Intelligent Drivesystems, Worldwide Services

Screw Conveyor

Gearmotors and Speed Reducers

Durable & Premium Efficient
SK 1282 SCP - SK 6282 SCP &
9012.1 SCP - SK 9052.1 SCP Gear Units

PRODUCT OVERVIEW

G1129 - 60 Hz

NORD®
DRIVESYSTEMS

DRIVESYSTEMS

Spanning the globe
To serve you

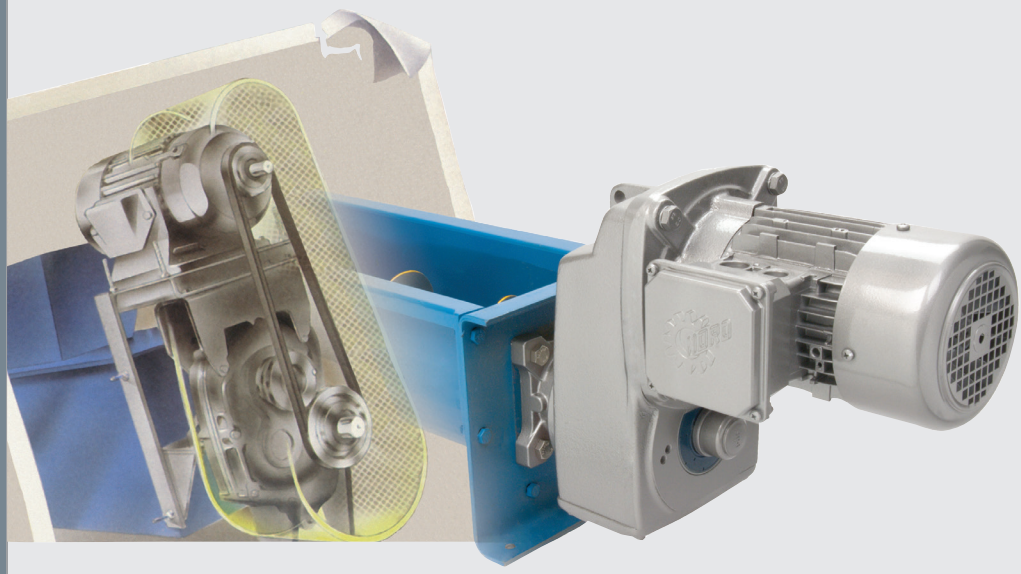
Since 1965, NORD has become well established in the power transmission industry and grown to global proportions on the strength of product performance, superior customer service, and intelligent drive solutions. NORD is constantly improving and expanding its products to meet a never-ending variety of industrial challenges.

NORD designs and manufactures drive systems engineered for adaptability. NORD's innovative drive solutions are specified and utilized for a range of applications in nearly every industry throughout the world.

NORD Drivesystems' product portfolio is extensive and continuously evolving in order to meet the needs of today's fast-changing markets. NORD's range of drive equipment includes: helical inline, helical shaft-mount, helical-bevel, helical-worm and worm gear units with torques from 90 lb-in to 2,200,000 lb-in, readily available AC motors and from 1/6 HP to 250 HP, variable frequency drives up to 250 HP, and mechanical variable speed drives.

But NORD does far more than manufacture the world's finest drive components. We provide our customers with optimum drive configurations for their specific purposes, providing each and every one with truly complete and efficient systems at a price/quality ratio unmatched in today's competitive markets.

NORD makes its wide product range easily available through a global network that includes representation in over 60 countries. By providing all of our customers with prompt delivery, and expert support services, we are firmly committed to exceeding customer expectations and being responsive to the ideas and specifications of every customer, anywhere in the world.



Screw Conveyor Package - Innovative Design

The NORD Screw Conveyor Package (SCP) offers a compact and cost effective alternative to traditional screw conveyor drives. Closely stepped speed reduction ratios combined with a directly coupled gearmotor or NEMA C-face input design eliminates the need for top motor mounts, pulleys, belts or guards. Minimizing parts and eliminating the belted input systems provides for easier system maintenance, increased reliability, and superior drive performance.

The SCP design is available for both CLINCHER™ Parallel Shaft gear units and Helical-Bevel Right Angle gear units. The CEMA flange and shaft assembly are a unique NORD design to offer superior protection against unwanted debris. A slight lead taper on the reducer shaft provides for easy mounting and removal, allowing for some screw pipe misalignment and reduced bearing loads.

Features and Benefits

OPTIMIZED SEALING SYSTEM
- Dual Viton lip seals
- Grease impregnated packing seal
- Dual gap seals – 0.03" gap (excludes particles)
- Material evacuation ports
- Shaft material ditch
- Quadrilip™ sealing

FLANGE
- Standard CEMA mounting
- Durable class 35 gray cast iron
- Versatile flange – multiple bolt patterns

MOUNTING
- Standard CEMA mounting
- Versatile flange – multiple bolt patterns
- 3-Hole tapered CEMA drive shaft
  - Easy mounting & Easy removal (limited fretting due to reduced material contact)
- Reduced bearing loads
- Quick external removal feature

DRIVESYSTEMS

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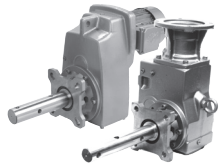
NORD Gear



Company Overview

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Short, On-Time Delivery

As a NORD customer, you can rest assured that your order will be delivered on time. Because NORD has both decentralized assembly and manufacturing operations and a linked global network, we offer our customers:

- Fast, reliable delivery
- Greater product versatility
- Shorter lead times
- Timely shipping
- Global Availability

Global Availability

NORD makes its wide product range easily available through a global network that includes representation in over 60 countries. Providing all customers with prompt delivery, and expert support services, we are firmly committed to exceeding customer expectations and being totally responsive to the ideas and specifications of every customer, anywhere in the world.

Increased North American Presence

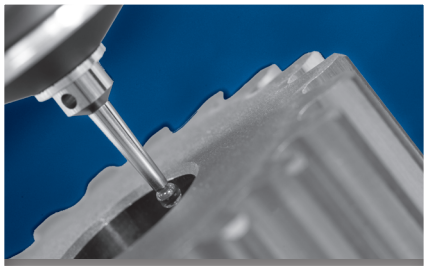
NORD covers North America with over 30 district offices and over 500 distributor branches. NORD operates a manufacturing and assembly facility in Waunakee, WI, Charlotte, NC, Corona, CA, Brampton, ON, and Monterrey, Mexico, resulting in an ever-increasing capacity in the United States and Canada and giving our customers the shortest lead times in the industry.

Manufacturing

NORD Gear continually invests in the latest research, manufacturing and automation technology. This ensures our ability to provide you with the utmost quality at an affordable price. Not only do we invest in our North American facilities, we invest in our factories throughout the world. We continually try to improve our practices to provide our customers with the most superior product available.

Quality

Quality is assured at NORD assembly and manufacturing facilities, based on ISO 9000 standards — from careful inspection of incoming materials to closely monitored machining operations including gear cutting, turning, hardening & grinding as well as finishing and assembly.



Worldwide Standards

NORD products are designed and manufactured based on the latest North American and global standards.

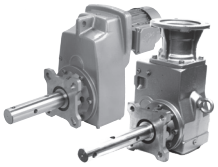
Energy Efficiency

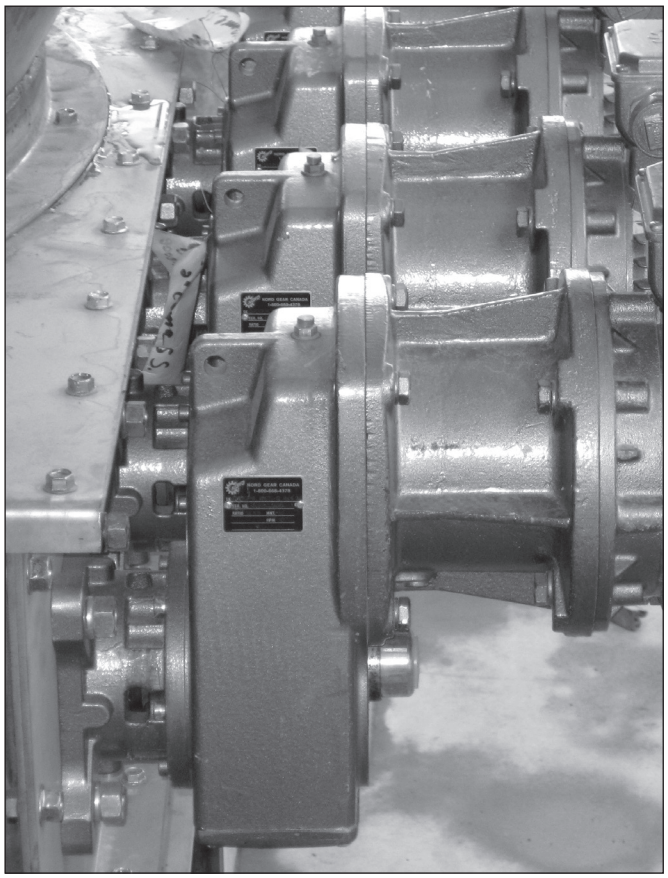
Lowering your operating costs is one of our greatest goals! NORD research and development focuses on energy efficiency, with gearboxes, motors, and frequency inverters designed for lower energy consumption. Our fully diverse line of in-line or right-angle units and motors has been developed to suit your needs.

NORD 911

Trouble? Just call 715-NORD-911 (in Canada, 905-796-3606). Emergency service is available 24 hours a day, 7 days a week. We'll answer your call, ship the parts, or build a unit and have it shipped directly to you to provide what you need, when you need it.

SCP Overview





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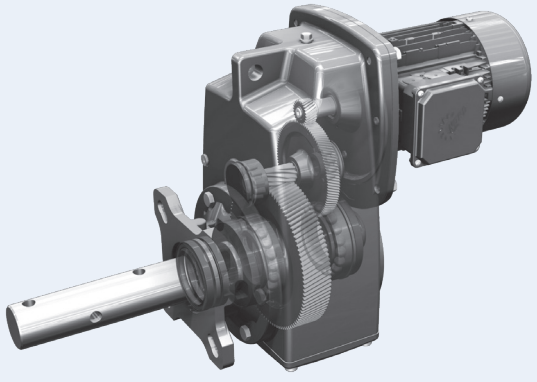
Benefits

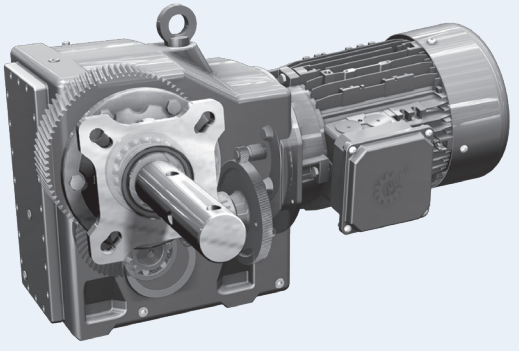
- Reduced cost
- Large ratio range
- Direct drive motor options (Integral or C-face)
- No belt maintence or belt guarding required.
- Reduced parts / higher reliability / space savings
- Higher efficiency
- More direct torque transfer.

Ratings Overview



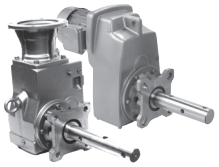
CLINCHER™ SCP

- Torque Capacity: Up to 53,100 lb-in
- Power Range: 0.16 – 60 Hp
- Ratio Range: 4.32:1 – 1585.08:1
- Output Speed: 1.0 – 405 rpm
- Efficiency: Up to 97%
- CEMA Drive Shaft Sizes:
  1-1/2", 2", 2-7/16", 3", 3-7/16"

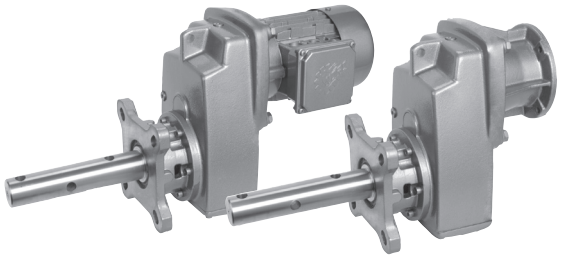


HELICAL-BEVEL SCP

- Torque Capacity: Up to 42,480 lb-in
- Power Range: 0.16 – 30 HP
- Ratio Range: 8.09:1 – 4246.38:1
- Output Speed: 0.41 – 216 rpm
- Efficiency: Up to 95%
- CEMA Drive Shaft Sizes:
  1-1/2", 2", 2-7/16", 3", 3-7/16"



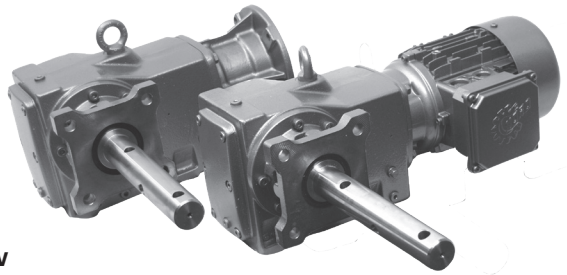
SCP Overview



Capacity & Ratings Overview

CEMA Drive Shaft Combinations

Model Type	Max Torque [lb-in]	Ratio Range [x:1]	Speed's [rpm]	Max Thrust Load Std Brgs [lb]	Max Thrust Load HD Brgs " VL " [lb]	Gear Stages	Efficiency [%]	1.5" Shaft	2.0" Shaft	2-7/16" Shaft	3.0" Shaft	3-7/16" Shaft
SK 1282 SCP	2620	4.79-109.5	365-16	1609	1609	2	97	X	X	X		
SK 1382 SCP	2425	87.94-624.45	20-2.8	1609	1609	3	95.5	X	X	X		
SK 2282 SCP	4611	4.51-127.51	388-14	2700	3375	2	97	X	X	X		
SK 2382 SCP	4983	82.22-763.41	21-2.3	2700	3375	3	95.5	X	X	X		
SK 3282 SCP	8983	4.48-112.23	391-16	3263	4500	2	97	X	X	X	X	
SK 3382 SCP	9195	89.60-1022.42	20-1.7	3263	4500	3	95.5	X	X	X	X	
SK 4282 SCP	16089	4.7-155.4	372-11	4950	6750	2	97		X	X	X	
SK 4382 SCP	18381	86.83-1585.08	26-1.1	4950	6750	3	95.5		X	X	X	
SK 5282 SCP	28630	4.32-134.03	405-13	7200	9000	2	97		X	X	X	X
SK 5382 SCP	28320	82.72-1367.08	21-1.3	7200	9000	3	95.5		X	X	X	X
SK 6282 SCP	40152	4.39-80.33	399-22	10463	13500	2	97				X	X
SK 6382 SCP	53100	24.42-551.58	72-3.2	10463	13500	3	95.5				X	X



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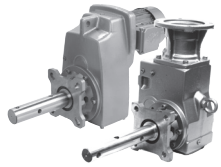
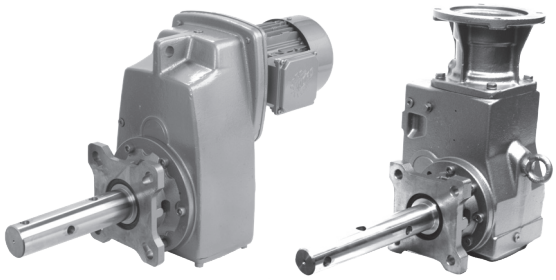
SK 9012.1 SCP	3540	8.09-332.37	5.3-216	4500	4500	3	95.5	X	X	X		
SK 9013.1 SCP	3540	141.29-1690.10	1.0-12.0	4500	4500	4	94	X	X	X		
SK 9022.1 SCP	7611	8.78-276.86	6.3-199	2700	5141	3	95.5	X	X	X		
SK 9023.1 SCP	7611	228.47-1899.26	0.92-7.7	2700	5625	4	94	X	X	X		
SK 9032.1 SCP	13718	8.48-295.85	5.9-206	3263	5234	3	95.5	X	X	X	X	
SK 9033.1 SCP	13718	167.45-3635.95	0.48-10	3263	6750	4	94	X	X	X	X	
SK 9042.1 SCP	24780	8.83-329.69	5.3-198	9000	6869	3	95.5		X	X	X	X
SK 9043.1 SCP	24780	172.08-4246.38	0.41-10	9000	9000	4	94		X	X	X	X
SK 9052.1 SCP	42480	8.1-289.61	6.0-216	10125	10125	3	95.5				X	X
SK 9053.1 SCP	42480	164.99-3735.92	0.47-11	10125	10125	4	94				X	X

SCP
Key Features



NORD DRIVESYSTEMS

UNICASE® One Piece Housing



Our CLINCHER™ and Helical-Bevel housings are a heavy-duty one-piece UNICASE® design. Optimally designed internal reinforcements provide increased torsional strength and rigidity. Bearing and seal seats are contained within the casting, eliminating housing splits and bolt-on carriers that can weaken the housing and be more prone to oil leaks. Bores and mounting faces are precisely machined in one set-up ensuring accurate positioning of gears, bearings and seals while providing high load bearing capacity, minimal vibration, low noise and longer life for all components. In addition the CLINCHER™ and Helical-Bevel housings are adaptable with versatile mounting options and accessory kits.

- Increased torsional strength and rigidity.
- Eliminates housing splits and bolt-on carriers.
- Leak-free housing design.
- Versatile mounting options and accessory kits.

High-Strength Gearcases

NORD housings are designed for maximum torque delivery. NORD uses state of the art FEM (Finite Element Modeling) to allow optimal structural design to maximize the strength and rigidity of internal components.

Benefits

- Thick housing wall cross-sections
- Torsionally stiff
- Maintains shaft alignment
- Primer sealed interior walls assure casting integrity and longer service life

High-Quality Gearing (Infinite Life Design)

NORD continually invests in state-of-the-art gear production equipment applying the latest in proven design techniques and gear research. This allows us to produce exceptionally high quality gears.

Benefits

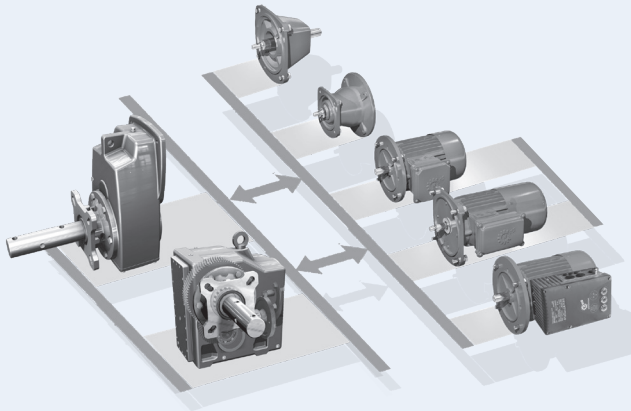
- Designed & manufactured up to AGMA CLASS 13
- Infinite design life
- Case-hardened steel
- Exceptional hardness: 60 Rc Typical
- High-speed gears are ground; low speed gears are skive hobbed
- 275% momentary overload capacity
- Low noise
- Low maintenance

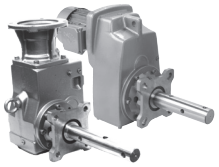
Modular Design

NORD's modular design philosophy provides you with a competitive edge by allowing you to configure drive systems to exactly fit your applications.

All NORD products including the SCP units are modular in design and provide extraordinary flexibility. The SCP unit may also be provided with a number of different input components including:

- Integral motor (gearmotor)
- NEMA C-Face motor adapter
- IEC B5 motor adapter
- Solid input shaft
- Custom motor adapter (servo, hydraulic motors, and more)





SCP
Key Features

Large Ratio Per Gear Stage

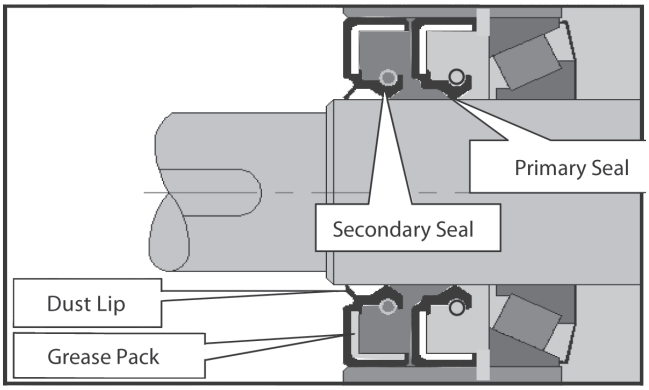
NORD gear cutting technology allows for the production of gear sets with a higher maximum ratio per stage than many other speed reducer manufacturers. NORD commonly produces gear sets with a maximum ratio of between 9:1 and 10:1 per stage. This allows for double reduction gear units with a maximum ratio between 72:1 and 100:1. Most speed reducer manufacturer's can only produce single-stage reduction of between 5:1 and 6:1. This means a twostage reducer with a maximum reduction of about 25:1 to 35:1. NORD can often provide a two stage reducer when most companies must provide three-stage units.

The same situation applies to three, four and higher gear stages. This allows NORD to provide superior value and performance in many conditions.

Benefits

- Better value
- Higher efficiency
- Quieter operation
- Lower weight
- Longer life

QUADRILIP™ Sealing



The QUADRILIP™ system has four components for sealing lubricant inside, and contaminants outside, the speed reducer. The system includes a double lip seal, single lip seal and grease pack barrier (grease lip). Furthermore, the shaft seal area is used to eliminate lead marks, ensure a proper seal and to keep foreign material from entering the gear unit.

Benefits

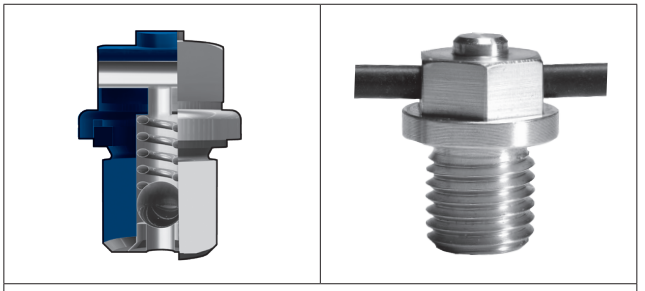
- Superior protection against leaks
- Long seal life
- Improved protection against contaminants
- Improved speed reducer life
- Reduced maintenance requirements & costs

AUTOVENT™

The AUTOVENT™ helps prevent bearing and gear damage by behaving like a check valve to block the entry of foreign material and prevent lubrication contamination from dust particles, moisture and air-borne process chemicals. The breather opens at approximately 0.3-0.9 psi during operation and closes tightly as the gearbox cools. This option is perfect for humid conditions and wash-down environments, helping to maintain proper oil cleanliness, while reducing foaming and oxidation.

Benefits

- Cleaner gearbox oil
- Extended lubrication life
- Longer-lasting seals, gears, and bearings



Autovent with transportation plug

Factory Oil Filled

All SCP units are factory filled with high quality, industry accepted gear lubricants.

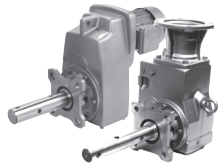
Benefits

- Easy commissioning / no need for on-site filling
- Ensures proper oil grade and fi ll level
- Prevents damage from dry start-ups

NORD High-Performance Motors & Options

NORD motors are designed to run cool for producing longer service life. Low rotor inertia and high starting torque allow peak performance in the most diffi cult applications for inverter and vector duty per NEMA MG 1-2006 Section 31.4.4.2 voltage spikes. Our motors are internationally accepted, conforming to North American NEMA MG 1 and international IEC electrical specifications. High performance options include brakes, encoders, and forced cooling fans.

SCP
Key Features



SCP - Product Features

NORD offers a unique class of high performance screw conveyor drives. The NORD SCP line is based upon the premium efficient CLINCHER™ gear units. The SCP series of screw conveyor drives offers superior durability in the most severe load and service conditions. The SCP system may also be provided as right-angle helical-bevel gear drives.

Optimized Sealing System

- **❶ Dual Fluropolymer lip seals**
  The SCP mounting flanges contains dual Fluropolymer seals to provide improved sealing. The Fluropolymer seals provide a high degree of chemical and mechanical protection.
- **❷ Dual gap seals (excludes particles) – 0.03" gap**
  The SCP mounting flange and CEMA drive shaft are designed to provide a mechanical sealing device referred to as a gap seal. The flange owns a clearance of 0.03" at two locations on the shaft. This forms a mechanical block to large particles and prevents their entrance into the gear unit.
- **❸ Shaft material ditch**
  Should any material penetrate the fluoropolymer seals, gap seals and greased packing felt seals, the shaft material ditch provides a material gravity break to divert anything that is working its way down the shaft towards the inside of the gearbox.
- **❹ Greased packing felt seal**
  Provides protection for small objects. If materials work their way past the first fluropolymer lip seal and gap seal it will be trapped within the grease felt sealing ring.
- **❺ Material evacuation ports**
  Provides an exit for any foreign material that infiltrates the external sealing system. Also provides a way to clean out the sealing system.
- **❻ QUADRILIP™ sealing**
  Please see page 7 for details

Mounting

- **Standard CEMA mounting**
  The NORD SCP drives adhere to the CEMA standard mounting dimensions.
- **❼ 3-Hole tapered CEMA drive shaft**
  The NORD SCP CEMA drive shaft is a standard three hole shaft. This allows for mounting to either 2-bolt or 3-bolt connections. The drive shaft is tapered for easier mounting and removal. The taper also reduces shaft loading due to misalignments.
- **Easy mounting**
  The NORD SCP drive is easily mounted into the screw pipe. The taper shaft acts as a guide in assembling the drive shaft into the screw pipe.
- **Easy Removal** -
  There is less fretting due to less material contact.
- **Reduced bearing loads**
  Taper allows for screw pipe misalignment.
- **Quick external removal feature** -
  The SCP drive can be easily removed from the screw pipe in two ways. First is the conventional removal of the complete drive and shaft. Unbolt the mounting flange from the trough and remove the cross bolts from the pipe and shaft. After this is done the drive may be removed. This requires access to inside of the screw pipe which is not always possible.

  The Second way to remove the drive without screw pipe access by unbolting the SCP mounting flange from the drive and removing the drive, leaving the flange and drive shaft attached to the screw pipe.

Flange

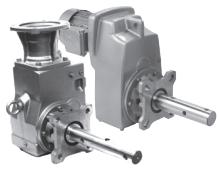
- **Standard CEMA mounting**
  The NORD SCP drives adhere to the CEMA standard mounting dimensions.
- **High strength class 35 gray cast iron**
  The SCP drives and screw conveyor flanges are made form high strength class 35 gray cast iron with a minimum tensile strength of 35,000psi.
- **❽ Versatile flange – multiple bolt patterns**
  The SCP mounting flanges often accommodate more that one CEMA bolt pattern. This allows one drive to be used on different screw sizes simply by switching out the drive shaft.

High Efficiency

The NORD SCP design is extremely efficient due to the direct coupled gearmotor or NEMA C-face input design. Belted input systems have scientifically lower total drive efficiency. Efficiency may be further increased by using the NORD "H" line of energy efficient motors.

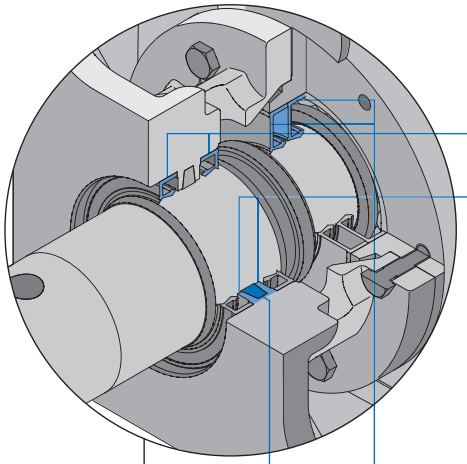
Options

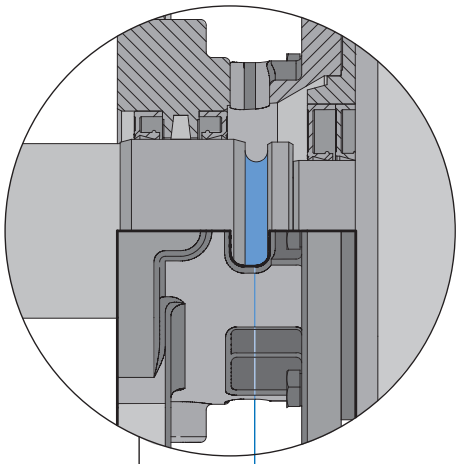
- Grease purge-able seal (PC) - see page 18
- Stainless steel CEMA drive shaft (SM5) - See page 18



SCP
Key Features

Screw Conveyor Key Features and Details





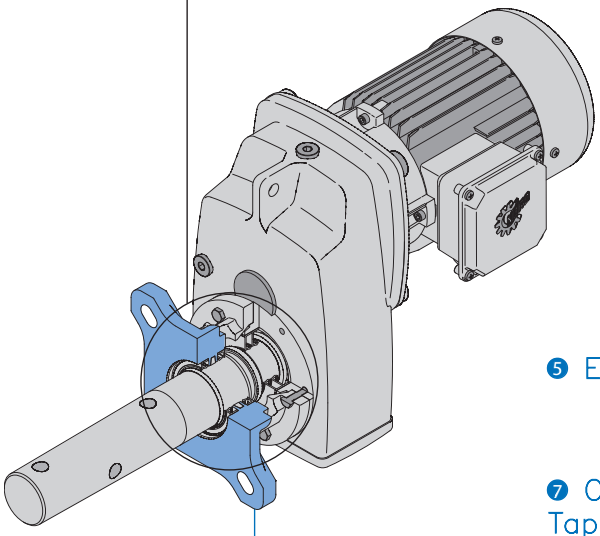
❶ Dual Viton Seals

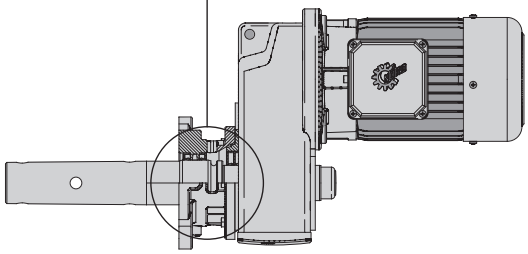
❷ Dual Gap Seals
0.03”

❸ Shaft Material Ditch

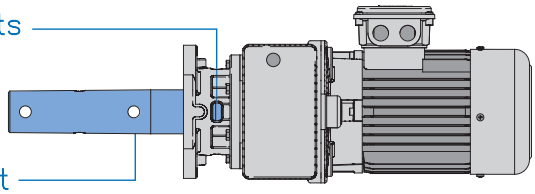
❻ Quadrilip Seals

❹ Greased Packing Felt Seal





❺ Evacuation Ports



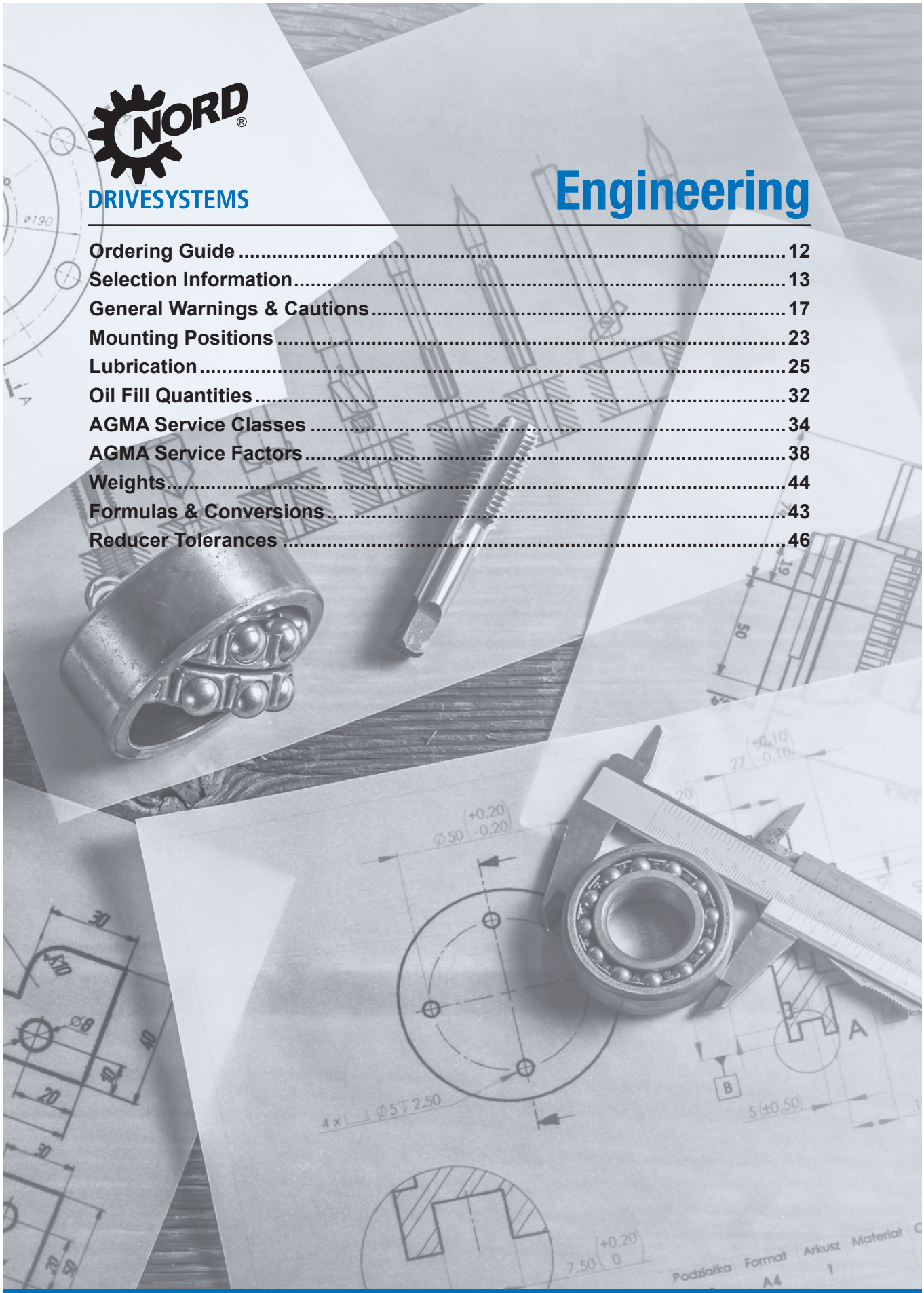
❼ CEMA 3–Hole
Tapered Driveshaft

❽ CEMA Mounting
Versatile Flange – Multiple Bolt Patterns

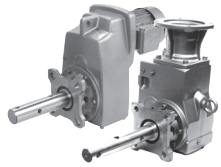
Notes

NORD DRIVESYSTEMS

Engineering



SCP
Ordering Guide



NORD DRIVESYSTEMS

	Gear Unit	Reducer Options		Motor/Input	Motor Options
SK	❶	❷	❸		❹
				see page 63	see page 244

❶

Gear Unit	
1282 SCP	9012.1 SCP
1382 SCP	9013.1 SCP
2282 SCP	9022.1 SCP
2382 SCP	9023.1 SCP
3282 SCP	9032.1 SCP
3382 SCP	9033.1 SCP
4282 SCP	9042.1 SCP
4382 SCP	9043.1 SCP
5282 SCP	9052.1 SCP
5382 SCP	9053.1 SCP
6282 SCP	
6382 SCP	

❷

Reducer Options	
ADP - Additional Drain Plug	**PC -** Grease Purge Seal
LL - Long Term Storage	**RV -** Drain Valve
MDP - Magnetic Drain Plug	**SM5 -** Stainless Steel CEMA Shaft
OA - Oil Expansion Chamber	**VL -** Heavy Duty Bearings
OSG - Oil Sight Glass	

❹

Motor Options	
F & FC - Blower Cooling Fan	**OL -** Non Ventilated TENV W/Out Fan
RD - Drip Cover Canopy	**OLH -** Non Ventilated TENV W/Out Fan & Cover
RDD - Double Drip Cover Canopy	**WE -** Motor Second Shaft Extension
KD - Condensation Drain Holes	**Z -** High Inertia Motor Fan
KB - Condensation Drain Holes Plugged	**IG -** Incremental Encoderr
IP66 - IP66 Motor Enclosure	**TW -** Thermostat
KKV - Potted Terminal Box	**TF -** Thermistor
MS - Quick Power Disconnect, Harting Plug	**SH -** Anti-Condensation Space Heaters

❸

Input Shaft	NEMA Adapter	IEC Adapter	Integral Motors	Integral Energy Efficent Motors	Integral Premium Efficent Motors
W	N56C	IEC 63	**63S/4** - 0.16hp	**80LH/4** - 1hp	**80LP/4** - 1hp
	N140TC	IEC 71	**63L/4** - 0.25hp	**90SH/4** - 1.5hp	**90SP/4** - 1.5hp
	N180TC	IEC 80	**71S/4** - 0.33hp	**90LH/4** - 2hp	**90LP/4** - 2hp
	N210TC	IEC 90	**71L/4** - 0.50hp	**100LH/4** - 3hp	**100LP/4** - 3hp
	N250TC	IEC 100	**80S/4** - 0.75hp	**112MH/4** - 5hp	**112MP/4** - 5hp
	N280TC	IEC 112	**80L/4** - 1hp	**132SH/4** - 7.5hp	**132SP/4** - 7.5hp
		IEC 132	**90S/4** - 1.5hp	**132MH/4** - 10hp	**132MP/4** - 10hp
		IEC160	**90L/4** - 2hp	**160MH/4** - 15hp	**160MP/4** - 15hp
		IEC180	**100L/4** - 3hp	**160LH/4** - 20hp	**160LP/4** - 20hp
			100LA/4 - 5hp	**180MH/4** - 25hp	**180MP/4** - 25hp
			112M/4 - 5.4hp	**180LH/4** - 30hp	**180LP/4** - 30hp
			132S/4 - 7.5hp	**200LH/4** - 40hp	
			132M/4 - 10hp	**225SH/4** - 50hp	
			160M/4 - 15hp	**225MH/4** - 60hp	
			160L/4 - 20hp		
			180MX/4 - 25hp		
			180LX/4 - 30hp		
			200L/4 - 40hp		
			225S/4 - 50hp		
			225M/4 - 60hp		
			Other Speeds Available	Other Speeds Available	

Product Specifications

Ratio

_____ :1

see pages 77 or 155

OR

Output Speed

_____ rpm

see pages 77 or 155

Mounting Position

- ❍ M1
- ❍ M2
- ❍ M3
- ❍ M4
- ❍ M5
- ❍ M6
- ❍ Special _____

CEMA Shaft Diameter

- ❍ 1-1/2″
- ❍ 2″
- ❍ 2-7/16″
- ❍ 3″
- ❍ 3-7/16″

Paint

- ❍ Standard Stainless Steel Paint
- ❍ NSD+ (gray)
- ❍ NSD+W (white)
- ❍ NSD-X3 (gray)
- ❍ NSD-X3W (white)
- ❍ Casting Primed
- ❍ Special _____

Lubricant

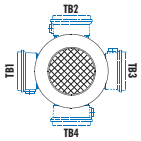
- ❍ Standard
- ❍ Synthetic
- ❍ Food Grade
- ❍ Other _____

Voltage & Frequency

Single Speed Motors	Two Speed Motors
❍ 230/460V-60Hz	❍ 460V-60Hz
❍ 208-230/460V-60Hz	❍ 230V-60Hz
❍ 575V-60Hz	❍ 575V-60Hz
❍ 400V-50Hz	❍ 400V-50Hz
❍ Other	❍ Other

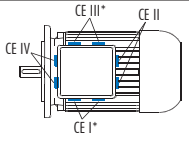
Terminal Box Position

- ❍ TB1
- ❍ TB2
- ❍ TB3
- ❍ TB4



Conduit Entry Location

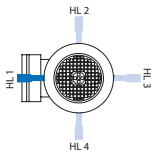
- ❍ CE I *
- ❍ CE II
- ❍ CE III *
- ❍ CE IV

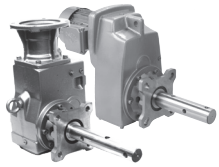


*Brakemotor

Hand Release Position

- ❍ HL1
- ❍ HL2
- ❍ HL3
- ❍ HL4





Gearbox Selection

A number of factors are considered when selecting a gear unit, including gearbox rating, service factor, speed and speed variation, horsepower, thermal capacity, ratio, physical size, ambient conditions and cost. Below are some guideline steps to help aid in the gear unit selection.

Selection steps

1. Determine the speed and/or gear ratio
2. Determine the required power or torque
3. Determine Service Factor
4. Select the basic gearbox type and input
5. Determine the required mounting position
6. Select options
7. Checks – overhung load, thrust load, NEMA motor weight, thermal considerations, and other application considerations

1. Determine the speed and/or gear ratio

The first step in selecting a gear unit is determining the final output speed or speeds you need. This speed is normally described in revolutions per minute (rpm). This output speed or speeds is determined by the input speed to the gear unit divided by its gear ratio. Their relationship is described by the following formulas.

$$\text{i (gear ratio)} = \frac{\text{Input speed [rpm]}}{\text{Output speed [rpm]}}$$

$$\text{Output speed [rpm]} = \frac{\text{Input speed [rpm]}}{\text{i (gear ratio)}}$$

To specify a gear unit, you can identify either gear ratio needed or the output speed (rpm) if the input speed is known.

2. Power and Torque

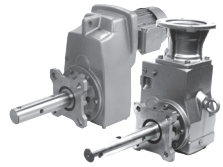
The second step for selecting a gear unit is the required power or torque needed to power the load. Torque in this catalog is normally expressed in pound-inches [lb-in].

$$\text{Power [hp]} = \frac{\text{Torque [lb-in] x speed [rpm]}}{63025}$$

$$\text{Torque [lb-in]} = \frac{\text{Power [hp] x 63025}}{\text{speed [rpm]}}$$

For a proper selection, please ensure that the motor or other prime mover can produce enough torque or power and that the gear unit has adequate torque or power capacity. You must also consider if the power or torque is specified at the input or output of the gear unit. The Helical-worm gear units have lower efficiency than in-line or bevel gear units, therefore helical-worm products efficiency may need to be considered in the selection.

To specify a gear unit you can identify your selection with either torque or power.



3. Service Factor or Service Class

In addition to power or torque, service factor must also be considered. A service factor is essentially the ratio of extra capacity in a gear unit compared to the power or torque that is needed to run that application. The goal of selecting a gear unit with extra capacity (service factor) is to provide adequate service life in operation.

One reason to apply a larger service factor is if a unit operates more hours per day. If a unit runs 24 hours per day it should normally have a higher service factor than a unit that runs 8 hours per day if you expect the same calendar life.

A second reason for applying a larger service factor is to cope with a more difficult application. Even if it takes the same power and speed to operate a rock crusher as it does a fan, the rock crusher needs a stronger gearbox (higher service factor) to give the same operating life as the gear unit powering the fan.

The following are four possible methods of service factor specification.

a. Customer or User Specification

Many customers will have their own service factor guidelines or specifications.

b. AGMA Service Factoring

American Gear Manufacturers Association (AGMA) publishes lists of recommended service factors for different applications. These service factor recommendations have been determined form the experience of many gear manufactures and are in AGMA standard 6010. See page 46 for additional detail.

c. AGMA Service Classes

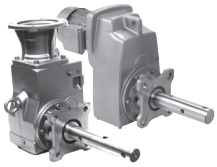
American Gear Manufactures Association (AGMA) has another method for selecting gear units service factors. AGMA standard 6009 lists many applications by a service class (I, II, III) with class I being the simplest applications and class III being the hardest. These application service classes are associated with a range of service factors by the following table.

AGMA Service Class	Service Factor
I	1.00 to 1.39
II	1.40 to 1.99
III	2.00 and above

In the gearmotors selection table each unit is also classified by an AGMA service class. See page 34 or additional detail.

d. NORD Mass Acceleration Service Factoring

NORD often uses a calculation based system to properly assign a service factor. This system considers hours of operation per day, the severity of the application and the number of times the equipment is cycled. See page 38 for additional detail.



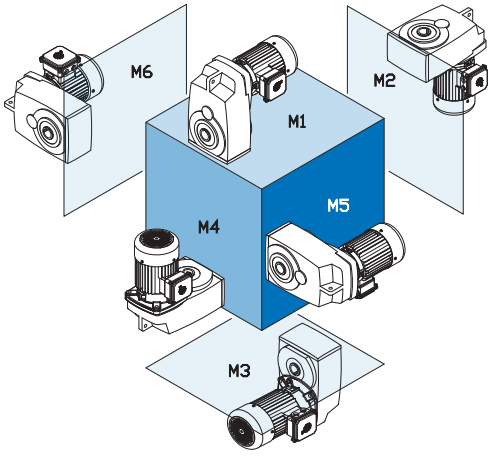
4. Gearbox Input

NORD's modular design allows for a number of different inputs to be added to our reducers including:

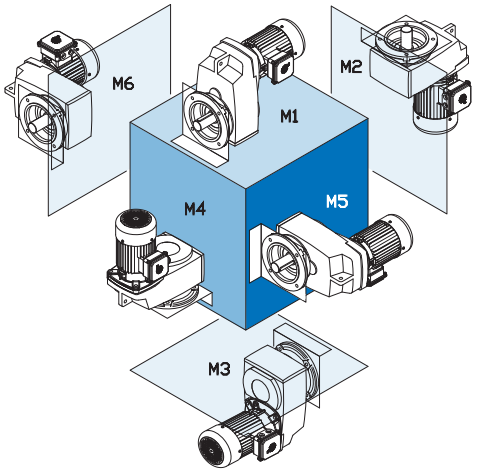
- Integral motor
- NEMA-C and IEC motor adapter
- Solid input shaft
- Servo motor adapter
- Scoop mount
- Motor mount platform

5. Mounting Position

The gearbox mounting position is an important and often overlooked specification. The mounting position determines how much oil the gear reducer requires, in addition to determining the position of the oil drain, oil fill and vent on the gear drive. NORD offers six basic mounting positions. If your application requires a variation from the six basic mounting positions, please contact NORD.



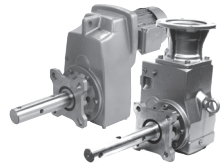
CLINCHER™ Shaft Mounting



CLINCHER™ Flange Mounting

6. Options

NORD offers a number of mechanical, protective, and paint & lubrication options for our gear reducers & motors. Please see page 48 or gear unit options & refer to page 244 for motor options.



7. Checks

a. Thrust Loads (Axial)

Loads that are directed towards or away from the gearbox along the axis of the shaft are called thrust or axial loads. Output shaft thrust capacity [FA] can be found in the gearmotor rating tables. Thrust load capacities should not exceed the values listed in the tables to ensure long bearing life. Contact NORD for combination loads or a more exact examination of the application.

b. C-face Motor Weight Limits

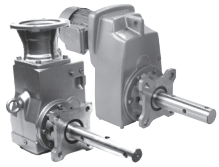
When mounting a motor to a NORD motor adapter it is important to consider the motor's weight. The following are tables that includes the maximum motor weight the NEMA or IEC adapters can support. If the motor exceeds the listed weight it must be externally supported. When a C-face mounted motor is externally supported care must be taken to ensure that the support system does not impose additional pre-loads on the motor adapter.

NEMA Motor Weight Limit

Motor FRAME	56C	143TC	145TC	182TC	184TC	210TC	250TC	280TC	324TC	326TC	365TC
Max Motor Weight [lb]	66	88	110	130	175	220	440	550	770	1100	1540

IEC Motor Weight Limit

Motor FRAME	63	71	80	90	100	112	132	160	180	200	225	250	280	315
Max Motor Weight [lb]	55	66	88	110	130	175	220	440	550	770	1100	1540	2200	3300



General Warnings & Cautions

Applications with risk of personal injury should be reviewed together with NORD. Examples include hoists, lifts or other applications where people may be at risk.

Vertical Reducer Mounting Positions

Gear units and gear motors may be mounted in positions with vertical shafts. For these mounting positions, the gear units are filled with increased amounts of lubricant. In some instances they may also be equipped with specially sealed, grease lubricated bearings. Gear units with vertical shafts have increased oil-splashing-losses resulting in a higher temperature rise during operation.

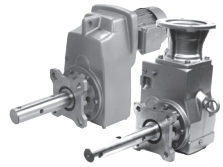
Consult NORD for determination of the thermal power capacity if the gear reducer is mounted as follows:

- In the reducer in upright or standing mounting position (M2 or M4).
- Right-angle reducer with vertical-down or vertical-up output-shaft mounting position (M5 or M6).

Page 23 displays the mounting positions.

Ventilation

Screw Conveyor gear units (SCP) include a vent to compensate for the difference in air pressure between the interior of the gear unit and it's environment. Our vents are sealed before delivery with a transportation plug that must be removed prior to the reducer's activation.



NEMA and IEC Adapters

NEMA/IEC adapters have an additional shaft coupling and additional bearing seats compared to integral motors. This means that there are higher no-load losses with NEMA or IEC adapters. We recommend mounting the motor directly, since it offers technical and cost advantages.

NEMA and IEC adapters used in hoist, lifts and other applications with danger of personal injury should be reviewed together with NORD.

NEMA C-Face Adapter Capacity

The NEMA adapters are designed to handle the torques produced by the standard NEMA power assignment at 4 pole (1800 rpm) motor speeds. If a larger motor power is used than the power below NORD should be consulted. Also if a NEMA adapter is being used for other than an AC induction motor NORD should be consulted.

Adapter	Max Power [hp]
56C	1
140TC	2
180TC	5
210TC	10

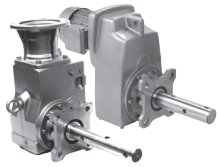
Adapter	Max Power [hp]
250TC	20
280TC	30
320TC	50
360TC	75

Overload Conditions

Loads that exceed the gearbox ratings are considered overloads. An overload may either be momentary or periodic in duration, as well as quasi-steady or vibratory in nature. The load magnitude and the number of stress cycles need to be considered and analysis is required to prevent low-cycle fatigue or yield stress failure.

Refer the following load conditions to the factory:

- The peak momentary or starting load exceeds 200% percent of gear unit's rated capacity.
- Frequent load reversals occur and develop high peak torques during the changes in load direction.
- Heavy repetitive shock loads may occur.
- When high-energy loads must be absorbed and high peak torques develop, such as when stalling conditions occur.



Oversized Prime Movers

High torque motors or oversized prime movers are sometimes needed to overcome high energy loads. Recommended operating service factors do not cover instances where oversized prime movers are required. These applications should be reviewed by the factory.

Variable Speed or Multi-Speed Applications

Gear reducer ratings in this catalog are based upon single speed operation of the gear unit. When selecting gear drives for multi-speed or variable speed applications, determine the speed at which the greatest torque is developed and make the initial selection of the gear drive on that basis.

The following information is essential in order for NORD to verify adequate oil distribution, thermal capacity and whether or not there is any need for an oil distribution system or special cooling options:

- Indicate the operating speed requirements and gear ratio.
- Provide the minimum and maximum speeds are along with the speed duration cycles.

NORD Gear specifies different oil levels for various gear reducer sizes, speeds, ratios and mounting positions; If one intends to operate an existing gear drive at a different speed from those shown on the nameplate, the full application and nameplate information must be reviewed by the factory.

Brake Equipped Applications

When a brake is either supplied between the motor and the prime mover or included with a motor, the gear drive must be selected by either the brake's rating or the highest equivalent input power, whichever is greater. If the brake rating is higher than 200% of the rated gear unit capacity or if the brake is located on the output shaft of the gear drive, the application should be reviewed by the factory.

Protection against Moisture

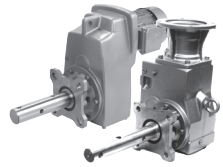
Wet or Damp Outdoor Installation

Special seals and anti-corrosion measures are required for installation outdoors, in wet or damp environments or in tropical climates.

Exposure to Solar Heating

If a drive is exposed to radiant or solar heating, while operating in the sun at ambient temperatures of 104ºF (40ºC) or higher, then special protection measures are recommended. This protection can consist of a canopy over the gear drive or reflective paint on the gear drive. If neither is possible, a heat exchanger or other cooling device may be required.

Protection against Solar Heating



Nord provides protection against a wide variety of special conditions.

Special Conditions

Consideration must be taken during unit selection when special environmental or extraordinary conditions are present during transportation, storage or operation. Please consult NORD for assistance.Special conditions may include (but are not limited to):

- Exposure to aggressive corrosive materials (contaminated air, gasses, acids, bases, salts, etc.).
- Exposure to very high relative humidity (installed outside, in damp rooms, or used in tropical environments).
- Direct contact between the motor and liquid.
- Material build-up on the gear unit or motor (dirt, dust, sand, etc.).
- High atmospheric pressure.
- Radiation exposure.
- Extreme high or low temperatures or large temperature fluctuations.
- High vibration, rapid accelerations or decelerations, shock or impact.
- Other abnormal conditions

Special Applications

Severe operating conditions typically apply for gear drive applications such as agitators, mixers, ventilators, fans, and cooling towers.

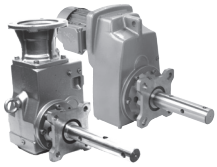
Often these applications may involve one or more of the following operating conditions:

- 24-hour continuous operation at or near full-load motor power or full-load torque.
- A large inertia or moving mass at the reducer output with a small gear ratio generating very high load conditions at the reducer's input.
- Vibrations may be common, such as those found when an external drive chain or belt is used.
- A direct gear drive connection to a mixer or fan shaft that produces high oscillating and bending movements as well as high load forces to the reducers drive shaft and internal bearings.
- Vertical reducer configuration is needed & special reducer options are often necessary.
- Outdoor installation (i.e. humidity and aggressive media, as well as sudden changes in temperature with the possibility of condensation).
- A high degree of environmental protection is required (special sealing, biodegradable oil, special maintenance and servicing needs, low noise, etc.).

NORD has experience with many unique applications and has developed a package of design options in order to meet these requirements. Please consult NORD when selecting a gear unit for special applications.

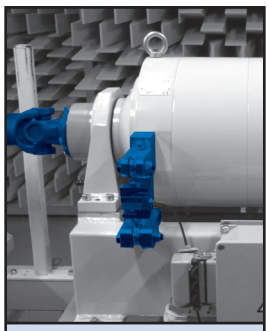
Storage Before Installation

The gear units and motors should be stored in a dry area before they are to be installed. Special measures are required for longer storage. Please request long term storage instructions from NORD Gear or from the NORD web site.



Gear Reducer Ratings

The permissible continuous power limit of gear reducers is limited by both the mechanical rating and the thermal rating. The mechanical rating depends upon the material strength of the gear reducer's gears, bearings, housing, shafts, etc. The mechanical input power limit to the reducer is also a function of the mechanical power rating divided by the relevant reducer service factor.



A torque dynamometer set up for operation in our test facility

The thermal rating or thermal limit depends upon the amount heat generated within the reducer and is influenced by a variety of factors including:

- Churning or splashing losses in the lubricant which depend upon reducer type, ratio, input style, mounting position or oil fill-level, and the circumferential travel velocities of the gear wheels.
- The actual speed and load conditions. These factors determine load-dependent losses in the gears and frictional losses in the gears, bearings and seal areas.
- Ambient Conditions:
  - Ambient Temperature.
  - Amount of free air circulation around the drive.
  - Possible near-by heat sources.
  - Heat dissipation or the ability of the reducer to transfer heat through the housing, shafts, and the mating sub-structure or mounting surface.

Observing the Reducer's Thermal Limit

When to Contact NORD

Through computer program analysis NORD can evaluate application conditions and the impact they have on a reducer's thermal capacity.

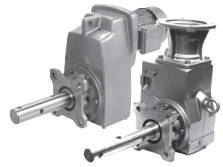
Special considerations may be taken for operation in extreme thermal environments

When applying helical in-line, Clincher™ shaft mount, & helical-bevel gear units of case sizes 6 & larger (SK62, SK6282 and SK9072.1 and larger), consult NORD if any two or more of the following conditions apply:

- Gear ratio, $i_{total} \leq 24:1$or $\leq 48:1$ for helical-bevel units
- Input power, $P_1 \geq 60$ hp (45 kw)
- Input speed, $n_1 > 1800$
- Vertical positioning (mounting position M2 or M4)
- Input configuration: NEMA C-face, IEC, servo adapter or solid-shaft input (Type-W)
- Elevated ambient temperature ≥ 86° F (30 °C)

Advise NORD of any special application considerations:

- Confined space or limited air circulation
- Exposure to other near-by radiant heat sources
- Dirty or dusty environments
- High altitude operation > 3,280 ft (1000 m) a.s.l.



Dangers of Reducer Overheating

The following problems may result when a reducer's thermal capacity or maximum oil sump temperatures are exceeded:

- Lubrication oxidation, breakdown & deterioration.
- A decrease in lubrication viscosity & film thickness.
- Loss of critical bearing and gear clearances required for proper lubrication.
- Increased contact pressures & increased operating temps. in the critical load zones of the gearing and bearings.
- An increased possibility for metal-to-metal contact and premature component wear.
- A significant reduction in the lubricant's ability to prevent scuffing, pitting, and in extreme cases galling or welding.

Maximum Oil Sump Temperature Limit

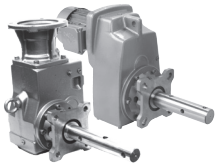
To prevent reducer overheating, the reducer's maximum oil sump temperature limit must not be exceeded for prolonged periods of operation (up to 3 hours continuous operation, depending upon reducer size).

Oil Type	Maximum Oil Temperature Limit	
	NORD	AGMA 9005-D94
Mineral	80-85 °C (176-185 °F)	95 °C (203 °F)
Synthetic	105 °C (220 ° F)	107 ° C (225 ° F)

Measures to Expand the Application Range

There are a variety of measures that may be taken in order to protect against thermal overload and expand the application range of the gear reducer. Common examples include the following:

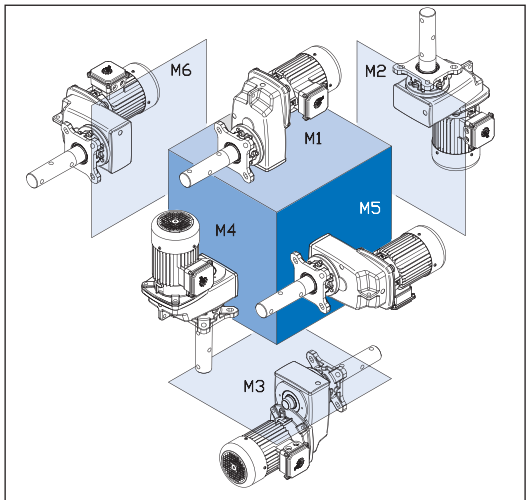
- Recommending a change in lubrication viscosity and/or a specific synthetic lubricant type.
- Applying high-temperature seals.
- Increasing air flow around the gear unit.
- Protecting the reducer from high heat sources.
- Considering an integral motor instead of the bolt-on input assembly covers. In many cases the motor fan will substantially increase air-flow around the gear unit.
- Add an Oil Expansion/Overflow Chamber (Option "OA") or an Oil Reservoir (Option "OT").
- Oil Cooler (Option "OC").
- Water Cooling Cover (Option "WC")



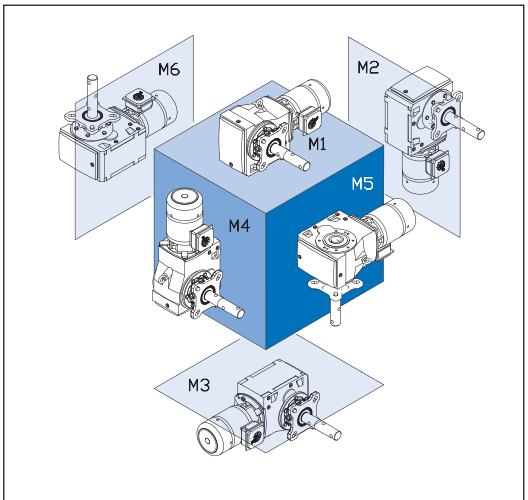
Mounting Positions

The reducer mounting position determines the approximate oil fill level and the appropriate vent location. In some cases the mounting position may dictate possible variation in final reducer assembly. If considering any mounting positions that are not shown as catalog-standard options, it is critical that the customer consult with NORD prior to ordering.

Screw Conveyor Package

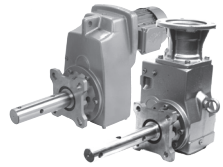


CLINCHER™ SCP Mounting

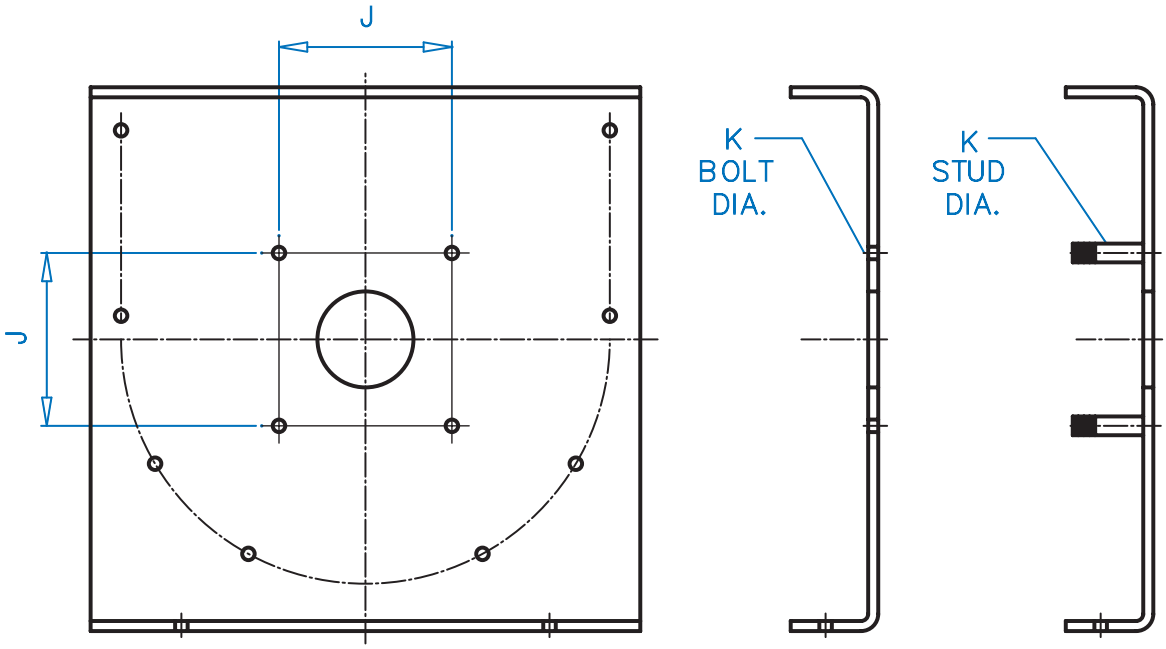


Helical-Bevel SCP Mounting

Mounting Dimensions

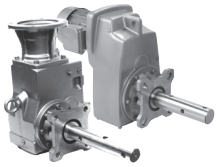


Screw Conveyor Mounting

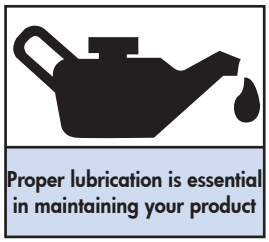


Screw Conveyor mounting dimensions from CEMA 300-13 excerpts

Screw Diameter [in]	CEMA Drive shaft [in]	J Width [in]	K Bolt [in]	K Stud [in]
6	1-1/2	4	1/2	7/16
9	1-1/2	4	1/2	7/16
	2	5-1/8	5/8	9/16
12	2	5-1/8	5/8	9/16
	2-7/16	5-5/8	5/8	9/16
	3	6	3/4	3/4
14	2-7/16	5-5/8	5/8	9/16
	3	6	3/4	3/4
16	3	6	3/4	3/4
18	3	6	3/4	3/4
	3-7/16	6-3/4	3/4	3/4
20	3	6	3/4	3/4
	3-7/16	6-3/4	3/4	3/4
24	3-7/16	6-3/4	3/4	3/4



The Importance of Proper Lubrication



Proper lubrication is essential in maintaining your product

Proper gearbox lubrication is essential in order to reduce friction and component wear, and protect against corrosion and rust. Gear lubricants reduce heat and wear by inserting a load-sharing “protective fluid film” between mating parts and preventing direct metal to metal contact. Properly selected lubricants will operate under various film conditions, improve heat transfer, optimize reducer efficiency, absorb shock loads, reduce noise, inhibit foaming, and separate water readily.

Design Considerations

Along with many other factors, the gear designer must consider the type of gearing (helical, bevel, worm, etc.), the gear load and speed conditions, and the expected operating oil temperatures. These factors help determine a generally suitable oil category, a desired additive package, preferred base-oil type, and oil viscosity.

It is important that the consumer be aware of these many design factors before making any changes in the critical areas (oil category, base-oil type, viscosity, etc.) One should consult their preferred lubrication supplier or NORD Gear when questions arise.

Gear Oil Types, Categorized by Base Oil

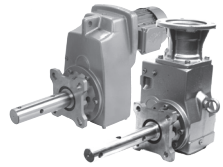
Mineral Oil with an EP Additive (DIN 51517, Type CLP)

High performance mineral gear oils are carefully engineered and manufactured to improve aging characteristics, minimize friction, offer good wear protection, provide corrosion and oxidation resistance, minimize foam, and separate water. Mineral gear oils are classified as API Group I or II oils, depending upon viscosity.

The standard NORD mineral gear oil has an extreme pressure (EP) additive ISO Viscosity Grade EP220 (AGMA 5 EP) and is generally acceptable for helical and helical-bevel gear units. Good quality mineral oil should have the ability to operate at moderate sump temperatures (up to 80-85 °C) without losing viscosity or thickness. A minimum viscosity index (VI) of 93 or higher is suggested. The oil must also have good film strength to handle shock loads, high torque, and start-up conditions. A minimum FZG Scuffing Load Stage 12 is desirable.

Advantages:

- Most economical of all the gear oil types.
- Offers good compatibility with shaft seals, gaskets, paint finishes, etc.
- Offers good corrosion and oxidation protection.
- Effectively reduces internal friction and wear.



Synthetic Oils

Synthetic gear oils are suggested when mineral gear oils have reached their performance limit or when they no longer meet certain application requirements. NORD may recommend synthetic oil for any one of the following conditions:

- Severe duty applications or when gears are exposed to frequent starts and stops, high-load or shock.
- For applications in low or high temperature service.
- To extend oil service interval requirements.
- To eliminate the necessity for seasonal oil changes.
- To extend service life of factory-sealed or maintenance-free gear units.
- To take advantage of performance benefits: shear resistance, low traction coefficient, reduced internal friction, improved lubricity, reduced operating temperatures, improved gear efficiency, etc.

Advantages:

Compared to mineral oils, synthetic oils provide several performance advantages including:

- Ability to operate at higher temperatures without losing viscosity or thickness, due to a much improved viscosity index.
- Improved low-temperature stability due to a lower pour point
- Increased oil change intervals due to superior oxidative and wear resistance
- Lower tendency to form residues and increased resistance to foaming.
- Other benefits may include: very good shear resistance, low traction coefficient, reduced internal friction, improved lubricity, reduced operating temperatures, improved gear efficiency, and extended component life and wear protection.

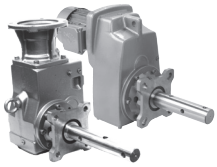
When application conditions warrant the use of synthetic oil, NORD may suggest a particular type of synthetic oil, depending upon the gear unit type and the application.

Synthetic Hydrocarbon/Polyalphaolefin Oil (DIN 51517, Type CLP-HC)

Synthetic Hydrocarbons (SHC) or Polyalphaolefin (PAO) synthetic base oils offer good miscibility with mineral base oils and are very readily available. SHC/PAO oils are classified as API Group IV oils. The can be formulated with or without anti-wear (AW) or extreme pressure (EP) additives. They can also be formulated for acceptance in food-grade applications.

Advantages:

- Higher viscosity index and therefore greater high-temperature stability than mineral oil.
- Better low-temperature stability and lower pour point than mineral type gear oils
- High surface tension and lower tendency to foam compared to mineral oil, and water-soluble polyglycol gear oils.
- Compatible (miscible) with mineral oil.
- Better water seperability demulsibility than PG oils.



Polyalkylene Glycol or Polyglycol Synthetic Oil (DIN 51517, Type CLP-PG)

Polyalkylene glycol or polyglycol (PAG or PG) synthetic gear oils are made readily available through many lubrication suppliers. PG oils are classified as API Group V gear oils. They can also be formulated for acceptance in food-grade applications.

PG gear oils possess extremely low traction coefficients and a viscosity index higher than any of the other synthetics (often greater than 220 VI), resulting in excellent heat resistant, shear stability, and natural anti-wear properties.

Typical PG gear oils are formulated with a 1:1 or higher ratio of ethylene oxide to propylene oxide (50:50 or 60:40 is common); this makes PG gear oils water soluble, providing them with very good corrosion resistance even when water is present in concentrations that are higher then what is normally allowed.

Advantages:

- PG oils offer the highest viscosity index of any other synthetic resulting in excellent heat resistant, shear stability, and superior natural anti-wear properties without requiring EP-additives.
- PG gears oils minimize internal friction and often result in improved gear efficiency.
- PG oils have significantly higher film strength than mineral and SHC/PAO oils and out perform these oils at higher operating oil temperatures (approaching 80°C or higher).

⚠ ***CAUTION*** ⚠
Polyglycol (PG) oils are not miscible with other oil types and should never be mixed with mineral oil, hydrosynthesized synthetic or PAO synthetic oils.

Food-Grade Lubricants

Food-grade lubricants should be manufactured in compliance with FDA 212 CFR 178.3570 and should either satisfy the former 1998 USDA Guidelines as an H1 lubricant or currently qualify as a NSF-H1 lubricant. Please consult with lubrication manufacture for more information or visit www.nsf.org

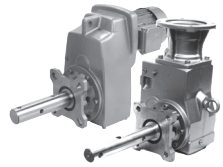
H1 food grade oil can only contain additives which appear on the FDA “approved list” for food safe compounds. H1 oils are generally absent of common zinc-based AW additives, and sulfur-phosphorus based, EP chemistries, commonly found in many industrial gear oils. Food manufactures control risk and liability by following detailed guidelines outlined by the HACCP (Hazard Analysis and Critical Control Point) program, which includes food-grade H1 lubricants. Food grade H1 lubricants may be formulated as highly refined mineral oils (white oils), SHC/PAO synthetic oils or PG synthetic oils.

The highly refined nature of good-quality food-grade white-oils provides good long-term oxidative stability and in most cases adequate lubrication under high-load (boundary) conditions. So long as food-grade white oils meet the minimum anti-wear requirements of the normally specified non-food grade oil, they are often acceptable. Both food-grade white oils and PAO’s have an inherent “purity” and absence of polar compounds, making them better than the average mineral oil or even PG oil in terms of demulsibility (water seperability).

Advantages:

Compared to food-grade white-oils, food-grade synthetic PAO or PG oils typically provide:

- Better wear and oxidation resistance.
- Improved high-temperature characteristics.
- Better cold-temperature behavior.



The Importance of Oil Viscosity

Viscosity or the oil's resistance to shear under load, is often considered the single most important property of any gear oil.

NORD Gear Designers have selected the most appropriate ISO viscosity grade of oil, for each type or class of gear reducer. Gear oil viscosity is selected by assuming typical ambient conditions, at rated speed and load conditions.

Important Considerations:

- The correct viscosity selection helps provide proper lubrication and assures that a minimum film thick-ness is maintained between interacting surfaces.
- The degree to which viscosity changes with temperature or the viscosity index, varies from oil to oil, and depends upon the type of lubricant and additive agents used.
- Selecting too low of a viscosity can result in mixed-boundary (partial metal-to metal contact) or boundary lubrication (full metal-to-metal contact) conditions, increasing internal friction heat build-up and wear.
- Selecting too high of a viscosity results in increased churning and squeezing losses in the load zone and excessive heat (especially when peripheral gear speeds are high); Ultimately, this causes the oil temperature to rise and the viscosity to go down, decreasing the effectiveness of the lubricant.

Considering an Oil Viscosity Change

There are three primary reasons to consider a lubrication viscosity change as follows:

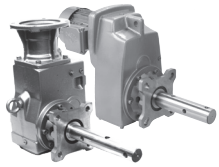
1. Low temperature gear oils should be selected so that the pour point is at least 9°F (5°C) lower than the expected minimum ambient temperature. In extreme cases, consider a lower ISO Viscosity rating and test the critical performance of the gear box under cold start-up.
2. High temperature applications may require an increase in the lubricants viscosity to assure proper lubrication conditions in the critical load zones of the gear unit. NORD also recommends switching to synthetic oil if oil sump temperatures exceed 176-185 °F (80-85 °C).
3. In cases of extreme load conditions, gear pairs and antifriction bearings may be more susceptible to scuffing wear. In these operating conditions, it may be beneficialto consider an increased lubrication viscosity and/or lubrication with improved antiwear additive packages.

NORD recommends that the user consult with their primary lubrication supplier when considering changes in oil viscosity.

Maximum Oil Sump Temperature Limit

To prevent reducer overheating, the reducer's maximum oil sump temperature limit must not be exceeded for prolonged periods of operation (up to 3 hours continuous operation, depending upon reducer size).

Oil Type	Maximum Oil Temperature Limit	
	NORD	AGMA 9005-D94
Mineral	80-85 °C (176-185 °F)	95 °C (203 °F)
Synthetic	105 °C (220 ° F)	107 ° C (225 ° F)



Lubrication Types

Proper gearbox lubrication is essential in order to reduce friction, heat, and component wear. Lubricants reduce heat and wear by inserting a protective "fluid boundary" between mating parts and preventing direct metal to metal contact. Lubricants also help prevent corrosion and oxidation, minimize foam, improve heat transfer, optimize reducer efficiency, absorb shock loads and reduce noise.

Mounting position not only determines the proper fill-level but may also have some effect on final reducer assembly. If considering any mounting positions that are not shown as catalog-standard options, it is critical that the customer consult with NORD prior to ordering. Unless otherwise specified, NORD supplies all Screw conveyor gear units factory-filled with the standard mineral lubrication type and the appropriate quantity.

Standard Oil Lubricants

Gear Unit Type	ISO Viscosity	Oil Type	Ambient Temperature Range	Manufacturer Brand/Type	Notes
Clincher™ SCP & Helical-Bevel SCP	VG220	MIN-EP	0 to 40°C (32 to 104°)	Mobilgear 600XP220	♦❶
	VG220	PAO-EP	-35 to 60°C (-31 to 140°F)	Mobil SHC Gear 220	♦
	VG220	FG	-5 to 40°C (23 to 104°F)	Fuchs FM220	♦

Optional Oil Lubricants

Gear Unit Type	ISO Viscosity	Oil Type	Ambient Temperature Range	Manufacturer Brand/Type	Notes
Clincher™ SCP & Helical-Bevel SCP	VG460	PAO-EP	-35 to 80°C (-31 to 176°F)	Mobil SHC Gear 460	-
	VG460	FG-PAO	-35 to 80°C (-31 to 176°F)	Mobil SHC Cibus 460	-
	VG220	FG-PAO	-35 to 60°C (-31 to 140°F)	Mobil SHC Cibus 220	-
	VG150	PAO-EP	-35 to 25°C (-31 to 77°F)	Mobil SHC Gear 150	-

Standard Bearing Grease Lubricants

Grease Thickener	NLGI Grade	Grease Type	Ambient Temperature Range	Manufacturer Brand/Type	Notes
Li-Complex	NLGI 2	MIN	-30 to 60°C (-22 to 140°F)	Mobil Grease XHP222	♦❶
Li-Complex	NLGI 2	PAO	-40 to 80°C (-40 to 176°F)	Mobil / Mobilith SHC 220	♦
Polyurea	NLGI 2	FG-PAO	-30 to 80°C (-22 to 176°F)	Mobil SHC Polyrex 222	♦

♦ Stocked Lubricants

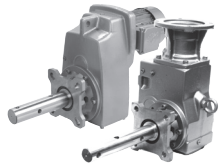
❶ Standard product on serviceable gear units

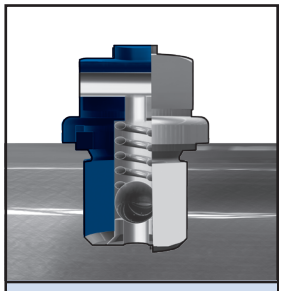
IMPORTANT NOTES

- Food grade lubricants must be in compliance with FDA 212 CFR 178.3570 and qualify as a NSF-H1 lubricant. Please consult with lubrication manufacturer for more information.
- When making a lubrication change, check with the lubrication supplier to assure compatibility and to obtain recommended cleaning or flushing procedures.
- Do not to mix different oils with different additive packages or different base oil formulation types. Polyglycol(PG) oils are not miscible with other oil types and should never be mixed with mineral oil.
- Consult NORD if considering oils of ISO Viscosity VG100 or lower.

Oil Type Codes

MIN-EP	Mineral Oil with EP Additive
PAO	Synthetic Polyalphaolefin Oil
PAO-EP	Synthetic Polyalphaolefin Oil with EP Additive
FG	Food-Grade Oil
FG-PAO	Food-Grade, Synthetic Polyalphaolefin Oil





The Standard AUTOVENT™

Ventilation

Most gear reducers (except for SK0182NB, SK0282NB and SK1382NB) are equipped with a vent which helps compensate for air pressure differences between the inner space of the gear unit and the atmosphere.

The spring-pressure vent (AUTOVENT™) is commonly supplied and factory-installed. Normally open vents may also be supplied as an option; normally-open vents are closed upon delivery in order to prevent oil leakage during transport. When normally open vents are supplied, the sealing plugs must be removed prior to commissioning the reducer.

Prior to reducer start-up, it is important to check the maintenance manual to verify that the vent is properly located with respect to mounting position.

Mounting Position

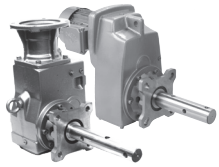
The reducer mounting position determines the approximate oil fill-level and the appropriate vent location. In some cases mounting position may dictate possible variation in final reducer assembly.

If considering any mounting positions that are not shown as catalog-standard options, it is critical that the customer consult with NORD prior to ordering.

Oil Fill Quantities

Oil fill quantities shown in the catalog or maintenance instructions are approximate amounts. The actual oil volume varies depending upon the gear ratio. Prior to commissioning the reducer, the oil-fill level should be checked using the reducer's oil-level plug. It may be necessary to drain excess oil or add additional oil.

Unless otherwise specified, NORD supplies most all gear units factory-filled with the standard lubrication type per the specified mounting position.



Lubrication Replacement

If the gear unit is filled with mineral oil, the lubricant should be replaced at least after every 10,000 operating hours or after every two years. If the gear unit is filled with synthetic oil, the lubricant should be replaced at least after every 20,000 operating hours or after every four years.

Often gear reducers are exposed to extreme ambient conditions, hostile environments, wet conditions, or dirty and dusty operating areas. Especially in these situations, it is important to change the reducer lubricant more often that what is suggested as a typical guideline.

The Importance of Routine Oil Analysis

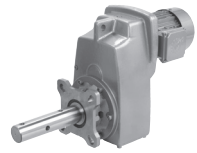
Routine oil analysis, sound lubrication practices, and good tracking of oil performance trends as related to specific equipment, will help establish proper lubrication maintenance and change-out intervals.

To maximize equipment reliability, NORD Gear generally recommends a condition-based lubrication maintenance program. One may take exceptions to this general recommendation on sealed-for-life or maintenance-free gear units or smaller and less costly gear units. In these instances, the replacement cost of the gear unit is often small compared to the costs associated with this type of oil analysis program.

NORD suggests replacing the gear oil if oil analysis indicates any of the following:

- Viscosity has changed by approximately 10% or more.
- Debris particles (silicon, dust, dirt or sand) exceed 25 ppm.
- Iron content exceeds 150-200 ppm.
- Water content is greater than 0.05% (500 ppm).
- Acid number tests indicate a significant level of oxidative break-down of the oil and a critical reduction in performance.

CLINCHER™ SCP
Oil Fill Quantities



NORD DRIVESYSTEMS

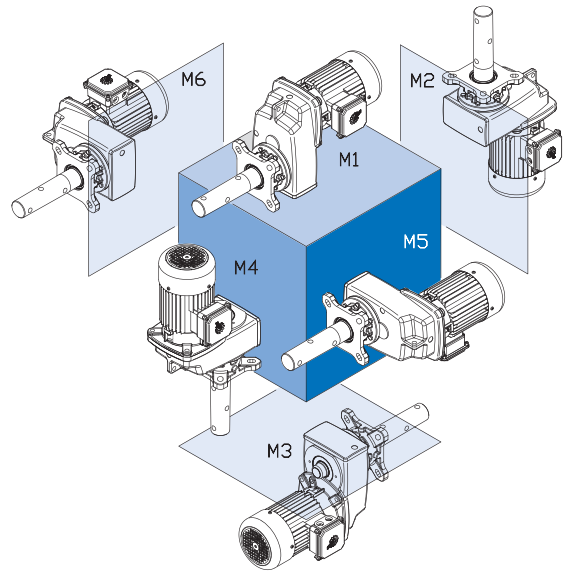
Screw Conveyor Package lubrication

Unless otherwise noted below, the following NORD Gear reducers are shipped from the factory with a pre-determined oil fill level in accordance to the specified reducer size and mounting position. For additional information, please refer to the "Oil Plug & Vent Locations" documentation for your gear unit.

STOP ***HARMFUL SITUATION*** **STOP**

Actual oil volume can vary slightly depending upon the gear case size, mounting and ratio. Prior to commissioning the reducer, check the oil-fill level using the reducer's oil level plug and drain or add additional oil as needed.

For mounting orientations other than shown please consult NORD Gear. Reducer modifications may be required.



Unit Type	Mounting Position											
	M1		M2		M3		M4		M5		M6	
	Quarts	Liters	Quarts	Liters	Quarts	Liters	Quarts	Liters	Quarts	Liters	Quarts	Liters
SK 1282	0.95	0.90	1.37	1.30	0.95	0.90	1.27	1.20	1.00	0.95	1.00	0.95
SK 1382	1.53	1.45	1.69	1.60	1.22	1.15	1.80	1.70	1.16	1.10	1.16	1.10
SK 2282	1.74	1.65	2.54	2.40	2.01	1.90	2.11	2.00	1.90	1.80	1.90	1.80
SK 2382	1.80	1.70	2.75	2.60	2.01	1.90	3.28	3.10	1.59	1.50	1.59	1.50
SK 3282	3.33	3.15	4.33	4.10	3.44	3.25	4.33	4.10	3.33	3.15	3.33	3.15
SK 3382	4.33	4.10	5.18	4.90	3.49	3.30	5.92	5.60	3.49	3.30	3.49	3.30
SK 4282	4.97	4.70	6.45	6.10	5.02	4.75	5.71	5.40	4.97	4.70	4.97	4.70
SK 4382	6.24	5.90	7.19	6.80	5.18	4.90	8.77	8.30	5.18	4.90	5.18	4.90
SK 5282	7.93	7.50	9.30	8.80	7.93	7.50	9.30	8.80	7.61	7.20	7.61	7.20
SK 5382	13.21	12.50	12.68	12.00	7.08	6.70	14.80	14.00	8.77	8.30	8.77	8.30
SK 6282	17.97	17.00	14.80	14.00	12.68	12.00	18.50	17.50	10.57	10.00	14.80	14.00
SK 6382	17.44	16.50	13.74	13.00	10.15	9.60	19.03	18.00	14.80	14.00	13.21	12.50

Helical-Bevel SCP Oil Fill Quantities

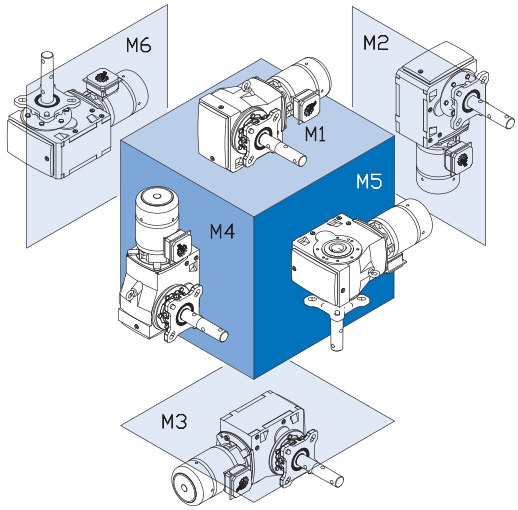
Screw Conveyor Package lubrication

Unless otherwise noted below, the following NORD Gear reducers are shipped from the factory with a pre-determined oil fill level in accordance to the specified reducer size and mounting position. For additional information, please refer to the "Oil Plug & Vent Locations" documentation for your gear unit.

STOP ***HARMFUL SITUATION*** **STOP**

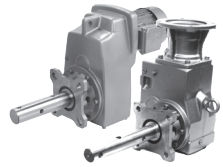
Actual oil volume can vary slightly depending upon the gear case size, mounting and ratio. Prior to commissioning the reducer, check the oil-fill level using the reducer's oil level plug and drain or add additional oil as needed.

For mounting orientations other than shown please consult NORD Gear. Reducer modifications may be required.



Unit Type	Mounting Position											
	M1		M2		M3		M4		M5		M6	
	Quarts	Liters	Quarts	Liters	Quarts	Liters	Quarts	Liters	Quarts	Liters	Quarts	Liters
SK9012.1	0.74	0.70	2.01	1.90	2.01	1.90	2.54	2.40	1.27	1.20	1.80	1.70
SK9013.1	1.27	1.20	2.43	2.30	2.32	2.20	3.17	3.00	1.48	1.40	2.01	1.90
SK9022.1	1.37	1.30	2.75	2.60	3.70	3.50	4.44	4.20	2.11	2.00	2.96	2.80
SK9023.1	2.54	2.40	3.17	3.00	4.02	3.80	5.60	5.30	2.32	2.20	3.28	3.10
SK9032.1	2.01	1.90	5.49	5.20	6.76	6.40	7.71	7.30	3.49	3.30	5.39	5.10
SK9033.1	4.02	3.80	6.02	5.70	7.29	6.90	8.98	8.50	3.80	3.60	5.92	5.60
SK9042.1	3.80	3.60	10.25	9.70	12.05	11.40	12.15	11.50	6.87	6.50	8.66	8.20
SK9043.1	6.02	5.70	10.78	10.20	15.53	14.70	15.53	14.70	6.97	6.60	10.14	9.60
SK9052.1	7.93	7.50	17.44	16.50	21.13	20.00	23.78	22.50	12.15	11.50	19.02	18.00
SK9053.1	13.21	12.50	19.02	18.00	22.72	21.50	28.00	26.50	13.74	13.00	17.96	17.00

AGMA Service Classes



NORD DRIVESYSTEMS

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AGMA Service Class Selection for Gearmotors and Motorized Reducers

Before a gearmotor is selected, an application classnumber must be determined. Since application classification represents the normal relationship between gear design power rating and the maximum potential transmitted power, it is suggested that the application class number be applied to the nameplate rating of the electric motor. The application class numbers are I, II, and III. Their relationship to service factor is:

Class Numbers	f_B
I	1.0 - 1.39
II	1.4 - 1.99
III	≥ 2.0

Application class numbers may be selected from the table. Some operational characteristics that affect an application's classification are:

- **Starting conditions:** Starting conditions where peak loads exceed 200 percent of rated load, applications with frequent starts and stops and reversing applications require special analysis. Rated load is defined as the unit rating with an application class number of I (1.0 - 1.39 service factor).
- **Overloads:** Loads in excess of the rated load are considered overloads. Overload can be of momentary duration, periodic, quasi-steady state, or vibratory in nature. The magnitude and the number of stress cycles require special analysis to prevent low cycle fatigue or yield stress failure. Applications with high torque motors, motors for intermittent operation and applications where extreme repetitive shock occurs or where high-energy loads must be absorbed as when stalling require special consideration.
- **Brake equipped applications:** When a gear drive is equipped with a brake that is used to decelerate the motion of the system, select the drive based on the brake rating or the equivalent power, whichever is greater. If the brake is located on the output shaft of the gear drive, special analysis is required.
- **Reliability and life requirement:** Applications requiring a high degree of reliability or unusually long life should be given careful consideration by the user and NORD GEAR before assigning an application class number. High reliability and life should be addressed by using an increased safety factor agreed to between NORD and the purchaser.

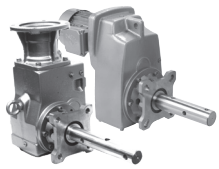
Synchronous motors, certain types of high torque induction motors and generator drives require special analysis. Synchronous motors have high transient torque during starting and restarting after they trip out momentarily.

Induction motors of special high slip design can produce extremely high starting torque. High torque loads are produced when the motor trips out for a very short time and then the trip re-closes.

Generators have extremely high loads when they are out of phase with the main system and when there are across the line short circuits.

Adjustments to the gear drive selection may be necessary when one or more of the following conditions exist:

- Ambient conditions. Extremes of temperature and environment.
- Lubrication. Any lubricant not in accordance with NORD's recommendations.
- Misalignment and distortions due to inadequate foundations.
- Reversing applications.
- High-risk applications involving human safety.



Service Class Tables

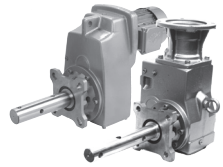
The service class tables provide a guide in the selection and application of gear drives designed and rated in accordance with AGMA Standard 6013.

The service class tables have been developed from the experience of manufacturers and users of gear drives for use in common applications and has been found to be generally satisfactory for the listed industries when gears are applied using AGMA standards. It is recommended that the user and NORD Gear agree upon class numbers for special applications when variations from the table may be required.

