04	32657	284.00	180...250
		1500	20.73	72.36	33010	250.00	180...250
		1500	22.65	66.22	33911	235.00	180...250
		1500	26.35	56.93	34892	208.00	180...250
		1500	28.41	52.80	36361	200.80	180...250
		1500	33.05	45.39	37408	177.70	180...250
		1500	38.44	39.02	31922	130.40	180...250
Triple	SP3-20L	1500	64.28	23.34	47752	116.70	160...250
		1500	70.25	21.35	48832	109.20	160...250
		1500	76.77	19.54	49490	101.23	160...250
		1500	88.10	17.03	49819	88.79	160...250
		1500	96.27	15.58	50027	81.61	160...250
		1500	111.99	13.39	50408	70.68	160...250
		1500	120.74	12.42	50600	65.76	160...250
		1500	135.47	11.07	49492	57.40	160...250
		1500	140.45	10.68	50979	56.96	160...250
		1500	151.70	9.89	40747	42.20	160...250
		1500	163.37	9.18	46554	44.75	160...250
		1500	170.00	8.82	51482	47.53	160...250
		1500	176.14	8.52	41064	36.60	160...250
		1500	197.63	7.59	47938	38.10	160...250
		1500	204.89	7.32	41387	31.71	160...250
		1500	213.07	7.04	41470	30.53	160...250
		1500	238.33	6.29	34935	23.00	160...250
		1500	247.85	6.05	42065	26.60	160...250
		1500	288.30	5.20	35388	19.27	160...250
		Quadruple	SP4-20L	1500	249.98	6.00	50967
1500	273.18			5.49	53076	30.51	100...200
1500	298.54			5.02	53171	27.98	100...200
1500	326.25			4.60	53269	25.65	100...200
1500	342.60			4.38	53326	24.44	100...200
1500	374.41			4.01	53424	22.40	100...200
1500	409.16			3.67	53522	20.53	100...200
1500	469.55			3.19	53674	17.93	100...200
1500	475.95			3.15	53685	17.72	100...200
1500	513.14			2.92	53769	16.44	100...200
1500	575.74			2.61	53895	14.73	100...200
1500	596.89			2.51	53935	14.18	100...200
1500	643.53			2.33	54020	13.18	100...200
1500	694.32			2.16	54101	12.24	100...200
1500	722.05			2.08	54146	11.79	100...200
1500	748.57			2.00	54186	11.35	100...200
1500	807.07			1.86	49297	9.55	100...200
1500	839.91			1.79	54312	10.18	100...200
1500	870.76			1.72	54381	9.80	100...200
1500	905.53			1.66	54645	9.44	100...200
1500	938.80			1.60	50176	8.41	100...200
1500	1012.89			1.48	52133	8.08	100...200
1500	1016.02			1.48	54807	8.47	100...200
1500	1053.34			1.42	55655	8.29	100...200
1500	1092.04			1.37	51070	7.33	100...200
1500	1135.65			1.32	51308	7.09	100...200
1500	1225.28			1.22	52831	6.75	100...200
1500	1270.29			1.18	51980	6.42	100...200
1500	1274.20			1.18	56959	7.04	100...200
1500	1321.01			1.14	52223	6.20	100...200
1500	1477.63			1.02	46316	4.95	100...200
1500	1482.00			1.01	54526	5.77	100...200
1500	1536.64	0.98	53153	5.45	100...200		
1500	1598.00	0.94	53401	5.26	100...200		
1500	1787.46	0.84	47818	4.21	100...200		
1500	1858.84	0.81	54353	4.61	100...200		
1500	2162.25	0.69	49372	3.57	100...200		



MODEL: SP-20 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES
Double	SP2-20L	1000	16.53	60.50	35985	228.00	180...250
		1000	18.06	55.36	36739	213.00	180...250
		1000	20.73	48.24	37306	188.40	180...250
		1000	22.65	44.15	38225	176.60	180...250
		1000	26.35	37.95	39253	156.00	180...250
		1000	28.41	35.20	37840	139.30	180...250
		1000	33.05	30.26	38102	120.70	180...250
		1000	38.44	26.01	32530	88.60	180...250
Triple	SP3-20L	1000	64.28	15.56	49930	81.36	160...250
		1000	70.25	14.24	49743	74.20	160...250
		1000	76.77	13.03	49963	68.17	160...250
		1000	88.10	11.35	50309	59.66	160...250
		1000	96.27	10.39	52099	56.60	160...250
		1000	111.99	8.93	52502	49.10	160...250
		1000	120.74	8.28	52622	45.57	160...250
		1000	135.47	7.38	50580	39.09	160...250
		1000	140.45	7.12	52786	39.40	160...250
		1000	151.70	6.59	41615	28.71	160...250
		1000	163.37	6.12	48441	31.04	160...250
		1000	170.00	5.88	53000	32.63	160...250
		1000	176.14	5.68	42502	25.23	160...250
		1000	197.63	5.06	48900	25.91	160...250
		1000	204.89	4.88	43544	22.25	160...250
		1000	213.07	4.69	43821	21.52	160...250
		1000	238.33	4.20	36642	16.11	160...250
		1000	247.85	4.03	44905	18.95	160...250
		1000	288.30	3.47	37793	13.73	160...250
		Quadruple	SP4-20L	1000	249.98	4.00	51399
1000	273.18			3.66	53519	20.51	100...200
1000	298.54			3.35	53615	18.80	100...200
1000	326.25			3.07	53713	17.24	100...200
1000	342.60			2.92	53769	16.44	100...200
1000	374.41			2.67	53866	15.05	100...200
1000	409.16			2.44	53964	13.79	100...200
1000	469.55			2.13	54116	12.07	100...200
1000	475.95			2.10	54128	11.90	100...200
1000	513.14			1.95	54212	11.07	100...200
1000	575.74			1.74	54341	9.90	100...200
1000	596.89			1.68	54565	9.54	100...200
1000	643.53			1.55	55076	8.94	100...200
1000	694.32			1.44	55574	8.38	100...200
1000	722.05			1.38	55845	8.07	100...200
1000	748.57			1.34	56095	7.81	100...200
1000	807.07			1.24	51699	6.71	100...200
1000	839.91			1.19	56877	7.09	100...200
1000	870.76			1.15	57131	6.88	100...200
1000	905.53			1.10	57408	6.61	100...200
1000	938.80			1.07	52620	5.84	100...200
1000	1012.89			0.99	54752	5.68	100...200
1000	1016.02			0.98	55937	5.74	100...200
1000	1053.34			0.95	58649	5.82	100...200
1000	1092.04			0.92	53557	5.16	100...200
1000	1135.65			0.88	53806	4.96	100...200
1000	1225.28			0.82	56520	4.85	100...200
1000	1270.29			0.79	54511	4.51	100...200
1000	1274.20			0.78	59837	4.92	100...200
1000	1321.01			0.76	54760	4.36	100...200
1000	1477.63			0.68	49578	3.53	100...200
1000	1482.00			0.67	58353	4.12	100...200
1000	1536.64	0.65	55740	3.79	100...200		
1000	1598.00	0.63	56000	3.66	100...200		
1000	1787.46	0.56	51193	3.00	100...200		
1000	1858.84	0.54	57000	3.22	100...200		
1000	2162.25	0.46	52865	2.55	100...200		



MODEL: SP-20 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES
Double	SP2-20L	750	16.53	45.38	38931	185.00	180...250
		750	18.06	41.52	40016	174.00	180...250
		750	20.73	36.18	37792	143.11	180...250
		750	22.65	33.11	41847	145.00	180...250
		750	26.35	28.46	42944	128.00	180...250
		750	28.41	26.40	38332	105.84	180...250
		750	33.05	22.70	38619	91.73	180...250
		750	38.44	19.51	32982	67.39	180...250
Triple	SP3-20L	750	64.28	11.67	51791	63.29	160...250
		750	70.25	10.68	50457	56.42	160...250
		750	76.77	9.77	50692	51.90	160...250
		750	88.10	8.51	50481	47.81	160...250
		750	96.27	7.79	52690	43.00	160...250
		750	111.99	6.70	52856	37.08	160...250
		750	120.74	6.21	52942	34.37	160...250
		750	135.47	5.54	51319	29.80	160...250
		750	140.45	5.34	53105	29.70	160...250
		750	151.70	4.94	43450	22.52	160...250
		750	163.37	4.59	49137	23.61	160...250
		750	170.00	4.41	53317	24.62	160...250
		750	176.14	4.26	44516	19.81	160...250
		750	197.63	3.80	49612	19.74	160...250
		750	204.89	3.66	45621	17.48	160...250
		750	213.07	3.52	45915	16.92	160...250
		750	238.33	3.15	38400	12.66	160...250
		750	247.85	3.03	47059	14.88	160...250
		750	288.00	2.60	39618	10.79	160...250
		Quadruple	SP4-20L	750	249.98	3.00	53741
750	273.18			2.75	53839	15.50	100...200
750	298.54			2.51	53936	14.18	100...200
750	326.25			2.30	54033	13.01	100...200
750	342.60			2.19	54088	12.40	100...200
750	374.41			2.00	54186	11.35	100...200
750	409.16			1.83	54284	10.40	100...200
750	469.55			1.60	54887	9.20	100...200
750	475.95			1.58	54969	9.10	100...200
750	513.14			1.46	55482	8.48	100...200
750	575.74			1.30	56257	7.66	100...200
750	596.89			1.26	56509	7.46	100...200
750	643.53			1.17	57038	6.93	100...200
750	694.32			1.08	57553	6.51	100...200
750	722.05			1.04	57833	6.30	100...200
750	748.57			1.00	58092	6.08	100...200
750	807.07			0.93	53473	5.21	100...200
750	839.91			0.89	58901	5.49	100...200
750	870.76			0.86	59165	5.33	100...200
750	905.53			0.83	59451	5.17	100...200
750	938.80			0.80	54425	4.56	100...200
750	1012.89			0.74	57449	4.45	100...200
750	1016.02			0.74	56783	4.40	100...200
750	1053.34			0.71	60550	4.50	100...200
750	1092.04			0.69	55394	4.00	100...200
750	1135.65			0.66	55652	3.85	100...200
750	1225.28			0.61	59317	3.80	100...200
750	1270.29			0.59	56380	3.48	100...200
750	1274.20			0.59	61967	3.83	100...200
750	1321.01			0.57	56643	3.38	100...200
750	1477.63			0.51	52041	2.78	100...200
750	1482.00			0.51	61253	3.27	100...200
750	1536.64			0.49	57652	2.96	100...200
750	1598.00			0.47	57921	2.85	100...200
750	1787.46			0.42	53741	2.36	100...200
750	1858.84			0.40	58952	2.47	100...200
750	2162.25	0.35	55500	2.03	100...200		