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
AGITATORS (mixers)			
Pure Liquids	I	I	II
Liquids and Solids	I	II	II
Liquids – Variable Density	I	II	II
BLOWERS			
Centrifugal	I	I	II
Lobe	I	II	II
Vane	I	II	II
BREWING AND DISTILLING			
Bottling Machinery	I	I	II
Brew Kettles – Continuous Duty	II	II	II
Cookers – Continuous Duty	II	II	II
Mash Tubs – Continuous Duty	II	II	II
Scale Hopper – Frequent Starts	II	II	II
CAN FILLING MACHINES	I	I	II
CAR DUMPERS	II	III	III
CAR PULLERS	I	II	II
CLARIFIERS	I	I	II
CLASSIFIERS	I	II	II
CLAY WORKING MACHINERY			
Brick Press	II	III	III
Briquette Machine	II	III	III
Pug Mill	I	II	II
COMPACTORS	III	III	III
COMPRESSORS			
Centrifugal	I	I	II
Lobe	I	II	II
Reciprocating, Multi-Cylinder	II	II	III
Reciprocating, Single-Cylinder	III	III	III
CONVEYORS – GENERAL PURPOSE			
Includes Apron, Assemble, Belt, Bucket, Chain, Flight, Oven & Screw - Uniformly loaded or Fed	I	I	II
Heavy Duty – Not Uniformly Fed	I	II	II
Severe Duty – Reciprocating or Shaker	II	III	III
CRANES[1)]			
Main Hoist			
Medium Duty	II	II	II
Heavy Duty	III	III	III
Reversing	II	II	II
Skip Hoist	II	II	II
Trolley Drive	II	II	II
Bridge Drive	II	II	II
CRUSHER			
Stone or Ore	III	III	III

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
DREDGES			
Cable Reels	II	II	II
Conveyors	II	II	II
Cutter Head Dives	III	III	III
Pumps	III	III	III
Screen Drives	III	III	III
Stackers	II	II	II
Winches	II	II	II
ELEVATORS			
Bucket	I	II	II
Centrifugal Discharge	I	I	II
Escalators	I	I	II
Freight	I	II	II
Gravity Discharge	I	I	II
EXTRUDERS			
General	II	II	II
Plastics			
Variable Speed Drive	III	III	III
Fixed Speed Drive	III	III	III
Rubber			
Continuous Screw Operation	III	III	III
Intermittent Screw Operation	III	III	III
FANS			
Centrifugal	I	I	II
Cooling Towers	III	III	III
Forced Draft	II	II	II
Induced Draft	II	II	II
Industrial & Mine	II	II	II
FEEDERS			
Apron	I	II	II
Belt	I	II	II
Disc	I	I	II
Reciprocating	II	III	III
Screw	I	II	II
FOOD INDUSTRY			
Cereal Cooker	I	I	II
Dough Mixer	II	II	II
Meat Grinders	II	II	II
Slicers	I	II	II
GENERATORS AND EXCITERS	II	II	II
HAMMER MILLS	III	III	III
HOISTS			
Heavy Duty	III	III	III
Medium Duty	II	II	II
Skip Hoist	II	II	II

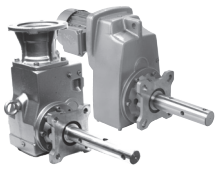
AGMA Service Classes



NORD DRIVESYSTEMS

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
LAUNDRY TUMBLERS	II	II	II
LAUNDRY WASHERS	II	II	III
LUMBER INDUSTRY			
Barkers			
Spindle Feed	II	II	II
Main Drive	III	III	III
Conveyors			
Burner	II	II	II
Main or Heavy Duty	II	II	II
Main log	III	III	III
Re-saw, Merry-Go-Round	II	II	II
Slab	III	III	III
Transfer	II	II	II
Chains			
Floor	II	II	II
Green	II	II	III
Cut-Off Saws			
Chain	II	II	III
Drag	II	II	III
Debarking Drums	III	III	III
Feeds			
Edger	II	II	II
Gang	II	III	III
Trimmer	II	II	II
Long Deck	III	III	III
Log Hauls – Incline – Well Type	III	III	III
Log Turning Devices	III	III	III
Planer Feed	II	II	II
Planer Tilting Hoists	II	II	II
Rolls – live-off brg. – Roll Cases	III	III	III
Sorting Table	II	II	II
Tipple Hoist	II	II	II
Transfers			
Chain	II	II	III
Craneway	II	II	III
Tray Drives	II	II	II
Veneer Lathe Drives	II	II	II
METAL MILLS			
Draw Bench Carriage and Main Drive	II	II	II
Runout Table			
Non-reversing	II	II	II
Group Drives	II	II	II
Individual Drives	III	III	III
Reversing	III	III	III
Slab Pushers	II	II	II
Shears	III	III	III
Wire drawing	II	II	II
Wire Winding Machine	II	II	II
METAL STRIP PROCESSING MACHINERY			
Bridles	II	II	II
Coilers & Uncoilers	I	I	II
Edge Trimmers	I	II	II
Flatteners	II	II	II
Loopers (Accumulators)	I	I	I
Pinch Rolls	II	II	I
Scrap Choppers	II	II	II
Shears	III	III	III
Slitters	I	II	II

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
MILLS, ROTARY TYPE			
Ball & Rod			
Spur Ring Gear	III	III	III
Helical Ring Gear	II	II	II
Direct Connected	III	III	III
Cement Kilns	II	II	II
Dryers & Coolers	II	II	II
PAPER MILLS[2]			
Agitator (Mixer)	II	II	II
Agitator for Pure liquors	II	II	II
Barking Drums	III	III	III
Barkers – Mechanical	III	III	III
Beater	II	II	II
Breaker Stack	II	II	II
Calender[3]	II	II	II
Chipper	III	III	III
Chip Feeder	II	II	II
Coating Rolls	II	II	II
Conveyors			
Chip, Bark, Chemical	II	II	II
log (including Slab)	III	III	III
Couch Rolls	II	II	II
Cutter	III	III	III
Cylinder Molds	II	II	II
Dryers[3]			
Paper Machine	II	II	II
Conveyor Type	II	II	II
Embosser	II	II	II
Extruder	II	II	II
Fourdrinier Rolls (Includes lump Breaker, Dandy Roll, Wire Turning, and Return Rolls)	II	II	II
Jordan	II	II	II
Kiln Drive	II	II	II
Mt. Hope Roll	II	II	II
Paper Rolls	II	II	II
Platter	II	II	II
Presses – Felt & Suction	II	II	II
Pulper	III	III	III
Pumps – Vacuum	II	II	II
Reel (Surface Type)	II	II	II
Screens			
Chip	II	II	II
Rotary	II	II	II
Vibrating	III	III	III
Size Press	II	II	II
Supercalendar[4]	II	II	II
Thickener (AC Motor)	II	II	II
Thickener (DC Motor)	II	II	II
Washer (AC Motor)	II	II	II
Washer (DC Motor)	II	II	II
Wind and Unwind Stand	I	I	I
Winders (Surface Type)	II	II	II
Yankee Dryers[3]	II	II	II



AGMA Service Classes

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
PLASTICS INDUSTRY – PRIMARY PROCESSING			
Intensive Internal Mixers			
Batch Mixers	III	III	III
Continuous Mixers	II	II	II
Batch Drop Mill – 2 smooth rolls	II	II	II
Continuous Feed, Holding &	II	II	II
Biend Mill Calendars	II	II	II
PLASTICS INDUSTRY – SECONDARY PROCESSING			
Blow Molders	II	II	II
Coating	II	II	II
Film	II	II	II
Pipe	II	II	II
Pre-Plasticizers	II	II	II
Rods	II	II	II
Sheet	II	II	II
Tubing	II	II	II
PULLERS – BARGE HAUL	II	II	II
PUMPS			
Centrifugal	I	I	II
Proportioning	II	II	II
Reciprocating			
Single Acting, 3 or more cylinders	II	II	II
Double Acting, 2 or more cylinders	II	II	II
Rotary			
Gear Type	I	I	II
Lobe	I	I	II
Vane	I	I	II
RUBBER INDUSTRY			
Intensive Internal Mixers			
Batch Mixers	III	III	III
Continuous Mixers	II	II	II
Mixing Mill			
2 smooth rolls	II	II	II
1 or 2 corrugated rolls	III	III	III
Batch Drop Mill – 2 smooth rolls	II	II	II
Cracker Warmer – 2 roll, 1 corrugated roll	III	III	III
Cracker – 2 corrugated rolls	III	III	III
Holding, Feed & Blend Mill – 2 rolls	II	II	II
Refiner – 2 rolls	II	II	II
Calendars	II	II	II
SAND MULLER	II	II	II
SEWAGE DISPOSAL EQUIPMENT			
Bar Screens	II	II	II
Chemical Feeders	II	II	II
Dewatering Screens	II	II	II
Scum Breakers	II	II	II
Slow or Rapid Mixers	II	II	II
Sludge Collectors	II	II	II
Thickener	II	II	II
Vacuum Filters	II	II	II

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
SCREENS			
Air Washing	I	I	II
Rotary – Stone or Gravel	II	II	II
Traveling Water Intake I	I	I	I
SCREW CONVEYORS			
Uniformly loaded or Fed	I	I	II
Heavy Duty	I	II	II
SUGAR INDUSTRY			
Beet Slicer	III	III	III
Cane Knives	II	II	II
Crushers	II	II	II
Mills (low speed end)	III	III	III
TEXTILE INDUSTRY			
Batchers	II	II	II
Calendars	II	II	II
Cards	II	II	II
Dry Cans	II	II	II
Dyeing Machinery	II	II	II
Looms	II	II	II
Mangles	II	II	II
Nappers	II	II	II
Pads	II	II	II
Siashers	II	II	II
Soapers	II	II	II
Spinners	II	II	II
Tenter Frames	II	II	II
Washers	II	II	II
Winders	II	II	II

Notes to GEARMOTOR SERVICE FACTOR table:

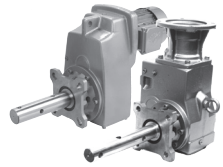
1) Crane drives are to be selected based upon the gear tooth bending strength using the numeric service factors shown in the table or by analysis such as Miners' Rule. In all cases, the pitting resistance service factor shall be a minimum of 1.0. Contact NORD Gear for selection assistance.

2) Service factors for paper mill applications are applied to the nameplate rating of the electric drive motor at the motor rated based speed.

3) Anti-friction bearings only.

4) A Class Number of I may be applied at base speed of a supercalendar operating over a speed range of part-range constant horsepower and part-range constant torque where the constant horsepower speed range is greater than 1.5 to 1. A Class Number of II is applicable to supercalendars operating over the entire speed range at constant torque or where the constant horse-power speed range is less than 1.5 to1.

AGMA Service Factors



NORD DRIVESYSTEMS

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AGMA Service Factor Selection for Speed Reducers

Before an enclosed speed reducer or increaser can be selected for any application, an equivalent unit power rating (service factor = 1.0) must be determined. This is done by multiplying the specified power by the service factor. Since the service factor represents the normal relationship between the gear unit rating and the required application power, it is suggested that the service factor be applied to the nameplate rating of the prime mover or driven machine rating, as applicable.

NORD Gear and the user must agree upon which power, prime mover rating or driven machine requirements, should dictate the selection of the gear drive. It is necessary that the gear drive selected have a rated unit capacity equal to or in excess of this ”equivalent unit power rating”.

All service factors listed are 1.0 or greater. Service factors less than 1.0 can be used in some applications when specified by the user and agreed to by NORD Gear.

The service factor tables should be used with caution, since much higher values have occurred in some applications. Values as high as ten have been used. On some applications up to six times nominal torque can occur, such as: Turbine/Generator drives, Heavy Plate and Billet rolling mills.

It has been developed from the experience of manufacturers and users of gear drives for use in common applications. It is suggested that service factors for special applications be agreed upon by the user and NORD GEAR when variations of the values in the table may be required.

Service factors shown are for reducers driven by motors (electric or hydraulic) and turbines (steam or gas) according to AGMA 6013-A06. When the driver is a single cylinder or multi-cylinder engine, the service factors from the table must be modified for the appropriate type of prime mover.

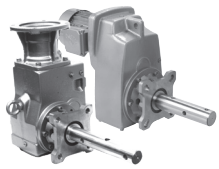
As an example, if the application is a centrifugal blower, the service factor from the reducer service factor table is 1.25 for a motor or turbine. The service factor conversion table changes this value to 1.75 for a single cylinder engine and 1.50 for a multi-cylinder engine.

⚠ CAUTION ⚠

Any user of enclosed gear drives should make sure that the latest available information affecting the selection of a gear drive is used. When better load intensity data is available on the driving or driven equipment, this should be considered when a service factor is selected.

Service Factor Conversion Table for Engine Driven Applications

Electric Motor, Steam & Gas Turbines, Hydraulics	Single-Cylinder Engines	Multi-Cylinder Engines
1.00	1.50	1.25
1.25	1.75	1.50
1.50	2.0	1.75
1.75	2.25	2.00
2.00	2.50	2.25
2.25	2.75	2.50
2.50	3.00	2.75
2.75	3.25	3.00
3.00	3.50	3.25

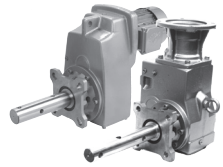


AGMA Service Factors

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
AGITATORS (mixers)			
Pure Liquids	1.00	1.00	1.25
Liquids and Solids	1.00	1.25	1.50
Liquids – Variable Density	1.00	1.25	1.50
BLOWERS			
Centrifugal	1.00	1.25	1.50
Lobe	1.00	1.25	1.50
Vane	1.00	1.00	1.25
BREWING AND DISTILLING			
Bottling Machinery	1.00	1.00	1.25
Brew Kettles – Continuous Duty	1.00	1.00	1.25
Cookers – Continuous Duty	1.00	1.00	1.25
Mash Tubs – Continuous Duty	1.00	1.00	1.25
Scale Hopper – Frequent Starts	1.00	1.25	1.50
CAN FILLING MACHINES	1.00	1.00	1.25
CAR DUMPERS	1.25	1.50	1.75
CAR PULLERS	1.00	1.25	1.50
CLARIFIERS	1.00	1.00	1.25
CLASSIFIERS	1.00	1.25	1.50
CLAY WORKING MACHINERY			
Brick Press	1.25	1.50	1.75
Briquette Machine	1.25	1.50	1.75
Pug Mill	1.00	1.25	1.50
COMPACTORS	1.50	1.75	2.00
COMPRESSORS			
Centrifugal	1.00	1.00	1.25
Lobe	1.00	1.25	1.50
Reciprocating, Multi-Cylinder	1.00	1.25	1.50
Reciprocating, Single-Cylinder	1.25	1.50	1.75
CONVEYORS – GENERAL PURPOSE			
Uniformly loaded or fed	1.00	1.00	1.25
Not uniformly fed	1.00	1.25	1.50
Reciprocating or shaker	1.25	1.50	1.75
CRANES[1)]			
Dry dock			
Main hoist	1.25	1.50	1.75
Auxilliary hoist	1.25	1.50	1.75
Boom hoist	1.25	1.50	1.75
Slewing drive	1.25	1.50	1.75
Traction drive	1.50	1.50	1.50
Industrial Duty			
Main hoist	1.00	1.25	1.50
CRUSHER			
Stone or ore	1.50	1.75	2.00

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
DREDGES			
Cable reels	1.00	1.25	1.50
Conveyors	1.00	1.25	1.50
Cutter Head Dives	1.25	1.50	1.75
Pumps	1.00	1.25	1.50
Screen Drives	1.25	1.50	1.75
Stackers	1.00	1.25	1.50
Winches	1.00	1.25	1.50
ELEVATORS			
Bucket	1.00	1.25	1.50
Centrifugal Discharge	1.00	1.00	1.25
Gravity Discharge	1.00	1.00	1.25
EXTRUDERS			
General	1.25	1.25	1.25
Plastics			
Variable Speed Drive	1.50	1.50	1.50
Fixed Speed Drive	1.75	1.75	1.75
Rubber			
Continuous Screw Operation	1.50	1.50	1.50
Intermittent Screw Operation	1.75	1.75	1.75
FANS			
Centrifugal	1.00	1.00	1.25
Forced Draft	1.25	1.25	1.25
Induced Draft	1.00	1.25	1.50
Industrial & Mine	1.00	1.25	1.50
FEEDERS			
Apron	1.00	1.25	1.50
Belt	1.00	1.25	1.50
Disc	1.00	1.00	1.25
Reciprocating	1.25	1.50	1.75
Screw	1.00	1.25	1.50
FOOD INDUSTRY			
Cereal Cooker	1.00	1.00	1.25
Dough Mixer	1.00	1.25	1.50
Meat Grinders	1.00	1.25	1.50
Slicers	1.00	1.25	1.50
GENERATORS AND EXCITERS	1.00	1.00	1.25
HAMMER MILLS	1.50	1.50	1.75
HOISTS			
Heavy Duty	1.25	1.50	1.75
Medium Duty	1.00	1.25	1.50
Skip Hoist	1.00	1.25	1.50
LAUNDRY TUMBLERS	1.00	1.25	1.50
LAUNDRY WASHERS	1.25	1.25	1.50

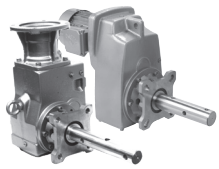
AGMA Service Factors



NORD DRIVESYSTEMS

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
LUMBER INDUSTRY			
Barkers	1.25	1.25	1.50
Spindle Feed	1.50	1.50	1.50
Main Drive	1.25	1.25	1.50
Conveyors			
Burner	1.25	1.25	1.50
Main or Heavy Duty	1.50	1.50	1.50
Main log	1.50	1.50	1.75
Re-saw, Merry-Go-Round	1.25	1.25	1.50
Slab	1.50	1.50	1.75
Transfer	1.25	1.25	1.50
Chains			
Floor	1.50	1.50	1.50
Green	1.50	1.50	1.50
Cut-Off Saws			
Chain	1.50	1.50	1.50
Drag	1.50	1.50	1.50
Debarking Drums	1.50	1.50	1.75
Feeds			
Edger	1.25	1.25	1.50
Gang	1.50	1.50	1.50
Trimmer	1.25	1.25	1.50
Long Deck	1.50	1.50	1.50
Log Hauls – Incline – Well Type	1.50	1.50	1.50
Log Turning Devices	1.50	1.50	1.50
Planer Feed	1.25	1.25	1.50
Planer Tilting Hoists	1.50	1.50	1.50
Rolls – live-off brg. – Roll Cases	1.50	1.50	1.50
Sorting Table	1.25	1.50	1.50
Tipple Hoist	1.25	1.25	1.50
Transfers			
Chain	1.50	1.50	1.50
Causeway	1.50	1.50	1.50
Tray Drives	1.25	1.25	1.50
METAL MILLS			
Draw Bench Carriage/Main Drive	1.00	1.25	1.50
Runout Table			
Non-reversing			
Group Drives	1.00	1.25	1.50
Individual Drives	1.50	1.50	1.75
Reversing	1.50	1.50	1.75
Slab Pushers	1.25	1.25	1.50
Shears	1.50	1.50	1.75
Wire drawing	1.00	1.25	1.50
Wire Winding Machine	1.00	1.25	1.50

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
METAL STRIP PROCESSING MACHINERY			
Bridles	1.25	1.25	1.50
Coilers and uncoilers	1.00	1.00	1.25
Edge Trimmers	1.00	1.25	1.50
Flatteners	1.00	1.25	1.50
Loopers (accumulators)	1.00	1.00	1.00
Pinch rolls	1.00	1.25	1.50
Scrap choppers	1.00	1.25	1.50
Shears	1.50	1.50	1.75
Slitters	1.00	1.25	1.50
MILLS, ROTARY TYPE			
Ball & Rod			
Spur Ring Gear	1.50	1.50	1.75
Helical Ring Gear	1.50	1.50	1.50
Direct Connected	1.50	1.50	1.75
Cement Kilns	1.50	1.50	1.50
Dryers & Coolers	1.50	1.50	1.50
MIXERS CONCRETE	1.00	1.25	1.50
PAPER MILLS[2]			
Agitator (Mixer)	1.50	1.50	1.50
Agitator for Pure liquors	1.25	1.25	1.25
Barking Drums	1.75	1.75	1.75
Barkers – Mechanical	1.75	1.75	1.75
Beater	1.50	1.50	1.50
Breaker Stack	1.25	1.25	1.25
Calender[3]	1.25	1.25	1.25
Chipper	1.75	1.75	1.75
Chip Feeder	1.50	1.50	1.50
Coating Rolls	1.25	1.25	1.25
Conveyors			
Chip, Bark, Chemical	1.25	1.25	1.25
log (including Slab)	1.75	1.75	1.75
Couch Rolls	1.25	1.25	1.25
Cutter	1.75	1.75	1.75
Cylinder Molds	1.25	1.25	125
Dryers[3]			
Paper Machine	1.25	1.25	1.25
Conveyor Type	1.25	1.25	1.25
Embosser	1.25	1.25	1.25
Extruder	1.50	1.50	1.50
Fourdrinier Rolls (Includes lump Breaker, Dandy Roll, Wire Turning and Return Rolls)	1.25	1.25	1.25
Jordan	1.25	1.25	1.25
Kiln Drive	1.50	1.50	1.50

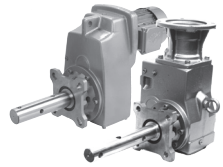


AGMA Service Factors

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
PAPER MILLS[2] (cont)			
Mt. Hope Roll	1.25	1.25	1.25
Paper Rolls	1.25	1.25	1.25
Presses – Felt & Suction	1.25	1.25	1.25
Pulper	1.50	1.50	1.75
Pumps – Vacuum	1.50	1.50	1.50
Reel (Surface Type)	1.25	1.25	1.50
Screens			
Chip	1.50	1.50	1.50
Rotary	1.50	1.50	1.50
Vibrating	1.75	1.75	1.75
Size Press	1.25	1.25	1.25
Supercalendar[4]	1.25	1.25	1.25
Thickener (AC Motor)	1.50	1.50	1.50
Thickener (DC Motor)	1.25	1.25	1.25
Washer (AC Motor)	1.50	1.50	1.50
Washer (DC Motor)	1.25	1.25	1.25
Wind and Unwind Stand	1.00	1.00	1.00
Winders (Surface Type)	1.25	1.25	1.25
Yankee Dryers[2]	1.25	1.25	1.25
PLASTICS INDUSTRY – PRIMARY PROCESSING			
Intensive Internal Mixers			
Batch Mixers	1.75	1.75	1.75
Continuous Mixers	1.50	1.50	1.50
Batch Drop Mill – 2 smooth rolls			
Continuous Feed, Holding & Biend Mill	1.25	1.25	1.25
Calendars	1.50	1.50	1.50
PLASTICS INDUSTRY – SECONDARY PROCESSING			
Blow Molders	1.50	1.50	1.50
Coating	1.25	1.25	1.25
Film	1.25	1.25	1.25
Pipe	1.25	1.25	1.25
Pre-Plasticizers	1.50	1.50	1.50
Rods	1.25	1.25	1.25
Sheet	1.25	1.25	1.25
Tubing	1.25	1.25	1.50
PULLERS – BARGE HAUL	1.00	1.50	1.75

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
PUMPS			
Centrifugal	1.00	1.00	1.25
Proportioning	1.00	1.25	1.50
Reciprocating			
Single Acting, 3 or more cylinders	1.00	1.25	1.50
Double Acting, 2 or more cylinders	1.00	1.25	1.50
Rotary			
Gear Type	1.00	1.00	1.50
Lobe	1.00	1.00	1.25
Vane	1.00	1.00	1.25
RUBBER INDUSTRY			
Intensive Internal Mixers			
Batch Mixers	1.50	1.75	1.75
Continuous Mixers	1.25	1.50	1.50
Mixing Mill			
2 smooth rolls	1.50	1.50	1.50
1 or 2 corrugated rolls	1.75	1.75	1.75
Batch Drop Mill – 2 smooth rolls	1.50	1.50	1.50
Cracker Warmer – 2 roll, 1 corrugated roll	1.75	1.75	1.75
Cracker – 2 corrugated rolls	1.75	1.75	1.75
Holding, Feed & Blend Mill – 2 rolls	1.25	1.25	1.25
Refiner – 2 rolls	1.50	1.50	1.50
Calendars	1.50	1.50	1.50
SAND MILLER	1.00	1.25	1.50
SEWAGE DISPOSAI EQUIPMENT			
Bar Screens	1.00	1.00	1.25
Chemical Feeders	N/A	1.00	1.25
Dewatering Screens	1.00	1.25	1.50
Scum Breakers	1.00	1.25	1.50
Slow or Rapid Mixers	1.00	1.25	1.50
Sludge Collectors	1.00	1.00	1.25
Thickener	1.00	1.25	1.50
Vacuum Filters	1.00	1.25	1.50
SCREENS			
Air Washing	1.00	1.00	1.25
Rotary – Stone or Gravel	1.00	1.25	1.50
Traveling Water Intake I	1.00	1.00	1.25

AGMA Service Factors



NORD DRIVESYSTEMS

Application	Load Duration		
	Up to 3 hrs per day	3-10 hrs per day	Over 10 hrs per day
SCREW CONVEYORS			
Uniformly loaded or Fed	1.00	1.00	1.25
Heavy Duty	1.00	1.25	1.50
Severe Duty Reciprocating	1.50	1.75	2.00
SUGAR INDUSTRY			
Beet Slicer	1.50	1.50	1.75
Cane Knives	1.50	1.50	1.50
Crushers	1.50	1.50	1.50
Mills (low speed end)	1.50	1.50	1.50
TEXTILE INDUSTRY			
Batchers	1.00	1.25	1.50
Calendars	1.00	1.25	1.50
Cards	1.00	1.25	1.50
Dry Cans	1.00	1.25	1.50
Dyeing Machinery	1.00	1.25	1.50
Looms	1.00	1.25	1.50
Mangles	1.00	1.25	1.50
Nappers	1.00	1.25	1.50
Pads	1.00	1.25	1.50
Siashers	1.00	1.25	1.50
Soapers	1.00	1.25	1.50
Spinners	1.00	1.25	1.50
Tenter Frames	1.00	1.25	1.50
Washers	1.00	1.25	1.50
Winders	1.00	1.25	1.50

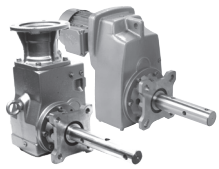
Notes to REDUCER SERVICE FACTOR table:

1) Crane drives are to be selected based upon the gear tooth bending strength using the numeric service factors shown in the table or by analysis such as Miners' Rule. In all cases, the pitting resistance service factor shall be a minimum of 1.0. Contact NORD Gear for selection assistance.

2) Service factors for paper mill applications are applied to the nameplate rating of the electric drive motor at the motor rated based speed.

3) Anti-friction bearings only.

4) A Class Number of I may be applied at base speed of a supercalendar operating over a speed range of part-range constant horsepower and part-range constant torque where the constant horsepower speed range is greater than 1.5 to 1. A Class Number of II is applicable to supercalendars operating over the entire speed range at constant torque or where the constant horse-power speed range is less than 1.5 to1.



Formulas & Conversions

Metric ⇒ Inch

Multiply	By	To Obtain
Gram [g]	x 0.0353	= oz
Kilogram [kg]	x 2.205	= lb
Newton [N]	x 0.2248	= lb
Newton meter [Nm]	x 8.851	= lb-in
Newton meter [Nm]	x 0.7375	= lb-ft
Inertia [kgm²]	x 23.75	= lb-ft²
Kilowatt [kW]	x 1.341	= hp
Meter [m]	x 39.4	= in
Meter [m]	x 3.281	= ft
Meter [m]	x 1.094	= yd
Millimeter [mm]	x 0.0391	= in
Centimeter [cm]	x 0.394	= in
Cubic Centimeter [cm³]	x 0.061	= in³
Liter [l]	x 61.023	= in³
Liter [l]	x 1.057	= qt
Liter [l]	x 0.2642	= gal

Inch ⇒ Metric

Multiply	By	To Obtain
Ounce [oz]	x 28.35	= g
Pound [lb]	x 0.454	= kg
Ounce [oz]	x 0.028	= kg
Pound [lb]	x 4.448	= N
Pound-Inch [lb-in]	x 0.113	= Nm
Pound Feet [lb-ft]	x 1.3558	= Nm
Pound Feet Squared [lb-ft²]	x 0.0421	= kgm²
Horsepower [hp]	x 0.746	= kW
Feet [ft]	x 0.3048	= kW
Yard [yd]	x 0.9144	= m
Inch [in]	x 25.4	= mm
Inch [in]	x 2.54	= cm
Inch [in]	x 0.0254	= m
Cubic Inch [in³]	x 16.39	= cm³
Cubic Inch [in³]	x 0.016	= liters
Gallon [gal]	x 3.785	= liters

Temperature

°F = 1.8 °C + 32

°C = 0.5555 x (°F - 32)

°C = °K - 273.16

Linear Velocity

Miles per Hour [mph]	x 88	= ft/min [fpm]
Miles per Hour [mph]	x 1.4677	= ft/sec [fps]
Feet per Minute [fpm]	x 0.3048	= m/min
Feet per Minute [fpm]	x 0.00508	= m/sec
Meter per Minute [m/min]	x 3.2808	= ft/min [fpm]
Meter per Second [m/sec]	x 196.85	= ft/min [fpm]

Power

$$hp = \frac{\text{Torque (lb-in)} \times \text{rpm}}{63025}$$

$$hp = \frac{\text{Torque (lb-ft)} \times \text{rpm}}{5252}$$

$$hp_{(Lift)} = \frac{\text{Wgt (lb)} \times \text{fpm}}{33000 \times \text{Efficiency}}$$

$$hp_{(Slide)} = \frac{\text{Wgt (lb)} \times \mu \times \text{fpm}}{33000 \times \text{Efficiency}}$$

Torque

$$T_{(lb\text{-}in)} = \frac{hp \times 63025}{rpm}$$

$$T_{(lb\text{-}ft)} = \frac{hp \times 5252}{rpm}$$

Linear & Rotational Speed

$$fpm = 0.2618 \times Dia_{(in)} \times rpm$$

$$rpm = \frac{fpm \times 3.820}{Dia_{(in)}}$$

Electric Motor 3-phase

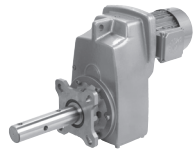
$$hp_{(3ph\text{-}motor)} = \frac{1.732 \times V \times I \times PF \times Efficiency}{746}$$

Metric M Threads

For metric "M" threads, it is customary to omit the thread pitch for course threads. For example, if a thread is called out as an M8 with no pitch shown, it is automatically a course pitch thread.

Course threads and pitch
M6 x 1
M8 x 1.25
M10 x 1.5
M12 x 1.75
M16 x 2
M20 x 2.5
M24 x 3

CLINCHER™ SCP Weights



NORD DRIVESYSTEMS

Base Weight

Input Type	SK 1282 [lb]	SK 1382 [lb]	SK 2282 [lb]	SK 2382 [lb]	SK 3282 [lb]	SK 3382 [lb]	SK 4282 [lb]	SK 4382 [lb]	SK 5282 [lb]	SK 5382 [lb]	SK 6282 [lb]	SK 6382 [lb]
63S/4	39	48	–	78	–	114	–	–	–	–	–	–
63L/4	40	49	–	80	–	115	–	–	–	–	–	–
71S/4	43	52	67	82	100	118	–	166	–	–	–	–
71L/4	45	54	69	84	102	120	–	168	–	–	–	–
80S/4	49	–	73	88	106	124	–	172	–	260	–	–
80L/4	51	–	75	90	108	126	–	174	–	262	–	–
90S/4	57	–	82	97	115	–	148	181	227	269	–	–
90L/4	62	–	86	–	119	–	152	185	232	274	–	406
100L/4	71	–	95	–	128	–	161	–	240	282	–	410
100LA/4	77	–	101	–	135	–	168	–	247	284	432	426
112M/4	97	–	121	–	155	–	188	–	267	–	452	446
132S/4	–	–	–	–	185	–	218	–	298	–	483	476
132M/4	–	–	–	–	209	–	243	–	322	–	507	501
160M/4	–	–	–	–	–	–	282	–	362	–	547	540
160L/4	–	–	–	–	–	–	320	–	399	–	584	578
180MX/4	–	–	–	–	–	–	–	–	452	–	637	–
180LX/4	–	–	–	–	–	–	–	–	452	–	637	–
225S/4	–	–	–	–	–	–	–	–	–	–	867	–
225M/4	–	–	–	–	–	–	–	–	–	–	939	–
56C	51	60	82	53	115	119	154	171	234	260	–	403
140TC	51	60	82	57	115	126	170	181	249	269	–	412
180TC	66	73	90		123	141	170	190	249	278	448	428
210TC	–	–	90		143	–	201	–	280	278	476	459
250TC	–	–	–		–	–	223	–	302	–	531	481
280TC	–	–	–		–	–	–	–	322	–	531	481
320TC	–	–	–		–	–	–	–	–	–	562	–
360TC	–	–	–		–	–	–	–	–	–	595	–
W	40	40	77	49	110	115	165	176	245	265	477	423

SCP Package Additional Weight

	1-1/2" [lbs]	2" [lbs]	2-7/16" [lbs]	3" [lbs]	3-7/16" [lbs]
SK 1282/1382 SCP	9	15	22	-	-
SK 2282/2382 SCP	12	19	24	-	-
SK 3282/3382 SCP	15	24	29	35	-
SK 4282/4382 SCP	-	27	32	38	-
SK 5282/5382 SCP	-	35	42	48	62
SK 6282/6382 SCP	-	-	-	59	72

Helical Bevel SCP Weights

Base Weight

Input Type	SK 9012.1 [lb]	SK 9013.1 [lb]	SK 9022.1 [lb]	SK 9023.1 [lb]	SK 9032.1 [lb]	SK 9033.1 [lb]	SK 9042.1 [lb]	SK 9043.1 [lb]	SK 9052.1 [lb]	SK 9053.1 [lb]
63S/4	74	85	–	103	–	–	–	–	–	–
63L/4	75	86	93	104	–	155	–	–	–	–
71S/4	80	–	96	107	140	157	–	277	–	–
71L/4	80	–	98	109	142	159	–	278	–	450
80S/4	84	–	101	–	146	163	–	282	–	454
80L/4	86	–	104	–	148	165	–	284	–	456
90S/4	93	–	110	–	154	–	258	291	423	463
90L/4	97	–	115	–	159	–	262	–	428	467
100L/4	106	–	123	–	168	–	271	–	437	–
100LA/4	112	–	130	–	174	–	278	–	443	–
112M/4	132	–	150	–	194	–	298	–	463	–
132S/4	–	–	–	–	225	–	329	–	494	–
132M/4	–	–	–	–	249	–	353	–	518	–
160M/4	–	–	–	–	–	–	392	–	558	–
160L/4	–	–	–	–	–	–	430	–	595	–
180MX/4	–	–	–	–	–	–	–	–	648	–
180LX/4	–	–	–	–	–	–	–	–	648	–
56C	86	90	104	108	154	165	265	291	430	463
140TC	86	–	104	–	154	165	265	291	430	463
180TC	101	–	119	–	163	–	280	300	445	472
210TC	–	–	–	–	183	–	311	–	476	–
250TC	–	–	–	–	–	–	333	–	498	–
280TC	–	–	–	–	–	–	–	–	498	–
W	75	86	93	104	150	154	276	287	441	459

SCP Package Additional Weight

	1-1/2" [lbs]	2" [lbs]	2-7/16" [lbs]	3" [lbs]	3-7/16" [lbs]
SK 9012.1/9013.1 SCP	16	24	29	-	-
SK 9022.1/9023.1 SCP	19	28	32	-	-
SK 9032.1/9033.1 SCP	25	38	42	49	-
SK 9042.1/9043.1 SCP	-	59	61	68	80
SK 9052.1/9053.1 SCP	-	-	-	78	91

Reducer Tolerances

Casting Surfaces may differ slightly (approximately 0.125 inches or 3.2mm) from the specified nominal dimensions as a result of the manufacturing process

Solid Shaft Diameter Tolerance		[in]
> 0.375	≤ 1.750	+0.0000 / -0.0005
> 1.750	≤ 7.500	+0.0000 / -0.0010

All Keys and Keyways: Inch - ANSI B17

Solid Shaft Diameter Tolerance		[mm]
> 10	≤ 18	+0.012 / +0.001
> 18	≤ 30	+0.015 / +0.002
> 30	≤ 50	+0.018 / +0.002
> 50	≤ 80	+0.030 / +0.011
> 80	≤ 120	+0.035 / +0.013
> 120	≤ 180	+0.040 / +0.015
> 180	≤ 190	+0.046 / +0.017

All Keys and Keyways: Metric - DIN 6885, class m6

Solid Shaft Drill & Tap Shaft End - Threaded Holes		[in]
> ø 0.375	≤ ø 0.500	10-24 x 0.43
> ø 0.500	≤ ø 0.875	1/4-20 x 0.59
> ø 0.875	≤ ø 0.938	5/16-18 x 0.71
> ø 0.938	≤ ø 1.100	3/8-16 x 0.87
> ø 1.100	≤ ø 1.300	1/2-13 x 1.10
> ø 1.300	≤ ø 1.875	5/8-11 x 1.42
> ø 1.875	≤ ø 3.500	3/4-10 x 1.73
> ø 3.500	≤ ø 7.500	1-8 x 2.20

Solid Shaft Drill & Tap Shaft End - Threaded Holes		[mm]
> ø 10	≤ ø 13	M4 x 10
> ø 13	≤ ø 16	M5 x 12.5
> ø 16	≤ ø 21	M6 x 16
> ø 21	≤ ø 24	M8 x 19
> ø 24	≤ ø 30	M10 x 22
> ø 30	≤ ø 38	M12 x 28
> ø 38	≤ ø 50	M16 x 36
> ø 50	≤ ø 85	M20 x 42
> ø 85	≤ ø 130	M24 x 50
> ø 130	≤ ø 190	M30 x 60

Flange Pilot (AK or AK1) Tolerance			[in]
Flange Pilot Diameter		Pilot Tolerance	Fit Class ❶
> ø 1.969	≤ ø 3.150	+0.0005 / -0.0003	j6
> ø 3.150	≤ ø 4.724	+0.0005 / -0.0004	j6
> ø 4.724	≤ ø 7.087	+0.0006 / -0.0004	j6
> ø 7.087	≤ ø 9.055	+0.0006 / -0.0005	j6
> ø 9.055	≤ ø 9.843	+0.0000 / -0.0011	h6
> ø 9.843	≤ ø 12.402	+0.0000 / -0.0013	h6
> ø 12.402	≤ ø 15.748	+0.0000 / -0.0014	h6
> ø 15.748	≤ ø 19.685	+0.0000 / -0.0016	h6

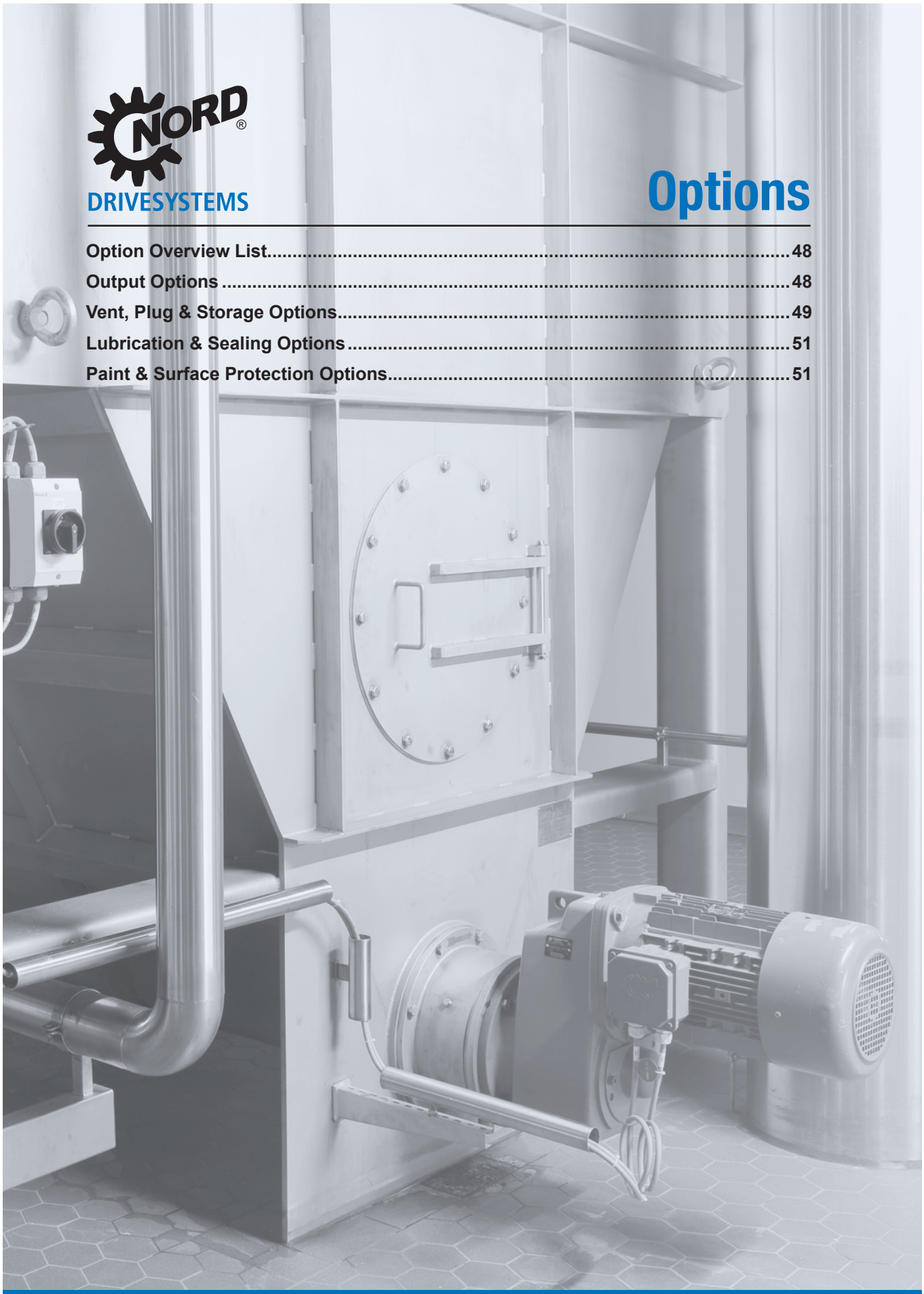
❶ **Inch Pilot Tolerances per ISO286-2**

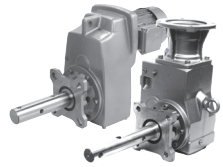
Flange Pilot (AK or AK1) Tolerance			[mm]
Flange Pilot Diameter		Pilot Tolerance	Fit Class ❶
> ø 50	≤ ø 80	+0.012 / -0.007	j6
> ø 80	≤ ø 120	+0.013 / -0.009	j6
> ø 120	≤ ø 180	+0.014 / -0.011	j6
> ø 180	≤ ø 230	+0.016 / -0.013	j6
> ø 230	≤ ø 250	+0.000 / -0.029	h6
> ø 250	≤ ø 315	+0.000 / -0.032	h6
> ø 315	≤ ø 400	+0.000 / -0.036	h6
> ø 400	≤ ø 500	+0.000 / -0.040	h6

❶ **Metric Pilot Tolerances per ISO286-2**

DRIVESYSTEMS

Options





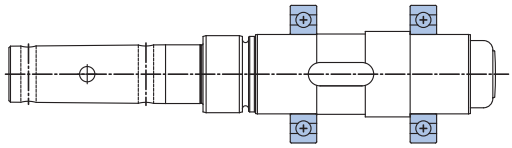
Screw Conveyor Gear Unit Options

Option Code	Description	Page
ADP	Additional drain plug	49
DR	Autovent	49
FKM	Fluoro-elastomer oil seals	50
FV	Filtered vent	49
LL	Long term storage	49
MDP	Magnetic drain plug	49
NBR	Nitirle Rubber Oil Seals	50
OA	Oil expansion chamber	50
OSG	Oil sight glass	50
OV	Open vent	49
PC	Grease Purged Seal	48
SM	Stainless steel output shaft	48
VL	Heavy duty output bearings	48
-	Special Drain Plugs	49
-	Paint coatings	51

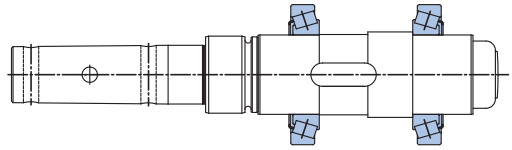
Heavy Duty Output Bearings (VL)

Replacing standard output bearings with heavy-duty versions will increase the external load carrying capacity of the speed reducer. Increased capacity in either or both overhung (radial) or thrust (axial) loading insures that premature bearing failure will not occur due to high stresses in the bearing elements. The increased bearing capacity will also keep the speed reducer as small as possible by not having to select the next larger case size in order to handle the bearing loads. If increased bearing life is desired, larger bearings will reduce the relative stress on the bearings and increase B10 bearing life.

Standard Bearing



Heavy Duty Bearings (VL)-option

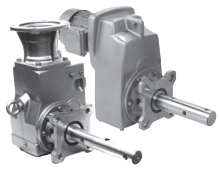


Grease Purge Seal (PC)

The SCP screw conveyor package has an optional grease purgeable sealing system. The design replaces the greased packed felt packing seal with a grease filled cavity. The system also includes a grease nipple and relief to allow the seal to be flushed with fresh grease.

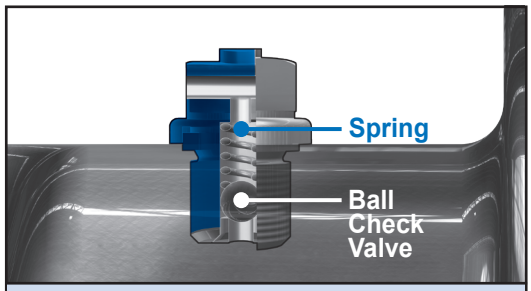
Stainless Steel Output Shaft (SM5)

Output shafts made from stainless steel are available and are frequently used in food, pharmaceutical, and washdown applications. In some cases stainless steel solid input shafts may also be provided.



Autovent™ (DR)

The AUTOVENT™ helps prevent bearing and gear damage by behaving like a check valve to block the entry of foreign material and prevent lubrication contamination from dust particles, moisture and air-borne process chemicals. The breather opens at approximately 0.3-0.9 psi during operation and closes tightly as the gearbox cools. This option is perfect for humid conditions and wash-down environments, helping to maintain proper oil cleanliness, while reducing foaming and oxidation.



The Standard AUTOVENT™

Open Vent (OV)

An open vent may be optionally supplied on NORD reducers. The open vent allows for air pressure differences between the inner space of the reducer and the atmosphere. This open vent will be closed upon delivery to prevent oil leakage. Before the reducer is put in service the open vent should be activated by removing the sealing plug.

Filtered Vent (FV)

NORD offers a filtered vent, which allows gases to permeate, but does not allow dust and debris to pass through the vent.

Magnetic Drain Plug (MDP)

Magnetic drain plugs attract and hold ferrous metal particles that may circulate inside the reducer's lubrication system. These potentially abrasive particles may cause excessive wear in the reducer if they remain circulating. An increase of collected material may be a warning sign of future problems.

Special Drain Plugs

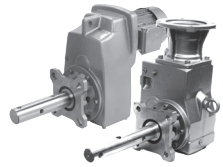
NORD can offer specialized oil drain plugs and solutions. Some of these solutions include spring loaded right-angle valves, straight valves, with or without covers as well as other fitting types.

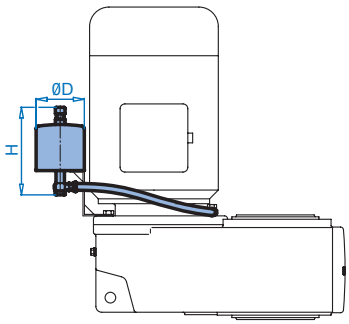
Additional Drain Plug Hole (ADP)

NORD can add an additional drain hole to the reducer housing for a small surcharge if required for special oil plumbing needs.

Long Term Storage (LL)

Speed reducers are frequently put in storage prior to installation for long periods of time and in some cases exposed to the elements. NORD's long term storage option protects the unit from moisture or corrosion by coating all unpainted surfaces with a dry, transparent, durable waxy film. Once installation is necessary this waxy film can be easily removed with a commercial de-greaser or petroleum solvent. If possible the store room should be vented and dry, with room temperatures between 23°F and 104 °F (-5 °C and 40 °C).





Oil Expansion Chamber Dimension Callouts

Oil Sight Glass (OSG)

Nitrile Rubber & Flouro Elastomer Seals (NBR) (FKM)

Oil Expansion Chamber (OA)

Gear units sizes SK4282 or SK9042.1 and larger that are mounted in M4 position with motor or input shaft vertical-up, that have ratios itotal≤ 24:1 or output speeds n2 ≥ 75 rpm, require an oil expansion chamber.

The oil expansion chamber provides a safe overflow area fot the expanded oil-air mixture located just above the lubrication zone of the high speed gear mesh. This device also helps to eliminate excessice pressure build-up, minimize the formation of foam, and prevent oil loss through the breather, oil seals, gaskets, etc.

Gear Unit		Size	Part #	D	H	[lb]
CLINCHER	Helical-Bevel					
SK 4282/SK 4382 SK 5282/SK 5382 SK 6382	SK 9042.1/SK 9043.1 SK 9052.1/SK 9053.1	I	28390390	3.94	7.09	11.0
SK 6282		II	28390400	5.91	11.81	13.2

Oil Sight Glass (OSG)

The oil sight glass provides a visible oil level indication on the reducer. The sight glass replaces the standard steel fill plug and consists of a sealed clear porthole centered in the middle of a brass plug. The sight glass allows for quick oil level and color inspection.

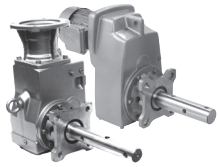
Nitrile Rubber Oil Seals (NBR)

Nitrile rubber (NBR) or Buna-N shaft seals are standard issue with NORD gear units. NBR seals offer high tensile strength and good resistance to abrasion, tear, and compression set. They are designed to withstand most oils, lubricants, fuels, and animal oils and they provide resistance to many diluted acids and bases. They perform well in cold environments and in temperatures up to 125°F (250°C). NBR seals should not be used when exposed to concentrated acids, oxidizing agents, ozone, or chlorinated hydrocarbons.

Fluoro-elastomer Oil Seals (FKM)

As a standard option, NORD offers Fluoro-elastomer (FKM) shaft seals. FKM seals also offer good resistance to abrasion, tear, and compression set. FKM seals provide very good resistance to oils, fuels and mineral acids. Compared to NBR seals, FKM seals offer superior resistance to oxidation and aging, ozone, UV exposure, weather, fungus, and mold. FKM seals are also preferred when high temperature resistance is needed as they are designed to handle temperatures up to 390°F (200°C). FKM seals should be applied with extreme caution in cold temperature environments as they may become brittle. FKM seals may also accelerate wear on softer shaft steels including 300 series austenitic stainless steel alloys.

If your gearmotor or gear reducer application requires special sealing solutions please consult NORD.



Paint Coatings and Surface Protection

NORD's standard paint coating is a two component, aliphatic polyurethane finish contaning 316 stainless steel material. This gray stainless steel paint has excellent appearance and outstanding physical properties. It is suitable for both indoor and outdoor applications.

Advantages of NORD's stainless steel two component polyurethane:

- Excellent adhesion to cast iron, aluminum, steel, and plastics
- Excellent corrosion resistance
- Excellent chemical resistance
- Excellent gloss and color retention
- Suitable for indoor and outdoor exposure
- Nonporous and excellent abrasion resistance
- Suitable for use in a USDA inspected facility

Finish	Standard Colors	Coating	Use
Standard (stainless steel paint)	Stainless steel silver (Gray)	1 x Stainless steel (316) top coat (polyurethane)	Indoor or outdoor moderate environment
Alternate color	Black, Blue, Red, Orange	1 x Color top coat (polyurethane)	Indoor or outdoor protected

Additionally a variety of coating options are available including our severe duty coatings.

nsd+

Improved corrosion protection for wet and outdoor environments starts by applying a primer undercoat over the primed cast-iron or base aluminum materials. The finish is then completed with our exceptional strength stainless steel polyurethane top coat.

NORD Severe Duty + (NSD+)	Stainless steel silver (Gray)	1 x Primer high solid alkyd system 1 x Stainless steel (316) top coat (polyurethane)	Indoor or outdoor moderate environment
NORD Severe Duty +W (NSD+W)	White	1 x Primer high solid alkyd system 1 x White top coat (polyurethane)	Indoor or outdoor moderate environment
Alternate color (NSD+)	Black, Blue, Red, Orange	1 x Primer high solid alkyd system 1 x Color top coat (polyurethane)	Indoor or outdoor moderate environment

nsd+X3

For more demanding environments our multi-layer corrosion protection starts with a primer undercoat over the base material and then adding our stainless steel polyurethane coating and a high-gloss topcoat.

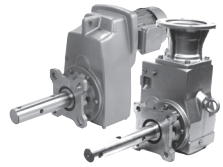
NORD Severe Duty Extreme (NSD-X3)	Stainless steel silver (Gray)	1 x Primer high solid alkyd system 1 x Stainless steel (316) (polyurethane) 1 x Clear top coat (polyurethane)	Indoor or outdoor more severe environment
NORD Severe Duty Extreme (NSD-X3W)	White	1 x Primer high solid alkyd system 1 x White (polyurethane) 1 x Clear top coat (polyurethane)	Indoor or outdoor more severe environment
Alternate color (NSD-X3)	Black, Blue, Red, Orange	1 x Primer high solid alkyd system 1 x Color (polyurethane) 1 x Clear top coat (polyurethane)	Indoor or outdoor more severe environment

Nord Products on the Paint Line

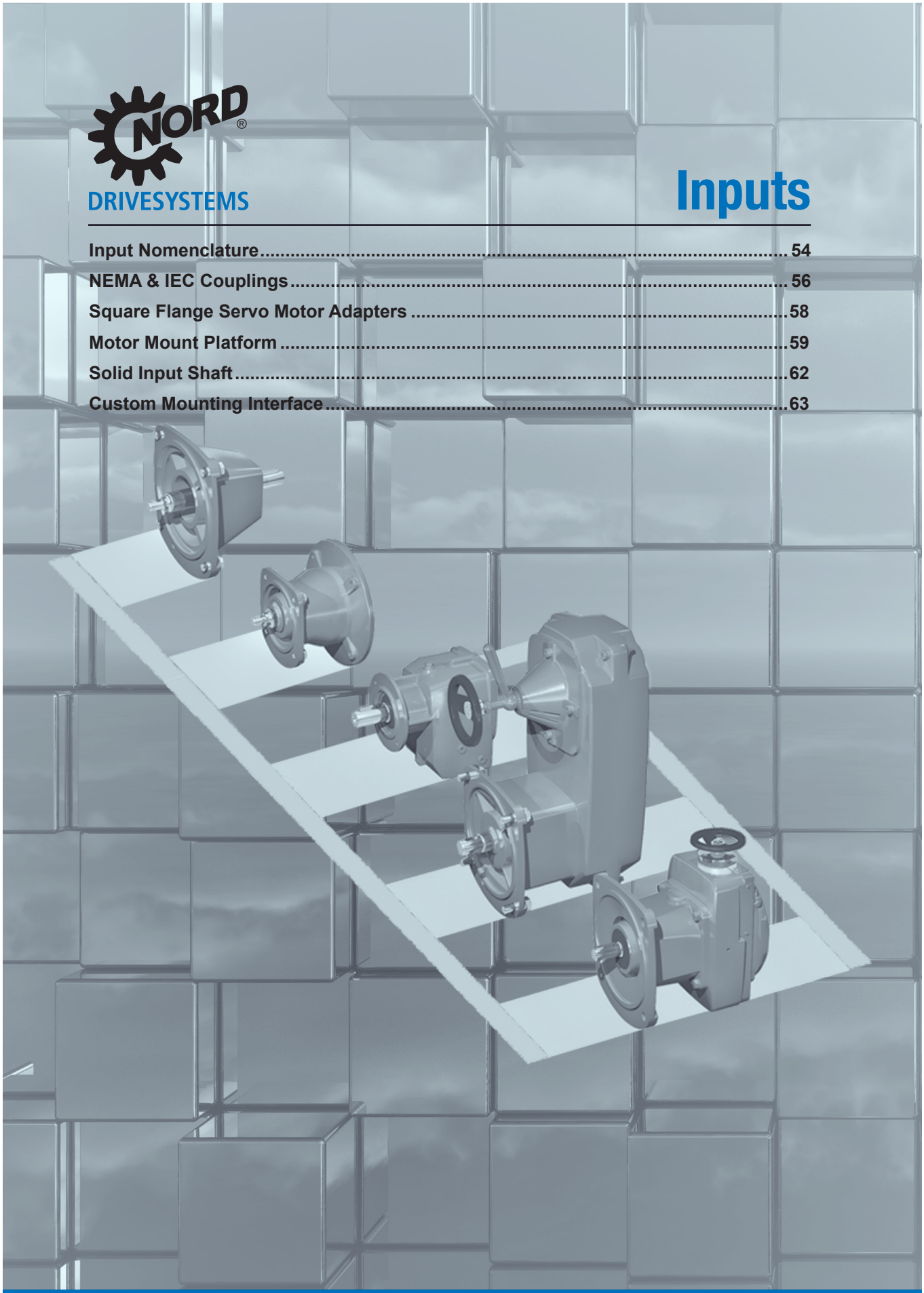
NSD+ on Cast Iron

NSDX3 on Cast Iron

Notes



Inputs



Example Nomenclature

SK3282SCP - W

- **W** — **Solid Input Shaft**
- **SK3282SCP** — **Gear unit**

CLINCHER™ Gear unit with solid input shaft.

SK3282SCP - 140TC

- **140TC** — **NEMA 140TC Motor Adaptor**
- **SK3282SCP** — **Gear unit**

CLINCHER™ Gear unit to recieve standard NEMA C-Face motor adaptor.

SK3282SCP - IEC80

- **IEC80** — **IEC 80 B5 Motor Adaptor**
- **SK3282SCP** — **Gear unit**

CLINCHER™ gear unit with a standard metric IEC B5 flange mount motor adaptor.

Input

NORD's modular design allows for many different types of inputs to be added to gear reducers. All inputs are bolt on and include machined pilots to ensure simple and accurate assembly. NORD offers the following different input types:

- Integral motor
- Solid input shaft
- NEMA C-face motor adapter
- IEC B5 motor adapter
- Servo motor adapter
- Motor platform
- Scoop mount motor platform
- Custom mounting interface

Nomenclature

After the letters, 'SK' Reducer sizes are indicated followed by the dash (-), then the input device such as:

- SK3282SCP – 90L/4 (Integral motor)
- SK3282SCP – W (Solid input shaft)
- SK3282SCP – 140TC (NEMA C-face motor adaptor)
- SK3282SCP – IEC80 (IEC B5 motor adaptor)
- SK3282SCP – SEP130 (Servo motor adaptor)
- SK3282SCP – MK140T (Motor platform)
- SK3282SCP – S140T (Scoop mount motor platform)
- SK3282SCP – WII (Custom mounting interface)

Solid Input Shaft	NEMA Motor Adapter	IEC Motor Adapter	Integral Motor Standard Effiency & 60 Minute Duty		Integral Motor Premium Efficency		Scoop Mount Motor Platform	Motor Platform	Servo Motor Adapter Keyed
W	N56C	IEC 63	63S/4 - 0.16hp	100L/4 - 3hp	80LP/4 - 1hp	160MP/4 - 15hp	S56	MKN056	SEP 100
	N140 TC	IEC 71	63L/4 - 0.25hp	100LA/4 - 5hp	90SP/4 - 1.5hp	160LP/4 - 20hp	S140T	MKN140	SEP 130
	N180TC	IEC 80	71S/4 - 0.33hp	132S/4 - 7.5hp	90LP/4 - 2hp	180MP/4 - 25hp	S180T	MKN180	SEP 165
	N210TC	IEC 90	71L/4 - 0.50hp	132M/4 - 10hp	100LP/4 - 3hp	180LP/4 - 30hp	S210T	MKN210	SEP 215
	N250TC	IEC 100	80S/4 - 0.75hp	160M/4 - 15hp	112MP/4 - 5hp	225RP/4 - 40hp	S250T	MKN250	SEP 300
	N280TC	IEC 112	80L/4 - 1hp	160L/4 - 20hp	132SP/4 - 7.5hp	225SP/4 - 50hp	S280T	MKN280	Servo Motor Adapter Clamp
	N320TC	IEC 132	90S/4 - 1.5hp	180MX/4 - 25hp	132MP/4 - 10hp	225MP/4 - 60hp	S320T	MKN320	
		IEC160	90L/4 - 2hp	180LX/4 - 30hp					SEK 100
		IEC 180		200LX/4 - 40hp					SEK 130
		IEC 200							SEK 165
		IEC 225							SEK 215
		IEC 250							SEK 300
		IEC280							
		IEC 315		Other Speeds Available		Other Speeds Available			

Integral Motors

NORD provides integral motors that mount directly to the gearbox. Integral motor mounting eliminates the need for costly v-belts or sheaves and directly couples the motor to the reducer. This also results in a dimensionally compact one-piece package.

NORD high performance integral motors are available in many operational voltages, are inverter duty rated, and offer many valuable options including energy efficient motors and power off brakes. For more information on integral motors, see the motor section.

Solid Input Shaft

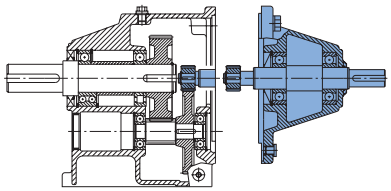
Designed to mount couplings, sheaves or sprockets, which transfer torque from the prime mover. The input shaft is made from ANSI 1045 or stronger material dimensioned with long keys according to ANSI B17 standards. Bearings are sized to handle overhung loads resulting from belt or sprocket inputs. The maximum gearbox input power rating is indicated in the speed reducer performance tables.

The bearings of solid input shaft type W of the larger gear units require re-lubrication at a regular interval. This is necessary for double-stage gearboxes sizes SK6282 and larger. For additional information please reference the approprite user manuals located at nord.com/docs by entering your products serial number.

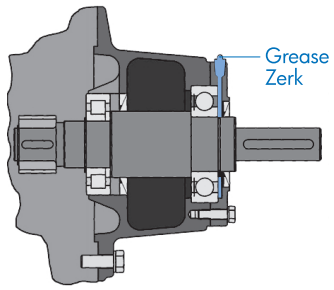
Automatic Lubricator

Our double-reduction gearboxes size SK6282 and larger and triple reduction gearboxes SK6382 and larger that are equipped with either a NEMA C-face or IEC adapter larger than 250TC/IEC160 are provided with an automatic lubricator.

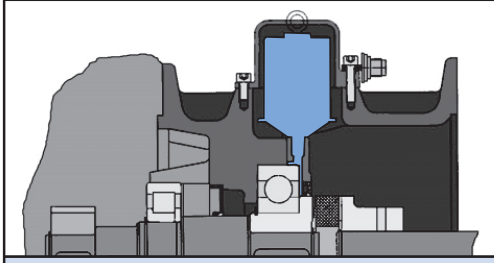
The automatic lubricator must be activated before the gearbox is put into operation. Activation is accomplished by turning the plastic eyelet into the canister until the eyelet breaks off. For additional information please reference the approprite user manuals located at nord.com.



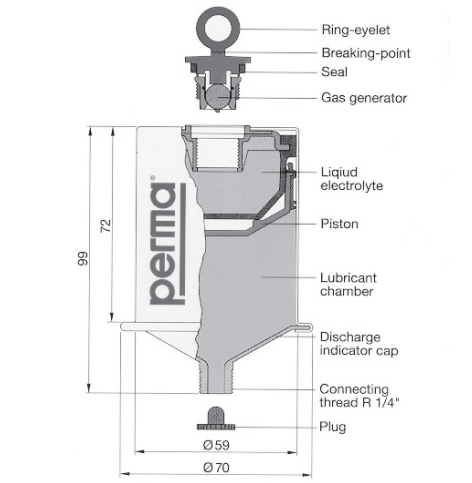
Solid Input Shaft



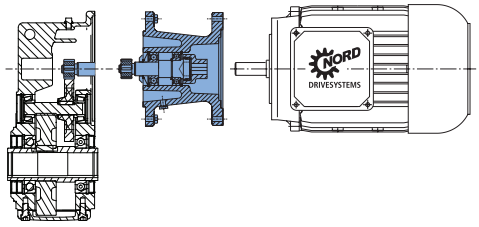
Re-Lubricating the bearing with the Grease Zerk



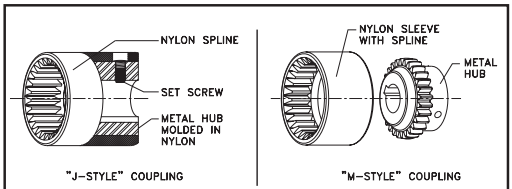
Automatic Lubricator



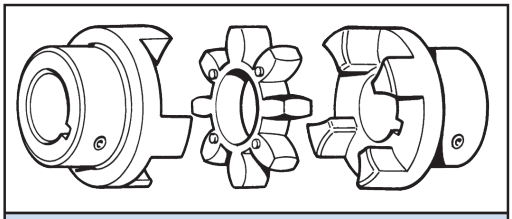
Automatic Lubricator Dimensions & Descriptions



NEMA C-FACE / IEC Motor Adapter



J & M Style Coupling Illustrations



Jaw Style Coupling Illustration

NEMA C-Face Motor Adapter

NEMA C-face motor adapters allow for easy installation and removal of industry standard C-face motors. NEMA C-face motor adapters consist of a coupling and an adapter housing that connect the motor to the gear reducer. Gear units with NEMA C-face adapters are commonly used in applications that require specialized motors,for serviceability or quick replacement. NORD additionally offers NEMA C-face motors and brakemotors that may be installed to the motor adapter.

The maximum input power of a gear unit with a NEMA C-face adapter is generally limited by the power rating of the standard NEMA C-face motor size. The power limits are indicated in the reducer ratings tables. In some cases the gearbox limit ($T2_{max}$) will be the limiting capacity. Both the NEMA adapter limit and the gearbox torque limit must be considered. If the speeds required exceed those included in the ratings tables please contact NORD. For additional information please reference the approprite user manuals located at nord.com.

IEC Motor Adapter

IEC motor adapters allow for easy installation and removal of industry standard IEC motors according to DIN 42677. The IEC adapter is very similar to the NEMA C-face adapter in construction. The maximum input power is generally limited by the IEC motor size. For ratings and dimensions, please consult our metric catalogs.

Motor Adapter Couplings

Couplings are made with tough abrasion resistant materials, which resist most chemicals and petroleum products. They are electrically isolated (prevent metal to metal contact) and require no lubrication or maintenance. Depending on the size of the C-face input, NORD will provide either a gear or jaw type coupling.

Gear Couplings

Gear couplings are used with 56C to 280TC adapters and provide a space saving design. C-face adapter input shafts have a machined male spline that connects with a molded nylon spline on the coupling. This specially designed nylon sleeve exhibits high torsional stiffness, resulting in minimum backlash and reduced internal frictional losses. The coupling design yields low inertia and uses blind assembly and slip together components for easy inspection without disassembly.

NORD incorporates two styles of gear couplings, the “J” and “M” styles. The “J” style is a one-piece coupling consisting of a nylon sleeve and metal hub that are fused together. The “M” style is a two-piece coupling consisting of a separate nylon sleeve and metal hub.

Jaw Couplings

Jaw couplings are used with 320TC and larger adapters. The cast iron jaw type couplings have a urethane “spider” that provides smooth transmission of the motor torque and has excellent shock and vibration dampening characteristics. A set screw on the coupling prohibits axial movement along the motor shaft. Jaw couplings with low-backlash hubs and spider elements are provided with NORD servo adapters

NEMA Motor Adapter Details

NEMA C-face Motor Frame	NEMA Adapter Nomenclature	4 pole Motor HP	Max Motor Weight [lb]	Coupling Description	Coupling Bore [inches]	Continuous Torque [in-lb]	Maximum Torque [in-lb]
56 C	- 56C	≤ 1.0	66	J14	0.625	44	88
56 C	- 56C	≤ 1.5	66	J24	0.875	106	212
143 TC	- 140TC	≤ 1.5	88				
145 TC	- 140TC	≤ 2	110				
145 TC	- 140TC	3	110				
182 TC	- 180TC	3	130	J28	1.125	398	1195
184 TC	- 180TC	5	175				
182 TC	- 180TC	3	130	M38	1.125	708	2214
184 TC	- 180TC	5	175				
213 TC	- 210TC	7.5	220		1.375		
215 TC	- 210TC	10	220				
254 TC	- 250TC	15	440	M42	1.625	885	2655
256 TC	- 250TC	20	440				
284 TC	- 280TC	25	550	M48	1.875	1239	3717
286 TC	- 280TC	30	550				
324 TC	- 320TC	40	770	R65	2.125	5532	11063
326 TC	- 320TC	50	1100				
364 TC	- 360TC	60	1540	R90	2.375	21242	42484
365 TC	- 360TC	75	1540				

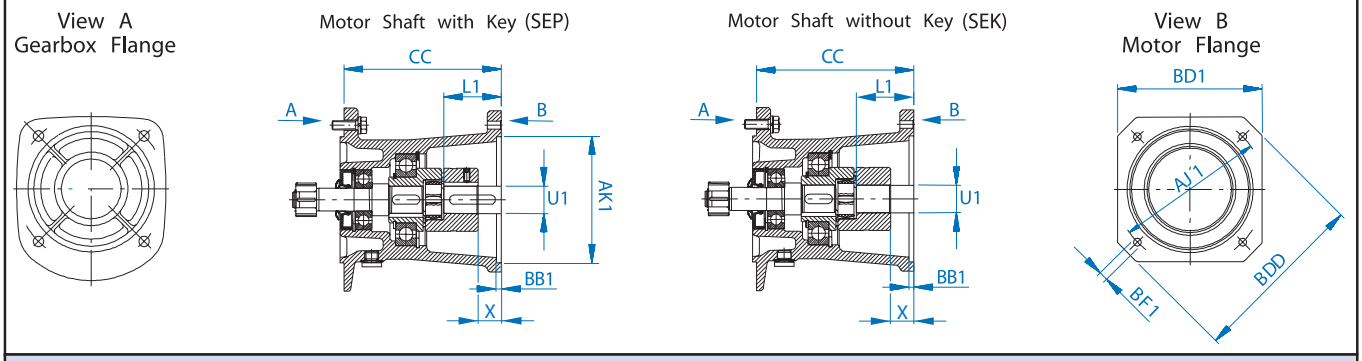
IEC Motor Adapter Details

IEC Motor B5 4 pole	IEC Adapter Nomenclature	HP / kW	Max Weight Limit [lb]	Coupling Description	Coupling Bore [mm]	Continuous Torque [Nm]	Maximum Torque [Nm]
63 S/4	- IEC 63	0.16 / 0.12	55	J14	11	5	10
63 L/4	- IEC 63	0.25 / 0.18	55				
71 S/4	- IEC 71	0.33 / 0.25	66		14		
71 L/4	- IEC 71	0.50 / 0.37	66				
80 S/4	- IEC 80	0.75 / 0.55	88	J24	19	12	24
80 L/4	- IEC 80	1.00 / 0.75	88				
90 S/4	- IEC 90	1.5 / 1.1	110		24		
90 L/4	- IEC 90	2.0 / 1.5	110				
100 L/4	- IEC 100	3.0 / 2.2	130	J28	28	45	135
100 L/40	- IEC 100	5.0 / 3.7	130				
112 M/4	- IEC 112	5.3 / 4.0	175				
132 S/4	- IEC 132	7.5 / 5.5	220	M38	38	80	240
132 M/4	- IEC 132	10 / 7.5	220				
160 M/4	- IEC 160	15 / 11	440	M42	42	100	300
160 L/4	- IEC 160	20 / 15	440				
180 M/4	- IEC 180	25 / 18.5	550	M48	48	140	420
180 L/4	- IEC 180	30 / 22	550				
200 L/4	- IEC 200	40 / 30	770	R65	55	625	1250
225 S/4	- IEC 225	50 / 37.5	1100		60		
225 M/4	- IEC 225	60 / 45	1100				
250 M/4	- IEC 250	75 / 55	1540	R90	70	2400	4800
280 S/4	- IEC 280	100 / 75	1540		80		
280 M/4	- IEC 280	125 / 90	2200				
315 S/4	- IEC 315	150 / 110	3300		85		
315 M/4	- IEC 315	175 / 132	3300				
315 L/4	- IEC 315	250 / 200	3300				

Servo Motor Adapters

Servo motor adapters are designed to handle the highly dynamic capabilities of servo motors. NORD servo motor adapters have a square mounting flange and are available with either a keyed (SEP) or a keyless (SEK) coupling. They are suitable for speeds up to 3000 rpm and the high torques produced by servo motors. Higher input speeds can be handled for a short duration and the bearings and input shaft are designed to cope with the high torque loads.

Compatibility and dimensions are listed in the table below.



Servo Motor Dimension Illustrations

Reducer type		Servo Adapter	Reducer Input Flange Size	Units	Motor Flange						Motor Shaft		Coupling Distance	Rotex® Coupling info			
Clincher SCP	H-Bevel SCP				CC	AJ1	AK1	BD1	BDD	BF1	U1	L1	X	Size	Cont. Torque	Peak Torque	Units
SK 1282 SCP SK 2382 SCP SK 3382 SCP	SK 9012.1 SCP SK 9013.1 SCP SK 9016.1 SCP	-SEP 100	160S	in	4.92	3.94	3.150	3.78	4.72	M6	0.748	1.57	0.59	R19 GS	150	301	[lb-in]
		-SEK 100		mm	125	100	80	96	120		19	40	15		17	34	[Nm]
SK 1282 SCP SK 2382 SCP SK 3382 SCP	SK 9012.1 SCP SK 9022.1 SCP SK 9023.1 SCP SK 9033.1 SCP	-SEP 130	160S	in	5.39	5.12	4.331	4.96	6.50	M8	0.945	1.97	0.79	R24 GS	531	1,062	[lb-in]
		-SEK 130		mm	137	130	110	126	165		24	50	20		60	120	[Nm]
		-SEP 165	160S	in	5.98	6.50	5.118	6.50	7.32	M10	1.260	2.28	0.91	R28 GS	1,416	2,832	[lb-in]
		-SEK 165		mm	152	165	130	165	186		32	58	23		160	320	[Nm]
SK 3282 SCP SK 4382 SCP SK 5382 SCP	SK 9032.1 SCP SK 9043.1 SCP SK 9053.1 SCP	-SEP 130	250S	in	5.94	5.12	4.331	4.96	6.10	M8	0.945	1.97	0.79	R24 GS	531	1,062	[lb-in]
		-SEK 130		mm	151	130	110	126	155		24	50	20		60	120	[Nm]
		-SEP 165	250S	in	6.57	6.50	5.118	6.10	7.32	M10	1.260	2.28	0.91	R28 GS	1,416	2,832	[lb-in]
		-SEK 165		mm	167	165	130	155	186		32	58	23		160	320	[Nm]
		-SEP 215	250S	in	7.40	8.46	7.087	7.56	9.45	M12	1.496	3.15	1.77	R28 GS	1,416	2,832	[lb-in]
		-SEK 215		mm	188	215	180	192	240		38	80	45		160	320	[Nm]
SK 4282 SCP SK 5282 SCP SK 6382 SCP	SK 9042.1 SCP SK 9052.1 SCP	-SEP 215	300S	in	9.06	8.46	7.087	7.56	9.45	M12	1.496	3.15	0.94	R48 GS	4,647	9,293	[lb-in]
		-SEK 215		mm	230	215	180	192	240		38	80	24		525	1,050	[Nm]
		-SEP 300	300S	in	9.13	11.81	9.843	10.24	13.78	M16	1.890	3.23	1.02	R48 GS	4,647	9,293	[lb-in]
		-SEK 300		mm	232	300	250	260	350		48	82	26		525	1,050	[Nm]
SK 6282 SCP		-SEP 300	350	in	9.84	11.81	9.843	10.24	13.78	M16	1.890	3.23	1.02	R48 GS	4,674	9,293	[lb-in]
		-SEK 300		mm	250	300	250	260	350		48	82	26		525	1,050	[Nm]

SEP adapter couplings are intended for keyed motor shafts and SEK adapters use clamping style couplings for motor shafts without keys.

Check with factory to confirm ratio availability of a particular gear unit type and servo adapter combination.

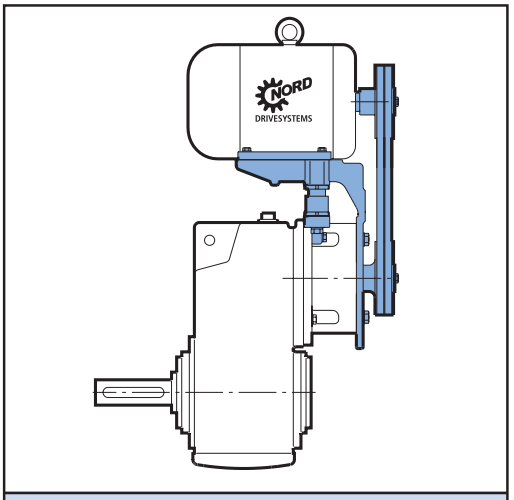
Consult NORD if trying to adapt a servo motor with dimensions other than shown.

Motor Platform (MK)

Some applications require the motor to be mounted to the reducer while allowing a belt drive connection from the motor to the reducer. MK platforms offer the following advantages:

- Light, vibration inhibiting aluminum construction
- Corrosion resistant, easily adjustable mechanism for belt tensioning
- Corrosion resistant fasteners
- Available in all mounting positions
- The motor may be positioned 90° to the right or left
- Platform has multiple bolt patterns for various motor sizes

Motor platforms are pre drilled and tapped to bolt on a standard NEMA footed motor. Each platform has belt tension adjusters. See dimension DH on the following pages for the adjustability range. Motor, belts, sheaves and guard are supplied by the customer.

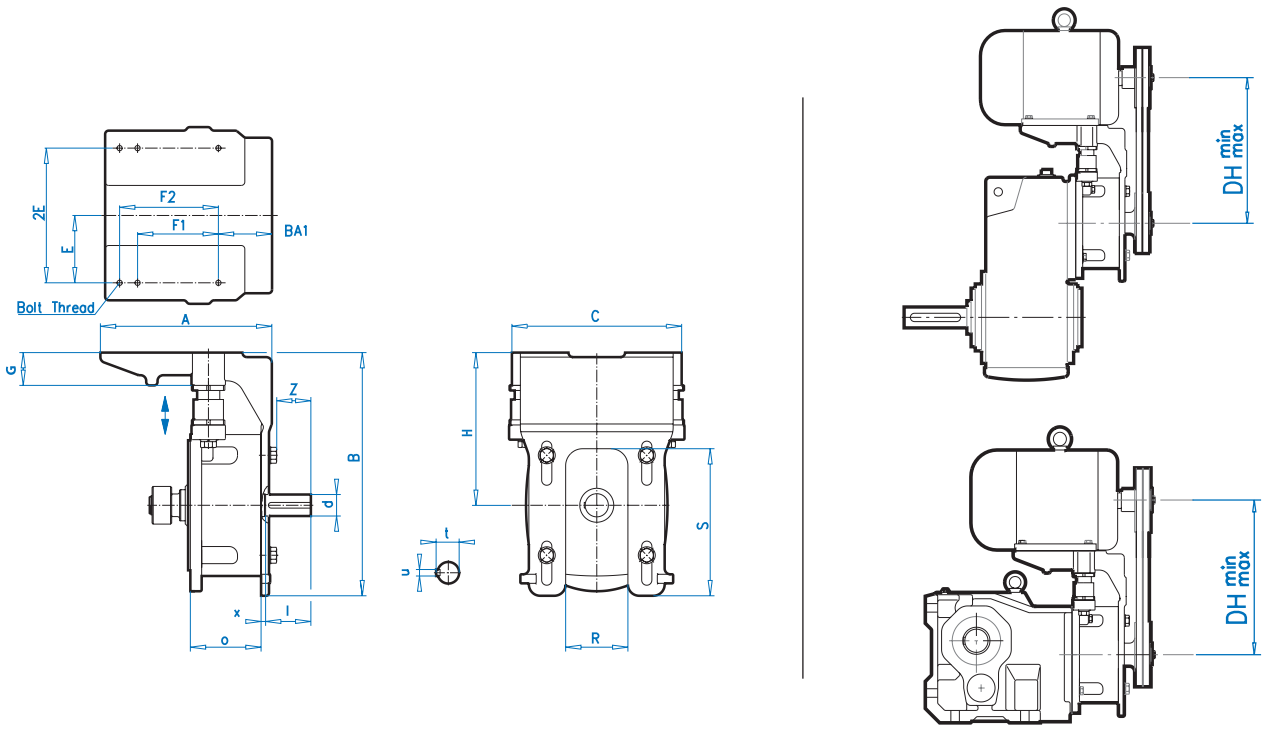


Motor Mount Platform

Reducer Type	Motor Platform Description							
	-MKN56	-MKN140	-MKN180	-MKN210	-MKN250T	-MKN280	-MKN320	-MKN360
	NEMA Footed Motor Frame Size							
	N56	N143T N145T	N182T N184T	N213T N215T	N254T N256T	N284T N286T	N324T N326T	N364T N365T
CLINCHER™ SCP Gear Units								
SK 1282 SCP	X	X						
SK 2282 SCP	X	X	X					
SK 2382 SCP	X	X						
SK 3282 SCP	X	X	X	X				
SK 3382 SCP	X	X						
SK 4282 SCP		X	X	X	X			
SK 4382 SCP	X	X	X					
SK 5282 SCP		X	X	X				
SK 5382 SCP	X	X	X	X				
SK 6282 SCP			X	X	X	X	X	
SK 6382 SCP		X	X	X	X			
Helical Bevel SCP Gear Units								
SK 9012.1 SCP	X	X						
SK 9013.1 SCP	X	X						
SK 9016.1 SCP	X	X						
SK 9022.1 SCP	X	X						
SK 9023.1 SCP	X	X						
SK 9032.1 SCP	X	X	X	X				
SK 9033.1 SCP	X	X						
SK 9042.1 SCP		X	X	X	X			
SK 9043.1 SCP	X	X	X	X				
SK 9052.1 SCP		X	X	X	X			
SK 9053.1 SCP	X	X	X	X				

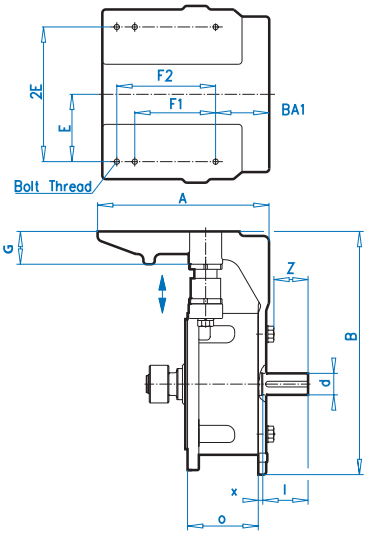
Check with factory to confirm ratio availability of a particular gear unit type and motor platform

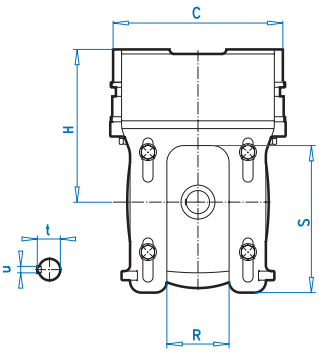
Motor Platform (MK)

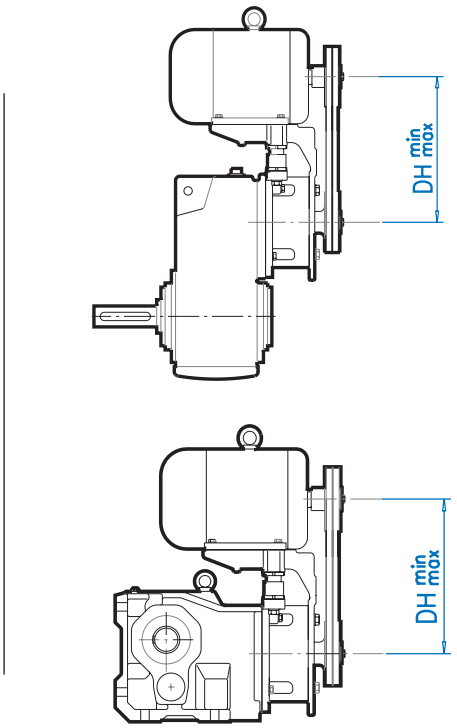


Reducer Type		MK Platform	F1	F2	BA1	Bolt Thread	E	2E	A	B	C	G	H	O	R	S	Z
CLINCHER	H-Bevel																
SK 1282	SK 9012.1	56	3	5	2.87	5/16-18	2.44	4.88	8.74	9.96	8.03	1.77	6.02	4.70	2.36	5.51	1.61
SK 2382	SK 9013.1	140T	4	5	2.37	5/16-18	2.75	5.50									
SK 3382	SK 9016.1																
	SK 9022.1																
	SK 9023.1																
	SK 9033.1																
SK 2282	SK 9032.1	56	3	5.5	2.98	5/16-18	2.44	4.88	9.29	12.60	9.84	1.97	7.83	4.47	2.60	5.71	1.89
SK 3282	SK 9043.1	140T	4	5	2.48	5/16-18	2.75	5.50									
SK 4382	SK 9053.1	180T	4.5	5	2.48	3/8-16	3.75	7.50									
SK 5382		213T	5.5	–	3.38	3/8-16	4.25	8.50									
		215T	–	7	3.38	3/8-16	4.25	8.50	11.52	13.47							
SK 4282	SK 9042.1	140T	4	4.5	2.68	5/16-18	2.75	5.50	11.93	16.93	11.81	2.28	10.00	4.92	4.33	10.24	2.40
SK 5282	SK 9052.1	180T	4.5	5.5	3.18	3/8-16	3.75	7.50									
SK 6382		210T	5.5	7	3.93	3/8-16	4.25	8.50									
		250T	8.25	10	4.65	1/2-13	5	10	15.90	17.68	12.50						
		250T	8.25	10	4.65	1/2-13	5	10	15.90	17.68	12.50						
SK 6282		180T	4.5	5.5	3.26	3/8-16	3.75	7.50	18.74	20.87	15.75	2.95	12.40	9.92	5.12	12.40	4.57
		210T	5.5	7	4.01	3/8-16	4.25	8.50									
		250T	8.25	10	4.76	1/2-13	5	10									
		280T	9.5	11	5.26	1/2-13	5.5	11									
		320T	10.5	12	5.76	5/8-11	6.25	12.5									

Motor Platform (MK)





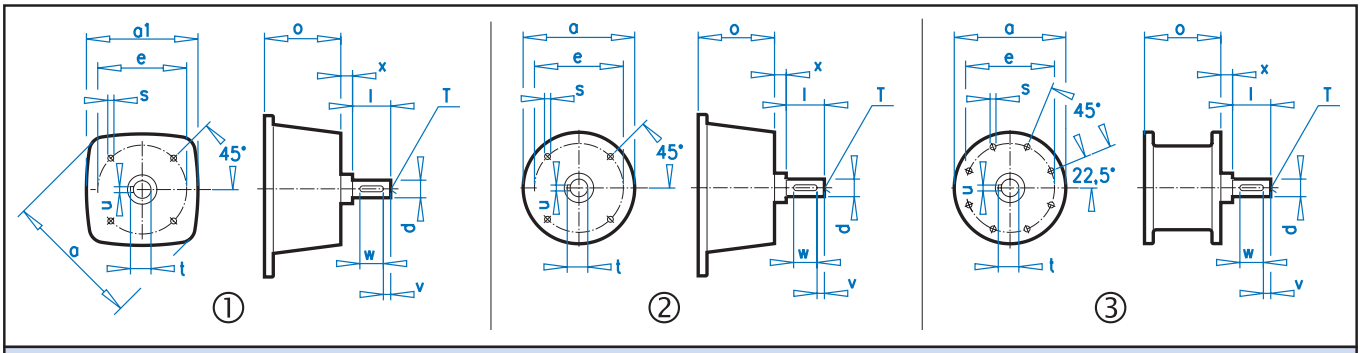


Reducer Type		MK Platform	DHmin	DHmax	d [mm]	l [mm]	t [mm]	u [mm]	x [mm]
CLINCHER	H-Bevel								
SK 1282	SK 9012.1	56	9.51	10.31	24	50	27	8	8
SK 2382	SK 9013.1	140T	9.51	10.31					
SK 3382	SK 9016.1								
	SK 9022.1								
	SK 9023.1								
	SK 9033.1								
SK 2282	SK 9032.1	56	11.34	12.32	28	60	31	8	9
SK 3282	SK 9043.1	140T	11.34	12.32					
SK 4382	SK 9053.1	180T	12.34	13.32					
SK 5382		213T	13.09	14.07					
		215T	13.96	14.94					
SK 4282	SK 9042.1	140T	13.5	14.76	38	80	41	10	8
SK 5282	SK 9052.1	180T	14.5	15.76					
SK 6382		210T	15.25	16.51					
		250T	17.0	18.26					
		250T	17.0	18.26					
SK 6282		180T	16.9	18.48	65	140	69	18	8
		210T	17.65	19.23					
		250T	18.65	20.23					
		280T	19.4	20.98					
		320T	20.4	21.98					

Solid Input Shaft With Flanged Housing

Solid Input Shaft With Flanged Housing (example SK3282 – W II)

Same internal components as the Solid Input Shaft (-W) but the housing has a flat machined mounting face with metric drilled and tapped holes. Standard units are available with metric shafts.



Solid Input Shaft with Flanged Housing Dimension Illustrations

Double Reduction	Triple Reduction	Compound Gear Units	RLS Opt.	Ill.	Outline Dimensions [mm]					Shaft Dimensions [mm]							
					a	a1	e	o	s	d	l	t	u	v	w	x	T
SK 0182NB WO SK 0282NB WO	SK 1382NB WO			②	120	-	75	61.5	M5 x 11	14	40	16	5	5	30	8	M5
SK 0182NB WII SK 0282NB WII	SK 1382NB WI			②	120	-	100	61.5	M8 x 11	16	40	18	5	4	32	8	M5
SK 1282 W0	SK 2382 W0 SK 3382 W0	SK ../02 W0 SK ../12 W0		②	90	-	75	70.5	M5 x 13	14	38.5	16	5	5	30	2	M5
SK 1282 WII	SK 2382 WII	SK ../02 WII SK ../12 WII	RLS	②	120	-	100	74	M8 x 13	16	40	18	5	4	32	8	M5
SK 2282 WIII SK 3282 WIII	SK 4382 WIII SK 5382 WIII	SK ../22 WII SK ../32 WII		②	120	-	100	113.5	M8 x 13	16	40	18	5	4	32	8	M5
SK 1282 WII	SK 2382 WIII SK 3382 WIII	SK ../02 WIII SK ../12 WIII		②	150	-	125	119.5	M8 x 13	24	50	27	8	5	40	8	M8
SK 2282 WI SK 3282 WI	SK 4382 WI SK 5382 WI	SK ../22 WI SK ../32 WI		①	180	140	125	113.5	M8 x 13	24	50	27	8	5	40	8	M8
SK 4282 WIV SK 5282 WIV	SK 6382 WIV	SK ../42 WIV SK ../52 WIV		①	180	140	125	124	M8 x 13	24	50	27	8	5	40	8	M8
SK 2282 WII SK 3282 WII	SK 4382 WII SK 5382 WII	SK ../22 WII SK ../32 WII	RLS	①	180	140	150	113.5	M10 x 18	28	60	31	8	5	50	9	M10
SK 4282 WI SK 5282 WI	SK 6382 WI	SK ../42 WI SK ../52 WI		①	180	140	150	124	M10 x 16	28	60	31	8	5	50	9	M10
SK 6282 W0 SK 7282 W0	SK 7382 W0 SK 8382 W0 SK 9382 W0			②	180	-	150	124	M10 x 18	28	60	31	8	5	50	9	M10
SK 4282 WII SK 5282 WII	SK 6382 WII	SK ../42 WII SK ../52 WII	RLS	①	290	250	215	125	M12 x 20	38	80	41	10	5	70	8	M12
SK 6282 WI SK 7282 WI	SK 7382 WI SK 8382 WI SK 9382 WI			①	290	250	215	170	M12 x 25	38	80	41	10	5	70	8	M12
SK 4282 WIII SK 5282 WIII	SK 6382 WIII	SK ../42 WIII SK ../52 WIII		①	290	250	250	125	M16 x 25	38	80	41	10	5	70	8	M12
SK 6282 WII SK 7282 WII SK 8282 WII	SK 7382 WII SK 8382 WII SK 9382 WII	SK 10382.1 WII SK 11382.1 WII		①	290	250	250	170	M16 x 25	38	80	41	10	5	70	8	M12
SK 6282 WIII SK 7282 WIII	SK 7382 WIII SK 8382 WIII SK 9382 WIII		RLS	①	290	250	250	170	M16 x 25	42	110	45	12	10	90	8	M16
SK 6282 WIV SK 7282 WIV SK 8282 WV	SK 7382 WIV SK 8282 WIV SK 9382 WIV SK 10382.1 WV			①	350	300	300	252	M20 x 30	65	140	69	18	15	110	8	M20
SK 8282 WI SK 9282 WI	SK 10382.1 WI SK 11382.1 WI			①	350	300	250	236	M16 x 25	42	110	45	12	10	90	8	M16
SK 8282 WIII SK 9282 WIII	SK 10382.1 WIII SK 11382.1 WIII		RLS	①	350	300	250	236	M20 x 30	65 / 70	140	69	18	15	110	8	M20
SK 8282 WIV SK 9282 WIV	SK 10382.1 WIV SK 11382.1 WIV			③	550	-	500	245	Ø 17.5	65 / 70	140	69	18	15	110	12	M20

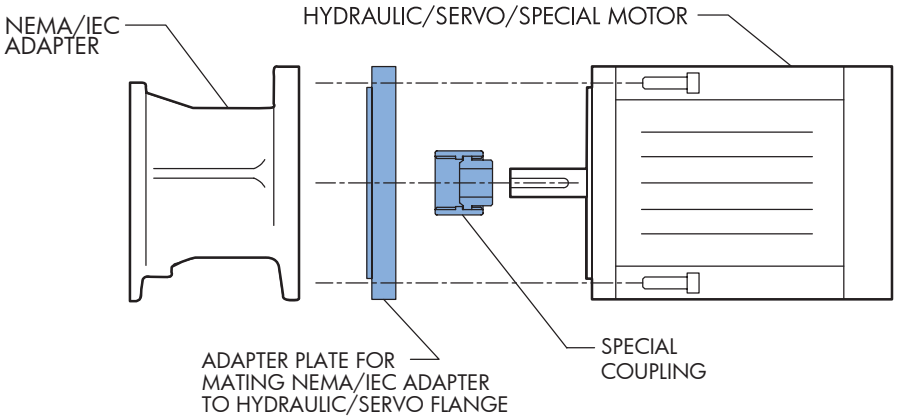
Custom Mounting Interface

NORD can provide custom input adapters typically consisting of a special adapter plate and special coupling to mount non-standard dimensioned motors or other devices.

When a custom input adapter is required, special attention needs to be given for each application to be sure the customer receives the performance that is necessary. The following information is required:

- Motor Dimensional Drawing
- Motor Weight
- Motor performance specifications, including torque, horsepower and operating speed ranges.

NORD engineers will review the performance requirements and make a unit selection based on given parameters.

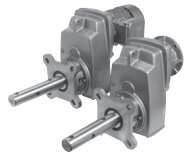


Custom Mounting Interface Example

Notes

CLINCHER™ NEMA C-Face & Solid Input Shaft Ratings

Screw Conveyor Package Ratings & Combinations Table Overview



NEMA C-Face Combination Tables Overview

GEARBOX TYPE – Nomenclature for specified gear unit.

TOTAL GEAR RATIO

OUTPUT SPEED – Based on 1750 rpm input speed

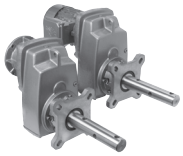
MAXIMUM TORQUE RATINGS

MAX POWER RATING – Based on 1750 rpm input speed

NEMA C-FACE INPUT POSSIBLE COMBINATIONS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input P_{max} [hp]	NEMA C-face 56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 40 max hp	360TC 50 max hp
SK 1282 SCP	4.79	365	1133	5.00	X	X	X	X	X	X	X	X
	5.47	320	1522	5.00	X	X	X	X	X	X	X	X
	6.43	272	1602	5.00	X	X	X	X	X	X	X	X

X = Available Combination



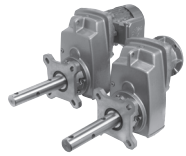
SK 1282 SCP & SK 1382 SCP
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 1282 SCP	4.79	365	1133	*5.00*	X	X	X					
	5.47	320	1522	*5.00*	X	X	X					
	6.43	272	1602	*5.00*	X	X	X					
	7.24	242	1655	*5.00*	X	X	X					
	8.21	213	1416	4.78	X	X	X*					
	8.24	212	1690	5.00	X	X	X					
	9.18	191	1673	*5.00*	X	X	X					
	10.34	169	1735	4.65	X	X	X*					
	11.76	149	1805	4.27	X	X	X*					
	14.11	124	1859	3.66	X	X	X*					
	17.21	102	1982	3.21	X	X	X*					
	20.57	85	1991	2.68	X	X	X*					
	25.22	69	1991	2.18	X	X	X*					
	28.33	62	1991	1.96	X	X*						
	32.08	55	2036	1.78	X	X*						
	41.07	43	1920	1.31	X	X*						
	46.19	38	1735	1.05	X							
	49.25	36	2301	1.31	X	X*						
	55.39	32	2080	1.06	X							
	58.89	30	2505	1.19	X	X*						
	66.23	26	2390	0.99	X*							
	72.17	24	2620	1.00	X	X*						
	81.17	22	2620	0.91	X*							
	92.48	19	2053	0.62	X*							
	109.50	16	1850	0.47	X*							
SK 1382 SCP	87.94	20	2425	0.77	X							
	105.11	17	2390	0.63	X							
	128.82	14	1991	0.43	X							
	163.93	11	1991	0.34	X							
	209.87	8.3	2080	0.28	X							
	251.67	7.0	2425	0.27	X							
	300.93	5.8	2390	0.22	X							
	368.79	4.8	1991	0.15	X							
	414.78	4.2	1991	0.13	X							
	472.60	3.7	1991	0.12	X							
	556.83	3.1	1991	0.10	X							
	634.45	2.8	1965	0.09	X							

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

SK 2282 SCP & SK 2382 SCP
Ratings & Combinations



NORD DRIVESYSTEMS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 2282 SCP	4.51	388	1646	*5.00*	X	X	X					
	5.72	306	1876	*5.00*	X	X	X					
	6.43	272	2000	*5.00*	X	X	X					
	7.48	234	2151	*5.00*	X	X	X					
	8.37	209	2266	*5.00*	X	X	X					
	9.03	194	2965	*5.00*	X	X	X					
	10.15	172	3151	*5.00*	X	X	X					
	11.81	148	3398	*5.00*	X	X	X					
	13.23	132	3584	*5.00*	X	X	X					
	16.53	106	4168	*5.00*	X	X	X					
	18.51	95	4301	*5.00*	X	X	X					
	21.90	80	4248	*5.00*	X	X	X					
	23.96	73	3850	4.46	X	X	X*					
	24.97	70	4337	4.81	X	X	X*					
	26.83	65	3885	4.01	X	X	X*					
	29.65	59	4425	4.14	X	X	X*					
	31.23	56	3938	3.50	X	X	X*					
	36.54	48	4434	3.38	X	X	X*					
	37.18	47	4071	3.03	X	X						
	43.71	40	4983	3.16	X	X	X*					
	45.11	39	3983	2.46	X	X						
	51.71	34	4611	2.49	X	X	X*					
	53.96	32	4478	2.27	X	X						
	63.83	27	4611	1.97	X	X*						
	69.67	25	3921	1.55	X	X*						
	82.42	21	4221	1.41	X	X*						
	100.98	17	3894	1.05	X	X*						
	104.07	17	3513	0.95	X*	X*						
	127.51	14	3363	0.75	X*	X*						
SK 2382 SCP	82.22	21	4965	1.50	X	X*						
	98.35	18	4983	1.42	X	X*						
	116.35	15	4611	1.10	X	X*						
	131.86	13	4611	0.95	X*	X*						
	149.96	12	4611	0.88	X*	X*						
	185.11	9.5	4611	0.69	X*	X*						
	236.11	7.4	4186	0.49	X*							
	276.27	6.3	4894	0.49	X*							
	330.45	5.3	4983	0.42	X*							
	390.93	4.5	4611	0.33	X*							
	482.56	3.6	4611	0.26	X*							
	623.10	2.8	4611	0.20	X*							
	763.41	2.3	3876	0.14	X*							

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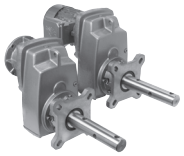

SK 3282 SCP & SK 3382 SCP
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 3282 SCP	4.48	391	4080	*10.00*	X	X	X	X				
	5.68	308	4912	*10.00*	X	X	X	X				
	6.70	261	5372	*10.00*	X	X	X	X				
	8.31	211	5983	*10.00*	X	X	X	X				
	9.80	179	7425	*10.00*	X	X	X	X				
	11.38	154	7266	*10.00*	X	X	X	X				
	14.11	124	7584	*10.00*	X	X	X	X				
	16.67	105	7443	*10.00*	X	X	X	X				
	20.18	87	7275	*10.00*	X	X	X	X				
	21.38	82	6390	8.31	X	X	X	X*				
	22.45	78	7080	8.76	X	X	X	X*				
	23.71	74	7124	8.36	X	X	X	X*				
	25.88	68	7487	8.07	X	X	X	X*				
	28.70	61	7700	7.45	X	X	X	X*				
	31.93	55	7761	6.77	X	X	X	X*				
	37.77	46	7390	5.39	X	X	X					
	38.62	45	5611	4.01	X	X	X*					
	42.02	42	8222	5.48	X	X	X*					
	44.85	39	6522	4.03	X	X	X*					
	48.04	36	4885	2.79	X	X						
	52.97	33	7478	3.91	X	X	X*					
	55.79	31	5682	2.79	X	X						
	64.12	27	8983	3.85	X	X	X*					
	65.89	27	6708	2.87	X	X						
	70.56	25	4991	1.98	X	X*						
	79.76	22	7523	2.62	X	X						
	88.74	20	8363	2.65	X	X						
	100.88	17	7142	1.93	X	X*						
	112.23	16	6815	1.73	X	X*						
SK 3382 SCP	89.60	20	5496	1.50	X	X*	X*					
	104.05	17	6505	1.50	X	X*	X*					
	126.93	14	6850	1.50	X	X*	X*					
	161.46	11	6974	1.22	X	X*						
	190.69	9.2	7664	1.12	X	X*						
	230.83	7.6	8850	1.07	X	X*						
	287.14	6.1	8301	0.80	X*	X*						
	408.58	4.3	7045	0.48	X*							
	482.56	3.6	7664	0.44	X*							
	584.13	3	8850	0.42	X*							
	726.61	2.4	8354	0.32	X*							
	808.42	2.2	9195	0.32	X*							
	919.00	1.9	7275	0.22	X*							
	1,022.42	1.7	6965	0.19	X*							

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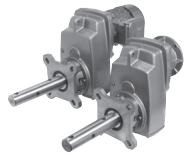
SK 4282 SCP
Ratings & Combinations



DRIVESYSTEMS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face*							
					56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 4282 SCP	4.70	372	9160	*20.00*			X	X	X			
	5.00	350	9160	*20.00*			X	X	X			
	5.43	322	9160	*20.00*			X	X	X			
	6.06	289	10620	*20.00*	X	X	X	X	X			
	7.13	245	10638	*20.00*	X	X	X	X	X			
	8.33	210	11257	*20.00*	X	X	X	X	X			
	9.23	190	14461	*20.00*	X	X	X	X	X			
	10.85	161	15045	*20.00*	X	X	X	X	X			
	12.68	138	15488	*20.00*	X	X	X	X	X			
	15.20	115	15930	*20.00*	X	X	X	X	X			
	18.18	96	15930	*20.00*	X	X	X	X	X			
	21.45	82	14921	19.41	X	X	X	X	X*			
	22.39	78	15036	18.60	X	X	X	X	X*			
	26.25	67	14231	15.12	X	X	X	X	X*			
	26.43	66	15815	16.55	X	X	X	X	X*			
	26.72	65	14160	14.60			X	X				
	32.04	55	15797	13.78			X	X				
	32.34	54	14337	12.28	X	X	X	X	X*			
	36.40	48	12169	9.26			X	X*				
	36.81	48	12390	9.43	X	X	X	X*				
	38.31	46	17700	12.91			X	X*				
	40.74	43	13771	9.39	X	X	X	X*				
	43.65	40	14160	8.98			X	X*				
	45.05	39	14107	8.73	X	X	X	X*				
	52.20	34	16089	8.68			X	X*				
	61.60	28	15877	7.05			X	X*				
	75.39	23	14063	5.13			X	X*				
	90.52	19	14160	4.27	X	X	X*					
	110.78	16	14160	3.59	X	X	X*					
	155.40	11	11284	1.97	X	X*						

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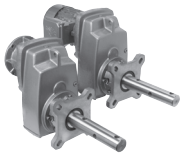

SK 4382 SCP
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 4382 SCP	86.83	20	17523	*5.00*	X	X	X*					
	103.82	17	17700	4.77	X	X	X*					
	118.38	15	17700	4.21	X	X	X*					
	140.60	12	17700	3.37	X	X	X*					
	160.20	11	14664	2.56	X	X	X*					
	191.57	9.1	17612	2.54	X	X	X*					
	211.09	8.3	14470	1.90	X	X*						
	253.12	6.9	17355	1.90	X	X*						
	272.54	6.4	13912	1.41	X	X*						
	302.65	5.8	18381	1.69	X	X*						
	326.81	5.4	16727	1.43	X	X*						
	344.84	5.1	14709	1.19	X	X*						
	390.76	4.5	17700	1.26	X	X*						
	412.38	4.2	17612	1.17	X	X*						
	445.23	3.9	14744	0.91	X*	X*						
	532.44	3.3	17700	0.93	X*	X*						
	605.88	2.9	13054	0.60	X*	X*						
	654.27	2.7	10912	0.47	X*	X*						
	782.32	2.2	13063	0.46	X*	X*						
	1,097.48	1.6	9629	0.24	X*	X*						
	1,129.91	1.5	14160	0.34	X*	X*						
	1,585.08	1.1	12567	0.22	X*	X*						

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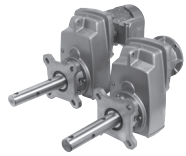
SK 5282 SCP
Ratings & Combinations



DRIVESYSTEMS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face*							
					56C	140TC	180TC	210TC	250TC	280TC	320TC	360TC
					1.0 max hp	2.0 max hp	5.0 max hp	10 max hp	20 max hp	30 max hp	50 max hp	75 max hp
SK 5282 SCP	4.32	405	13718	*30.00*					X	X		
	5.01	349	15045	*30.00*					X	X		
	5.29	331	15488	*30.00*					X	X		
	5.71	306	15930	*30.00*					X	X		
	6.33	276	18709	*30.00*			X	X	X	X		
	7.17	244	19125	*30.00*			X	X	X	X		
	8.70	201	20886	*30.00*	X	X	X	X	X	X		
	9.46	185	20355	*30.00*			X	X	X	X		
	10.71	163	22125	*30.00*			X	X	X	X		
	13.00	135	23267	*30.00*	X	X	X	X	X	X		
	15.38	114	23010	*30.00*	X	X	X	X	X	X		
	17.59	99	24338	*30.00*	X	X	X	X	X	X		
	18.88	93	23010	*30.00*	X	X	X	X	X	X		
	20.36	86	27435	*30.00*	X	X	X	X	X	X		
	25.00	70	25665	28.49	X	X	X	X	X	X*		
	30.50	57	25665	23.20	X	X	X	X	X			
	33.43	52	20355	16.79	X	X	X	X	X*	X*		
	35.46	49	23895	18.57			X	X				
	40.80	43	22125	15.09	X	X	X	X	X*			
	41.94	42	28320	18.87			X	X				
	47.27	37	21240	12.46			X	X				
	51.49	34	28630	15.44			X	X				
	55.55	32	22125	11.23	X	X	X	X				
	55.90	31	23010	11.31			X	X				
	68.63	25	26285	10.42			X	X				
	81.61	21	16178	5.39	X	X	X					
	91.81	19	24417	7.36			X	X*				
	100.19	17	19833	5.35	X	X	X					
	134.03	13	23488	4.84	X	X	X*					

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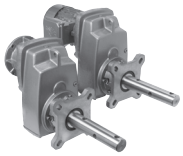

SK 5382 SCP
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 5382 SCP	82.72	21	24736	*7.50*	X	X	X	X*				
	91.71	19	25665	*7.50*	X	X	X	X*				
	117.37	15	24338	5.79	X	X	X	X*				
	138.82	13	28320	5.84	X	X	X	X*				
	153.92	11	28320	4.94	X	X	X*	X*				
	171.27	10	24780	3.93	X	X	X*					
	202.57	8.6	28320	3.86	X	X	X*					
	248.70	7	28320	3.14	X	X	X*					
	269.99	6.5	23895	2.46	X	X	X*					
	331.48	5.3	28320	2.38	X	X	X*					
	361.69	4.8	24780	1.89	X	X*						
	427.79	4.1	28320	1.84	X	X*						
	525.20	3.3	28320	1.48	X	X*						
	570.18	3.1	24780	1.22	X	X*						
	700.03	2.5	28320	1.12	X	X*						
	936.45	1.9	23895	0.72	X*	X*						
	1,367.08	1.3	23895	0.49	X*	X*						

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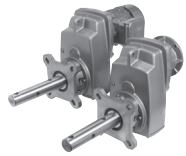
SK 6282 SCP
Ratings & Combinations



DRIVESYSTEMS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face*							
					56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 6282 SCP	4.39	399	18001	*60.00*					X	X	X	
	4.88	359	19081	*60.00*			X	X	X	X	X	
	5.50	318	20275	*60.00*			X	X	X	X	X	
	5.78	303	20656	*60.00*			X	X	X	X	X	
	5.99	292	21169	*60.00*					X	X	X	
	6.74	260	26462	*60.00*			X	X	X	X	X	
	7.82	224	23736	*60.00*			X	X	X	X	X	
	9.39	186	24373	*60.00*			X	X	X	X	X	
	10.64	164	38179	*60.00*			X	X	X	X	X	
	12.35	142	38843	*60.00*			X	X	X	X	X	
	14.83	118	39604	*60.00*			X	X	X	X	X	
	18.70	94	39179	58.43			X	X	X	X	X	
	22.95	76	40135	48.40			X	X	X	X	X*	
	26.05	67	40117	42.65			X	X	X	X		
	29.90	59	40152	37.59			X	X	X	X*		
	39.48	44	28320	19.77			X	X	X*	X*		
	49.75	35	35754	19.86			X	X	X*	X*		
	61.08	29	40135	18.47			X	X	X*	X*		
	65.44	27	29816	12.77			X	X				
	80.33	22	36559	12.76			X	X				

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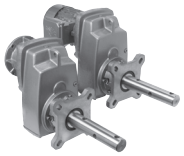

SK 6382 SCP
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 max hp	140TC 2.0 max hp	180TC 5.0 max hp	210TC 10 max hp	250TC 20 max hp	280TC 30 max hp	320TC 50 max hp	360TC 75 max hp
SK 6382 SCP	24.42	72	41507	*30.00*	X	X	X	X	X	X		
	28.72	61	40710	*30.00*	X	X	X	X	X	X		
	30.91	57	40268	*30.00*	X	X	X	X	X	X		
	36.34	48	40268	*30.00*	X	X	X	X	X	X		
	42.46	41	40268	26.20	X	X	X	X	X	X*		
	51.07	34	44958	24.25	X	X	X	X	X	X*		
	59.66	29	48675	22.40	X	X	X	X	X	X*		
	73.50	24	49295	18.77	X	X	X	X	X*			
	75.18	23	53100	19.38	X	X	X	X	X*	X*		
	92.63	19	53100	16.01	X	X	X	X	X*			
	114.79	15	52038	12.39	X	X	X	X	X*			
	126.87	14	40533	9.00	X	X	X	X*				
	159.88	11	51065	8.91	X	X	X	X*				
	171.34	10	49295	7.82			X	X*				
	212.33	8.2	41330	5.38			X	X*				
	225.79	7.8	35577	4.40	X	X	X*					
	251.76	7.0	39648	4.40	X	X	X*					
	267.59	6.5	52038	5.37			X	X*				
	317.28	5.5	49914	4.36	X	X	X*					
	393.19	4.5	52038	3.72	X	X	X*					
	445.09	3.9	36905	2.28	X	X						
	551.58	3.2	45755	2.32	X	X						

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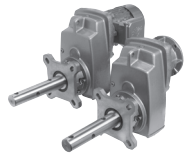
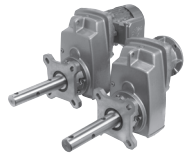
* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

Notes



DRIVESYSTEMS

CLINCHER™ SCP Gearmotor Ratings



DRIVESYSTEMS

Explanation of Selection Tables

OUTPUT SPEED – Output speed at NORD standard efficiency motor rated speed.

OUTPUT TORQUE – Output torque produced by motor.

SERVICE FACTOR

AGMA SERVICE CLASS

TOTAL GEAR RATIO

NEMA C-FACE INPUT

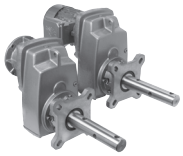
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	CEMA DriveShaft 2"	CEMA DriveShaft 2-7/16"	CEMA DriveShaft 3"	CEMA DriveShaft 3-7/16"
79	401	10.6	III	21.90	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
72	440	8.8	III	23.96	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
69	458	9.5	III	24.97	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		

AXIAL LOAD RATING HEAVY DUTY BEARINGS "VL"

AXIAL LOAD RATING STANDARD BEARINGS

CEMA DRIVESHAFT AVAILABILITY, X=POSSIBLE COMBINATION

The specified motor efficiency class needs to meet the requirements of the country where the motor will be utilized.
See the Energy Efficiency Regulations pages on 233 for additional information.

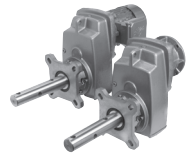


0.16 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
356	28	40.0	III	4.79	1147	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
311	32	46.9	III	5.47	1232	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
265	38	42.1	III	6.43	1305	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
235	43	38.5	III	7.24	1358	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
208	49	29.2	III	8.21	1414	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
207	49	34.6	III	8.24	1415	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
186	54	30.8	III	9.18	1466	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
164	61	28.3	III	10.34	1525	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
145	70	25.9	III	11.76	1589	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
121	84	22.2	III	14.11	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
99	102	19.4	III	17.21	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
83	122	16.3	III	20.57	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
67	150	13.3	III	25.22	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
60	168	11.8	III	28.33	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
53	190	10.7	III	32.08	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
37	274	6.3	III	46.19	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
31	328	6.3	III	55.39	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
26	393	6.1	III	66.23	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
21	481	5.4	III	81.17	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
18	548	3.7	III	92.48	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
16	649	2.8	III	109.50	1607	1619	SK 1282 SCP	63 S/4	56C	X	X	X		
21	488	10.2	III	82.22	2698	3372	SK 2382 SCP	63 S/4	56C	X	X	X		
17	584	8.5	III	98.35	2698	3372	SK 2382 SCP	63 S/4	56C	X	X	X		
15	690	6.7	III	116.35	2698	3372	SK 2382 SCP	63 S/4	56C	X	X	X		
19	531	10.4	III	89.60	3260	4496	SK 3382 SCP	63 S/4	56C	X	X	X	X	
16	616	10.6	III	104.05	3260	4496	SK 3382 SCP	63 S/4	56C	X	X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

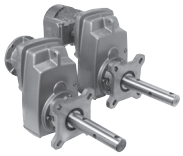
0.25 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
352	45	25.3	III	4.79	1147	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
307	51	29.7	III	5.47	1231	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
262	60	26.6	III	6.43	1302	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
232	68	24.3	III	7.24	1355	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
205	77	18.5	III	8.21	1411	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
204	77	21.9	III	8.24	1411	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
183	86	19.5	III	9.18	1462	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
162	97	17.9	III	10.34	1520	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
143	110	16.4	III	11.76	1583	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
119	132	14.1	III	14.11	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
98	161	12.3	III	17.21	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
82	193	10.3	III	20.57	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
67	237	8.4	III	25.22	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
59	266	7.5	III	28.33	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
52	301	6.8	III	32.08	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
36	433	4.0	III	46.19	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
30	519	4.0	III	55.39	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
25	621	3.8	III	66.23	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
21	761	3.4	III	81.17	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
18	867	2.4	III	92.48	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
15	1027	1.8	II	109.50	1607	1619	SK 1282 SCP	63 L/4	56C	X	X	X		
20	772	6.4	III	82.22	2698	3372	SK 2382 SCP	63 L/4	56C	X	X	X		
17	923	5.4	III	98.35	2698	3372	SK 2382 SCP	63 L/4	56C	X	X	X		
19	839	6.6	III	89.60	3260	4496	SK 3382 SCP	63 L/4	56C	X	X	X	X	
16	975	6.7	III	104.05	3260	4496	SK 3382 SCP	63 L/4	56C	X	X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

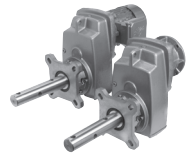


0.33 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
358	58	19.5	III	4.79	1131	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
312	67	22.9	III	5.47	1212	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
266	78	20.5	III	6.43	1289	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
236	88	18.8	III	7.24	1340	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
209	99	14.2	III	8.21	1395	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
208	100	16.9	III	8.24	1395	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
187	111	15.0	III	9.18	1445	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
165	126	13.8	III	10.34	1502	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
146	143	12.6	III	11.76	1563	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
121	171	10.8	III	14.11	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
99	209	9.5	III	17.21	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
83	251	7.9	III	20.57	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
68	307	6.5	III	25.22	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
60	345	5.8	III	28.33	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
53	390	5.2	III	32.08	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
42	499	3.8	III	41.07	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
37	561	3.1	III	46.19	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
35	599	3.8	III	49.25	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
31	673	3.1	III	55.39	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
29	716	3.5	III	58.89	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
26	806	3.0	III	66.23	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
24	878	3.0	III	72.17	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
21	987	2.7	III	81.17	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
19	1124	1.8	II	92.48	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
16	1331	1.4	II	109.50	1607	1619	SK 1282 SCP	71 S/4	56C	X	X	X		
25	848	4.6	III	69.67	2698	3372	SK 2282 SCP	71 S/4	56C	X	X	X		
21	1003	4.2	III	82.42	2698	3372	SK 2282 SCP	71 S/4	56C	X	X	X		
17	1228	3.2	III	100.98	2698	3372	SK 2282 SCP	71 S/4	56C	X	X	X		
16	1266	2.8	III	104.07	2698	3372	SK 2282 SCP	71 S/4	56C	X	X	X		
21	1001	5.0	III	82.22	2698	3372	SK 2382 SCP	71 S/4	56C	X	X	X		
17	1197	4.2	III	98.35	2698	3372	SK 2382 SCP	71 S/4	56C	X	X	X		
15	1416	3.3	III	116.35	2698	3372	SK 2382 SCP	71 S/4	56C	X	X	X		
24	858	5.8	III	70.56	3260	4496	SK 3282 SCP	71 S/4	56C	X	X	X	X	
17	1227	5.8	III	100.88	3260	4496	SK 3282 SCP	71 S/4	56C	X	X	X	X	
15	1365	5.0	III	112.23	3260	4496	SK 3282 SCP	71 S/4	56C	X	X	X	X	
19	1088	5.1	III	89.60	3260	4496	SK 3382 SCP	71 S/4	56C	X	X	X	X	
16	1264	5.1	III	104.05	3260	4496	SK 3382 SCP	71 S/4	56C	X	X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

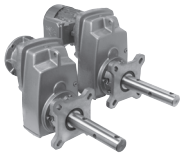
0.50 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
360	88	12.9	III	4.79	1114	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
314	100	15.2	III	5.47	1192	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
268	118	13.6	III	6.43	1273	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
237	133	12.5	III	7.24	1322	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
210	150	9.4	III	8.21	1377	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
209	151	11.2	III	8.24	1375	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
188	168	10.0	III	9.18	1424	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
166	190	9.2	III	10.34	1478	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
146	215	8.4	III	11.76	1537	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
122	258	7.2	III	14.11	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
100	315	6.3	III	17.21	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
83	378	5.3	III	20.57	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
68	462	4.3	III	25.22	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
61	519	3.8	III	28.33	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
54	588	3.5	III	32.08	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
42	752	2.6	III	41.07	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
37	846	2.1	III	46.19	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
35	902	2.6	III	49.25	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
31	1014	2.1	III	55.39	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
29	1079	2.3	III	58.89	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
26	1214	2.0	III	66.23	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
24	1322	2.0	III	72.17	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
21	1487	1.8	II	81.17	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
19	1693	1.2	I	92.48	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
16	2005	0.9	*	109.50	1607	1619	SK 1282 SCP	71 L/4	56C	X	X	X		
302	104	18.0	III	5.72	2272	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
267	118	17.0	III	6.43	2363	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
230	137	15.7	III	7.48	2481	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
206	153	14.8	III	8.37	2572	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
191	165	18.0	III	9.03	2637	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
169	186	16.9	III	10.15	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
146	216	15.7	III	11.81	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
130	242	14.8	III	13.23	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
104	303	13.7	III	16.53	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
93	339	12.7	III	18.51	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

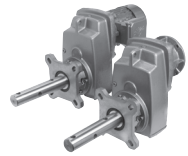


0.50 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
79	401	10.6	III	21.90	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
72	440	8.8	III	23.96	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
69	458	9.5	III	24.97	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
64	491	7.9	III	26.83	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
58	543	8.1	III	29.65	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
46	681	6.0	III	37.18	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
25	1277	3.1	III	69.67	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
21	1511	2.8	III	82.42	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
17	1850	2.1	III	100.98	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
17	1907	1.8	II	104.07	2698	3372	SK 2282 SCP	71 L/4	56C	X	X	X		
21	1508	3.3	III	82.22	2698	3372	SK 2382 SCP	71 L/4	56C	X	X	X		
17	1803	2.8	III	98.35	2698	3372	SK 2382 SCP	71 L/4	56C	X	X	X		
15	2133	2.2	III	116.35	2698	3372	SK 2382 SCP	71 L/4	56C	X	X	X		
300	105	46.8	III	5.74	2246	3989	SK 3282 SCP	71 L/4	56C	X	X	X	X	
205	154	38.9	III	8.31	2723	4465	SK 3282 SCP	71 L/4	56C	X	X	X	X	
122	258	29.4	III	14.11	3221	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
103	305	24.4	III	16.67	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
85	369	19.7	III	20.18	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
80	392	16.3	III	21.38	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
77	411	17.2	III	22.45	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
73	434	16.4	III	23.71	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
67	474	15.8	III	25.88	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
60	525	14.7	III	28.70	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
54	584	13.3	III	31.93	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
46	692	10.7	III	37.77	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
41	770	10.7	III	42.02	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
24	1292	3.9	III	70.56	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
17	1848	3.9	III	100.88	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
15	2056	3.3	III	112.23	3260	4496	SK 3282 SCP	71 L/4	56C	X	X	X	X	
19	1639	3.4	III	89.60	3260	4496	SK 3382 SCP	71 L/4	56C	X	X	X	X	
17	1904	3.4	III	104.05	3260	4496	SK 3382 SCP	71 L/4	56C	X	X	X	X	
20	1590	11.0	III	86.83	4946	6744	SK 4382 SCP	71 L/4	56C		X	X	X	
17	1903	9.3	III	103.82	4946	6744	SK 4382 SCP	71 L/4	56C		X	X	X	
15	2172	8.2	III	118.38	4946	6744	SK 4382 SCP	71 L/4	56C		X	X	X	
21	1512	16.4	III	82.72	7194	8992	SK 5382 SCP	71 L/4	56C		X	X	X	X
19	1677	15.3	III	91.71	7194	8992	SK 5382 SCP	71 L/4	56C		X	X	X	X
15	2149	11.3	III	117.37	7194	8992	SK 5382 SCP	71 L/4	56C		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

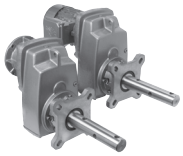
0.75 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
358	132	8.6	III	4.79	1098	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
312	151	10.1	III	5.47	1172	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
266	177	9.0	III	6.43	1255	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
236	200	8.3	III	7.24	1301	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
209	226	6.3	III	8.21	1356	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
208	227	7.4	III	8.24	1351	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
187	253	6.6	III	9.18	1400	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
165	286	6.1	III	10.34	1451	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
146	325	5.6	III	11.76	1505	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
121	389	4.8	III	14.11	1589	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
99	476	4.2	III	17.21	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
83	570	3.5	III	20.57	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
68	698	2.9	III	25.22	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
60	784	2.5	III	28.33	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
53	887	2.3	III	32.08	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
42	1134	1.7	II	41.07	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
37	1276	1.4	II	46.19	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
35	1361	1.7	II	49.25	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
31	1531	1.4	II	55.39	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
29	1628	1.5	II	58.89	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
26	1832	1.3	I	66.23	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
24	1995	1.3	I	72.17	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
21	2244	1.2	I	81.17	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
19	2555	0.8	*	92.48	1607	1619	SK 1282 SCP	80 S/4	56C	X	X	X		
300	158	11.9	III	5.72	2261	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
266	178	11.3	III	6.43	2350	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
229	207	10.4	III	7.48	2466	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
205	231	9.8	III	8.37	2554	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
190	249	11.9	III	9.03	2620	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
168	281	11.2	III	10.15	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
145	327	10.4	III	11.81	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
130	365	9.8	III	13.23	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
103	458	9.1	III	16.53	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
92	512	8.4	III	18.51	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
78	605	7.0	III	21.90	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
71	663	5.8	III	23.96	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
68	691	6.3	III	24.97	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
64	741	5.2	III	26.83	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
58	819	5.4	III	29.65	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

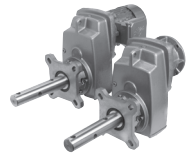


0.75 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
46	1028	4.0	III	37.18	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
38	1248	3.2	III	45.11	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
32	1492	3.0	III	53.96	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
27	1765	2.6	III	63.83	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
25	1927	2.0	III	69.67	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
21	2279	1.9	II	82.42	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
17	2791	1.4	II	100.98	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
16	2877	1.2	I	104.07	2698	3372	SK 2282 SCP	80 S/4	56C	X	X	X		
21	2275	2.2	III	82.22	2698	3372	SK 2382 SCP	80 S/4	56C	X	X	X		
17	2720	1.8	II	98.35	2698	3372	SK 2382 SCP	80 S/4	56C	X	X	X		
15	3218	1.4	II	116.35	2698	3372	SK 2382 SCP	80 S/4	56C	X	X	X		
298	159	31	III	5.74	2237	3984	SK 3282 SCP	80 S/4	56C	X	X	X	X	
203	232	25.8	III	8.31	2705	4457	SK 3282 SCP	80 S/4	56C	X	X	X	X	
121	389	19.5	III	14.11	3198	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
103	460	16.2	III	16.67	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
85	557	13.1	III	20.18	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
80	591	10.8	III	21.38	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
76	620	11.4	III	22.45	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
72	655	10.9	III	23.71	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
66	715	10.5	III	25.88	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
60	792	9.7	III	28.70	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
54	882	8.8	III	31.93	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
45	1045	7.1	III	37.77	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
41	1162	7.1	III	42.02	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
36	1327	3.7	III	48.04	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
31	1541	3.7	III	55.79	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
26	1822	3.7	III	65.89	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
24	1949	2.6	III	70.56	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
21	2204	3.4	III	79.76	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
19	2453	3.4	III	88.74	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
17	2788	2.6	III	100.88	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
15	3102	2.2	III	112.23	3260	4496	SK 3282 SCP	80 S/4	56C	X	X	X	X	
19	2473	2.2	III	89.60	3260	4496	SK 3382 SCP	80 S/4	56C	X	X	X	X	
16	2873	2.3	III	104.05	3260	4496	SK 3382 SCP	80 S/4	56C	X	X	X	X	
20	2399	7.3	III	86.83	4946	6744	SK 4382 SCP	80 S/4	56C		X	X	X	
16	2871	6.2	III	103.82	4946	6744	SK 4382 SCP	80 S/4	56C		X	X	X	
21	2282	10.8	III	82.72	7194	8992	SK 5382 SCP	80 S/4	56C		X	X	X	X
19	2530	10.1	III	91.71	7194	8992	SK 5382 SCP	80 S/4	56C		X	X	X	X
15	3242	7.5	III	117.37	7194	8992	SK 5382 SCP	80 S/4	56C		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

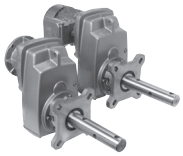
1 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
362	174	6.5	III	4.79	1073	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
316	199	7.6	III	5.47	1143	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
270	234	6.9	III	6.43	1231	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
239	264	6.3	III	7.24	1275	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
211	298	4.8	III	8.21	1328	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
210	300	5.6	III	8.24	1321	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
189	334	5.0	III	9.18	1368	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
167	377	4.6	III	10.34	1416	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
147	428	4.2	III	11.76	1466	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
123	513	3.6	III	14.11	1544	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
100	627	3.2	III	17.21	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
84	751	2.7	III	20.57	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
69	920	2.2	III	25.22	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
61	1033	1.9	II	28.33	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
54	1168	1.7	II	32.08	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
42	1495	1.3	I	41.07	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
37	1682	1.0	I	46.19	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
35	1793	1.3	I	49.25	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
31	2017	1.0	I	55.39	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
29	2146	1.2	I	58.89	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
26	2414	1.0	I	66.23	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
24	2629	1.0	I	72.17	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
21	2957	0.9	*	81.17	1607	1619	SK 1282 SCP	80 LP/4	140TC	X	X	X		
304	208	9.0	III	5.72	2235	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
269	234	8.5	III	6.43	2325	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
231	273	7.9	III	7.48	2437	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
207	305	7.4	III	8.37	2523	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
192	328	9.0	III	9.03	2589	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
170	370	8.5	III	10.15	2688	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
146	430	7.9	III	11.81	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
131	481	7.5	III	13.23	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
104	603	6.9	III	16.53	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
93	674	6.4	III	18.51	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
79	798	5.3	III	21.90	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
72	874	4.4	III	23.96	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
69	910	4.8	III	24.97	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
65	977	4.0	III	26.83	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
58	1080	4.1	III	29.65	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
47	1355	3.0	III	37.18	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
38	1645	2.4	III	45.11	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
32	1967	2.3	III	53.96	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
27	2326	2.0	III	63.83	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
25	2539	1.5	II	69.67	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
21	3004	1.4	II	82.42	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		
17	3679	1.1	I	100.98	2698	3372	SK 2282 SCP	80 LP/4	140TC	X	X	X		

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

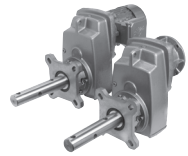


1 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
21	2998	1.7	II	82.22	2698	3372	SK 2382 SCP	80 LP/4	140TC	X	X	X		
18	3585	1.4	II	98.35	2698	3372	SK 2382 SCP	80 LP/4	140TC	X	X	X		
15	4241	1.1	I	116.35	2698	3372	SK 2382 SCP	80 LP/4	140TC	X	X	X		
301	209	23.5	III	5.74	2210	3960	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
206	306	19.5	III	8.31	2663	4426	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
123	513	14.8	III	14.11	3158	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
104	607	12.3	III	16.67	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
86	734	9.9	III	20.18	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
81	779	8.2	III	21.38	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
77	817	8.7	III	22.45	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
73	863	8.3	III	23.71	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
67	942	7.9	III	25.88	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
60	1044	7.4	III	28.70	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
54	1162	6.7	III	31.93	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
46	1377	5.4	III	37.77	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
41	1532	5.4	III	42.02	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
36	1749	2.8	III	48.04	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
31	2031	2.8	III	55.79	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
26	2401	2.8	III	65.89	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
25	2569	1.9	II	70.56	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
22	2905	2.6	III	79.76	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
19	3233	2.6	III	88.74	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
17	3674	1.9	II	100.88	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
15	4089	1.7	II	112.23	3260	4496	SK 3282 SCP	80 LP/4	140TC	X	X	X	X	
19	3259	1.7	II	89.60	3260	4496	SK 3382 SCP	80 LP/4	140TC	X	X	X	X	
17	3786	1.7	II	104.05	3260	4496	SK 3382 SCP	80 LP/4	140TC	X	X	X	X	
20	3161	5.5	III	86.83	4946	6744	SK 4382 SCP	80 LP/4	140TC		X	X	X	
17	3784	4.7	III	103.82	4946	6744	SK 4382 SCP	80 LP/4	140TC		X	X	X	
15	4318	4.1	III	118.38	4946	6744	SK 4382 SCP	80 LP/4	140TC		X	X	X	
21	3007	8.2	III	82.72	7194	8992	SK 5382 SCP	80 LP/4	140TC		X	X	X	X
19	3334	7.7	III	91.71	7194	8992	SK 5382 SCP	80 LP/4	140TC		X	X	X	X
15	4272	5.7	III	117.37	7194	8992	SK 5382 SCP	80 LP/4	140TC		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

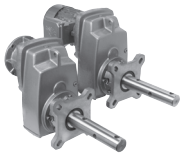
1.5 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
364	260	4.4	III	4.79	1033	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
318	297	5.1	III	5.47	1096	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
271	349	4.6	III	6.43	1176	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
240	394	4.2	III	7.24	1228	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
213	444	3.2	III	8.21	1280	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
211	447	3.8	III	8.24	1269	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
190	498	3.4	III	9.18	1313	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
168	562	3.1	III	10.34	1353	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
148	638	2.8	III	11.76	1395	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
124	765	2.4	III	14.11	1463	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
101	935	2.1	III	17.21	1528	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
84	1120	1.8	II	20.57	1587	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
69	1371	1.5	II	25.22	1607	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
61	1540	1.3	I	28.33	1607	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
54	1743	1.2	I	32.08	1607	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
42	2230	0.9	*	41.07	1607	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
35	2674	0.9	*	49.25	1607	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
30	3201	0.8	*	58.89	1607	1619	SK 1282 SCP	90 SP/4	140TC	X	X	X		
386	245	6.7	III	4.51	1951	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
305	310	6.1	III	5.72	2186	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
271	349	5.7	III	6.43	2287	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
233	406	5.3	III	7.48	2394	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
208	454	5.0	III	8.37	2475	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
193	489	6.1	III	9.03	2541	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
171	552	5.7	III	10.15	2634	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
147	642	5.3	III	11.81	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
132	717	5.0	III	13.23	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
105	900	4.6	III	16.53	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
94	1006	4.3	III	18.51	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
79	1189	3.6	III	21.90	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
73	1303	3.0	III	23.96	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
70	1357	3.2	III	24.97	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
65	1457	2.7	III	26.83	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
59	1610	2.7	III	29.65	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
56	1695	2.3	III	31.23	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
48	1987	2.2	III	36.54	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
47	2020	2.0	III	37.18	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
40	2376	2.1	III	43.71	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
39	2453	1.6	II	45.11	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
34	2811	1.6	II	51.71	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
32	2933	1.5	II	53.96	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
27	3470	1.3	I	63.83	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
25	3787	1.0	I	69.67	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		
21	4480	0.9	*	82.42	2698	3372	SK 2282 SCP	90 SP/4	140TC	X	X	X		

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

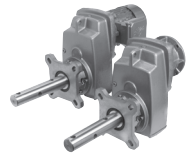


1.5 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
21	4471	1.1	I	82.22	2698	3372	SK 2382 SCP	90 SP/4	140TC	X	X	X		
18	5346	0.9	*	98.35	2698	3372	SK 2382 SCP	90 SP/4	140TC	X	X	X		
383	247	16.5	III	4.48	1962	3675	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
303	312	15.8	III	5.74	2174	3931	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
257	368	14.6	III	6.70	2346	4124	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
207	457	13.1	III	8.31	2604	4386	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
178	531	14.0	III	9.80	2771	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
153	617	11.8	III	11.38	2903	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
124	765	9.9	III	14.11	3096	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
104	905	8.2	III	16.67	3257	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
86	1095	6.6	III	20.18	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
81	1161	5.5	III	21.38	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
78	1218	5.8	III	22.45	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
73	1287	5.5	III	23.71	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
67	1405	5.3	III	25.88	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
61	1558	4.9	III	28.70	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
55	1733	4.5	III	31.93	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
46	2053	3.6	III	37.77	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
45	2097	2.7	III	38.62	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
41	2285	3.6	III	42.02	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
39	2436	2.7	III	44.85	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
36	2608	1.9	II	48.04	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
33	2879	2.6	III	52.97	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
31	3030	1.9	II	55.79	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
27	3483	2.6	III	64.12	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
26	3581	1.9	II	65.89	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
25	3832	1.3	I	70.56	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
22	4333	1.7	II	79.76	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
20	4821	1.7	II	88.74	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
17	5480	1.3	I	100.88	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
16	6098	1.1	I	112.23	3260	4496	SK 3282 SCP	90 SP/4	140TC	X	X	X	X	
19	4860	1.1	I	89.60	3260	4496	SK 3382 SCP	90 SP/4	140TC	X	X	X	X	
17	5646	1.2	I	104.05	3260	4496	SK 3382 SCP	90 SP/4	140TC	X	X	X	X	
287	330	32.2	III	6.06	3211	6010	SK 4282 SCP	90 SP/4	140TC		X	X	X	
244	387	27.5	III	7.13	3458	6298	SK 4282 SCP	90 SP/4	140TC		X	X	X	
209	453	24.9	III	8.33	3729	6593	SK 4282 SCP	90 SP/4	140TC		X	X	X	
189	501	28.8	III	9.23	3936	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
161	589	25.6	III	10.85	4202	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
137	688	22.5	III	12.68	4414	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
115	825	19.3	III	15.20	4677	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
96	988	16.1	III	18.18	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
81	1166	12.8	III	21.45	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

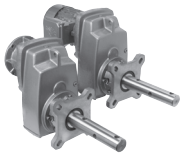
1.5 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
78	1216	12.4	III	22.39	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
66	1426	10.0	III	26.25	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
66	1435	11.0	III	26.43	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
54	1755	8.2	III	32.34	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
47	2001	6.2	III	36.81	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
43	2216	6.2	III	40.74	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
39	2448	5.8	III	45.05	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
23	4167	3.4	III	76.70	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
19	4918	2.9	III	90.52	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
16	6016	2.4	III	110.78	4946	6744	SK 4282 SCP	90 SP/4	140TC		X	X	X	
26	3627	2.9	III	66.65	4946	6744	SK 4382 SCP	90 SP/4	140TC		X	X	X	
20	4715	3.7	III	86.83	4946	6744	SK 4382 SCP	90 SP/4	140TC		X	X	X	
17	5643	3.1	III	103.82	4946	6744	SK 4382 SCP	90 SP/4	140TC		X	X	X	
15	6440	2.7	III	118.38	4946	6744	SK 4382 SCP	90 SP/4	140TC		X	X	X	
200	472	44.2	III	8.70	5012	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
134	706	32.9	III	13.00	6044	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
113	836	27.5	III	15.38	6384	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
99	957	25.4	III	17.59	6668	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
92	1025	22.5	III	18.88	6820	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
85	1106	24.8	III	20.36	6984	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
70	1356	18.9	III	25.00	7194	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
57	1656	15.5	III	30.50	7194	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
52	1815	11.2	III	33.43	7194	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
43	2216	10.0	III	40.80	7194	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
31	3018	7.3	III	55.55	7194	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
21	4438	3.6	III	81.61	7194	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
17	5441	3.6	III	100.19	7194	8992	SK 5282 SCP	90 SP/4	140TC		X	X	X	X
21	4485	5.5	III	82.72	7194	8992	SK 5382 SCP	90 SP/4	140TC		X	X	X	X
19	4972	5.2	III	91.71	7194	8992	SK 5382 SCP	90 SP/4	140TC		X	X	X	X
15	6372	3.8	III	117.37	7194	8992	SK 5382 SCP	90 SP/4	140TC		X	X	X	X
71	1327	31.3	III	24.42	9730	13489	SK 6382 SCP	90 SP/4	140TC				X	X
61	1557	26.1	III	28.72	10246	13489	SK 6382 SCP	90 SP/4	140TC				X	X
56	1679	24.0	III	30.91	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
48	1971	20.4	III	36.34	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
41	2304	17.5	III	42.46	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
34	2772	16.2	III	51.07	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
29	3241	15.0	III	59.66	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
24	3989	12.4	III	73.5	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
23	4091	13.0	III	75.18	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
19	5036	10.5	III	92.63	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X
15	6237	8.3	III	114.79	10454	13489	SK 6382 SCP	90 SP/4	140TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

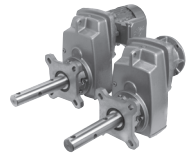


2 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
362	348	3.3	III	4.79	999	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
316	399	3.8	III	5.47	1055	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
270	468	3.4	III	6.43	1125	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
239	528	3.1	III	7.24	1183	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
211	596	2.4	III	8.21	1236	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
210	600	2.8	III	8.24	1220	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
189	667	2.5	III	9.18	1262	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
167	754	2.3	III	10.34	1295	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
147	856	2.1	III	11.76	1329	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
123	1026	1.8	II	14.11	1386	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
100	1255	1.6	II	17.21	1433	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
84	1501	1.3	I	20.57	1474	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
69	1839	1.1	I	25.22	1516	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
61	2065	1.0	I	28.33	1530	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
54	2337	0.9	*	32.08	1539	1619	SK 1282 SCP	90 LP/4	140TC	X	X	X		
383	329	5.0	III	4.51	1926	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
304	415	4.5	III	5.72	2151	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
269	469	4.3	III	6.43	2257	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
231	545	3.9	III	7.48	2358	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
207	609	3.7	III	8.37	2435	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
192	656	4.5	III	9.03	2502	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
170	740	4.3	III	10.15	2589	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
146	861	3.9	III	11.81	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
131	962	3.7	III	13.23	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
104	1206	3.5	III	16.53	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
93	1348	3.2	III	18.51	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
79	1595	2.7	III	21.90	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
72	1748	2.2	III	23.96	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
69	1820	2.4	III	24.97	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
65	1954	2.0	III	26.83	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
58	2160	2.0	III	29.65	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
55	2273	1.7	II	31.23	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
47	2665	1.7	II	36.54	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
47	2709	1.5	II	37.18	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
40	3186	1.6	II	43.71	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
38	3289	1.2	I	45.11	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
33	3769	1.2	I	51.71	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
32	3933	1.1	I	53.96	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		
27	4653	1.0	I	63.83	2698	3372	SK 2282 SCP	90 LP/4	140TC	X	X	X		

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

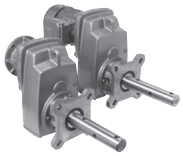
2 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
381	331	12.3	III	4.48	1944	3664	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
302	418	11.8	III	5.74	2149	3916	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
255	493	10.9	III	6.70	2315	4105	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
206	612	9.8	III	8.31	2561	4361	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
177	712	10.4	III	9.80	2735	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
152	827	8.8	III	11.38	2862	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
123	1026	7.4	III	14.11	3045	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
104	1213	6.1	III	16.67	3197	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
86	1468	5.0	III	20.18	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
81	1557	4.1	III	21.38	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
77	1634	4.3	III	22.45	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
73	1726	4.1	III	23.71	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
67	1884	4.0	III	25.88	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
60	2089	3.7	III	28.70	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
54	2324	3.3	III	31.93	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
46	2753	2.7	III	37.77	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
45	2812	2.0	III	38.62	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
41	3064	2.7	III	42.02	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
39	3266	2.0	III	44.85	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
36	3497	1.4	II	48.04	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
33	3861	1.9	II	52.97	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
31	4063	1.4	II	55.79	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
27	4671	1.9	II	64.12	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
26	4802	1.4	II	65.89	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
22	5810	1.3	I	79.76	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
19	6466	1.3	I	88.74	3260	4496	SK 3282 SCP	90 LP/4	140TC	X	X	X	X	
285	442	24.0	III	6.06	3193	6000	SK 4282 SCP	90 LP/4	140TC		X	X	X	
243	519	20.5	III	7.13	3435	6285	SK 4282 SCP	90 LP/4	140TC		X	X	X	
208	607	18.5	III	8.33	3699	6576	SK 4282 SCP	90 LP/4	140TC		X	X	X	
187	672	21.5	III	9.23	3904	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
160	789	19.1	III	10.85	4172	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
137	923	16.8	III	12.68	4378	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
114	1107	14.4	III	15.20	4635	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
95	1325	12.0	III	18.18	4896	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
81	1563	9.5	III	21.45	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
77	1630	9.2	III	22.39	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
66	1913	7.4	III	26.25	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
66	1924	8.2	III	26.43	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
54	2354	6.1	III	32.34	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
47	2684	4.6	III	36.81	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
42	2972	4.6	III	40.74	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
38	3283	4.3	III	45.05	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
23	5588	2.5	III	76.70	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
19	6595	2.1	III	90.52	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	
16	8068	1.8	II	110.78	4946	6744	SK 4282 SCP	90 LP/4	140TC		X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

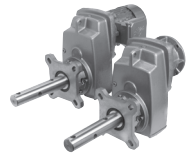


2 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
26	4864	2.2	III	66.65	4946	6744	SK 4382 SCP	90 LP/4	140TC		X	X	X	
20	6323	2.8	III	86.83	4946	6744	SK 4382 SCP	90 LP/4	140TC		X	X	X	
17	7567	2.3	III	103.82	4946	6744	SK 4382 SCP	90 LP/4	140TC		X	X	X	
15	8636	2.0	III	118.38	4946	6744	SK 4382 SCP	90 LP/4	140TC		X	X	X	
199	633	33.0	III	8.70	4997	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
133	947	24.6	III	13.00	6024	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
112	1121	20.5	III	15.38	6360	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
98	1283	19.0	III	17.59	6638	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
92	1374	16.7	III	18.88	6790	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
85	1483	18.5	III	20.36	6949	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
69	1818	14.1	III	25.00	7194	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
57	2220	11.6	III	30.50	7194	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
52	2434	8.4	III	33.43	7194	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
42	2972	7.4	III	40.80	7194	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
31	4047	5.5	III	55.55	7194	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
21	5951	2.7	III	81.61	7194	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
17	7297	2.7	III	100.19	7194	8992	SK 5282 SCP	90 LP/4	140TC		X	X	X	X
21	6015	4.1	III	82.72	7194	8992	SK 5382 SCP	90 LP/4	140TC		X	X	X	X
19	6668	3.8	III	91.71	7194	8992	SK 5382 SCP	90 LP/4	140TC		X	X	X	X
15	8545	2.8	III	117.37	7194	8992	SK 5382 SCP	90 LP/4	140TC		X	X	X	X
71	1779	23.3	III	24.42	9697	13489	SK 6382 SCP	90 LP/4	140TC				X	X
60	2088	19.5	III	28.72	10204	13489	SK 6382 SCP	90 LP/4	140TC				X	X
56	2251	17.9	III	30.91	10451	13489	SK 6382 SCP	90 LP/4	140TC				X	X
48	2643	15.2	III	36.34	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X
41	3090	13.0	III	42.46	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X
34	3717	12.1	III	51.07	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X
29	4347	11.2	III	59.66	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X
24	5350	9.2	III	73.50	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X
23	5487	9.7	III	75.18	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X
19	6753	7.9	III	92.63	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X
15	8364	6.2	III	114.79	10454	13489	SK 6382 SCP	90 LP/4	140TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

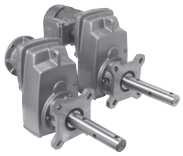
3 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
370	510	2.2	III	4.79	921	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
323	585	2.6	III	5.47	963	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
276	686	2.3	III	6.43	1013	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
244	774	2.1	III	7.24	1053	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
216	874	1.6	II	8.21	1129	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
215	879	1.9	II	8.24	1095	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
193	978	1.7	II	9.18	1151	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
171	1105	1.6	II	10.34	1171	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
151	1255	1.4	II	11.76	1190	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
126	1505	1.2	I	14.11	1225	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
103	1839	1.1	I	17.21	1239	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
86	2201	0.9	*	20.57	1246	1619	SK 1282 SCP	100 LP/4	180TC	X	X	X		
392	482	3.4	III	4.51	1848	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
311	609	3.1	III	5.72	2048	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
275	687	2.9	III	6.43	2165	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
237	799	2.7	III	7.48	2266	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
212	893	2.5	III	8.37	2333	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
197	961	3.1	III	9.03	2400	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
174	1085	2.9	III	10.15	2476	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
150	1262	2.7	III	11.81	2572	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
134	1410	2.5	III	13.23	2643	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
107	1769	2.4	III	16.53	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
96	1977	2.2	III	18.51	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
81	2339	1.8	II	21.90	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
74	2563	1.5	II	23.96	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
71	2669	1.6	II	24.97	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
66	2864	1.4	II	26.83	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
60	3166	1.4	II	29.65	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
57	3333	1.2	I	31.23	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
48	3907	1.1	I	36.54	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
40	4672	1.1	I	43.71	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
34	5526	0.8	*	51.71	2698	3372	SK 2282 SCP	100 LP/4	180TC	X	X	X		
390	485	8.4	III	4.48	1882	3606	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
309	613	8.0	III	5.74	2070	3848	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
261	723	7.4	III	6.70	2219	4028	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
211	898	6.7	III	8.31	2438	4271	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
181	1044	7.1	III	9.80	2631	4459	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
156	1213	6.0	III	11.38	2753	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
126	1505	5.0	III	14.11	2914	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
106	1779	4.2	III	16.67	3048	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
88	2152	3.4	III	20.18	3202	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
83	2283	2.8	III	21.38	3237	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

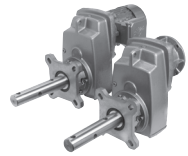


3 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
79	2395	3.0	III	22.45	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
75	2531	2.8	III	23.71	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
68	2762	2.7	III	25.88	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
62	3062	2.5	III	28.70	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
55	3408	2.3	III	31.93	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
47	4037	1.8	II	37.77	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
46	4122	1.4	II	38.62	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
42	4492	1.8	II	42.02	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
39	4789	1.4	II	44.85	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
33	5660	1.3	I	52.97	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
28	6848	1.3	I	64.12	3260	4496	SK 3282 SCP	100 LP/4	180TC	X	X	X	X	
292	649	16.4	III	6.06	3109	5920	SK 4282 SCP	100 LP/4	180TC		X	X	X	
248	761	14.0	III	7.13	3335	6197	SK 4282 SCP	100 LP/4	180TC		X	X	X	
212	890	12.6	III	8.33	3581	6478	SK 4282 SCP	100 LP/4	180TC		X	X	X	
192	986	14.7	III	9.23	3776	6680	SK 4282 SCP	100 LP/4	180TC		X	X	X	
163	1157	13.0	III	10.85	4070	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
140	1353	11.4	III	12.68	4262	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
117	1623	9.8	III	15.20	4503	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
97	1942	8.2	III	18.18	4745	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
82	2292	6.5	III	21.45	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
79	2390	6.3	III	22.39	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
67	2804	5.1	III	26.25	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
67	2821	5.6	III	26.43	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
55	3451	4.2	III	32.34	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
49	3887	3.1	III	36.40	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
48	3935	3.1	III	36.81	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
43	4357	3.2	III	40.74	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
41	4662	3.0	III	43.65	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
39	4814	2.9	III	45.05	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
34	5579	2.9	III	52.20	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
29	6585	2.4	III	61.60	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
23	8055	1.7	II	75.39	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
23	8193	1.7	II	76.70	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
20	9669	1.5	II	90.52	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
16	11828	1.2	I	110.78	4946	6744	SK 4282 SCP	100 LP/4	180TC		X	X	X	
27	7131	1.5	II	66.65	4946	6744	SK 4382 SCP	100 LP/4	180TC		X	X	X	
20	9270	1.9	II	86.83	4946	6744	SK 4382 SCP	100 LP/4	180TC		X	X	X	
17	11094	1.6	II	103.82	4946	6744	SK 4382 SCP	100 LP/4	180TC		X	X	X	
15	12661	1.4	II	118.38	4946	6744	SK 4382 SCP	100 LP/4	180TC		X	X	X	
280	676	27.7	III	6.33	4240	8255	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
247	766	25.0	III	7.17	4478	8560	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
204	928	22.5	III	8.70	4888	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
187	1012	20.1	III	9.46	5101	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

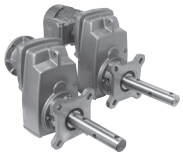
3 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
165	1146	19.3	III	10.71	5420	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
136	1389	16.8	III	13.00	5919	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
115	1643	14.0	III	15.38	6243	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
100	1881	12.9	III	17.59	6510	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
94	2015	11.4	III	18.88	6657	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
87	2174	12.6	III	20.36	6806	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
71	2666	9.6	III	25.00	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
58	3255	7.9	III	30.50	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
53	3569	5.7	III	33.43	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
43	4357	5.1	III	40.80	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
37	5050	4.2	III	47.27	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
32	5934	3.7	III	55.55	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
32	5976	3.9	III	55.90	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
26	7328	3.6	III	68.63	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
22	8725	1.9	II	81.61	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
19	9808	2.5	III	91.81	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
18	10698	1.9	II	100.19	7194	8992	SK 5282 SCP	100 LP/4	180TC		X	X	X	X
21	8819	2.8	III	82.72	7194	8992	SK 5382 SCP	100 LP/4	180TC		X	X	X	X
19	9776	2.6	III	91.71	7194	8992	SK 5382 SCP	100 LP/4	180TC		X	X	X	X
15	12527	1.9	II	117.37	7194	8992	SK 5382 SCP	100 LP/4	180TC		X	X	X	X
263	718	36.8	III	6.74	5494	10519	SK 6282 SCP	100 LP/4	180TC				X	X
227	835	28.4	III	7.82	5852	10994	SK 6282 SCP	100 LP/4	180TC				X	X
189	1001	24.3	III	9.39	6329	11597	SK 6282 SCP	100 LP/4	180TC				X	X
167	1135	33.7	III	10.64	6705	12040	SK 6282 SCP	100 LP/4	180TC				X	X
143	1318	29.5	III	12.35	7182	12581	SK 6282 SCP	100 LP/4	180TC				X	X
120	1581	25.1	III	14.83	7835	13267	SK 6282 SCP	100 LP/4	180TC				X	X
95	1996	19.6	III	18.70	8763	13489	SK 6282 SCP	100 LP/4	180TC				X	X
77	2447	16.4	III	22.95	9354	13489	SK 6282 SCP	100 LP/4	180TC				X	X
68	2779	14.4	III	26.05	9735	13489	SK 6282 SCP	100 LP/4	180TC				X	X
59	3193	12.6	III	29.90	10165	13489	SK 6282 SCP	100 LP/4	180TC				X	X
27	6992	4.3	III	65.44	10454	13489	SK 6282 SCP	100 LP/4	180TC				X	X
22	8573	4.3	III	80.33	10454	13489	SK 6282 SCP	100 LP/4	180TC				X	X
72	2608	15.9	III	24.42	9526	13489	SK 6382 SCP	100 LP/4	180TC				X	X
62	3062	13.3	III	28.72	10013	13489	SK 6382 SCP	100 LP/4	180TC				X	X
57	3301	12.2	III	30.91	10249	13489	SK 6382 SCP	100 LP/4	180TC				X	X
49	3874	10.4	III	36.34	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X
42	4531	8.9	III	42.46	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X
35	5450	8.3	III	51.07	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X
30	6372	7.6	III	59.66	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X
24	7843	6.3	III	73.50	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X
24	8044	6.6	III	75.18	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X
19	9900	5.4	III	92.63	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X
15	12262	4.2	III	114.79	10454	13489	SK 6382 SCP	100 LP/4	180TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

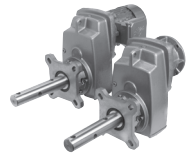


5 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
367	858	1.3	I	4.79	788	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
321	983	1.5	II	5.47	807	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
273	1152	1.4	II	6.43	824	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
242	1301	1.3	I	7.24	834	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
215	1469	1.0	I	8.21	894	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
213	1478	1.1	I	8.24	840	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
192	1645	1.0	I	9.18	880	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
170	1857	0.9	*	10.34	880	1619	SK 1282 SCP	112 MP/4	180TC	X	X	X		
389	810	2.0	III	4.51	1740	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
308	1023	1.8	II	5.72	1901	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
273	1155	1.7	II	6.43	1991	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
235	1343	1.6	II	7.48	2112	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
210	1501	1.5	II	8.37	2165	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
195	1616	1.8	II	9.03	2233	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
173	1824	1.7	II	10.15	2288	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
149	2121	1.6	II	11.81	2352	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
133	2371	1.5	II	13.23	2396	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
106	2973	1.4	II	16.53	2507	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
95	3323	1.3	I	18.51	2541	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
80	3931	1.1	I	21.90	2593	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
73	4307	0.9	*	23.96	2629	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
70	4486	1.0	I	24.97	2615	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
65	4814	0.8	*	26.83	2643	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
59	5322	0.8	*	29.65	2624	3372	SK 2282 SCP	112 MP/4	180TC	X	X	X		
386	816	5.0	III	4.48	1801	3546	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
306	1030	4.8	III	5.74	1961	3771	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
259	1216	4.4	III	6.70	2085	3935	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
209	1509	4.0	III	8.31	2259	4154	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
180	1755	4.2	III	9.80	2422	4331	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
155	2039	3.6	III	11.38	2579	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
125	2529	3.0	III	14.11	2697	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
105	2990	2.5	III	16.67	2795	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
87	3618	2.0	III	20.18	2901	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
82	3838	1.7	II	21.38	2911	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
78	4026	1.8	II	22.45	2957	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
74	4254	1.7	II	23.71	2951	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
68	4643	1.6	II	25.88	3002	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
61	5147	1.5	II	28.70	3035	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
55	5728	1.4	II	31.93	3074	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
46	6785	1.1	I	37.77	3085	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	
42	7550	1.1	I	42.02	3103	4496	SK 3282 SCP	112 MP/4	180TC	X	X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

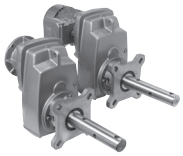
5 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
289	1090	9.7	III	6.06	3016	5855	SK 4282 SCP	112 MP/4	180TC		X	X	X	
246	1280	8.3	III	7.13	3221	6118	SK 4282 SCP	112 MP/4	180TC		X	X	X	
211	1496	7.5	III	8.33	3439	6384	SK 4282 SCP	112 MP/4	180TC		X	X	X	
190	1657	8.7	III	9.23	3624	6583	SK 4282 SCP	112 MP/4	180TC		X	X	X	
162	1945	7.7	III	10.85	3897	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
139	2274	6.8	III	12.68	4100	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
116	2728	5.8	III	15.20	4315	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
97	3265	4.9	III	18.18	4520	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
82	3853	3.9	III	21.45	4721	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
78	4018	3.7	III	22.39	4750	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
67	4713	3.0	III	26.25	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
66	4742	3.3	III	26.43	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
66	4797	3.0	III	26.72	4901	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
55	5753	2.7	III	32.04	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
54	5801	2.5	III	32.34	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
48	6534	1.9	II	36.40	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
48	6614	1.9	II	36.81	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
46	6886	2.6	III	38.31	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
43	7324	1.9	II	40.74	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
40	7837	1.8	II	43.65	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
39	8091	1.7	II	45.05	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
34	9379	1.7	II	52.20	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
28	11069	1.4	II	61.60	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
23	13540	1.0	I	75.39	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
23	13771	1.0	I	76.70	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
19	16253	0.9	*	90.52	4946	6744	SK 4282 SCP	112 MP/4	180TC		X	X	X	
26	11986	0.9	*	66.65	4946	6744	SK 4382 SCP	112 MP/4	180TC		X	X	X	
20	15582	1.1	I	86.83	4946	6744	SK 4382 SCP	112 MP/4	180TC		X	X	X	
17	18648	0.9	*	103.82	4946	6744	SK 4382 SCP	112 MP/4	180TC		X	X	X	
15	21283	0.8	*	118.38	4946	6744	SK 4382 SCP	112 MP/4	180TC		X	X	X	
277	1137	16.5	III	6.33	4182	8218	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
245	1287	14.9	III	7.17	4409	8517	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
202	1560	13.4	III	8.70	4797	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
185	1701	12.0	III	9.46	5005	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
164	1926	11.5	III	10.71	5304	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
135	2334	10.0	III	13.00	5812	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
114	2762	8.3	III	15.38	6117	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
100	3163	7.7	III	17.59	6364	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
93	3387	6.8	III	18.88	6506	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
86	3655	7.5	III	20.36	6635	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
70	4481	5.7	III	25.00	7048	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
58	5472	4.7	III	30.50	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
53	5999	3.4	III	33.43	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
50	6366	3.8	III	35.46	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

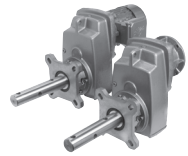


5 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
43	7324	3.0	III	40.80	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
42	7534	3.8	III	41.94	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
37	8488	2.5	III	47.27	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
34	9238	3.1	III	51.49	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
32	9975	2.2	III	55.55	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
31	10045	2.3	III	55.90	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
26	12317	2.1	III	68.63	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
21	14666	1.1	I	81.61	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
19	16487	1.5	II	91.81	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
18	17983	1.1	I	100.19	7194	8992	SK 5282 SCP	112 MP/4	180TC		X	X	X	X
21	14823	1.7	II	82.72	7194	8992	SK 5382 SCP	112 MP/4	180TC		X	X	X	X
19	16432	1.6	II	91.71	7194	8992	SK 5382 SCP	112 MP/4	180TC		X	X	X	X
15	21057	1.2	I	117.37	7194	8992	SK 5382 SCP	112 MP/4	180TC		X	X	X	X
261	1208	21.9	III	6.74	5448	10492	SK 6282 SCP	112 MP/4	180TC				X	X
225	1403	16.9	III	7.82	5795	10960	SK 6282 SCP	112 MP/4	180TC				X	X
187	1683	14.5	III	9.39	6255	11552	SK 6282 SCP	112 MP/4	180TC				X	X
165	1907	20.0	III	10.64	6626	11994	SK 6282 SCP	112 MP/4	180TC				X	X
142	2216	17.5	III	12.35	7083	12524	SK 6282 SCP	112 MP/4	180TC				X	X
119	2657	14.9	III	14.83	7705	13194	SK 6282 SCP	112 MP/4	180TC				X	X
94	3354	11.7	III	18.70	8636	13489	SK 6282 SCP	112 MP/4	180TC				X	X
77	4113	9.8	III	22.95	9200	13489	SK 6282 SCP	112 MP/4	180TC				X	X
67	4672	8.6	III	26.05	9558	13489	SK 6282 SCP	112 MP/4	180TC				X	X
59	5367	7.5	III	29.90	9959	13489	SK 6282 SCP	112 MP/4	180TC				X	X
27	11753	2.5	III	65.44	10454	13489	SK 6282 SCP	112 MP/4	180TC				X	X
22	14411	2.5	III	80.33	10454	13489	SK 6282 SCP	112 MP/4	180TC				X	X
72	4385	9.5	III	24.42	9350	13489	SK 6382 SCP	112 MP/4	180TC				X	X
61	5146	7.9	III	28.72	9803	13489	SK 6382 SCP	112 MP/4	180TC				X	X
57	5548	7.3	III	30.91	10021	13489	SK 6382 SCP	112 MP/4	180TC				X	X
48	6513	6.2	III	36.34	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X
41	7616	5.3	III	42.46	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X
34	9160	4.9	III	51.07	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X
29	10712	4.5	III	59.66	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X
24	13183	3.7	III	73.50	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X
23	13521	3.9	III	75.18	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X
19	16642	3.2	III	92.63	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X
15	20612	2.5	III	114.79	10454	13489	SK 6382 SCP	112 MP/4	180TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

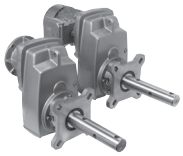
7.5 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
390	1213	3.4	III	4.48	1689	3453	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
309	1531	3.2	III	5.74	1815	3655	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
261	1809	3.0	III	6.70	1908	3801	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
211	2244	2.7	III	8.31	2030	3989	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
181	2610	2.8	III	9.80	2158	4150	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
156	3032	2.4	III	11.38	2269	4294	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
126	3762	2.0	III	14.11	2402	4479	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
106	4447	1.7	II	16.67	2470	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
88	5380	1.4	II	20.18	2517	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
83	5708	1.1	I	21.38	2495	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
79	5987	1.2	I	22.45	2534	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
75	6327	1.1	I	23.71	2491	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
68	6906	1.1	I	25.88	2511	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
62	7656	1.0	I	28.70	2491	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
55	8519	0.9	*	31.93	2475	4496	SK 3282 SCP	132 SP/4	210TC	X	X	X	X	
376	1259	7.3	III	4.70	2623	5367	SK 4282 SCP	132 SP/4	210TC		X	X	X	
354	1335	6.9	III	5.00	2680	5453	SK 4282 SCP	132 SP/4	210TC		X	X	X	
325	1454	6.3	III	5.43	2765	5579	SK 4282 SCP	132 SP/4	210TC		X	X	X	
292	1621	6.6	III	6.06	2879	5742	SK 4282 SCP	132 SP/4	210TC		X	X	X	
248	1903	5.6	III	7.13	3055	5988	SK 4282 SCP	132 SP/4	210TC		X	X	X	
212	2225	5.1	III	8.33	3239	6233	SK 4282 SCP	132 SP/4	210TC		X	X	X	
192	2465	5.9	III	9.23	3411	6428	SK 4282 SCP	132 SP/4	210TC		X	X	X	
163	2893	5.2	III	10.85	3633	6692	SK 4282 SCP	132 SP/4	210TC		X	X	X	
140	3383	4.6	III	12.68	3869	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
117	4057	3.9	III	15.20	4057	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
97	4856	3.3	III	18.18	4217	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
82	5731	2.6	III	21.45	4374	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
79	5976	2.5	III	22.39	4379	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
67	7010	2.0	III	26.25	4543	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
67	7053	2.2	III	26.43	4527	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
66	7134	2.0	III	26.72	4441	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
55	8557	1.8	II	32.04	4588	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
55	8628	1.7	II	32.34	4675	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
49	9718	1.3	I	36.40	4579	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
48	9838	1.3	I	36.81	4712	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
46	10241	1.7	II	38.31	4680	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
43	10893	1.3	I	40.74	4781	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
41	11655	1.2	I	43.65	4688	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
39	12034	1.2	I	45.05	4808	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
34	13949	1.2	I	52.20	4717	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
29	16462	1.0	I	61.60	4749	6744	SK 4282 SCP	132 SP/4	210TC		X	X	X	
280	1691	11.1	III	6.33	4076	8127	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
247	1915	10.0	III	7.17	4288	8415	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
204	2321	9.0	III	8.70	4644	8878	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
187	2529	8.0	III	9.46	4843	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
165	2864	7.7	III	10.71	5114	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

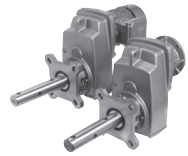


7.5 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
136	3472	6.7	III	13.00	5582	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
115	4109	5.6	III	15.38	5925	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
100	4704	5.2	III	17.59	6146	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
94	5038	4.6	III	18.88	6281	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
87	5436	5.0	III	20.36	6386	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
71	6665	3.9	III	25.00	6754	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
58	8138	3.2	III	30.50	7092	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
53	8922	2.3	III	33.43	7067	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
50	9468	2.5	III	35.46	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
43	10893	2.0	III	40.80	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
42	11205	2.5	III	41.94	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
37	12624	1.7	II	47.27	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
34	13739	2.1	III	51.49	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
32	14835	1.5	II	55.55	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
32	14940	1.5	II	55.90	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
26	18319	1.4	II	68.63	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
19	24521	1.0	I	91.81	7194	8992	SK 5282 SCP	132 SP/4	210TC		X	X	X	X
21	22046	1.1	I	82.72	7194	8992	SK 5382 SCP	132 SP/4	210TC		X	X	X	X
19	24439	1.1	I	91.71	7194	8992	SK 5382 SCP	132 SP/4	210TC		X	X	X	X
15	31318	0.8	*	117.37	7194	8992	SK 5382 SCP	132 SP/4	210TC		X	X	X	X
263	1796	14.7	III	6.74	5348	10401	SK 6282 SCP	132 SP/4	210TC				X	X
227	2087	11.4	III	7.82	5677	10857	SK 6282 SCP	132 SP/4	210TC				X	X
189	2503	9.7	III	9.39	6112	11432	SK 6282 SCP	132 SP/4	210TC				X	X
167	2836	13.5	III	10.64	6472	11869	SK 6282 SCP	132 SP/4	210TC				X	X
143	3295	11.8	III	12.35	6900	12383	SK 6282 SCP	132 SP/4	210TC				X	X
120	3952	10.0	III	14.83	7474	13029	SK 6282 SCP	132 SP/4	210TC				X	X
95	4989	7.9	III	18.70	8346	13489	SK 6282 SCP	132 SP/4	210TC				X	X
77	6117	6.6	III	22.95	8956	13489	SK 6282 SCP	132 SP/4	210TC				X	X
68	6948	5.8	III	26.05	9283	13489	SK 6282 SCP	132 SP/4	210TC				X	X
59	7983	5.0	III	29.90	9646	13489	SK 6282 SCP	132 SP/4	210TC				X	X
45	10534	2.7	III	39.48	10318	13489	SK 6282 SCP	132 SP/4	210TC				X	X
36	13297	2.7	III	49.75	10454	13489	SK 6282 SCP	132 SP/4	210TC				X	X
29	16304	2.5	III	61.08	10454	13489	SK 6282 SCP	132 SP/4	210TC				X	X
27	17480	1.7	II	65.44	10454	13489	SK 6282 SCP	132 SP/4	210TC				X	X
22	21433	1.7	II	80.33	10454	13489	SK 6282 SCP	132 SP/4	210TC				X	X
72	6521	6.4	III	24.42	9077	13489	SK 6382 SCP	132 SP/4	210TC				X	X
62	7654	5.3	III	28.72	9485	13489	SK 6382 SCP	132 SP/4	210TC				X	X
57	8252	4.9	III	30.91	9680	13489	SK 6382 SCP	132 SP/4	210TC				X	X
49	9686	4.2	III	36.34	10098	13489	SK 6382 SCP	132 SP/4	210TC				X	X
42	11327	3.6	III	42.46	10454	13489	SK 6382 SCP	132 SP/4	210TC				X	X
35	13624	3.3	III	51.07	10454	13489	SK 6382 SCP	132 SP/4	210TC				X	X
30	15931	3.1	III	59.66	10454	13489	SK 6382 SCP	132 SP/4	210TC				X	X
24	19608	2.5	III	73.50	10454	13489	SK 6382 SCP	132 SP/4	210TC				X	X
24	20110	2.6	III	75.18	10454	13489	SK 6382 SCP	132 SP/4	210TC				X	X
19	24751	2.1	III	92.63	10454	13489	SK 6382 SCP	132 SP/4	210TC				X	X
15	30656	1.7	II	114.79	10454	13489	SK 6382 SCP	132 SP/4	210TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

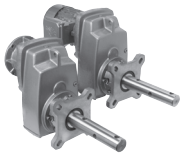
10 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
389	1622	2.5	III	4.48	1585	3371	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
308	2048	2.4	III	5.74	1680	3551	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
261	2418	2.2	III	6.70	1744	3677	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
210	3001	2.0	III	8.31	1817	3834	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
181	3490	2.1	III	9.80	1916	3980	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
155	4054	1.8	II	11.38	1983	4100	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
125	5030	1.5	II	14.11	2029	4237	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
106	5946	1.3	I	16.67	2077	4352	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
88	7194	1.0	I	20.18	2104	4466	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
83	7632	0.8	*	21.38	2046	4459	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
79	8006	0.9	*	22.45	2103	4496	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
74	8460	0.8	*	23.71	2007	4487	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
68	9234	0.8	*	25.88	2015	4496	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
62	10236	0.8	*	28.70	1944	4496	SK 3282 SCP	132 MP/4	210TC	X	X	X	X	
375	1683	5.4	III	4.70	2532	5294	SK 4282 SCP	132 MP/4	210TC		X	X	X	
353	1785	5.1	III	5.00	2583	5375	SK 4282 SCP	132 MP/4	210TC		X	X	X	
324	1944	4.7	III	5.43	2658	5494	SK 4282 SCP	132 MP/4	210TC		X	X	X	
291	2168	4.9	III	6.06	2756	5647	SK 4282 SCP	132 MP/4	210TC		X	X	X	
248	2545	4.2	III	7.13	2906	5876	SK 4282 SCP	132 MP/4	210TC		X	X	X	
212	2976	3.8	III	8.33	3059	6102	SK 4282 SCP	132 MP/4	210TC		X	X	X	
191	3295	4.4	III	9.23	3219	6292	SK 4282 SCP	132 MP/4	210TC		X	X	X	
163	3868	3.9	III	10.85	3396	6532	SK 4282 SCP	132 MP/4	210TC		X	X	X	
139	4523	3.4	III	12.68	3577	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
116	5425	2.9	III	15.20	3811	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
97	6492	2.5	III	18.18	3925	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
82	7662	1.9	II	21.45	4038	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
79	7991	1.9	II	22.39	4019	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
67	9373	1.5	II	26.25	4138	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
67	9431	1.7	II	26.43	4112	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
66	9540	1.5	II	26.72	3990	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
55	11442	1.4	II	32.04	4065	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
55	11537	1.2	I	32.34	4176	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
48	13154	0.9	*	36.81	4132	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
46	13693	1.3	I	38.31	4060	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
43	14565	0.9	*	40.74	4149	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	
39	16091	0.9	*	45.05	4109	6744	SK 4282 SCP	132 MP/4	210TC		X	X	X	

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

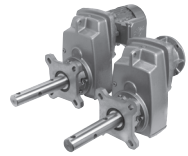


10 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
279	2261	8.3	III	6.33	3991	8062	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
246	2560	7.5	III	7.17	4188	8341	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
203	3103	6.7	III	8.70	4517	8788	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
186	3382	6.0	III	9.46	4709	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
165	3830	5.8	III	10.71	4955	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
136	4642	5.0	III	13.00	5373	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
115	5494	4.2	III	15.38	5753	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
100	6289	3.9	III	17.59	5948	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
94	6736	3.4	III	18.88	6076	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
87	7268	3.8	III	20.36	6156	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
71	8912	2.9	III	25.00	6482	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
58	10881	2.4	III	30.50	6759	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
53	11929	1.7	II	33.43	6640	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
50	12660	1.9	II	35.46	6865	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
43	14565	1.5	II	40.80	6834	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
42	14983	1.9	II	41.94	7097	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
34	18371	1.6	II	51.49	7194	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
32	19836	1.1	I	55.55	7041	8992	SK 5282 SCP	132 MP/4	210TC		X	X	X	X
262	2401	11.0	III	6.74	5273	10343	SK 6282 SCP	132 MP/4	210TC				X	X
226	2790	8.5	III	7.82	5587	10789	SK 6282 SCP	132 MP/4	210TC				X	X
188	3346	7.3	III	9.39	5999	11350	SK 6282 SCP	132 MP/4	210TC				X	X
166	3792	10.1	III	10.64	6351	11783	SK 6282 SCP	132 MP/4	210TC				X	X
143	4406	8.8	III	12.35	6753	12282	SK 6282 SCP	132 MP/4	210TC				X	X
119	5285	7.5	III	14.83	7287	12906	SK 6282 SCP	132 MP/4	210TC				X	X
94	6671	5.9	III	18.70	8090	13489	SK 6282 SCP	132 MP/4	210TC				X	X
77	8179	4.9	III	22.95	8741	13489	SK 6282 SCP	132 MP/4	210TC				X	X
68	9291	4.3	III	26.05	9038	13489	SK 6282 SCP	132 MP/4	210TC				X	X
59	10674	3.8	III	29.90	9364	13489	SK 6282 SCP	132 MP/4	210TC				X	X
45	14085	2.0	III	39.48	9922	13489	SK 6282 SCP	132 MP/4	210TC				X	X
35	17779	2.0	III	49.75	10454	13489	SK 6282 SCP	132 MP/4	210TC				X	X
29	21800	1.8	II	61.08	10454	13489	SK 6282 SCP	132 MP/4	210TC				X	X
72	8719	4.8	III	24.42	8833	13489	SK 6382 SCP	132 MP/4	210TC				X	X
62	10235	4.0	III	28.72	9199	13489	SK 6382 SCP	132 MP/4	210TC				X	X
57	11034	3.6	III	30.91	9370	13489	SK 6382 SCP	132 MP/4	210TC				X	X
49	12951	3.1	III	36.34	9734	13489	SK 6382 SCP	132 MP/4	210TC				X	X
42	15145	2.7	III	42.46	10082	13489	SK 6382 SCP	132 MP/4	210TC				X	X
35	18217	2.5	III	51.07	10454	13489	SK 6382 SCP	132 MP/4	210TC				X	X
30	21302	2.3	III	59.66	10454	13489	SK 6382 SCP	132 MP/4	210TC				X	X
24	26217	1.9	II	73.50	10454	13489	SK 6382 SCP	132 MP/4	210TC				X	X
23	26890	2.0	III	75.18	10454	13489	SK 6382 SCP	132 MP/4	210TC				X	X
19	33095	1.6	II	92.63	10454	13489	SK 6382 SCP	132 MP/4	210TC				X	X
15	40991	1.3	I	114.79	10454	13489	SK 6382 SCP	132 MP/4	210TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

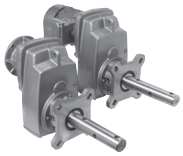
15 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
376	2517	3.6	III	4.70	2345	5136	SK 4282 SCP	160 MP/4	250TC		X	X	X	
354	2671	3.4	III	5.00	2384	5208	SK 4282 SCP	160 MP/4	250TC		X	X	X	
325	2908	3.2	III	5.43	2438	5312	SK 4282 SCP	160 MP/4	250TC		X	X	X	
292	3243	3.3	III	6.06	2508	5445	SK 4282 SCP	160 MP/4	250TC		X	X	X	
248	3806	2.8	III	7.13	2608	5640	SK 4282 SCP	160 MP/4	250TC		X	X	X	
212	4451	2.5	III	8.33	2701	5826	SK 4282 SCP	160 MP/4	250TC		X	X	X	
192	4929	2.9	III	9.23	2840	6008	SK 4282 SCP	160 MP/4	250TC		X	X	X	
163	5786	2.6	III	10.85	2937	6200	SK 4282 SCP	160 MP/4	250TC		X	X	X	
140	6765	2.3	III	12.68	3020	6378	SK 4282 SCP	160 MP/4	250TC		X	X	X	
117	8114	2.0	III	15.20	3162	6617	SK 4282 SCP	160 MP/4	250TC		X	X	X	
97	9711	1.6	II	18.18	3247	6744	SK 4282 SCP	160 MP/4	250TC		X	X	X	
82	11461	1.3	I	21.45	3343	6744	SK 4282 SCP	160 MP/4	250TC		X	X	X	
79	11952	1.3	I	22.39	3268	6744	SK 4282 SCP	160 MP/4	250TC		X	X	X	
67	14020	1.0	I	26.25	3325	6744	SK 4282 SCP	160 MP/4	250TC		X	X	X	
67	14106	1.1	I	26.43	3280	6744	SK 4282 SCP	160 MP/4	250TC		X	X	X	
55	17256	0.8	*	32.34	3176	6744	SK 4282 SCP	160 MP/4	250TC		X	X	X	
410	2305	6.0	III	4.32	3331	7143	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
353	2682	5.6	III	5.01	3513	7441	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
336	2815	5.5	III	5.29	3573	7538	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
311	3038	5.2	III	5.71	3669	7693	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
280	3382	5.5	III	6.33	3809	7914	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
247	3829	5.0	III	7.17	3978	8174	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
204	4642	4.5	III	8.70	4252	8586	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
187	5059	4.0	III	9.46	4430	8809	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
165	5728	3.9	III	10.71	4629	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
136	6943	3.4	III	13.00	4953	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
115	8217	2.8	III	15.38	5289	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
100	9407	2.6	III	17.59	5541	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
94	10075	2.3	III	18.88	5654	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
87	10872	2.5	III	20.36	5686	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
71	13330	1.9	II	25.00	5925	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
58	16276	1.6	II	30.50	6080	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
53	17843	1.1	I	33.43	5776	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X
43	21786	1.0	I	40.80	5781	8992	SK 5282 SCP	160 MP/4	250TC		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

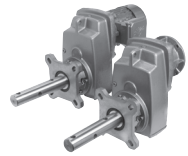


15 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
361	2615	7.3	III	4.88	4556	9349	SK 6282 SCP	160 MP/4	250TC				X	X
323	2931	6.9	III	5.50	4746	9649	SK 6282 SCP	160 MP/4	250TC				X	X
306	3085	6.7	III	5.78	4834	9787	SK 6282 SCP	160 MP/4	250TC				X	X
263	3592	7.4	III	6.74	5106	10204	SK 6282 SCP	160 MP/4	250TC				X	X
227	4173	5.7	III	7.82	5390	10628	SK 6282 SCP	160 MP/4	250TC				X	X
189	5005	4.9	III	9.39	5755	11158	SK 6282 SCP	160 MP/4	250TC				X	X
167	5673	6.7	III	10.64	6091	11584	SK 6282 SCP	160 MP/4	250TC				X	X
143	6591	5.9	III	12.35	6441	12051	SK 6282 SCP	160 MP/4	250TC				X	X
120	7904	5.0	III	14.83	6895	12632	SK 6282 SCP	160 MP/4	250TC				X	X
95	9978	3.9	III	18.70	7567	13418	SK 6282 SCP	160 MP/4	250TC				X	X
77	12234	3.3	III	22.95	8261	13489	SK 6282 SCP	160 MP/4	250TC				X	X
68	13897	2.9	III	26.05	8530	13489	SK 6282 SCP	160 MP/4	250TC				X	X
59	15966	2.5	III	29.90	8781	13489	SK 6282 SCP	160 MP/4	250TC				X	X
45	21067	1.3	I	39.48	9109	13489	SK 6282 SCP	160 MP/4	250TC				X	X
36	26594	1.3	I	49.75	9476	13489	SK 6282 SCP	160 MP/4	250TC				X	X
29	32607	1.2	I	61.08	9802	13489	SK 6282 SCP	160 MP/4	250TC				X	X
72	13042	3.2	III	24.42	8327	13489	SK 6382 SCP	160 MP/4	250TC				X	X
62	15309	2.7	III	28.72	8606	13489	SK 6382 SCP	160 MP/4	250TC				X	X
57	16504	2.4	III	30.91	8732	13489	SK 6382 SCP	160 MP/4	250TC				X	X
49	19372	2.1	III	36.34	8985	13489	SK 6382 SCP	160 MP/4	250TC				X	X
42	22653	1.8	II	42.46	9209	13489	SK 6382 SCP	160 MP/4	250TC				X	X
35	27248	1.7	II	51.07	9431	13489	SK 6382 SCP	160 MP/4	250TC				X	X
30	31862	1.5	II	59.66	9573	13489	SK 6382 SCP	160 MP/4	250TC				X	X
24	39215	1.3	I	73.50	9676	13489	SK 6382 SCP	160 MP/4	250TC				X	X
24	40221	1.3	I	75.18	9789	13489	SK 6382 SCP	160 MP/4	250TC				X	X
19	49502	1.1	I	92.63	9773	13489	SK 6382 SCP	160 MP/4	250TC				X	X
15	61312	0.8	*	114.79	9580	13489	SK 6382 SCP	160 MP/4	250TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