MODEL: SP-20 L

MODEL		n ₁ (RPM)	RATIO i	n ₂ (RPM)	M _{n2} (Nm)	P _{n1} (kW)	MOTOR FRAME SIZES
Double	SP2-20L	500	16.53	30.25	44192	140.00	180...250
		500	18.06	27.68	45191	131.00	180...250
		500	20.73	24.12	38507	97.20	180...250
		500	22.65	22.07	47186	109.00	180...250
		500	26.35	18.98	45935	91.30	180...250
		500	28.41	17.60	39094	72.00	180...250
		500	33.05	15.13	39384	62.40	180...250
		500	38.44	13.01	33648	45.80	180...250
Triple	SP3-20L	500	64.28	7.78	52691	42.93	160...250
		500	70.25	7.12	50675	37.86	160...250
		500	76.77	6.51	50772	34.63	160...250
		500	88.10	5.68	53037	31.50	160...250
		500	96.27	5.19	53138	28.80	160...250
		500	111.99	4.46	53304	24.92	160...250
		500	120.74	4.14	53388	23.14	160...250
		500	135.47	3.69	52354	20.24	160...250
		500	140.45	3.56	53552	19.95	160...250
		500	151.70	3.30	46403	16.02	160...250
		500	163.37	3.06	50164	16.08	160...250
		500	170.00	2.94	53763	16.56	160...250
		500	176.14	2.84	47559	14.12	160...250
		500	197.63	2.53	50657	13.42	160...250
		500	204.89	2.44	48748	12.50	160...250
		500	213.07	2.35	48886	11.98	160...250
		500	238.33	2.10	41046	9.02	160...250
		500	247.85	2.02	49039	10.37	160...250
		500	288.30	1.73	42360	7.67	160...250
		Quadruple	SP4-20L	500	249.98	2.00	54186
500	273.18			1.83	54284	10.40	100...200
500	298.54			1.67	54563	9.60	100...200
500	326.25			1.53	55154	8.84	100...200
500	342.60			1.46	55486	8.48	100...200
500	374.41			1.34	56093	7.81	100...200
500	409.16			1.22	56701	7.24	100...200
500	469.55			1.06	57663	6.40	100...200
500	475.95			1.05	57749	6.35	100...200
500	513.14			0.97	58289	5.92	100...200
500	575.74			0.87	59100	5.38	100...200
500	596.89			0.84	59365	5.22	100...200
500	643.53			0.78	59920	4.89	100...200
500	694.32			0.72	60462	4.56	100...200
500	722.05			0.69	60755	4.39	100...200
500	748.57			0.67	61027	4.28	100...200
500	807.07			0.62	56079	3.64	100...200
500	839.91			0.60	61878	3.86	100...200
500	870.76			0.57	62154	3.71	100...200
500	905.53			0.55	62455	3.60	100...200
500	938.80			0.53	57074	3.18	100...200
500	1012.89			0.49	61510	3.16	100...200
500	1016.02			0.49	58028	2.98	100...200
500	1053.34			0.47	63606	3.16	100...200
500	1092.04			0.46	58089	2.80	100...200
500	1135.65			0.44	58364	2.69	100...200
500	1225.28			0.41	63527	2.73	100...200
500	1270.29			0.39	59123	2.41	100...200
500	1274.20			0.39	65097	2.66	100...200
500	1321.01			0.38	59398	2.36	100...200
500	1477.63			0.34	55734	1.99	100...200
500	1482.00			0.34	65616	2.34	100...200
500	1536.64	0.33	60456	2.09	100...200		
500	1598.00	0.31	60742	1.97	100...200		
500	1787.46	0.28	57562	1.69	100...200		
500	1858.84	0.27	61820	1.75	100...200		
500	2162.25	0.23	59452	1.43	100...200		



MODEL: SP-21 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES
Double	SP2-21L	1500	16.53	90.75	41562	395.00	180...250
		1500	18.06	83.04	42546	370.00	180...250
		1500	20.73	72.36	46346	351.00	180...250
		1500	22.65	66.22	44300	307.00	180...250
		1500	26.35	56.93	45628	272.00	180...250
		1500	28.41	52.80	50884	281.00	180...250
		1500	33.05	45.39	52966	251.60	180...250
		1500	38.44	39.02	43106	176.20	180...250
Triple	SP3-21L	1500	64.28	23.34	62196	152.00	160...250
		1500	70.25	21.35	63500	142.00	160...250
		1500	76.77	19.54	65486	134.00	160...250
		1500	88.10	17.03	66779	119.00	160...250
		1500	96.27	15.58	68517	111.72	160...250
		1500	111.99	13.39	69010	96.80	160...250
		1500	120.74	12.42	69279	90.02	160...250
		1500	135.47	11.07	69673	80.79	160...250
		1500	140.45	10.68	69797	78.02	160...250
		1500	151.70	9.89	56907	58.92	160...250
		1500	163.37	9.18	67396	64.80	160...250
		1500	170.00	8.82	70466	65.11	160...250
		1500	176.14	8.52	57347	51.08	160...250
		1500	197.63	7.59	68016	54.06	160...250
		1500	204.89	7.32	57793	44.28	160...250
		1500	213.07	7.04	57914	42.64	160...250
		1500	238.33	6.29	47122	31.06	160...250
		1500	247.85	6.05	58726	37.20	160...250
		1500	288.30	5.20	47738	26.00	160...250
		Quadruple	SP4-21L	1500	249.98	6.00	68321
1500	273.18			5.49	71173	40.93	100...200
1500	298.54			5.02	71304	37.52	100...200
1500	326.25			4.60	71436	34.40	100...200
1500	342.60			4.38	71507	32.77	100...200
1500	374.41			4.01	71637	30.04	100...200
1500	409.16			3.67	71770	27.54	100...200
1500	469.55			3.19	71975	24.05	100...200
1500	475.95			3.15	71994	23.75	100...200
1500	513.14			2.92	72105	22.05	100...200
1500	575.74			2.61	72272	19.75	100...200
1500	596.89			2.51	72326	19.00	100...200
1500	643.53			2.33	72439	17.67	100...200
1500	694.32			2.16	72549	16.41	100...200
1500	722.05			2.08	72608	15.80	100...200
1500	748.57			2.00	72663	15.22	100...200
1500	807.07			1.86	63932	12.41	100...200
1500	839.91			1.79	72832	13.62	100...200
1500	870.76			1.72	72926	13.13	100...200
1500	905.53			1.66	73283	12.66	100...200
1500	938.80			1.60	65037	10.83	100...200
1500	1012.89			1.48	73921	11.46	100...200
1500	1016.02			1.48	74316	11.49	100...200
1500	1053.34			1.42	74650	11.10	100...200
1500	1092.04			1.37	66153	9.49	100...200
1500	1135.65			1.32	66452	9.18	100...200
1500	1225.28			1.22	74900	9.57	100...200
1500	1270.29			1.18	67291	8.31	100...200
1500	1274.20			1.18	76419	9.42	100...200
1500	1321.01			1.14	67598	8.00	100...200
1500	1477.63			1.02	62359	6.63	100...200
1500	1482.00			1.01	77280	8.19	100...200
1500	1536.64	0.98	68757	7.02	100...200		
1500	1598.00	0.94	69070	6.78	100...200		
1500	1787.46	0.84	64369	5.66	100...200		
1500	1858.84	0.81	70258	5.93	100...200		
1500	2162.25	0.69	66449	4.83	100...200		