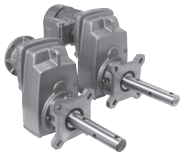
20 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
377	3347	2.7	III	4.70	2163	4980	SK 4282 SCP	160 LP/4	250TC		X	X	X	
355	3551	2.6	III	5.00	2189	5043	SK 4282 SCP	160 LP/4	250TC		X	X	X	
326	3866	2.4	III	5.43	2225	5132	SK 4282 SCP	160 LP/4	250TC		X	X	X	
292	4312	2.5	III	6.06	2267	5245	SK 4282 SCP	160 LP/4	250TC		X	X	X	
249	5061	2.1	III	7.13	2320	5405	SK 4282 SCP	160 LP/4	250TC		X	X	X	
213	5918	1.9	II	8.33	2359	5552	SK 4282 SCP	160 LP/4	250TC		X	X	X	
192	6554	2.2	III	9.23	2480	5726	SK 4282 SCP	160 LP/4	250TC		X	X	X	
164	7692	2.0	III	10.85	2505	5869	SK 4282 SCP	160 LP/4	250TC		X	X	X	
140	8995	1.7	II	12.68	2505	5992	SK 4282 SCP	160 LP/4	250TC		X	X	X	
117	10789	1.5	II	15.20	2546	6170	SK 4282 SCP	160 LP/4	250TC		X	X	X	
98	12912	1.2	I	18.18	2500	6283	SK 4282 SCP	160 LP/4	250TC		X	X	X	
83	15239	1.0	I	21.45	2460	6394	SK 4282 SCP	160 LP/4	250TC		X	X	X	
79	15891	0.9	*	22.39	2331	6337	SK 4282 SCP	160 LP/4	250TC		X	X	X	
68	18641	0.8	*	26.25	2296	6452	SK 4282 SCP	160 LP/4	250TC		X	X	X	
67	18755	0.8	*	26.43	2220	6403	SK 4282 SCP	160 LP/4	250TC		X	X	X	
411	3064	4.5	III	4.32	3215	7041	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
354	3566	4.2	III	5.01	3376	7323	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
337	3743	4.1	III	5.29	3428	7415	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
312	4040	3.9	III	5.71	3512	7560	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
280	4496	4.2	III	6.33	3631	7766	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
248	5091	3.8	III	7.17	3773	8008	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
204	6171	3.4	III	8.70	3995	8386	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
187	6726	3.0	III	9.46	4161	8603	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
166	7616	2.9	III	10.71	4316	8855	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
137	9232	2.5	III	13.00	4556	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
115	10925	2.1	III	15.38	4805	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
101	12508	1.9	II	17.59	4972	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
94	13396	1.7	II	18.88	5132	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
87	14455	1.9	II	20.36	5140	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
71	17724	1.4	II	25.00	5370	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
58	21640	1.2	I	30.50	5404	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
53	23724	0.9	*	33.43	4918	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X
44	28966	0.8	*	40.80	4733	8992	SK 5282 SCP	160 LP/4	250TC		X	X	X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

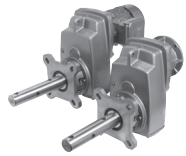


20 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
363	3477	5.5	III	4.88	4440	9246	SK 6282 SCP	160 LP/4	250TC				X	X
323	3897	5.2	III	5.50	4615	9535	SK 6282 SCP	160 LP/4	250TC				X	X
307	4102	5.0	III	5.78	4696	9667	SK 6282 SCP	160 LP/4	250TC				X	X
264	4776	5.5	III	6.74	4943	10065	SK 6282 SCP	160 LP/4	250TC				X	X
227	5549	4.3	III	7.82	5196	10468	SK 6282 SCP	160 LP/4	250TC				X	X
189	6655	3.7	III	9.39	5517	10968	SK 6282 SCP	160 LP/4	250TC				X	X
167	7542	5.1	III	10.64	5837	11386	SK 6282 SCP	160 LP/4	250TC				X	X
144	8763	4.4	III	12.35	6137	11822	SK 6282 SCP	160 LP/4	250TC				X	X
120	10510	3.8	III	14.83	6516	12358	SK 6282 SCP	160 LP/4	250TC				X	X
95	13266	3.0	III	18.70	7069	13082	SK 6282 SCP	160 LP/4	250TC				X	X
77	16266	2.5	III	22.95	7626	13489	SK 6282 SCP	160 LP/4	250TC				X	X
68	18477	2.2	III	26.05	7943	13489	SK 6282 SCP	160 LP/4	250TC				X	X
59	21227	1.9	II	29.90	8200	13489	SK 6282 SCP	160 LP/4	250TC				X	X
45	28010	1.0	I	39.48	8300	13489	SK 6282 SCP	160 LP/4	250TC				X	X
36	35358	1.0	I	49.75	8481	13489	SK 6282 SCP	160 LP/4	250TC				X	X
29	43354	0.9	*	61.08	8624	13489	SK 6282 SCP	160 LP/4	250TC				X	X
73	17341	2.4	III	24.42	7627	13489	SK 6382 SCP	160 LP/4	250TC				X	X
62	20354	2.0	III	28.72	7992	13489	SK 6382 SCP	160 LP/4	250TC				X	X
57	21944	1.8	II	30.91	8097	13489	SK 6382 SCP	160 LP/4	250TC				X	X
49	25757	1.6	II	36.34	8241	13489	SK 6382 SCP	160 LP/4	250TC				X	X
42	30119	1.3	I	42.46	8339	13489	SK 6382 SCP	160 LP/4	250TC				X	X
35	36228	1.2	I	51.07	8386	13489	SK 6382 SCP	160 LP/4	250TC				X	X
30	42363	1.1	I	59.66	8353	13489	SK 6382 SCP	160 LP/4	250TC				X	X
24	52140	0.9	*	73.50	8177	13489	SK 6382 SCP	160 LP/4	250TC				X	X
24	53476	1.0	I	75.18	8289	13489	SK 6382 SCP	160 LP/4	250TC				X	X
19	65817	0.8	*	92.63	7928	13489	SK 6382 SCP	160 LP/4	250TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

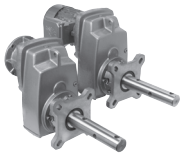
25 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
412	3820	3.6	III	4.32	3102	6940	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
354	4445	3.4	III	5.01	3242	7206	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
338	4665	3.3	III	5.29	3287	7292	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
313	5035	3.2	III	5.71	3358	7428	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
281	5605	3.3	III	6.33	3457	7620	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
248	6346	3.0	III	7.17	3572	7843	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
205	7693	2.7	III	8.70	3746	8187	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
188	8384	2.4	III	9.46	3900	8398	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
166	9494	2.3	III	10.71	4014	8623	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
137	11507	2.0	III	13.00	4177	8964	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
116	13618	1.7	II	15.38	4351	8992	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
101	15591	1.6	II	17.59	4437	8992	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
94	16698	1.4	II	18.88	4565	8992	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
87	18018	1.5	II	20.36	4503	8992	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
71	22093	1.2	I	25.00	4660	8992	SK 5282 SCP	180 MP/4	280TC		X	X	X	X
406	3878	4.6	III	4.39	4161	8879	SK 6282 SCP	180 MP/4	280TC				X	X
364	4334	4.4	III	4.88	4326	9144	SK 6282 SCP	180 MP/4	280TC				X	X
324	4858	4.2	III	5.50	4486	9422	SK 6282 SCP	180 MP/4	280TC				X	X
308	5112	4.0	III	5.78	4559	9548	SK 6282 SCP	180 MP/4	280TC				X	X
297	5304	4.0	III	5.99	4612	9639	SK 6282 SCP	180 MP/4	280TC				X	X
265	5953	4.4	III	6.74	4781	9928	SK 6282 SCP	180 MP/4	280TC				X	X
228	6917	3.4	III	7.82	5005	10309	SK 6282 SCP	180 MP/4	280TC				X	X
190	8295	2.9	III	9.39	5283	10779	SK 6282 SCP	180 MP/4	280TC				X	X
168	9401	4.1	III	10.64	5588	11189	SK 6282 SCP	180 MP/4	280TC				X	X
144	10923	3.6	III	12.35	5841	11594	SK 6282 SCP	180 MP/4	280TC				X	X
120	13100	3.0	III	14.83	6149	12087	SK 6282 SCP	180 MP/4	280TC				X	X
95	16536	2.4	III	18.70	6592	12749	SK 6282 SCP	180 MP/4	280TC				X	X
78	20276	2.0	III	22.95	7028	13352	SK 6282 SCP	180 MP/4	280TC				X	X
68	23032	1.7	II	26.05	7239	13489	SK 6282 SCP	180 MP/4	280TC				X	X
60	26460	1.5	II	29.90	7450	13489	SK 6282 SCP	180 MP/4	280TC				X	X
73	21615	1.9	II	24.42	6951	13403	SK 6382 SCP	180 MP/4	280TC				X	X
62	25371	1.6	II	28.72	7163	13489	SK 6382 SCP	180 MP/4	280TC				X	X
58	27353	1.5	II	30.91	7249	13489	SK 6382 SCP	180 MP/4	280TC				X	X
49	32106	1.3	I	36.34	7392	13489	SK 6382 SCP	180 MP/4	280TC				X	X
42	37543	1.1	I	42.46	7460	13489	SK 6382 SCP	180 MP/4	280TC				X	X
35	45158	1.0	I	51.07	7349	13489	SK 6382 SCP	180 MP/4	280TC				X	X
30	52806	0.9	*	59.66	7141	13489	SK 6382 SCP	180 MP/4	280TC				X	X
24	66658	0.8	*	75.18	6796	13489	SK 6382 SCP	180 MP/4	280TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

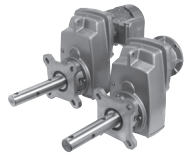


30 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
412	4584	3.0	III	4.32	2991	6844	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
354	5334	2.8	III	5.01	3111	7095	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
338	5598	2.8	III	5.29	3149	7175	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
313	6042	2.6	III	5.71	3208	7301	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
281	6726	2.8	III	6.33	3289	7479	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
248	7616	2.5	III	7.17	3378	7683	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
205	9231	2.3	III	8.70	3505	7993	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
188	10061	2.0	III	9.46	3648	8199	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
166	11392	1.9	II	10.71	3724	8398	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
137	13809	1.7	II	13.00	3817	8690	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
116	16342	1.4	II	15.38	3922	8966	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
101	18709	1.3	I	17.59	3937	8992	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
94	20037	1.1	I	18.88	4037	8992	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
87	21622	1.3	I	20.36	3915	8992	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
71	26511	1.0	I	25.00	3939	8992	SK 5282 SCP	180 LP/4	280TC		X	X	X	X
406	4654	3.9	III	4.39	4045	8794	SK 6282 SCP	180 LP/4	280TC				X	X
364	5201	3.7	III	4.88	4217	9049	SK 6282 SCP	180 LP/4	280TC				X	X
324	5829	3.5	III	5.50	4362	9315	SK 6282 SCP	180 LP/4	280TC				X	X
308	6135	3.4	III	5.78	4428	9436	SK 6282 SCP	180 LP/4	280TC				X	X
297	6365	3.3	III	5.99	4475	9523	SK 6282 SCP	180 LP/4	280TC				X	X
265	7144	3.7	III	6.74	4625	9797	SK 6282 SCP	180 LP/4	280TC				X	X
228	8300	2.9	III	7.82	4821	10158	SK 6282 SCP	180 LP/4	280TC				X	X
190	9954	2.4	III	9.39	5057	10597	SK 6282 SCP	180 LP/4	280TC				X	X
168	11281	3.4	III	10.64	5348	11000	SK 6282 SCP	180 LP/4	280TC				X	X
144	13108	3.0	III	12.35	5556	11375	SK 6282 SCP	180 LP/4	280TC				X	X
120	15720	2.5	III	14.83	5797	11823	SK 6282 SCP	180 LP/4	280TC				X	X
95	19844	2.0	III	18.70	6138	12423	SK 6282 SCP	180 LP/4	280TC				X	X
78	24331	1.6	II	22.95	6464	12966	SK 6282 SCP	180 LP/4	280TC				X	X
68	27638	1.5	II	26.05	6581	13247	SK 6282 SCP	180 LP/4	280TC				X	X
60	31752	1.3	I	29.90	6673	13489	SK 6282 SCP	180 LP/4	280TC				X	X
73	25938	1.6	II	24.42	6315	12968	SK 6382 SCP	180 LP/4	280TC				X	X
62	30445	1.3	I	28.72	6396	13282	SK 6382 SCP	180 LP/4	280TC				X	X
58	32823	1.2	I	30.91	6411	13416	SK 6382 SCP	180 LP/4	280TC				X	X
49	38527	1.0	I	36.34	6384	13489	SK 6382 SCP	180 LP/4	280TC				X	X
42	45052	0.9	*	42.46	6259	13489	SK 6382 SCP	180 LP/4	280TC				X	X
35	54189	0.8	*	51.07	5955	13489	SK 6382 SCP	180 LP/4	280TC				X	X
30	63367	0.8	*	59.66	5534	13489	SK 6382 SCP	180 LP/4	280TC				X	X

(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

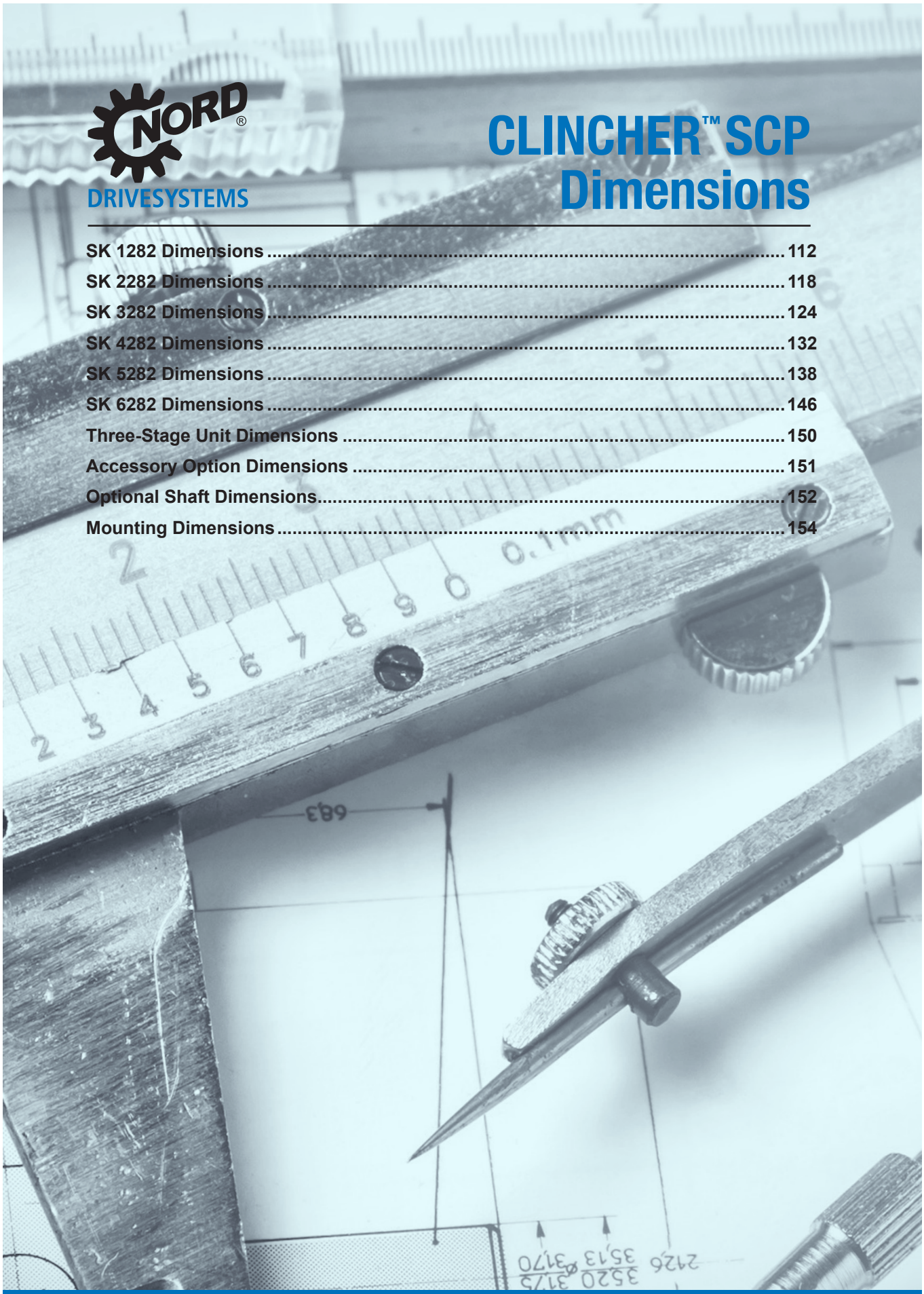
40 hp & 50 hp & 60 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity Std Brg [lb]	Thrust Capacity H.D. Brg " VL" [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
40 hp Motors														
407	6188	2.9	III	4.39	3815	8618	SK 6282 SCP	225 RP/4	320TC				X	X
365	6916	2.8	III	4.88	3965	8854	SK 6282 SCP	225 RP/4	320TC				X	X
325	7751	2.6	III	5.50	4113	9097	SK 6282 SCP	225 RP/4	320TC				X	X
309	8157	2.5	III	5.78	4165	9206	SK 6282 SCP	225 RP/4	320TC				X	X
298	8463	2.5	III	5.99	4202	9285	SK 6282 SCP	225 RP/4	320TC				X	X
265	9498	2.8	III	6.74	4315	9531	SK 6282 SCP	225 RP/4	320TC				X	X
228	11036	2.2	III	7.82	4456	9849	SK 6282 SCP	225 RP/4	320TC				X	X
190	13235	1.8	II	9.39	4612	10228	SK 6282 SCP	225 RP/4	320TC				X	X
168	15000	2.5	III	10.64	4876	10615	SK 6282 SCP	225 RP/4	320TC				X	X
145	17428	2.2	III	12.35	4998	10929	SK 6282 SCP	225 RP/4	320TC				X	X
121	20901	1.9	II	14.83	5114	11291	SK 6282 SCP	225 RP/4	320TC				X	X
96	26384	1.5	II	18.70	5270	11768	SK 6282 SCP	225 RP/4	320TC				X	X
78	32351	1.2	I	22.95	5403	12190	SK 6282 SCP	225 RP/4	320TC				X	X
50 hp Motors														
407	7735	2.3	III	4.39	3597	8449	SK 6282 SCP	225 SP/4	320TC				X	X
365	8644	2.2	III	4.88	3713	8664	SK 6282 SCP	225 SP/4	320TC				X	X
325	9688	2.1	III	5.50	3832	8885	SK 6282 SCP	225 SP/4	320TC				X	X
309	10196	2.0	III	5.78	3884	8983	SK 6282 SCP	225 SP/4	320TC				X	X
298	10579	2.0	III	5.99	3922	9053	SK 6282 SCP	225 SP/4	320TC				X	X
265	11873	2.2	III	6.74	4013	9271	SK 6282 SCP	225 SP/4	320TC				X	X
228	13795	1.7	II	7.82	4101	9547	SK 6282 SCP	225 SP/4	320TC				X	X
190	16544	1.5	II	9.39	4180	9866	SK 6282 SCP	225 SP/4	320TC				X	X
168	18750	2.0	III	10.64	4419	10238	SK 6282 SCP	225 SP/4	320TC				X	X
145	21785	1.8	II	12.35	4460	10491	SK 6282 SCP	225 SP/4	320TC				X	X
121	26127	1.5	II	14.83	4460	10765	SK 6282 SCP	225 SP/4	320TC				X	X
96	32980	1.2	I	18.70	4449	11120	SK 6282 SCP	225 SP/4	320TC				X	X
78	40438	1.0	I	22.95	4413	11422	SK 6282 SCP	225 SP/4	320TC				X	X
60 hp Motors														
407	9282	1.9	II	4.39	3384	8280	SK 6282 SCP	225 MP/4	360TC				X	X
365	10373	1.8	II	4.88	3469	8475	SK 6282 SCP	225 MP/4	360TC				X	X
325	11626	1.7	II	5.50	3552	8672	SK 6282 SCP	225 MP/4	360TC				X	X
309	12236	1.7	II	5.78	3587	8759	SK 6282 SCP	225 MP/4	360TC				X	X
298	12695	1.7	II	5.99	3611	8821	SK 6282 SCP	225 MP/4	360TC				X	X
265	14247	1.9	II	6.74	3679	9011	SK 6282 SCP	225 MP/4	360TC				X	X
228	16554	1.4	II	7.82	3748	9245	SK 6282 SCP	225 MP/4	360TC				X	X
168	22500	1.7	II	10.64	3973	9861	SK 6282 SCP	225 MP/4	360TC				X	X
145	26142	1.5	II	12.35	3938	10053	SK 6282 SCP	225 MP/4	360TC				X	X

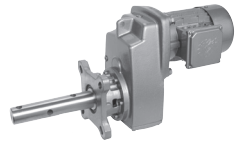
(AGMA Class I = f_B 1.0 - 1.39 II = f_B 1.4 - 1.99 III = f_B ≥ 2.0 * = f_B < 1.0)

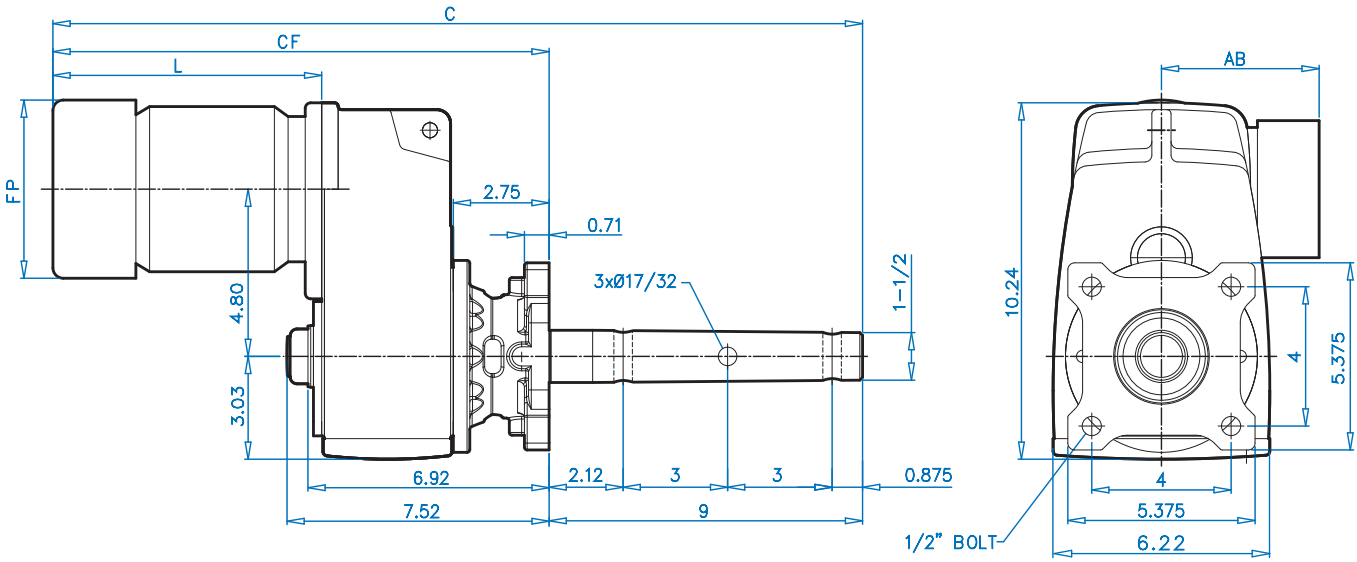


DRIVESYSTEMS

CLINCHER™ SCP Dimensions

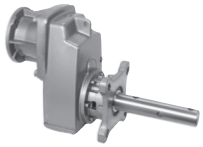
SK 1282 SCP + Motor
1-1/2” CEMA Drive Shaft



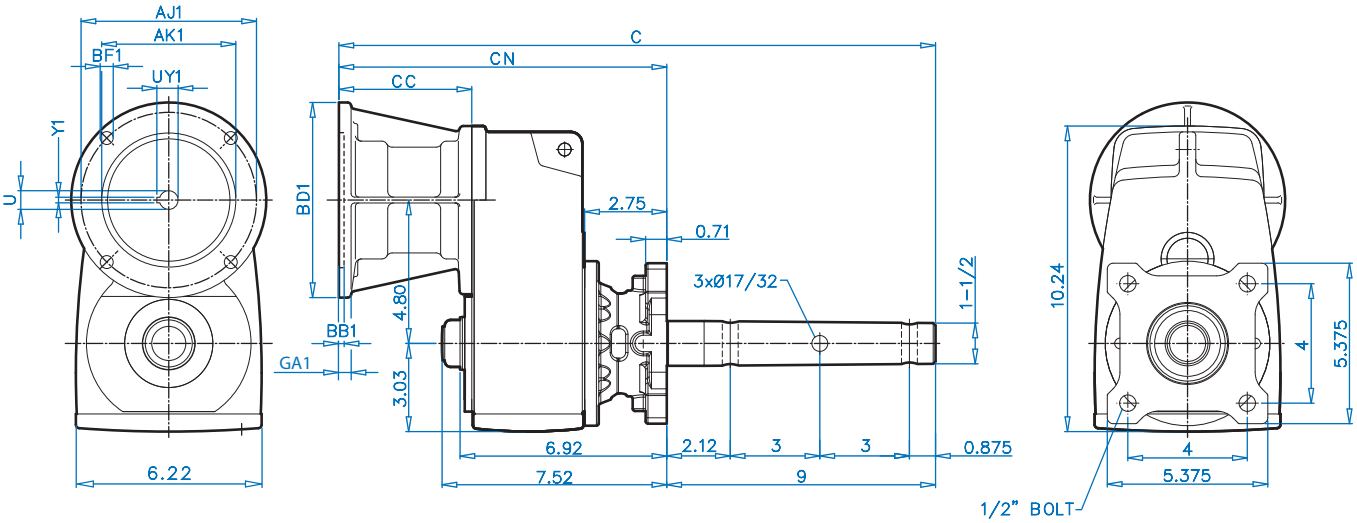


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
63S/L	23,38	14,38	7,73	5,08	4,51
71S/L	24,96	15,96	9,31	5,72	4,86
80S/L/LP	25,94	16,94	10,29	6,43	5,59
90SP/LP	27,52	18,28	11,87	7,19	5,79
100LP/AP	28,74	19,74	13,09	7,90	6,65
112MH/MP	30,60	21,60	14,95	8,87	7,05



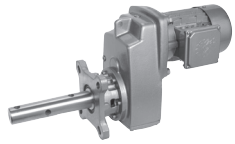
SK 1282 SCP + NEMA 1-1/2” CEMA Drive Shaft

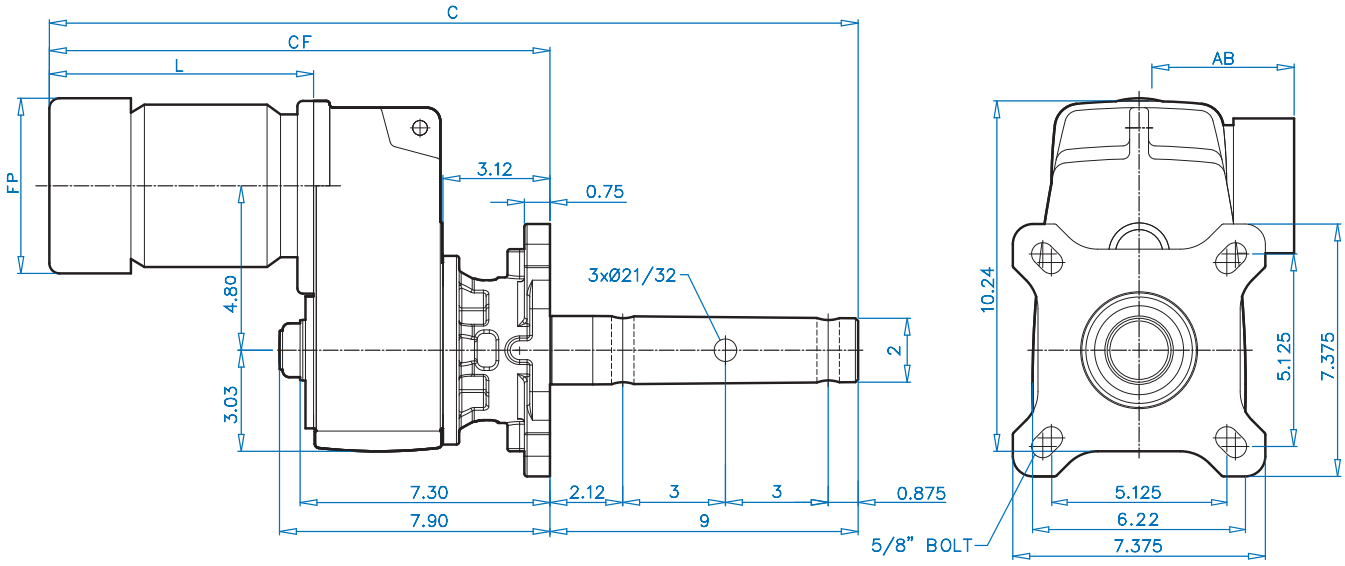


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	20,10	11,10	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	20,10	11,10	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	21,30	12,30	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

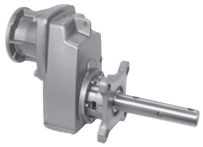
SK 1282 SCP + Motor
2” CEMA Drive Shaft



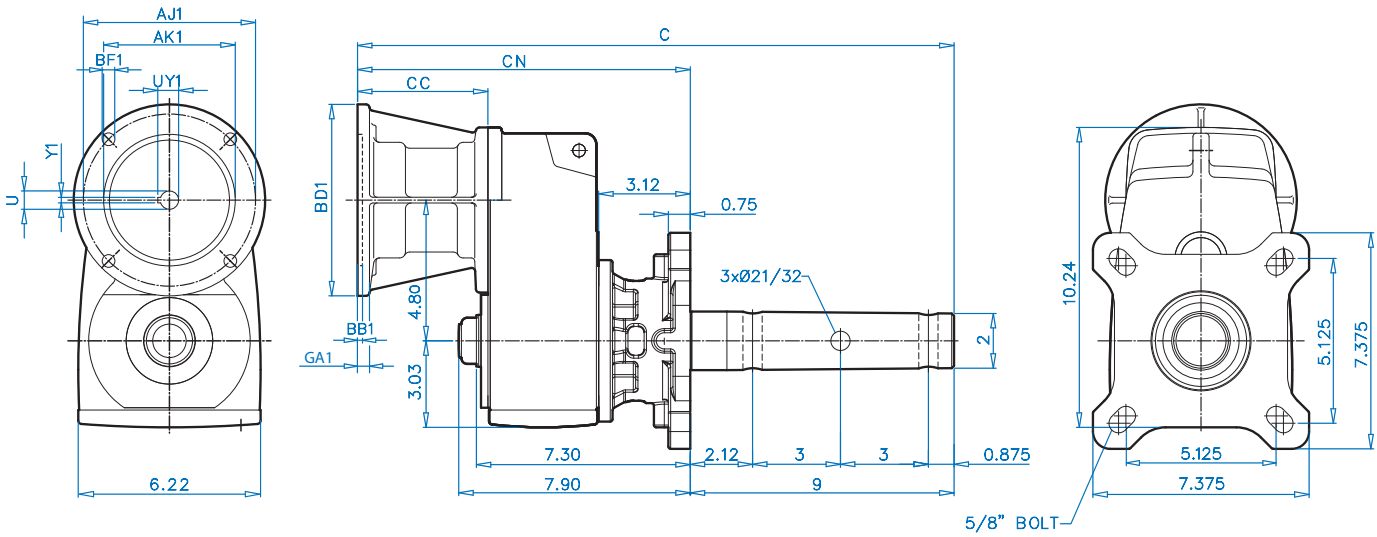


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
63S/L	23,76	14,76	7,73	5,08	4,51
71S/L	25,33	16,33	9,31	5,72	4,86
80S/L/LP	26,32	17,32	10,29	6,43	5,59
90SP/LP	27,89	18,65	11,87	7,19	5,79
100LP/AP	29,11	20,11	13,09	7,90	6,65
112MP	30,97	21,97	14,95	8,87	7,05



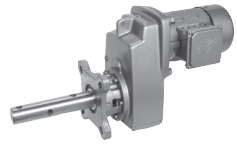
SK 1282 SCP + NEMA 2” CEMA Drive Shaft

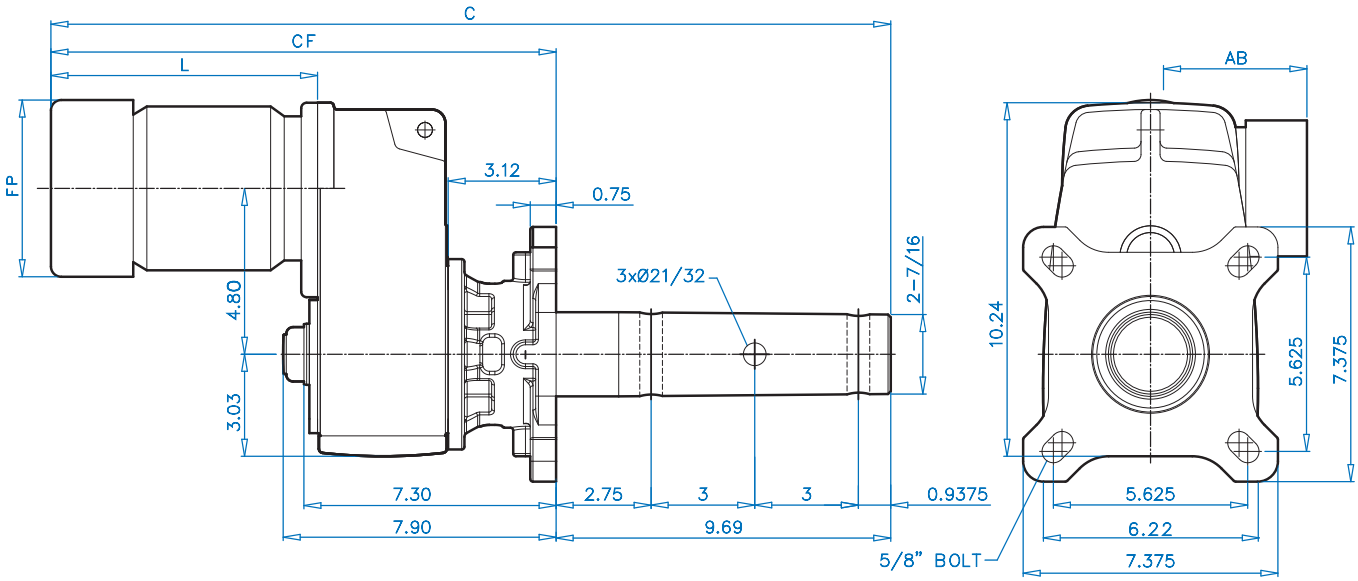


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	20,47	11,47	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	20,47	11,47	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	21,67	12,67	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

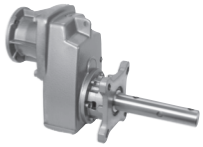
SK 1282 SCP + Motor
2-7/16” CEMA Drive Shaft



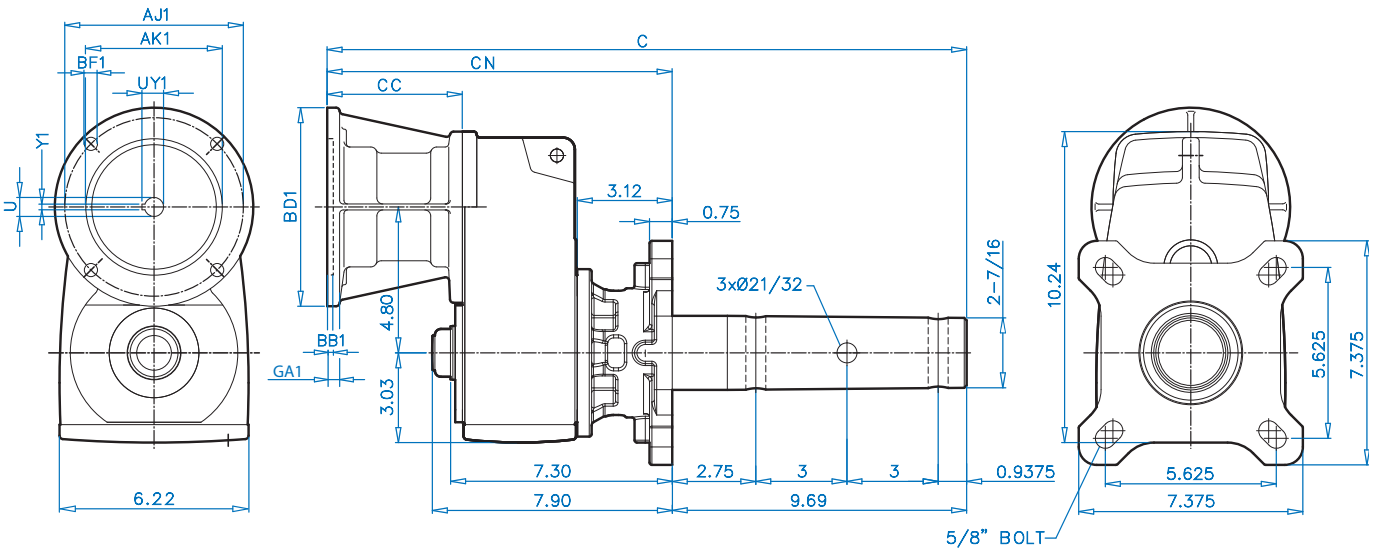


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
63S/L	23,76	14,76	7,73	5,08	4,51
71S/L	25,33	16,33	9,31	5,72	4,86
80S/L/LP	26,32	17,32	10,29	6,43	5,59
90SP/LP	27,89	18,65	11,87	7,19	5,79
100LP/AP	29,11	20,11	13,09	7,90	6,65
112MP	30,97	21,97	14,95	8,87	7,05



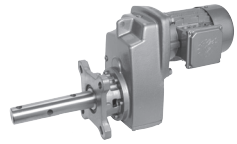
SK 1282 SCP + NEMA 2-7/16” CEMA Drive Shaft

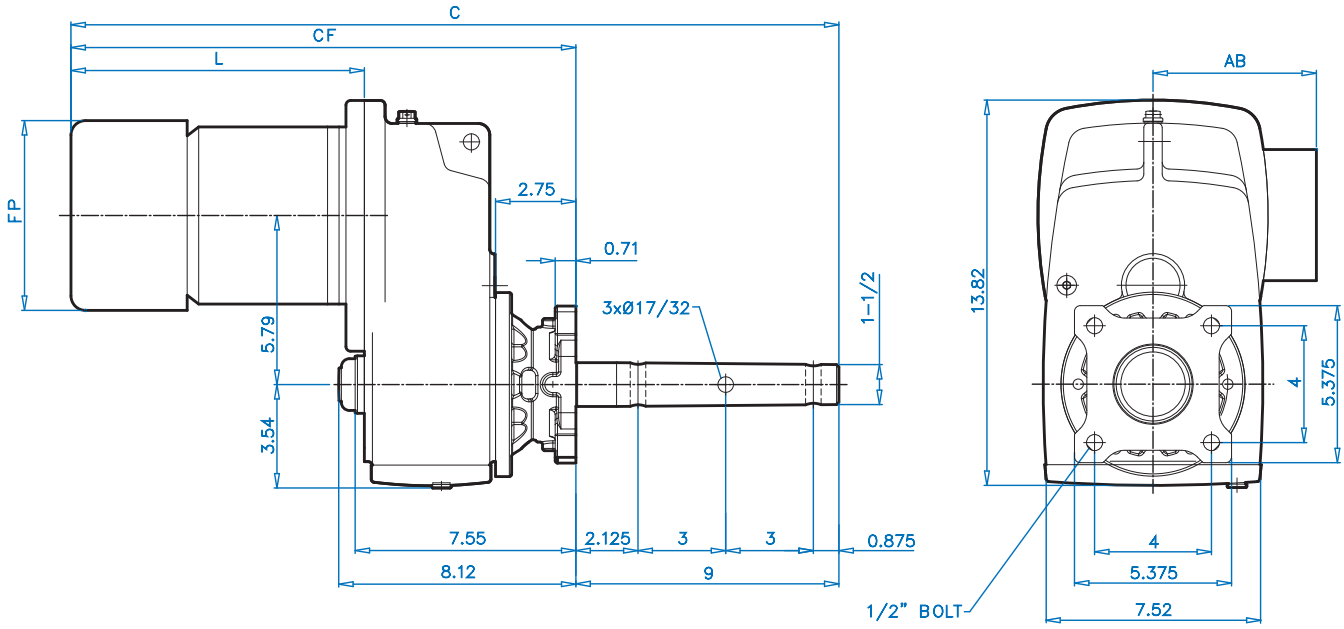


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	21,16	11,47	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	21,16	11,47	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	22,36	12,67	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

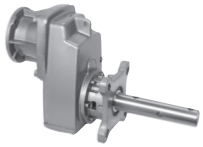
SK 2282 SCP + Motor
1-1/2” CEMA Drive Shaft



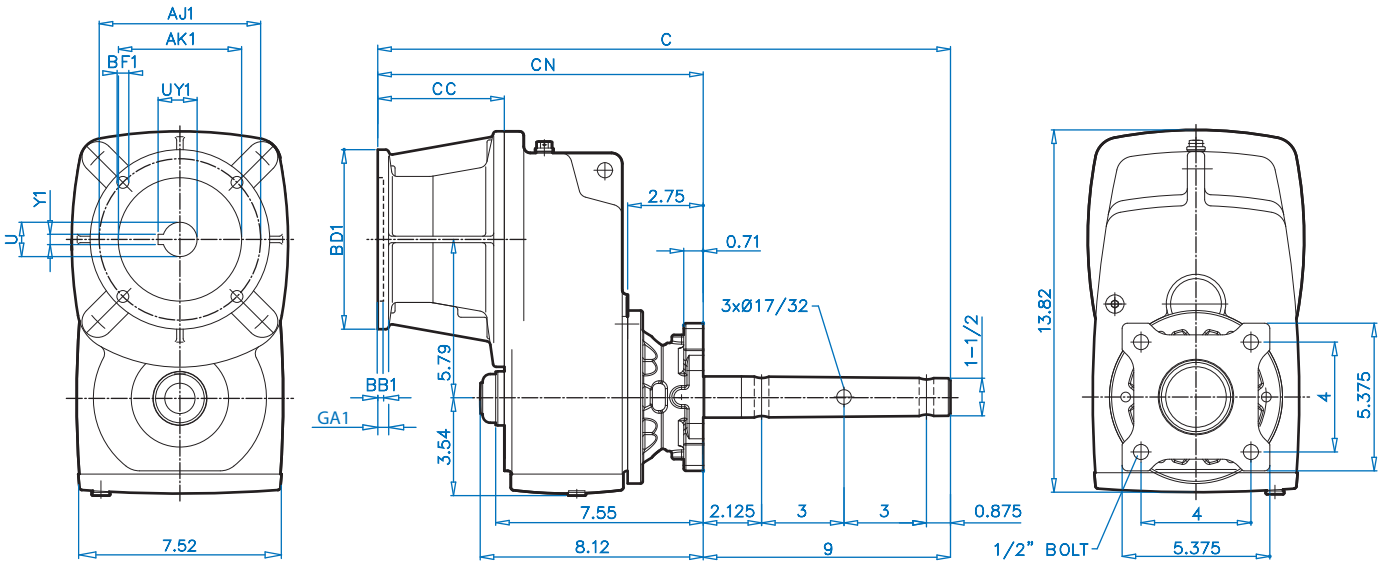


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
71S/L	25,51	16,51	9,07	5,72	4,86
80S/L/LP	26,49	17,49	10,06	6,43	5,59
90SP/LP	28,07	19,07	11,63	7,19	5,79
100LP/AP	29,29	20,29	12,85	7,90	6,65
112MP	31,15	22,15	14,71	8,87	7,05



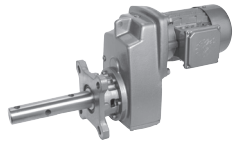
SK 2282 SCP + NEMA 1-1/2” CEMA Drive Shaft

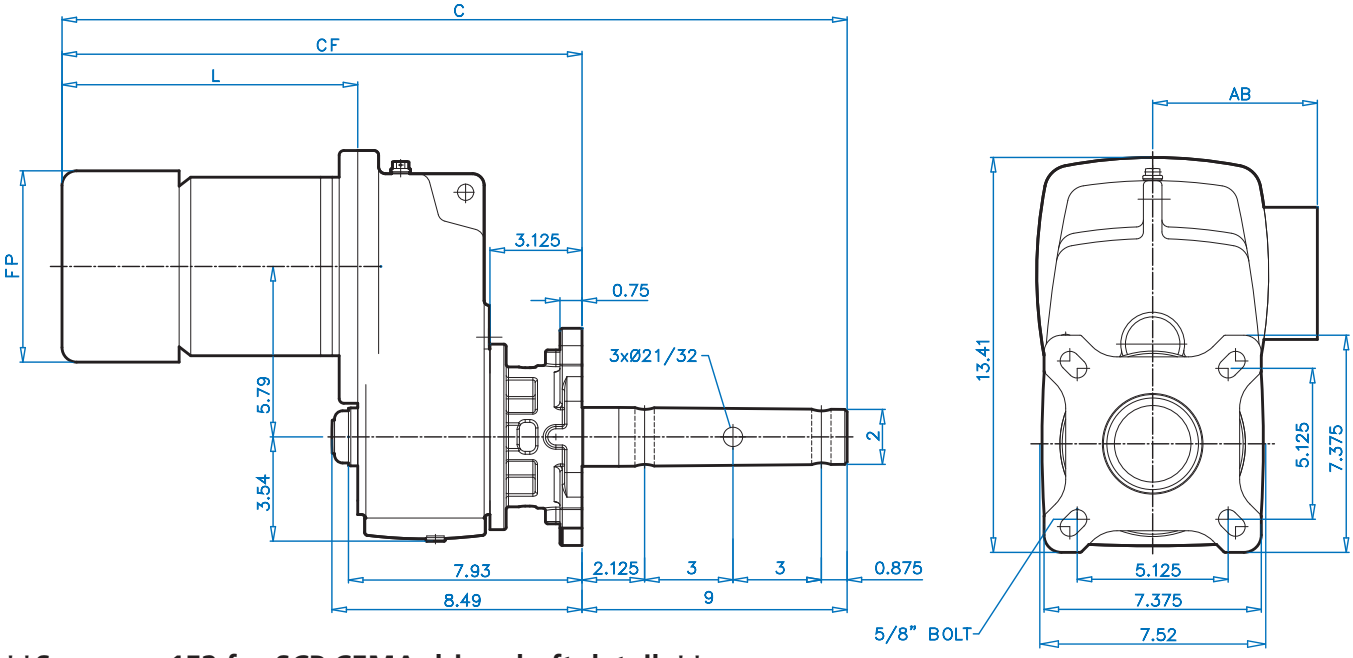


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	21,04	12,04	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	21,04	12,04	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	23,08	14,08	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

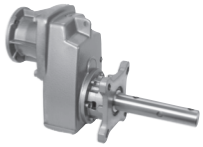
SK 2282 SCP + Motor
2” CEMA Drive Shaft



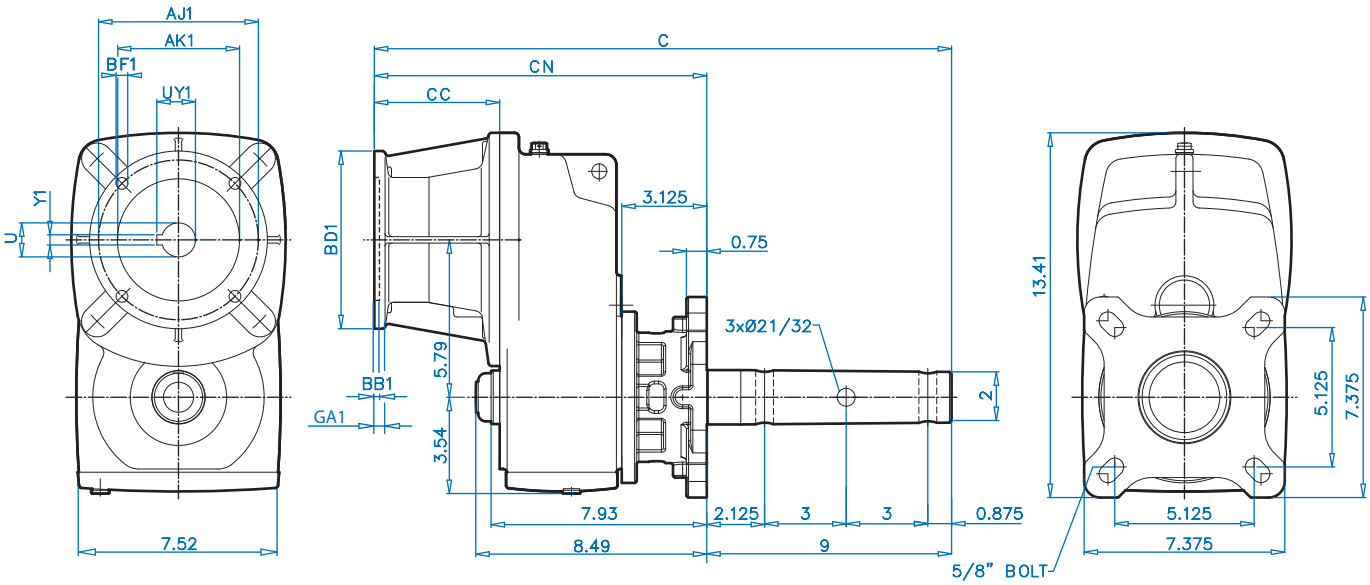


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
71S/L	25,88	16,88	9,07	5,72	4,86
80S/L/LP	26,87	17,87	10,06	6,43	5,59
90SP/LP	28,44	19,44	11,63	7,19	5,79
100LP/AP	29,66	20,66	12,85	7,90	6,65
112MP	31,53	22,53	14,71	8,87	7,05



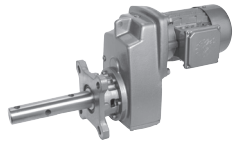
SK 2282 SCP + NEMA 2” CEMA Drive Shaft

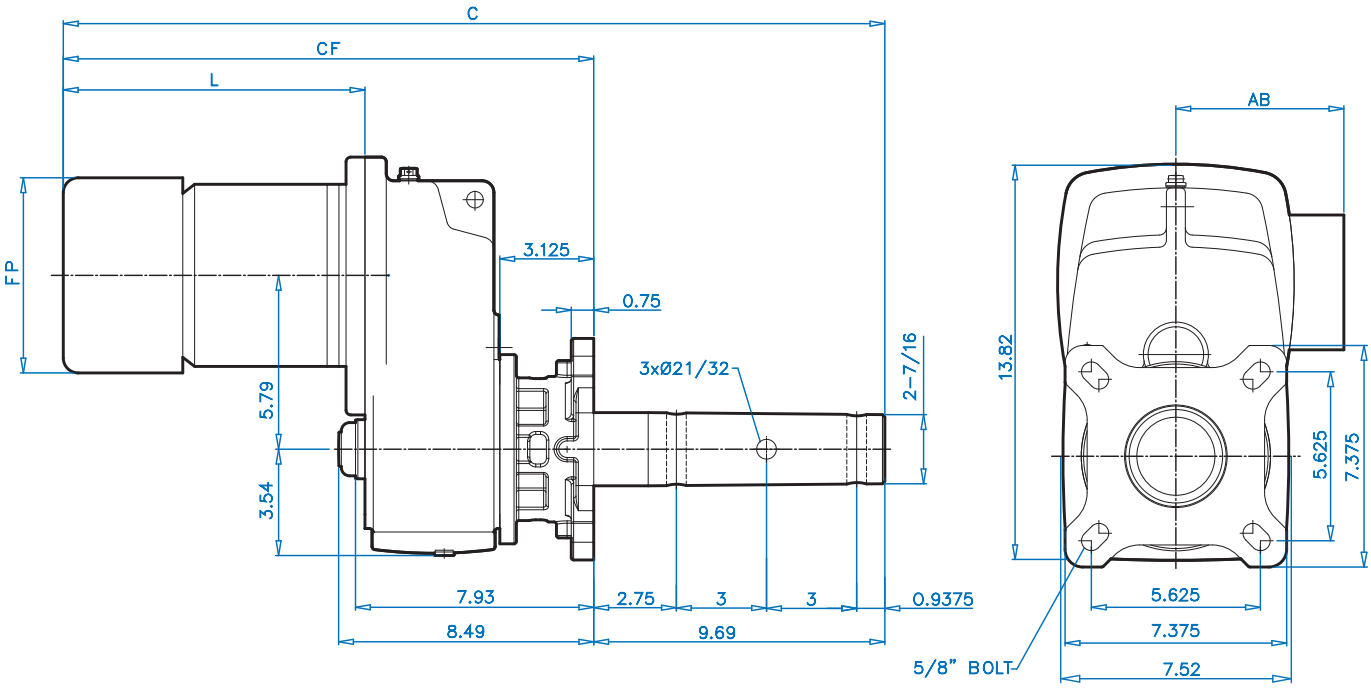


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	21,42	12,42	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	21,42	12,42	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	23,46	14,46	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

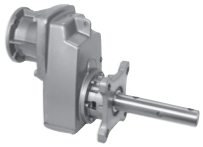
SK 2282 SCP + Motor
2-7/16” CEMA Drive Shaft



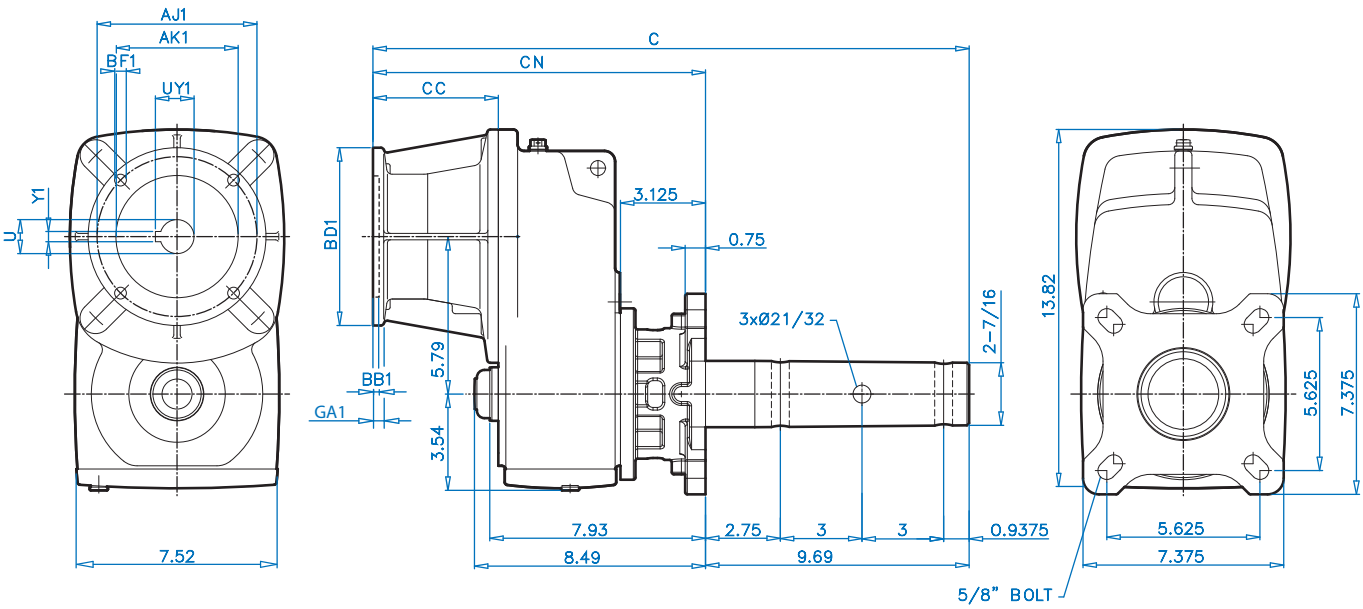


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
71S/L	26,57	16,88	9,07	5,72	4,86
80S/L/LP	27,56	17,87	10,06	6,43	5,59
90SP/LP	29,13	19,44	11,63	7,19	5,79
100LP/AP	30,35	20,66	12,85	7,90	6,65
112MP	32,21	22,53	14,71	8,87	7,05



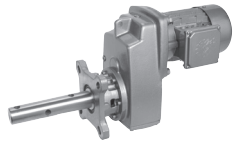
SK 2282 SCP + NEMA 2-7/16” CEMA Drive Shaft

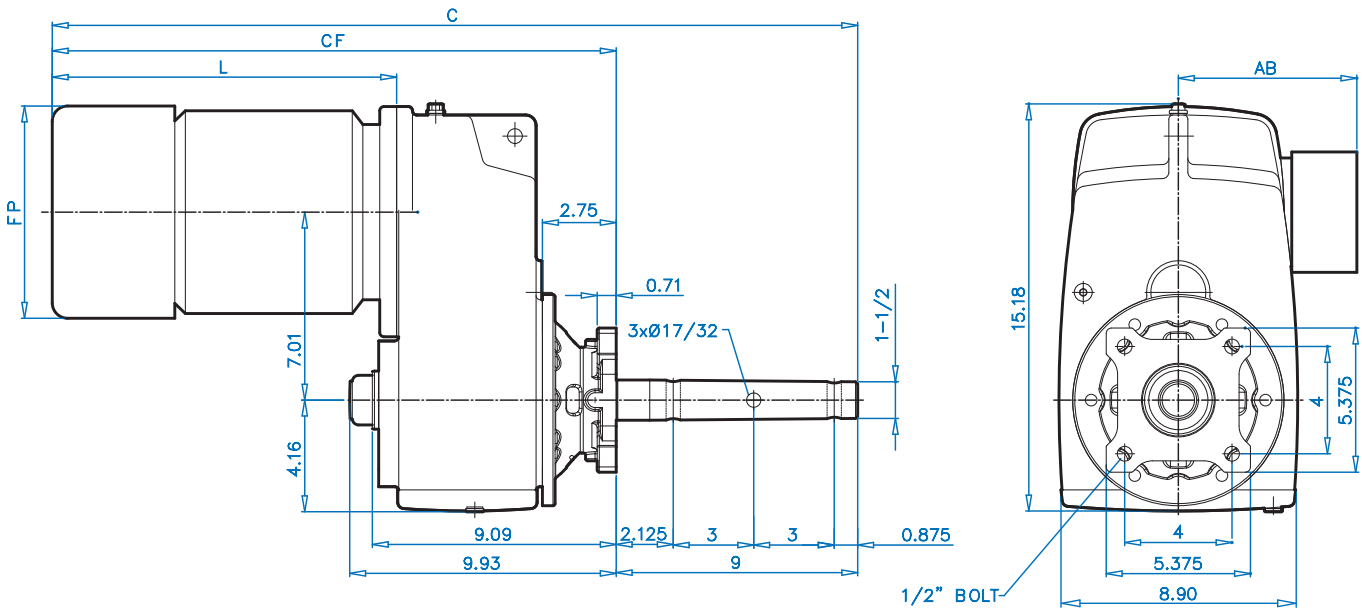


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	22,11	12,42	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	22,11	12,42	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	24,15	14,46	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

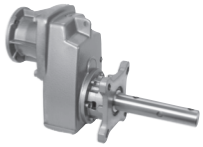
SK 3282 SCP + Motor
1-1/2” CEMA Drive Shaft



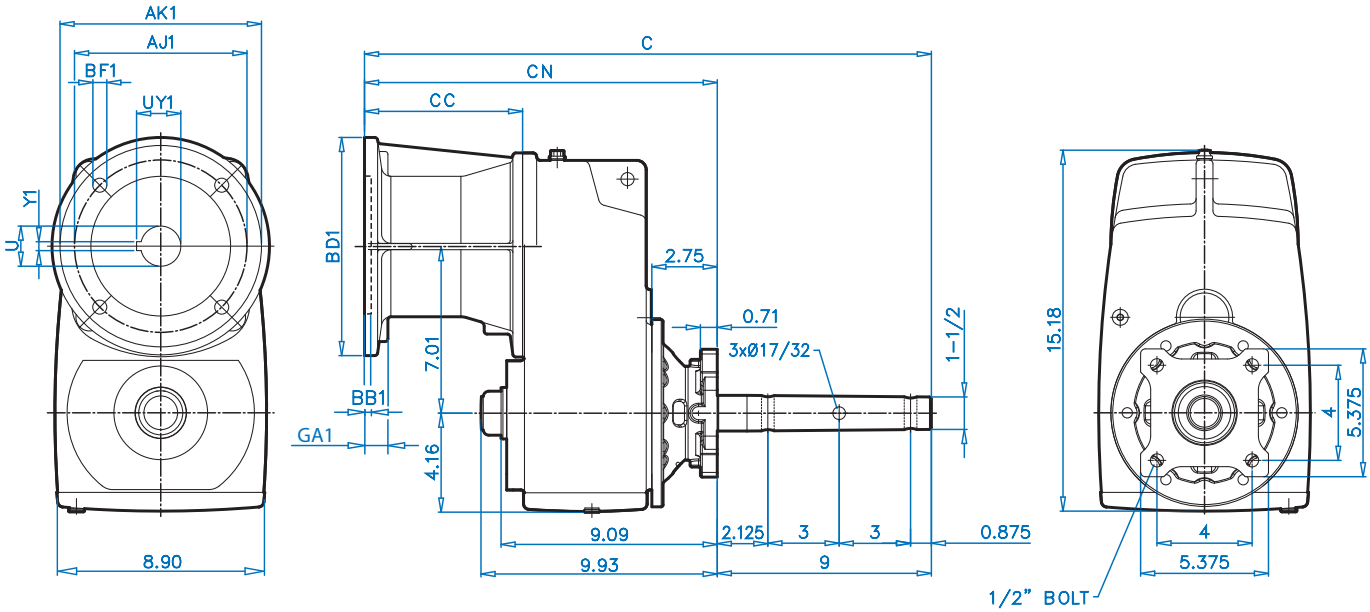


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
71S/L	26,49	17,41	9,07	5,72	4,86
80S/L/LP	27,47	18,47	10,06	6,43	5,59
90SP/LP	29,04	20,04	11,63	7,19	5,79
100LP/AP	30,27	21,27	12,85	7,90	6,65
112MP	32,13	23,13	14,71	8,87	7,05
132SP/MP	34,56	25,56	17,14	10,45	8,03



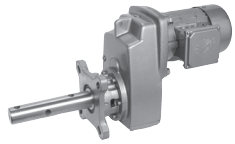
SK 3282 SCP + NEMA 1-1/2” CEMA Drive Shaft

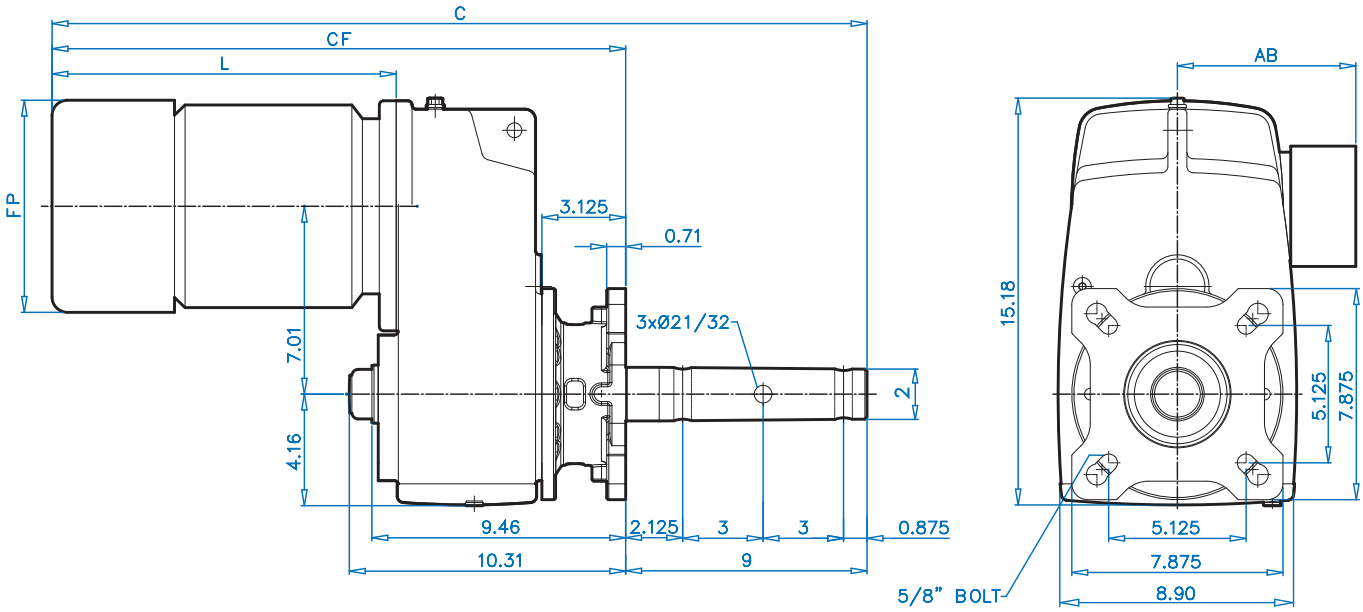


See page 152 for SCP CEMA drive shaft details**

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	22,02	13,02	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	22,02	13,02	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	24,06	15,06	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	24,06	15,06	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,310

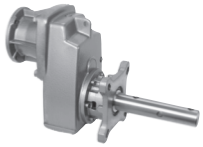
SK 3282 SCP + Motor
2” CEMA Drive Shaft



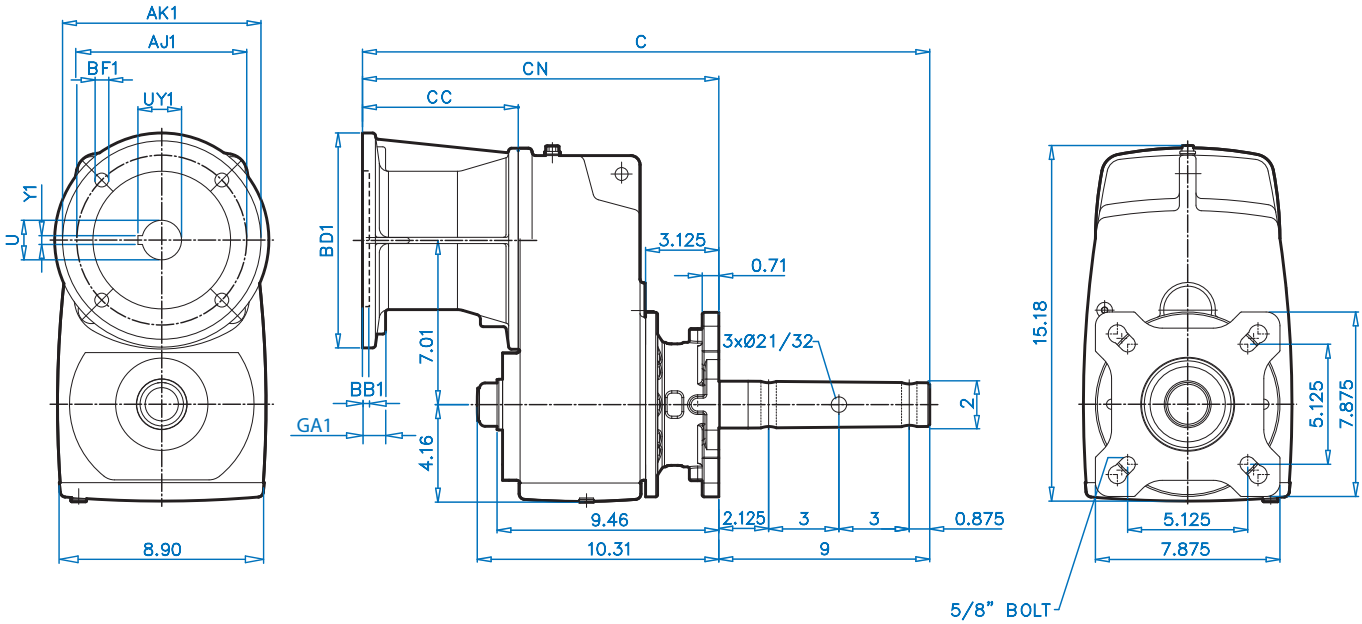


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
71S/L	26,86	17,79	9,07	5,72	4,86
80S/L/LP	27,85	18,85	10,06	6,43	5,59
90SP/LP	29,42	20,42	11,63	7,19	5,79
100LP/AP	30,64	21,64	12,85	7,90	6,65
112MP	32,50	23,50	14,71	8,87	7,05
132SP/MP	34,93	25,93	17,14	10,45	8,03



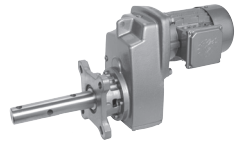
SK 3282 SCP + NEMA 2” CEMA Drive Shaft

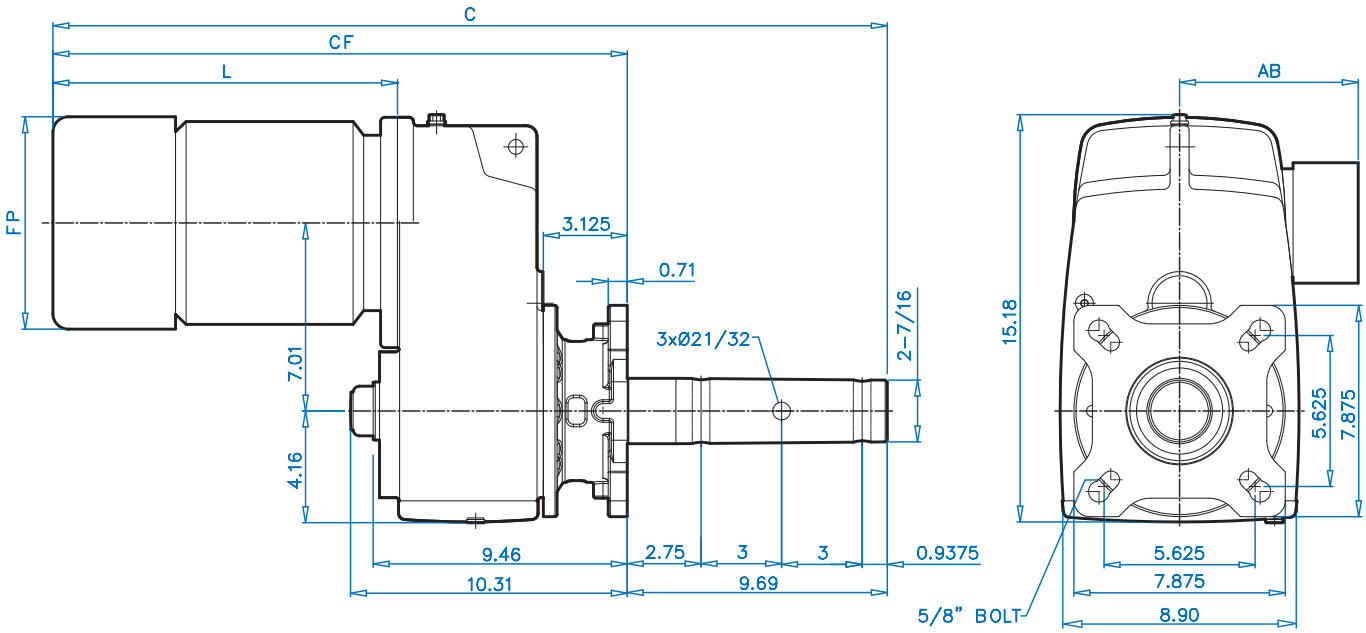


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	22,40	13,40	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	22,40	13,40	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	24,44	15,44	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	24,44	15,44	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,310

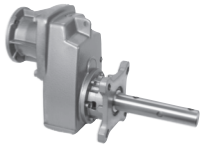
SK 3282 SCP + Motor
2-7/16” CEMA Drive Shaft



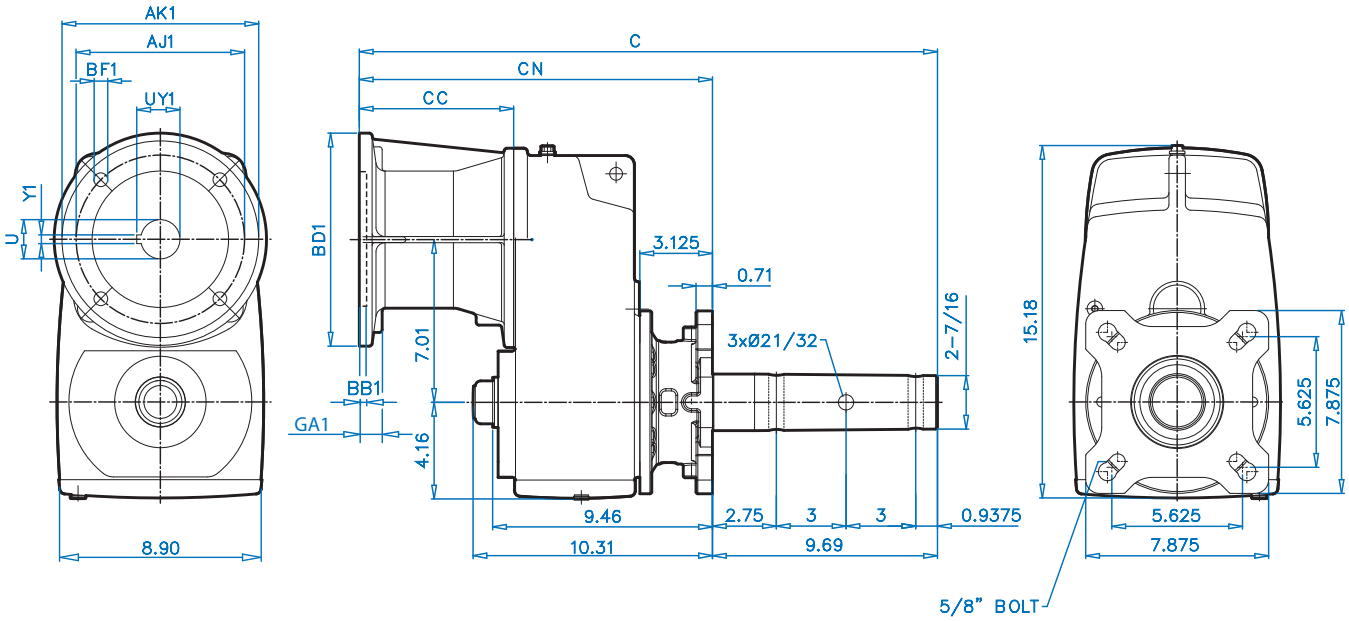


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
71S/L	27,55	18,48	9,07	5,72	4,86
80S/L/LP	28,53	18,85	10,06	6,43	5,59
90SP/LP	30,11	20,42	11,63	7,19	5,79
100LP/AP	31,33	21,64	12,85	7,90	6,65
112MP	33,19	23,50	14,71	8,87	7,05
132SP/MP	35,62	25,93	17,14	10,45	8,03



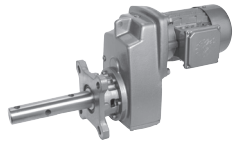
SK 3282 SCP + NEMA 2-7/16” CEMA Drive Shaft

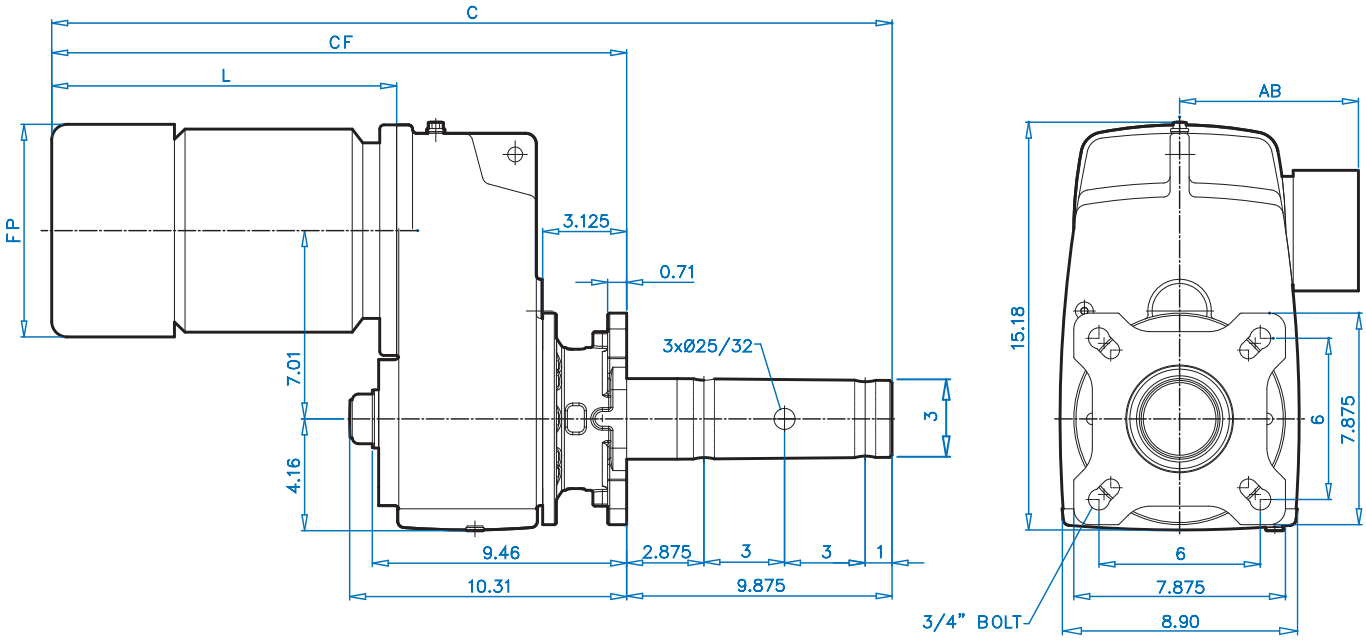


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	23,08	13,40	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	23,08	13,40	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	25,12	15,44	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	25,12	15,44	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,310

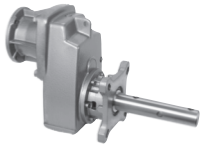
SK 3282 SCP + Motor
3” CEMA Drive Shaft



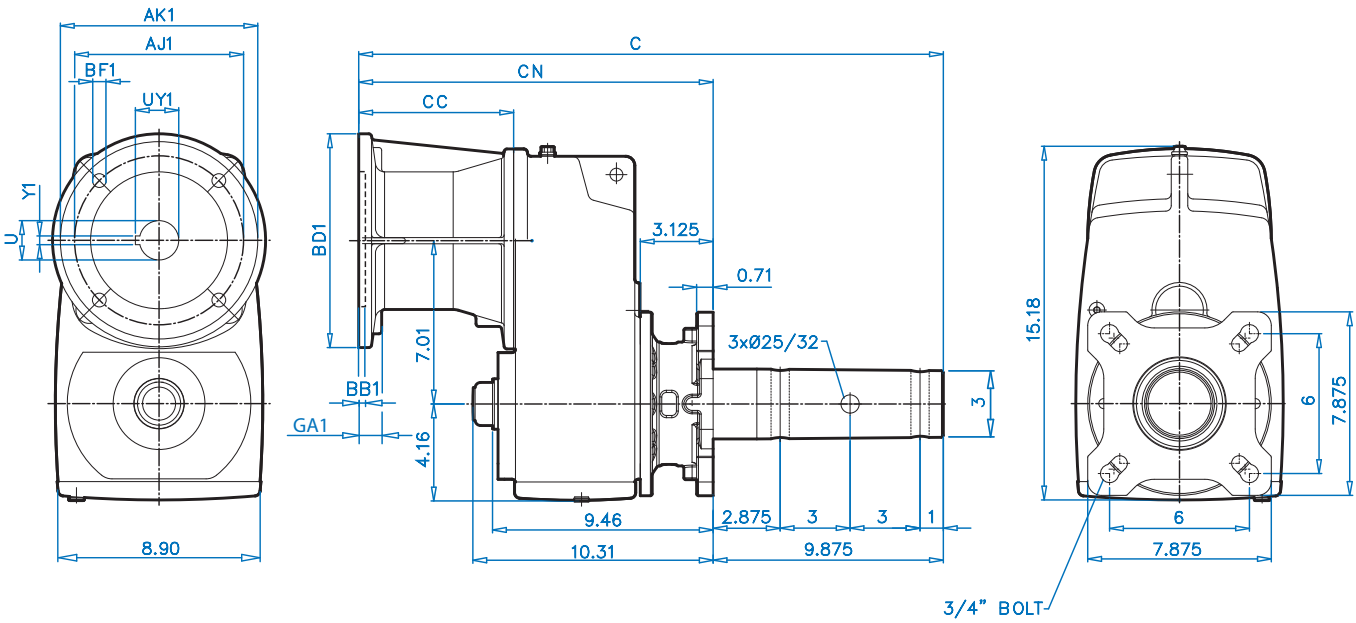


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
71S/L	27,74	18,66	9,07	5,72	4,86
80S/L/LP	28,72	18,85	10,06	6,43	5,59
90SP/LP	30,29	20,42	11,63	7,19	5,79
100LP/AP	31,52	21,64	12,85	7,90	6,65
112MP	33,38	23,50	14,71	8,87	7,05
132SP/MP	35,81	25,93	17,14	10,45	8,03



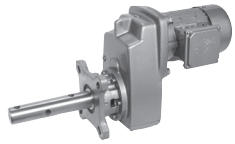
SK 3282 SCP + NEMA 3” CEMA Drive Shaft

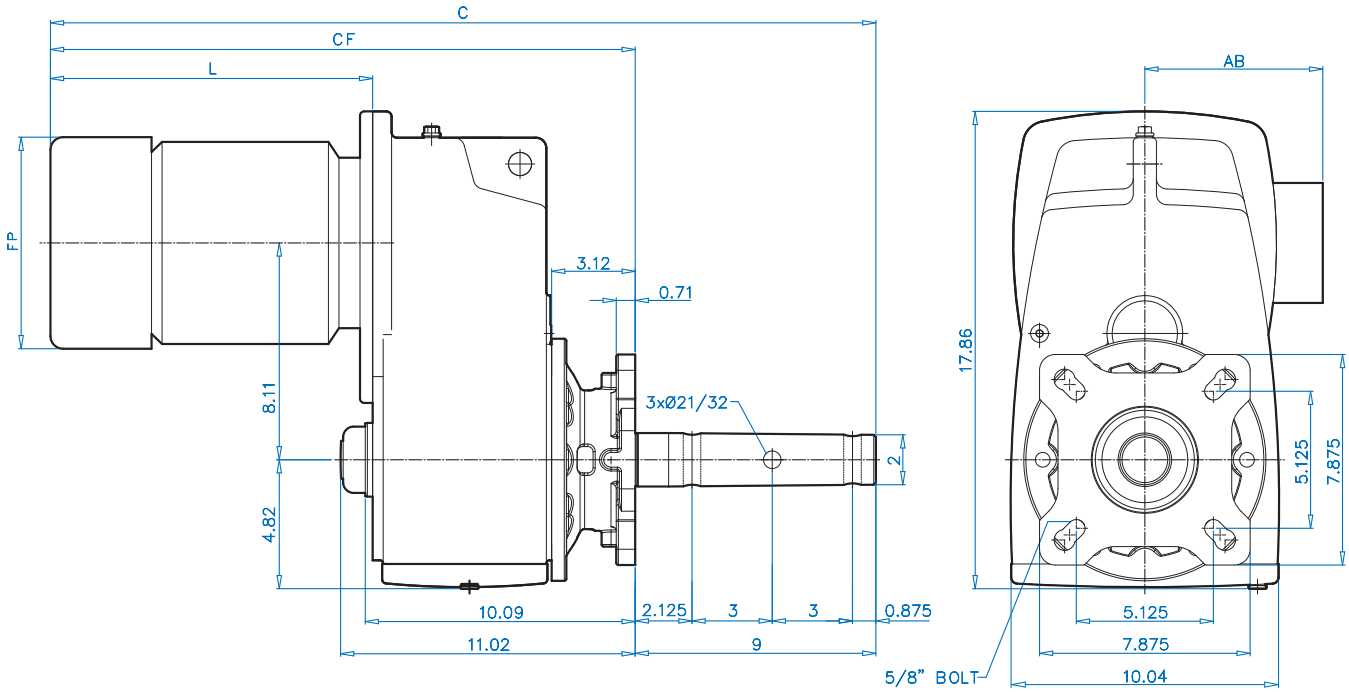


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	23,27	13,40	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	23,27	13,40	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	25,31	15,44	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	25,31	15,44	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,310

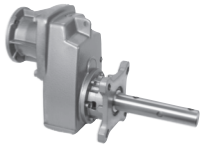
SK 4282 SCP + Motor
2” CEMA Drive Shaft



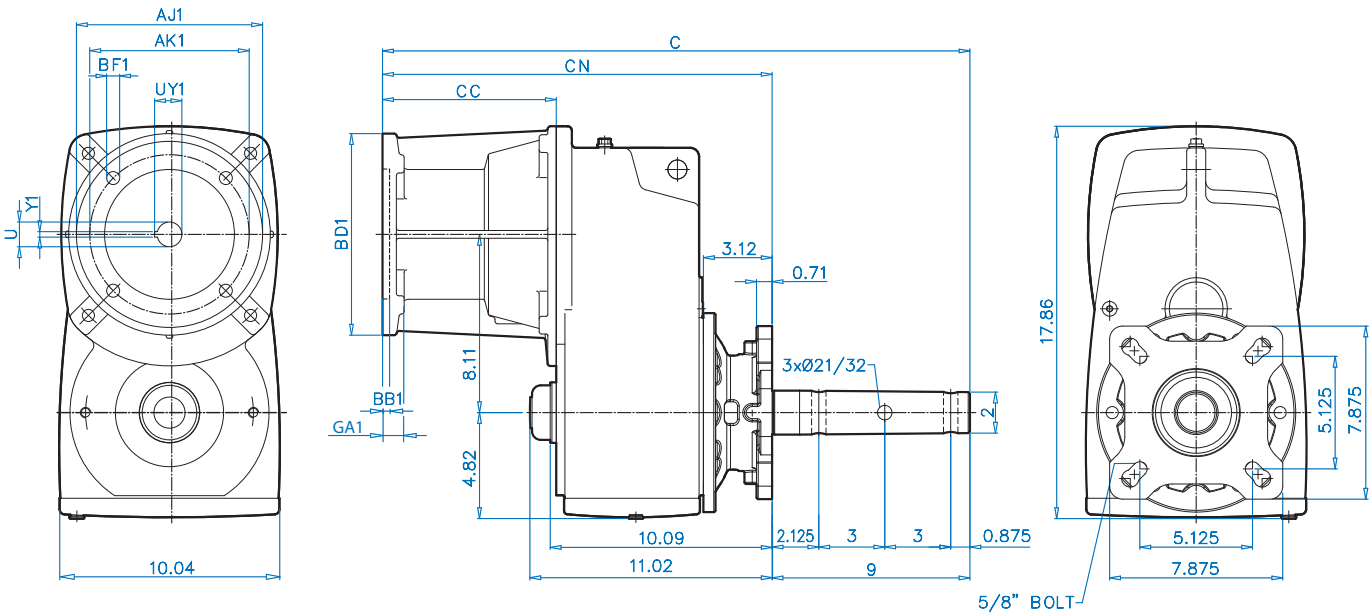


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
90SP/LP	29,94	20,94	10,84	7,19	5,79
100LP/AP	31,16	22,16	12,06	7,90	6,65
112MP	33,02	24,02	13,93	8,87	7,05
132SP/MP	35,45	26,45	16,35	10,45	8,03
160MP	38,51	29,51	19,41	12,56	9,53
160LP	40,27	31,27	21,17	12,56	9,53



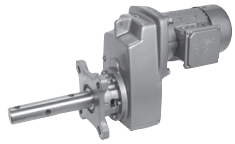
SK 4282 SCP + NEMA 2” CEMA Drive Shaft

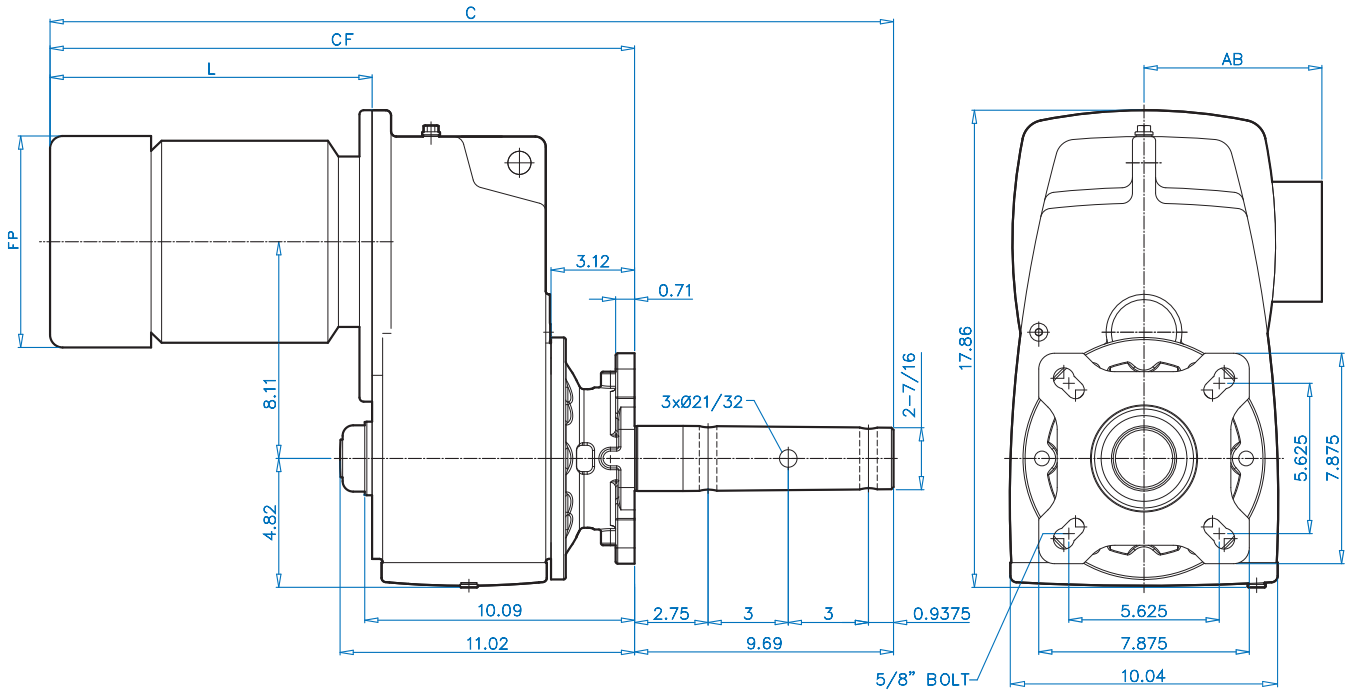


See page 152 for SCP CEMA drive shaft details**

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	23,43	14,43	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	23,43	14,43	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	27,01	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	27,01	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	27,01	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375

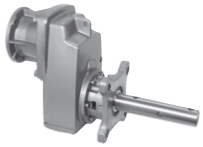
SK 4282 SCP + Motor
2-7/16” CEMA Drive Shaft



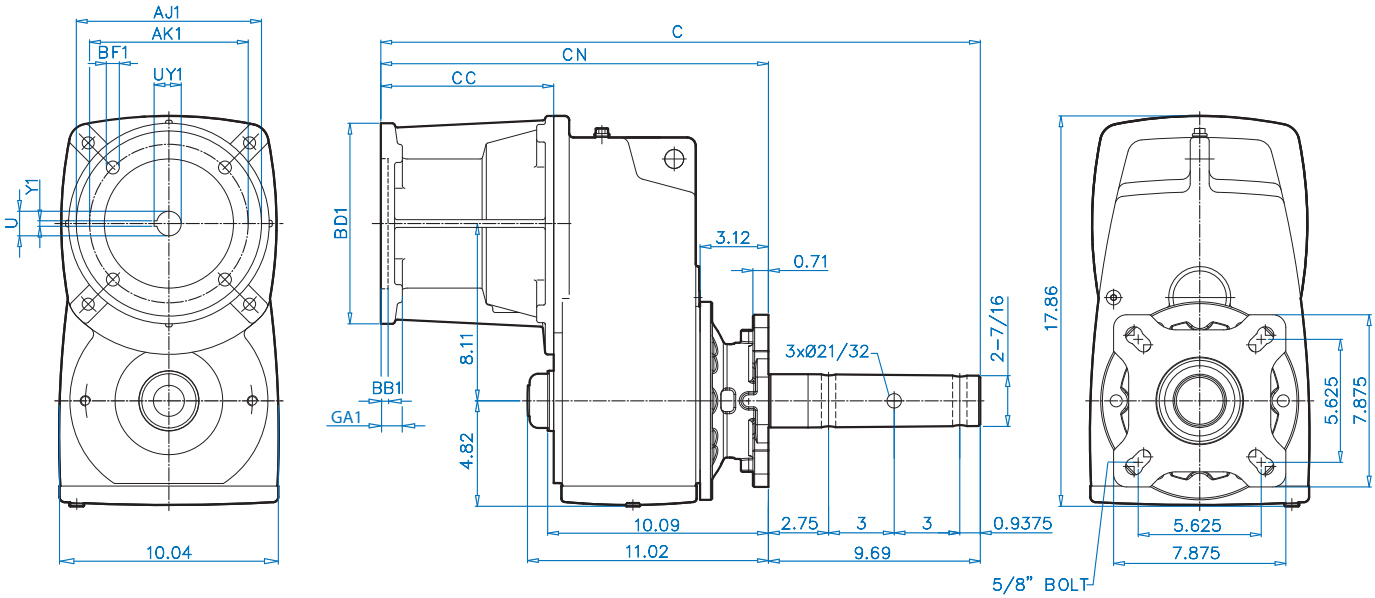


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
90SP/LP	30,63	20,94	10,84	7,19	5,79
100LP/AP	31,85	22,16	12,06	7,90	6,65
112MP	33,71	24,02	13,93	8,87	7,05
132SP/MP	36,14	26,45	16,35	10,45	8,03
160MP	39,19	29,51	19,41	12,56	9,53
160LP	40,95	31,27	21,17	12,56	9,53



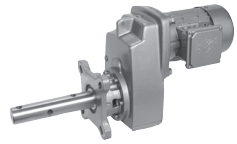
SK 4282 SCP + NEMA 2-7/16” CEMA Drive Shaft

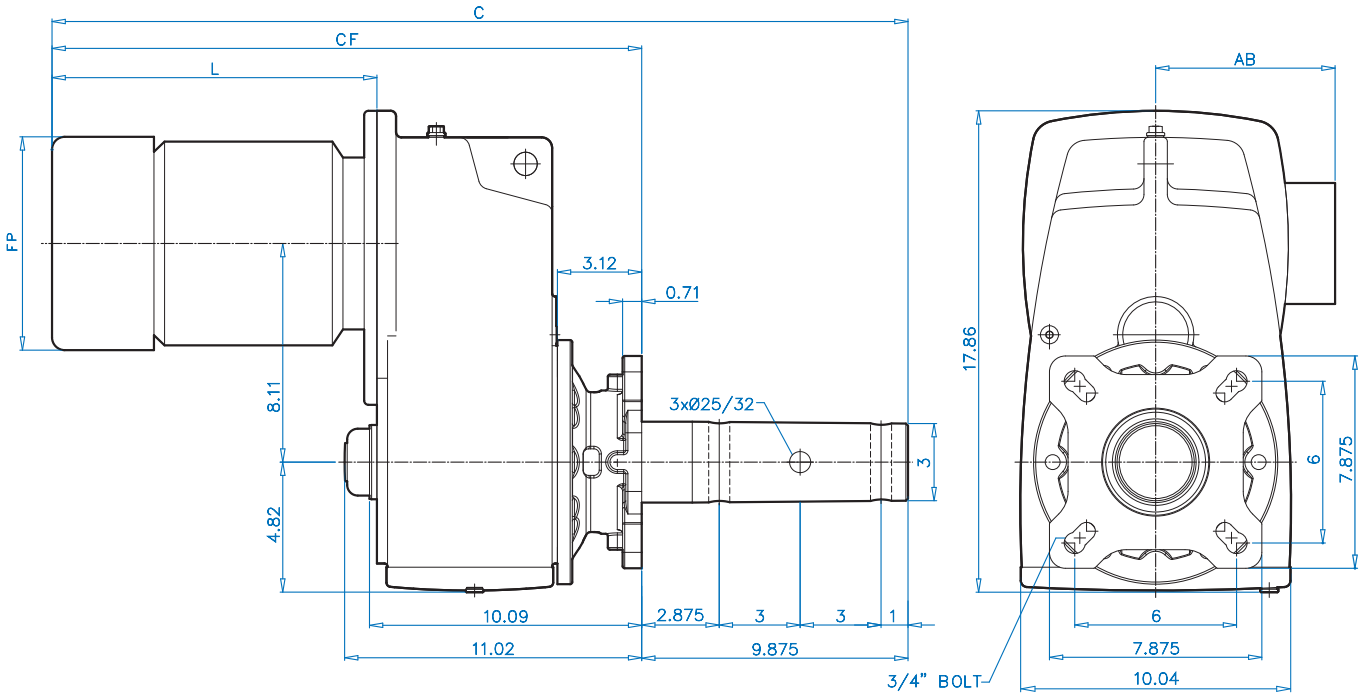


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	24,11	14,43	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	24,11	14,43	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	27,70	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	27,70	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	27,70	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375

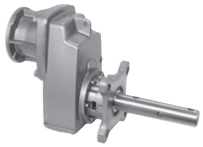
SK 4282 SCP + Motor
3” CEMA Drive Shaft



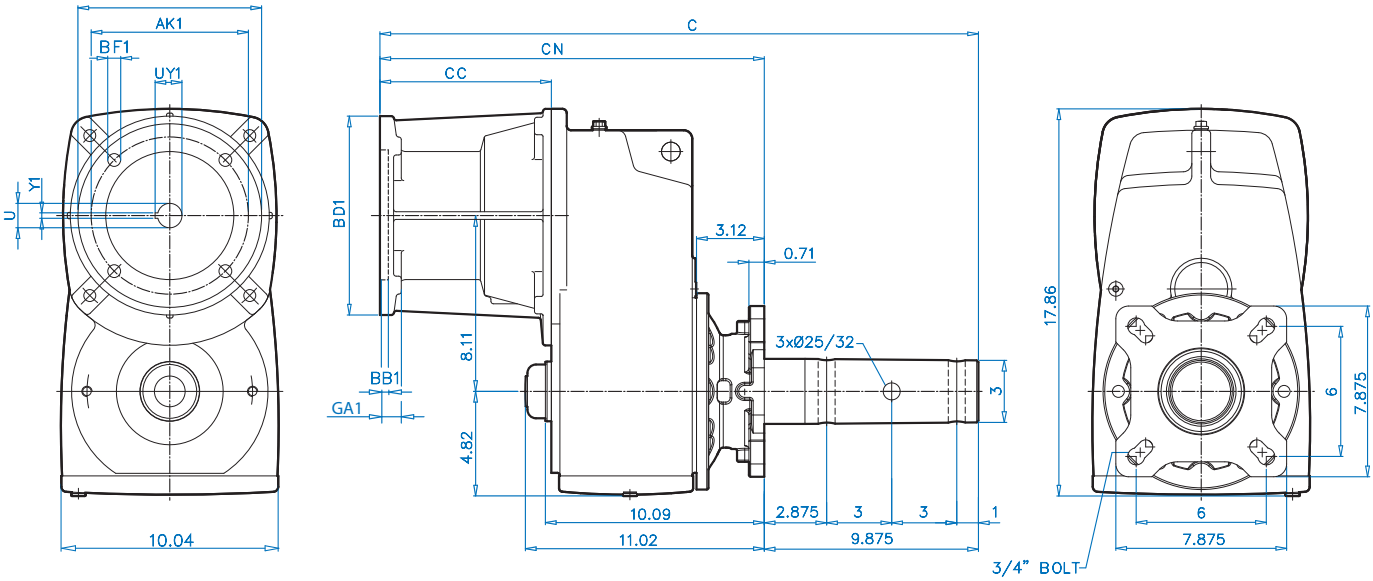


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
90SP/LP	30,81	20,94	10,84	7,19	5,79
100LP/AP	32,03	22,16	12,06	7,90	6,65
112MP	33,90	24,02	13,93	8,87	7,05
132SP/MP	36,33	26,45	16,35	10,45	8,03
160MP	39,38	29,51	19,41	12,56	9,53
160LP	41,14	31,27	21,17	12,56	9,53



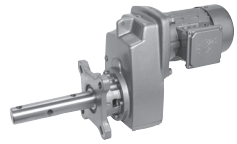
SK 4282 SCP + NEMA 3” CEMA Drive Shaft

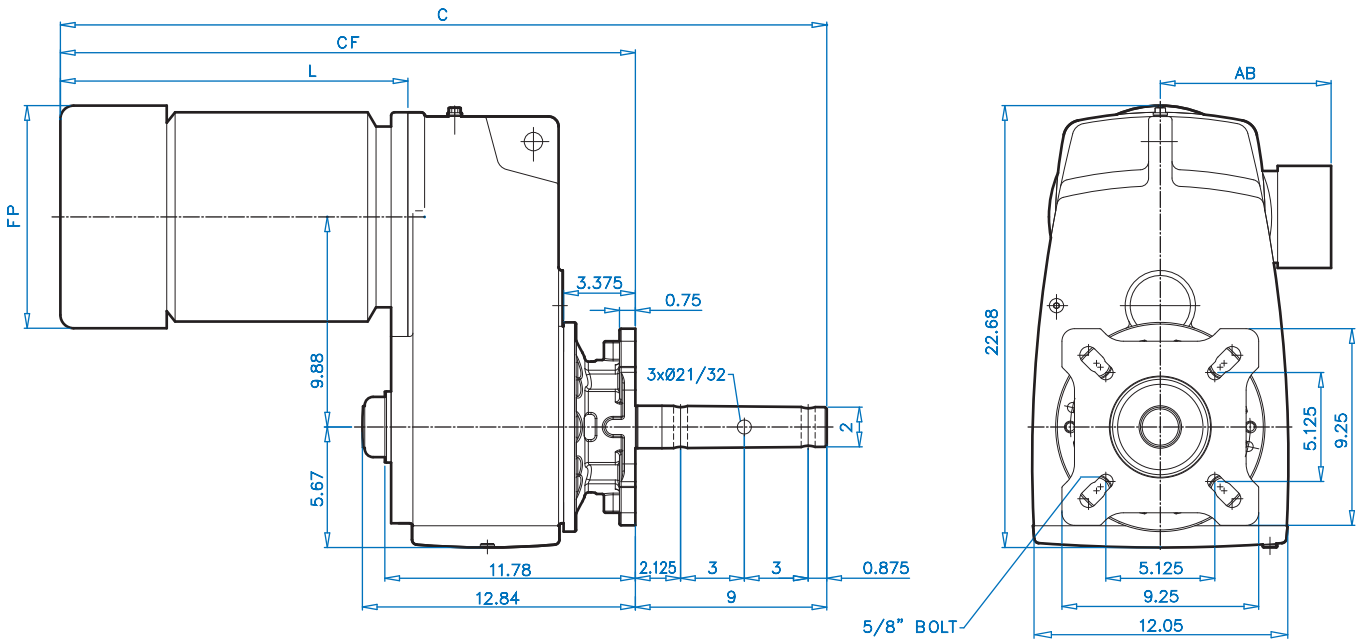


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	24,30	14,43	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	24,30	14,43	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	27,88	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	27,88	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	27,88	18,01	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375

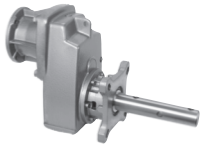
SK 5282 SCP + Motor
2” CEMA Drive Shaft



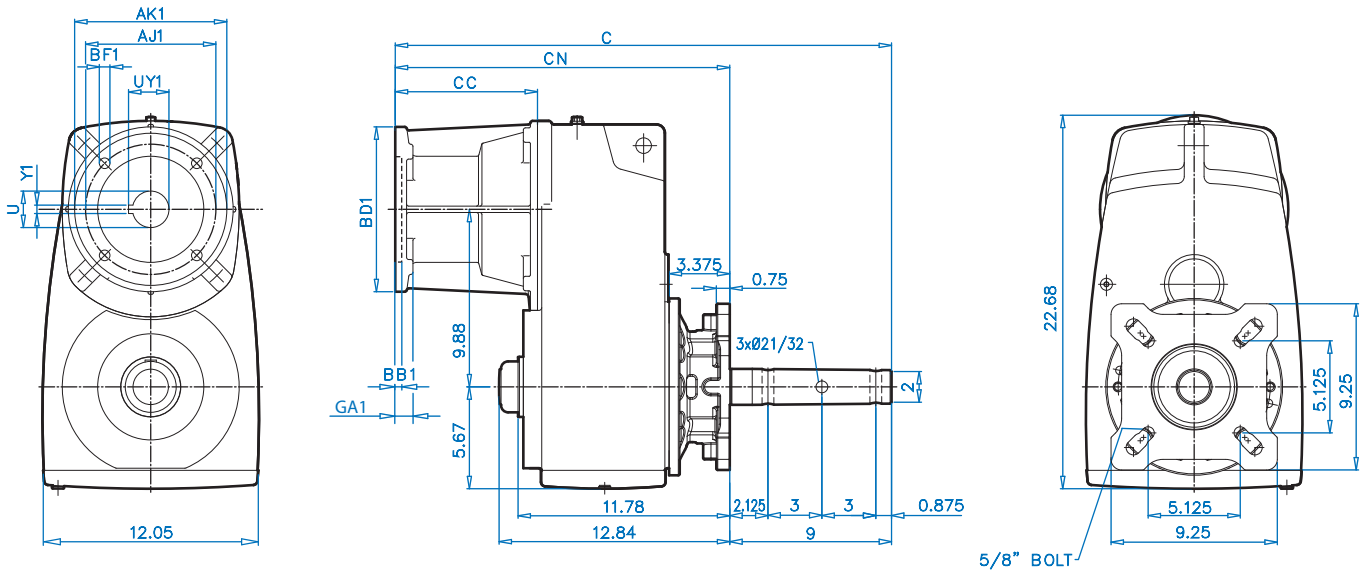


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
90SP/LP	30,84	21,84	10,84	7,19	5,79
100LP/AP	32,06	23,06	12,06	7,90	6,65
112MP	33,92	24,92	13,93	8,87	7,05
132SP/MP	36,35	27,35	16,35	10,45	8,03
160MP	39,41	30,41	19,41	12,56	9,53
160LP	41,17	32,17	21,17	12,56	9,53
180MP/LP	44,17	35,17	24,17	15,83	12,01



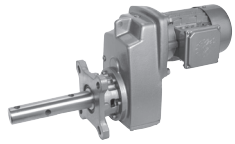
SK 5282 SCP + NEMA 2” CEMA Drive Shaft

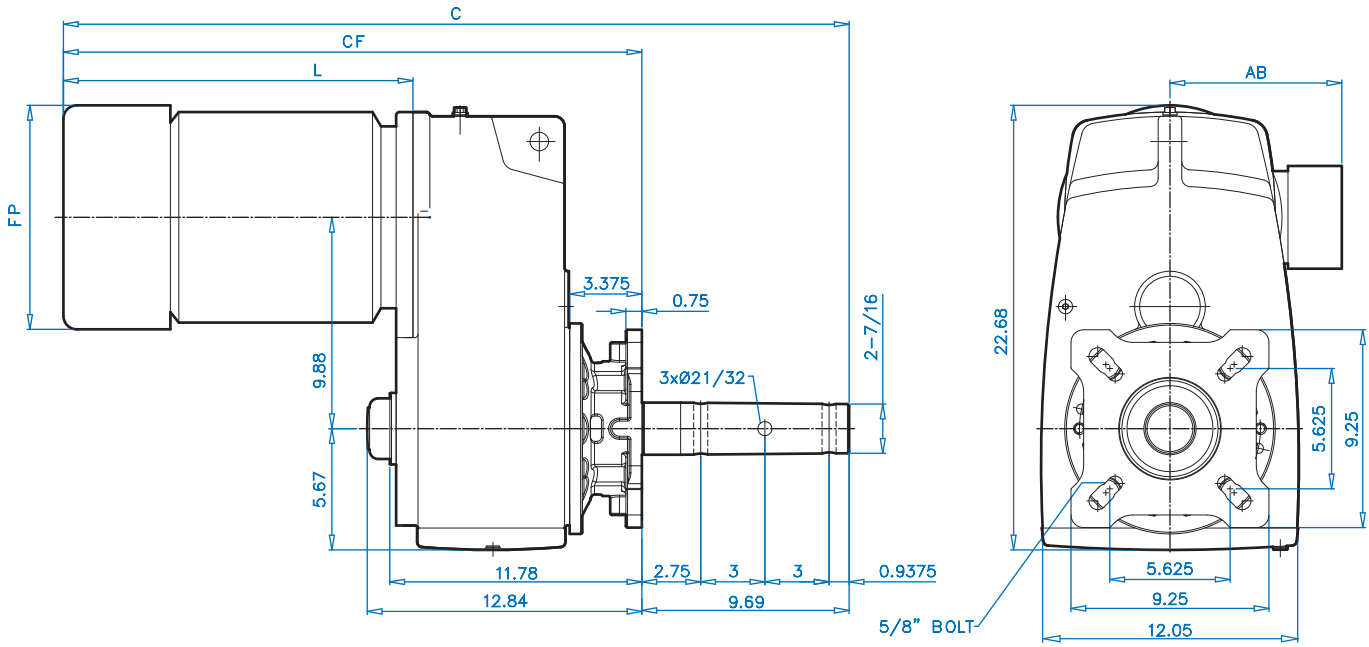


See page 152 for SCP CEMA drive shaft details**

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	24,33	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	24,33	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	27,91	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	27,91	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	27,91	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	28,54	19,54	8,54	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500

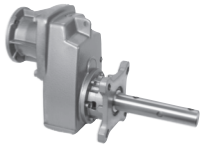
SK 5282 SCP + Motor
2-7/16” CEMA Drive Shaft



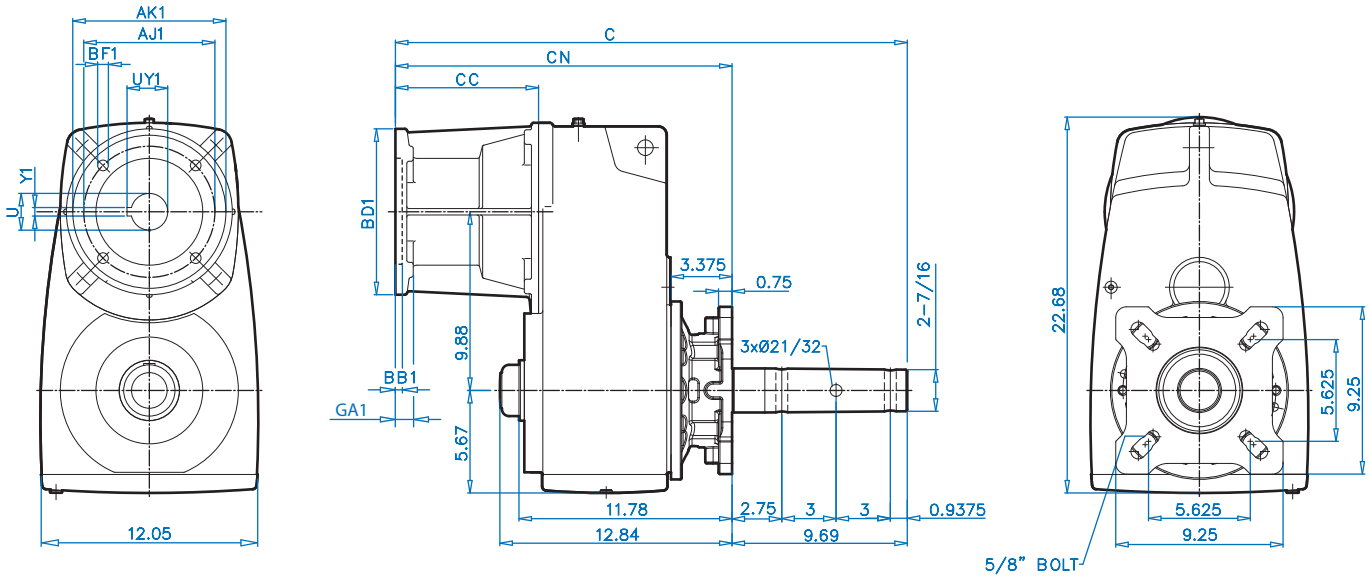


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
90SP/LP	31,53	21,84	10,84	7,19	5,79
100LP/AP	32,75	23,06	12,06	7,90	6,65
112MP	34,61	24,92	13,93	8,87	7,05
132SP/MP	37,04	27,35	16,35	10,45	8,03
160MP	40,09	30,41	21,17	12,56	9,53
160LP	41,85	32,17	21,17	12,56	9,53
180MP/LP	44,86	35,17	24,17	15,83	12,01



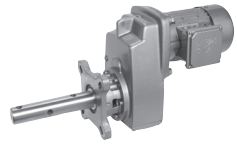
SK 5282 SCP + NEMA 2-7/16” CEMA Drive Shaft

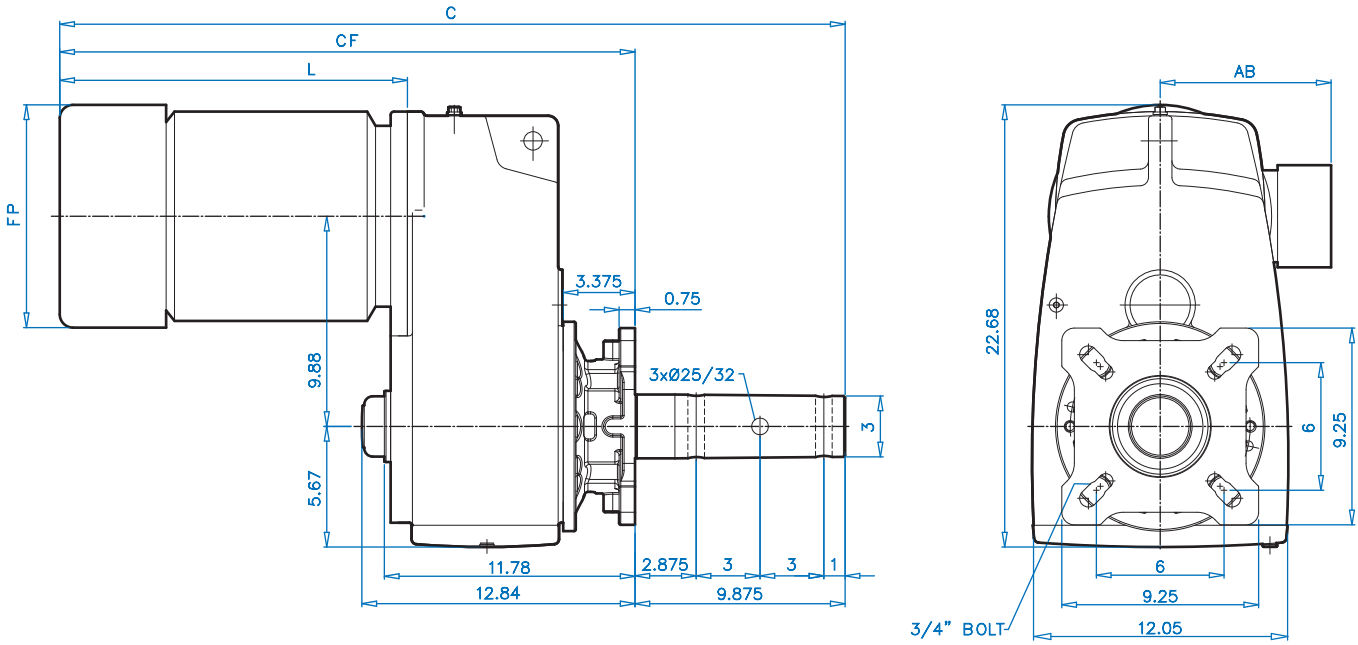


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	25,02	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	25,02	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	28,60	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	28,60	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	28,60	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	29,23	19,54	8,54	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500

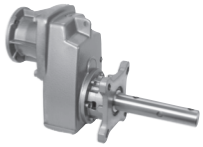
SK 5282 SCP + Motor
3” CEMA Drive Shaft



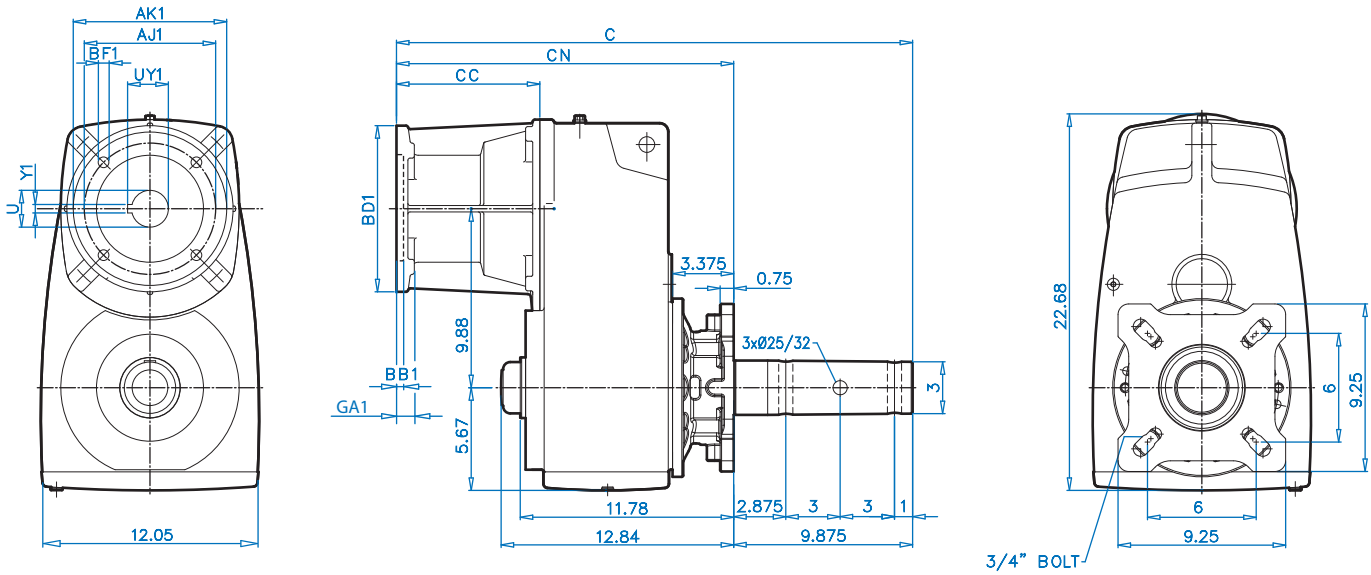


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
90SP/LP	31,71	21,84	10,84	7,19	5,79
100LP/AP	32,94	23,06	12,06	7,90	6,65
112MP	34,80	24,92	13,93	8,87	7,05
132SP/MP	37,23	27,35	16,35	10,45	8,03
160MP	40,28	30,41	19,41	12,56	9,53
160LP	42,04	32,17	21,17	12,56	9,53
180MP/LP	20,87	35,17	24,17	15,83	12,01



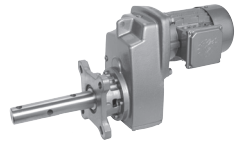
SK 5282 SCP + NEMA 3” CEMA Drive Shaft

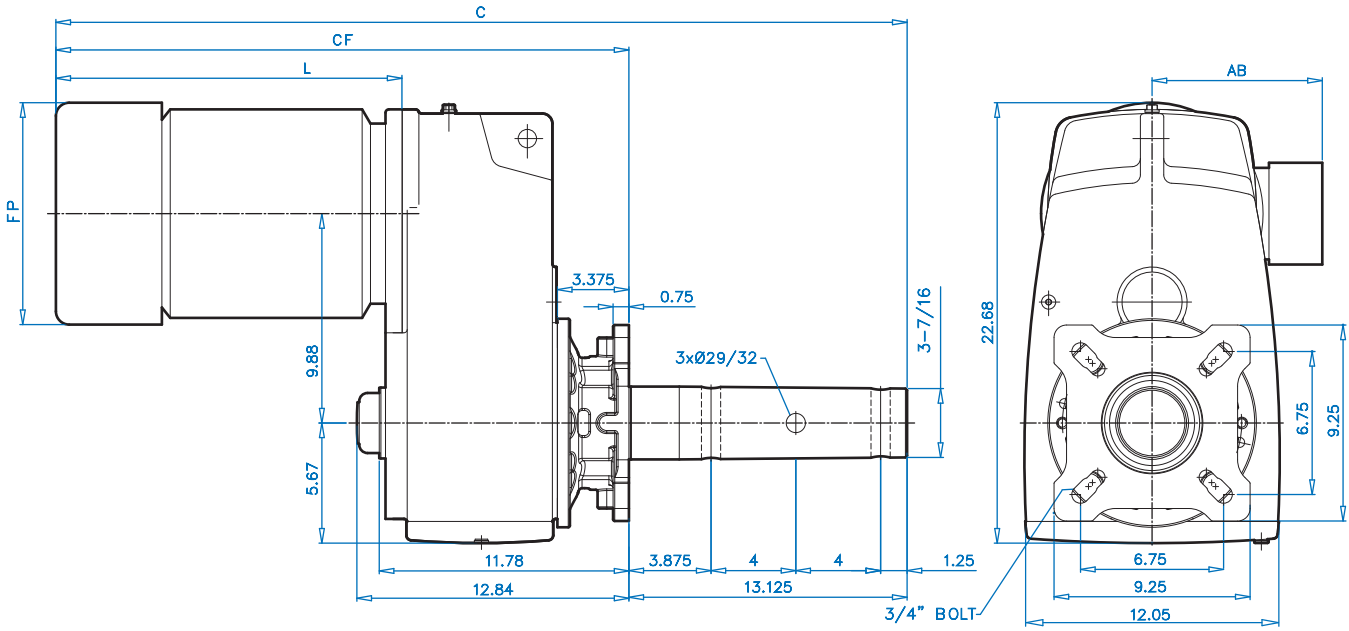


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	25,20	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	25,20	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	28,79	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	28,79	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	28,79	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	29,42	19,54	8,54	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500

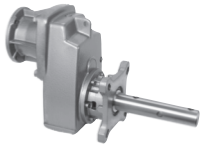
SK 5282 SCP + Motor
3-7/16”CEMA Drive Shaft



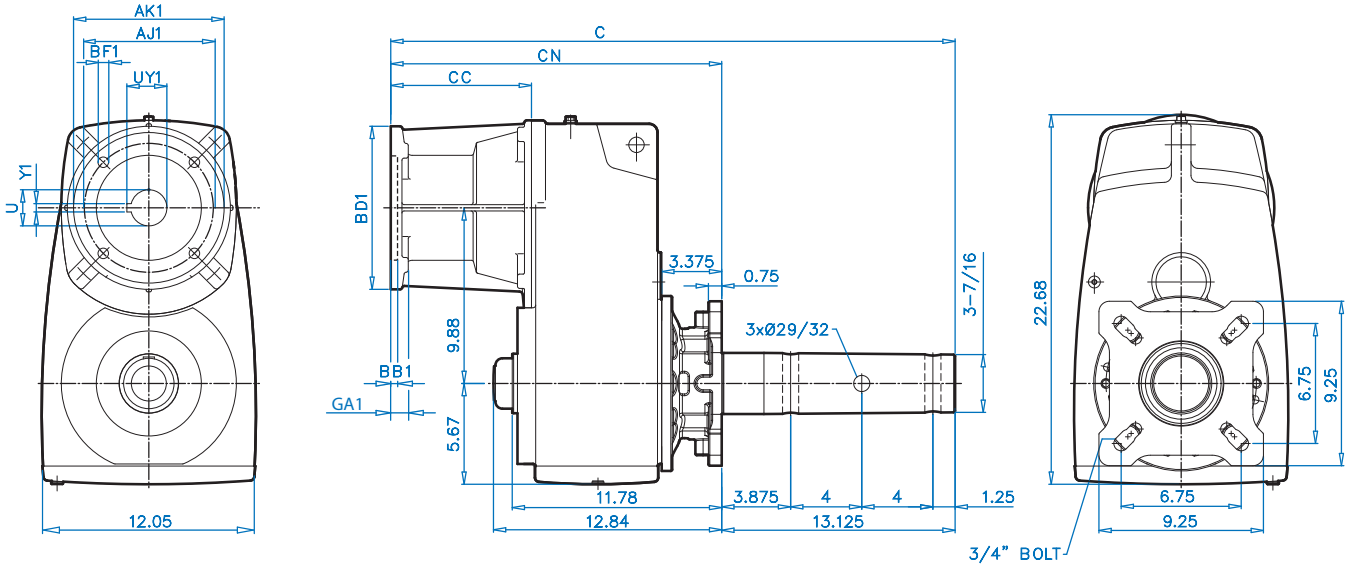


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
90SP/LP	34,96	21,84	10,84	7,19	5,79
100LP/AP	36,19	23,06	12,06	7,90	6,65
112MP	38,05	24,92	13,93	8,87	7,05
132SP/MP	40,48	27,35	16,35	10,45	8,03
160MP	43,53	30,41	19,41	12,56	9,53
160LP	45,29	32,17	21,17	12,56	9,53
180MP/LP	48,30	35,17	24,17	15,83	12,01



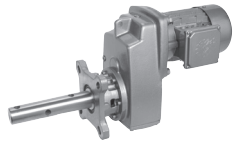
SK 5282 SCP + NEMA 3-7/16” CEMA Drive Shaft

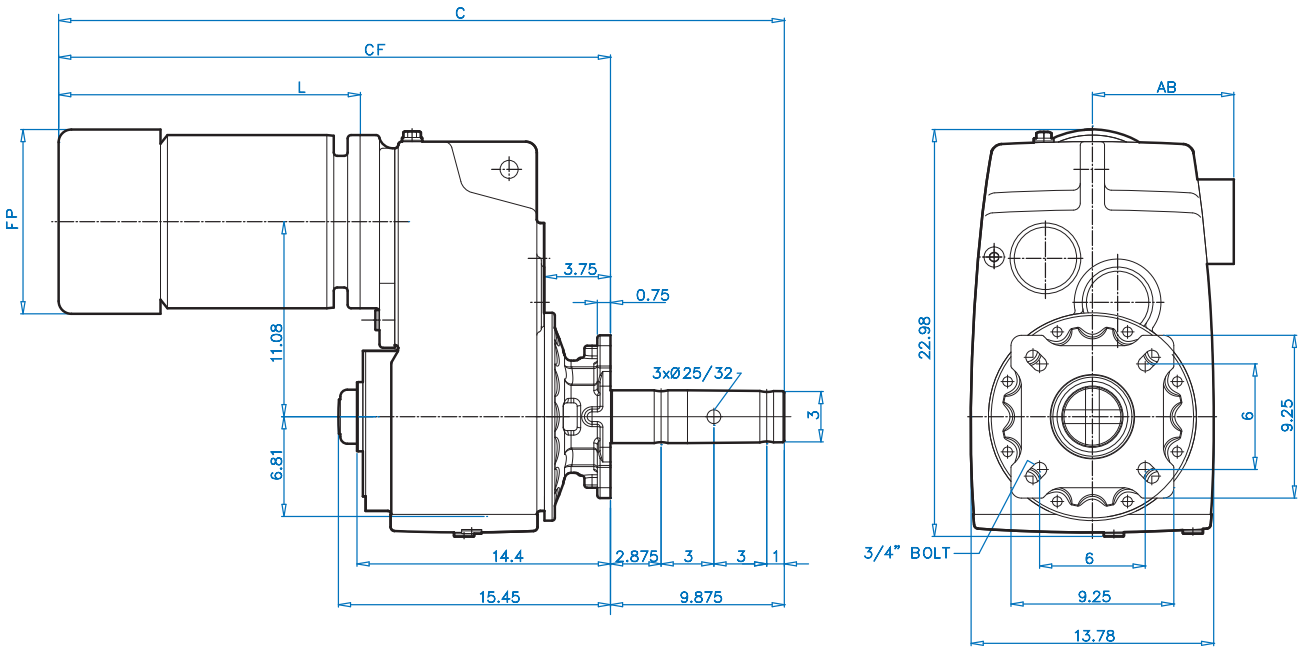


See page 152 for SCP CEMA drive shaft details

NEMA	Overall			NEMA Input						Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	28,45	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	28,45	15,33	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	32,04	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	32,04	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	32,04	18,91	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	32,67	19,54	8,54	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500

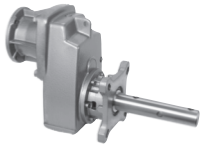
SK 6282 SCP + Motor
3” CEMA Drive Shaft



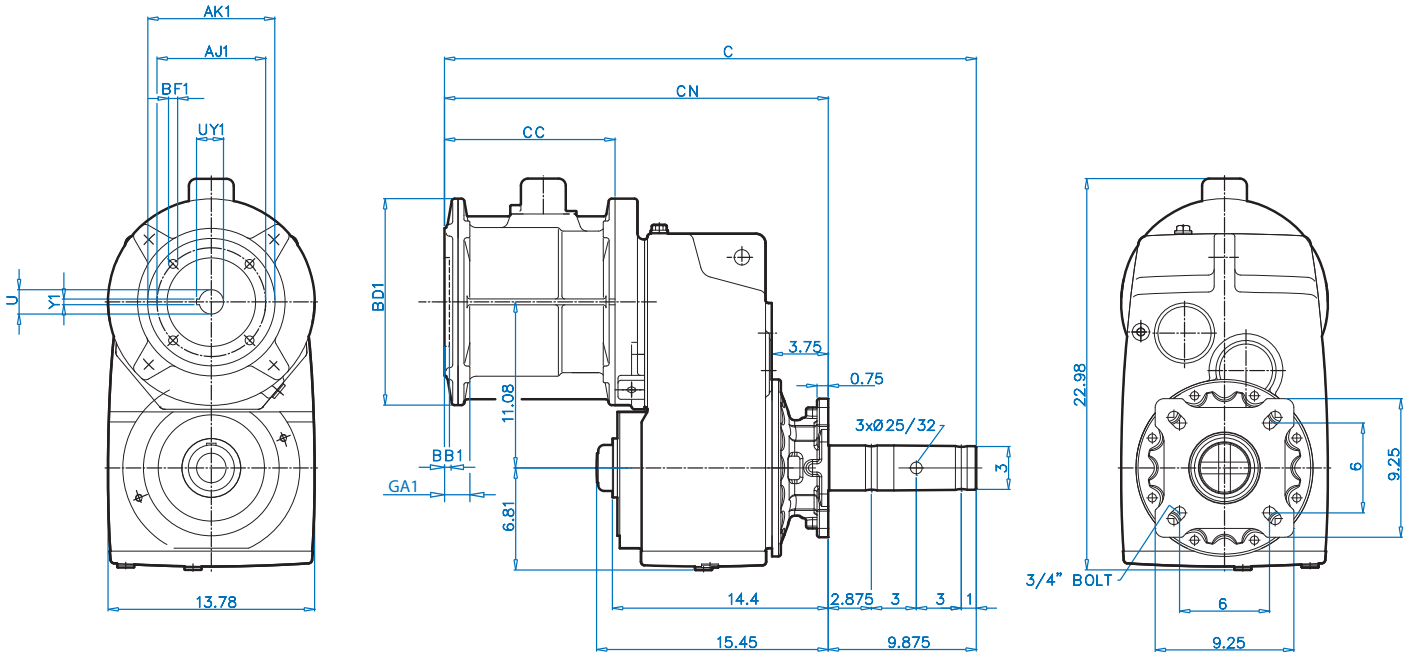


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
100LP/AP	36,50	26,62	12,06	7,90	6,65
112MP	38,24	28,37	13,81	8,87	7,05
132SP/MP	41,58	31,70	17,14	10,45	8,03
160MP	43,84	33,97	19,41	12,56	9,53
160LP	45,60	35,73	21,17	12,56	9,53
180MP/LP	48,61	38,73	24,17	15,83	12,01
225RP/SP/MP	53,65	43,77	29,21	17,05	13,66
250WP	53,65	43,77	29,21	17,05	13,66



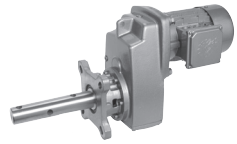
SK 6282 SCP + NEMA 3” CEMA Drive Shaft

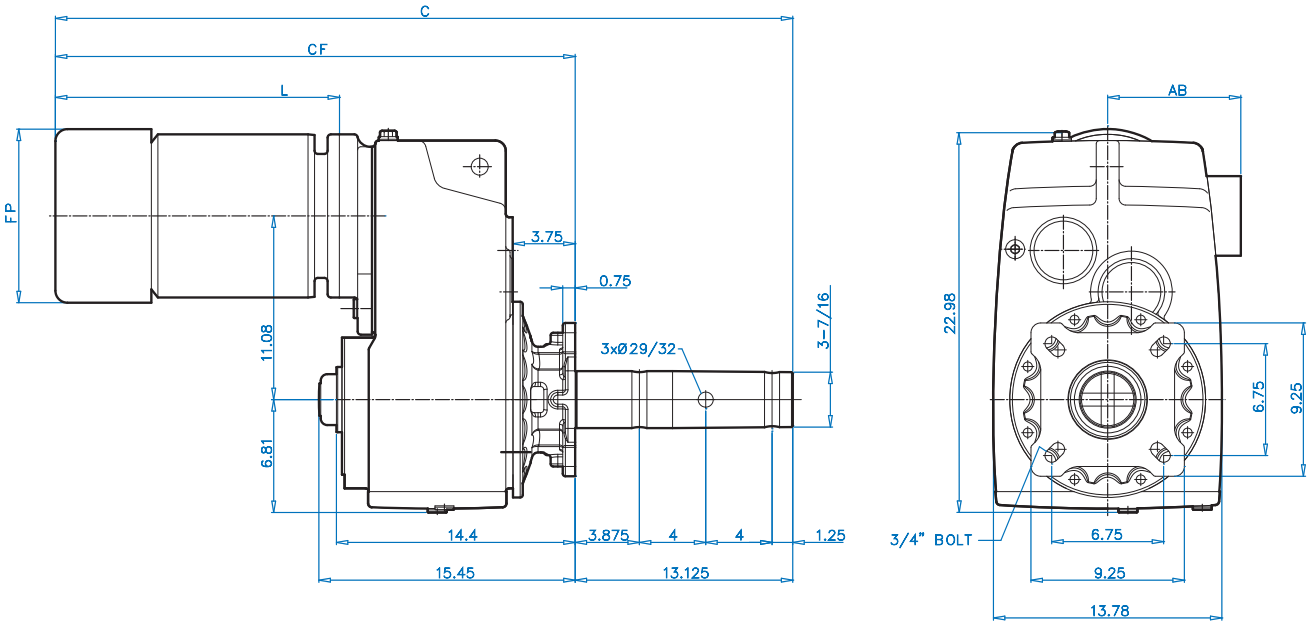


See page 152 for SCP CEMA drive shaft details

NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
180TC	31,95	22,08	7,52	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	31,95	22,08	7,52	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	35,81	25,94	11,38	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	35,81	25,94	11,38	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500
320TC	34,79	24,91	10,35	11,000	12,50	0,23	15,75	0,71	1,18	2,125	2,35	0,500
360 TC	37,70	27,83	13,27	11,000	12,50	0,16	17,72	0,71	1,34	2,375	2,65	0,625

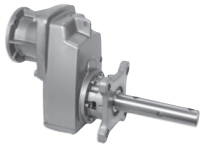
SK 6282 SCP + Motor
3-7/16” CEMA Drive Shaft



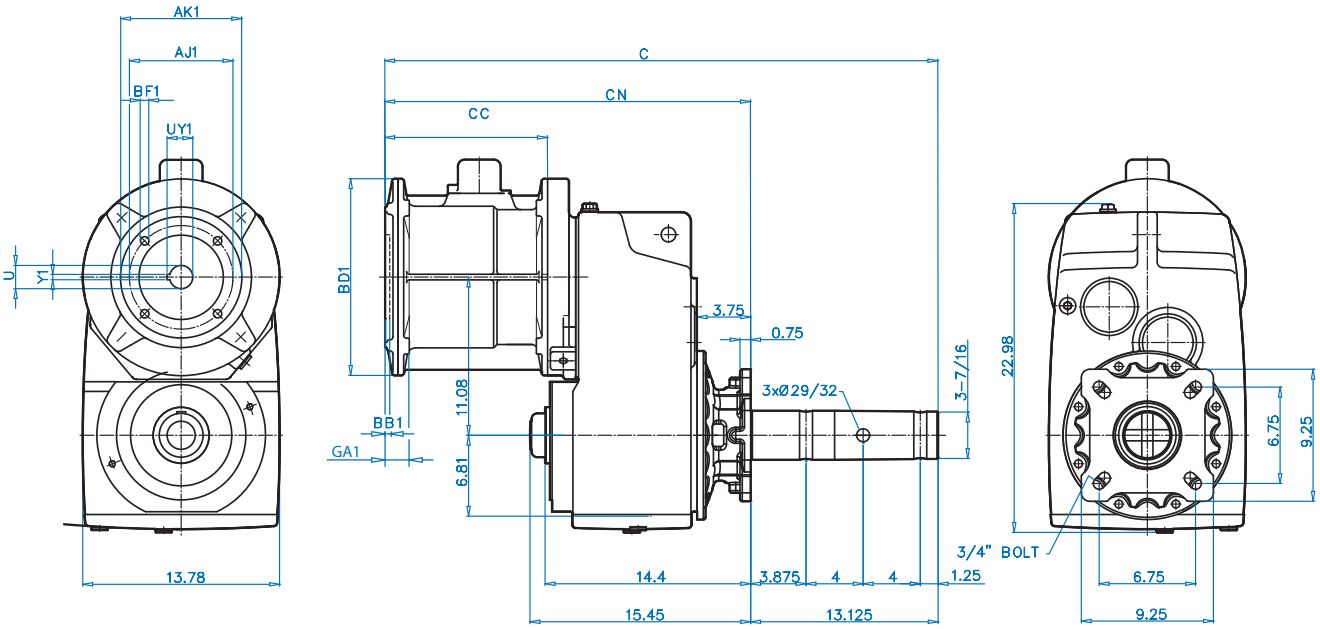


See page 152 for SCP CEMA drive shaft details**

Motor Type	Overall		Motor		
	C	CF	L	FP	AB
100LP/AP	39,75	26,62	12,06	7,90	6,65
112MP	41,49	28,37	13,81	8,87	7,05
132SP/MP	49,04	31,70	17,14	10,45	8,03
160MP	47,09	33,97	19,41	12,56	9,53
160LP	48,85	35,73	21,17	12,56	9,53
180MP/LP	51,86	38,73	24,17	15,83	12,01
225RP/SP/MP	56,90	43,77	29,21	17,05	13,66
250WP	56,90	43,77	29,21	17,05	13,66

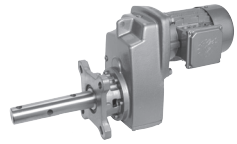


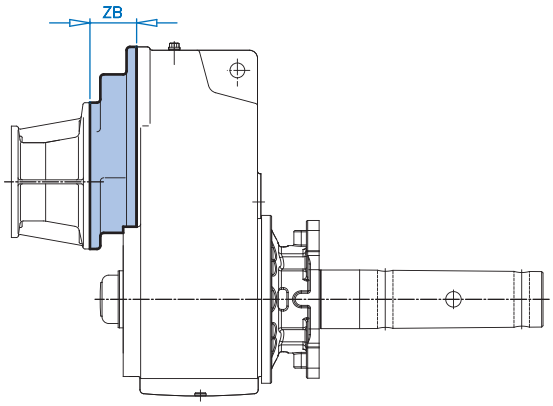
SK 6282 SCP + NEMA 3-7/16” CEMA Drive Shaft

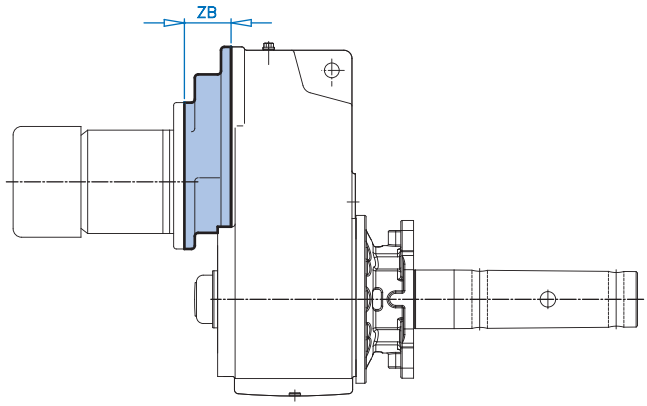


See page 152 for SCP CEMA drive shaft details

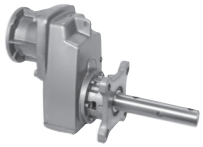
NEMA	Overall		NEMA Input							Coupling		
C-Face Input	C	CN	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
180TC	35,20	22,08	7,52	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	35,20	22,08	7,52	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	39,06	25,94	11,38	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	39,06	25,94	11,38	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500
320TC	38,04	24,91	10,35	11,000	12,50	0,23	15,75	0,71	1,18	2,125	2,35	0,500
360 TC	40,95	27,83	13,27	11,000	12,50	0,16	17,72	0,71	1,34	2,375	2,65	0,625



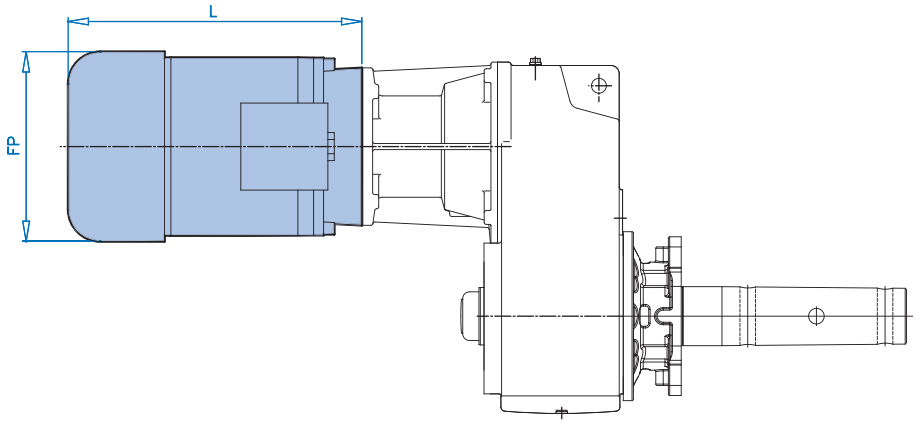




Clincher Model Type	ZB
SK 1382 SCP	2.28
SK 2382 SCP	2.36
SK 3382 SCP	2.36
SK 4382 SCP	2.72
SK 5382 SCP	2.72
SK 6382 SCP	0.00

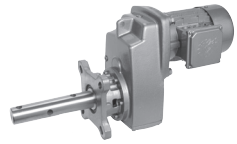


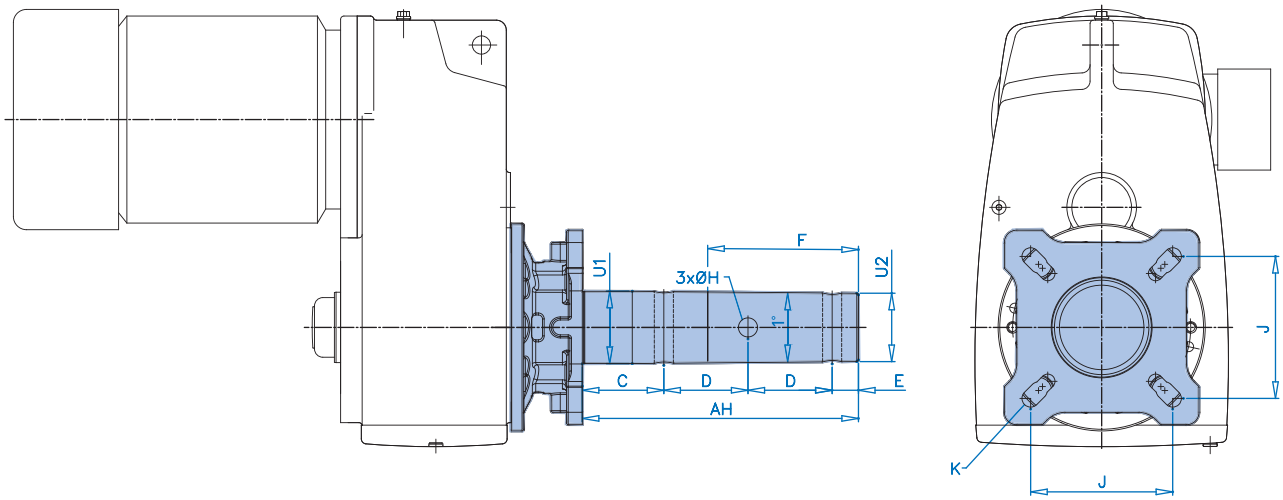
SK SCP + Motor
Terminal Box Dimensions



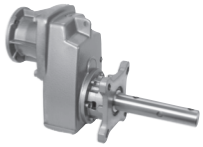
Motor Type	L	FP	AB
63S/L	7.73	5.09	4.51
71S/L	9.31	5.72	4.86
80S/L/LP	10.29	6.43	5.59
90SP/LP	11.87	7.19	5.79
100LP/AP	13.09	7.90	6.65
112MP	14.95	8.87	7.05
132SP/MP	16.35	10.45	8.03
160MP	19.41	12.56	9.53
160LP	21.17	12.56	9.53
180MP/LP	24.17	14.26	10.04
225RP/SP/MP	29.21	17.44	13.66
250WP	29.21	17.44	13.66

CLINCHER™ SCP
CEMA Drive Shaft Assembly

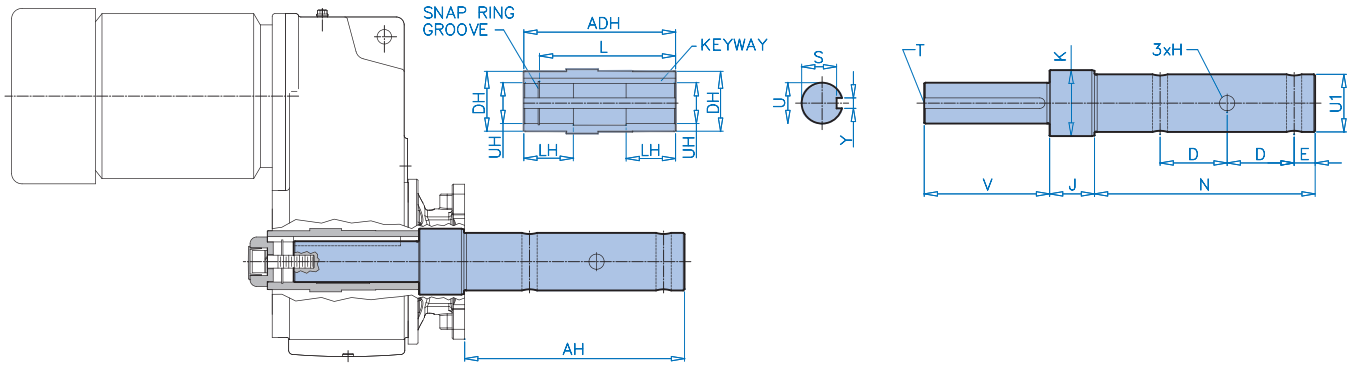




Shaft Size	Shaft								Flange	
	U1	U2	AH	C	D	E	F	H	J	K
1-1/2	1.5	1.41	9.00	2.125	3.0	0.875	5 3/8	17/32	4	9/16
2	2.0	1.91	9.00	2.125	3.0	0.875	5 3/8	21/32	5-1/8	11/16
2-7/16	2.4375	2.34	9.6875	2.75	3.0	0.9375	5 7/16	21/32	5-5/8	11/16
3	3.0	2.91	9.875	2.875	3.0	1.00	5 1/2	25/32	6	13/16
3-7/16	3.4375	3.31	13.125	3.875	4.0	1.25	7 1/4	29/32	6-3/4	13/16

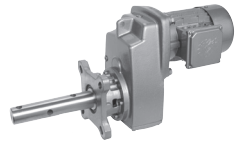


CLINCHER™ SCP + NEMA CEMA Drive Shaft

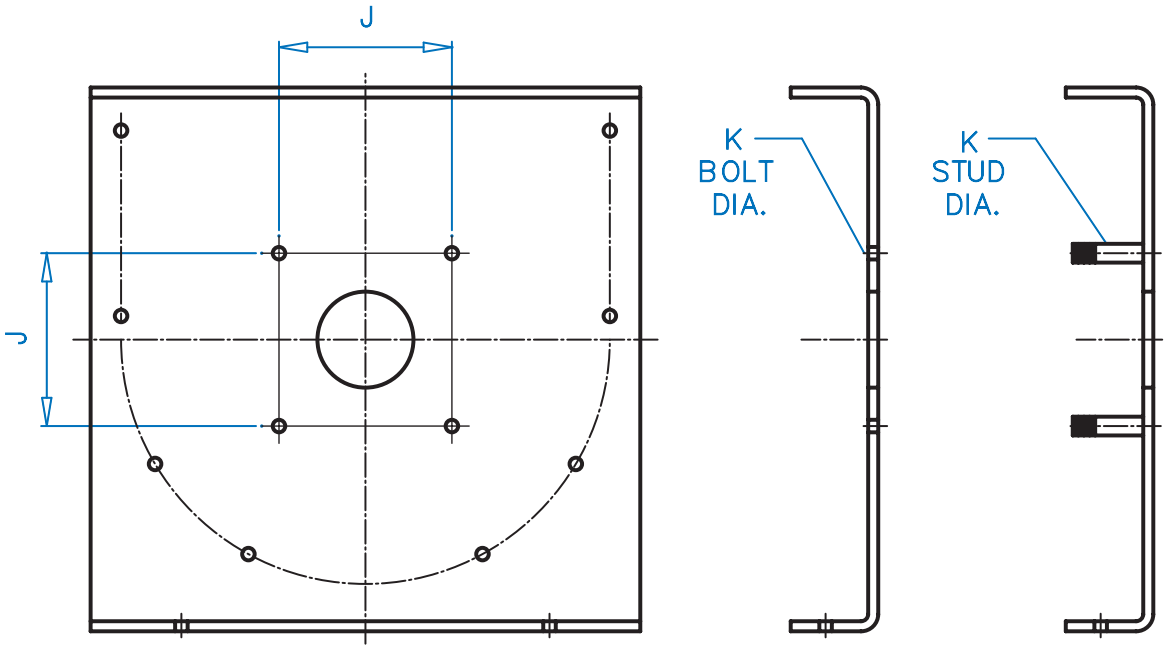


Gear Unit Size	Hollow Shaft				
	UH	ADH	L	LH	DH
SK 1282/1382 SCP	1.1875 + 0.0008	4.80	3.85	1.57	1.77
SK 2282/2382 SCP	1.4375 + 0.0010	5.47	4.80	1.97	1.97
SK 3282/3382 SCP	1.6250 + 0.0010	6.85	6.14	2.28	2.17
SK 4282/4382 SCP	2.0625 + 0.0010	7.68	6.42	2.56	2.76
SK 5282/5382 SCP	2.4375 + 0.0012	9.06	7.58	2.95	3.35
SK 6282/6382 SCP	2.7500 + 0.0012	11.41	9.92	3.54	3.93

	Hollow Shaft														
	U1	AH	D	E	H	N	J	K		U		V	S	Y	T	Key
SK 1282/	1-1/2	9	3	7/8	17/32	9.04	2.04	2.165	-0.0039 -0.0069	1.1875	+0.0000 -0.0006	3.74	1.049	0.25	7/16-14 x 1	1/4 x 1/4
1382	2	9	3	7/8	21/32	9.04	2.41	2.559	-0.0039 -0.0069	1.1875	+0.0000 -0.0006	3.74	1.049	0.25	7/16-14 x 1	1/4 x 1/4
	2-7/16	9-11/16	3	15/16	21/32	9.73	2.41	2.559	-0.0039 -0.0069	1.1875	+0.0000 -0.0006	3.74	1.049	0.25	7/16-14 x 1	1/4 x 1/4
SK 2282/	1-1/2	9	3	7/8	17/32	9.04	2.04	2.165	-0.0039 -0.0069	1.4375	+0.0000 -0.0006	4.65	1.225	0.375	5/8-11 x 1.5	3/8 x 3/8
2382	2	9	3	7/8	21/32	9.04	2.41	2.559	-0.0039 -0.0069	1.4375	+0.0000 -0.0006	4.65	1.225	0.375	5/8-11 x 1.5	3/8 x 3/8
	2-7/16	9-11/16	3	15/16	21/32	9.73	2.41	2.559	-0.0039 -0.0069	1.4375	+0.0000 -0.0006	4.65	1.225	0.375	5/8-11 x 1.5	3/8 x 3/8
SK 3282/	1-1/2	9	3	7/8	17/32	9.04	2.20	2.165	-0.0039 -0.0069	1.625	+0.0000 -0.0006	6.14	1.478	0.375	5/8-11 x 1.5	3/8 x 1/4
3382	2	9	3	7/8	21/32	9.04	2.57	3.150	-0.0039 -0.0069	1.625	+0.0000 -0.0006	6.14	1.478	0.375	5/8-11 x 1.5	3/8 x 1/4
	2-7/16	9-11/16	3	15/16	21/32	9.73	2.57	3.150	-0.0039 -0.0069	1.625	+0.0000 -0.0006	6.14	1.478	0.375	5/8-11 x 1.5	3/8 x 1/4
	3	9-7/8	3	1	25/32	9.91	2.57	3.150	-0.0039 -0.0069	1.625	+0.0000 -0.0006	6.14	1.478	0.375	5/8-11 x 1.5	3/8 x 1/4
SK 4282/	2	9	3	7/8	21/32	9.04	2.37	3.150	-0.0039 -0.0069	2.0625	+0.0000 -0.0007	6.69	1.844	0.5	5/8-11 x 1.5	1/2 x 3/8
4382	2-7/16	9-11/16	3	15/16	21/32	9.73	2.37	3.150	-0.0039 -0.0069	2.0625	+0.0000 -0.0007	6.69	1.844	0.5	5/8-11 x 1.5	1/2 x 3/8
	3	9-7/8	3	1	25/32	9.91	2.37	3.150	-0.0039 -0.0069	2.0625	+0.0000 -0.0007	6.69	1.844	0.5	5/8-11 x 1.5	1/2 x 3/8
SK 5282/	2	9	3	7/8	21/32	9.04	2.68	3.937	-0.0047 -0.0081	2.4375	+0.0000 -0.0007	8.19	2.084	0.625	3/4-10 x 2	5/8 x 5/8
5382	2-7/16	9-11/16	3	15/16	21/32	9.73	2.68	3.937	-0.0047 -0.0081	2.4375	+0.0000 -0.0007	8.19	2.084	0.625	3/4-10 x 2	5/8 x 5/8
	3	9-7/8	3	1	25/32	9.91	2.68	3.937	-0.0047 -0.0081	2.4375	+0.0000 -0.0007	8.19	2.084	0.625	3/4-10 x 2	5/8 x 5/8
	3-7/16	13-1/8	4	1-1/4	29/32	13.16	2.68	3.937	-0.0047 -0.0081	2.4375	+0.0000 -0.0007	8.19	2.084	0.625	3/4-10 x 2	5/8 x 5/8
SK 6282/	3	9-7/8	3	1	25/32	9.91	2.94	3.937	-0.0047 -0.0081	2.750	+0.0000 -0.0007	10.55	2.402	0.625	3/4-10 x 2	5/8 x 5/8
6382	3-7/16	13-1/8	4	1-1/4	29/32	13.16	2.94	3.937	-0.0047 -0.0081	2.750	+0.0000 -0.0007	10.55	2.402	0.625	3/4-10 x 2	5/8 x 5/8



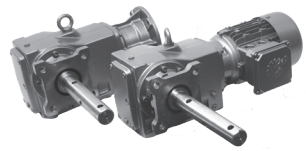
Screw Conveyor Mounting



Screw Conveyor mounting dimensions from CEMA 300-13 excerpts

Screw Diameter [in]	CEMA Drive shaft [in]	J Width [in]	K Bolt [in]	K Stud [in]
6	1-1/2	4	1/2	7/16
9	1-1/2	4	1/2	7/16
	2	5-1/8	5/8	9/16
12	2	5-1/8	5/8	9/16
	2-7/16	5-5/8	5/8	9/16
	3	6	3/4	3/4
14	2-7/16	5-5/8	5/8	9/16
	3	6	3/4	3/4
16	3	6	3/4	3/4
18	3	6	3/4	3/4
	3-7/16	6-3/4	3/4	3/4
20	3	6	3/4	3/4
	3-7/16	6-3/4	3/4	3/4
24	3-7/16	6-3/4	3/4	3/4

Helical-Bevel SCP Gearmotor Ratings



Explanation of Selection Tables

OUTPUT SPEED – Output speed at NORD standard efficiency motor rated speed.

OUTPUT TORQUE – Output torque produced by motor.

SERVICE FACTOR

AGMA SERVICE CLASS

TOTAL GEAR RATIO

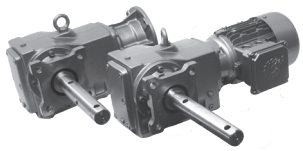
NEMA C-FACE INPUT

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearmotor		Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
160	197	40.5	III	10.73	2950	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
100	313	41.0	III	17.08	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
85	371	35.8	III	20.23	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	

AXIAL LOAD RATINGS

CEMA DRIVESHAFT AVAILABILITY, X=POSSIBLE COMBINATION

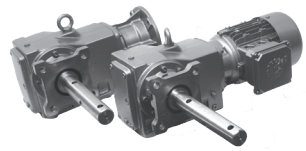
The specified motor efficiency class needs to meet the requirements of the country where the motor will be utilized.
See the Energy Efficiency Regulations pages on 233 for additional information.



0.16 hp Gearmotors & Speed Reducers

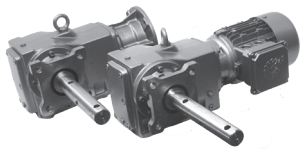
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
210	48	33.2	III	8.09	3169	SK 9012.1 SCP	63 S/4	56C	X	X	X		
184	55	31.4	III	9.23	3299	SK 9012.1 SCP	63 S/4	56C	X	X	X		
157	64	27.5	III	10.85	3458	SK 9012.1 SCP	63 S/4	56C	X	X	X		
139	73	26.8	III	12.23	3585	SK 9012.1 SCP	63 S/4	56C	X	X	X		
111	91	37.1	III	15.30	3828	SK 9012.1 SCP	63 S/4	56C	X	X	X		
97	104	32.4	III	17.45	3985	SK 9012.1 SCP	63 S/4	56C	X	X	X		
81	124	28.5	III	20.87	4203	SK 9012.1 SCP	63 S/4	56C	X	X	X		
69	146	24.3	III	24.53	4404	SK 9012.1 SCP	63 S/4	56C	X	X	X		
61	164	21.5	III	27.65	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
54	187	19.0	III	31.45	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
49	207	17.1	III	34.81	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
41	248	14.3	III	41.65	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
35	290	12.2	III	48.95	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
31	328	10.8	III	55.17	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
27	372	9.5	III	62.74	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
22	455	7.8	III	76.53	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
20	511	6.9	III	86.00	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
17	578	6.1	III	97.36	4496	SK 9012.1 SCP	63 S/4	56C	X	X	X		
153	66	69.9	III	11.13	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
136	74	64.3	III	12.51	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
117	86	59.4	III	14.56	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
104	97	56.8	III	16.30	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
85	118	56.9	III	19.93	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
76	133	51.8	III	22.41	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
69	146	52.2	III	24.56	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
65	155	49.1	III	26.07	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
58	173	43.9	III	29.20	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
51	197	38.6	III	33.26	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
43	235	32.3	III	39.77	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
38	266	28.6	III	44.71	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
35	291	26.2	III	49.01	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
33	309	24.6	III	52.02	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
29	345	22.0	III	58.25	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
26	394	19.3	III	66.42	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
22	468	16.3	III	78.89	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		
17	587	13.0	III	98.88	2698	SK 9022.1 SCP	63 S/4	56C	X	X	X		

0.25 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

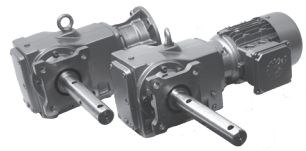
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
208	76	21.0	III	8.09	3172	SK 9012.1 SCP	63 L/4	56C	X	X	X		
181	87	19.9	III	9.23	3301	SK 9012.1 SCP	63 L/4	56C	X	X	X		
155	102	17.4	III	10.85	3460	SK 9012.1 SCP	63 L/4	56C	X	X	X		
137	115	16.9	III	12.23	3586	SK 9012.1 SCP	63 L/4	56C	X	X	X		
110	143	23.5	III	15.30	3828	SK 9012.1 SCP	63 L/4	56C	X	X	X		
96	164	20.5	III	17.45	3983	SK 9012.1 SCP	63 L/4	56C	X	X	X		
80	196	18.0	III	20.87	4199	SK 9012.1 SCP	63 L/4	56C	X	X	X		
68	230	15.4	III	24.53	4399	SK 9012.1 SCP	63 L/4	56C	X	X	X		
61	260	13.6	III	27.65	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
53	295	12.0	III	31.45	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
48	327	10.8	III	34.81	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
40	391	9.0	III	41.65	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
34	459	7.7	III	48.95	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
30	518	6.8	III	55.17	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
27	588	6.0	III	62.74	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
22	719	4.9	III	76.53	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
20	808	4.4	III	86.00	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
17	914	3.9	III	97.36	4496	SK 9012.1 SCP	63 L/4	56C	X	X	X		
151	104	44.2	III	11.13	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
134	118	40.7	III	12.51	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
115	137	37.6	III	14.56	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
103	153	35.9	III	16.30	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
84	187	36.0	III	19.93	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
75	211	32.7	III	22.41	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
68	231	33.0	III	24.56	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
64	245	31.0	III	26.07	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
57	274	27.8	III	29.20	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
50	312	24.4	III	33.26	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
42	372	20.4	III	39.77	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
37	420	18.1	III	44.71	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
34	459	16.6	III	49.01	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
32	489	15.6	III	52.02	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
29	546	13.9	III	58.25	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
25	623	12.2	III	66.42	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
21	740	10.3	III	78.89	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		
17	928	8.2	III	98.88	2698	SK 9022.1 SCP	63 L/4	56C	X	X	X		



0.33 hp Gearmotors & Speed Reducers

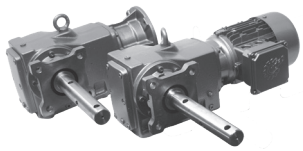
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
211	98	16.2	III	8.09	3148	SK 9012.1 SCP	71 S/4	56C	X	X	X		
185	113	15.3	III	9.23	3276	SK 9012.1 SCP	71 S/4	56C	X	X	X		
157	132	13.4	III	10.85	3432	SK 9012.1 SCP	71 S/4	56C	X	X	X		
139	149	13.1	III	12.23	3556	SK 9012.1 SCP	71 S/4	56C	X	X	X		
112	186	18.1	III	15.30	3797	SK 9012.1 SCP	71 S/4	56C	X	X	X		
98	213	15.8	III	17.45	3950	SK 9012.1 SCP	71 S/4	56C	X	X	X		
82	255	13.9	III	20.87	4162	SK 9012.1 SCP	71 S/4	56C	X	X	X		
70	299	11.9	III	24.53	4358	SK 9012.1 SCP	71 S/4	56C	X	X	X		
62	337	10.5	III	27.65	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
54	383	9.2	III	31.45	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
49	424	8.4	III	34.81	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
41	507	7.0	III	41.65	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
35	595	5.9	III	48.95	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
31	672	5.3	III	55.17	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
27	763	4.6	III	62.74	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
22	933	3.8	III	76.53	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
20	1047	3.4	III	86.00	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
18	1185	3.0	III	97.36	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
16	1338	2.6	III	109.79	4496	SK 9012.1 SCP	71 S/4	56C	X	X	X		
154	135	34.1	III	11.13	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
136	152	31.4	III	12.51	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
117	177	29.0	III	14.56	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
105	198	27.7	III	16.30	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
86	242	27.8	III	19.93	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
76	273	25.3	III	22.41	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
70	299	25.5	III	24.56	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
65	318	23.9	III	26.07	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
59	355	21.4	III	29.20	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
51	405	18.8	III	33.26	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
43	483	15.8	III	39.77	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
38	545	14.0	III	44.71	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
35	596	12.8	III	49.01	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
33	634	12.0	III	52.02	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
29	708	10.7	III	58.25	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
26	808	9.4	III	66.42	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
22	959	7.9	III	78.89	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		
17	1203	6.3	III	98.88	2698	SK 9022.1 SCP	71 S/4	56C	X	X	X		

0.50 hp Gearmotors & Speed Reducers



DRIVESYSTEMS

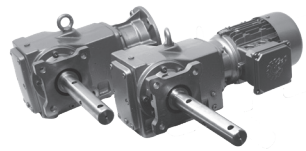
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
213	148	10.8	III	8.09	3128	SK 9012.1 SCP	71 L/4	56C	X	X	X		
186	170	10.2	III	9.23	3253	SK 9012.1 SCP	71 L/4	56C	X	X	X		
158	199	8.9	III	10.85	3406	SK 9012.1 SCP	71 L/4	56C	X	X	X		
140	225	8.7	III	12.23	3528	SK 9012.1 SCP	71 L/4	56C	X	X	X		
113	280	12.0	III	15.30	3766	SK 9012.1 SCP	71 L/4	56C	X	X	X		
98	320	10.5	III	17.45	3914	SK 9012.1 SCP	71 L/4	56C	X	X	X		
82	384	9.2	III	20.87	4122	SK 9012.1 SCP	71 L/4	56C	X	X	X		
70	450	7.9	III	24.53	4312	SK 9012.1 SCP	71 L/4	56C	X	X	X		
62	508	7.0	III	27.65	4462	SK 9012.1 SCP	71 L/4	56C	X	X	X		
55	577	6.1	III	31.45	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
49	639	5.5	III	34.81	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
41	764	4.6	III	41.65	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
35	896	3.9	III	48.95	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
31	1012	3.5	III	55.17	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
27	1150	3.1	III	62.74	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
22	1405	2.5	III	76.53	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
20	1578	2.2	III	86.00	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
18	1785	2.0	III	97.36	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
16	2015	1.8	II	109.79	4496	SK 9012.1 SCP	71 L/4	56C	X	X	X		
155	203	22.6	III	11.13	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
137	230	20.8	III	12.51	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
118	267	19.2	III	14.56	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
106	298	18.4	III	16.30	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
86	365	18.4	III	19.93	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
77	412	16.8	III	22.41	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
70	450	16.9	III	24.56	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
66	479	15.9	III	26.07	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
59	535	14.2	III	29.20	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
52	610	12.5	III	33.26	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
43	727	10.5	III	39.77	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
38	821	9.3	III	44.71	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
35	898	8.5	III	49.01	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
33	955	8.0	III	52.02	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
30	1067	7.1	III	58.25	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
26	1218	6.3	III	66.42	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
22	1445	5.3	III	78.89	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		
17	1812	4.2	III	98.88	2698	SK 9022.1 SCP	71 L/4	56C	X	X	X		



0.50 hp Gearmotors & Speed Reducers

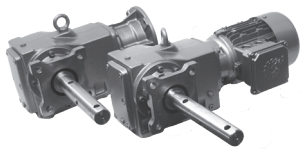
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
160	197	40.5	III	10.73	2950	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
100	313	41.0	III	17.08	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
85	371	35.8	III	20.23	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
69	459	28.9	III	25.03	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
58	544	24.4	III	29.66	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
48	653	21.0	III	35.61	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
45	698	19.7	III	38.05	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
43	740	18.5	III	40.36	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
34	915	15.0	III	49.94	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
29	1084	12.7	III	59.17	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
27	1175	11.7	III	64.08	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
23	1391	9.9	III	75.91	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
20	1542	8.9	III	84.17	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
18	1716	8.0	III	93.50	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	
16	2033	6.7	III	110.77	3260	SK 9032.1 SCP	71 L/4	56C	X	X	X	X	

0.75 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

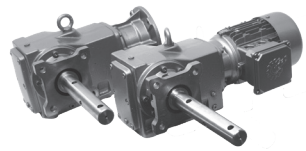
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
211	224	7.1	III	8.09	3111	SK 9012.1 SCP	80 S/4	56C	X	X	X		
185	256	6.7	III	9.23	3234	SK 9012.1 SCP	80 S/4	56C	X	X	X		
157	300	5.9	III	10.85	3383	SK 9012.1 SCP	80 S/4	56C	X	X	X		
139	339	5.7	III	12.23	3500	SK 9012.1 SCP	80 S/4	56C	X	X	X		
112	422	8.0	III	15.30	3735	SK 9012.1 SCP	80 S/4	56C	X	X	X		
98	483	7.0	III	17.45	3879	SK 9012.1 SCP	80 S/4	56C	X	X	X		
82	579	6.1	III	20.87	4080	SK 9012.1 SCP	80 S/4	56C	X	X	X		
70	678	5.2	III	24.53	4262	SK 9012.1 SCP	80 S/4	56C	X	X	X		
62	766	4.6	III	27.65	4404	SK 9012.1 SCP	80 S/4	56C	X	X	X		
54	870	4.1	III	31.45	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
49	964	3.7	III	34.81	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
41	1153	3.1	III	41.65	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
35	1352	2.6	III	48.95	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
31	1527	2.3	III	55.17	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
27	1734	2.0	III	62.74	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
22	2120	1.7	II	76.53	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
20	2380	1.5	II	86.00	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
18	2693	1.3	I	97.36	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
16	3040	1.2	I	109.79	4496	SK 9012.1 SCP	80 S/4	56C	X	X	X		
154	307	15.0	III	11.13	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
136	346	13.8	III	12.51	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
117	403	12.7	III	14.56	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
105	450	12.2	III	16.30	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
86	551	12.2	III	19.93	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
76	621	11.1	III	22.41	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
70	679	11.2	III	24.56	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
65	723	10.5	III	26.07	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
59	808	9.4	III	29.20	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
51	920	8.3	III	33.26	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
43	1097	6.9	III	39.77	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
38	1238	6.1	III	44.71	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
35	1354	5.6	III	49.01	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
33	1440	5.3	III	52.02	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
29	1610	4.7	III	58.25	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
26	1837	4.1	III	66.42	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
22	2180	3.5	III	78.89	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
20	2356	3.2	III	85.11	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
17	2734	2.8	III	98.88	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		
15	3200	2.4	III	115.74	2698	SK 9022.1 SCP	80 S/4	56C	X	X	X		



0.75 hp Gearmotors & Speed Reducers

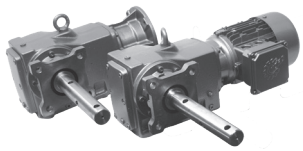
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
159	297	26.8	III	10.73	2934	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
100	473	27.2	III	17.08	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
84	560	23.7	III	20.23	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
68	693	19.2	III	25.03	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
58	820	16.2	III	29.66	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
48	986	13.9	III	35.61	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
45	1053	13.0	III	38.05	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
42	1116	12.3	III	40.36	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
34	1381	9.9	III	49.94	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
29	1635	8.4	III	59.17	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
27	1772	7.7	III	64.08	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
23	2099	6.5	III	75.91	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
20	2327	5.9	III	84.17	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
18	2589	5.3	III	93.50	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	
15	3067	4.5	III	110.77	3260	SK 9032.1 SCP	80 S/4	56C	X	X	X	X	

1 hp Gearmotors & Speed Reducers



DRIVESYSTEMS

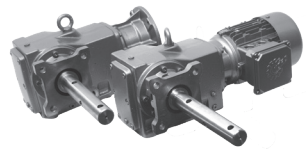
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
214	295	5.4	III	8.09	3079	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
187	337	5.1	III	9.23	3198	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
159	396	4.5	III	10.85	3342	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
141	447	4.4	III	12.23	3456	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
113	556	6.0	III	15.30	3687	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
99	637	5.3	III	17.45	3825	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
83	763	4.6	III	20.87	4019	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
70	894	4.0	III	24.53	4191	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
62	1010	3.5	III	27.65	4326	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
55	1147	3.1	III	31.45	4470	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
50	1270	2.8	III	34.81	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
41	1520	2.3	III	41.65	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
35	1782	2.0	III	48.95	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
31	2013	1.8	II	55.17	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
28	2286	1.5	II	62.74	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
23	2794	1.3	I	76.53	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
20	3137	1.1	I	86.00	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
18	3550	1.0	I	97.36	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
16	4007	0.9	*	109.79	4496	SK 9012.1 SCP	80 LP/4	140TC	X	X	X		
156	405	11.4	III	11.13	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
138	457	10.5	III	12.51	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
119	531	9.7	III	14.56	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
106	594	9.2	III	16.30	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
87	726	9.3	III	19.93	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
77	819	8.4	III	22.41	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
70	895	8.5	III	24.56	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
66	952	8.0	III	26.07	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
59	1064	7.2	III	29.20	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
52	1212	6.3	III	33.26	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
44	1446	5.3	III	39.77	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
39	1632	4.7	III	44.71	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
35	1785	4.3	III	49.01	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
33	1898	4.0	III	52.02	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
30	2122	3.6	III	58.25	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
26	2421	3.1	III	66.42	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
22	2873	2.6	III	78.89	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
20	3105	2.5	III	85.11	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
17	3604	2.1	III	98.88	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		
15	4218	1.8	II	115.74	2698	SK 9022.1 SCP	80 LP/4	140TC	X	X	X		



1 hp Gearmotors & Speed Reducers

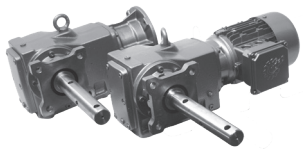
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
161	391	20.4	III	10.73	2901	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
101	623	20.6	III	17.08	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
85	738	18.0	III	20.23	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
69	913	14.5	III	25.03	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
58	1081	12.3	III	29.66	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
49	1299	10.6	III	35.61	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
45	1388	9.9	III	38.05	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
43	1471	9.3	III	40.36	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
35	1819	7.5	III	49.94	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
29	2155	6.4	III	59.17	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
27	2335	5.9	III	64.08	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
23	2766	5.0	III	75.91	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
21	3066	4.5	III	84.17	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
18	3413	4.0	III	93.50	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	
16	4042	3.4	III	110.77	3260	SK 9032.1 SCP	80 LP/4	140TC	X	X	X	X	

1.5 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

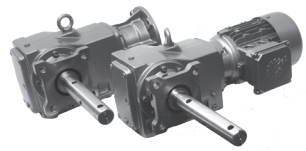
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
215	439	3.6	III	8.09	3031	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
188	503	3.4	III	9.23	3143	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
160	590	3.0	III	10.85	3279	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
142	666	2.9	III	12.23	3385	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
114	830	4.1	III	15.30	3610	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
99	950	3.5	III	17.45	3737	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
83	1137	3.1	III	20.87	3917	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
71	1334	2.7	III	24.53	4073	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
63	1506	2.4	III	27.65	4193	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
55	1710	2.1	III	31.45	4319	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
50	1894	1.9	II	34.81	4409	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
42	2267	1.6	II	41.65	4496	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
36	2658	1.3	I	48.95	4496	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
31	3002	1.2	I	55.17	4496	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
28	3409	1.0	I	62.74	4496	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
23	4166	0.8	*	76.53	4496	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
20	4679	0.8	*	86.00	4496	SK 9012.1 SCP	90 SP/4	140TC	X	X	X		
198	478	8.9	III	8.78	2521	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
157	603	7.6	III	11.13	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
139	681	7.0	III	12.51	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
119	792	6.5	III	14.56	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
107	885	6.2	III	16.30	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
99	952	6.7	III	17.52	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
87	1082	6.2	III	19.93	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
77	1221	5.7	III	22.41	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
71	1335	5.7	III	24.56	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
67	1420	5.4	III	26.07	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
60	1588	4.8	III	29.20	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
55	1708	4.3	III	31.38	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
52	1808	4.2	III	33.26	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
44	2157	3.5	III	39.77	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
39	2434	3.1	III	44.71	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
36	2662	2.9	III	49.01	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
33	2831	2.7	III	52.02	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
30	3164	2.4	III	58.25	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
26	3611	2.1	III	66.42	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
22	4284	1.8	II	78.89	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
20	4631	1.6	II	85.11	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
18	5375	1.4	II	98.88	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
15	6290	1.2	I	115.74	2698	SK 9022.1 SCP	90 SP/4	140TC	X	X	X		
205	462	16.9	III	8.48	2631	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
162	583	13.7	III	10.73	2852	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
137	689	12.8	III	12.68	2998	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
128	736	16.2	III	13.49	3074	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
108	871	14.2	III	16.04	3236	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	



1.5 hp Gearmotors & Speed Reducers

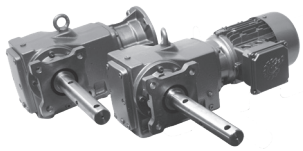
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
102	929	13.8	III	17.08	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
86	1100	12.1	III	20.23	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
73	1299	10.6	III	23.91	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
69	1361	9.8	III	25.03	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
59	1612	8.2	III	29.66	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
49	1937	7.1	III	35.61	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
46	2070	6.6	III	38.05	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
43	2193	6.3	III	40.36	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
36	2590	5.3	III	47.70	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
35	2714	5.1	III	49.94	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
29	3214	4.3	III	59.17	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
27	3483	3.9	III	64.08	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
23	4125	3.3	III	75.91	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
21	4573	3.0	III	84.17	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
19	5090	2.7	III	93.50	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
16	6028	2.3	III	110.77	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
15	6399	2.1	III	117.70	3260	SK 9032.1 SCP	90 SP/4	140TC	X	X	X	X	
152	621	21.4	III	11.40	7230	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
130	729	24.3	III	13.40	7572	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
111	853	20.8	III	15.66	7921	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
86	1106	20.8	III	20.32	8549	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
73	1298	18.4	III	23.89	8948	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
62	1517	16.3	III	27.91	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
55	1723	14.4	III	31.70	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
51	1868	13.3	III	34.39	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
43	2204	11.2	III	40.54	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
37	2587	9.6	III	47.67	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
31	3025	8.2	III	55.69	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
28	3434	7.2	III	63.25	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
25	3723	6.7	III	68.61	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
23	4134	6.0	III	76.18	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
20	4700	5.3	III	86.43	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
18	5192	4.8	III	95.56	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
15	6401	3.3	III	117.79	8992	SK 9042.1 SCP	90 SP/4	140TC		X	X	X	X
106	889	42.8	III	16.33	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
74	1270	30.0	III	23.33	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
64	1487	27.4	III	27.35	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
56	1702	25.0	III	31.28	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
48	1967	21.6	III	36.21	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
32	2964	14.3	III	54.56	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
28	3393	12.5	III	62.42	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
24	3921	10.8	III	72.24	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
20	4788	8.9	III	88.17	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X
17	5569	7.6	III	102.40	10116	SK 9052.1 SCP	90 SP/4	140TC				X	X

2.0 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

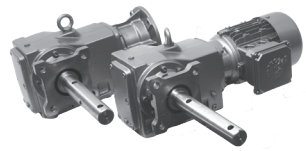
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
214	589	2.7	III	8.09	2992	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
187	675	2.6	III	9.23	3098	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
159	791	2.2	III	10.85	3225	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
141	894	2.2	III	12.23	3324	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
113	1113	3.0	III	15.30	3543	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
99	1274	2.6	III	17.45	3660	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
83	1525	2.3	III	20.87	3826	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
70	1788	2.0	III	24.53	3965	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
62	2020	1.8	II	27.65	4071	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
55	2293	1.5	II	31.45	4180	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
50	2540	1.4	II	34.81	4250	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
41	3040	1.2	I	41.65	4411	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
35	3565	1.0	I	48.95	4496	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
31	4026	0.9	*	55.17	4496	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
28	4571	0.8	*	62.74	4496	SK 9012.1 SCP	90 LP/4	140TC	X	X	X		
197	641	6.6	III	8.78	2482	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
156	809	5.7	III	11.13	2651	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
138	913	5.2	III	12.51	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
119	1062	4.8	III	14.56	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
106	1187	4.6	III	16.30	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
99	1277	5.0	III	17.52	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
87	1451	4.6	III	19.93	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
77	1638	4.2	III	22.41	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
70	1791	4.3	III	24.56	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
66	1905	4.0	III	26.07	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
59	2129	3.6	III	29.20	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
55	2290	3.2	III	31.38	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
52	2424	3.1	III	33.26	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
44	2893	2.6	III	39.77	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
39	3264	2.3	III	44.71	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
35	3570	2.1	III	49.01	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
33	3797	2.0	III	52.02	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
30	4244	1.8	II	58.25	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
26	4843	1.6	II	66.42	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
22	5745	1.3	I	78.89	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
20	6210	1.2	I	85.11	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
17	7207	1.1	I	98.88	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
15	8435	0.9	*	115.74	2698	SK 9022.1 SCP	90 LP/4	140TC	X	X	X		
203	620	12.6	III	8.48	2591	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
161	782	10.2	III	10.73	2813	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
136	924	9.6	III	12.68	2951	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
128	987	12.1	III	13.49	3030	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
108	1169	10.6	III	16.04	3184	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
101	1246	10.3	III	17.08	3238	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	



2.0 hp Gearmotors & Speed Reducers

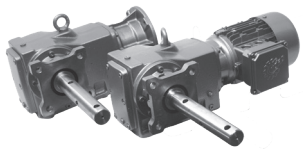
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
85	1476	9.0	III	20.23	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
72	1743	7.9	III	23.91	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
69	1826	7.3	III	25.03	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
58	2162	6.1	III	29.66	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
49	2598	5.3	III	35.61	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
45	2775	4.9	III	38.05	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
43	2941	4.7	III	40.36	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
36	3474	3.9	III	47.70	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
35	3639	3.8	III	49.94	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
29	4310	3.2	III	59.17	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
27	4671	2.9	III	64.08	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
23	5532	2.5	III	75.91	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
21	6132	2.2	III	84.17	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
18	6825	2.0	III	93.50	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
16	8083	1.7	II	110.77	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
15	8581	1.6	II	117.70	3260	SK 9032.1 SCP	90 LP/4	140TC	X	X	X	X	
151	833	15.9	III	11.40	7205	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
129	978	18.1	III	13.40	7542	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
110	1143	15.5	III	15.66	7883	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
85	1483	15.5	III	20.32	8504	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
72	1740	13.7	III	23.89	8893	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
62	2035	12.2	III	27.91	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
55	2311	10.7	III	31.70	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
50	2505	9.9	III	34.39	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
43	2955	8.4	III	40.54	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
36	3469	7.1	III	47.67	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
31	4056	6.1	III	55.69	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
27	4605	5.4	III	63.25	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
25	4992	5.0	III	68.61	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
23	5544	4.5	III	76.18	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
20	6303	3.9	III	86.43	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
18	6963	3.6	III	95.56	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
15	8584	2.5	III	117.79	8992	SK 9042.1 SCP	90 LP/4	140TC		X	X	X	X
106	1192	31.9	III	16.33	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
74	1703	22.3	III	23.33	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
63	1994	20.4	III	27.35	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
55	2283	18.6	III	31.28	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
48	2638	16.1	III	36.21	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
32	3975	10.7	III	54.56	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
28	4550	9.3	III	62.42	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
24	5259	8.1	III	72.24	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
20	6421	6.6	III	88.17	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
17	7469	5.7	III	102.40	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X
14	8744	4.9	III	120.03	10116	SK 9052.1 SCP	90 LP/4	140TC				X	X