MODEL: SP-21 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES
Double	SP2-21L	1000	16.53	60.50	47033	298.00	180...250
		1000	18.06	55.36	47951	278.00	180...250
		1000	20.73	48.24	52486	265.00	180...250
		1000	22.65	44.15	50217	232.00	180...250
		1000	26.35	37.95	51583	205.00	180...250
		1000	28.41	35.20	53564	197.20	180...250
		1000	33.05	30.26	53929	170.80	180...250
		1000	38.44	26.01	43914	119.60	180...250
Triple	SP3-21L	1000	64.28	15.56	66925	109.05	160...250
		1000	70.25	14.24	68812	102.59	160...250
		1000	76.77	13.03	69112	94.28	160...250
		1000	88.10	11.35	69578	82.66	160...250
		1000	96.27	10.39	69898	75.98	160...250
		1000	111.99	8.93	70433	65.86	160...250
		1000	120.74	8.28	70560	61.12	160...250
		1000	135.47	7.38	70733	54.68	160...250
		1000	140.45	7.12	70787	52.75	160...250
		1000	151.70	6.59	58108	40.11	160...250
		1000	163.37	6.12	68719	44.05	160...250
		1000	170.00	5.88	71061	43.77	160...250
		1000	176.14	5.68	59333	35.23	160...250
		1000	197.63	5.06	69364	36.76	160...250
		1000	204.89	4.88	60776	31.04	160...250
		1000	213.07	4.69	61164	30.02	160...250
		1000	238.33	4.20	49408	21.71	160...250
		1000	247.85	4.03	62656	26.46	160...250
		1000	288.30	3.47	50954	18.52	160...250
		Quadruple	SP4-21L	1000	249.98	4.00	68901
1000	273.18			3.66	71773	27.51	100...200
1000	298.54			3.35	71896	25.22	100...200
1000	326.25			3.07	72034	23.16	100...200
1000	342.60			2.92	72103	22.05	100...200
1000	374.41			2.67	72234	20.20	100...200
1000	409.16			2.44	72365	18.49	100...200
1000	469.55			2.13	72573	16.19	100...200
1000	475.95			2.10	72598	15.96	100...200
1000	513.14			1.95	72704	14.85	100...200
1000	575.74			1.74	72872	13.28	100...200
1000	596.89			1.68	73174	12.80	100...200
1000	643.53			1.55	73866	11.99	100...200
1000	694.32			1.44	74542	11.24	100...200
1000	722.05			1.38	74906	10.82	100...200
1000	748.57			1.34	75245	10.48	100...200
1000	807.07			1.24	66934	8.69	100...200
1000	839.91			1.19	76305	9.50	100...200
1000	870.76			1.15	76650	9.23	100...200
1000	905.53			1.10	77026	8.87	100...200
1000	938.80			1.07	68092	7.56	100...200
1000	1012.89			0.99	77597	8.04	100...200
1000	1016.02			0.98	78113	8.05	100...200
1000	1053.34			0.95	78462	7.80	100...200
1000	1092.04			0.92	69262	6.63	100...200
1000	1135.65			0.88	69576	6.41	100...200
1000	1225.28			0.82	79925	6.86	100...200
1000	1270.29			0.79	70454	5.80	100...200
1000	1274.20			0.78	80318	6.56	100...200
1000	1321.01			0.76	70772	5.60	100...200
1000	1477.63			0.68	66725	4.72	100...200
1000	1482.00			0.67	81816	5.77	100...200
1000	1536.64	0.65	71988	4.90	100...200		
1000	1598.00	0.63	72308	4.73	100...200		
1000	1787.46	0.56	68886	4.06	100...200		
1000	1858.84	0.54	73560	4.16	100...200		
1000	2162.25	0.46	71123	3.42	100...200		



MODEL: SP-21 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n_2} (Nm)	P_{n_1} (kW)	MOTOR FRAME SIZES
Double	SP2-21L	750	16.53	45.38	51557	245.00	180...250
		750	18.06	41.52	52435	228.00	180...250
		750	20.73	36.18	53497	202.58	180...250
		750	22.65	33.11	54257	188.00	180...250
		750	26.35	28.46	56699	169.00	180...250
		750	28.41	26.40	54269	149.85	180...250
		750	33.05	22.70	54650	129.80	180...250
		750	38.44	19.51	44517	90.96	180...250
Triple	SP3-21L	750	64.28	11.67	69490	84.91	160...250
		750	70.25	10.68	69799	78.04	160...250
		750	76.77	9.77	70112	71.73	160...250
		750	88.10	8.51	70520	62.83	160...250
		750	96.27	7.79	70653	57.60	160...250
		750	111.99	6.70	70875	49.71	160...250
		750	120.74	6.21	70987	46.11	160...250
		750	135.47	5.54	71158	41.26	160...250
		750	140.45	5.34	71213	39.80	160...250
		750	151.70	4.94	60641	31.40	160...250
		750	163.37	4.59	69700	33.51	160...250
		750	170.00	4.41	71494	33.03	160...250
		750	176.14	4.26	62120	27.67	160...250
		750	197.63	3.80	70365	27.96	160...250
		750	204.89	3.66	62833	24.07	160...250
		750	213.07	3.52	62885	23.15	160...250
		750	238.33	3.15	51759	17.06	160...250
		750	247.85	3.03	63076	19.98	160...250
		750	288.30	2.60	53393	14.54	160...250
		Quadruple	SP4-21L	750	249.98	3.00	72063
750	273.18			2.75	72198	20.79	100...200
750	298.54			2.51	72326	19.00	100...200
750	326.25			2.30	72459	17.45	100...200
750	342.60			2.19	72532	16.63	100...200
750	374.41			2.00	72663	15.22	100...200
750	409.16			1.83	72794	13.94	100...200
750	469.55			1.60	73611	12.33	100...200
750	475.95			1.58	73726	12.20	100...200
750	513.14			1.46	74419	11.38	100...200
750	575.74			1.30	75465	10.27	100...200
750	596.89			1.26	75807	10.00	100...200
750	643.53			1.17	76523	9.30	100...200
750	694.32			1.08	77224	8.73	100...200
750	722.05			1.04	77600	8.45	100...200
750	748.57			1.00	77952	8.16	100...200
750	807.07			0.93	69157	6.74	100...200
750	839.91			0.89	79049	7.37	100...200
750	870.76			0.86	79406	7.15	100...200
750	905.53			0.83	79794	6.93	100...200
750	938.80			0.80	70347	5.89	100...200
750	1012.89			0.74	80887	6.26	100...200
750	1016.02			0.74	80918	6.27	100...200
750	1053.34			0.71	81283	6.04	100...200
750	1092.04			0.69	71557	5.13	100...200
750	1135.65			0.66	71879	4.97	100...200
750	1225.28			0.61	82799	5.29	100...200
750	1270.29			0.59	72787	4.50	100...200
750	1274.20			0.59	83204	5.14	100...200
750	1321.01			0.57	73114	4.34	100...200
750	1477.63			0.51	70021	3.74	100...200
750	1482.00			0.51	84756	4.49	100...200
750	1536.64			0.49	74372	3.82	100...200
750	1598.00			0.47	74708	3.67	100...200
750	1787.46			0.42	72295	3.18	100...200
750	1858.84			0.40	75993	3.21	100...200
750	2162.25	0.35	74649	2.71	100...200		