3.0 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

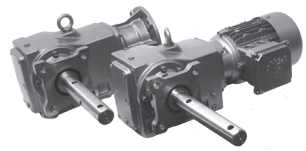
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
219	864	1.8	II	8.09	2889	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
191	989	1.7	II	9.23	2983	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
163	1160	1.5	II	10.85	3093	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
144	1310	1.5	II	12.23	3176	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
116	1631	2.1	III	15.30	3383	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
101	1868	1.8	II	17.45	3479	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
85	2236	1.6	II	20.87	3617	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
72	2622	1.4	II	24.53	3724	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
64	2961	1.2	I	27.65	3802	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
56	3362	1.1	I	31.45	3877	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
51	3724	1.0	I	34.81	3910	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
42	4457	0.8	*	41.65	4017	SK 9012.1 SCP	100 LP/4	180TC	X	X	X		
201	939	4.5	III	8.78	2381	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
159	1186	3.9	III	11.13	2527	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
141	1339	3.6	III	12.51	2603	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
121	1557	3.3	III	14.56	2697	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
109	1740	3.2	III	16.30	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
101	1872	3.4	III	17.52	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
89	2128	3.2	III	19.93	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
79	2401	2.9	III	22.41	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
72	2626	2.9	III	24.56	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
68	2792	2.7	III	26.07	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
61	3121	2.4	III	29.20	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
56	3357	2.2	III	31.38	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
53	3555	2.1	III	33.26	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
45	4241	1.8	II	39.77	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
40	4786	1.6	II	44.71	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
36	5233	1.5	II	49.01	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
34	5566	1.4	II	52.02	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
30	6221	1.2	I	58.25	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
27	7100	1.1	I	66.42	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
22	8423	0.9	*	78.89	2698	SK 9022.1 SCP	100 LP/4	180TC	X	X	X		
208	908	8.6	III	8.48	2471	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
165	1147	6.9	III	10.73	2708	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
140	1354	6.5	III	12.68	2830	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
131	1447	8.3	III	13.49	2912	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
110	1713	7.2	III	16.04	3049	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
104	1827	7.0	III	17.08	3095	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
87	2163	6.1	III	20.23	3233	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
74	2555	5.4	III	23.91	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
71	2677	5.0	III	25.03	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
60	3170	4.2	III	29.66	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
50	3808	3.6	III	35.61	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
46	4069	3.4	III	38.05	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
44	4312	3.2	III	40.36	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
37	5093	2.7	III	47.70	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	



3.0 hp Gearmotors & Speed Reducers

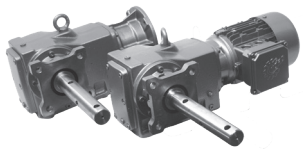
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
35	5335	2.6	III	49.94	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
30	6319	2.2	III	59.17	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
28	6848	2.0	III	64.08	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
23	8110	1.7	II	75.91	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
21	8991	1.5	II	84.17	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
19	10007	1.4	II	93.50	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
16	11851	1.2	I	110.77	3260	SK 9032.1 SCP	100 LP/4	180TC	X	X	X	X	
155	1221	10.9	III	11.40	7087	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
132	1434	12.3	III	13.40	7409	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
113	1676	10.6	III	15.66	7734	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
87	2174	10.6	III	20.32	8334	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
74	2551	9.4	III	23.89	8701	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
63	2984	8.3	III	27.91	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
56	3387	7.3	III	31.70	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
51	3672	6.7	III	34.39	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
44	4333	5.7	III	40.54	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
37	5086	4.9	III	47.67	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
32	5947	4.2	III	55.69	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
28	6752	3.7	III	63.25	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
26	7319	3.4	III	68.61	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
23	8128	3.0	III	76.18	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
20	9241	2.7	III	86.43	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
19	10209	2.4	III	95.56	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
15	12585	1.7	II	117.79	8992	SK 9042.1 SCP	100 LP/4	180TC		X	X	X	X
148	1274	27.1	III	11.88	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
131	1442	26.4	III	13.45	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
108	1748	21.8	III	16.33	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
89	2130	17.9	III	19.91	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
78	2412	15.8	III	22.53	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
76	2497	15.2	III	23.33	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
65	2923	13.9	III	27.35	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
56	3347	12.7	III	31.28	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
49	3868	11.0	III	36.21	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
45	4246	10.0	III	39.72	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
39	4808	8.8	III	44.96	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
32	5827	7.3	III	54.56	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
28	6671	6.4	III	62.42	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
25	7710	5.5	III	72.24	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
20	9413	4.5	III	88.17	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
17	10950	3.9	III	102.40	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X
15	12820	3.3	III	120.03	10116	SK 9052.1 SCP	100 LP/4	180TC				X	X

5.0 hp Gearmotors & Speed Reducers



DRIVESYSTEMS

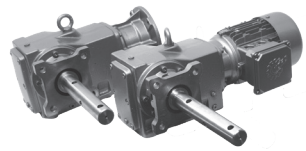
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
217	1452	1.1	I	8.09	2724	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
189	1663	1.0	I	9.23	2792	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
162	1950	0.9	*	10.85	2868	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
143	2203	0.9	*	12.23	2922	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
115	2742	1.2	I	15.30	3105	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
100	3140	1.1	I	17.45	3160	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
84	3759	0.9	*	20.87	3243	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
72	4407	0.8	*	24.53	3284	SK 9012.1 SCP	112 MP/4	180TC	X	X	X		
200	1579	2.7	III	8.78	2216	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
158	1994	2.3	III	11.13	2317	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
140	2250	2.1	III	12.51	2365	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
120	2617	2.0	III	14.56	2420	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
108	2925	1.9	II	16.30	2454	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
100	3147	2.0	III	17.52	2474	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
88	3576	1.9	II	19.93	2592	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
78	4036	1.7	II	22.41	2622	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
71	4413	1.7	II	24.56	2608	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
67	4694	1.6	II	26.07	2647	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
60	5247	1.5	II	29.20	2655	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
56	5643	1.3	I	31.38	2654	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
53	5975	1.3	I	33.26	2610	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
44	7129	1.1	I	39.77	2617	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
39	8044	0.9	*	44.71	2572	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
36	8797	0.9	*	49.01	2464	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
34	9356	0.8	*	52.02	2484	SK 9022.1 SCP	112 MP/4	180TC	X	X	X		
206	1527	5.1	III	8.48	2302	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
163	1928	4.1	III	10.73	2525	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
138	2277	3.9	III	12.68	2632	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
130	2432	4.9	III	13.49	2722	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
109	2880	4.3	III	16.04	2826	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
103	3070	4.2	III	17.08	2853	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
87	3636	3.7	III	20.23	2950	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
73	4295	3.2	III	23.91	3029	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
70	4499	3.0	III	25.03	3036	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
59	5328	2.5	III	29.66	3112	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
49	6402	2.1	III	35.61	3144	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
46	6839	2.0	III	38.05	3173	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
43	7248	1.9	II	40.36	3180	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
37	8560	1.6	II	47.70	3182	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
35	8968	1.5	II	49.94	3153	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
30	10621	1.3	I	59.17	3136	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
27	11511	1.2	I	64.08	3069	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
23	13633	1.0	I	75.91	2991	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
21	15112	0.9	*	84.17	2896	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	
19	16820	0.8	*	93.50	2723	SK 9032.1 SCP	112 MP/4	180TC	X	X	X	X	



5.0 hp Gearmotors & Speed Reducers

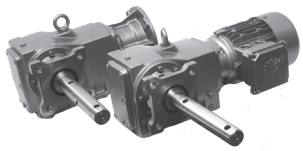
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
153	2053	6.5	III	11.40	6958	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
131	2410	7.3	III	13.40	7256	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
112	2818	6.3	III	15.66	7553	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
86	3654	6.3	III	20.32	8120	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
73	4289	5.6	III	23.89	8447	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
63	5015	4.9	III	27.91	8771	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
55	5694	4.4	III	31.70	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
51	6172	4.0	III	34.39	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
43	7283	3.4	III	40.54	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
37	8549	2.9	III	47.67	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
32	9996	2.5	III	55.69	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
28	11350	2.2	III	63.25	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
26	12303	2.0	III	68.61	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
23	13662	1.8	II	76.18	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
20	15533	1.6	II	86.43	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
18	17160	1.4	II	95.56	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
15	21154	1.0	I	117.79	8992	SK 9042.1 SCP	112 MP/4	180TC		X	X	X	X
147	2141	16.1	III	11.88	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
130	2424	15.7	III	13.45	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
107	2939	13.0	III	16.33	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
88	3580	10.6	III	19.91	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
78	4054	9.4	III	22.53	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
75	4197	9.1	III	23.33	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
64	4914	8.3	III	27.35	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
56	5626	7.6	III	31.28	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
48	6502	6.5	III	36.21	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
44	7137	6.0	III	39.72	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
39	8081	5.3	III	44.96	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
32	9795	4.3	III	54.56	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
28	11214	3.8	III	62.42	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
24	12960	3.3	III	72.24	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
20	15823	2.7	III	88.17	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
17	18406	2.3	III	102.40	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X
15	21549	2.0	III	120.03	10116	SK 9052.1 SCP	112 MP/4	180TC				X	X

7.5 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

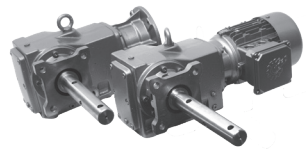
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
208	2271	3.4	III	8.48	2082	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
165	2867	2.8	III	10.73	2230	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
140	3386	2.6	III	12.68	2335	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
131	3617	3.3	III	13.49	2474	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
110	4283	2.9	III	16.04	2537	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
104	4567	2.8	III	17.08	2541	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
87	5408	2.5	III	20.23	2587	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
74	6387	2.1	III	23.91	2600	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
71	6691	2.0	III	25.03	2582	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
60	7925	1.7	II	29.66	2583	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
50	9521	1.4	II	35.61	2501	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
46	10172	1.3	I	38.05	2496	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
44	10780	1.3	I	40.36	2463	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
37	12731	1.1	I	47.70	2337	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
35	13338	1.0	I	49.94	2255	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
30	15796	0.9	*	59.17	2089	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
28	17120	0.8	*	64.08	1920	SK 9032.1 SCP	132 SP/4	210TC	X	X	X	X	
199	2370	5.2	III	8.83	6349	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
188	2515	5.3	III	9.39	6445	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
173	2738	4.8	III	10.21	6584	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
155	3053	4.3	III	11.40	6763	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
132	3584	4.9	III	13.40	7029	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
113	4191	4.2	III	15.66	7290	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
97	4873	4.4	III	18.20	7625	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
87	5434	4.2	III	20.32	7814	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
74	6379	3.7	III	23.89	8091	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
63	7459	3.3	III	27.91	8357	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
56	8408	2.3	III	31.48	8555	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
56	8469	2.9	III	31.70	8527	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
51	9180	2.7	III	34.39	8696	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
44	10832	2.3	III	40.54	8950	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
37	12714	1.9	II	47.67	8992	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
32	14867	1.7	II	55.69	8992	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
28	16880	1.5	II	63.25	8992	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
26	18298	1.4	II	68.61	8992	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
23	20319	1.2	I	76.18	8992	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
20	23102	1.1	I	86.43	8992	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X
19	25522	1.0	I	95.56	8992	SK 9042.1 SCP	132 SP/4	210TC		X	X	X	X



7.5 hp Gearmotors & Speed Reducers

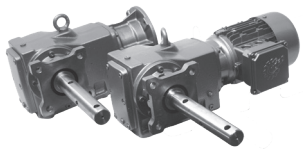
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
148	3184	10.8	III	11.88	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
131	3606	10.6	III	13.45	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
108	4371	8.7	III	16.33	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
89	5325	7.1	III	19.91	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
78	6030	6.3	III	22.53	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
76	6242	6.1	III	23.33	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
65	7309	5.6	III	27.35	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
56	8367	5.1	III	31.28	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
49	9670	4.4	III	36.21	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
45	10614	4.0	III	39.72	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
39	12019	3.5	III	44.96	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
32	14568	2.9	III	54.56	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
28	16678	2.5	III	62.42	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
25	19275	2.2	III	72.24	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
20	23533	1.8	II	88.17	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
17	27374	1.6	II	102.40	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X
15	32050	1.3	I	120.03	10116	SK 9052.1 SCP	132 SP/4	210TC				X	X

10 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

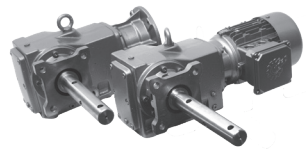
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
208	3036	2.6	III	8.48	1879	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
164	3834	2.1	III	10.73	1960	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
139	4528	2.0	III	12.68	2003	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
130	4836	2.5	III	13.49	2159	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
110	5727	2.2	III	16.04	2230	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
103	6106	2.1	III	17.08	2222	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
87	7232	1.8	II	20.23	2226	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
74	8540	1.6	II	23.91	2175	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
70	8947	1.5	II	25.03	2129	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
59	10596	1.3	I	29.66	2054	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
50	12731	1.1	I	35.61	1856	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
46	13601	1.0	I	38.05	1816	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
44	14414	1.0	I	40.36	1743	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
37	17023	0.8	*	47.70	1486	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
35	17834	0.8	*	49.94	1351	SK 9032.1 SCP	132 MP/4	210TC	X	X	X	X	
199	3169	3.9	III	8.83	6214	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
187	3362	3.9	III	9.39	6301	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
172	3661	3.6	III	10.21	6427	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
154	4083	3.3	III	11.40	6588	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
132	4792	3.7	III	13.40	6822	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
112	5604	3.2	III	15.66	7048	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
97	6516	3.3	III	18.20	7370	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
87	7266	3.2	III	20.32	7530	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
74	8529	2.8	III	23.89	7756	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
63	9973	2.5	III	27.91	7964	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
56	11242	1.7	II	31.48	8112	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
56	11323	2.2	III	31.70	8066	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
51	12275	2.0	III	34.39	8211	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
44	14484	1.7	II	40.54	8377	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
37	17000	1.5	II	47.67	8502	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
32	19879	1.2	I	55.69	8581	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
28	22571	1.1	I	63.25	8502	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
26	24467	1.0	I	68.61	8606	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
23	27168	0.9	*	76.18	8574	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X
20	30889	0.8	*	86.43	8488	SK 9042.1 SCP	132 MP/4	210TC		X	X	X	X



10 hp Gearmotors & Speed Reducers

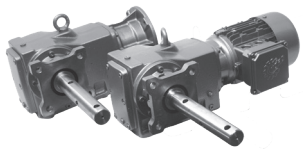
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
148	4258	8.1	III	11.88	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
131	4821	7.9	III	13.45	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
108	5844	6.5	III	16.33	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
89	7120	5.3	III	19.91	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
78	8062	4.7	III	22.53	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
76	8347	4.6	III	23.33	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
64	9773	4.2	III	27.35	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
56	11188	3.8	III	31.28	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
49	12930	3.3	III	36.21	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
44	14192	3.0	III	39.72	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
39	16071	2.6	III	44.96	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
32	19479	2.2	III	54.56	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
28	22301	1.9	II	62.42	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
24	25773	1.6	II	72.24	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
20	31467	1.4	II	88.17	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
17	36602	1.2	I	102.40	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X
15	42855	1.0	I	120.03	10116	SK 9052.1 SCP	132 MP/4	210TC				X	X

15 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

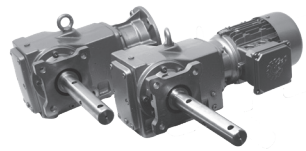
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
199	4740	2.6	III	8.83	5931	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
188	5029	2.6	III	9.39	6001	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
173	5476	2.4	III	10.21	6101	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
155	6107	2.2	III	11.40	6224	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
132	7168	2.5	III	13.40	6397	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
113	8382	2.1	III	15.66	6550	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
97	9746	2.2	III	18.20	6848	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
87	10869	2.1	III	20.32	6948	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
74	12757	1.9	II	23.89	7074	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
63	14918	1.7	II	27.91	7168	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
56	16816	1.2	I	31.48	7214	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
51	18360	1.3	I	34.39	7232	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
44	21664	1.1	I	40.54	7223	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
37	25428	1.0	I	47.67	7149	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
32	29735	0.8	*	55.69	7001	SK 9042.1 SCP	160 MP/4	250TC		X	X	X	X
218	4340	5.3	III	8.10	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
187	5050	4.6	III	9.40	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
178	5301	4.7	III	9.93	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
165	5721	4.5	III	10.71	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
148	6368	5.4	III	11.88	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
131	7211	5.3	III	13.45	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
108	8741	4.4	III	16.33	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
99	9568	4.0	III	17.94	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
89	10650	3.6	III	19.91	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
78	12059	3.2	III	22.53	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
76	12485	3.0	III	23.33	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
65	14617	2.8	III	27.35	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
56	16735	2.5	III	31.28	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
49	19340	2.2	III	36.21	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
45	21228	2.0	III	39.72	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
39	24038	1.8	II	44.96	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
32	29137	1.5	II	54.56	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
28	33356	1.3	I	62.42	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
25	38550	1.1	I	72.24	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X
20	47067	0.9	*	88.17	10116	SK 9052.1 SCP	160 MP/4	250TC				X	X



20 hp Gearmotors & Speed Reducers

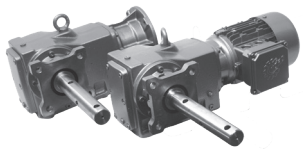
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
200	6302	2.0	III	8.83	5650	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
189	6687	2.0	III	9.39	5703	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
173	7281	1.8	II	10.21	5776	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
155	8119	1.6	II	11.40	5863	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
132	9530	1.9	II	13.40	5973	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
113	11144	1.6	II	15.66	6056	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
97	12958	1.7	II	18.20	6329	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
87	14451	1.6	II	20.32	6370	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
74	16962	1.4	II	23.89	6396	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
64	19834	1.2	I	27.91	6376	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
56	22358	0.9	*	31.48	6323	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
52	24411	1.0	I	34.39	6260	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
44	28804	0.9	*	40.54	6076	SK 9042.1 SCP	160 LP/4	250TC		X	X	X	X
218	5771	4.0	III	8.10	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
188	6715	3.4	III	9.40	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
179	7048	3.5	III	9.93	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
166	7607	3.4	III	10.71	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
149	8467	4.1	III	11.88	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
131	9588	4.0	III	13.45	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
108	11622	3.3	III	16.33	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
99	12721	3.0	III	17.94	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
89	14160	2.7	III	19.91	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
79	16034	2.4	III	22.53	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
76	16600	2.3	III	23.33	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
65	19435	2.1	III	27.35	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
57	22250	1.9	II	31.28	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
49	25714	1.7	II	36.21	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
45	28224	1.5	II	39.72	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
39	31960	1.3	I	44.96	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
33	38739	1.1	I	54.56	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
28	44350	1.0	I	62.42	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X
25	51255	0.8	*	72.24	10116	SK 9052.1 SCP	160 LP/4	250TC				X	X

25 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

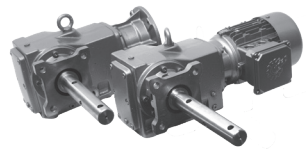
Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
201	7856	1.6	II	8.83	5370	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
189	8335	1.6	II	9.39	5406	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
174	9076	1.5	II	10.21	5453	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
156	10121	1.3	I	11.40	5503	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
133	11879	1.5	II	13.40	5552	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
113	13891	1.3	I	15.66	5565	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
98	16152	1.3	I	18.20	5813	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
87	18012	1.3	I	20.32	5795	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
75	21142	1.1	I	23.89	5723	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
64	24723	1.0	I	27.91	5589	SK 9042.1 SCP	180 MP/4	280TC		X	X	X	X
219	7193	3.2	III	8.10	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
188	8370	2.7	III	9.40	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
179	8785	2.8	III	9.93	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
166	9482	2.7	III	10.71	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
149	10554	3.3	III	11.88	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
132	11951	3.2	III	13.45	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
109	14487	2.6	III	16.33	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
99	15857	2.4	III	17.94	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
89	17650	2.2	III	19.91	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
79	19986	1.9	II	22.53	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
76	20691	1.8	II	23.33	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
65	24226	1.7	II	27.35	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
57	27734	1.5	II	31.28	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
49	32052	1.3	I	36.21	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
45	35181	1.2	I	39.72	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
40	39838	1.1	I	44.96	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
33	48288	0.9	*	54.56	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X
29	55282	0.8	*	62.42	10116	SK 9052.1 SCP	180 MP/4	280TC				X	X



30 hp Gearmotors & Speed Reducers

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
201	9427	1.3	I	8.83	5092	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
189	10002	1.3	I	9.39	5112	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
174	10891	1.2	I	10.21	5133	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
156	12145	1.1	I	11.40	5146	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
133	14255	1.2	I	13.40	5133	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
113	16669	1.1	I	15.66	5074	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
98	19383	1.1	I	18.20	5298	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
87	21615	1.1	I	20.32	5221	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
75	25371	0.9	*	23.89	5048	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
64	29668	0.8	*	27.91	4800	SK 9042.1 SCP	180 LP/4	280TC		X	X	X	X
219	8632	2.7	III	8.10	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
188	10044	2.3	III	9.40	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
179	10542	2.4	III	9.93	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
166	11379	2.3	III	10.71	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
149	12665	2.7	III	11.88	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
132	14342	2.7	III	13.45	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
109	17384	2.2	III	16.33	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
99	19028	2.0	III	17.94	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
89	21180	1.8	II	19.91	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
79	23983	1.6	II	22.53	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
76	24830	1.5	II	23.33	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
65	29071	1.4	II	27.35	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
57	33281	1.3	I	31.28	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
49	38463	1.1	I	36.21	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
45	42218	1.0	I	39.72	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X
40	47805	0.9	*	44.96	10116	SK 9052.1 SCP	180 LP/4	280TC				X	X

40 hp Gearmotors & Speed Reducers



NORD DRIVESYSTEMS

Output Speed n_2 [rpm]	Output Torque T_2 [lb-in]	SF f_a	AGMA Class	Gear Ratio i	Thrust Capacity [lb]	Gearbox	Motor Type	Reducer C-Face Input	CEMA DriveShaft 1-1/2"	2"	2-7/16"	3"	3-7/16"
220	11477	2.0	III	8.10	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
189	13354	1.7	II	9.40	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
180	14017	1.8	II	9.93	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
167	15129	1.7	II	10.71	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
150	16840	2.0	III	11.88	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
132	19069	2.0	III	13.45	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
109	23114	1.6	II	16.33	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
100	25300	1.5	II	17.94	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
90	28161	1.4	II	19.91	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
79	31888	1.2	I	22.53	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
76	33013	1.2	I	23.33	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
65	38652	1.1	I	27.35	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X
45	56132	0.8	*	39.72	10116	SK 9052.1 SCP	225 RP/4	320TC				X	X

Helical-Bevel SCP NEMA & Solid Input Shaft Ratings

Screw Conveyor Package Ratings & Combinations Table Overview

NEMA C-Face Combination Tables

GEARBOX TYPE – Nomenclature for specified gear unit.

TOTAL GEAR RATIO

OUTPUT SPEED – Based on 1750 rpm input speed

MAXIMUM TORQUE RATINGS

MAX POWER RATING – Based on 1750 rpm input speed

NEMA C-FACE INPUT POSSIBLE COMBINATIONS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input P_{max} [hp]	NEMA C-face 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9022.1 SCP	4.79	365	1133	5.00	X	X	X	X	X	X	X	X
	5.47	320	1522	5.00	X	X	X	X	X	X	X	X
	6.43	272	1602	5.00	X	X	X	X	X	X	X	X

X = Available Combination

SK 9012.1 SCP & SK 9013.1 SCP
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input P_{max} [hp]	NEMA C-face* 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9012.1 SCP	8.09	216	1593	*5.00*	X	X	X					
	9.23	190	1726	*5.00*	X	X	X					
	10.85	161	1770	4.53	X	X	X*					
	12.23	143	1947	4.42	X	X	X*					
	15.30	114	3363	5.00	X	X	X					
	17.45	100	3363	5.00	X	X	X					
	20.87	84	3540	4.71	X	X	X*					
	24.53	71	3540	4.01	X	X	X*					
	27.65	63	3540	3.55	X	X	X*					
	31.45	56	3540	3.13	X	X	X*					
	34.81	50	3540	2.82	X	X	X*					
	41.65	42	3540	2.36	X	X	X*					
	48.95	36	3540	2.01	X	X	X*					
	55.17	32	3540	1.78	X	X*	X*					
	62.74	28	3540	1.57	X	X*	X*					
	76.53	23	3540	1.28	X	X*	X*					
	86.00	20	3540	1.14	X	X*						
	97.36	18	3540	1.01	X	X*						
	109.79	16	3540	0.90	X*	X*						
	123.48	14	3540	0.80	X*							
	140.70	12	3540	0.70	X*							
	166.59	11	3540	0.59	X*							
	183.10	9.6	3540	0.54	X*	X*						
	205.93	8.5	3540	0.48	X*							
	246.37	7.1	3540	0.40	X*							
	280.71	6.2	3540	0.35	X*							
	332.37	5.3	3540	0.30	X*							
SK 9013.1 SCP	**141.29**	12	3540	*0.50*	X*							
	177.88	9.8	3540	*0.50*	X*							
	212.83	8.2	3540	0.46	X*							
	281.92	6.2	3540	0.35	X*							
	320.60	5.5	3540	0.31	X*							
	439.46	4.0	3540	0.22	X*							
	589.96	3.0	3540	0.17	X*							
	667.89	2.6	3540	0.15	X*							
	847.07	2.1	3540	0.12	X*							
	1256.07	1.4	3540	0.08	X*							
	1412.68	1.2	3540	0.07	X*							
	1690.10	1.0	3540	0.06	X*							

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

SK 9022.1 SCP & SK 9023.1 SCP
Ratings & Combinations

DRIVESYSTEMS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9022.1 SCP	8.78	199	4248	*5.00*	X	X	X					
	11.13	157	4602	*5.00*	X	X	X					
	12.51	140	4779	*5.00*	X	X	X					
	14.56	120	5133	*5.00*	X	X	X					
	16.30	107	5487	*5.00*	X	X	X					
	17.52	100	6372	*5.00*	X	X	X					
	19.93	88	6726	*5.00*	X	X	X					
	22.41	78	6903	*5.00*	X	X	X					
	24.56	71	7611	*5.00*	X	X	X					
	26.07	67	7611	*5.00*	X	X	X					
	29.20	60	7611	*5.00*	X	X	X					
	31.38	56	7257	*5.00*	X	X	X					
	33.26	53	7611	*5.00*	X	X	X					
	39.77	44	7611	*5.00*	X	X	X					
	44.71	39	7611	4.73	X	X	X*					
	49.01	36	7611	4.31	X	X	X*					
	52.02	34	7611	4.06	X	X	X*					
	58.25	30	7611	3.63	X	X	X*					
	66.42	26	7611	3.18	X	X	X*					
	78.89	22	7611	2.68	X	X	X*					
	85.11	21	7611	2.48	X	X						
	98.88	18	7611	2.14	X	X						
	115.74	15	7611	1.83	X	X*						
	137.57	13	7611	1.54	X	X*						
	169.81	10	7611	1.24	X	X*						
	184.46	9.5	7611	1.15	X	X*						
	219.25	8.0	7611	0.96	X*	X*						
	232.92	7.5	6195	0.74	X*							
	276.86	6.3	7080	0.71	X*							
SK 9023.1 SCP	**228.47**	7.7	5753	0.70	X*							
	297.67	5.9	7611	0.71	X*							
	339.41	5.2	7611	0.62	X*							
	472.43	3.7	7611	0.45	X*							
	561.55	3.1	7611	0.38	X*							
	678.31	2.6	7611	0.31	X*							
	753.86	2.3	7611	0.28	X*							
	951.94	1.8	7611	0.22	X*							
	1120.38	1.6	7611	0.19	X*							
	1504.07	1.2	7611	0.14	X*							
	1899.26	0.92	7611	0.11	X*							

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

SK 9032.1 & 9033.1 SCP Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input P_{max} [hp]	NEMA C-face* 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9032.1 SCP	8.48	206	7788	*10.00*	X	X	X	X				
	10.73	163	7965	*10.00*	X	X	X	X				
	12.68	138	8850	*10.00*	X	X	X	X				
	13.49	130	11948	*10.00*	X	X	X	X				
	16.04	109	12390	*10.00*	X	X	X	X				
	17.08	102	12833	*10.00*	X	X	X	X				
	20.23	87	13275	*10.00*	X	X	X	X				
	23.91	73	13718	*10.00*	X	X	X	X				
	25.03	70	13275	*10.00*	X	X	X	X				
	29.66	59	13275	*10.00*	X	X	X	X				
	35.61	49	13718	*10.00*	X	X	X	X				
	38.05	46	13718	*10.00*	X	X	X	X				
	40.36	43	13718	9.44	X	X	X	X*				
	47.70	37	13718	7.98	X	X	X	X*				
	49.94	35	13718	7.63	X	X	X	X*				
	59.17	30	13718	6.44	X	X	X	X*				
	64.08	27	13718	5.94	X	X	X	X*				
	75.91	23	13718	5.02	X	X	X	X*				
	84.17	21	13718	4.52	X	X	X*	X*				
	93.50	19	13718	4.07	X	X	X*					
	110.77	16	13718	3.44	X	X	X*					
	117.70	15	13718	3.24	X	X						
	139.44	13	13718	2.73	X	X						
	158.74	11	13718	2.40	X	X	X*					
	188.06	9.3	13718	2.03	X	X	X*					
	197.45	8.9	13718	1.93	X	X*						
	233.92	7.5	13718	1.63	X	X*						
	249.72	7.0	13718	1.53	X	X*						
	295.85	5.9	13718	1.29	X	X*						
SK 9033.1 SCP	167.45	10	13718	*1.50*	X	X*	X*					
	214.83	8.1	13718	*1.50*	X	X*	X*					
	267.65	6.5	13718	1.42	X	X*						
	352.25	5.0	13718	1.08	X	X*						
	398.77	4.4	13718	0.96	X*	X*						
	539.10	3.2	13718	0.71	X*							
	691.55	2.5	13718	0.55	X*							
	873.65	2.0	13718	0.44	X*							
	1149.80	1.5	13718	0.33	X*							
	1361.37	1.3	13718	0.28	X*							
	1822.00	0.96	13718	0.21	X*							
	2428.14	0.72	13718	0.16	X*							
	3635.95	0.48	13718	0.10	X*							

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

SK 9042.1 SCP
Ratings & Combinations

NORD DRIVESYSTEMS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9042.1 SCP	8.83	198	12390	*20.00*			X	X	X			
	9.39	186	13275	*20.00*			X	X	X	X*		
	10.21	171	13275	*20.00*			X	X	X			
	11.40	154	13275	*20.00*	X	X	X	X	X	X*		
	13.40	131	17700	*20.00*	X	X	X	X	X	X*		
	15.66	112	17700	*20.00*	X	X	X	X	X	X*		
	18.20	96	21683	*20.00*			X	X	X			
	20.32	86	23010	*20.00*	X	X	X	X	X	X*		
	23.89	73	23895	*20.00*	X	X	X	X	X	X*		
	27.91	63	24780	*20.00*	X	X	X	X	X	X*		
	31.48	56	19470	17.17	-		X	X	X*			
	31.70	55	24780	20.00	X	X	X	X				
	34.39	51	24780	20.00	X	X	X	X	X			
	40.54	43	24780	16.97	X	X	X	X	X*	X*		
	47.67	37	24780	14.43	X	X	X	X	X*	X*		
	55.69	31	24780	12.35	X	X	X	X	X*	X*		
	63.25	28	24780	10.88	X	X	X	X				
	68.61	26	24780	10.03	X	X	X	X	X*			
	76.18	23	24780	9.03	X	X	X	X*				
	86.43	20	24780	7.96	X	X	X	X*				
	95.56	18	24780	7.20	X	X	X	X*				
	117.79	15	21240	5.01	X	X	X					
	132.79	13	24780	5.18			X	X*				
	159.94	11	24780	4.30			X*	X*				
	165.24	11	13275	2.23	X	X						
	195.12	9	24780	3.53	X	X	X*					
	235.01	7.4	24780	2.93	X	X	X*					
	273.73	6.4	24780	2.51	X	X						
	329.69	5.3	24780	2.09	X	X						

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

SK 9043.1 SCP
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input P_{max} [hp]	NEMA C-face* 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9043.1 SCP	172.08	10	24780	*3.00*	X	X	X*					
	204.38	8.6	24780	*3.00*	X	X	X*					
	279.60	6.3	24780	2.46	X	X	X*					
	350.72	5.0	24780	1.96	X	X*	X*					
	404.82	4.3	24780	1.70	X	X*	X*					
	568.04	3.1	24780	1.21	X	X*						
	645.18	2.7	24780	1.07	X	X*						
	881.60	2.0	24780	0.78	X*	X*						
	1113.24	1.6	24780	0.62	X*	X*						
	1517.17	1.2	24780	0.45	X*	X*						
	2128.35	0.82	24780	0.32	X*	X*						
	2397.14	0.73	24780	0.29	X*	X*						
	3026.98	0.58	24780	0.23	X*	X*						
	3362.82	0.52	24780	0.20	X*	X*						
	4246.38	0.41	24780	0.16	X*	X*						

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

SK 9052.1 SCP
Ratings & Combinations

NORD DRIVESYSTEMS

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input ◈ P_{max} [hp]	NEMA C-face* 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9052.1 SCP	8.1	216	23010	*30.00*					X	X		
	9.4	186	23010	*30.00*					X	X		
	9.93	176	24780	*30.00*					X	X		
	10.71	163	25665	*30.00*					X	X		
	11.88	147	34515	*30.00*			X	X	X	X		
	13.45	130	38055	*30.00*			X	X	X	X		
	16.33	107	38055	*30.00*	X	X	X	X	X	X		
	17.94	98	38055	*30.00*					X	X		
	19.91	88	38055	*30.00*			X	X	X	X		
	22.53	78	38055	*30.00*			X	X	X	X		
	23.33	75	38055	*30.00*	X	X	X	X	X	X		
	27.35	64	40710	*30.00*	X	X	X	X	X	X		
	31.28	56	42480	*30.00*	X	X	X	X	X	X		
	36.21	48	42480	*30.00*	X	X	X	X	X	X		
	39.72	44	42480	29.69			X	X	X	X*		
	44.96	39	42480	26.23			X	X	X	X*		
	54.56	32	42480	21.62	X	X	X	X	X	X*		
	62.42	28	42480	18.89	X	X	X	X	X*	X*		
	72.24	24	42480	16.33	X	X	X	X	X*	X*		
	88.17	20	42480	13.38	X	X	X	X	X*			
	102.40	17	42480	11.52	X	X	X	X				
	120.03	15	42480	9.83	X	X	X	X*				
	145.16	12	31860	6.09	X	X	X					
	169.24	10	42480	6.97			X	X*				
	198.38	8.8	42480	5.95			X	X*				
	247.06	7.1	42480	4.77	X	X	X*					
	289.61	6.0	42480	4.07	X	X	X*					

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

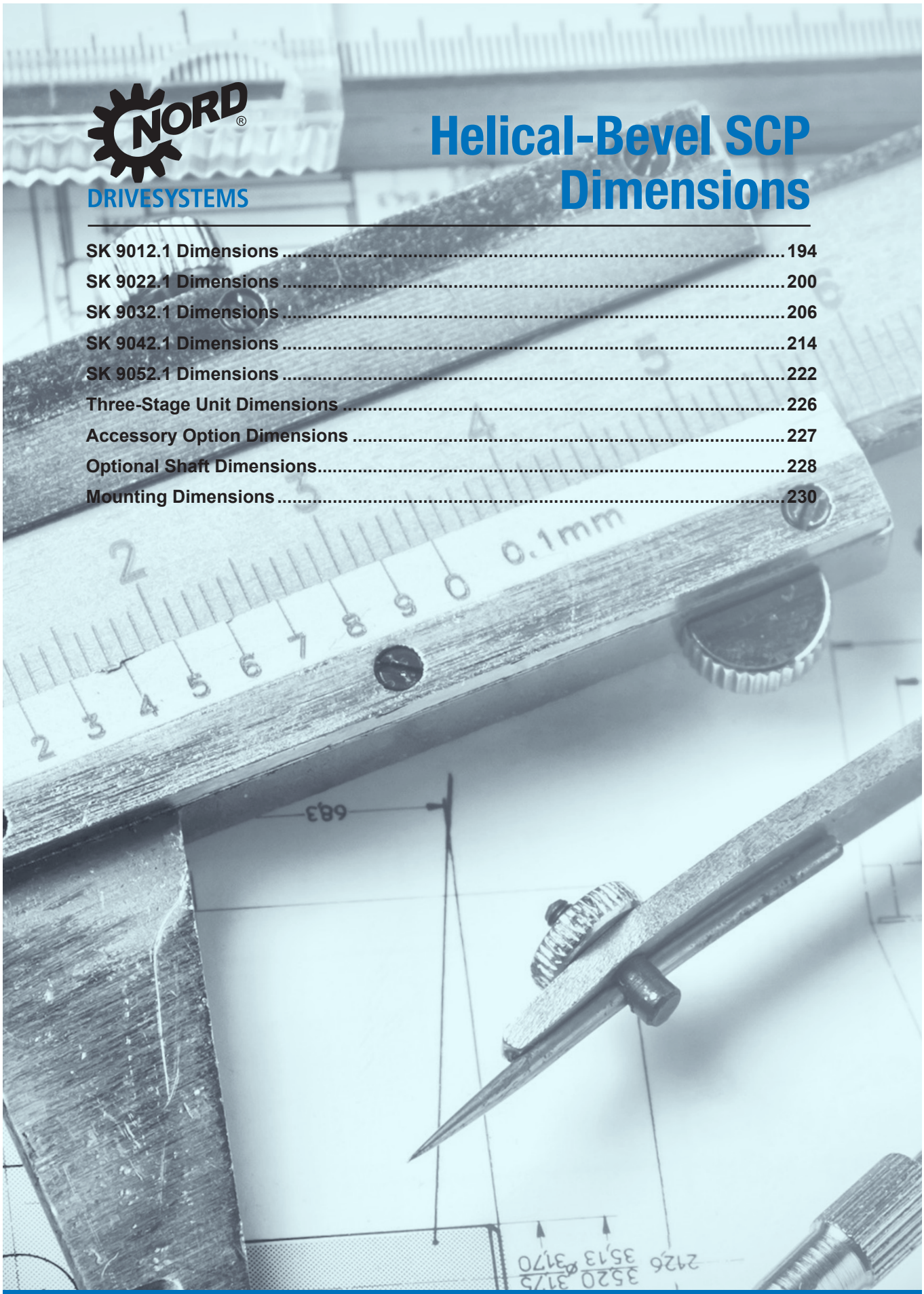
SK 9053.1
Ratings & Combinations

Type	Ratio	Output Speed 1750 rpm input n_2 [rpm]	Max Torque T_{max} [lb-in]	Max Power 1750 rpm input P_{max} [hp]	NEMA C-face* 56C 1.0 hp	140TC 2.0 hp	180TC 5.0 hp	210TC 10 hp	250TC 20 hp	280TC 30 hp	320TC 50 hp	360TC 75 hp
SK 9053.1 SCP	164.99	11	42480	*5.00*	X	X	X	X*				
	229.07	7.6	42480	*5.00*	X	X	X	X*				
	265.11	6.6	42480	4.45	X	X	X*	X*				
	348.91	5.0	42480	3.38	X	X	X*					
	458.57	3.8	42480	2.57	X	X						
	579.95	3.0	42480	2.03	X	X						
	703.83	2.5	35400	1.40	X	X*						
	931.87	1.9	42480	1.27	X	X*						
	1062.85	1.6	42480	1.11	X	X*	X*	X*				
	1398.80	1.3	42480	0.84	X*	X*	X*					
	1872.50	0.93	42480	0.63	X*	X*						
	2023.49	0.86	42480	0.58	X*	X*						
	2953.98	0.59	42480	0.40	X*	X*						
	3735.92	0.47	42480	0.32	X*	X*						

◈ The maximum input power limit shown is the largest motor power typically combined with the gear unit. *The Italicized power values shown are not the mechanical limit and often may be increased through discussion with our sales or engineering department.*

* The NEMA C-face power limit must also be considered when selecting a reducer. The C-face Adapter's Maximum Input Power values are displayed under the Available Combinations and based on a 1750 rpm motor.

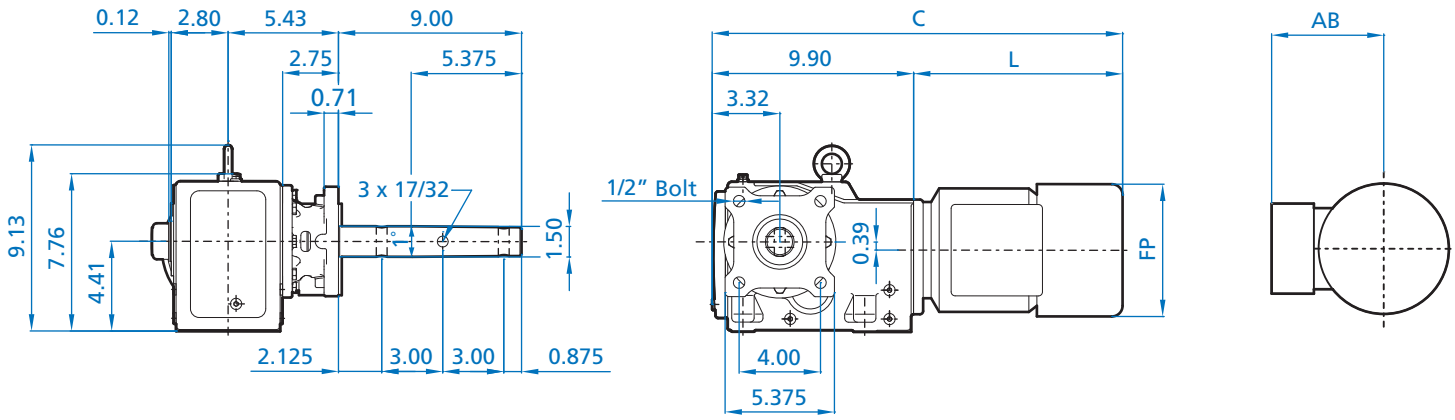
Notes



DRIVESYSTEMS

Helical-Bevel SCP Dimensions

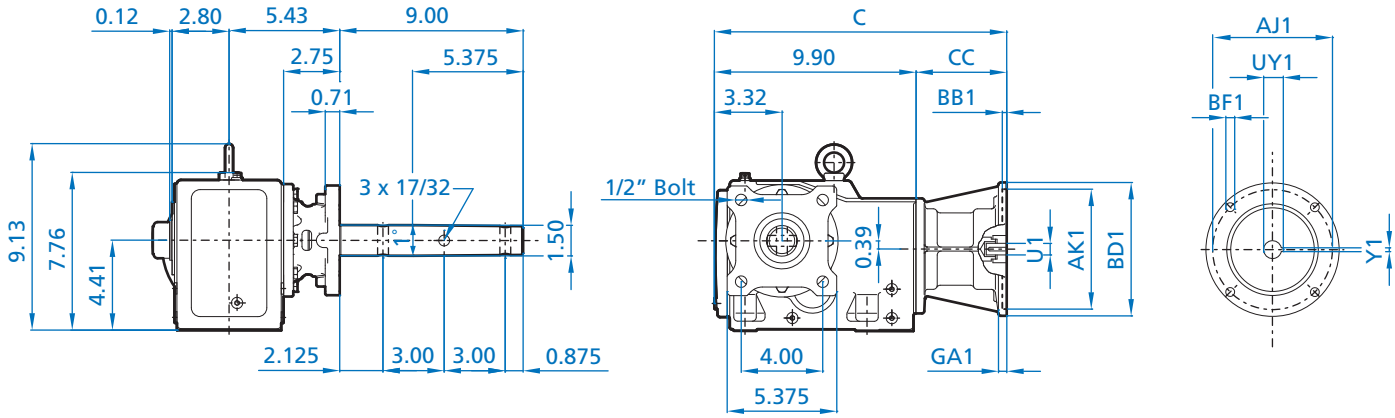
SK 9012.1 SCP + Motor
1-1/2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
63S/L	17,63	7,73	5,09	4,51
71S/L	19,21	9,31	5,72	4,86
80S/L/LP	20,19	10,29	6,43	5,59
90SP/LP	21,76	11,87	7,19	5,79
100LP/AP	22,99	13,09	7,90	6,65
112MP	24,85	14,95	8,87	7,05

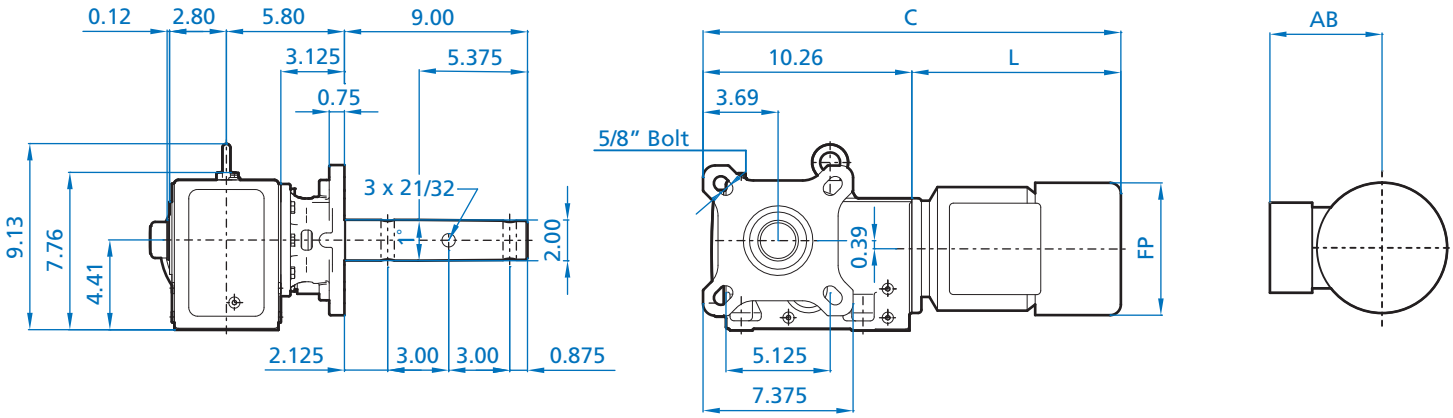
SK 9012.1 SCP + NEMA 1-1/2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	14,35	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	14,35	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	15,55	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

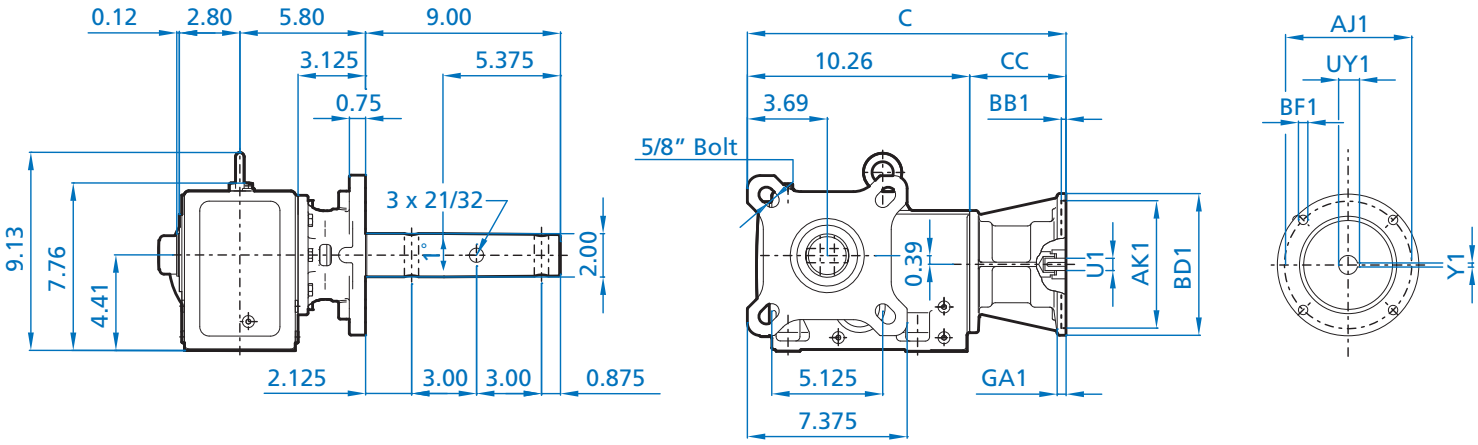
SK 9012.1 SCP + Motor
2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
63S/L	17,99	7,73	5,09	4,51
71S/L	19,57	9,31	5,72	5,24
80S/L/LP	20,55	10,29	6,43	5,59
90SP/LP	22,12	11,87	7,19	5,79
100LP/AP	23,35	13,09	7,90	6,77
112MP	25,21	14,95	8,87	7,17

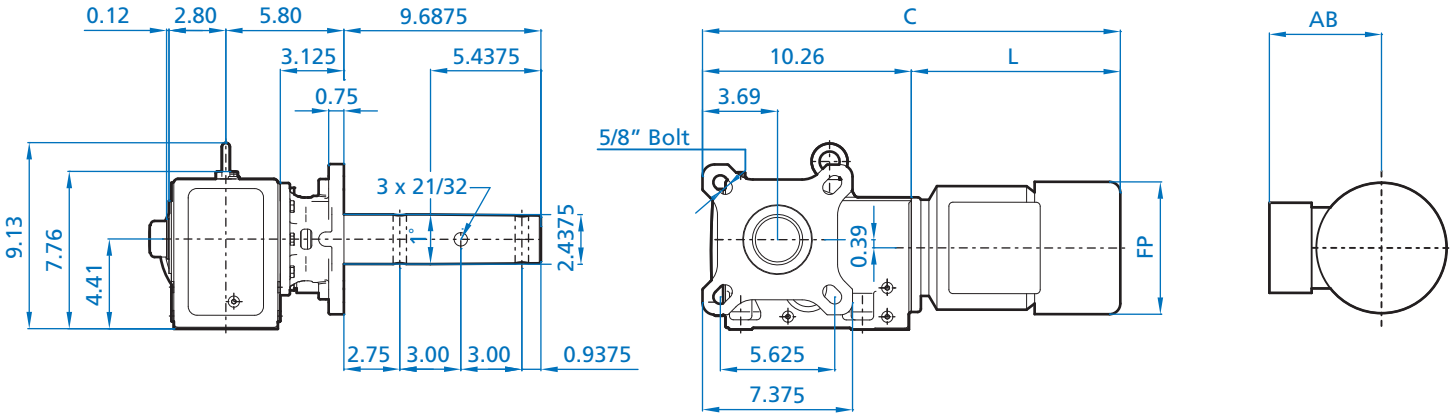
SK 9012.1 SCP + NEMA 2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	14,71	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	14,71	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	15,91	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

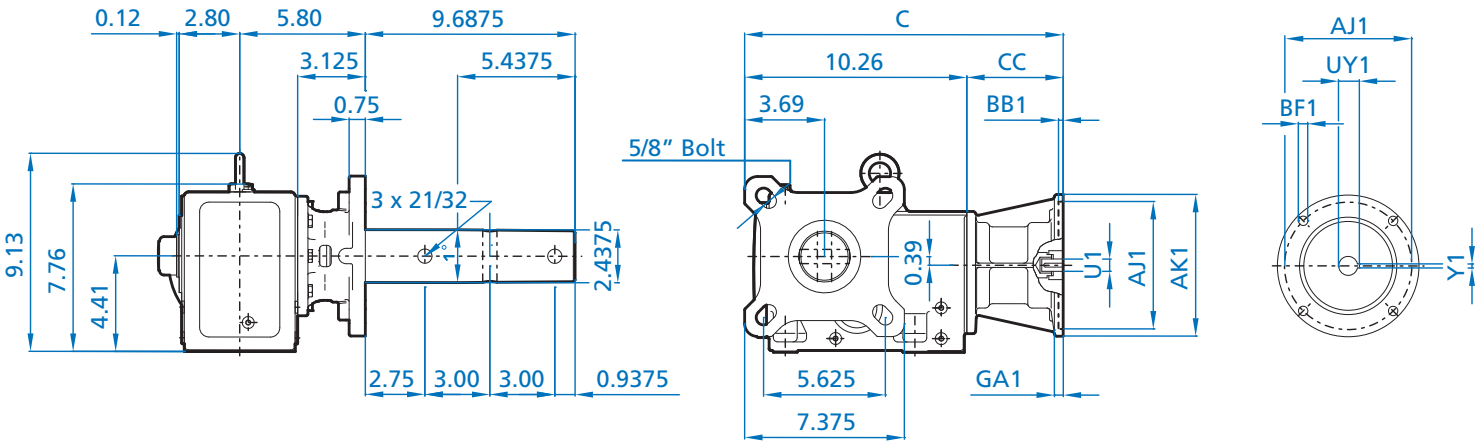
SK 9012.1 SCP + Motor
2-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

Motor Type	Gearbox	Motor		
	C	L	FP	AB
63S/L	17,99	7,73	5,09	4,51
71S/L	19,57	9,31	5,72	5,24
80S/L/LP	20,55	10,29	6,43	5,59
90SP/LP	22,12	11,87	7,19	5,79
100LP/AP	23,35	13,09	7,90	6,77
112MP	25,21	14,95	8,87	7,17

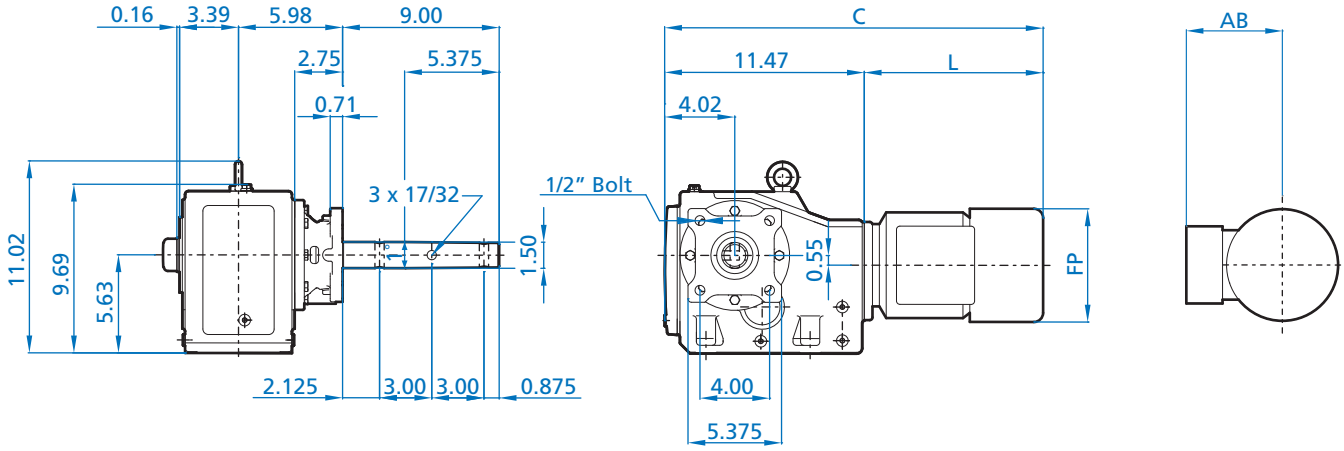
SK 9012.1 SCP + NEMA 2-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	14,71	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	14,71	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	15,91	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

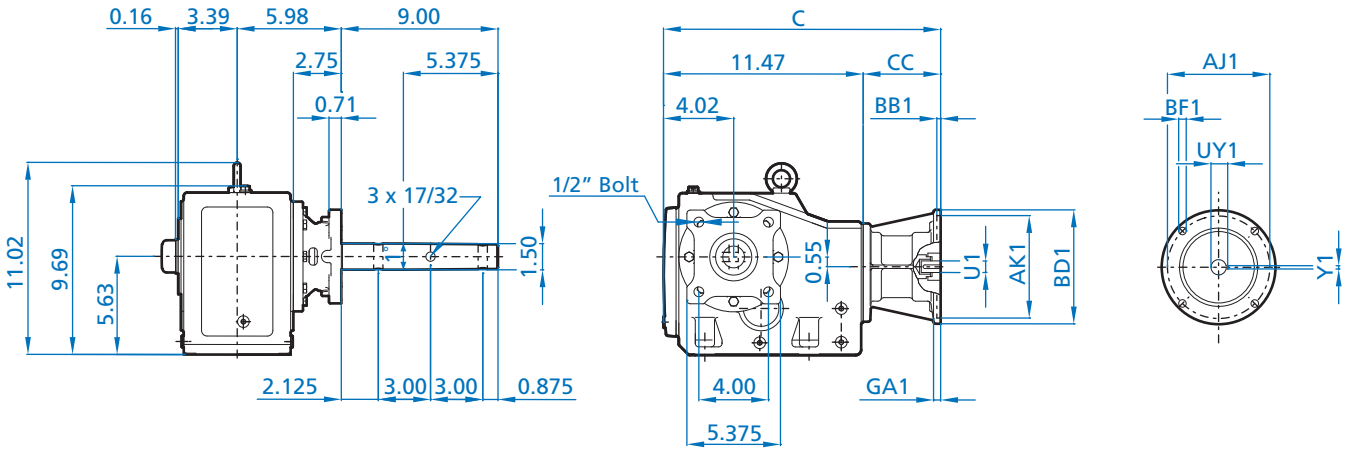
SK 9022.1 SCP + Motor
1-1/2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
63S/L	19,20	7,73	5,09	4,51
71S/L	20,78	9,31	5,72	4,86
80S/L/LP	21,76	10,29	6,43	5,59
90SP/LP	23,34	11,87	7,19	5,79
100LP/AP	24,56	13,09	7,90	6,65
112MP	26,42	14,95	8,87	7,05

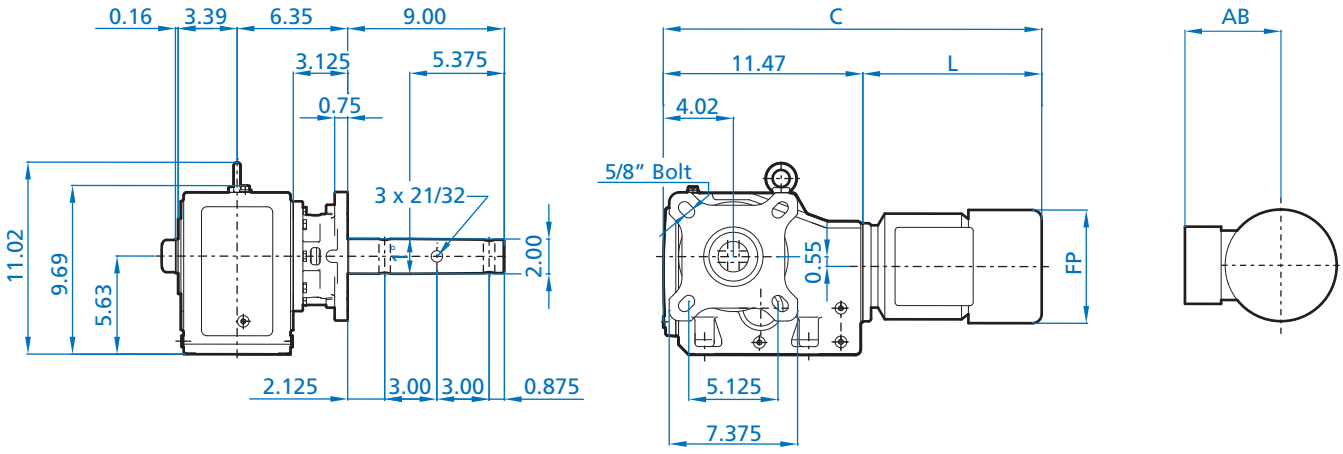
SK 9022.1 SCP + NEMA 1-1/2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	15,92	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	15,92	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	17,12	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

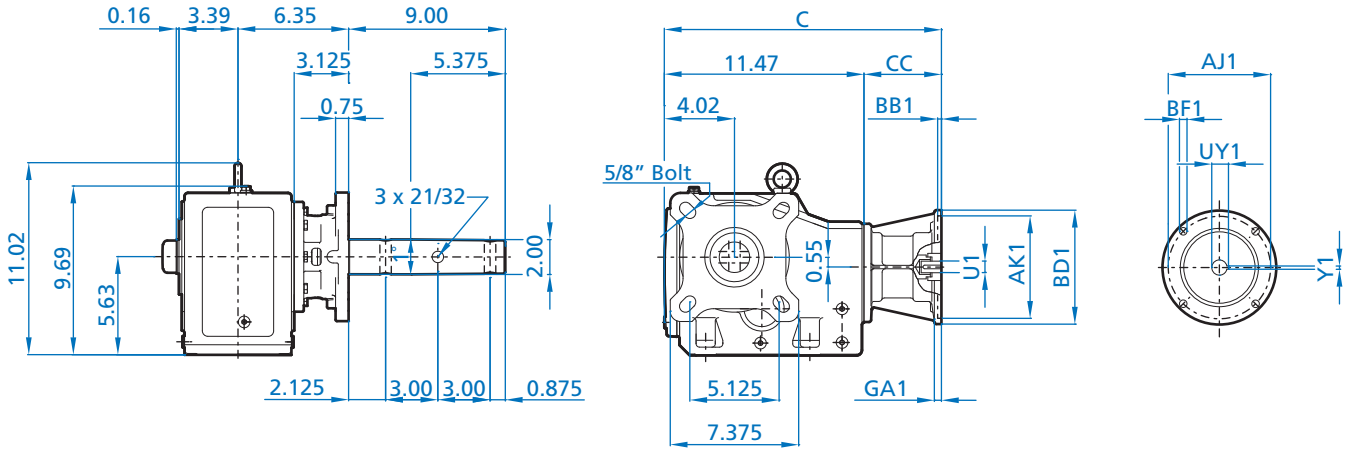
SK 9022.1 SCP + Motor
2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
63S/L	19,20	7,73	5,09	4,51
71S/L	20,78	9,31	5,72	4,86
80S/L/LP	21,76	10,29	6,43	5,59
90SP/LP	23,34	11,87	7,19	5,79
100LP/AP	24,56	13,09	7,90	6,65
112MP	26,42	14,95	8,87	7,05

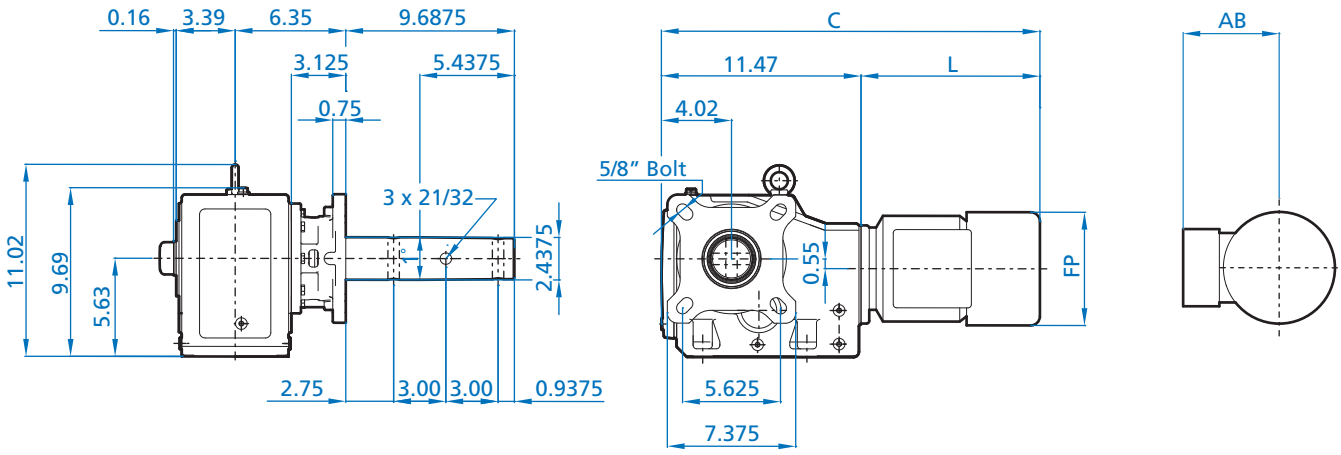
SK 9022.1 SCP + NEMA 2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	15,92	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	15,92	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	17,12	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

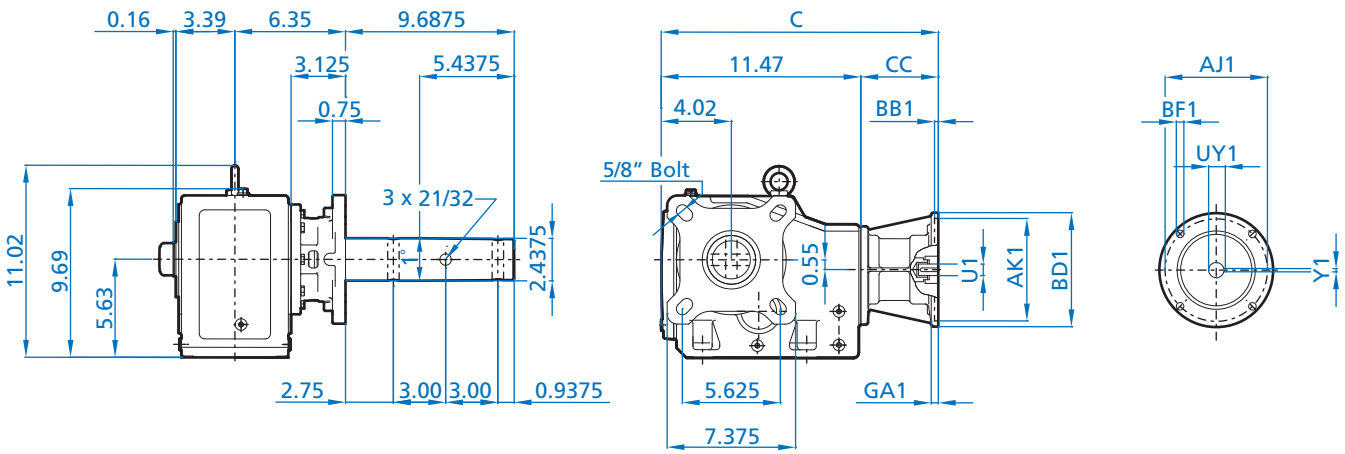
SK 9022.1 SCP + Motor
2-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
63S/L	19,20	7,73	5,09	4,51
71S/L	20,78	9,31	5,72	4,86
80S/L/LP	21,76	10,29	6,43	5,59
90SP/LP	23,34	11,87	7,19	5,79
100LP/AP	24,56	13,09	7,90	6,65
112MP	26,42	14,95	8,87	7,05

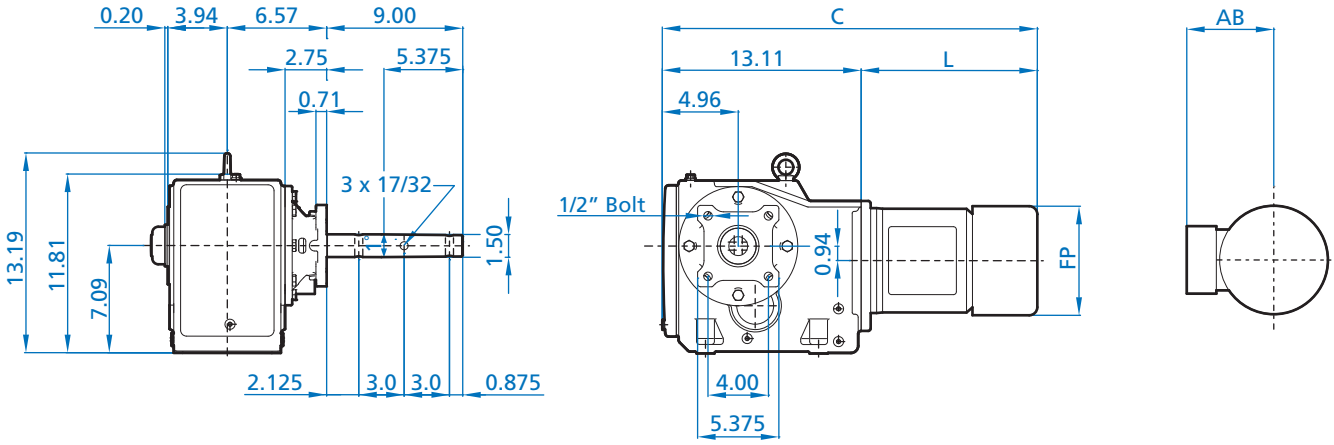
SK 9022.1 SCP + NEMA 2-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	15,92	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	15,92	4,45	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	17,12	5,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250

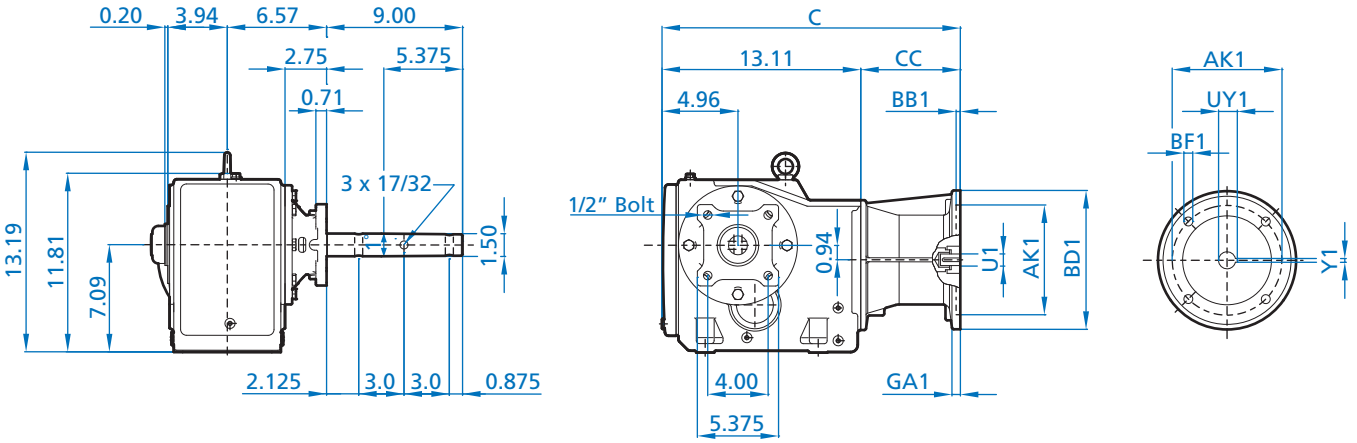
SK 9032.1 SCP + Motor
1-1/2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
71S/L	22,18	9,07	5,72	4,86
80S/L/LP	23,17	10,06	6,43	5,59
90SP/LP	24,74	11,63	7,19	5,79
100LP/AP	25,96	12,85	7,90	6,65
112MP	27,82	14,71	8,87	7,05
132SP/LP	30,25	17,14	10,45	8,03

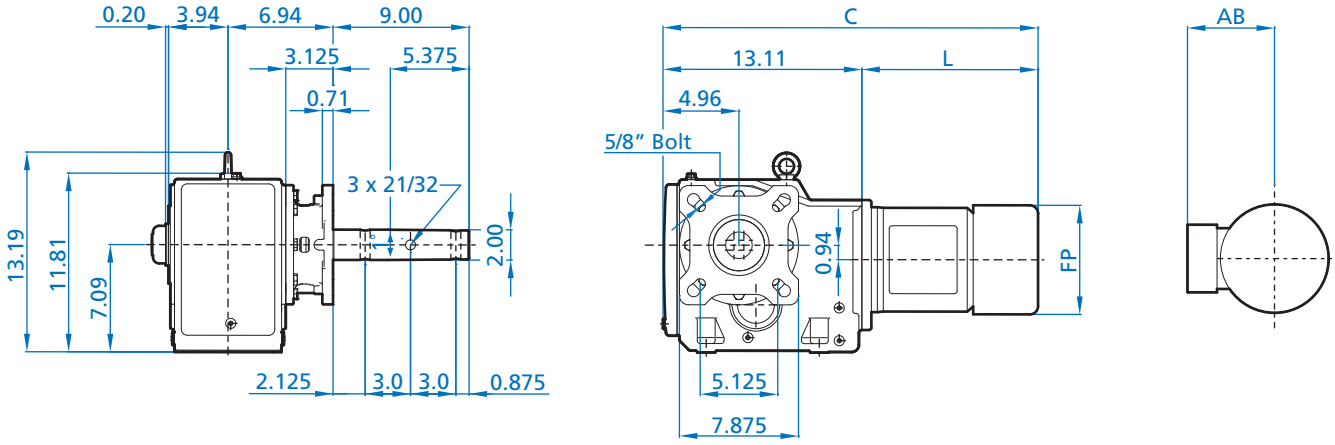
SK 9032.1 SCP + NEMA 1-1/2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312

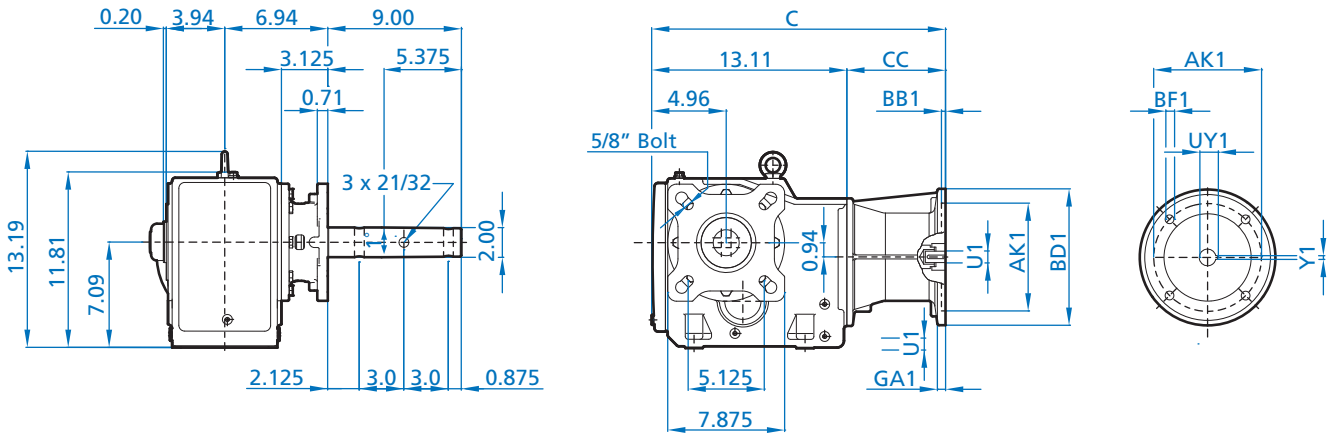
SK 9032.1 SCP + Motor
2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
71S/L	22,18	9,07	5,72	4,86
80S/L/LP	23,17	10,06	6,43	5,59
90SP/LP	24,74	11,63	7,19	5,79
100LP/AP	25,96	12,85	7,90	6,65
112MP	27,82	14,71	8,87	7,05
132SP/LP	30,25	17,14	10,45	8,03

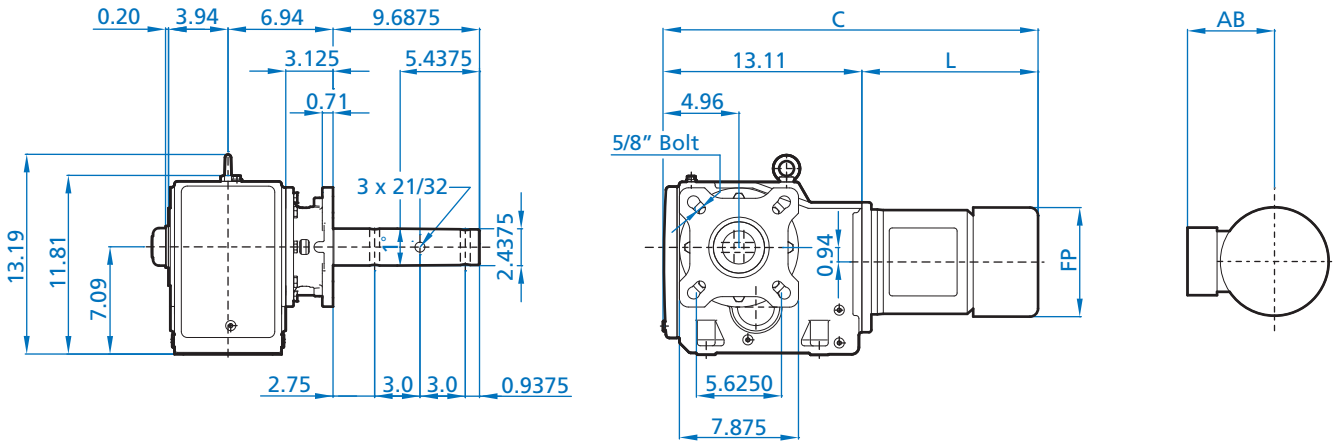
SK 9032.1 SCP + NEMA 2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312

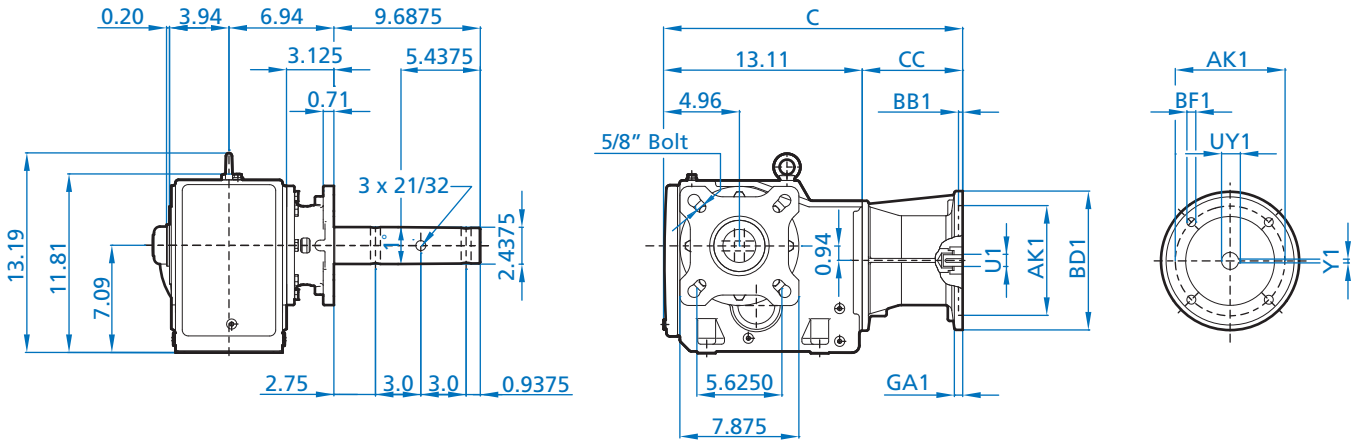
SK 9032.1 SCP + Motor
2-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
71S/L	22,18	9,07	5,72	4,86
80S/L/LP	23,17	10,06	6,43	5,59
90SP/LP	24,74	11,63	7,19	5,79
100LP/AP	25,96	12,85	7,90	6,65
112MP	27,82	14,71	8,87	7,05
132SP/LP	30,25	17,14	10,45	8,03

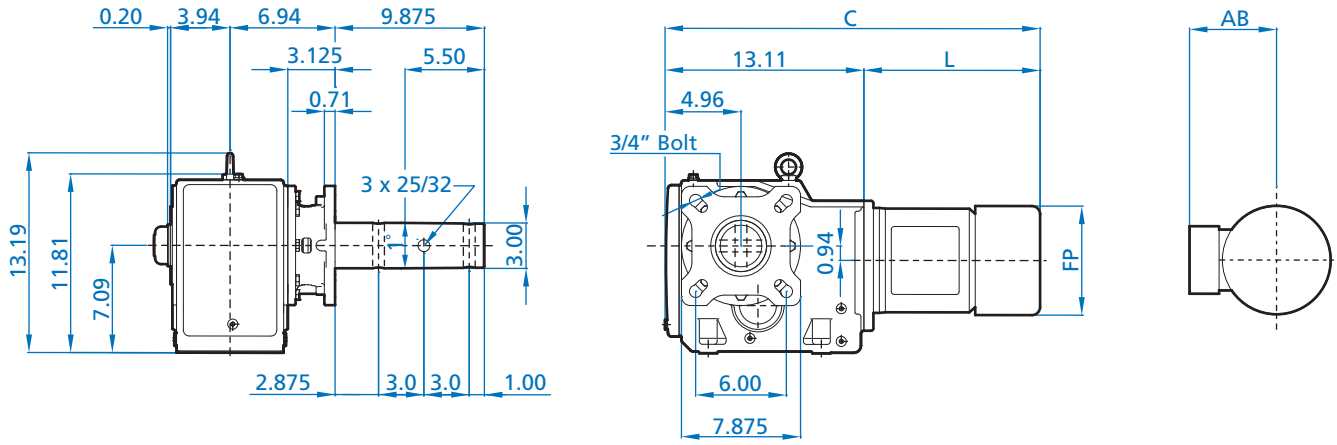
SK 9032.1 SCP + NEMA 2-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312

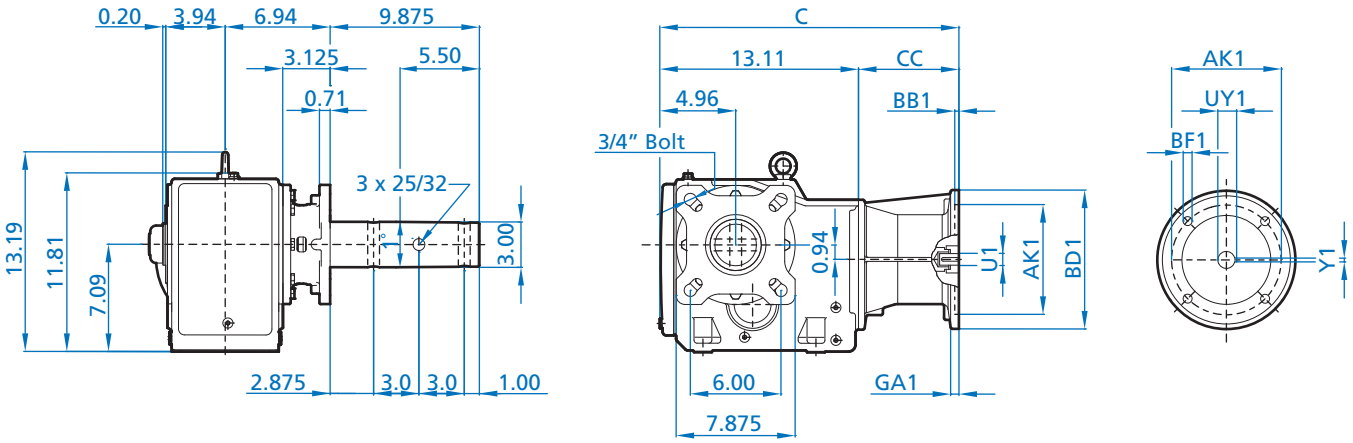
SK 9032.1 SCP + Motor
3” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

Motor Type	Gearbox	Motor		
	C	L	FP	AB
71S/L	22,18	9,07	5,72	4,86
80S/L/LP	23,17	10,06	6,43	5,59
90SP/LP	24,74	11,63	7,19	5,79
100LP/AP	25,96	12,85	7,90	6,65
112MP	27,82	14,71	8,87	7,05
132SP/LP	30,25	17,14	10,45	8,03

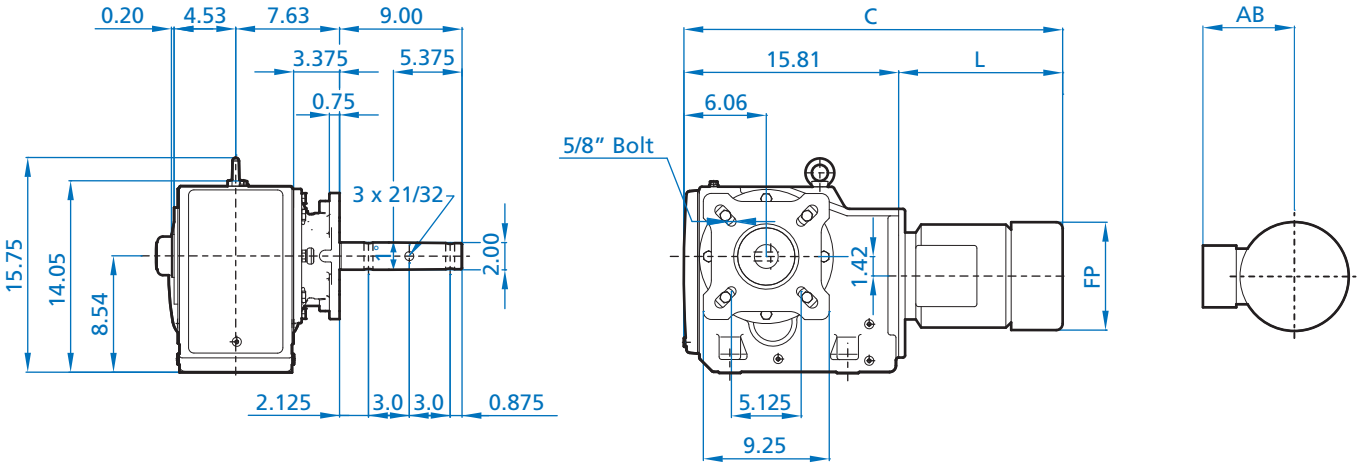
SK 9032.1 SCP + NEMA 3” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	17,72	4,61	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	19,76	6,65	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312

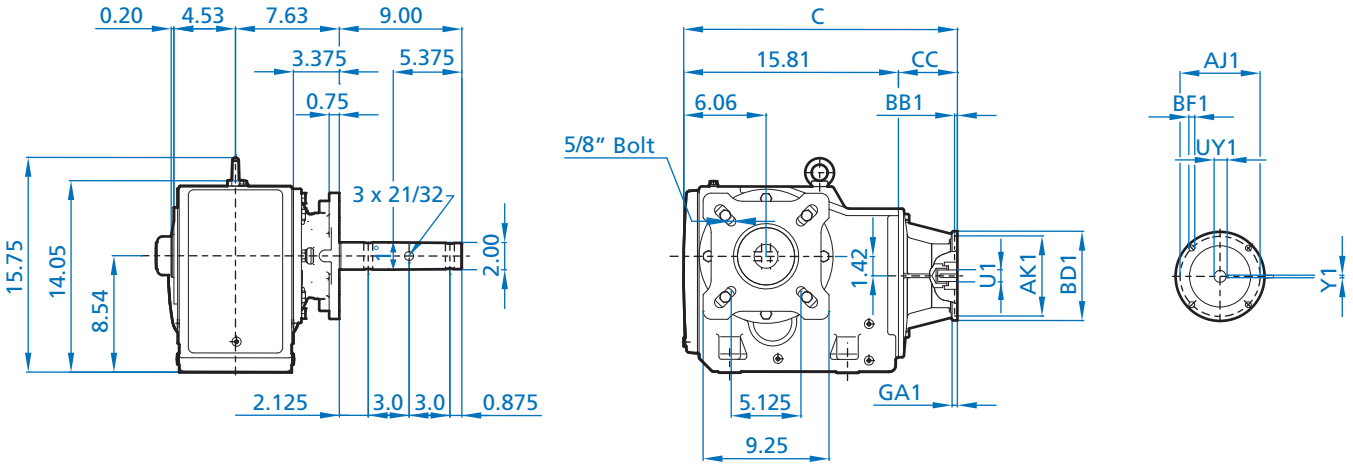
SK 9042.1 SCP + Motor
2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
90SP/LP	26,65	10,84	7,19	5,79
100LP/AP	27,87	12,06	7,90	6,65
112MP	29,73	13,93	8,87	7,05
132SP/LP	32,16	16,35	10,45	8,03
160MP	35,22	19,41	12,56	9,53
160LP	36,98	21,17	12,56	9,53

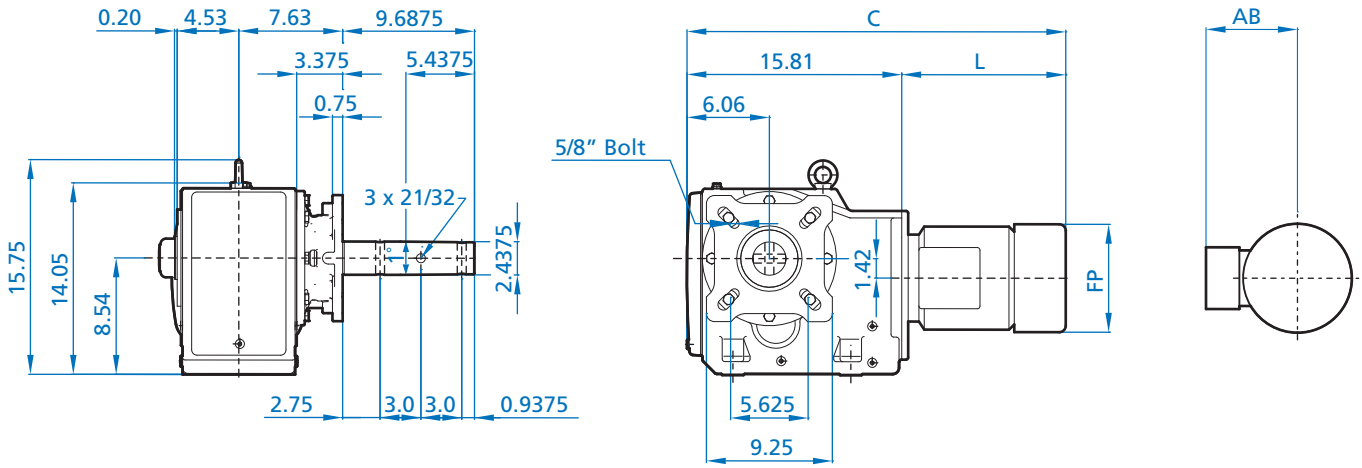
SK 9042.1 SCP + NEMA 2” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375