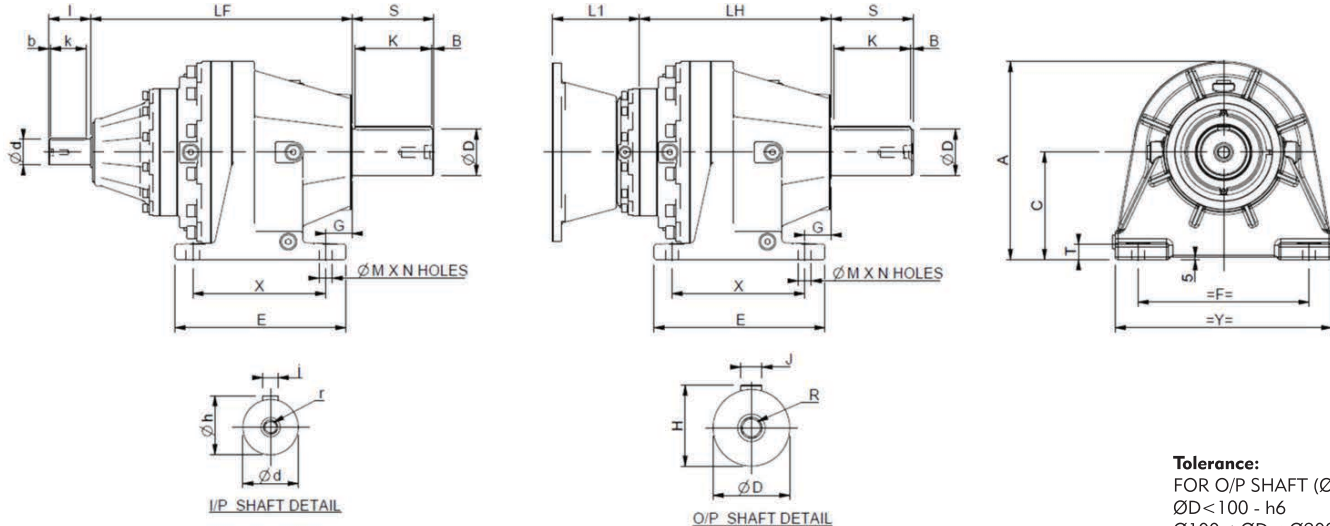
MODEL: SP-21 L

MODEL		n_1 (RPM)	RATIO i	n_2 (RPM)	M_{n2} (Nm)	P_{n1} (kW)	MOTOR FRAME SIZES
Double	SP2-21L	500	16.53	30.25	57450	182.00	180...250
		500	18.06	27.68	59335	172.00	180...250
		500	20.73	24.12	54493	137.60	180...250
		500	22.65	22.07	61472	142.00	180...250
		500	26.35	18.98	62906	125.00	180...250
		500	28.41	17.60	55312	101.80	180...250
		500	33.05	15.13	55716	88.20	180...250
		500	38.44	13.01	45406	61.90	180...250
Triple	SP3-21L	500	64.28	7.78	67947	55.36	160...250
		500	70.25	7.12	70787	52.77	160...250
		500	76.77	6.51	70919	48.37	160...250
		500	88.10	5.68	71120	42.25	160...250
		500	96.27	5.19	71247	38.73	160...250
		500	111.99	4.46	71474	33.42	160...250
		500	120.74	4.14	71589	31.01	160...250
		500	135.47	3.69	71755	27.74	160...250
		500	140.45	3.56	71810	26.76	160...250
		500	151.70	3.30	62967	21.73	160...250
		500	163.37	3.06	71145	22.80	160...250
		500	170.00	2.94	72090	22.20	160...250
		500	176.14	2.84	63165	18.76	160...250
		500	197.63	2.53	71849	19.04	160...250
		500	204.89	2.44	63355	16.18	160...250
		500	213.07	2.35	63407	15.56	160...250
		500	238.33	2.10	55307	12.15	160...250
		500	247.85	2.02	63600	13.43	160...250
		500	288.30	1.73	57064	10.38	160...250
		Quadruple	SP4-21L	500	249.98	2.00	69886
500	273.18			1.83	72796	13.72	100...200
500	298.54			1.67	73170	12.83	100...200
500	326.25			1.53	73981	11.87	100...200
500	342.60			1.46	74422	11.38	100...200
500	374.41			1.34	75242	10.55	100...200
500	409.16			1.22	76068	9.71	100...200
500	469.55			1.06	77371	8.62	100...200
500	475.95			1.05	77488	8.52	100...200
500	513.14			0.97	78225	7.97	100...200
500	575.74			0.87	79319	7.21	100...200
500	596.89			0.84	79683	6.99	100...200
500	643.53			0.78	80429	6.53	100...200
500	694.32			0.72	81169	6.12	100...200
500	722.05			0.69	81562	5.91	100...200
500	748.57			0.67	81935	5.72	100...200
500	807.07			0.62	72405	4.70	100...200
500	839.91			0.60	83088	5.22	100...200
500	870.76			0.57	83463	5.02	100...200
500	905.53			0.55	83867	4.84	100...200
500	938.80			0.53	73645	4.10	100...200
500	1012.89			0.49	85012	4.36	100...200
500	1016.02			0.49	85050	4.38	100...200
500	1053.34			0.47	85435	4.24	100...200
500	1092.04			0.46	74923	3.59	100...200
500	1135.65			0.44	75256	3.47	100...200
500	1225.28			0.41	87029	3.72	100...200
500	1270.29			0.39	76211	3.14	100...200
500	1274.20			0.39	87446	3.57	100...200
500	1321.01			0.38	76543	3.03	100...200
500	1477.63			0.34	74960	2.66	100...200
500	1482.00			0.34	89076	3.17	100...200
500	1536.64	0.33	77872	2.65	100...200		
500	1598.00	0.31	78215	2.56	100...200		
500	1787.46	0.28	77407	2.27	100...200		
500	1858.84	0.27	79554	2.25	100...200		
500	2162.25	0.23	79935	1.93	100...200		



11. DIMENSIONS CHART

11.1 DIMENSIONS OF FOOT MOUNTED UNIT



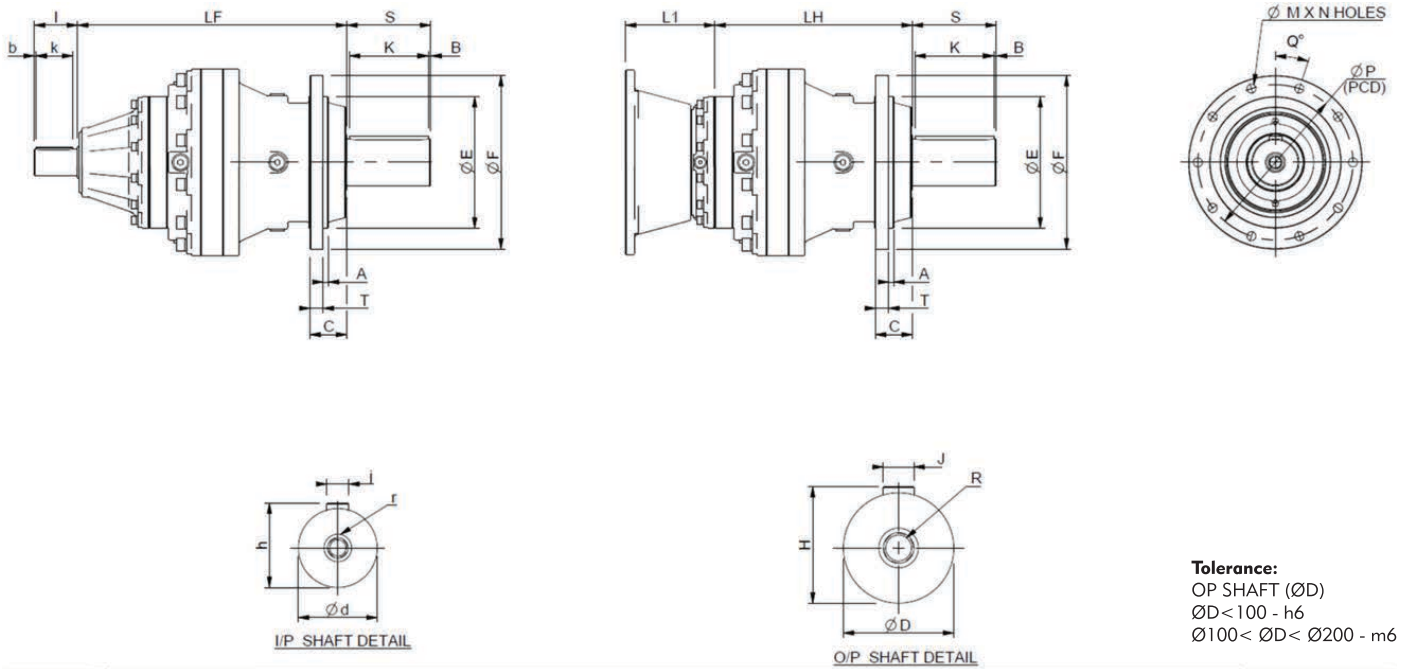
Tolerance:
 FOR O/P SHAFT (ØD)
 ØD < 100 - h6
 Ø100 ≤ ØD < Ø200 - m6

MODEL	OUTPUT SHAFT							INPUT SHAFT							FOOT MOUNTING							OVERALL					
	D	H	J(h9)	R	S	K	B	d(h6)	h	i(h9)	r	l	k	b	C	T	F	Y	E	X	G	m	N	A	LF	LH	
SINGLE STAGE																											
SP1-10L	38	41	10	M12	58	50	4	38	41	10	M12	58	50	3	120	16	170	210	160	120	31	4	11	220	246	123.5	
SP1-11L	50	53.5	14	M16	82	70	6	38	41	10	M12	58	50	3	130	20	215	260	190	140	37	4	17	230	278.5	156	
SP1-12L	65	69	18	M20	105	95	5	50	53.5	14	M12	82	70	3	160	26	255	310	235	185	36	4	18	285	325.5	189	
SP1-13L	65	69	18	M20	105	95	5	50	53.5	14	M12	82	70	3	160	26	255	310	235	185	36	4	18	285	341.5	205	
SP1-14L	80	85	22	M24	130	120	5	60	64	18	M12	105	90	5	190	29	290	350	290	230	42.5	4	22	340	400	232.5	
SP1-15L	80	85	22	M24	130	120	5	60	64	18	M12	105	90	5	190	29	290	350	290	230	42.5	4	22	340	417	249.5	
SP1-16L	90	95	25	M24	160	150	5	70	74.5	20	M12	105	90	5	210	34	335	425	335	260	52	4	26	387.5	451	276	
SP1-17L	100	106	28	M24	165	150	7.5	80	85	22	M16	130	110	5	225	39	355	445	400	330	44	4	26	402.5	501.5	298	
SP1-18L	110	116	28	M24	165	150	7.5	80	85	22	M16	130	110	5	250	39	410	500	445	365	44	4	26	452.5	555.5	340	
DOUBLE STAGE																											
SP2-10L	38	41	10	M12	58	50	4	38	41	10	M12	58	50	3	120	16	170	210	160	120	31	4	11	220	298.5	176	
SP2-11L	50	53.5	14	M16	82	70	6	38	41	10	M12	58	50	3	130	20	215	260	190	140	37	4	17	230	331	208.5	
SP2-12L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	160	26	255	310	235	185	36	4	18	285	364	241.5	
SP2-13L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	160	26	255	310	235	185	36	4	18	285	390	267.5	
SP2-14L	80	85	22	M24	130	120	5	50	53.5	14	M12	82	70	3	190	29	290	350	290	230	42.5	4	22	340	442.5	306	
SP2-15L	80	85	22	M24	130	120	5	50	53.5	14	M12	82	70	3	190	29	290	350	290	230	42.5	4	22	340	459.5	323	
SP2-16L	90	95	25	M24	160	150	5	50	53.5	14	M12	82	70	3	210	34	335	425	335	260	52	4	26	387.5	512	375.5	
SP2-17L	100	106	28	M24	165	150	7.5	60	64	18	M12	105	90	5	225	39	355	445	400	330	44	4	26	402.5	557	389.5	
SP2-18L	110	116	28	M24	165	150	7.5	60	64	18	M12	105	90	5	250	39	410	500	445	365	44	4	26	452.5	629	461.5	
SP2-19L	120	127	32	M24	210	190	10	70	74.5	20	M12	105	90	5	280	44	470	560	460	380	45	4	26	505	668	493	
SP2-20L	140	148	36	M30	200	180	10	80	85	22	M16	130	110	5	300	35	510	620	620	500	56	4	33	570	737.5	534	
SP2-21L	160	169	40	M30	240	220	10	80	85	22	M16	130	110	5	330	35	600	720	720	590	67	4	33	635	829.5	614	
TRIPLE STAGE																											
SP3-10L	38	41	10	M12	58	50	4	28	31	8	M10	42	35	3	120	16	170	210	160	120	31	4	11	220	351	228.5	
SP3-11L	50	53.5	14	M16	82	70	6	38	41	10	M12	58	50	3	130	20	215	260	190	140	37	4	17	230	383.5	261	
SP3-12L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	160	26	255	310	235	185	36	4	18	285	416.5	294	
SP3-13L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	160	26	255	310	235	185	36	4	18	285	442.5	320	
SP3-14L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	190	29	290	350	290	230	42.5	4	22	340	481	358.5	
SP3-15L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	190	29	290	350	290	230	42.5	4	22	340	498	375.5	
SP3-16L	90	95	25	M24	160	150	5	38	41	10	M12	58	50	3	210	34	335	425	335	260	52	4	26	387.5	560.5	438	
SP3-17L	100	106	28	M24	165	150	7.5	50	53.5	14	M12	82	70	3	225	39	355	445	400	330	44	4	26	402.5	599.5	463	
SP3-18L	110	116	28	M24	165	150	7.5	50	53.5	14	M12	82	70	3	250	39	410	500	445	365	44	4	26	452.5	671.5	535	
SP3-19L	120	127	32	M24	210	190	10	50	53.5	14	M12	82	70	3	280	44	470	560	460	380	45	4	26	505	729	592.5	
SP3-20L	140	148	36	M30	200	180	10	60	64	18	M12	105	90	5	300	35	510	620	620	500	56	4	33	570	793	625.5	
SP3-21L	160	169	40	M30	240	220	10	60	64	18	M12	105	90	5	330	35	600	720	720	590	67	4	33	635	903	735.5	
QUADRUPLE STAGE																											
SP4-10L	38	41	10	M12	58	50	4	28	31	8	M10	42	35	3	120	16	170	210	160	120	31	4	11	220	403.5	281	
SP4-11L	50	53.5	14	M16	82	70	6	28	31	8	M10	42	35	3	130	20	215	260	190	140	37	4	17	230	436	313.5	
SP4-12L	65	69	18	M20	105	95	5	28	31	8	M10	42	35	3	160	26	255	310	235	185	36	4	18	285	469	346.5	
SP4-13L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	160	26	255	310	235	185	36	4	18	285	495	372.5	
SP4-14L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	190	29	290	350	290	230	42.5	4	22	340	533.5	411	
SP4-15L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	190	29	290	350	290	230	42.5	4	22	340	550.5	428	
SP4-16L	90	95	25	M24	160	150	5	38	41	10	M12	58	50	3	210	34	335	425	335	260	52	4	26	387.5	613	490.5	
SP4-17L	100	106	28	M24	165	150	7.5	38	41	10	M12	58	50	3	225	39	355	445	400	330	44	4	26	402.5	638	515.5	
SP4-18L	110	116	28	M24	165	150	7.5	38	41	10	M12	58	50	3	250	39	410	500	445	365	44	4	26	452.5	710	587.5	
SP4-19L	120	127	32	M24	210	190	10	38	41	10	M12	58	50	3	280	44	470	560	460	380	45	4	26	505	777.5	655	
SP4-20L	140	148	36	M30	200	180	10	50	53.5	14	M12	82	70	3	300	35	510	620	620	500	56	4	33	570	835.5	699	
SP4-21L	160	169	40	M30	240	220	10	50	53.5	14	M12	82	70	3	330	35	600	720	720	590	67	4	33	635	945.5	809	

NOTE: FOR L1 DIMENSION, PLEASE REFER PAGE NO. 67

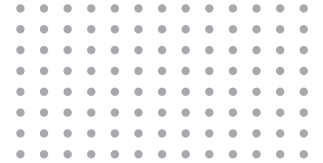


11.2 DIMENSIONS OF FLANGE MOUNTED UNIT

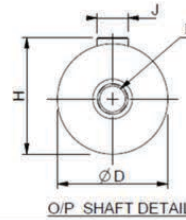
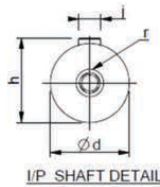
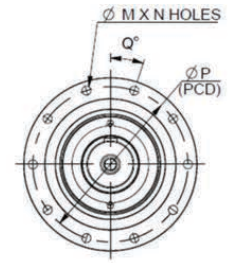
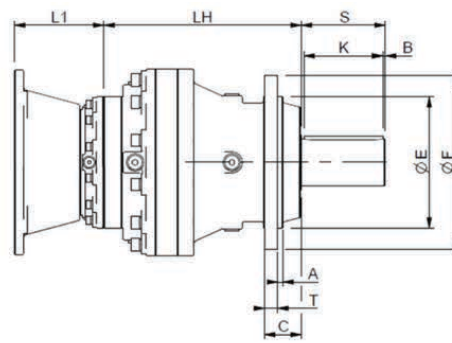
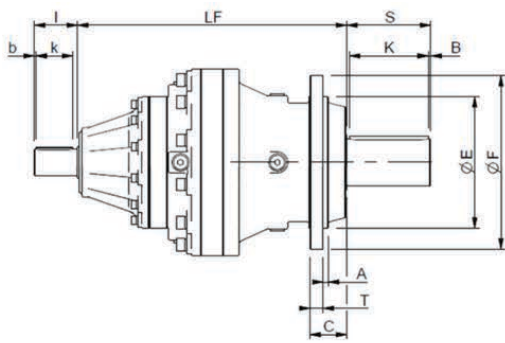


MODEL	OUTPUT SHAFT							INPUT SHAFT							FLANGE MOUNTING							OVERALL				
	D(h6)	H	J(h9)	R	S	K	B	d(h6)	h	j(h9)	r	l	k	b	E(f7)	F	C	T	A	M	N	Q	P	LF	LH	
SINGLE STAGE																										
SP1-10L	38	41	10	M12	58	50	4	38	41	10	M12	58	50	3	130	190	18	12	5	8	11	22.5	165	246	123.5	
SP1-11L	50	53.5	14	M16	82	70	6	38	41	10	M12	58	50	3	130	190	26	14	5	8	11	22.5	165	278.5	156	
SP1-12L	65	69	18	M20	105	95	5	50	53.5	14	M12	82	70	3	170	230	50	20	10	10	13	18	202	325.5	189	
SP1-13L	65	69	18	M20	105	95	5	50	53.5	14	M12	82	70	3	170	230	50	20	10	10	13	18	202	341.5	205	
SP1-14L	80	85	22	M24	130	120	5	60	64	18	M12	105	90	5	200	280	65	20	10	12	15	15	250	400	232.5	
SP1-15L	80	85	22	M24	130	120	5	60	64	18	M12	105	90	5	200	280	65	20	10	12	15	15	250	417	249.5	
SP1-16L	90	95	25	M24	160	150	5	70	74.5	20	M12	105	90	5	250	330	70	25	10	10	17	18	295	451	276	
DOUBLE STAGE																										
SP2-10L	38	41	10	M12	58	50	4	38	41	10	M12	58	50	3	130	190	18	12	5	8	11	22.5	165	298.5	176	
SP2-11L	50	53.5	14	M16	82	70	6	38	41	10	M12	58	50	3	130	190	26	14	5	8	11	22.5	165	331	208.5	
SP2-12L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	170	230	50	20	10	10	13	18	202	364	241.5	
SP2-13L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	170	230	50	20	10	10	13	18	202	390	267.5	
SP2-14L	80	85	22	M24	130	120	5	50	53.5	14	M12	82	70	3	200	280	65	20	10	12	15	15	250	442.5	306	
SP2-15L	80	85	22	M24	130	120	5	50	53.5	14	M12	82	70	3	200	280	65	20	10	12	15	15	250	459.5	323	
SP2-16L	90	95	25	M24	160	150	5	50	53.5	14	M12	82	70	3	250	330	70	25	10	10	17	18	295	512	375.5	
TRIPPLE STAGE																										
SP3-10L	38	41	10	M12	58	50	4	28	31	8	M10	42	35	3	130	190	18	12	5	8	11	22.5	165	351	228.5	
SP3-11L	50	53.5	14	M16	82	70	6	28	31	8	M10	42	35	3	130	190	26	14	5	8	11	22.5	165	383.5	261	
SP3-12L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	170	230	50	20	10	10	13	18	202	416.5	294	
SP3-13L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	170	230	50	20	10	10	13	18	202	442.5	320	
SP3-14L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	200	280	65	20	10	12	15	15	250	481	358.5	
SP3-15L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	200	280	65	20	10	12	15	15	250	498	375.5	
SP3-16L	90	95	25	M24	160	150	5	38	41	10	M12	58	50	3	250	330	70	25	10	10	17	18	295	560.5	438	
QUADRUPLE STAGE																										
SP4-10L	38	41	10	M12	58	50	4	28	31	8	M10	42	35	3	130	190	18	12	5	8	11	22.5	165	403.5	281	
SP4-11L	50	53.5	14	M16	82	70	6	28	31	8	M10	42	35	3	130	190	26	14	5	8	11	22.5	165	436	313.5	
SP4-12L	65	69	18	M20	105	95	5	28	31	8	M10	42	35	3	170	230	50	20	10	10	13	18	202	469	346.5	
SP4-13L	65	69	18	M20	105	95	5	38	41	10	M12	58	50	3	170	230	50	20	10	10	13	18	202	495	372.5	
SP4-14L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	200	280	65	20	10	12	15	15	250	533.5	411	
SP4-15L	80	85	22	M24	130	120	5	38	41	10	M12	58	50	3	200	280	65	20	10	12	15	15	250	550.5	428	
SP4-16L	90	95	25	M24	160	150	5	38	41	10	M12	58	50	3	250	330	70	25	10	10	17	18	295	613	490.5	