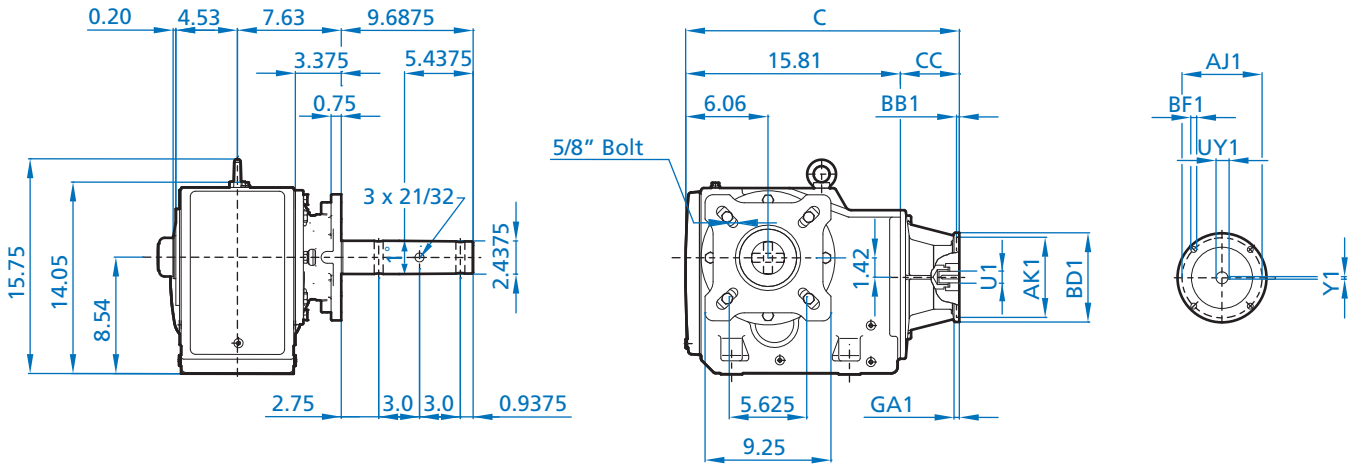
SK 9042.1 SCP + Motor
2-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
90SP/LP	26,65	10,84	7,19	5,79
100LP/AP	27,87	12,06	7,90	6,65
112MP	29,73	13,93	8,87	7,05
132SP/LP	32,16	16,35	10,45	8,03
160MP	35,22	19,41	12,56	9,53
160LP	36,98	21,17	12,56	9,53

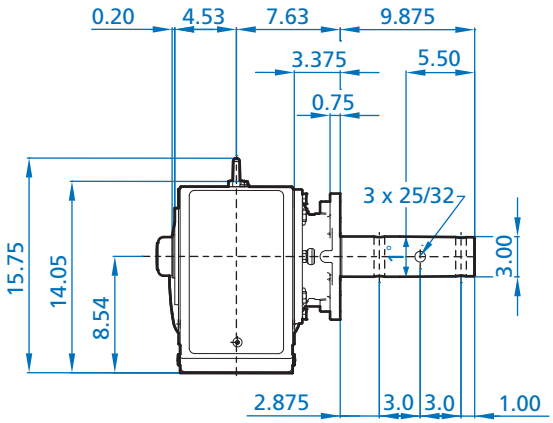
SK 9042.1 SCP + NEMA 2-7/16” CEMA Drive Shaft

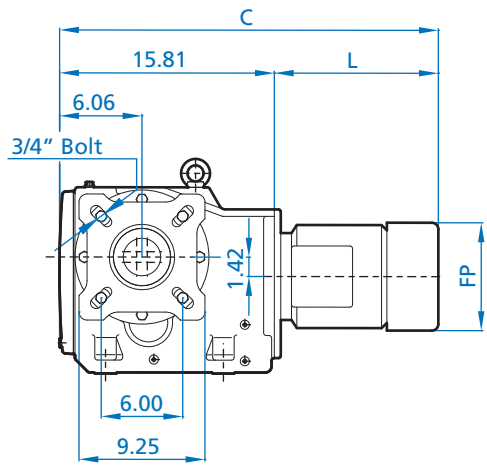


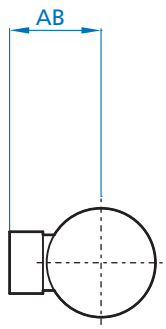
See page 228 for SCP CEMA drive shaft details

NEMA C-Face Input	Gearbox C	NEMA Input CC	AJ1	AK1	BB1	BD1	BF1	GA1	Coupling U1	UY1	Y1
56C	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375

SK 9042.1 SCP + Motor
3” CEMA Drive Shaft



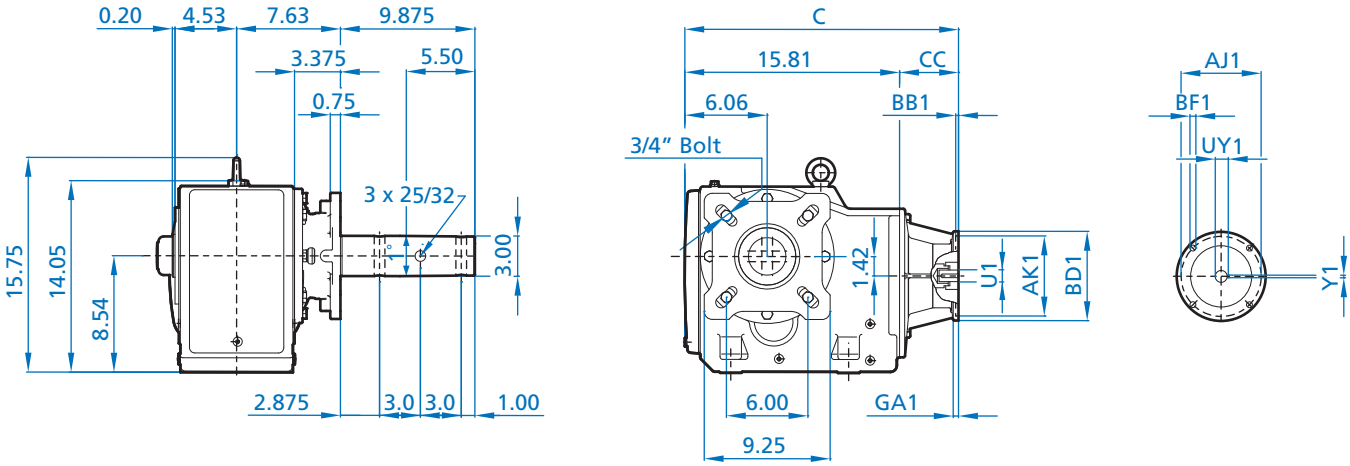




See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
90SP/LP	26,65	10,84	7,19	5,79
100LP/AP	27,87	12,06	7,90	6,65
112MP	29,73	13,93	8,87	7,05
132SP/LP	32,16	16,35	10,45	8,03
160MP	35,22	19,41	12,56	9,53
160LP	36,98	21,17	12,56	9,53

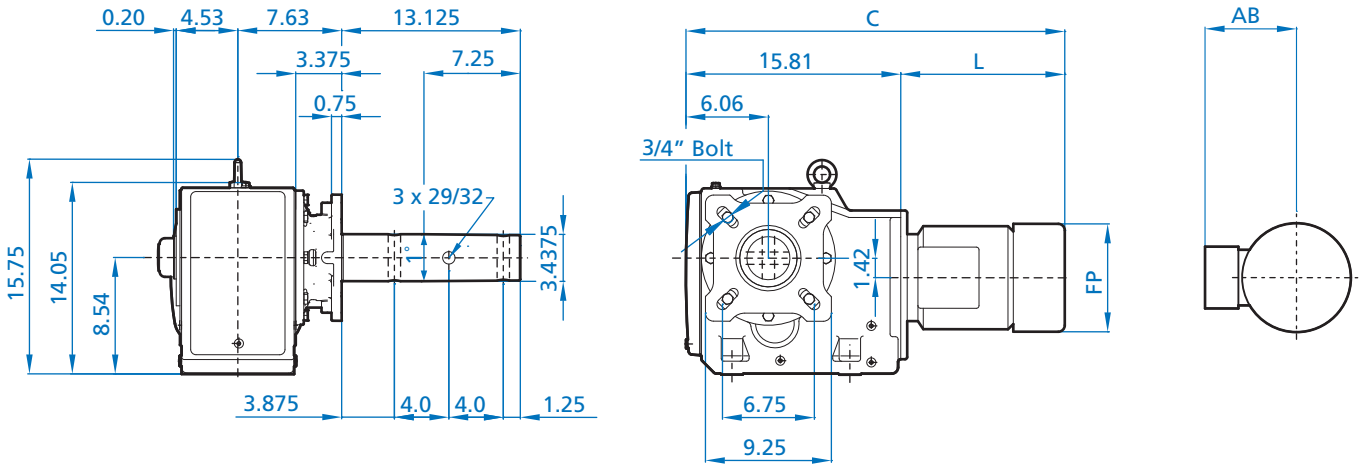
SK 9042.1 SCP + NEMA 3” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375

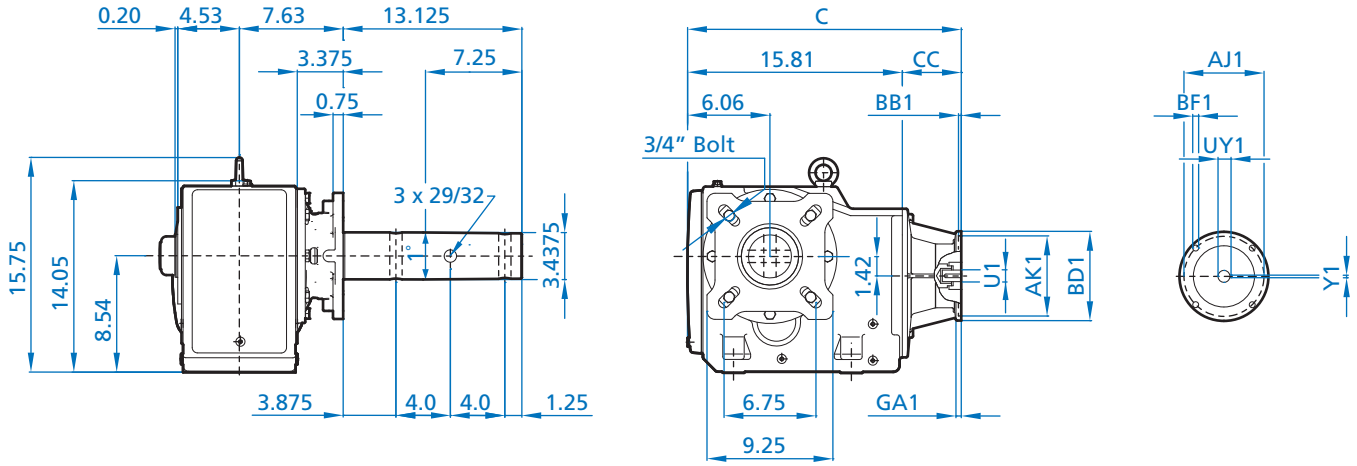
SK 9042.1 SCP + Motor
3-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

Motor Type	Gearbox	Motor		
	C	L	FP	AB
90SP/LP	26,65	10,84	7,19	5,79
100LP/AP	27,87	12,06	7,90	6,65
112MP	29,73	13,93	8,87	7,05
132SP/LP	32,16	16,35	10,45	8,03
160MP	35,22	19,41	12,56	9,53
160LP	36,98	21,17	12,56	9,53

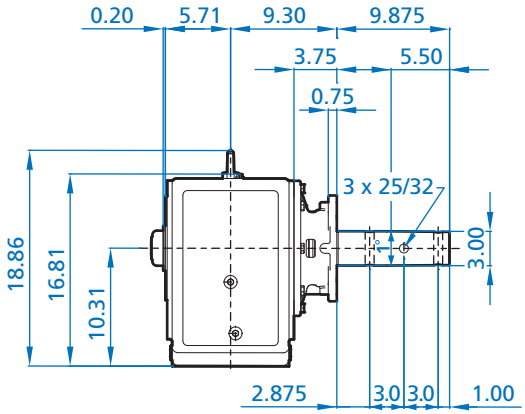
SK 9042.1 SCP + NEMA 3-7/16” CEMA Drive Shaft

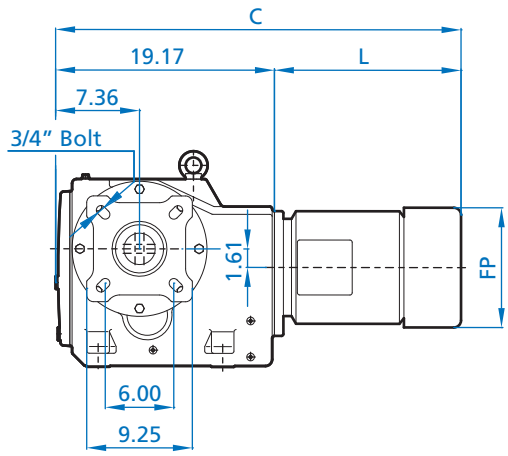


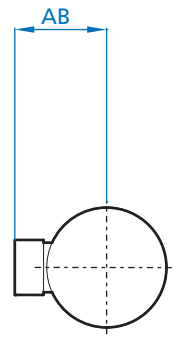
See page 228 for SCP CEMA drive shaft details**

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	20,14	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	23,72	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375

SK 9052.1 SCP + Motor
3” CEMA Drive Shaft



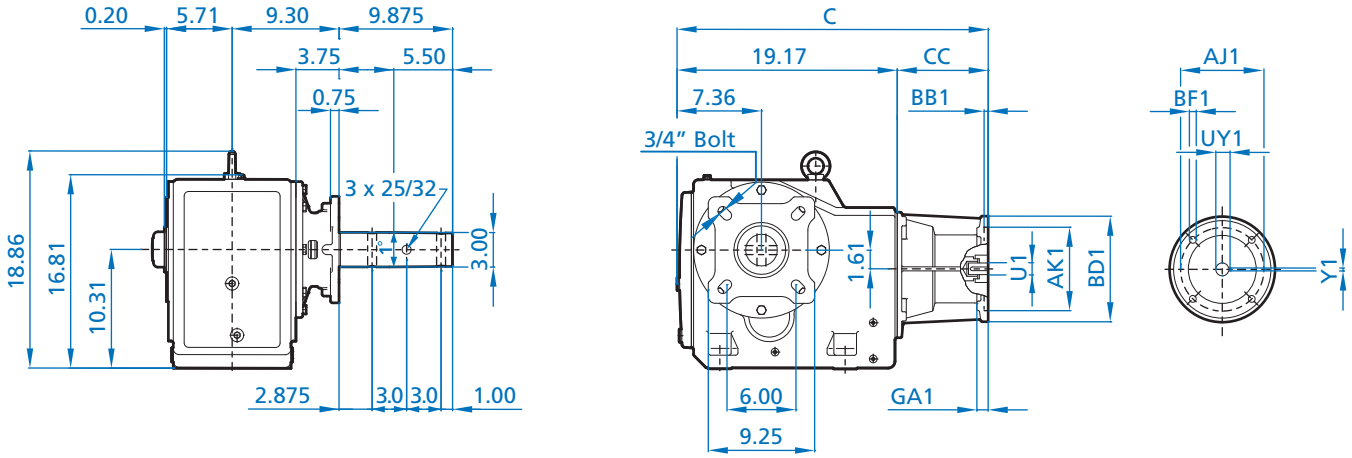




See page 228 for SCP CEMA drive shaft details**

Motor Type	Gearbox	Motor		
	C	L	FP	AB
90SP/LP	30,00	10,84	7,19	5,79
100LP/AP	31,22	12,06	7,90	6,65
112MP	33,08	13,93	8,87	7,05
132SP/MP	35,51	16,35	10,45	8,03
160MP	38,57	19,41	12,56	9,53
160LP	40,33	21,17	12,56	9,53
180MP/LP	43,69	24,17	14,26	10,04

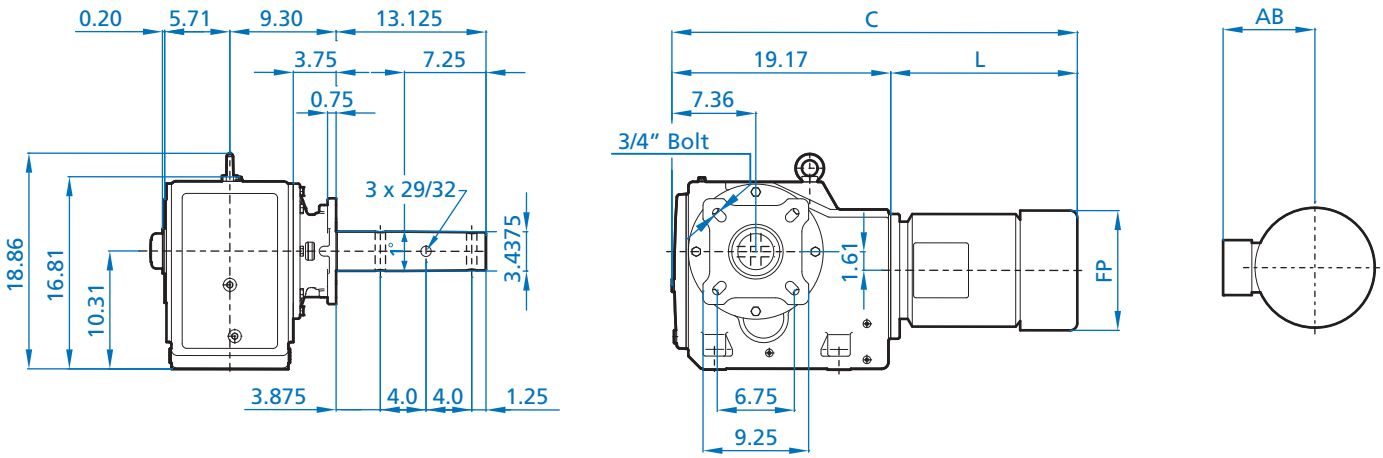
SK 9052.1 SCP + NEMA 3” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

NEMA	Gearbox	NEMA Input							Coupling		
C-Face Input	C	CC	AJ1	AK1	BB1	BD1	BF1	GA1	U1	UY1	Y1
56C	23,49	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	23,49	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	27,07	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	27,07	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	27,07	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	27,70	8,54	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500

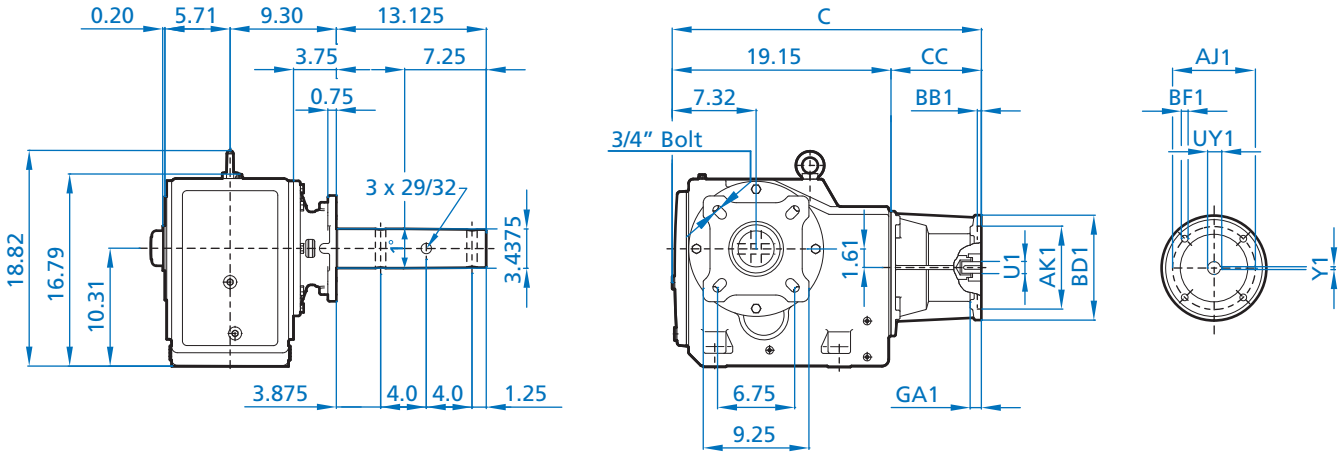
SK 9052.1 SCP + Motor
3-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

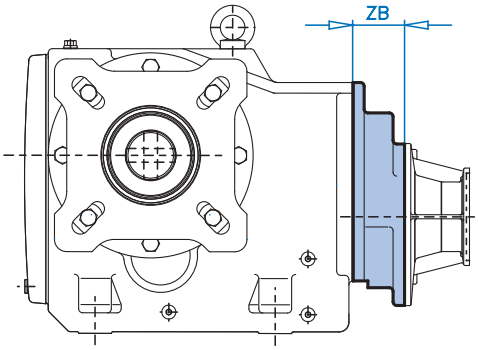
Motor Type	Gearbox	Motor		
	C	L	FP	AB
90SP/LP	30,00	10,84	7,19	5,79
100LP/AP	31,22	12,06	7,90	6,65
112MP	33,08	13,93	8,87	7,05
132SP/MP	35,51	16,35	10,45	8,03
160MP	38,57	19,41	12,56	9,53
160LP	40,33	21,17	12,56	9,53
180MP/LP	43,33	24,17	14,26	10,04

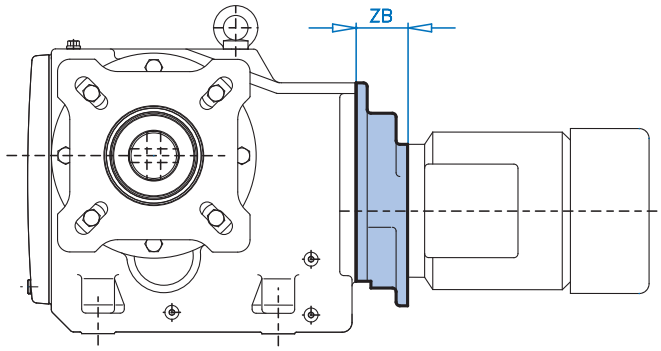
SK 9052.1 SCP + NEMA 3-7/16” CEMA Drive Shaft



See page 228 for SCP CEMA drive shaft details

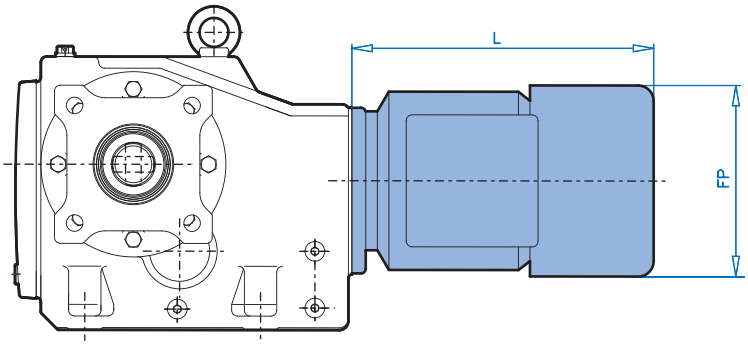
NEMA C-Face Input	Gearbox C	NEMA Input CC	AJ1	AK1	BB1	BD1	BF1	GA1	Coupling U1	UY1	Y1
56C	23,49	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,625	0,71	0,188
140TC	23,49	4,33	5,875	4,50	0,18	6,54	0,43	0,47	0,875	0,96	0,188
180TC	27,07	7,91	7,250	8,50	0,23	9,17	0,59	0,71	1,125	1,24	0,250
210TC	27,07	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,375	1,52	0,312
250TC	27,07	7,91	7,250	8,50	0,23	9,17	0,59	0,98	1,625	1,80	0,375
280TC	27,70	8,54	9,000	10,50	0,23	13,78	0,55	0,79	1,875	2,10	0,500

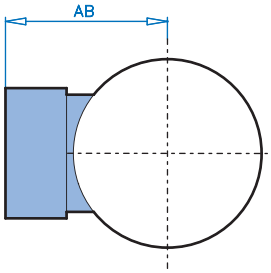




Bevel Model Type	ZB
9013.1	2.28
9023.1	2.28
9033.1	2.36
9043.1	2.72
9053.1	2.72

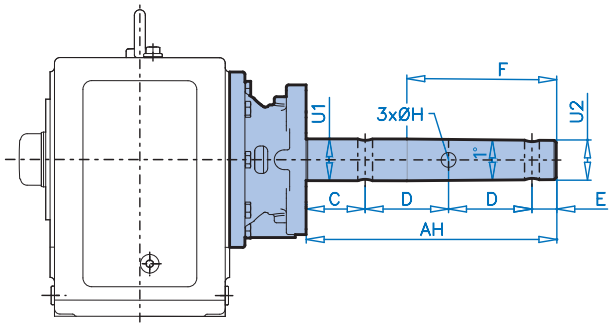
SCP + Motor
Terminal Box Dimensions

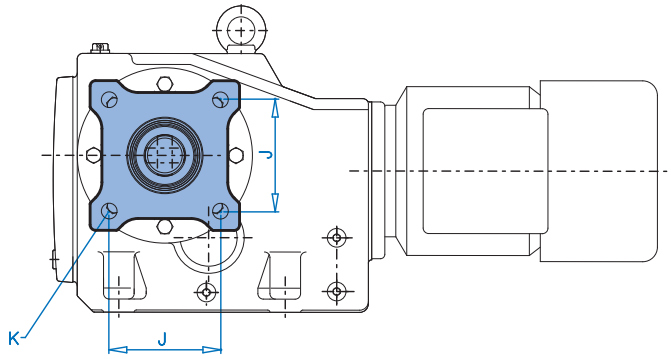




Motor Type	L	FP	AB
63S/L	7.73	5.09	4.51
71S/L	9.31	5.72	4.86
80S/L/LP	10.29	6.43	5.59
90SP/LP	11.87	7.19	5.79
100LP/AP	13.09	7.90	6.65
112MP	14.95	8.87	7.05
132SP/MP	16.35	10.45	8.03
160MP	19.41	12.56	9.53
160LP	21.17	12.56	9.53
180MP/LP	24.17	14.26	10.04

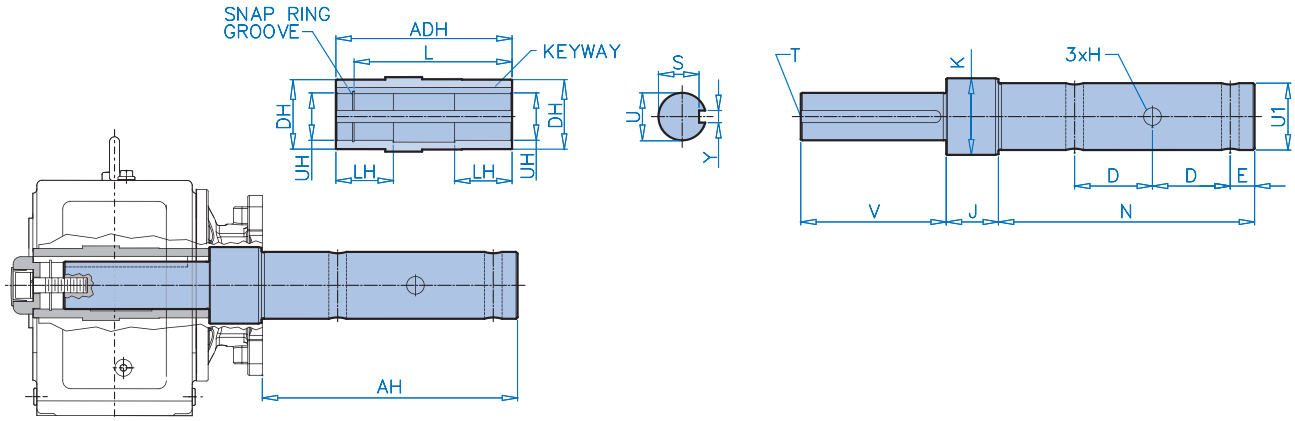
Helical-Bevel SCP
CEMA Drive Shaft Assembly





Shaft Size	Shaft								Flange	
	U1	U2	AH	C	D	E	F	H	J	K
1-1/2	1.5	1.41	9.00	2.125	3.0	0.875	5 3/8	17/32	4	9/16
2	2.0	1.91	9.00	2.125	3.0	0.875	5 3/8	21/32	5-1/8	11/16
2-7/16	2.4375	2.34	9.6875	2.75	3.0	0.9375	5 7/16	21/32	5-5/8	11/16
3	3.0	2.91	9.875	2.875	3.0	1.00	5 1/2	25/32	6	13/16
3-7/16	3.4375	3.31	13.125	3.875	4.0	1.25	7 1/4	29/32	6-3/4	13/16

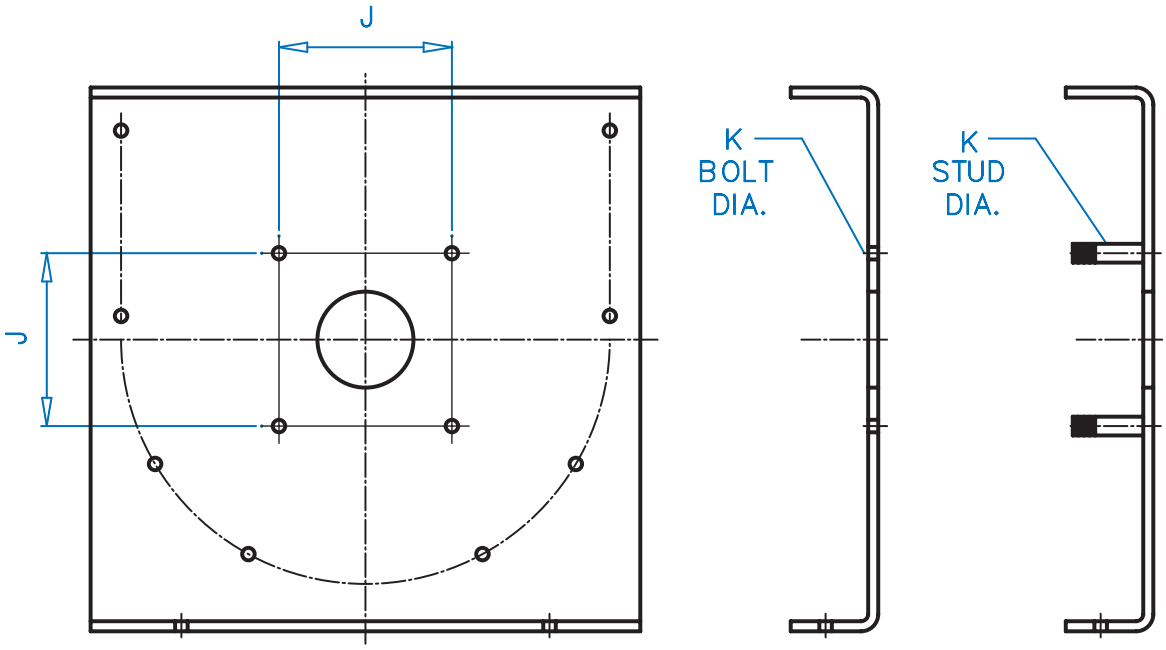
Helical Bevel SCP + NEMA CEMA Drive Shaft



Gear Size	Hollow Shaft					
	UH		ADH	L	LH	DH
SK 9012.1 SCP	1.375	+0.0010 -0.0000	5.83	4.60	1.97	1.97
SK 9022.1 SCP	1.500	+0.0010 -0.0000	7.09	5.86	2.36	2.17
SK 9032.1 SCP	2.000	+0.0010 -0.0000	8.27	7.01	2.76	2.76
SK 9042.1 SCP	2.375	+0.0012 -0.0000	9.45	7.97	3.15	3.15
SK 9052.1 SCP	2.750	+0.0012 -0.0000	11.81	10.33	3.94	3.94

	Shaft														
	U1	AH	D	E	H	N	J	K		U		V	S	Y	T	Key
SK 9012.1/	1-1/2	9	3	7/8	17/32	9.04	2.47	2.165	-0.0039 -0.0069	1.375	+0.0000 -0.0006	4.88	1.201	0.3125	5/8-11 x 1.5	5/16 x 5/16
SK 9013.1	2	9	3	7/8	21/32	9.04	2.85	2.559	-0.0039 -0.0069	1.375	+0.0000 -0.0006	4.88	1.201	0.3125	5/8-11 x 1.5	5/16 x 5/16
	2-7/16	9-11/16	3	15/16	21/32	9.73	2.85	2.559	-0.0039 -0.0069	1.375	+0.0000 -0.0006	4.88	1.201	0.3125	5/8-11 x 1.5	5/16 x 5/16
SK 9022.1/	1-1/2	9	3	7/8	17/32	9.04	2.40	2.165	-0.0039 -0.0069	1.500	+0.0000 -0.0006	6.14	1.289	0.3750	5/8-11 x 1.5	3/8 x 3/8
SK 9023.1	2	9	3	7/8	21/32	9.04	2.77	2.559	-0.0039 -0.0069	1.500	+0.0000 -0.0006	6.14	1.289	0.3750	5/8-11 x 1.5	3/8 x 3/8
	2-7/16	9-11/16	3	15/16	21/32	9.73	2.77	2.559	-0.0039 -0.0069	1.500	+0.0000 -0.0006	6.14	1.289	0.3750	5/8-11 x 1.5	3/8 x 3/8
SK 9032.1/	1-1/2	9	3	7/8	17/32	9.04	2.40	2.165	-0.0039 -0.0069	2.000	+0.0000 -0.0007	7.28	1.718	0.5000	5/8-11 x 1.5	1/2 x 1/2
SK 9033.1	2	9	3	7/8	21/32	9.04	2.77	3.150	-0.0039 -0.0069	2.000	+0.0000 -0.0007	7.28	1.718	0.5000	5/8-11 x 1.5	1/2 x 1/2
	2-7/16	9-11/16	3	15/16	21/32	9.73	2.77	3.150	-0.0039 -0.0069	2.000	+0.0000 -0.0007	7.28	1.718	0.5000	5/8-11 x 1.5	1/2 x 1/2
	3	9-7/8	3	1	25/32	9.91	2.77	3.150	-0.0039 -0.0069	2.000	+0.0000 -0.0007	7.28	1.718	0.5000	5/8-11 x 1.5	1/2 x 1/2
SK 9042.1/	2	9	3	7/8	21/32	9.04	2.86	3.937	-0.0047 -0.0081	2.375	+0.0000 -0.0007	8.58	2.114	0.6250	3/4-10 x 2	5/8 x 7/16
SK 9043.1	2-7/16	9-11/16	3	15/16	21/32	9.73	2.86	3.937	-0.0047 -0.0081	2.375	+0.0000 -0.0007	8.58	2.114	0.6250	3/4-10 x 2	5/8 x 7/16
	3	9-7/8	3	1	25/32	9.91	2.86	3.937	-0.0047 -0.0081	2.375	+0.0000 -0.0007	8.58	2.114	0.6250	3/4-10 x 2	5/8 x 7/16
	3-7/16	13-1/8	4	1-1/4	29/32	13.16	2.86	3.937	-0.0047 -0.0081	2.375	+0.0000 -0.0007	8.58	2.114	0.6250	3/4-10 x 2	5/8 x 7/16
SK 9052.1/	3	9-7/8	3	1	25/32	9.91	3.36	3.937	-0.0047 -0.0081	2.750	+0.0000 -0.0006	10.94	2.402	0.6250	3/4-10 x 2	5/8 x 5/8
SK 9053.1	3-7/16	13-1/8	4	1-1/4	29/32	13.16	3.36	3.937	-0.0047 -0.0081	2.750	+0.0000 -0.0006	10.94	2.402	0.6250	3/4-10 x 2	5/8 x 5/8

Screw Conveyor Mounting



Screw Conveyor mounting dimensions from CEMA 300-13 excerpts

Screw Diameter [in]	CEMA Drive shaft [in]	J Width [in]	K Bolt [in]	K Stud [in]
6	1-1/2	4	1/2	7/16
9	1-1/2	4	1/2	7/16
	2	5-1/8	5/8	9/16
12	2	5-1/8	5/8	9/16
	2-7/16	5-5/8	5/8	9/16
	3	6	3/4	3/4
14	2-7/16	5-5/8	5/8	9/16
	3	6	3/4	3/4
16	3	6	3/4	3/4
18	3	6	3/4	3/4
	3-7/16	6-3/4	3/4	3/4
20	3	6	3/4	3/4
	3-7/16	6-3/4	3/4	3/4
24	3-7/16	6-3/4	3/4	3/4

DRIVESYSTEMS

Motors

Motor Ordering Guide

NORD DRIVESYSTEMS

	Frame ❶	Size ❷	Poles ❹	Mounting ❸	Motor Options ❺	Brake Size ❻	Brake Options ❼
SK							
OR	Part Number						

Size & Frame Combinations ❶ ❷

Frame	Size			
63	S	L	-	-
71	S	L	-	-
80	S	-	-	-
80	L	LP	-	-
90	S	SP	-	-
100	L	LP	LA	AP
112	M	MP	-	-
132	S	SP	-	-
132	M	MP	-	-
160	S	SP	-	-
160	M	MP	-	-
160	L	LP	-	-
180	MX	-	-	-
180	LX	-	-	-
180	MP	-	-	-
180	LP	-	-	-
200	X	-	-	-
225	RP	-	-	-
225	SP	-	-	-
225	MP	-	-	-
250	WP	-	-	-
280	SP	MP	-	-
315	SP	MP	RP	LP

Available Mounting Combinations ❸

Integral	NEMA Foot		NEMA C-face		IEC B3	IEC B5	IEC B14			
X	-	-	56C	-	-	A140	C90	C105	C120	-
X	56	-	56C	-	B3-71	A160	C105	C120	C140	-
X	56	-	56C	-	B3-80	A200	C120	C140	C160	-
X	56	143T	56C	143TC	B3-80	A200	C120	C140	C160	-
X	145T	-	145TC	-	B3-90	A200	C120	C140	C160	-
X	182T	-	182TC	-	B3-100	A250	C120	C140	C160	C200
X	184T	-	184TC	-	B3-112	A250	C140	C160	C200	-
X	213T	-	213TC	-	B3-132	A300	C160	C200	-	-
X	215T	-	215TC	-	B3-132	A300	C160	C200	-	-
X	-	-	254TC	-	B3-160	A300	C200	-	-	-
X	-	-	256TC	-	B3-160	A300	C200	-	-	-
X	-	-	256TC	-	B3-160	A300	C200	-	-	-
X	-	-	284TC	-	-	A300	C200	-	-	-
X	-	-	286TC	-	-	A350	C200	-	-	-
X	-	-	284TC	-	B3-180	A350	-	-	-	-
X	-	-	286TC	-	B3-180	A350	-	-	-	-
X	-	-	-	-	-	A400	-	-	-	-
X	-	-	-	-	B3-225	A450	-	-	-	-
X	-	-	-	-	B3-225	A450	-	-	-	-
X	-	-	-	-	B3-225	A450	-	-	-	-
X	-	-	-	-	-	-	-	-	-	-
X	-	-	-	-	-	-	-	-	-	-
X	-	-	-	-	-	-	-	-	-	-

Poles ❹

Poles	60Hz [rpm]	50Hz [rpm]
4	1800	1500
2	3600	3000
6	1200	1000
4-2	1800/3600	1500/3000
8-2	1200/3600	1000/3000

Other

Duty
- ❍ Continuous S1
- ❍ Time Rated S2 [min]
- ❍ Intermittent S3 [%]

Enclosure
- ❍ IP55
- ❍ IP65
- ❍ IP66

Country of Use _____

Power _____ [hp/kW]

Efficiency Class
- ❍ Standard Efficient (60 min duty)
- ❍ Premium Efficient (PE/IE3) (P)

Standards
- ❍ North American [CUS]
- ❍ International [IEC]
- ❍ Other: _____

Inverter Duty Speed Range
- ❍ 5:1 (60-12Hz) (VR)
- ❍ 10:1 (60-6Hz) (VN)
- ❍ 20:1 (80-4Hz) (VW)
- ❍ 1000:1 (60-0Hz) (VZ-F)

Electrical Design
- ❍ 3-Phase
- ❍ Single Phase - ECR (60Hz)
- ❍ Single Phase - EAR1 (50Hz)
- ❍ Single Phase -EHB1 (50Hz)
- ❍ Single Phase - EST (50Hz)

Hazerdous Location
- ❍ None
- ❍ Class 1 Div 2 - Gas
- ❍ Class 2 Div 2 - Dust
- ❍ Global - ATEX

Motor Options ❺

Electrical Motor Options
- ❒ **TW** - Thermostat
- ❒ **TF** - Thermistor
- ❒ **SH** - Space Heater (select voltage)
  ❍ 110 Volt ❍ 230 Volt ❍ 460 Volt
- ❒ **ISO** H - Class H insulation
- ❒ **WU** - High Resistance Rotor

AC Drive Related Motor Options
- ❒ **F** - Blower Fan (200-575V 1 & 3 Phase)
- ❒ **FC** - Blower Cooling Fan (115V, 1 Phase)
- ❒ **IG__** - Incremental Encoder
- ❒ **IG__P** - Incremental Encoder with Plug
  IG & IG__P Options:
  Logic: ❍ TTL ❍ HTL ❍ Push-pull
  Supply: ❍ 4-6V ❍ 10-30V ❍ 5-30V
  PPR: ❍ 1024 ❍ 2048 ❍ 4096
- ❒ **AG** - Absolute Encoder
  AG Options: Turns [ ] Step [ ]
  AG Bus System: [ ]
- ❒ **MG** -Magnetic Encoder **PPR:** ❍ 1 ❍ 32 ❍ 256

Environmental Motor Options
- ❒ **RD** - Canopy Drip Cover
- ❒ **RDD** - Double Fan Cover
- ❒ **KB** - Condensation Drain Holes (plugged)
- ❒ **KBO** - Condensation Drain Holes (open)
- ❒ **IP66** - IP66 Enclosure Protection
- ❒ **KKV** - Terminal Box Sealed with Resin
- ❒ **AICM** - Additional Insulation
- ❒ **EP** - Epoxy Dipped Windings

Additional Motor Options
- ❒ **OL** - Totally Enclosed Non-Ventilated (TENV)
- ❒ **OL/H** - (TENV) Without Fan Cover
- ❒ **WE** - Second Shaft Extension (Fan Side)
- ❒ **HR** - Hand Wheel
- ❒ **Z** - High Inertia Cast Iron Fan
- ❒ **RLS** - Motor Backstop (rotation viewing fan)
  ❍ Clockwise ❍ Counter-Clockwise
- ❒ **EKK** - Small Terminal Box
- ❒ **MS** - Quick Power Plug Connector

Brake Options ❼

- ❒ **HL** - Hand Release Lever
- ❒ **FHL** - Locking Hand Release Lever
- ❒ **HLH** - Hand Release Lever with Hole
- ❒ **RG** - Corrosion Protected Brake
- ❒ **SR** - Dust & Corrosion Protected Brake
- ❒ **ADJ**_____**Nm** - Brake Torque Adjustment
- ❒ **BIP66** - IP66 Brake Enclosure
- ❒ **MIK** - Micro-switch
- ❒ **BSH** - Brake Heating/Bifilar Coil
- ❒ **NRB1** - Quiet Brake Release
- ❒ **NRB2** - Quiet Brakemotor Operation
- ❒ **DBR** - Double Brake
- ❒ **G...P** - High Performance Rectifier (See Rectifier Selection Below)
- ❒ **G...V** - Sealed Rectifier (See Rectifier Selection Below)
- ❒ **IR** - Current Sensing Relay

Brake Size ❻

❍ BRE 5	❍ BRE 150
❍ BRE 10	❍ BRE 250
❍ BRE 20	❍ BRE 400
❍ BRE 40	❍ BRE 800
❍ BRE 60	❍ BRE 1200
❍ BRE 100	

Rectifier Selection

Rectifier Wiring
- ❍ Across the line (from terminal box)
- ❍ Separate power source (AC vector drive) (Soft starter)

Brake Supply Voltage

❍ 24 VDC	❍ 460 VAC
❍ 115 VAC	❍ 500 VAC
❍ 200 VAC	❍ 575 VAC
❍ 230 VAC	❍ Other ____
❍ 400 VAC	

Braking Method*

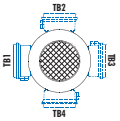
❍ Method 10	❍ Method 35
❍ Method 15	❍ Method 40
❍ Method 20	❍ Method 45
❍ Method 25	❍ Method 50
❍ Method 30	❍ Method 55

Paint Options
- ❍ Unpainted Aluminum Alloy
- ❍ Stainless Steel Paint
- ❍ NSD+ (gray)
- ❍ NSD+W (white)
- ❍ NSD-X3 (gray)
- ❍ NSD-X3W (white)
- ❍ Special _____

Voltage & Frequency

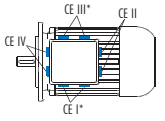
Single Speed Motors	Two Speed Motors
❍ 230/460V-60Hz	❍ 460V-60Hz
❍ 208-230/460V-60Hz	❍ 230V-60Hz
❍ 575V-60Hz	❍ 575V-60Hz
❍ 400V-50Hz	❍ 400V-50Hz
❍ Other _____	❍ Other _____

Terminal Box Position
- ❍ TB1
- ❍ TB2
- ❍ TB3
- ❍ TB4



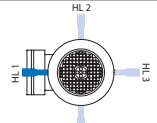
Mtg. Pos. M1 Shown

Conduit Entry Location
- ❍ CE I *
- ❍ CE II
- ❍ CE III *
- ❍ CE IV



*Brakemotor Mtg. Pos. M1 Shown

Hand Release Position
- ❍ HL1
- ❍ HL2
- ❍ HL3
- ❍ HL4



Motors

Standards

All motors are in accordance with existing standards and regulations:

NEMA MG 1 - Motors and Generators:

- Electrical performance
- Motors for operation on variable AC vector drive

UL 1004 – Electric Motors

CSA C22.2 No. 100-04 - Motors and Generators:

Industrial Products IEC 60034 - parts 1, 5, 6, 8, 9, 11, 12 and 14.

- Part 1 – General rules
- Part 5 – Types of enclosures
- Part 6 – Types of cooling
- Part 8 – Terminal lead designations and sense of rotation
- Part 9 – Noise limits
- Part 11 – Integrated thermal protection
- Part 12 – Starting Performance
- Part 14 – Mechanical vibration

Inverter/Vector Duty

NORD single–speed motors are Inverter/Vector Duty. The construction of the NORD motors insulating system takes into account the non-sinusoidal wave forms produced by variable frequency drives. NORD uses high grade insulating components and extra first turn protection as well as double coated wire to ensure long service life when connected to AC vector drives. NORD motors can produce full torque at zero speed if properly sized, selected and controlled.

INVERTER DUTY MOTOR

IEC 60038 – Standard voltages

CE	NORD motors carry the CE mark in accordance with the Low Voltage Directive and, if installed properly, the Electromagnetic Compatibility Directive (EMC). The CE mark is required for installation in European Union (EU) states.
®	Many NORD motors from frame size 63 to 315 are an Underwriters Laboratories Recognized component per UL standard 1004. ■ File number E191510
C US	The Canadian Standards Association CUS mark indicates that CSA has tested and approved NORD motors according to both US and Canadian standards. It is equivalent to the Underwriters Laboratories RU recognition mark (UL standard 1004) and the CSA mark according to CSA Standard C22.2 No. 100-04 ■ File number LR112560
ee	NORD Energy Efficient motors up to frame 180 have been evaluated by the United States Department of Energy and recieved a Certificate of Compliance to certify the efficiency ratings. The certificate of compliance is CC 092B.
pe	NORD Premium Efficient motors up to frame 180 have been evaluated by the United States Department of Energy and recieved a Certificate of Compliance to certify the efficiency ratings. The certificate of compliance is CC 092B.
energy verified	NORD energy efficient motors carry the CSA energy efficiency verification mark. This mark ensures that CSA has verified that NORD motors are designed and manufactured to meet energy efficiency requirements number EEV112560.
	China Compulsory Certification Nr.: 200 701 040 125 842 9
	GOST® certificate for the import of motors into Russia.

Global Standards and Directives

Energy savings, lowering operational costs, and protecting the environment are all important to our future. That is precisely why NORD supports global efforts to increase energy efficiency and minimize the human impact on our environment.

NORD's energy-saving motors and brake motors include premium efficient designs and optimal designs for intermittant duty applications. All NORD motors are inverter-duty that obtain improved dynamic performance and increased system efficiencies when paired with our high performance AC-drives.

NORD is able to provide motors that satisfy the latest global energy efficiency directives. Energy efficiency overviews by region may be found on the NORD website by clicking on "Products" then "Motor Efficiency Classes".

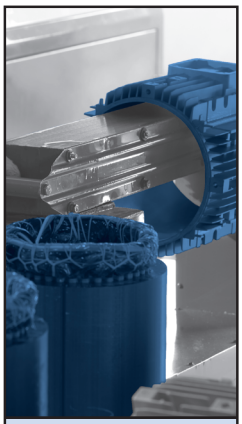
This catalogue has been produced with the greatest care on the most current legislation
However, NORD cannot accept liability for technical changes in regards to global requirements.

Standard Motor Construction

Our motors are an important part of our ability to provide a high quality, competitive, and complete drive system. NORD motors are designed for across the-line or inverter/vector duty operation. NORD motors are constructed with superior insulating methods to provide excellent moisture protection, low temperature rise, and voltage spike resistance in accordance with NEMA MG1. Low rotor inertia and high starting torque allow peak performance in difficult applications involving high start/stop cycling rates or rapid acceleration/deceleration. Standard motors offer protection from the elements with many standard and optional design features.

NORD offers a variety of high performance motors including:

- NORD continuous duty, premium efficient motors (1–75 HP) satisfy global energy efficiency mandates, NORD's premium efficient motors provide maximum energy savings, offer low rotor inertia, provide quick starts & stops, & handle high cycle rates in dynamic applications.
- NORD 60 minute duty motors (1 - 40 HP) motors are labeled "60 MIN" duty & are perfectly suited for intermittent or time limited applications. These motors offer higher cycling capacity, lower motor rotor inertia, & lower energy consumption while starting or stopping, as comparedto the NORD Premium Efficient motors. NORD can also provide motors that satisfy other periodic duty or intermittent duty ratings.
- NORD continuous duty, standard efficient motors (0.16 – 0.75 HP) satisfy global energy efficiency mandates. Like 60 minute duty motors, these motors offer higher cycling capacity, lower motor rotor inertia, and lower energy consumption while starting or stopping, as compared to the NORD Premium Efficient motors.

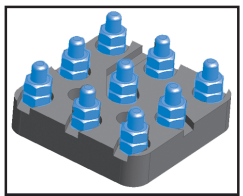


Motor Production

Motor Production

Some of the standard design benefits include:

- Shaft lip seals on both ends of the motor shafts.
- Stator to endbell connections sealed to exclude moisture.
- Double coated magnetic wire insulation.
- Inverter/vector duty insulation system conforms to NEMA MG1, section 31.4 voltage spikes.
- Moisture resistant varnish dipped windings with improved varnish materials.
- Inorganic insulating components for tropical protection.
- Conduit box sealed with gaskets.
- Corrosion resistant alloy materials.
- Threaded cable entry holes.



9 Post Terminal Block

Asynchronous Low Voltage Motors

The motors listed in this catalogue are low voltage asynchronous motors, which can be used as gear motors or stand-alone motors.

Non-Sparking Fan

The standard NORD motor fan is a non-sparking design. The fan will also provide proper airflow in either direction of rotation.

Terminal Block

Each NORD motor uses a terminal block, which is a superior method of wire termination when compared to pigtail leads. A terminal block ensures long-term reliability of the power connections.

Inverter/Vector Duty – Voltage Spikes

All NORD motors are constructed with an insulating system designed to withstand the repeated voltage spikes generated by modern AC vector drives. The insulation system withstands the ratings in conformance with NEMA MG1 Section 31.4.4.2 Voltage Spikes.

$V_{peak} \leq 3.1 \times V_{rated}$ with a Rise time $\geq 0.1\mu s$.

Standard Design & Construction

Insulation System

Insulation System

The NORD motor insulation system is designed to provide a superior degree of protection. NORD utilizes the following insulation components:

- Magnet wire – double coated insulation
- Varnish dip impregnation
- Slot liners
- Phase paper & separators
- Top sticks
- Wire sleeve connectors

Other motor manufacturers eliminate some of these insulating components for cost reduction which leads to less reliability.

Tropical Protection (Anti-fungal)

As a standard the NORD motor insulation system is tropically protected. The insulating and construction components are made of inorganic materials that resist fungal growth.

Low Inertia

The motor inertia in all NORD motors is extremely low which allows for an increased dynamic motor control capability. Low motor inertia is a significant advantage when using NORD motors with AC vector drives or controllers. NORD motors have the ability to cycle more frequently and require less mechanical energy to start than the standard NEMA frame motors. This leaves more energy to start the load.

High Starting Torque

NORD motors produce a higher starting torque than what is required by NEMA standards. This is achieved through improved motor winding, rotor design and construction.

Service Factor

NORD standard motors that are rated 230/460V-60Hz and 332/575V-60Hz have a service factor of 1.15. All other motors have a service factor of 1.0 or as noted in the motor rating tables beginning on page 245.

Poles / speeds

NORD offers a variety of single and two speed motors in addition to the standard 4 pole motor. NORD single speed motors are inverter/vector duty rated, however, it is not recommended to run a NORD two speed motor with an AC vector drive.

Number of Poles	Synchronous Speed at 60Hz	Synchronous Speed at 50Hz
Single Speed Motors		
4	1800 rpm	1500 rpm
2	3600 rpm	3000 rpm
6	1200 rpm	1000 rpm
Two Speed Motors		
4-2 - single winding	1800/3600 rpm	1500/3000 rpm
8-2 - dual winding	900/3600 rpm	750/3000 rpm

Other speeds available upon request.

Voltage and Frequency Variation

Voltage and frequency variations are based upon the assumption that the nameplate horsepower will not be exceeded and that the motor temperature may increase. Standard allowable deviations are based upon the type of motor labeling.

Poles	Efficiency	50 Hz NORD Motors			60 Hz NORD Motors		
		Motor Size Range	Power Range	Nominal Voltage	Motor Size Range	Power Range	Nominal Voltage
4	Standard (IE1)	63 S/4 - 132 M/4	0.12 - 7.5 kW	230/400 V Δ/Y	63 S/4 - 200 LX/4	0.16 - 40 Hp	230/460 V Y/YY
		160 M/4 - 200 LX/4	11 - 30 kW	400/690 V Δ/Y			332/575 V Δ/Y
	Premium Efficient (IE3)	63 SP/4 - 132 MP/4	0.12 - 7.5 kW	230/400 V Δ/Y	80 LP/4 - 180LP/4	1 - 30 HP	230/460 V Y/YY
		160 MP/4 - 180 LP/4	11 - 22 kW	400/690 V Δ/Y			332/575 V Δ/Y
4-2	Standard (IE1)	63 S/4-2 - 160L/4-2	0.10/0.15 - 13/17 kW	400 V Δ/YY	63 S/4-2 - 132 M/4-2	0.13/0.20 - 8.7/10.7 HP	230V or 460V or 575V Δ/YY
8-2		71 S/8-2 WU - 132 M/8-2 WU	0.045/0.22 - 1.4/5.5 kW	400 V Y/Y	71 S/8-2 WU - 132 M/8/2 WU	0.06/0.3 - 1.9/7.4 HP	230V or 460V or 575V Y/Y

NEMA and CSA Labeled Motors

Variations are based upon the nominal utilization voltage, and not the service (supply) voltage as per ANSI C84.1. Voltage and frequency tolerances follow the guidelines set forth in NEMA MG-1.

Service Voltages	Utilization Voltages	Voltage Variation	Frequency Variation	Voltage/Frequency Variation
120V	115V	+/- 10%	+/- 5%	+/- 5%
208V	200V			
240V	230V			
480V	460V			
600V	575V			

50Hz CE Labeled Motors

Standard NORD motors are designed in accordance with IEC 60034-1, It is common practice to display the rated voltage on the motor nameplate. Alternatively, the allowable voltage range may be displayed on the motor nameplate. Allowable voltage and frequency variations are as specified in the table below:

Motor Voltage	Voltage Tolerance	Allowable Voltage Range	Frequency Variation
230/400V	+/- 5%	220-240 / 380-420V	+/- 2%
400/690V	+/- 5%	380-420 / 660-725V	+/- 2%

Voltage harmonization was introduced to the European Union in 1983, as part of IEC 60038 (formerly IEC 38). From 1995-2008 a transition period allowed motors to be labeled with the “harmonized voltage” however a reduced allowable voltage tolerance was permitted by the IEC 60038 standard as displayed in the table below:

Previous Motor Voltage	Harmonized Motor Voltage	Voltage Tolerance
220/380V	230/400V	+6 / -10%
240/415V	230/400V	+10 / -6%
380/660V	400/690V	+6 / -10%

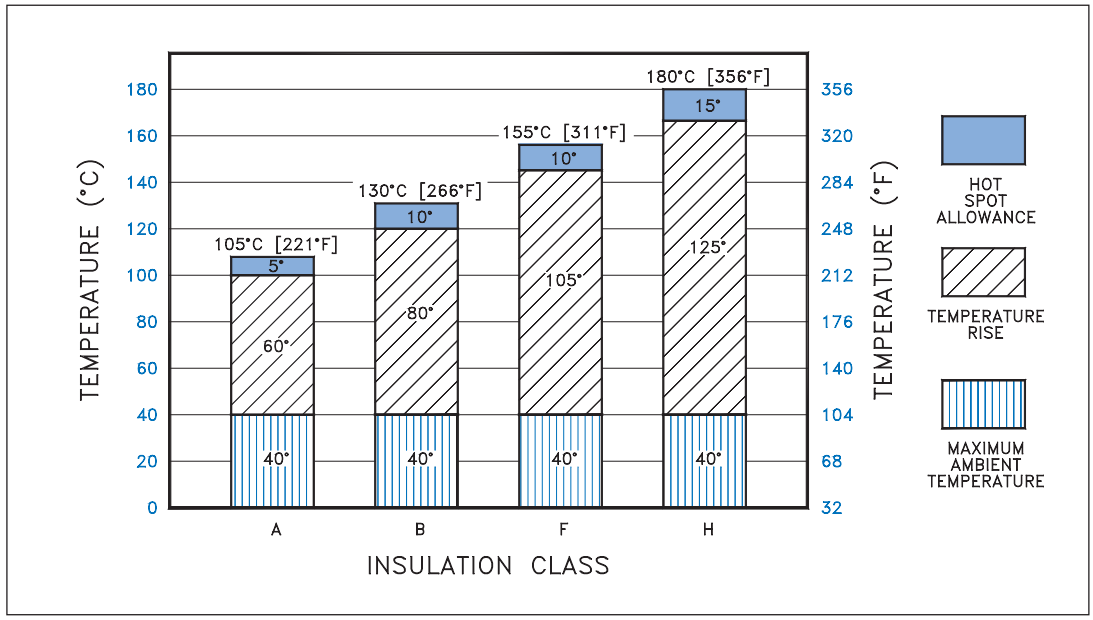
US and Canadian Standard (CUS)

CUS motor construction defines that NORD motors are constructed in accordance to UL 1004 (electric motors) and CSA C22.2 No. 100-04 (motors and generators) guidelines. This option is standard for 208, 230, 460, and 575 Volt operation at 60 Hz.

Motors nameplated with the CUS option will be marked and indicating that the Underwriters Laboratories and CSA have tested and approved NORD motors according to both US and Canadian standards.

Insulation Class

NORD motors are constructed with a thermal class F insulating system. Theses motors are also designed for a class B temperature rise of up to 80°C. The use of class F insulation with a class B temperature rise provides increased operating life. Motors constructed with class H insulation are also available as an option.



Ambient Temperature

NORD motors are designed to operate with a maximum ambient temperature of 40°C (104°F). If the motor's operating environment exceeds 40°C, the motor's nominal power P_n either needs to be de-rated (see table below) or upgraded insulation is required.

Ambient temp [°F]	113	122	131	140
Ambient temp [°C]	45	50	55	60
De-rate factor	0.96	0.92	0.87	0.82

Motor Rated Power = [P_n x De-rate factor]

Elevation

NORD motors are designed to operate at an elevation of up to 3300 ft (1000 m) above sea level. At higher elevations the air is thinner resulting in less cooling capacity. If the motor's installation elevation exceeds 3300 ft (1000 m), the motor's nominal power (P_n) either needs to be de-rated (see table below) or upgraded insulation systems need to be considered.

Altitude [ft]	5000	6500	8200	10000	11500	13000
Altitude [m]	1500	2000	2500	3000	3500	4000
De-rate Factor	0.97	0.94	0.90	0.86	0.83	0.80

Motor Rated Power = [P_n x De-rate factor]

Enclosure

The NORD standard motors are provided with Totally Enclosed Fan-Cooled (TEFC) with an IP55 enclosure rating. Other enclosures are available, including Totally Enclosed Non-Ventilated (TENV), Totally Enclosed Blower-Cooled (TEBC), and IP66.

The motor integral cooling fan provides proper air flow in either direction of rotation. The IEC cooling classification is IC 411 according to IEC 60034-6.

	1st digit Foreign body protection		**2nd digit Water protection**
0	No protection	**0**	No Protection
1	Protected against solid objects 50mm (2 in) in diameter and larger	**1**	Protected against dripping water
2	Protected against solid objects 12 mm (1/2 in) in diameter and larger	**2**	Protected against dripping water up to a 15 degree angle
3	Protected against solid objects 2.5 mm (0.1 in) in diameter and larger	**3**	Protection against sprayed water
4	Protected against solid objects 1 mm (0.04 in) in diameter and larger	**4**	Protection against splashed water
5	Protected against dust	**5**	Protection against water jets
6	Dust tight	**6**	Protection against high pressure water jets
7	--	**7**	Protection against intermittent submersion in water
8	--	**8**	Protection against continuous submersion in water

Duty Classes

The following duty types are defined in IEC 60034-1.

Duty Type	Explanation Excerpts
S1	Continuous operation at a constant load, the motor reaches thermal equilibrium
S2	Short-time operation at a constant load for a given time followed by a time of rest until the motor is completely cooled down to ambient temperature. Example: S2-10 minutes Recommended values for determination: 10, 30 min.
S3	Sequential intermittent operation, identical run and rest cycles with a constant load. Temperature equilibrium is never reached. Starting current has little effect on temperature rise. The cyclic duration factor (cdf) indicates the portion of operation time in relation to a complete duty cycle. The typical duty cycle time is 10 minutes, unless otherwise specified. Example: S3-40% Recommended values for determination: 25, 40, 60%
S6	Continuous operation with intermittent load sequential, identical cycles of running with constant load and running with no load. No rest periods. Example: S6-40% Recommended values for determination: 25, 40, 60%

Power Increasing Factor for Short-term & Intermittent Operation

Motor ratings in this catalog are based on continuous duty operation (S1). If a motor is designed for S1 duty, but is to be operated for short-time or intermittent operation it can be subjected to higher loads. The available motor power can be raised above the motor rated power by the “increasing factor” in the table below.

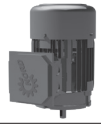
Duty Type			Increasing Factor
S2	Operating time	10 min	1.40
		30 min	1.15
S3	Cyclic duration factor (cdf)	25%	1.33
		40%	1.18
		60%	1.08
S6	Cyclic duration factor (cdf)	25%	1.45
		40%	1.35
		60%	1.15

Motor Rated Power = [P_n x Increasing factor]

Protective Features

All NORD Motors and Speed Reducers are constructed to provide a high degree of protection against wet and severe environments. NORD motors and speed reducers are sealed against moisture ingress and use corrosion and moisture resistant components. NORD has recently made many enhancements in the motor and gear units standard construction to provide improved environmental protection. Many of the standard protection features of the NORD units are only available at an additional cost from other motor and gear drive suppliers. NORD designs all gearmotors, speed reducers and motors for installation in harsh industrial, commercial and municipal installation environments.

Motors for Indoor Operation - Option Codes

	Dry Conditions	Wet or Humid Conditions
Ambient Temp. Fluctuation	–	KB, SH
Paint	–	NSD+
Vertical Motor Mount 	RD	RDD

Motors for Outdoor Operation - Option Codes

	Sheltered from the Elements	Exposed to the Elements
Ambient Temp. Fluctuation	KB, SH	KB, SH, KKV
Paint	NSD+	NSDx3
Vertical Motor Mount 	RD	RDD

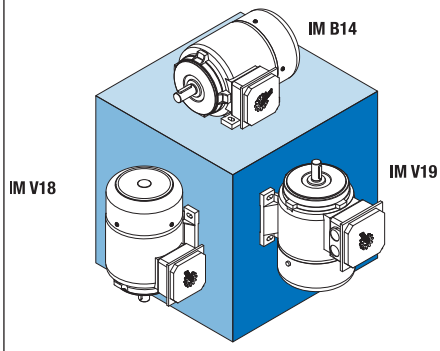
Option Code Key

KB	Condensation Drain Holes - Plugged
SH	Space Heater
KKV	Terminal Box Sealed with Resin
NSD+	NORD Severe Duty Paint
NSDx3	NORD Severe Extreme Duty X3 Paint
RD	Canopy Drip Cover
RDD	Double Fan Cover

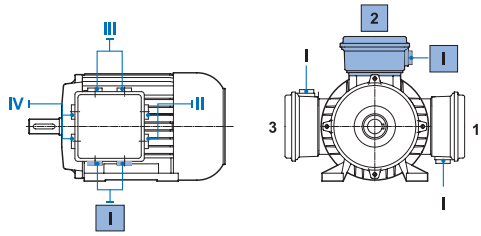
Mounting Positions

The motor mounting position helps to determine the use of specific options as well as help specify the terminal box location as well as the conduit entry location. However, unless a drip cover is used for shaft-up or shaft-down applications, drip-proof motors must be mounted in the horizontal or sidewall position to meet its enclosure definition. If considering any mounting positions that are not shown as catalog-standard options, it is critical that the customer consult with NORD prior to ordering. When mounting motors, secure the motor tightly to the mounting base of your equipment or onto to a flat and rigid surface.

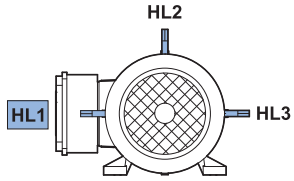
Mounting Positions Footed Motors



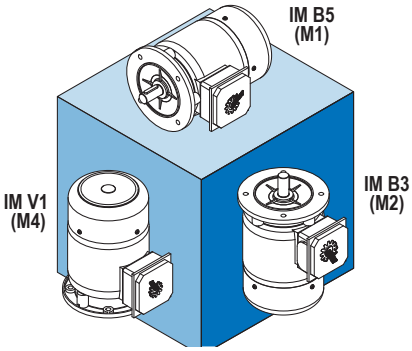
Terminal Block & Conduit Entry For Footed Motors



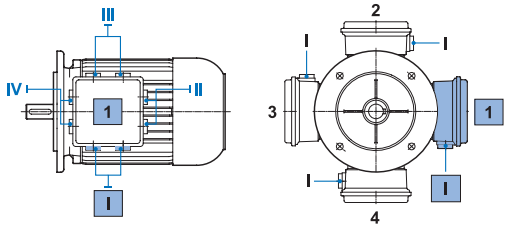
Hand Lever Positions For Footed Motors



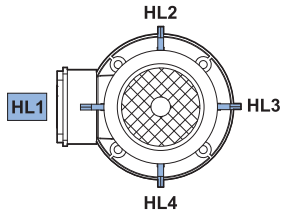
Mounting Positions Flanged Motors



Terminal Block & Conduit Entry For Flanged Motors



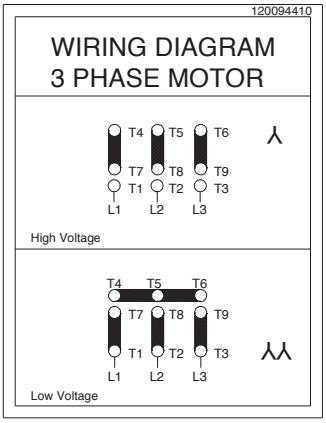
Hand Lever Positions For Flanged Motors



Motor Connection Diagrams

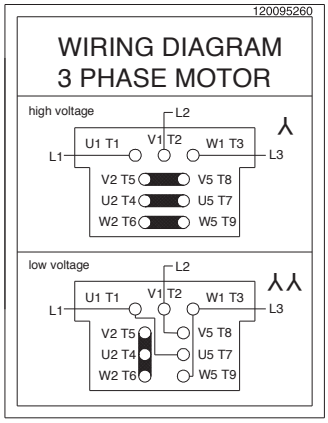
NORD Frames 63-225
230 / 460V, 60Hz, 3Ø | 200 / 400V, 50Hz, 3Ø

120094410



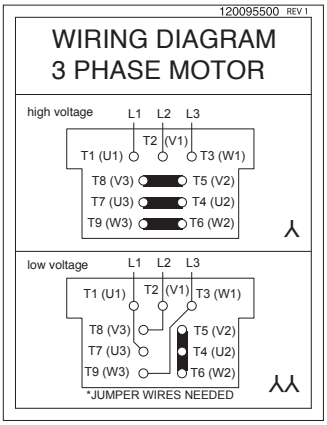
NORD Mfg by Siemens - Frames 200+
230 / 460V, 60Hz, 3Ø | 200 / 400V, 50Hz, 3Ø
190 / 380V, 60Hz, 3Ø

120095260



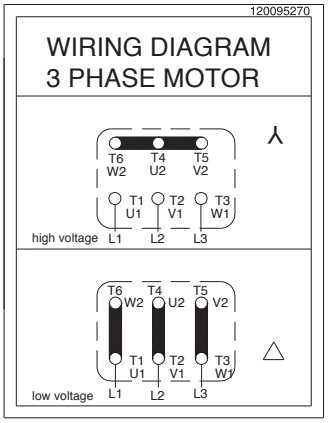
NORD Mfg by Siemens - Frames 200+
230 / 460V, 60Hz, 3Ø | 200 / 400V, 50Hz, 3Ø
190 / 380V, 60Hz, 3Ø

120095500 REV 1

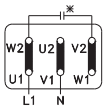


NORD Frames 63-225
460 / 800V, 60Hz, 3Ø | 230 / 400V, 50Hz, 3Ø
208 / 360V, 60Hz, 3Ø | 400 / 690V, 50Hz, 3Ø
332 / 575V, 60Hz, 3Ø

120095270



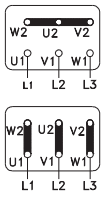
OPTION "F" 1 PH



230V
50 / 60 Hz

* CAPACITOR IS SUPPLIED

OPTION "F" 3 PH

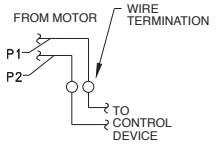


380-575V
50 / 60 Hz

220-332V
50 / 60 Hz

BLOWER COOLING FAN
"F" OPTION

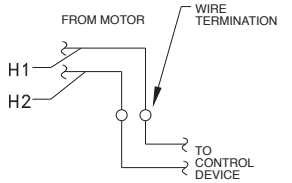
120095250



* MAX. OPERATING VOLTAGE 2.5V.
* SWITCH TEMP. 155°C
* RESPONSE TIME < 5 SECONDS

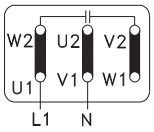
THERMISTOR
"TF" OPTION

120095240



SPACE HEATER
"SH" OPTION

120095220

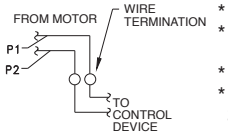


1 PHASE
115V*
50/60 Hz

* CAPACITOR IS SUPPLIED

BLOWER COOLING FAN
"FC" OPTION

120095450



* NC (NORMALLY CLOSED)
* CONTACTS RATED 1.6A AT 2.50 VAC
* 6-500 VAC RANGE
* AUTOMATIC RESET AT 30 ± 15°C TEMP. DROP

THERMISTATS
"TW" OPTION

120095230

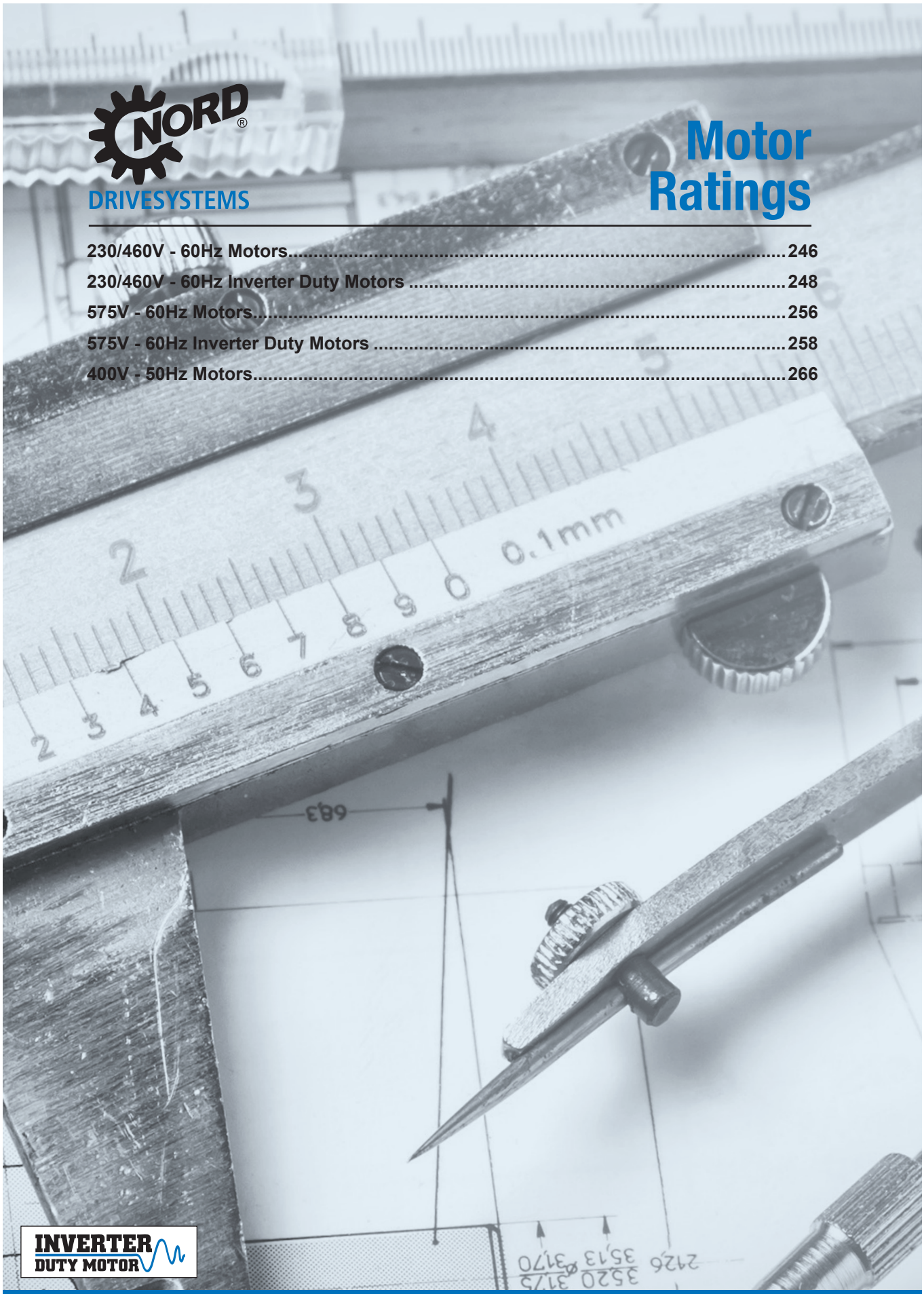
Motor Options & Construction

NORD motors are stocked in one of two ways. The first method is to stock a complete motor that is ready to be assembled to a gear reducer or shipped as a stand alone motor. The second method, the motor is assembled from component parts. The M Modify next to a motor option designates that the option can be added to a complete motor by simple modification. The B Build next to a motor option indicates that the motor will need to be built from component parts in order to incorporate the motor option.

Motor Options

Abbreviation	Description	M Modify	B Build
AG	Absolute Encoder		✓
AICM	Additional Insulation		✓
ECR	Single Phase Motors, 60Hz		✓
EKK	Small Terminal Box	✓	
EP	Epoxy Dipped Windings		✓
F	Blower Cooling Fan	✓	
FC	Blower Cooling Fan	✓	
HR	Hand Wheel		✓
IG...P	Incremental Encoder		✓
ISO H	Class H Insulation		✓
KB	Condensation Drain Holes - Plugged		✓
KBO	Condensation Drain Holes - Open		✓
KKV	Terminal Box Sealed with Resin		✓
MG	Magnetic Encoder		✓
MS	Quick Power Plug Connector	✓	
OL	Totally Enclosed Non-Ventilated	✓	
OL/H	Totally Enclosed Non Ventilated without Fan Cover		✓
RD	Canopy Drip Cover	✓	
RDD	Double Fan Cover	✓	
RLS	Motor Backstop		✓
RS	Round Motor Power Connectors		✓
SH	Space Heater		✓
TF	Thermistor		✓
TW	Thermostat		✓
WE	2nd Shaft Extension on Fan Side		✓
WU	High Resistance Rotor		✓
Z	High Inertia Cast Iron Fan		✓
-	IP65 Enclosure Protection	✓	
-	IP66 Enclosure Protection	✓	
-	Paint Coatings	✓	
-	Pre-Fabricated Motor Power Cable	✓	

For detailed motor option information please refer to the M7000 motor catalog



DRIVESYSTEMS

Motor Ratings

INVERTER DUTY MOTOR

Continuous Duty
230/460V - 60Hz

NORD DRIVESYSTEMS

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.15 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	P_n Full Load Power		Eff. Class	n_N Full-Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full-Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_K/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Efficiency	J_m Rotor Inertia	Wt. Weight
					230V	460V									
	[hp]	[kW]		[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4	0.16	0.12	-	1700	0.88	0.44	250%	F	5.93	2.7	3.5	0.66	52.0%	0.0050	7.9
63 L/4	0.25	0.18	-	1680	1.12	0.56	270%	E	9.38	2.3	2.5	0.71	57.0%	0.0066	9.3
71 S/4	0.33	0.25	-	1710	1.56	0.78	310%	G	12.2	2.4	2.7	0.64	63.0%	0.017	12
71 L/4	0.5	0.37	-	1720	1.90	0.95	350%	F	18.3	2.3	2.7	0.69	71.0%	0.020	14
80 S/4	0.75	0.55	-	1710	2.70	1.35	350%	F	27.6	2.2	2.3	0.71	72.0%	0.026	18
80 LP/4	1	0.75	pe	1730	3.14	1.57	650	K	36.4	3.5	3.8	0.70	86.1	0.045	22
90 SP/4	1.5	1.1	pe	1740	4.20	2.10	840	L	54.3	4.2	4.9	0.76	86.9	0.081	33
90 LP/4	2	1.5	pe	1730	5.60	2.80	760	K	72.9	3.9	4.3	0.78	87.0	0.093	37
100 LP/4	3	2.2	pe	1770	7.68	3.84	920	L	107	3.0	4.5	0.79	90.0	0.192	62
112 MP/4	5	3.7	pe	1755	13.0	6.50	950	L	180	4.1	4.6	0.80	90.3	0.332	78
132 SP/4	7.5	5.5	pe	1770	19.5	9.75	1020	M	267	4.7	5.0	0.77	91.7	0.759	121
132 MP/4	10	7.5	pe	1765	26.7	13.4	960	M	357	4.7	5.0	0.77	91.7	0.831	137
160 MP/4	15	11	pe	1770	35.6	17.8	880	K	534	3.2	3.8	0.84	92.5	1.59	205
160 LP/4	20	15	pe	1775	47.6	23.8	1080	M	710	4.3	4.7	0.85	93.0	2.18	269
180 MP/4	25	18.5	pe	1780	60.6	30.3	1010	L	885	3.9	4.0	0.82	93.6	3.80	342
180 LP/4	30	22	pe	1780	69.6	34.8	880	K	1062	3.3	3.4	0.85	93.6	3.80	342
225 RP/4	40	30	pe	1785	-	49.5	890	K	1420	3.4	3.8	0.81	94.5	11.63	694
225 SP/4	50	37	pe	1785	-	59.7	880	K	1752	3.0	3.7	0.82	94.6	12.81	728
225 MP/4	60	45	pe	1785	-	72.0	910	K	2131	3.3	3.6	0.83	95.2	15.90	805

pe CC092B · energy verified · c UL us · CE

Intermittent Duty 230/460V - 60Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.15 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	P_n Full Load Power		n_N Full-Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full-Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_K/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Efficiency	J_m Rotor Inertia	Wt. Weight
				230V	460V									
	[hp]	[kW]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4	1	0.75	1650	3.66	1.83	390%	G	38.2	2.2	2.3	0.74	70.0%	0.034	20
90 S/4	1.5	1.1	1660	4.84	2.42	490%	G	57.0	2.5	2.8	0.78	73.0%	0.056	26
90 L/4	2	1.5	1660	6.34	3.17	510%	H	75.9	2.5	2.8	0.80	74.0%	0.074	31
100 L/4	3	2.2	1705	9.00	4.50	490%	G	111	2.3	2.6	0.81	76.0%	0.107	40
100 LA/4	5	3.7	1725	15.2	7.60	510%	G	183	2.7	3.1	0.75	81.0%	0.142	46
132 S/4	7.5	5.5	1735	19.8	9.90	540%	G	272	2.4	2.7	0.82	85.0%	0.570	97
132 M/4	10	7.5	1735	25.8	12.9	630%	H	363	2.9	3.2	0.84	87.0%	0.759	121
160 M/4	15	11	1770	35.8	17.9	820%	J	534	2.9	3.8	0.85	90.7%	1.19	172
160 L/4	20	15	1760	48.4	24.2	850%	K	716	2.9	3.9	0.87	89.4%	1.59	205
180 MX/4	25	18.5	1760	59.0	29.5	880%	K	895	3.4	4.3	0.87	90.5%	1.90	236
180 LX/4	30	22	1765	74.4	37.2	890%	K	1071	3.6	4.4	0.80	92.8%	2.18	269
200 LX/4	40	30	1770	98.6	49.3	690%	H	1424	3.2	3.6	0.83	92.1%	3.80	342

Inverter Duty - Continuous Duty
5:1 Constant Torque (VR)
230/460V - 60-12Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power P_n Full Load Power [HP]	Power P_n Full Load Power [kW]	Eff. Class	Operating Range n_{60} Full Load Speed 60 Hz [rpm]	Operating Range n_{12} Full Load Speed 12 Hz [rpm]	Operating Range $T_{60\text{-}12}$ Full Load Torque 60-12 Hz [lb-in]	Motor Across the line data n_N Full Load Speed 60 Hz [rpm]	I_n Full-Load Current 230 V [A]	I_n Full-Load Current 460 V [A]	I_a/I_n Locked Rotor Current Ratio [%]	NEMA Code Letter	T_n Full Load Torque [lb-in]	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff. [%]	J_m Rotor Inertia [lb-ft²]	Wt. Weight [lb]
63 S/4-VR	0.16	0.12	-	1700	340	5.93	1700	0.88	0.44	250	F	5.93	2.7	3.5	0.66	52.0	0.0050	7.9
63 L/4-VR	0.25	0.18	-	1680	336	9.38	1680	1.12	0.56	270	E	9.38	2.3	2.5	0.71	57.0	0.0066	9.3
71 S/4-VR	0.33	0.25	-	1710	342	12.2	1710	1.56	0.78	310	G	12.2	2.4	2.7	0.64	63.0	0.017	12
71 L/4-VR	0.5	0.37	-	1720	344	18.3	1720	1.90	0.95	350	F	18.3	2.3	2.7	0.69	71.0	0.020	14
80 S/4-VR	0.75	0.55	-	1710	342	27.6	1710	2.70	1.35	350	F	27.6	2.2	2.3	0.71	72.0	0.026	18
80 LP/4-VR	1	0.75	pe	1730	346	36.4	1730	3.14	1.57	650	K	36.4	3.5	3.8	0.70	86.1	0.045	22
90 SP/4-VR	1.5	1.1	pe	1740	348	54.3	1740	4.20	2.10	840	L	54.3	4.2	4.9	0.76	86.9	0.081	33
90 LP/4-VR	2	1.5	pe	1730	346	72.9	1730	5.60	2.80	760	K	72.9	3.9	4.3	0.78	87.0	0.093	37
100 LP/4-VR	3	2.2	pe	1770	354	107	1770	7.68	3.84	920	L	107	3.0	4.5	0.79	90.0	0.192	62
112 MP/4-VR	5	3.7	pe	1755	351	180	1755	13	6.5	950	L	180	4.1	4.6	0.80	90.3	0.332	78
132 SP/4-VR	7.5	5.5	pe	1770	354	267	1770	19.5	9.75	1020	M	267	4.7	5.0	0.77	91.7	0.759	121
132 MP/4-VR	10	7.5	pe	1765	353	357	1765	26.7	13.4	960	M	357	4.7	5.0	0.77	91.7	0.831	137
160 MP/4-VR	15	11	pe	1770	354	534	1770	35.6	17.8	880	K	534	3.2	3.8	0.84	92.5	1.59	205
160 LP/4-VR	20	15	pe	1775	355	710	1775	47.6	23.8	1080	M	710	4.3	4.7	0.85	93.0	2.18	269
180 MP/4-VR	25	18.5	pe	1780	356	885	1780	60.6	30.3	1010	L	885	3.9	4.0	0.82	93.6	3.80	342
180 LP/4-VR	30	22	pe	1780	356	1062	1780	69.6	34.8	880	K	1062	3.3	3.4	0.85	93.6	3.80	342
225 RP/4-VR	40	30	pe	1785	357	1412	1785	-	49.5	890	K	1412	3.4	3.8	0.81	0.9	11.63	694
225 SP/4-VR	50	37	pe	1785	357	1765	1785	-	59.7	880	K	1765	3.0	3.7	0.82	0.9	12.81	728
225 MP/4-VR	60	45	pe	1785	357	2118	1785	-	72.0	910	K	2118	3.3	3.6	0.83	1.0	15.90	805

Inverter Duty - Intermittent Duty
5:1 Constant Torque (VR)
230/460V - 60-12Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line data											
	P_n Full Load Power		n_{60} Full Load Speed	n_{12} Full Load Speed	T_{60-12} Full Load Torque	n_N Full Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
			60 Hz	12 Hz	60-12 Hz	60 Hz	230 V	460 V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-VR	1	0.75	1650	330	38.2	1650	3.66	1.83	390	G	38.2	2.2	2.3	0.74	70.0	0.034	20
90 S/4-VR	1.5	1.1	1660	332	57.0	1660	4.84	2.42	490	G	57.0	2.5	2.8	0.78	73.0	0.056	26
90 L/4-VR	2	1.5	1660	332	75.9	1660	6.34	3.17	510	H	75.9	2.5	2.8	0.80	74.0	0.074	31
100 L/4-VR	3	2.2	1705	341	111	1705	9.00	4.50	490	G	111	2.3	2.6	0.81	76.0	0.107	40
100 LA/4-VR	5	3.7	1725	345	183	1725	15.2	7.62	510	G	183	2.7	3.1	0.75	81.0	0.142	46
132 S/4-VR	7.5	5.5	1735	347	272	1735	19.8	9.90	540	G	272	2.4	2.7	0.82	85.0	0.570	97
132 M/4-VR	10	7.5	1735	347	363	1735	25.8	12.9	630	H	363	2.9	3.2	0.84	87.0	0.759	121
160 M/4-VR	15	11	1770	354	534	1770	35.8	17.9	820	J	534	2.9	3.8	0.85	90.7	1.19	172
160 L/4-VR	20	15	1760	352	716	1760	48.4	24.2	850	K	716	2.9	3.9	0.87	89.4	1.59	205
180 MX/4-VR	25	18.5	1760	352	895	1760	59.0	29.5	880	K	895	3.4	4.3	0.87	90.5	1.90	236
180 LX/4-VR	30	22	1765	353	1071	1765	74.4	37.2	890	K	1071	3.6	4.4	0.80	92.8	2.18	269
200 LX/4-VR	40	30	1770	354	1424	1770	98.6	49.3	690	H	1424	3.2	3.6	0.83	92.1	3.80	342

Inverter Duty - Continuous Duty
10:1 Constant Torque (VN)
230/460V - 60-6Hz

NORD DRIVESYSTEMS

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power P_n Full Load Power		Eff. Class	Operating Range n_{60} Full Load Speed	n_6 Full Load Speed	T_{60-6} Full Load Torque	Motor Across the line data n_N Full Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
				60 Hz	6 Hz	60-6 Hz	60 Hz	230 V	460 V									
	[HP]	[kW]		[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4-VN	0.12	0.09	-	1720	172	4.40	1720	0.76	0.38	290	J	4.40	3.6	4.7	0.57	52.0	0.005	7.9
63 L/4-VN	0.16	0.12	-	1720	172	5.86	1720	0.90	0.45	335	J	5.86	3.7	4.0	0.64	52.0	0.007	9.3
71 S/4-VN	0.25	0.18	-	1740	174	9.06	1740	1.06	0.53	454	J	9.06	3.2	3.6	0.70	63.0	0.017	11.9
71 L/4-VN	0.33	0.25	-	1745	175	11.9	1745	1.48	0.74	449	K	11.9	3.5	4.2	0.64	65.0	0.020	13.9
80 S/4-VN	0.50	0.37	-	1745	175	18.1	1745	2.79	1.40	338	J	18.1	3.4	3.5	0.46	73.0	0.026	17.6
80 LP/4-VN	0.75	0.55	pe	1750	175	27.0	1750	2.32	1.16	881	M	27.0	4.7	5.1	0.71	85.6	0.045	22
90 SP/4-VN	1	0.75	pe	1760	176	35.8	1760	3.34	1.67	1057	R	35.8	6.4	7.4	0.65	86.3	0.081	33
90 LP/4-VN	1.5	1.1	pe	1755	176	53.9	1755	4.59	2.30	926	N	53.9	5.3	5.8	0.70	87.5	0.093	37
100 LP/4-VN	2	1.5	pe	1780	178	70.8	1780	5.72	2.86	1234	R	70.8	4.5	6.8	0.73	89.9	0.18	56
112 MP/4-VN	3	2.2	pe	1775	178	107	1775	9.33	4.67	1323	S	107	6.9	7.8	0.67	89.8	0.30	78
132 SP/4-VN	5	3.7	pe	1780	178	177	1780	15.7	7.9	1265	R	177	7.1	7.5	0.65	91.7	0.75	121
132 MP/4-VN	7.5	5.5	pe	1775	178	266	1775	21.5	10.8	1192	P	266	6.3	6.7	0.71	92.0	0.84	137
160 MP/4-VN	10	7.5	pe	1780	178	354	1780	27.6	13.8	1134	N	354	4.8	5.7	0.73	92.4	1.59	205
160 LP/4-VN	15	11	pe	1780	178	531	1780	38.4	19.2	1338	P	531	5.7	6.3	0.78	93.2	2.18	269
180 MP/4-VN	20	15	pe	1785	179	706	1785	49.6	24.8	1234	N	706	4.9	5.0	0.81	93.6	3.08	302
180 LP/4-VN	25	18.5	pe	1785	179	883	1785	59.7	29.9	1026	L	883	4.0	4.1	0.83	94.0	3.80	342
225 RP/4-VN	30	22	pe	1790	179	1056	1790	-	40.0	1101	N	1056	4.5	5.1	0.74	94.5%	11.63	694
225 SP/4-VN	40	30	pe	1790	179	1408	1790	-	50.6	1038	M	1408	3.8	4.6	0.78	94.8%	12.81	728
225 MP/4-VN	50	37	pe	1790	179	1760	1790	-	62.1	1055	M	1760	4.0	4.3	0.79	95.3%	15.90	805