NOTE: FOR L1 DIMENSION, PLEASE REFER PAGE NO. 67



11.2 DIMENSIONS OF FLANGE MOUNTED UNIT



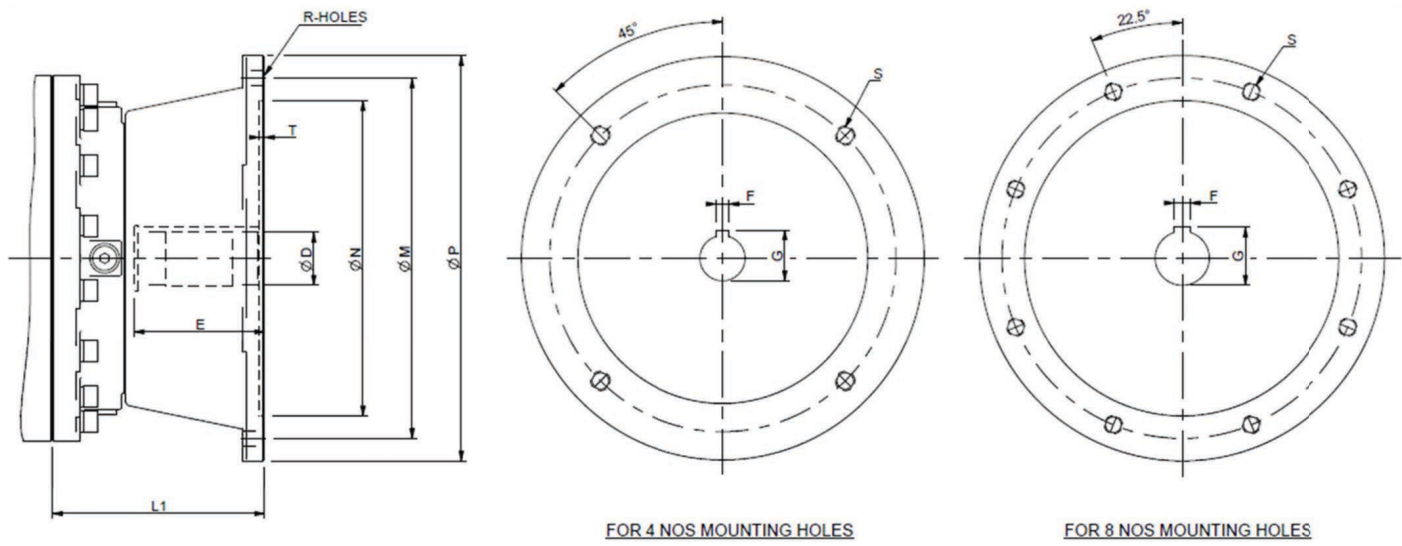
Tolerance:
 OP SHAFT (ØD)
 ØD < 100 - h6
 Ø100 < ØD < Ø200 - m6

MODEL	OUTPUT SHAFT							INPUT SHAFT							FLANGE MOUNTING										OVERALL			
	D	H	J(h9)	R	S	K	B	d(h6)	h	j(h9)	r	l	k	b	E(f7)	F(f7)	G	C	X	A	Y	T	M	N	Q	P	LF	LH
SINGLE STAGE																												
SP1-17L	100	106	28	M24	165	150	7.5	80	85	22	M16	130	110	5	205	295	355	199	129	10	140	25	12	17	15	325	501.5	298
SP1-18L	110	116	28	M24	165	150	7.5	80	85	22	M16	130	110	5	225	340	405	236	135	15.5	170.5	26	16	17	11.25	370	555.5	340
SP1-19L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP1-20L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SP1-21L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DOUBLE STAGE																												
SP2-17L	100	106	28	M24	165	150	7.5	60	64	18	M12	105	90	5	205	295	355	199	129	10	140	25	12	17	15	325	557	389.5
SP2-18L	110	116	28	M24	165	150	7.5	60	64	18	M12	105	90	5	225	340	405	236	135	15.5	170.5	26	16	17	11.25	370	629	461.5
SP2-19L	120	127	32	M24	210	190	10	70	74.5	20	M12	105	90	5	245	375	450	247	149	17	175	30	16	17	11.25	415	668	493
SP2-20L	140	148	36	M30	200	180	10	80	85	22	M16	130	110	5	280	415	490	262	155	17	185	35	20	17	15	455	737.5	534
SP2-21L	160	169	40	M30	240	220	10	80	85	22	M16	130	110	5	310	450	545	298	176	20	211	35	20	21	15	505	829.5	614
TRIPLE STAGE																												
SP3-17L	100	106	28	M24	165	150	7.5	50	53.5	14	M12	82	70	3	205	295	355	199	129	10	140	25	12	17	15	325	599.5	463
SP3-18L	110	116	28	M24	165	150	7.5	50	53.5	14	M12	82	70	3	225	340	405	236	135	15.5	170.5	26	16	17	11.25	370	671.5	535
SP3-19L	120	127	32	M24	210	190	10	50	53.5	14	M12	82	70	3	245	375	450	247	149	17	175	30	16	17	11.25	415	729	592.5
SP3-20L	140	148	36	M30	200	180	10	60	64	18	M12	105	90	5	280	415	490	262	155	17	185	35	20	17	15	455	793	625.5
SP3-21L	160	169	40	M30	240	220	10	60	64	18	M12	105	90	5	310	450	545	298	176	20	211	35	20	21	15	505	903	735.5
QUADRUPLE STAGE																												
SP4-17L	100	106	28	M24	165	150	7.5	38	41	10	M12	58	50	3	205	295	355	199	129	10	140	25	12	17	15	325	638	515.5
SP4-18L	110	116	28	M24	165	150	7.5	38	41	10	M12	58	50	3	225	340	405	236	135	15.5	170.5	26	16	17	11.25	370	710	587.5
SP4-19L	120	127	32	M24	210	190	10	38	41	10	M12	58	50	3	245	375	450	247	149	17	175	30	16	17	11.25	415	777.5	655
SP4-20L	140	148	36	M30	200	180	10	50	53.5	14	M12	82	70	3	280	415	490	262	155	17	185	35	20	17	15	455	835.5	699
SP4-21L	160	169	40	M30	240	220	10	50	53.5	14	M12	82	70	3	310	450	545	298	176	20	211	35	20	21	15	505	945.5	809

NOTE: FOR L1 DIMENSION, PLEASE REFER PAGE NO. 67



11.3. MOTOR MOUNTING DETAILS (AS PER IEC)



MOTOR FRAME SIZE	HOLLOW SHAFT				MOUNTING						STANDARD B5 TYPE MOTORS WITH POWER IN HP		
	D(F7)	E	F(Js9)	G	M	N(H7)	P	R	S	T	1500rpm	1000rpm	750rpm
63	11	28	4	12.9	115	95	140	4	M8	5	0.25	-	-
71	14	35	5	16.4	130	110	160	4	M8	5.5	0.33/0.50	0.33/0.50	0.1/0.12
80	19	45	6	21.9	165	130	200	4	M10	4.5	0.75/1	0.5/0.75	0.25/0.33
90	24	55	8	27.5	165	130	200	4	M10	4.5	1.5/2.0	1.0/1.5	0.5/0.75
100	28	65	8	31.5	215	180	250	4	M12	5	3.0/4.0	2	1.0/1.5
112	28	65	8	31.5	215	180	250	4	M12	5	5	3	2
132	38	85	10	41.5	265	230	300	4	M12	5	7.5/10	5.0/7.5	3.0/4.0
160	42	115	12	45.5	300	250	350	4	M16	6	12.5/15/20	10/12.5/15	5/7.5/10.0
180	48	115	14	52	300	250	350	4	M16	6	25/30	20	12.5/15.0
200	55	115	16	59.5	350	300	400	4	M16	6	40	25/30	20
225	60	145	18	64.6	400	350	450	8	M16	6	50/60	40	25/30
250	65	145	18	69.6	500	450	550	8	M16	6	75/100	50/60	40/50

NOTE: FOR L1 DIMENSION, PLEASE REFER PAGE NO. 67



11.4. AVAILABLE IEC MOTOR FRAME SIZES AS PER MODEL & L1 DISTANCE

MODEL	L1 IN (mm)												
	AVAILABLE MOTOR FRAME SIZE												
	63	71	80	90	100	112	132	160	180	200	225	250	
SP-10	SP1	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP2	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP3	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-11	SP1	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP2	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP3	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-12	SP1	-	-	-	-	115	115	140	170	170	170	-	-
	SP2	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP3	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-13	SP1	-	-	-	-	115	115	140	170	170	170	-	-
	SP2	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP3	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-14	SP1	-	-	-	-	-	-	-	181.5	181.5	181.5	211.5	211.5
	SP2	-	-	-	-	115	115	140	170	170	170	-	-
	SP3	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-15	SP1	-	-	-	-	-	-	-	181.5	181.5	181.5	211.5	211.5
	SP2	-	-	-	-	115	115	140	170	170	170	-	-
	SP3	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-16	SP1	-	-	-	-	-	-	-	-	192.5	192.5	222.5	222.5
	SP2	-	-	-	-	115	115	140	170	170	170	-	-
	SP3	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-17	SP1	-	-	-	-	-	-	-	-	192.5	192.5	222.5	222.5
	SP2	-	-	-	-	-	-	-	181.5	181.5	181.5	211.5	211.5
	SP3	-	-	-	-	115	115	140	170	170	170	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-18	SP1	-	-	-	-	-	-	-	-	192.5	192.5	222.5	222.5
	SP2	-	-	-	-	-	-	-	181.5	181.5	181.5	211.5	211.5
	SP3	-	-	-	-	115	115	140	170	170	170	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-19	SP2	-	-	-	-	-	-	-	-	192.5	192.5	222.5	222.5
	SP3	-	-	-	-	115	115	140	170	170	170	-	-
	SP4	93	100	101.5	111.5	121.5	121.5	141.5	-	-	-	-	-
SP-20	SP2	-	-	-	-	-	-	-	-	192.5	192.5	222.5	222.5
	SP3	-	-	-	-	-	-	-	181.5	181.5	181.5	211.5	211.5
	SP4	-	-	-	-	115	115	140	170	170	170	-	-
SP-21	SP2	-	-	-	-	-	-	-	-	192.5	192.5	222.5	222.5
	SP3	-	-	-	-	-	-	-	181.5	181.5	181.5	211.5	211.5
	SP4	-	-	-	-	115	115	140	170	170	170	-	-

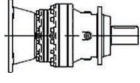


AVAILABLE FRAME SIZE
 NOT AVAILABLE FRAME SIZE

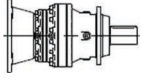




12. OIL QUANTITY

INLINE CONFIGURATION:

Oil Quantity are in Litres.

MODEL		MOUNTING POSITION		
				
		H1	V1	V2
SP-10L	SP1-10L	0.6	1	0.8
	SP2-10L	0.8	1.2	1.1
	SP3-10L	1.1	1.5	1.4
	SP4-10L	1.4	1.8	1.7
SP-11L	SP1-11L	0.7	1.1	1
	SP2-11L	1	1.4	1.3
	SP3-11L	1.3	1.7	1.6
	SP4-11L	1.6	2	1.9
SP-12L	SP1-12L	1.2	2.2	1.9
	SP2-12L	1.5	2.5	2.2
	SP3-12L	1.8	2.8	2.5
	SP4-12L	2.1	3.1	2.8
SP-13L	SP1-13L	1.5	2.5	2.3
	SP2-13L	2	2.9	2.8
	SP3-13L	2.3	3.2	3
	SP4-13L	2.6	3.5	3.3
SP-14L	SP1-14L	1.9	2.9	2.7
	SP2-14L	2.7	3.6	3.3
	SP3-14L	2.9	3.8	3.6
	SP4-14L	3.3	4.2	3.9
SP-15L	SP1-15L	2.4	3.3	3
	SP2-15L	3.1	4.1	3.8
	SP3-15L	3.4	4.4	4.1
	SP4-15L	3.7	4.7	4.4

MODEL		MOUNTING POSITION		
				
		H1	V1	V2
SP-16L	SP1-16L	3.3	4.8	4.3
	SP2-16L	4.3	5.7	5.2
	SP3-16L	4.8	6.2	5.7
	SP4-16L	5	6.5	6
SP-17L	SP1-17L	3.8	5.2	4.8
	SP2-17L	4.8	6.2	5.7
	SP3-17L	5.2	6.9	6.2
	SP4-17L	5.5	6.9	6.5
SP-18L	SP1-18L	4.8	6.2	5.7
	SP2-18L	6	6.9	6.9
	SP3-18L	6.7	8.2	7.7
	SP4-18L	7	8.5	8
SP-19L	SP1-19L	-	-	-
	SP2-19L	8.6	13.3	11.4
	SP3-19L	9.5	14.3	12.3
	SP4-19L	12.4	17.1	15.2
SP-20L	SP1-20L	-	-	-
	SP2-20L	10.9	15.7	13.8
	SP3-20L	11.9	16.6	14.7
	SP4-20L	12.3	17.1	15.2
SP-21L	SP1-21L	-	-	-
	SP2-21L	16.1	23.7	20
	SP3-21L	18	25.7	21.9
	SP4-21L	19	26.6	22.8

NOTE:

H1 - HORIZONTAL

V1 - VERTICAL DOWNWARD

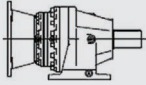
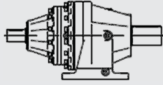
V2 - VERTICAL UPWARD

GEARBOX OIL QUANTITY ARE INDICATIVE. CHECK ACTUAL LEVEL AFTER FILLING THROUGH THE APPROPRIATE PLUG POSITION.



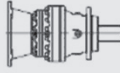
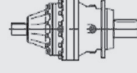
13. WEIGHT CHART

FOOT MOUNTING (WEIGHT IN Kgs)

FOOT MOUNTING		 HOLLOW INPUT											 SOLID INPUT		
MODEL		AVAILABLE MOTOR FRAME SIZES													
		63	71	80	90	100	112	132	160	180	200	225	250		
SP-10	SP1	22	23	25	26	26	26	30	-	-	-	-	-	25	
	SP2	29	30	32	33	33	33	37	-	-	-	-	-	30	
	SP3	36	37	39	40	40	40	44	-	-	-	-	-	37	
	SP4	43	44	46	47	47	47	51	-	-	-	-	-	44	
SP-11	SP1	30	31	33	34	34	34	38	-	-	-	-	-	32	
	SP2	37	38	40	41	41	41	45	-	-	-	-	-	39	
	SP3	44	45	47	48	48	48	52	-	-	-	-	-	46	
	SP4	51	52	54	55	55	55	59	-	-	-	-	-	53	
SP-12	SP1	-	-	-	-	61	61	65	71	71	74	-	-	59	
	SP2	61	62	64	65	65	65	69	-	-	-	-	-	62	
	SP3	68	69	71	72	72	72	76	-	-	-	-	-	69	
	SP4	74	75	77	78	78	78	82	-	-	-	-	-	76	
SP-13	SP1	-	-	-	-	65	65	69	75	75	78	-	-	63	
	SP2	67	68	70	71	71	71	75	-	-	-	-	-	68	
	SP3	73	74	76	77	77	77	81	-	-	-	-	-	75	
	SP4	80	81	83	84	84	84	88	-	-	-	-	-	82	
SP-14	SP1	-	-	-	-	-	-	-	113	113	116	122	129	103	
	SP2	-	-	-	-	111	111	115	121	121	124	-	-	109	
	SP3	110	111	113	114	114	114	118	-	-	-	-	-	112	
	SP4	117	118	120	121	121	121	125	-	-	-	-	-	119	
SP-15	SP1	-	-	-	-	-	-	-	119	119	122	128	135	109	
	SP2	-	-	-	-	117	117	121	127	127	130	-	-	115	
	SP3	117	118	120	121	121	121	125	-	-	-	-	-	118	
	SP4	123	124	126	127	127	127	131	-	-	-	-	-	125	
SP-16	SP1	-	-	-	-	-	-	-	-	180	183	191	197	166	
	SP2	-	-	-	-	175	175	179	185	185	188	-	-	174	
	SP3	177	178	180	181	181	181	185	-	-	-	-	-	178	
	SP4	184	185	187	188	188	188	192	-	-	-	-	-	185	
SP-17	SP1	-	-	-	-	-	-	-	-	205	208	216	222	204	
	SP2	-	-	-	-	-	-	-	225	225	228	234	241	217	
	SP3	-	-	-	-	222	222	226	232	232	235	-	-	223	
	SP4	222	223	225	226	226	226	230	-	-	-	-	-	226	
SP-18	SP1	-	-	-	-	-	-	-	-	269	271	279	285	272	
	SP2	-	-	-	-	-	-	-	293	293	296	302	309	287	
	SP3	-	-	-	-	291	291	295	301	301	304	-	-	293	
	SP4	291	292	294	295	295	295	299	-	-	-	-	-	296	
SP-19	SP2	-	-	-	-	-	-	-	-	385	388	396	402	376	
	SP3	-	-	-	-	380	380	384	390	390	393	-	-	383	
	SP4	382	383	385	386	386	386	390	-	-	-	-	-	387	
SP-20	SP2	-	-	-	-	-	-	-	-	494	497	505	511	489	
	SP3	-	-	-	-	-	-	-	514	514	517	523	530	505	
	SP4	-	-	-	-	512	512	516	522	522	525	-	-	493	
SP-21	SP2	-	-	-	-	-	-	-	-	681	683	691	697	692	
	SP3	-	-	-	-	-	-	-	711	711	714	720	727	712	
	SP4	-	-	-	-	707	707	711	717	717	720	-	-	718	



FLANGE MOUNTING (WEIGHT IN Kgs)

FLANGE MOUNTING		 HOLLOW INPUT											 SOLID INPUT	
		AVAILABLE MOTOR FRAME SIZES												
MODEL		63	71	80	90	100	112	132	160	180	200	225	250	
SP-10	SP1	20	21	23	24	24	24	28	-	-	-	-	-	21
	SP2	27	28	30	31	31	31	35	-	-	-	-	-	28
	SP3	34	35	37	38	38	38	42	-	-	-	-	-	35
	SP4	40	41	43	44	44	44	48	-	-	-	-	-	42
SP-11	SP1	24	25	27	28	28	28	32	-	-	-	-	-	25
	SP2	31	32	34	35	35	35	39	-	-	-	-	-	32
	SP3	38	39	41	42	42	42	46	-	-	-	-	-	39
	SP4	45	46	48	49	49	49	53	-	-	-	-	-	46
SP-12	SP1	-	-	-	-	51	51	55	61	61	64	-	-	49
	SP2	51	52	54	55	55	55	59	-	-	-	-	-	52
	SP3	58	59	61	62	62	62	66	-	-	-	-	-	59
	SP4	64	65	67	68	68	68	72	-	-	-	-	-	66
SP-13	SP1	-	-	-	-	55	55	59	65	65	68	-	-	53
	SP2	57	58	60	61	61	61	65	-	-	-	-	-	52
	SP3	63	64	66	67	67	67	71	-	-	-	-	-	65
	SP4	70	71	73	74	74	74	78	-	-	-	-	-	72
SP-14	SP1	-	-	-	-	-	-	-	96	96	99	105	112	86
	SP2	-	-	-	-	94	94	98	104	104	107	-	-	92
	SP3	94	95	97	98	98	98	102	-	-	-	-	-	95
	SP4	101	102	104	105	105	105	109	-	-	-	-	-	102
SP-15	SP1	-	-	-	-	-	-	-	102	102	105	111	118	92
	SP2	-	-	-	-	100	100	104	110	110	113	-	-	98
	SP3	100	101	103	104	104	104	108	-	-	-	-	-	101
	SP4	107	108	110	111	111	111	115	-	-	-	-	-	108
SP-16	SP1	-	-	-	-	-	-	-	-	128	131	139	145	134
	SP2	-	-	-	-	143	143	147	153	153	156	-	-	142
	SP3	145	146	148	149	149	149	153	-	-	-	-	-	146
	SP4	152	153	155	156	156	156	160	-	-	-	-	-	153
SP-17	SP1	-	-	-	-	-	-	-	-	152	155	163	169	148
	SP2	-	-	-	-	-	-	-	172	172	175	181	188	159
	SP3	-	-	-	-	170	170	174	180	180	183	-	-	168
	SP4	169	170	172	173	173	173	177	-	-	-	-	-	171
SP-18	SP1	-	-	-	-	-	-	-	-	204	206	214	220	204
	SP2	-	-	-	-	-	-	-	229	229	232	238	245	216
	SP3	-	-	-	-	227	227	231	237	237	240	-	-	225
	SP4	227	228	230	231	231	231	235	-	-	-	-	-	228
SP-19	SP2	-	-	-	-	-	-	-	-	305	308	316	322	289
	SP3	-	-	-	-	300	300	304	310	310	313	-	-	298
	SP4	301	302	304	305	305	305	309	-	-	-	-	-	302
SP-20	SP2	-	-	-	-	-	-	-	-	378	381	389	395	373
	SP3	-	-	-	-	-	-	-	400	400	403	409	416	389
	SP4	-	-	-	-	398	398	402	408	408	411	-	-	378
SP-21	SP2	-	-	-	-	-	-	-	-	523	525	533	539	522
	SP3	-	-	-	-	-	-	-	551	551	554	560	567	517
	SP4	-	-	-	-	549	549	553	559	559	562	-	-	547



14. LUBRICATION

RECOMMENDED LUBRICANT:

Premium Gear units are supplied without oil. Before operating it is essential to ensure that they are filled to correct oil levels as indicated by marketing on dipsticks, with lubricants recommended by Premium. Overfilling can cause overheating and leakage. Correct lubricant is most important and it should be noted that EP oils are recommended in all instances. Lubricants listed are suitable for normal ambient temperatures and Operating duties. All gear units are designed to operate under full load at maximum sump oil temperature of 95°C.

Where extreme conditions, are to be met, e.g. low temperature operation or unusual loading conditions, should be referred, with full Details, to Premium for recommendations. Recommended lubricants are based on information provided by oil

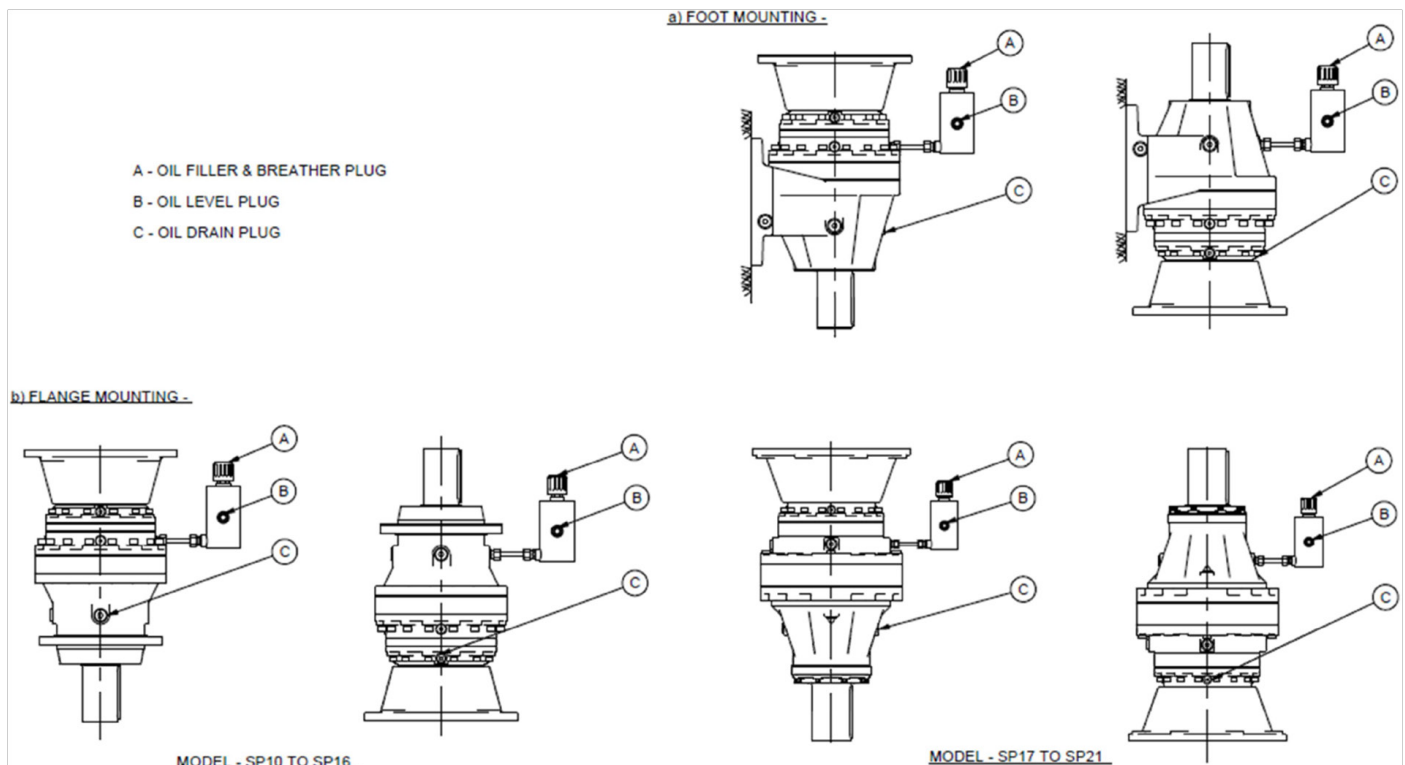
Suppliers and responsibility cannot be accepted for the quality or suitability of oil supplied, nor to any mechanical defect resulting from unsatisfactory lubrication due to the use of sub-standard oil.

LUBRICANT SPECIFICATION (CLP DIN 51517):

If the gear drive started when the ambient temperature is below -7°C (20°F) use a lube oil heater

Viscosity mm/s (cSt) at 40°C													TRIBOL		
	Bharat Petroleum	Indian Oil	Hindustan Petroleum	BP Energol	Castrol	SPARAN	Mobil gear	Shell Omala Oil	Cepsa Engranjes	Klüberail GEM 1	Aral	Chevron Gear Compound	Tribo	Balmer Lawrie	Blasia
VG 460	Amocam Oil 460	Servomesh SP 460	Parthan EP-460	GR-XP 460	Alpha MW 460	Spartan EP 460	Mobil gear 634	Omala 460	HP 460	460	Degol BG 460	EP 460	Trebol 1100/460	Balmerol Protomac 460 SP	Blasia 460
VG 320	Amocam Oil 320	Servomesh SP 320	Parthan EP-320	GR-XP 320	Alpha MW 320	Spartan EP 320	Mobil gear 632	Omala 320	HP 320	320	Degol BG 320	EP 320	Trebol 1100/320	Balmerol Protomac 320 SP	Blasia 320
VG 220	Amocam Oil 220	Servomesh SP 220	Parthan EP-220	GR-XP 220	Alpha MW 220	Spartan 220	Mobil gear 930	Omala 220	HP 220	220	Degol BG 220	EP 220	Trebol 1100/220	Balmerol Protomac 220 SP	Blasia 220

OIL TANK POSITIONS AS PER ORIENTATION:





Notes:

- There may be information in our catalogue that contains typographical errors, inaccuracies, or omissions that may relate to product descriptions, specifications, pricing and other details. All weights, measures and colors shown, are best approximations. Premium cannot guarantee and assumes no legal liability or responsibility for the accuracy or completeness of the information provided. The information contained in this catalogue is for general guidance only. Premium reserves the right to change, delete, or otherwise modify the information which is represented without any prior notice.
- You should take appropriate professional advice on your particular circumstances because the application of our equipment may vary depending on particular circumstances.
- Kindly ensure the product specification is mentioned in the purchase order.



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