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Inverter Duty - Intermittent Duty
10:1 Constant Torque (VN)
230/460V - 60-6Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line data											
	P_n Full Load Power		n_{60} Full Load Speed	n_6 Full Load Speed	$T_{60\text{-}6}$ Full Load Torque	n_N Full Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
			60 Hz	6 Hz	60-6 Hz	60 Hz	230 V	460 V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-VN	0.75	0.55	1740	174	27.2	1740	3.84	1.92	371	J	27.2	3.1	3.2	0.51	72.0	0.034	19.8
90 S/4-VN	1	0.75	1760	176	35.8	1760	3.90	1.95	609	L	35.8	4.0	4.5	0.65	74.0	0.056	26.5
90 L/4-VN	1.5	1.1	1750	175	54.0	1750	4.86	2.43	666	K	54.0	3.5	3.9	0.76	76.0	0.074	30.9
100 L/4-VN	2	1.5	1760	176	71.6	1760	7.26	3.63	608	K	71.6	3.6	4.0	0.68	76.0	0.11	39.7
100 LA/4-VN	3	2.2	1760	176	107	1760	13.0	6.48	598	M	107	4.6	5.3	0.50	86.0	0.14	46.3
132 S/4-VN	5	3.7	1775	178	178	1775	13.9	6.96	768	K	178	3.7	4.1	0.78	86.0	0.57	97.0
132 M/4-VN	7.5	5.5	1770	177	267	1770	20.5	10.2	794	K	267	3.9	4.4	0.78	88.0	0.76	121
160 M/4-VN	10	7.5	1780	178	354	1780	26.9	13.4	1092	N	354	4.4	5.7	0.77	90.4	1.19	172
160 L/4-VN	15	11	1775	178	533	1775	37.9	18.9	1085	M	533	3.9	5.2	0.81	91.2	1.59	205
180 MX/4-VN	20	15	1775	178	710	1775	51.1	25.6	1015	M	710	4.3	5.4	0.80	91.5	1.90	236
180 LX/4-VN	25	18.5	1775	178	888	1775	69.1	34.5	958	M	888	4.3	5.3	0.74	91.4	2.18	269
200 LX/4-VN	30	22	1785	179	1059	1785	85.0	42.5	801	L	1059	4.3	4.8	0.72	92.4	3.80	342

Inverter Duty - Continuous Duty
20:1 Constant Torque (VW)
230/460V - 80-4Hz

Inverter duty • Induction motor • TEBC
Synchronous speed 1800rpm @ 80Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power P_n Full Load Power		Eff. Class	Operating Range n_{80} Full Load Speed	n_4 Full Load Speed	T_{80-4} Full Load Torque	Motor Across the line data n_N Full Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
				80 Hz	4 Hz	80-4 Hz	60 Hz	230 V	460 V									
	[HP]	[kW]		[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4-VW	0.16	0.12	-	2250	113	4.48	1700	0.88	0.44	250	F	5.93	2.7	3.5	0.66	52.0	0.0050	7.9
63 L/4-VW	0.25	0.18	-	2220	111	7.10	1680	1.12	0.56	270	E	9.38	2.3	2.5	0.71	57.0	0.0066	9.3
71 S/4-VW	0.33	0.25	-	2285	114	9.10	1710	1.56	0.78	310	G	12.2	2.4	2.7	0.64	63.0	0.017	12
71 L/4-VW	0.5	0.37	-	2280	114	13.8	1720	1.90	0.95	350	F	18.3	2.3	2.7	0.69	71.0	0.020	14
80 S/4-VW	0.75	0.55	-	2285	114	20.7	1710	2.70	1.35	350	F	27.6	2.2	2.3	0.71	72.0	0.026	18
80 LP/4-VW	1	0.75	pe	2230	112	28.3	1730	3.14	1.57	650	K	36.4	3.5	3.8	0.70	86.1	0.045	22
90 SP/4-VW	1.5	1.1	pe	2320	116	40.7	1740	4.20	2.10	840	L	54.3	4.2	4.9	0.76	86.9	0.081	33
90 LP/4-VW	2	1.5	pe	2310	116	54.6	1730	5.60	2.80	760	K	72.9	3.9	4.3	0.78	87.0	0.093	37
100 LP/4-VW	3	2.2	pe	2360	118	80.1	1770	7.68	3.84	920	L	107	3.0	4.5	0.79	90.0	0.192	62
112 MP/4-VW	5	3.7	pe	2335	117	135	1755	13	6.5	950	L	180	4.1	4.6	0.80	90.3	0.332	78
132 SP/4-VW	7.5	5.5	pe	2355	118	201	1770	19.5	9.75	1020	M	267	4.7	5.0	0.77	91.7	0.759	121
132 MP/4-VW	10	7.5	pe	2350	118	268	1765	26.7	13.4	960	M	357	4.7	5.0	0.77	91.7	0.831	137
160 MP/4-VW	15	11	pe	2360	118	401	1770	35.6	17.8	880	K	534	3.2	3.8	0.84	92.5	1.59	205
160 LP/4-VW	20	15	pe	2360	118	534	1775	47.6	23.8	1080	M	710	4.3	4.7	0.85	93.0	2.18	269
180 MP/4-VW	25	18.5	pe	2380	119	662	1780	60.6	30.3	1010	L	885	3.9	4.0	0.82	93.6	3.80	342
180 LP/4-VW	30	22	pe	2370	119	798	1780	69.6	34.8	880	K	1062	3.3	3.4	0.85	93.6	3.80	342
225 RP/4-VW	40	30	pe	2380	119	1059	1785	-	49.5	890	K	1412	3.4	3.8	0.81	94.5%	11.63	694
225 SP/4-VW	50	37	pe	2380	119	1324	1785	-	59.7	880	K	1765	3.0	3.7	0.82	94.6%	12.81	728
225 MP/4-VW	60	45	pe	2380	119	1589	1785	-	72.0	910	K	2118	3.3	3.6	0.83	95.2%	15.90	805

Inverter Duty - Intermittent Duty
20:1 Constant Torque (VW)
230/460V - 80-4Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 80Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line data											
	P_n		n_{80}	n_4	T_{80-4}	n_N	I_n		I_a/I_n	NEMA	T_n	T_a/T_n	T_k/T_n	pf	η	J_m	
	Full Load Power		Full Load Speed	Full Load Speed	Full Load Torque	Full Load Speed	Full-Load Current		Locked Rotor Current Ratio	Code Letter	Full Load Torque	Locked Rotor Torque Ratio	Break Down Torque Ratio	Power Factor	Full Load Eff.	Rotor Inertia	Wt. Weight
			80 Hz	4 Hz	80-4 Hz	60 Hz	230 V	460 V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-VW	1	0.75	2290	115	27.5	1650	3.66	1.83	390	G	38.2	2.2	2.3	0.74	70.0	0.034	20
90 S/4-VW	1.5	1.1	2310	116	40.9	1660	4.84	2.42	490	G	57.0	2.5	2.8	0.78	73.0	0.056	26
90 L/4-VW	2	1.5	2305	115	54.7	1660	6.34	3.17	510	H	75.9	2.5	2.8	0.80	74.0	0.074	31
100 L/4-VW	3	2.2	2310	116	81.9	1705	9.00	4.50	490	G	111	2.3	2.6	0.81	76.0	0.11	40
100 LA/4-VW	5	3.7	2295	115	137	1725	15.2	7.6	510	G	183	2.7	3.1	0.75	81.0	0.14	46
132 S/4-VW	7.5	5.5	2340	117	202	1735	19.8	9.9	540	G	272	2.4	2.7	0.82	85.0	0.57	97
132 M/4-VW	10	7.5	2340	117	269	1735	25.8	12.9	630	H	363	2.9	3.2	0.84	87.0	0.76	121
160 M/4-VW	15	11	2350	118	402	1770	35.8	17.9	820	J	534	2.9	3.8	0.85	90.7	1.19	172
160 L/4-VW	20	15	2350	118	536	1760	48.4	24.2	850	K	716	2.9	3.9	0.87	89.4	1.59	205
180 MX/4-VW	25	18.5	2354	118	669	1760	59.0	29.5	880	K	895	3.4	4.3	0.87	90.5	1.90	236
180 LX/4-VW	30	22	2360	118	801	1765	74.4	37.2	890	K	1071	3.6	4.4	0.80	92.8	2.18	269
200 LX/4-VW	40	30	2370	119	1064	1770	98.6	49.3	690	H	1424	3.2	3.6	0.83	92.1	3.80	342

Inverter Duty - Continuous Duty
1000:1 Constant Torque (F VZ)
230/460V - 60-0Hz

Inverter duty • Induction motor • TEBC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power			Operating Range			Motor Across the line data												
	P_n Full Load Power		Eff. Class	n_{60} Full Load Speed	n_0 Full Load Speed	T_{60-0} Full Load Torque	n_N Full Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
				60 Hz	0 Hz	60-0 Hz	60 Hz	230 V	460 V										
	[HP]	[kW]		[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4-F VZ	0.16	0.12	-	1700	0	5.93	1700	0.88	0.44	250	F	5.93	2.7	3.5	0.66	52.0	0.005	7.9
63 L/4-F VZ	0.25	0.18	-	1680	0	9.38	1680	1.12	0.56	270	E	9.38	2.3	2.5	0.71	57.0	0.007	9.3
71 S/4-F VZ	0.33	0.25	-	1710	0	12.2	1710	1.56	0.78	310	G	12.2	2.4	2.7	0.64	63.0	0.017	12
71 L/4-F VZ	0.5	0.37	-	1720	0	18.3	1720	1.90	0.95	350	F	18.3	2.3	2.7	0.69	71.0	0.020	14
80 S/4-F VZ	0.75	0.55	-	1710	0	27.6	1710	2.70	1.35	350	F	27.6	2.2	2.3	0.71	72.0	0.026	18
80 LP/4-F VZ	1	0.75	pe	1730	0	36.4	1730	3.14	1.57	650	K	36.4	3.5	3.8	0.70	86.1	0.045	22
90 SP/4-F VZ	1.5	1.1	pe	1740	0	54.3	1740	4.20	2.10	840	L	54.3	4.2	4.9	0.76	86.9	0.081	33
90 LP/4-F VZ	2	1.5	pe	1730	0	72.9	1730	5.60	2.80	760	K	72.9	3.9	4.3	0.78	87.0	0.093	37
100 LP/4-F VZ	3	2.2	pe	1770	0	107	1770	7.68	3.84	920	L	107	3.0	4.5	0.79	90.0	0.192	62
112 MP/4-F VZ	5	3.7	pe	1755	0	180	1755	13.0	6.50	950	L	180	4.1	4.6	0.80	90.3	0.332	78
132 SP/4-F VZ	7.5	5.5	pe	1770	0	267	1770	19.5	9.75	1020	M	267	4.7	5.0	0.77	91.7	0.759	121
132 MP/4-F VZ	10	7.5	pe	1765	0	357	1765	26.7	13.4	960	M	357	4.7	5.0	0.77	91.7	0.831	137
160 MP/4-F VZ	15	11	pe	1770	0	534	1770	35.6	17.8	880	K	534	3.2	3.8	0.84	92.5	1.59	205
160 LP/4-F VZ	20	15	pe	1775	0	710	1775	47.6	23.8	1080	M	710	4.3	4.7	0.85	93.0	2.18	269
180 MP/4-F VZ	25	18.5	pe	1780	0	885	1780	60.6	30.3	1010	L	885	3.9	4.0	0.82	93.6	3.80	342
180 LP/4-F VZ	30	22	pe	1780	0	1062	1780	69.6	34.8	880	K	1062	3.3	3.4	0.85	93.6	3.80	342
225 RP/4-F VZ	40	30	pe	1785	0	1412	1785	-	49.5	890	K	1412	3.4	3.8	0.81	94.5%	11.63	694
225 SP/4-F VZ	50	37	pe	1785	0	1765	1785	-	59.7	880	K	1765	3.0	3.7	0.82	94.6%	12.81	728
225 MP/4-F VZ	60	45	pe	1785	0	2118	1785	-	72.0	910	K	2118	3.3	3.6	0.83	95.2%	15.90	805

Inverter Duty - Intermittent Duty 1000:1 Constant Torque (F VZ) 230/460V - 60-0Hz

Inverter duty • Induction motor • TEBC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 230/460V – 60Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line data											
	P_n Full Load Power		n_{60} Full Load Speed	n_0 Full Load Speed	T_{60-0} Full Load Torque	n_N Full Load Speed	I_n Full-Load Current		I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
			60 Hz	0 Hz	60-0 Hz	60 Hz	230 V	460 V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-F VZ	1	0.75	1650	0	38.2	1650	3.66	1.83	390	G	38.2	2.2	2.3	0.74	70.0	0.034	20
90 S/4-F VZ	1.5	1.1	1660	0	57.0	1660	4.84	2.42	490	G	57.0	2.5	2.8	0.78	73.0	0.056	26
90 L/4-F VZ	2	1.5	1660	0	75.9	1660	6.34	3.17	510	H	75.9	2.5	2.8	0.80	74.0	0.074	31
100 L/4-F VZ	3	2.2	1705	0	111	1705	9.00	4.50	490	G	111	2.3	2.6	0.81	76.0	0.107	40
100 LA/4-F VZ	5	3.7	1725	0	183	1725	15.2	7.6	510	G	183	2.7	3.1	0.75	81.0	0.142	46
132 S/4-F VZ	7.5	5.5	1735	0	272	1735	19.8	9.9	540	G	272	2.4	2.7	0.82	85.0	0.570	97
132 M/4-F VZ	10	7.5	1735	0	363	1735	25.8	12.9	630	H	363	2.9	3.2	0.84	87.0	0.759	121
160 M/4-F VZ	15	11	1770	0	534	1770	35.8	17.9	820	J	534	2.9	3.8	0.85	90.7	1.19	172
160 L/4-F VZ	20	15	1760	0	716	1760	48.4	24.2	850	K	716	2.9	3.9	0.87	89.4	1.59	205
180 MX/4-F VZ	25	18.5	1760	0	895	1760	59.0	29.5	880	K	895	3.4	4.3	0.87	90.5	1.90	236
180 LX/4-F VZ	30	22	1765	0	1071	1765	74.4	37.2	890	K	1071	3.6	4.4	0.80	92.8	2.18	269
200 LX/4-F VZ	40	30	1770	0	1424	1770	98.6	49.3	690	H	1424	3.2	3.6	0.83	92.1	3.80	342

Continuous Duty
575V - 60Hz

NORD DRIVESYSTEMS

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 332/575V – 60Hz • 1.15 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	P_n Full Load Power		Eff. Class	n_N Full Load Speed	I_n Full Load Current 575V	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	Eff. Normal Efficiency	J_m Rotor Inertia	Wt. Weight
	[hp]	[kW]		[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4	0.16	0.12	-	1700	0.37	250	G	5.93	2.7	3.5	0.66	52.0	0.0050	7.9
63 L/4	0.25	0.18	-	1680	0.46	270	E	9.38	2.3	2.5	0.71	57.0	0.0066	9.3
71 S/4	0.33	0.25	-	1710	0.66	310	G	12.2	2.4	2.7	0.64	63.0	0.017	12
71 L/4	0.5	0.37	-	1720	0.80	350	F	18.3	2.3	2.7	0.69	71.0	0.020	14
80 S/4	0.75	0.55	-	1710	1.12	350	F	27.6	2.2	2.3	0.71	72.0	0.026	18
80 LP/4	1	0.75	pe	1730	1.26	650	K	36.4	3.5	3.8	0.70	86.1	0.045	22
90 SP/4	1.5	1.1	pe	1740	1.68	840	L	54.3	4.2	4.9	0.76	86.9	0.081	33
90 LP/4	2	1.5	pe	1730	2.24	760	K	72.9	3.9	4.3	0.78	87.0	0.093	37
100 LP/4	3	2.2	pe	1770	3.07	920	L	107	3.0	4.5	0.79	90.0	0.19	62
112 MP/4	5	3.7	pe	1755	5.20	950	L	180	4.1	4.6	0.80	90.3	0.33	78
132 SP/4	7.5	5.5	pe	1770	7.80	1020	M	267	4.7	5.0	0.77	91.7	0.76	121
132 MP/4	10	7.5	pe	1765	10.7	960	M	357	4.7	5.0	0.77	91.7	0.83	137
160 MP/4	15	11	pe	1770	14.2	880	K	534	3.2	3.8	0.84	92.5	1.59	205
160 LP/4	20	15	pe	1775	19.0	1080	M	710	4.3	4.7	0.85	93.0	2.18	269
180 MP/4	25	18.5	pe	1780	24.2	1010	L	885	3.9	4.0	0.82	93.6	3.80	342
180 LP/4	30	22	pe	1780	27.8	880	K	1062	3.3	3.4	0.85	93.6	3.80	342
225 RP/4	40	30	pe	1785	39.6	890%	K	1420	3.4	3.8	0.81	94.5%	11.63	694
225 SP/4	50	37	pe	1785	47.8	880%	K	1752	3.0	3.7	0.82	94.6%	12.81	728
225 MP/4	60	45	pe	1785	57.6	910%	K	2131	3.3	3.6	0.83	95.2%	15.90	805

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Intermittent Duty
575V - 60Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 332/575V – 60Hz • 1.15 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	P_n Full Load Power		n_N Full Load Speed	I_n Full Load Current 575V	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	Eff. Normal Efficiency	J_m Rotor Inertia	Wt. Weight
	[hp]	[kW]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4	1	0.75	1650	1.46	390	G	38.2	2.2	2.3	0.74	70.0	0.034	20
90 S/4	1.5	1.1	1660	1.94	490	H	57.0	2.5	2.8	0.78	73.0	0.056	26
90 L/4	2	1.5	1660	2.54	510	H	75.9	2.5	2.8	0.80	74.0	0.074	31
100 L/4	3	2.2	1705	3.63	490	G	111	2.3	2.6	0.81	76.0	0.11	40
100 LA/4	5	3.7	1725	6.10	510	G	183	2.7	3.1	0.75	81.0	0.14	46
132 S/4	7.5	5.5	1735	7.92	540	G	272	2.4	2.7	0.82	85.0	0.57	97
132 M/4	10	7.5	1735	10.3	630	H	363	2.9	3.2	0.84	87.0	0.76	121
160 M/4	15	11	1770	14.5	820	J	534	2.9	3.8	0.85	90.7	1.19	172
160 L/4	20	15	1760	19.3	850	K	716	2.9	3.9	0.87	89.4	1.59	205
180 MX/4	25	18.5	1760	23.6	880	K	895	3.4	4.3	0.87	90.5	1.90	236
180 LX/4	30	22	1765	29.8	890	K	1071	3.6	4.4	0.80	92.8	2.18	269
200 LX/4	40	30	1770	39.4	690	H	1424	3.2	3.6	0.83	92.1	3.80	342

Inverter Duty - Continuous Duty
5:1 Constant Torque (VR)
575V - 60-12Hz

NORD DRIVESYSTEMS

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power P_n Full Load Power		Eff. Class	Operating Range			Motor Across the line Data											
				n_{60} Full Load Speed	n_{12} Full Load Speed	$T_{60\text{-}12}$ Full Load Torque	n_N Full Load Speed	I_n Full-Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
				60 Hz	12 Hz	60-12 Hz	60 Hz	575 V									
	[HP]	[kW]		[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4-VR	0.16	0.12	-	1700	340	5.93	1700	0.35	250	F	5.93	2.7	3.5	0.66	52.0	0.0050	7.9
63 L/4-VR	0.25	0.18	-	1680	336	9.38	1680	0.45	270	E	9.38	2.3	2.5	0.71	57.0	0.0066	9.3
71 S/4-VR	0.33	0.25	-	1710	342	12.2	1710	0.62	310	G	12.2	2.4	2.7	0.64	63.0	0.017	12
71 L/4-VR	0.5	0.37	-	1720	344	18.3	1720	0.76	350	F	18.3	2.3	2.7	0.69	71.0	0.020	14
80 S/4-VR	0.75	0.55	-	1710	342	27.6	1710	1.08	350	F	27.6	2.2	2.3	0.71	72.0	0.026	18
80 LP/4-VR	1	0.75	pe	1730	346	36.4	1730	1.26	650	K	36.43	3.5	3.8	0.70	86.1	0.045	22
90 SP/4-VR	1.5	1.1	pe	1740	348	54.3	1740	1.68	840	L	54.33	4.2	4.9	0.76	86.9	0.081	33
90 LP/4-VR	2	1.5	pe	1730	346	72.9	1730	2.24	760	K	72.86	3.9	4.3	0.78	87.0	0.093	37
100 LP/4-VR	3	2.2	pe	1770	354	107	1770	3.07	920	L	106.82	3.0	4.5	0.79	90.0	0.192	62
112 MP/4-VR	5	3.7	pe	1755	351	180	1755	5.20	950	L	179.56	4.1	4.6	0.80	90.3	0.332	78
132 SP/4-VR	7.5	5.5	pe	1770	354	267	1770	7.80	1020	M	267.06	4.7	5.0	0.77	91.7	0.759	121
132 MP/4-VR	10	7.5	pe	1765	353	357	1765	10.7	960	M	357.08	4.7	5.0	0.77	91.7	0.831	137
160 MP/4-VR	15	11	pe	1770	354	534	1770	14.2	880	K	534.11	3.2	3.8	0.84	92.5	1.59	205
160 LP/4-VR	20	15	pe	1775	355	710	1775	19.0	1080	M	710.14	4.3	4.7	0.85	93.0	2.18	269
180 MP/4-VR	25	18.5	pe	1780	356	885	1780	24.2	1010	L	885.19	3.9	4.0	0.82	93.6	3.80	342
180 LP/4-VR	30	22	pe	1780	356	1062	1780	27.8	880	K	1062.23	3.3	3.4	0.85	93.6	3.80	342
225 RP/4-VR	40	30	pe	1785	357	1412	1785	39.6	890	K	1412	3.4	3.8	0.81	94.5%	11.63	694
225 SP/4-VR	50	37	pe	1785	357	1765	1785	47.8	880	K	1765	3.0	3.7	0.82	94.6%	12.81	728
225 MP/4-VR	60	45	pe	1785	357	2118	1785	57.6	910	K	2118	3.3	3.6	0.83	95.2%	15.90	805

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Inverter Duty - Intermittent Duty
5:1 Constant Torque (VR)
575V - 60-12Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line Data										
	P_n Full Load Power		n_{60} Full Load Speed	n_{12} Full Load Speed	$T_{60\text{-}12}$ Full Load Torque	n_N Full Load Speed	I_n Full-Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
			60 Hz	12 Hz	60-12 Hz	60 Hz	575 V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-VR	1	0.75	1650	330	38.2	1650	1.46	390	G	38.2	2.2	2.3	0.74	70.0	0.034	20
90 S/4-VR	1.5	1.1	1660	332	57.0	1660	1.94	490	G	57.0	2.5	2.8	0.78	73.0	0.056	26
90 L/4-VR	2	1.5	1660	332	75.9	1660	2.54	510	H	75.9	2.5	2.8	0.80	74.0	0.074	31
100 L/4-VR	3	2.2	1705	341	111	1705	3.60	490	G	111	2.3	2.6	0.81	76.0	0.107	40
100 LA/4-VR	5	3.7	1725	345	183	1725	6.08	510	G	183	2.7	3.1	0.75	81.0	0.142	46
132 S/4-VR	7.5	5.5	1735	347	272	1735	7.92	540	G	272	2.4	2.7	0.82	85.0	0.570	97
132 M/4-VR	10	7.5	1735	347	363	1735	10.3	630	H	363	2.9	3.2	0.84	87.0	0.759	121
160 M/4-VR	15	11	1770	354	534	1770	14.3	820	J	534	2.9	3.8	0.85	90.7	1.19	172
160 L/4-VR	20	15	1760	352	716	1760	19.4	850	K	716	2.9	3.9	0.87	89.4	1.59	205
180 MX/4-VR	25	18.5	1760	352	895	1760	23.6	880	K	895	3.4	4.3	0.87	90.5	1.90	236
180 LX/4-VR	30	22	1765	353	1071	1765	29.8	890	K	1071	3.6	4.4	0.80	92.8	2.18	269
200 LX/4-VR	40	30	1770	354	1424	1770	39.4	690	H	1424	3.2	3.6	0.83	92.1	3.80	342

Inverter Duty - Continuous Duty
10:1 - Constant Torque (VN)
575V - 60-6Hz

NORD DRIVESYSTEMS

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power P_n Full Load Power		Eff. Class	Operating Range			Motor Across the line data										
				n_{60} Full Load Speed	n_6 Full Load Speed	T_{60-6} Full Load Torque	n_N Full Load Speed	I_n Full Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
				60 Hz	6 Hz	60-6 Hz	60 Hz	575V									
	[HP]	[kW]		[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4-VN	0.12	0.09	-	1720	172	4.40	1720	0.30	290	J	4.40	3.6	4.7	0.57	52.0	0.005	7.9
63 L/4-VN	0.16	0.12	-	1720	172	5.86	1720	0.36	335	J	5.86	3.7	4.0	0.64	52.0	0.007	9.3
71 S/4-VN	0.25	0.18	-	1740	174	9.06	1740	0.43	454	J	9.06	3.2	3.6	0.70	63.0	0.017	11.9
71 L/4-VN	0.33	0.25	-	1745	175	11.9	1745	0.59	449	K	11.9	3.5	4.2	0.64	65.0	0.020	13.9
80 S/4-VN	0.50	0.37	-	1745	175	18.1	1745	1.12	338	J	18.1	3.4	3.5	0.46	73.0	0.026	17.6
80 LP/4-VN	0.75	0.55	pe	1750	175	27.0	1750	0.93	881	M	27.0	4.7	5.1	0.71	85.6	0.045	22
90 SP/4-VN	1	0.75	pe	1760	176	35.8	1760	1.33	1057	R	35.8	6.4	7.4	0.65	86.3	0.081	33
90 LP/4-VN	1.5	1.1	pe	1755	176	53.9	1755	1.84	926	N	53.9	5.3	5.8	0.70	87.5	0.093	37
100 LP/4-VN	2	1.5	pe	1780	178	70.8	1780	2.29	1234	R	70.8	4.5	6.8	0.73	89.9	0.18	56
112 MP/4-VN	3	2.2	pe	1775	178	107	1775	3.73	1323	S	107	6.9	7.8	0.67	89.8	0.30	78
132 SP/4-VN	5	3.7	pe	1780	178	177	1780	6.29	1265	R	177	7.1	7.5	0.65	91.7	0.75	121
132 MP/4-VN	7.5	5.5	pe	1775	178	266	1775	8.6	1192	P	266	6.3	6.7	0.71	92.0	0.84	137
160 MP/4-VN	10	7.5	pe	1780	178	354	1780	11.0	1134	N	354	4.8	5.7	0.73	92.4	1.59	205
160 LP/4-VN	15	11	pe	1780	178	531	1780	15.4	1338	P	531	5.7	6.3	0.78	93.2	2.18	269
180 MP/4-VN	20	15	pe	1785	179	706	1785	19.8	1234	N	706	4.9	5.0	0.81	93.6	3.08	302
180 LP/4-VN	25	18.5	pe	1785	179	883	1785	23.9	1026	L	883	4.0	4.1	0.83	94.0	3.80	342
225 RP/4-VN	30	22	pe	1790	179	1056	1790	32.0	1101	N	1056	4.5	5.1	0.74	94.5%	11.63	694
225 SP/4-VN	40	30	pe	1790	179	1408	1790	40.5	1038	M	1408	3.8	4.6	0.78	94.8%	12.81	728
225 MP/4-VN	50	37	pe	1790	179	1760	1790	49.7	1055	M	1760	4.0	4.3	0.79	95.3%	15.90	805

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Inverter Duty - Intermittent Duty
10:1 Constant Torque (VN)
575V - 60-6Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line data										
	P_n Full Load Power		n_{60} Full Load Speed	n_6 Full Load Speed	$T_{60\text{-}6}$ Full Load Torque	n_N Full Load Speed	I_n Full Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
			60 Hz	6 Hz	60-6 Hz	60 Hz	575V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-VN	0.75	0.55	1740	174	27.2	1740	1.54	371	J	27.2	3.1	3.2	0.51	72.0	0.034	19.8
90 S/4-VN	1	0.75	1760	176	35.8	1760	1.56	609	L	35.8	4.0	4.5	0.65	74.0	0.056	26.5
90 L/4-VN	1.5	1.1	1750	175	54.0	1750	1.94	666	K	54.0	3.5	3.9	0.76	76.0	0.074	30.9
100 L/4-VN	2	1.5	1760	176	71.6	1760	2.90	608	K	71.6	3.6	4.0	0.68	76.0	0.11	39.7
100 LA/4-VN	3	2.2	1760	176	107	1760	5.19	598	M	107	4.6	5.3	0.50	86.0	0.14	46.3
132 S/4-VN	5	3.7	1775	178	178	1775	5.57	768	K	178	3.7	4.1	0.78	86.0	0.57	97.0
132 M/4-VN	7.5	5.5	1770	177	267	1770	8.19	794	K	267	3.9	4.4	0.78	88.0	0.76	121
160 M/4-VN	10	7.5	1780	178	354	1780	10.8	1092	N	354	4.4	5.7	0.77	90.4	1.19	172
160 L/4-VN	15	11	1775	178	533	1775	15.2	1085	M	533	3.9	5.2	0.81	91.2	1.59	205
180 MX/4-VN	20	15	1775	178	710	1775	20.5	1015	M	710	4.3	5.4	0.80	91.5	1.90	236
180 LX/4-VN	25	18.5	1775	178	888	1775	27.6	958	M	888	4.3	5.3	0.74	91.4	2.18	269
200 LX/4-VN	30	22	1785	179	1059	1785	34.0	801	L	1059	4.3	4.8	0.72	92.4	3.80	342

Inverter Duty - Continuous Duty
20:1 Constant Torque (VW)
575V - 80-4Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power P_n Full Load Power		Eff. Class	Operating Range			Motor Across the line data										
				n_{60} Full Load Speed	n_6 Full Load Speed	T_{60-6} Full Load Torque	n_N Full Load Speed	I_n Full Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
				80 Hz	4 Hz	80-4 Hz	60 Hz	575V									
	[HP]	[kW]		[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4-VW	0.16	0.12	-	2250	113	4.48	1700	0.35	250	F	5.93	2.7	3.5	0.66	52.0	0.0050	7.9
63 L/4-VW	0.25	0.18	-	2220	111	7.10	1680	0.45	270	E	9.38	2.3	2.5	0.71	57.0	0.0066	9.3
71 S/4-VW	0.33	0.25	-	2285	114	9.10	1710	0.62	310	G	12.2	2.4	2.7	0.64	63.0	0.017	12
71 L/4-VW	0.5	0.37	-	2280	114	13.8	1720	0.76	350	F	18.3	2.3	2.7	0.69	71.0	0.020	14
80 S/4-VW	0.75	0.55	-	2285	114	20.7	1710	1.08	350	F	27.6	2.2	2.3	0.71	72.0	0.026	18
80 LP/4-VW	1	0.75	pe	2230	112	28.3	1730	1.26	650	K	36.4	3.5	3.8	0.70	86.1	0.045	22
90 SP/4-VW	1.5	1.1	pe	2320	116	40.7	1740	1.68	840	L	54.3	4.2	4.9	0.76	86.9	0.081	33
90 LP/4-VW	2	1.5	pe	2310	116	54.6	1730	2.24	760	K	72.9	3.9	4.3	0.78	87.0	0.093	37
100 LP/4-VW	3	2.2	pe	2360	118	80.1	1770	3.07	920	L	107	3.0	4.5	0.79	90.0	0.192	62
112 MP/4-VW	5	3.7	pe	2335	117	135	1755	5.20	950	L	180	4.1	4.6	0.80	90.3	0.332	78
132 SP/4-VW	7.5	5.5	pe	2355	118	201	1770	7.80	1020	M	267	4.7	5.0	0.77	91.7	0.759	121
132 MP/4-VW	10	7.5	pe	2350	118	268	1765	10.7	960	M	357	4.7	5.0	0.77	91.7	0.831	137
160 MP/4-VW	15	11	pe	2360	118	401	1770	14.2	880	K	534	3.2	3.8	0.84	92.5	1.59	205
160 LP/4-VW	20	15	pe	2360	118	534	1775	19.0	1080	M	710	4.3	4.7	0.85	93.0	2.18	269
180 MP/4-VW	25	18.5	pe	2380	119	662	1780	24.2	1010	L	885	3.9	4.0	0.82	93.6	3.80	342
180 LP/4-VW	30	22	pe	2370	119	798	1780	27.8	880	K	1062	3.3	3.4	0.85	93.6	3.80	342
225 RP/4-VW	40	30	pe	2380	119	1059	1785	39.6	890	K	1412	3.4	3.8	0.81	94.5%	11.63	694
225 SP/4-VW	50	37	pe	2380	119	1324	1785	47.8	880	K	1765	3.0	3.7	0.82	94.6%	12.81	728
225 MP/4-VW	60	45	pe	2380	119	1589	1785	57.6	910	K	2118	3.3	3.6	0.83	95.2%	15.90	805

Inverter Duty - Intermittent Duty
20:1 Constant Torque (VW)
575V - 80-4Hz

Inverter duty • Induction motor • TEFC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line data										
	P_n Full Load Power		n_{60} Full Load Speed	n_6 Full Load Speed	T_{60-6} Full Load Torque	n_N Full Load Speed	I_n Full Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
			80 Hz	4 Hz	80-4 Hz	60 Hz	575V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-VW	1	0.75	2290	115	27.5	1650	1.46	390	G	38.2	2.2	2.3	0.74	70.0	0.034	20
90 S/4-VW	1.5	1.1	2310	116	40.9	1660	1.94	490	G	57.0	2.5	2.8	0.78	73.0	0.056	26
90 L/4-VW	2	1.5	2305	115	54.7	1660	2.54	510	H	75.9	2.5	2.8	0.80	74.0	0.074	31
100 L/4-VW	3	2.2	2310	116	81.9	1705	3.60	490	G	111	2.3	2.6	0.81	76.0	0.11	40
100 LA/4-VW	5	3.7	2295	115	137	1725	6.08	510	G	183	2.7	3.1	0.75	81.0	0.14	46
132 S/4-VW	7.5	5.5	2340	117	202	1735	7.92	540	G	272	2.4	2.7	0.82	85.0	0.57	97
132 M/4-VW	10	7.5	2340	117	269	1735	10.32	630	H	363	2.9	3.2	0.84	87.0	0.76	121
160 M/4-VW	15	11	2350	118	402	1770	14.3	820	J	534	2.9	3.8	0.85	90.7	1.19	172
160 L/4-VW	20	15	2350	118	536	1760	19.4	850	K	716	2.9	3.9	0.87	89.4	1.59	205
180 MX/4-VW	25	18.5	2354	118	669	1760	23.6	880	K	895	3.4	4.3	0.87	90.5	1.90	236
180 LX/4-VW	30	22	2360	118	801	1765	29.8	890	K	1071	3.6	4.4	0.80	92.8	2.18	269
200 LX/4-VW	40	30	2370	119	1064	1770	39.4	690	H	1424	3.2	3.6	0.83	92.1	3.80	342

Inverter Duty - Continuous Duty
1000:1 Constant Torque (F VZ)
575V - 60-0Hz

NORD DRIVESYSTEMS

Inverter duty • Induction motor • TEBC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power P_n Full Load Power		Eff. Class	Operating Range n_{60} Full Load Speed	n_6 Full Load Speed	T_{60-6} Full Load Torque	Motor Across the line data n_N Full Load Speed	I_n Full Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
				60 Hz	0 Hz	60-0 Hz	60 Hz	575V										
	[HP]	[kW]		[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4-F VZ	0.16	0.12	-	1700	0	5.93	1700	0.35	250	F	5.93	2.7	3.5	0.66	52.0	0.005	7.9
63 L/4-F VZ	0.25	0.18	-	1680	0	9.38	1680	0.45	270	E	9.38	2.3	2.5	0.71	57.0	0.007	9.3
71 S/4-F VZ	0.33	0.25	-	1710	0	12.2	1710	0.62	310	G	12.2	2.4	2.7	0.64	63.0	0.017	12
71 L/4-F VZ	0.5	0.37	-	1720	0	18.3	1720	0.76	350	F	18.3	2.3	2.7	0.69	71.0	0.020	14
80 S/4-F VZ	0.75	0.55	-	1710	0	27.6	1710	1.08	350	F	27.6	2.2	2.3	0.71	72.0	0.026	18
80 LP/4-F VZ	1	0.75	pe	1730	0	36.4	1730	1.26	650	K	36.4	3.5	3.8	0.70	86.1	0.045	22
90 SP/4-F VZ	1.5	1.1	pe	1740	0	54.3	1740	1.68	840	L	54.3	4.2	4.9	0.76	86.9	0.081	33
90 LP/4-F VZ	2	1.5	pe	1730	0	72.9	1730	2.24	760	K	72.9	3.9	4.3	0.78	87.0	0.093	37
100 LP/4-F VZ	3	2.2	pe	1770	0	107	1770	3.07	920	L	107	3.0	4.5	0.79	90.0	0.192	62
112 MP/4-F VZ	5	3.7	pe	1755	0	180	1755	5.20	950	L	180	4.1	4.6	0.80	90.3	0.332	78
132 SP/4-F VZ	7.5	5.5	pe	1770	0	267	1770	7.80	1020	M	267	4.7	5.0	0.77	91.7	0.759	121
132 MP/4-F VZ	10	7.5	pe	1765	0	357	1765	10.7	960	M	357	4.7	5.0	0.77	91.7	0.831	137
160 MP/4-F VZ	15	11	pe	1770	0	534	1770	14.2	880	K	534	3.2	3.8	0.84	92.5	1.59	205
160 LP/4-F VZ	20	15	pe	1775	0	710	1775	19.0	1080	M	710	4.3	4.7	0.85	93.0	2.18	269
180 MP/4-F VZ	25	18.5	pe	1780	0	885	1780	24.2	1010	L	885	3.9	4.0	0.82	93.6	3.80	342
180 LP/4-F VZ	30	22	pe	1780	0	1062	1780	27.8	880	K	1062	3.3	3.4	0.85	93.6	3.80	342
225 RP/4-F VZ	40	30	pe	1785	0	1412	1785	39.6	890	K	1412	3.4	3.8	0.81	94.5%	11.63	694
225 SP/4-F VZ	50	37	pe	1785	0	1765	1785	47.8	880	K	1765	3.0	3.7	0.82	94.6%	12.81	728
225 MP/4-F VZ	60	45	pe	1785	0	2118	1785	57.6	910	K	2118	3.3	3.6	0.83	95.2%	15.90	805

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Inverter Duty - Intermittent Duty
1000:1 Constant Torque (F VZ)
575V - 60-0Hz

Inverter duty • Induction motor • TEBC
Synchronous speed 1800rpm @ 60Hz • 4-pole • Three-phase
Voltages: 575V – 60Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	Power		Operating Range			Motor Across the line data										
	P_n Full Load Power		n_{60} Full Load Speed	n_6 Full Load Speed	T_{60-6} Full Load Torque	n_N Full Load Speed	I_n Full Load Current	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full Load Eff.	J_m Rotor Inertia	Wt. Weight
			60 Hz	0 Hz	60-0 Hz	60 Hz	575V									
	[HP]	[kW]	[rpm]	[rpm]	[lb-in]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4-F VZ	1	0.75	1650	0	38.2	1650	1.46	390	G	38.2	2.2	2.3	0.74	70.0	0.034	20
90 S/4-F VZ	1.5	1.1	1660	0	57.0	1660	1.94	490	G	57.0	2.5	2.8	0.78	73.0	0.056	26
90 L/4-F VZ	2	1.5	1660	0	75.9	1660	2.54	510	H	75.9	2.5	2.8	0.80	74.0	0.074	31
100 L/4-F VZ	3	2.2	1705	0	111	1705	3.60	490	G	111	2.3	2.6	0.81	76.0	0.107	40
100 LA/4-F VZ	5	3.7	1725	0	183	1725	6.08	510	G	183	2.7	3.1	0.75	81.0	0.142	46
132 S/4-F VZ	7.5	5.5	1735	0	272	1735	7.92	540	G	272	2.4	2.7	0.82	85.0	0.570	97
132 M/4-F VZ	10	7.5	1735	0	363	1735	10.32	630	H	363	2.9	3.2	0.84	87.0	0.759	121
160 M/4-F VZ	15	11	1770	0	534	1770	14.3	820	J	534	2.9	3.8	0.85	90.7	1.19	172
160 L/4-F VZ	20	15	1760	0	716	1760	19.4	850	K	716	2.9	3.9	0.87	89.4	1.59	205
180 MX/4-F VZ	25	18.5	1760	0	895	1760	23.6	880	K	895	3.4	4.3	0.87	90.5	1.90	236
180 LX/4-F VZ	30	22	1765	0	1071	1765	29.8	890	K	1071	3.6	4.4	0.80	92.8	2.18	269
200 LX/4-F VZ	40	30	1770	0	1424	1770	39.4	690	H	1424	3.2	3.6	0.83	92.1	3.80	342

Continuous Duty
400V - 50Hz

Inverter Duty • Induction motor • TEFC
Synchronous speed 1500rpm @ 50Hz • 4-pole • Three-phase
Voltages: 400V – 50Hz • 1.0 Service Factor
Continuous Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	P_n Full Load Power		Eff. Class	n_N Full Load Speed	I_n Full Load Current 400V*	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full-Load Efficien-cy	J_m Rotor Inertia	Wt. Weight
	[hp]	[kW]		[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
63 S/4	0.16	0.12	-	1335	0.55	290	H	7.55	2.7	2.7	0.64	50.0	0.0050	7.9
63 L/4	0.25	0.18	-	1390	0.68	300	G	11.3	2.6	2.7	0.61	58.0	0.0066	9.3
71 S/4	0.33	0.25	-	1380	0.76	330	F	15.1	2.2	2.1	0.77	63.0	0.017	12
71 L/4	0.5	0.37	-	1380	1.09	360	F	22.8	2.0	2.4	0.71	67.0	0.020	14
80 S/4	0.75	0.55	-	1375	1.52	330	E	34.4	1.9	2.0	0.73	75.1	0.026	18
80 LP/4	1	0.75	IE3	1415	1.79	540	H	44.5	3.0	3.1	0.72	83.7	0.045	22
90 SP/4	1.5	1.1	IE3	1430	2.38	680	J	66.1	3.6	4.0	0.78	85.3	0.081	33
90 LP/4	2	1.5	IE3	1415	3.23	590	H	89.1	3.3	3.5	0.79	85.3	0.093	37
100 LP/4	3	2.2	IE3	1465	4.27	820	K	129	2.6	3.9	0.83	88.1	0.19	62
100 AP/4	4	3	IE3	1460	6.06	730	J	173	2.4	3.6	0.81	88.1	0.19	62
112 MP/4	5.4	4	IE3	1440	7.85	740	J	236	3.3	3.5	0.83	88.6	0.33	78
132 SP/4	7.5	5.5	IE3	1465	10.9	860	K	323	3.9	4.1	0.80	90.9	0.76	121
132 MP/4	10	7.5	IE3	1460	15.7	750	K	432	3.9	4.2	0.77	90.4	0.83	137
160 SP/4	12	9.2	IE3	1470	16.7	810	J	514	2.9	3.3	0.88	91.0	1.59	205
160 MP/4	15	11	IE3	1465	20.5	740	J	645	2.9	3.4	0.85	91.4	1.59	205
160 LP/4	20	15	IE3	1465	27.9	910	K	860	3.8	4.3	0.85	92.3	2.18	269
180 MP/4	25	18.5	IE3	1480	34.0	920	K	1065	3.4	3.8	0.84	93.1	3.80	342
180 LP/4	30	22	IE3	1475	39.3	800	J	1282	2.8	3.2	0.87	93.1	3.80	342
225 RP/4	40	30	IE3	1485	56.2	780	J	1707	3.0	3.4	0.82	94.1	11.63	694
225 SP/4	50	37	IE3	1485	68.2	770	J	2106	2.9	3.2	0.83	94.1	12.81	728
225 MP/4	60	45	IE3	1485	81.7	800	J	2561	3.0	3.4	0.83	94.6	15.90	805

*** Standard motors 10hp (7.5kw) and below are rated 230Δ / 400Y volts, while motors above 10hp (7.5kw) are rated 400Δ / 690Y volts.**

Intermittent Duty
400V - 50Hz

Inverter Duty • Induction motor • TEFC
Synchronous speed 1500rpm @ 50Hz • 4-pole • Three-phase
Voltages: 400V – 50Hz • 1.0 Service Factor
60 Minute Duty • 40°C Ambient • up to 3300ft Elevation
Class B temperature rise • Class F insulation

Motor Type	P_n Full Load Power		n_N Full Load Speed	I_n Full Load Current 400V*	I_a/I_n Locked Rotor Current Ratio	NEMA Code Letter	T_n Full Load Torque	T_a/T_n Locked Rotor Torque Ratio	T_k/T_n Break Down Torque Ratio	pf Power Factor	η Full-Load Efficien-cy	J_m Rotor Inertia	Wt. Weight
	[hp]	[kW]	[rpm]	[A]	[%]		[lb-in]				[%]	[lb-ft²]	[lb]
80 L/4	1	0.75	1375	2.10	350%	F	45.8	2.0	2.1	0.74	75.5%	0.033	20
90 S/4	1.5	1.1	1395	2.81	440%	G	67.8	2.3	2.6	0.74	77.6%	0.056	26
90 L/4	2	1.5	1395	3.55	480%	G	90.4	2.3	2.6	0.78	77.5%	0.074	31
100 L/4	3	2.2	1440	5.20	510%	G	131	2.3	3.0	0.74	80.8%	0.11	40
100 LA/4	4	3	1415	6.52	540%	G	178	2.5	2.9	0.76	83.3%	0.14	46
112 M/4	5.4	4	1445	8.31	540%	G	236	2.3	2.9	0.80	85.1%	0.26	66
132 S/4	7.5	5.5	1445	11.4	550%	G	327	2.1	2.7	0.81	87.9%	0.57	97
132 M/4	10	7.5	1445	14.8	550%	G	436	2.5	2.8	0.84	87.7%	0.76	121
132 MA/4	12.3	9.2	1450	18.8	600%	H	535	2.6	3.1	0.80	86.9%	0.83	137
160 M/4	15	11	1455	20.9	650%	H	650	2.4	2.9	0.85	88.8%	1.19	172
160 L/4	20	15	1460	28.2	750%	J	863	2.9	3.5	0.85	89.7%	1.59	205
180 MX/4	25	18.5	1460	35.4	750%	J	1079	3.2	3.8	0.83	90.3%	1.90	236
180 LX/4	30	22	1460	42.6	750%	J	1295	3.3	3.8	0.82	90.3%	2.18	269
200 LX/4	40	30	1470	57.6	690%	H	1715	2.6	3.0	0.83	90.7%	3.80	342

*** Standard motors 10hp (7.5kw) and below are rated 230Δ / 400Y volts, while motors above 10hp (7.5kw) are rated 400Δ / 690Y volts.**

CE

Notes

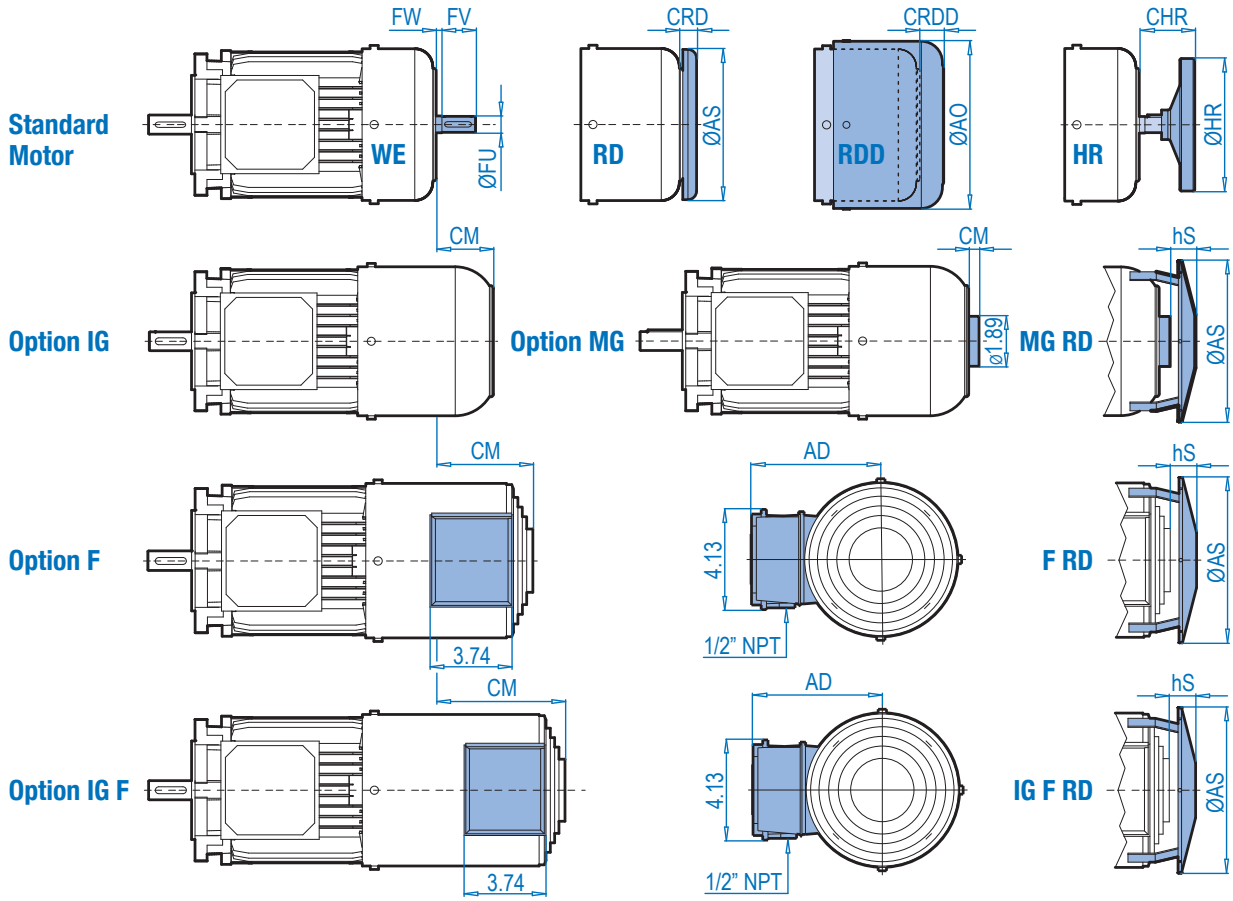
DRIVESYSTEMS

Motor Dimensions

INVERTER DUTY MOTOR

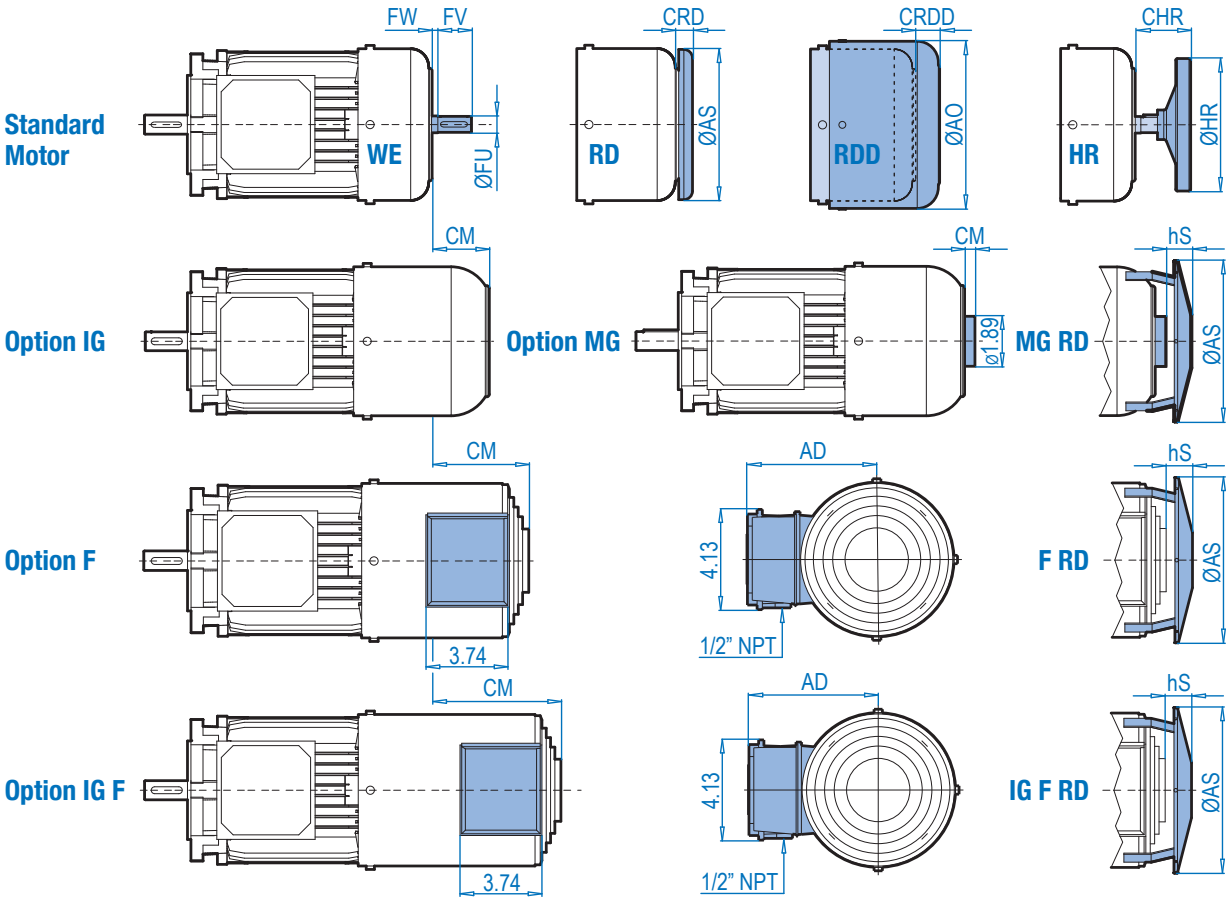
Motor Option Dimensions

DRIVESYSTEMS



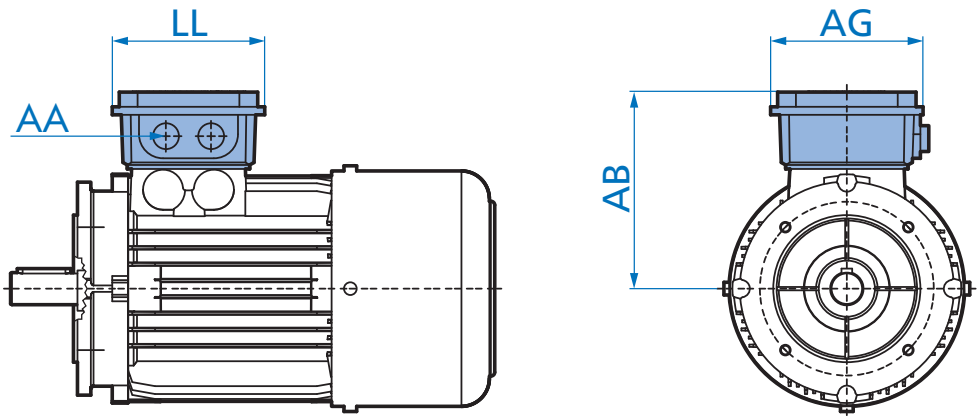
Motor Frame Size		WE (mm)				RD		RDD		HR		MG	MG RD		IG	F	IG F	F RD / IG F RD		
Std. Eff.	Prem. Eff.	FU	Tap	FW	FV	AS	CRD	AS	CRDD	HR	CHR	CM	AS	hS	CM	CM	CM	AS	hs	AD
63 S/L	-	11	M4	0	23	4.84	0.43	5.43	1.02	3.94	1.54	0.41	4.84	0.43	2.17	3.46	6.22	5.24	1.46	4.49
71 S/L	-	11	M4	1	23	5.43	0.43	6.14	0.94	3.94	1.57	0.45	5.43	0.43	2.20	3.50	5.67	5.91	1.46	4.84
80 S	80 LP	14	M5	3	30	6.14	0.59	6.93	1.02	3.94	1.93	0.39	6.14	0.35	2.40	3.54	5.51	6.69	1.57	5.20
90 S/L	90 SP/LP	19	M6	7	40	6.93	0.59	7.64	1.22	6.30	2.64	0.55	6.93	0.35	2.83	4.09	5.87	7.40	1.18	5.59
100 L/LA	100 LP/AP	24	M8	6	50	7.64	0.59	8.58	1.10	6.30	2.99	0.49	7.64	0.33	2.72	3.74	6.10	8.27	1.10	5.94
112 M	112 MP	24	M8	4	50	8.58	0.59	10.16	1.50	6.30	2.91	0.49	8.58	0.33	2.68	3.90	5.87	9.80	1.30	6.42
132 S/M	132 SP/MP	32	M12	18	80	10.12	0.67	12.20	1.61	7.87	4.69	0.39	10.12	0.43	2.48	4.53	6.10	11.81	1.26	7.20
160 M/L	-	42	M16	9	110	12.20	0.67	14.45	1.77	7.87	5.59	0.63	12.20	0.41	2.76	5.91	9.25	13.31	1.26	8.27
-	160 SP/MP/LP	42	M16	9	110	12.20	0.67	14.45	1.77	12.40	5.59	0.63	12.20	0.41	2.76	5.71	9.25	13.31	1.26	8.27
180 MX	-	42	M16	9	110	12.20	0.67	14.45	1.77	12.40	5.59	0.63	12.20	0.41	2.76	5.91	9.25	13.31	1.26	8.27
180 LX	-	42	M16	9	110	12.20	0.67	14.45	1.77	12.40	5.59	0.63	12.20	0.41	2.76	5.71	9.25	13.31	1.26	8.27
-	180 MP/LP	48	M16	7	110	13.70	0.59	15.87	2.68	12.40	5.59	0.51	13.70	0.41	4.29	6.02	9.17	13.31	1.26	8.27
200 LX	-	48	M16	7	110	13.70	0.59	15.87	2.68	12.40	5.59	0.51	13.70	0.41	4.29	6.02	9.17	13.31	1.26	8.27
-	225 RP/SP/MP	55	M20	10	110	13.70	3.41	20.43	3.31	-	-	-	-	-	2.64	5.00	11.30	-	-	9.84

Brakemotor Option Dimensions



Motor Frame Size		BRE	WE (mm)				RD		RDD		HR		MG	MG RD		IG	F	IG F	F RD / IG F RD		
Std. Eff.	Prem. Eff.	(Nm)	FU	Tap	FW	FV	AS	CRD	AS	CRDD	HR	CHR	CM	AS	hS	CM	CM	CM	AS	hs	AD
63 S/L	-	5	11	M4	4	23	4.84	0.43	5.43	1.02	3.94	1.69	0.57	4.84	0.43	2.44	3.54	4.92	5.24	1.46	4.49
71 S/L	-	5	11	M4	4	23	5.43	0.43	6.14	0.94	3.94	1.69	0.67	5.43	0.43	2.91	3.70	5.47	5.91	1.46	4.84
80 S	-	5	14	M5	4	30	6.14	0.59	6.93	1.02	3.94	1.97	0.47	6.14	0.35	2.24	3.54	5.51	6.69	1.57	5.20
-	80 LP	10	14	M5	4	30	6.14	0.59	6.93	1.02	3.94	1.97	0.47	6.14	0.35	2.24	3.54	5.51	6.69	1.57	5.20
90 S/L	90 SP/LP	20	14	M5	8	30	6.93	0.59	7.64	1.18	6.30	2.28	0.51	6.93	0.35	2.76	3.94	5.71	7.40	1.18	5.59
100 L/LA	100 LP	20	24	M8	10	50	7.64	0.59	8.58	1.10	6.30	3.15	0.51	7.64	0.33	2.76	4.13	5.51	8.27	1.10	5.94
-	100AP	40	24	M8	10	50	7.64	0.59	8.58	1.10	6.30	3.15	0.51	7.64	0.33	2.76	4.13	5.51	8.27	1.10	5.94
112 M	-	60	24	M8	7	50	8.58	0.59	10.16	1.50	6.30	3.03	0.49	8.58	0.35	2.52	4.13	5.51	9.80	1.30	6.42
-	112 MP	60	24	M8	7	50	8.58	0.59	10.16	1.50	6.30	3.03	0.49	8.58	0.33	2.52	4.13	5.51	9.80	1.30	6.42
132 S	-	60	32	M12	10	80	10.12	0.67	12.20	1.42	7.87	4.37	0.33	10.12	0.45	2.56	4.92	6.10	11.81	0.98	7.20
132 M	132 MP	100	32	M12	10	80	10.12	0.67	12.20	1.42	7.87	4.37	0.33	10.12	0.45	2.56	4.92	6.10	11.81	0.98	7.20
160 M	160 SP/MP	150	28	M10	9	60	12.20	0.67	14.45	1.77	7.87	5.59	0.67	12.20	0.41	2.76	5.71	9.25	13.31	1.26	8.27
160 L	-	250	42	M16	9	110	12.20	0.67	14.45	1.77	12.40	5.59	0.67	12.20	0.41	2.76	5.71	9.25	13.31	1.26	8.27
-	160 LP	250	42	M16	9	110	12.20	0.67	14.45	1.77	12.40	5.59	0.67	12.20	0.41	2.76	5.71	9.25	13.31	1.26	8.27
180 MX	-	250	42	M16	9	110	12.20	0.67	15.87	1.77	12.40	5.59	0.67	12.20	0.41	2.76	5.71	9.25	13.31	1.26	8.27
180 LX	-	250	42	M16	9	110	12.20	0.67	15.87	1.77	12.40	5.59	0.67	12.20	0.41	2.76	5.71	9.25	13.31	1.26	8.27
-	180 MP/LP	250	48	M16	9	110	13.70	0.67	15.87	2.76	12.40	5.59	0.71	13.70	0.41	2.76	5.75	9.88	13.31	1.26	8.27
200 LX	-	250	48	M16	9	110	13.70	0.67	15.87	2.76	12.40	5.59	0.71	13.70	0.41	2.76	5.75	9.88	13.31	1.26	8.27
-	225 RP/SP	400	55	M20	10	110	13.70	3.41	20.43	3.31	-	-	-	-	-	2.56	7.44	10.98	-	-	9.84
-	225 MP	800	55	M20	10	110	13.70	3.41	20.43	3.31	-	-	-	-	-	2.56	7.44	10.98	-	-	9.84

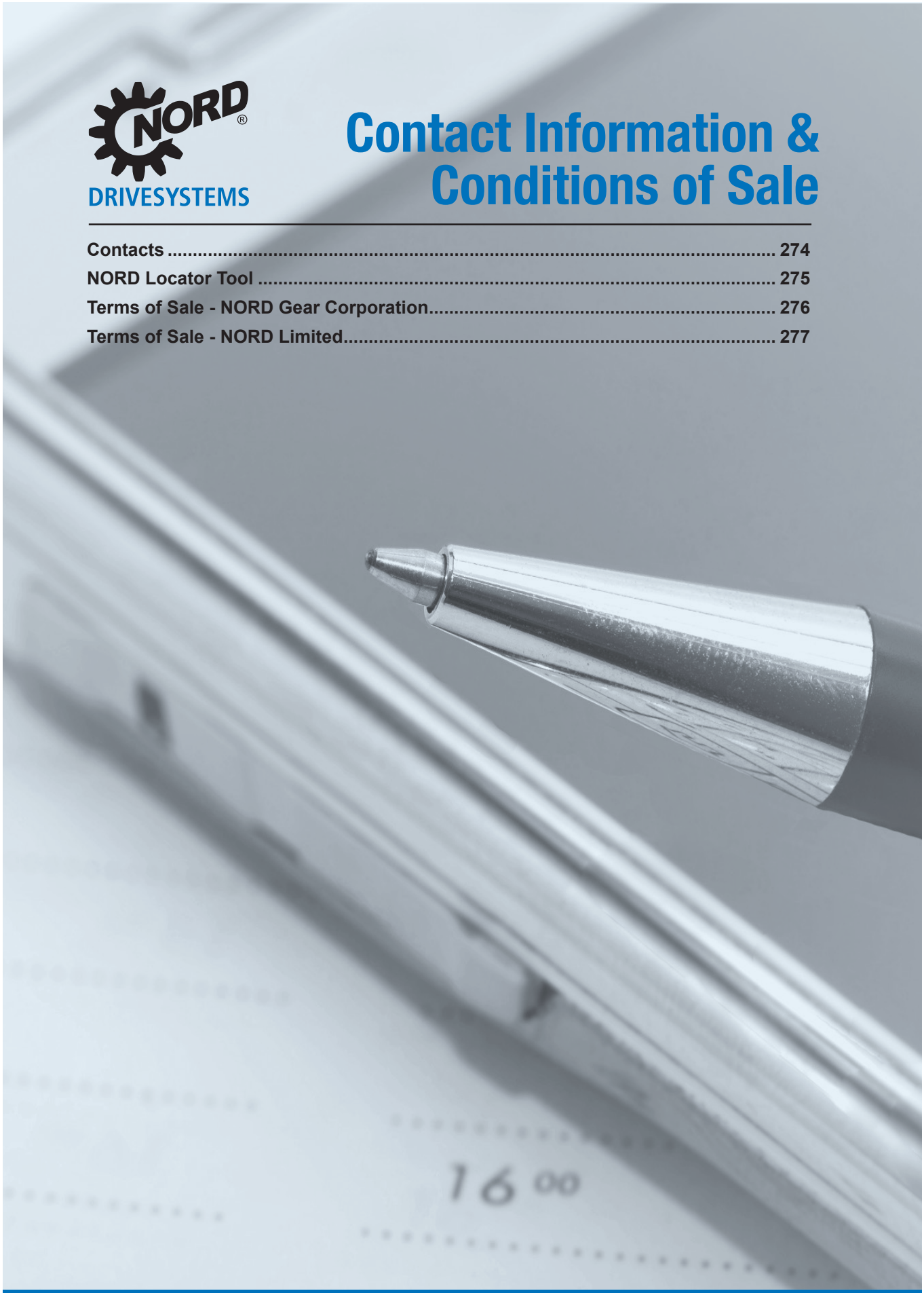
Conduit Box & Cable Entry Dimensions



Motor Frame Size		Motor Conduit Box & Cable Entry Dimensions									
60 Min.	Prem. Eff.	AB		LL		AG		FP		AA	Conduit
(IE1)	(IE3)	inch	mm	inch	mm	inch	mm	inch	mm		Adapter
63 S/L	-	4.51	115	3.95	100	3.95	100	5.08	129	M20 x 1.5	1/2" NPT
71 S/L	-	4.86	124	3.95	100	3.95	100	5.72	145	M20 x 1.5	1/2" NPT
80 S	80 LP	5.59	142	4.49	114	4.49	114	6.43	163	M25 x 1.5	3/4" NPT
90 S/L	90 SP/LP	5.79	147	4.49	114	4.49	114	7.19	183	M32 x 1.5	1" NPT
100 L/LA	100 LP/AP	6.65	169	4.49	114	4.49	114	7.90	201	M32 x 1.5	1" NPT
112 M	112 MP	7.05	179	4.49	114	4.49	114	8.87	225	M40 x 1.5	1" NPT
132 S/M	132 SP/MP	8.03	204	4.80	122	4.80	122	10.45	265	M40 x 1.5	1" NPT
160 M/L	160 SP/MP/LP	9.53	242	7.32	186	7.32	186	12.56	319	M40 x 1.5	1" NPT
180 MX/LX	-	9.53	242	7.32	186	7.32	186	12.56	319	M40 x 1.5	1" NPT
-	180 MP/LP	10.18	259	7.32	186	7.32	186	14.06	357	M40 x 1.5	1" NPT
200 LX	-	10.18	259	7.32	186	7.32	186	14.06	357	M40 x 1.5	1" NPT
-	225 RP/SP/MP	13.68	348	9.65	245	9.65	245	17.87	454	M50 x 1.5	1-1/2" NPT

Motor Frame Size		Brakemotor Conduit Box & Cable Entry Dimensions									
60 Min.	Prem. Eff.	AB		LL		AG		FP		AA	Conduit
(IE1)	(IE3)	inch	mm	inch	mm	inch	mm	inch	mm		Adapter
63 S/L	-	4.84	123	5.28	134	3.50	89	5.09	129	M20 x 1.5	1/2" NPT
71 S/L	-	5.24	133	5.28	134	3.50	89	5.72	145	M20 x 1.5	1/2" NPT
80 S	80 LP	5.59	142	6.02	153	4.25	108	6.43	163	M25 x 1.5	3/4" NPT
90 S/L	90 SP/LP	5.79	147	6.02	153	4.25	108	7.19	183	M32 x 1.5	1" NPT
100 L/LA	100 LP/AP	6.77	172	6.02	153	4.25	108	7.90	201	M32 x 1.5	1" NPT
112 M	112 MP	7.17	182	6.02	153	4.25	108	8.87	225	M40 x 1.5	1" NPT
132 S/M	132 SP/MP	7.91	201	7.29	185	5.48	139	10.45	265	M40 x 1.5	1" NPT
160 M/L	160 SP/MP/LP	9.53	242	7.32	186	7.32	186	12.56	319	M40 x 1.5	1" NPT
180 MX/LX	-	9.53	242	7.32	186	7.32	186	12.56	319	M40 x 1.5	1" NPT
-	180 MP/LP	10.18	259	7.32	186	7.32	186	14.06	357	M40 x 1.5	1" NPT
200 LX	-	10.18	259	7.32	186	7.32	186	14.06	357	M40 x 1.5	1" NPT
-	225 RP/SP/MP	13.68	348	9.65	245	9.65	245	17.87	454	M50 x 1.5	1-1/2" NPT

Contact Information & Conditions of Sale



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fax: 1-888-259-6673
email: info.us@nord.com

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email: info.us@nord.com

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eMail: info@nord.com

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eMail: info.ca@nord.com

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Mexico NORD Drivesystems SA DE CV
Mexico Regional Office
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San Pedro Garza Garcia, N.L.
México, C.P. 66266

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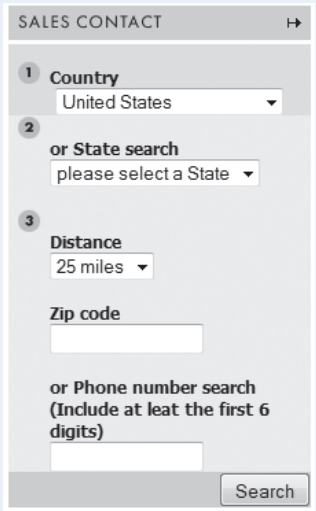
fax: +52-81-8220-9044
eMail: info.mx@nord.com

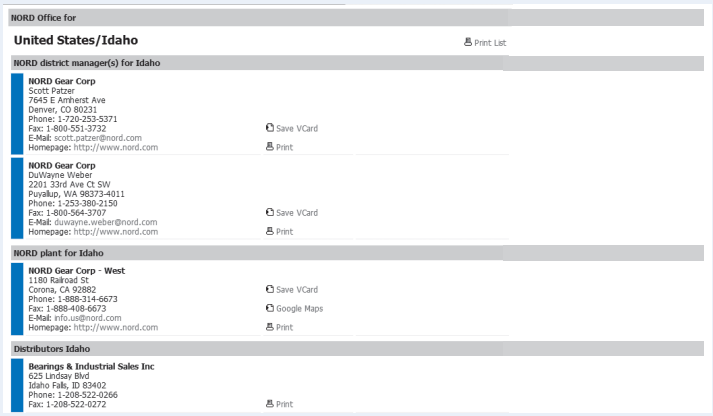
For Sales office or distributors please contact us or see our website at www.nord.com

Nord Locator Tool

For international contacts (outside of North America), NORD makes it easy for you to locate address and phone number of the sales contact or facility nearest you on our homepage or with the web address: www.locator.nord.com.



It is as easy as submitting your location and we provide you with a list of our nearest district managers, distributors and plant locations for your convenience.



NORD GEAR CORPORATION
Terms andConditions of Sale

1. CONTRACT
Any contract between Nord Gear Corporation, hereinafter designated as Seller, and the Buyer is subject to the terms and conditions of sale hereinafter set forth. Any deviation from such terms and conditions must be specifically set forth in writing and consented to by Seller. Accordingly, the Buyer and Seller acknowledge and agree that the terms and conditions set forth below and on the face hereof shall govern Buyer's purchase of the goods described on the face hereof and shall take precedence over and represents the final agreement between Buyer and Seller, notwithstanding any inconsistent, contradictory or other prior or further conditions contained in any oral or written request or purchase order issued by Buyer or any other document furnished by Buyer in connection with its purchase of the Goods, regardless of whether such document or documents are exchanged simultaneously with this Invoice or prior or subsequent thereto. Any additional or different terms or conditions which may appear in any communicaiton, oral or written, from Seller, its officers, employees, agents or representatives, are hereby expressly rejected and shall not be effective or binding upon the Seller, unless specifically hereafter agreed to in writing by Seller and no such additional or different terms or conditions in any document submitted to Seller by Buyer shall become part of the contract between Buyer and Seller, unless such written acceptance by Seller specifically recognizes and assents to their inclusion. Any objection by Buyer to the terms and conditions hereof shall be ineffective unless Seller is advised in writing thereof within two (2) days of the date of this Invoice.

2. CONFIRMATION
An order shall be deemed accepted only when duly confirmed by Seller, at Nord Gear Corporation's home office in Waunakee, Wisconsin, and upon such confirmation the order shall become a contract binding upon the parties hereto, their successors and assigns.

3. PRICES
Prices shown are list prices and may be subject to applicable discounts. Unless otherwise agreed upon in writing, prices are FOB factory Waunakee, Wisconsin. Prices and discounts are subject to change without notice until order is accepted. Seller's prices do not include cost of any inspection permits required.

4. LIMITED WARRANTY
Seller warrants the goods sold hereunder to be free from defects in material and workmanship under normal use and service not arising from misuse, negligence, or accident, including but not limited to the use, installation, and transportation of the goods by the Buyer, its agents, servants, employees, or by carriers. Such obligations under this warranty are limited to remedying any deficiencies in the goods at Waunakee, Wisconsin, or at such place or places in the United States of America as may be designated by Seller. THIS WARRANTY SHALL PERTAIN TO ANY PART OR PARTS OF ANY GOODS TO WHICH BUYER OR ITS ASSIGNS HAS GIVEN WRITTEN NOTICE OF CLAIMED DEFECTS TO SELLER. NORD GEAR CORP. WARRANTS ITS PRODUCTS AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF 12 MONTHS FROM DATE OF INSTALLATION OR 18 MONTHS FROM DATE OF SHIPMENT WHICHEVER COMES FIRST ON ALL COMPONENTS. 36 MONTHS FROM DATE OF INVOICE OR 24 MONTHS FROM DATE OF INSTALLATION WHICHEVER COMES FIRST ON GEARS AND HOUSINGS ONLY. PARTS WHICH ARE SUBJECT TO OPERATIONAL WEAR AND TEAR, SUCH AS BELTS & TRACTION DISCS, ARE NOT COVERED BY THE LIMITED WARRANTY. Buyer shall be required to furnish Seller with details of such defects and this warranty shall be effective as to such goods which Seller's examination shall disclose to its satisfaction to have been defective and which at Seller's option shall promptly thereafter be returned to Seller or its nominees. THE LIMITED WARRANTY SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH HEREIN, SELLER HAS MADE AND MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO THE GOODS SOLD HEREUNDER, INCLUDING, BUT NOT LIMITED TO, THEIR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. ANY DESCRIPTION OR MODEL OF THE GOODS IS FOR IDENTIFICATION OR ILLUSTRATIVE PURPOSES ONLY AND SHALL NOT BE DEEMED TO CREATE ANY WARRANTY, EXPRESS OR IMPLIED. SELLER MAKES NO REPRESENTATIONS AS TO THE CAPACITY OR PERFORMANCE OF THE GOODS SOLD HEREUNDER, EXCEPT AS SET FORTH IN THE INVOICE'S SPECIFICATIONS OR OTHER VALID AGREEMENT OR CONDITION AGREED TO BETWEEN THE PARTIES, AND ANY SUCH REPRESENTATIONS ARE EXPRESSLY CONDITIONED UPON THE CORRECTNESS OF THE DATA AND INFORMATION FURNISHED BY THE BUYER AND UPON THE GOODS BEING PROPERLY INSTALLED AND MAINTAINED. THE REMEDIES OF THE BUYER PROVIDED HEREUNDER ARE EXCLUSIVE. In no event shall the Seller be liable to the Buyer or to any other person for any loss or damage, direct or indirect, arising out of or caused by the use or operation of the goods, or for the loss of profits, business, or good will, or for any incidental, special or consequential damages. Seller shall in no event be liable to any person or firm (including any assignee or Buyer) except Buyer and its successors. Unless specifically authorized by Seller in writing, Seller shall not become responsible for any repair work done by Buyer or any other party on any goods sold. Any and all costs of the return to the Seller of such goods and all related costs to remove and re-install such goods, shall be borne by Buyer. Goods sold but not manufactured by the Seller are being warranted as to defects in material and workmanship consistent with the limited warranty policy of the original manufacturer of the goods and if there is not such a limited warranty policy, the warranty shall be limited to the provision of the preceding paragraph of Article 4 herein. Standards for the operating characteristics of the gearboxes and the gearmotors are in conformity with Seller's tests.

5. SHORTAGE AND NONCONFORMITY
Any claim of shortage or that the goods do not conform with the specifications of the order or model must be made in writing within ten (10) days after delivery of the goods (as to which such claim is made) to Buyer or its nominees, but in no event shall the claim be later than within the time limit provided by the carrier or insurance company, otherwise such claim shall be deemed waived. Buyer may not return any goods claimed to be in non-conformity without Seller's prior written authorization. Goods returned without permission will not be accepted, including for credit, and will be returned to Buyer, F.O.B. Sellter's plant. Any claim based on the receipt of damaged Goods must be filed with the carrier which delivered the goods. The samples, measurements, dimensions and weights contained in the Seller's catalogs, sales manuals, photographs and drawings constitute only an approximate guide. The Seller reserves the right to make any change which the Seller, in its absolute discretion, considers necessary. While the goods will be delivered principally according to specifications or standards or quantities agreed upon, insignificant deviations or insignificant changes in construction are permissible. The same applies to partial deliveries, In the event that Buyer has a verified claim of shortage or nonconformity of the goods to the specifications of the order or the model, and if such claim has been submitted within the required time limit as set forth above, the Seller shall, at its own expense, make up for the shortage of the goods, or replace or repair the goods, as the case may be, but in no event shall Seller be or become liable to Buyer or to any other person or persons for any loss in damage, direct or indirect, arising out of or caused by such incidents or for the loss of profits, business or good will. The liability of the Seller to Buyer, if any hereunder, for breach of warranty, contract, negligence or otherwise, shall in no event exceed the amount of the purchase price of the goods sold with respect to which any damages are claimed. Shipping dates are estimates unless parties expressly agree on time of the essence.

6. FORCE MAJEURE
The obligation of the Seller shall be modified or excused, as the case may be, for reasons of Acts of God, war, governmental law regulations, strikes or lock-outs, fire, breakdown of machinery, whether in its own business enterprise, or if for any other cause beyond Seller's control, the goods cannot be delivered or their delivery becomes delayed in whole or in part. In the above instances time for delivery shall be extended for the period of the delay caused, with the proviso, however, that either party may cancel in writing the undelivered portion of the order or contract if the delay exceeds six (6) months from the delivery date originally confirmed by Seller. In no event shall Seller become liable in the aforesaid instances to Buyer or any third party for consequential damages or business loss.

7. SHIPMENT AS UNIT
Each shipment by Seller shall be treated as a separate and distinct unit with respect, but only with respect to forwarding, terms of payment, and the making of claims by the Buyer: provided, however, that if the Buyer defaults in the payment of any obligation to Seller or any installments thereof, under any agreement between Buyer and Seller, or if Buyer refuses to accept any goods when tendered for delivery, the Seller may, on fifteen (15) days written notice to the Buyer, without prejudice to Seller's other lawful remedies, either defer further performance until the defaulted payments are made in full, or make future deliveries for cash in advance only, or treat the entire contract or contracts with Buyer as breached by the Buyer and pursue its remedies for breach.

8. BUYER'S REFUSAL OF DELIVERY
If Buyer refuses to accept delivery of any goods tendered for delivery, then Seller, without prejudice to Seller's other lawful remedies, may either store or cause such goods to be stored in a warehouse, for buyer's account and at Buyer's cost, risk and expense, or sell such goods (without notice) to any purchases at public or private sale, and hold the Buyer liable for any difference between (a) the contract price of the goods, and (b) the price at which goods are resold less the costs and expense of such resale including brokerage commissions, or restocking charges.

9. GOODS IN TRANSIT
If prior to delivery or while the goods are in transit, Buyer or Seller becomes bankrupt or insolvent, or any petition in bankruptcy or for the reorganization or for a state court receivership is filed against Buyer or Seller, as the case may be, then the other party hereto may forthwith terminate this contract by giving written notice of such termination. Such termination shall not affect any claim for damages available to the Buyer, provided that if Buyer is then indebted to Seller, the amount of any such damage claim shall be abated to the extent that the indebtedness of Buyer to Seller, as actually paid in money, is abated by any order of judgement entered or any plan adopted in any bankruptcy, reorganization, receivership, or similar proceeding. Such termination shall not prejudice the Seller's rights to any amounts then due under the contract. If Buyer becomes bankrupt or insolvent or any petition in bankruptcy or for reorganizing or if a state court receivership is filed against Buyer, then, at its option Seller may take possession of any goods theretofore sold to Buyer, in connection with which the full purchase price has not been paid, analogous to the terns and provisions set forth in Paragraphs 11 and 12 hereinafter.

10. DELIVERY
(a) Any indicated dates of delivery are approximate only, but NORD Gear will attempt to meet them whenever possible. (b) NORD Gear will not be liable for any penalty clausess contained in any specifications or order submitted unless agreed to in writing by an authorized officer of NORD Gear Corporation. (c) Unless otherwise agreed, delivery of the goods to any carrier shall constitute delivery to the Buyer, and thereafter the risk of loss or damage to the goods shall be upon the Buyer. (d) If the Buyer does not give delivery instructions to the Seller at least (10) days prior to the delivery date ex factory confirmed by the Seller, the Seller may deliver the goods to a carrier of its own choosing, at Buyer's cost and risk, or, at Seller's option, may store the goods on the pier or any warehouse, at Buyer's cost and risk. Any purchase price in such event becomes due and payable within ten (10) days of such storage.

11. PAYMENT OF PURCHASE PRICE
Time of payment is of the essence under the contract. Unless otherwise provided, terms of payment are 30 days net from the date of invoice with a 1% discount if paid within 10 days of date of invoice. Upon default in any of the terms of the contract, or failure to comply with any of the conditions thereof, or upon seizure of the property under execution or other legal process, or if the Buyer becomes bankrupt or insolvent, or any petition for reorganization or for a state court receivership is filed against Buyer, or if the Buyer makes any assignment for the benefit of it's creditors or otherwise sells, encumbers or disposes of the goods, or if for any other reason the Seller should deem itself insecure, the full amount of the purchase price then remaining unpaid shall at once become due and payable at the option of the Seller.

12. BUYER'S DEFAULT
Upon the Buyer's default, the Seller may dispose of the merchandise in any manner that it deems fit and, if it desires to resell same, may do so at private or public sale, with or without notice, and with or without the property being at the place of sale, subject, however, to applicable laws. The Seller or its assigns shall have the right to bid at such sale and may become the purchaser of the property. The proceeds of the sale shall first be applied to the expenses incurred in retaking, repairing, storing and selling the goods, reasonable attorney's fees included, and then shall be applied to the payment of the balance due under the contract. Any surplus amount shall be paid to the Buyer. If a deficiency results after the resale, the Buyer agrees to pay such forthwith, together with reasonable attorney's fees, for the recovery of the goods incurred by the Seller. If upon the Buyer's default, the Seller elects not to resell any goods which it may repossess, then the cost of repossession, including reasonable attorney's fees, shall forthwith be due and payable from Buyer to Seller. Buyer agrees to pay all reasonable costs and reasonable attorneys' fees incurred by Seller in enforcing Seller's rights against Buyer, including Seller's right to payment of the purchase price of the goods and Buyer's payment of all other amounts owing to Seller required under this Invoice and Conditions of Sale.

13. SECURITY INTEREST AND TITLE
In states and localities which are governed by the Uniform Commercial Code, this contract shall serve as security agreement, reserving in Seller a security interest until full payment of purchase price. The provisions of the Uniform Commercial Code regarding security interest shall have preference and apply if inconsistent with other terms of the conditions of sale. In states and localities where the Uniform Commercial Code does not apply, title to the goods shall remain in the Seller or its assigns until full payment of the purchase price. Buyer agrees to execute forthwith any and all documents in such a way and form as Seller may need for filing or recording the security interest under the Uniform Commercial Code with the proper registers or offices, or for filing or recording the conditional sales contract.

14. SALES AND USE TAX
Buyer agrees to bear and pay any sales or use tax in connection with the purchase herein, and to hold the Seller harmless from payment. At the option the Seller, Buyer shall give evidence of payment or of exemption certificate.

15. INSURANCE
The Buyer shall keep the goods insured against damage by fire, water or other casualty as required by Seller, with a company acceptable to Seller, with loss payable to Seller for the total purchase price until the Seller is fully paid. Seller, if it so elects, may place said insurance at Buyer's expense; Seller may cancel such insurance at any time and without notice and may receive the return premium, if any.

16. MODIFICATION BY SELLER
Any contract may be assigned or transferred by the Seller, or the time for the making of any payment due by Buyer may be extended by Seller without derogation of any of the rights of the Seller or its assigns. Waiver by any party of any default shall not be deemed a waiver of any subsequent default.

17. RETURNED GOODS
No goods will be accepted for return unless authorized in writing by Seller. In all cases, transportation and restocking charges will be borne by Buyer.

18. PACKING
The Buyer will be charged for export packaging or other special packing desired. Cost for cartage to ship or transfer express will be added to the invoice. No credit will be allowed if no packing is required.

19. CHANGES/CANCELLATION
NORD Gear will not accept changes in specifications to a confirmed order unless such changes are requested in writing and confirmed back in writing. In addition, the purchaser must to agree to any additional charges that may arise from the change. Placing orders on hold or cancellation of orders require Seller's written approval, and are subject to cancellation and/or restocking charges.

20. BUYER'S RESPONSIBILITY AS TO MAINTENANCE
Buyer shall use and shall require its employees and agents to use all safety devices and guards and shall maintain the same in proper working order. Buyer shall use and require its employees and agents to use safe operation procedures in operating the equipment and shall further obey and have its employees and agents obey safety instructions given by Seller. If Buyer fails to meet the obligations herein, Buyer agrees to defend, indemnify and save Seller harmless from any liability or obligation with regard to any personal injuries or property damages directly or indirectly connected with the operation of the equipment. Buyer further agrees to notify Seller promptly and in any event not later than ten (10) days after notice or knowledge of any accident or malfunction involving Seller's equipment which has caused personal injury or property damages and to cooperate fully with Seller in investigating and determining the causes of such accident and malfunction. In the event that Buyer fails to give such notice to Seller or to cooperate with Seller, Buyer shall be obligated to defend, indemnify and save Seller harmless from any such claims arising from such accident.

21. MISCELLANEOUS PROVISIONS
(a) If for any reason a provision of a contract is legally invalid, then in such event the rest of the contract shall remain in full force and affect, except that the parties shall try to replace such invalid provision closest to their original mutual intentions. (b) This Invoice and these Conditions of Sale constitute the entire agreement between the parties regarding the subject matter hereof and supercedes all prior agreements, understandings and statements, whether oral or written, regarding such subject matter. No modification to, change in or departure from, the provisions of this Invoice and Conditions of Sale shall be valid or binding on Seller, unless approved in writing by Seller. No course of dealing or usage of trade shall be applicable unless expressly incorporated into this Invoice and Conditions of Sale. Any amendments to any contract or contracts between the parties shall be valid only upon the written consent of both parties.

22. NON ASSIGNMENT BY BUYER
Contract or contracts may not be assigned by the Buyer without prior written consent of the Seller.

23. APPLICABLE LAW AND VENUE
All contracts and their interpretation are governed by the applicable, substantive laws of the State of Wisconsin. Any litigation brought by the Buyer regarding this Invoice or goods purchased hereunder may only be brought in the Circuit Court for Dane County, Wisconsin.

Nord Gear Company Terms 12/4/06

NORD GEAR LIMITED
Terms and Conditions of Sale

1. CONTRACT
Any contract between Nord Gear Limited, hereinafter designated as "Seller", and the party or parties accepting these terms and conditions of sale and any agent, officer, servant, employee or subcontractor of such party or parties, hereinafter designated as "Buyer", is subject to the terms and conditions of sale hereinafter set forth. Any deviation from such terms and conditions must be specifically set forth in writing and consented to by Seller.

2. CONFIRMATION
An order shall be deemed accepted only when duly confirmed by Seller, at Nord Gear Limited's home office in Brampton, Ontario, and upon such confirmation the orders shall become a contract binding upon the parties hereto, their successors and assigns.

3. PRICES
Prices shown are list prices and may be subject to applicable discounts. Unless otherwise agreed upon in writing, prices are FOB factory Brampton, Ontario. Prices and discounts are subject to change without notice until the order is accepted. Seller's prices do not include cost of any inspection permits required.

4. LIMITED WARRANTY
Seller warrants the goods sold hereunder to be free from defects in material and workmanship under normal use and service not arising from misuse, negligence, or accident, including but not limited to the use, installation, and transportation of the goods by Buyer, its agents, servants, employees, or by carriers. This warranty shall pertain to any part or parts of any goods to which Buyer or its assigns has within one year from date of delivery given written notice of claimed defects to Seller. Buyer shall be required to furnish Seller with details of such defects and this warranty shall be effective as to such goods which Seller's examination shall disclose to its satisfaction to have been defective and which at Seller's option shall promptly thereafter be returned to Seller or its nominees. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH ABOVE, SELLER HAS MADE NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE GOODS SOLD HEREUNDER, INCLUDING, BUT NOT LIMITED TO THEIR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. ANY DESCRIPTION OR MODEL OF THE GOODS IS FOR IDENTIFICATION OR ILLUSTRATIVE PURPOSES ONLY AND SHALL NOT BE DEEMED TO CREATE AN EXPRESS WARRANTY. The Buyer's exclusive remedy for claims arising from defective or nonconforming goods shall be limited to the repair or replacement thereof at the Seller's sole option. THE SELLER SHALL NOT BE RESPONSIBLE OR LIABLE FOR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE SALE, DELIVERY, USE, PERFORMANCE, OR SERVICE OF THE GOODS SOLD UNDER THIS AGREEMENT. SELLER SHALL NOT BE LIABLE FOR ANY LOST PROFITS OR FOR ANY CLAIM OR DEMAND AGAINST SELLER BY ANY PARTY. IN NO EVENT WILL SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, EVEN IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SELLER'S AGGREGATE LIABILITY FOR DAMAGES UNDER THIS AGREEMENT, WHETHER ARISING FROM OR BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, TORT OR OTHER CAUSE OF ACTION, SHALL IN NO CASE EXCEED THE PURCHASE PRICE THAT BUYER PAYS FOR THE PARTICULAR GOODS INVOLVED. Seller shall in no event be liable to any person or firm (including any assignee or Buyer) except Buyer and its successors. Unless specifically authorized by Seller in writing, Seller shall not become responsible for any repair work done by Buyer or any other party on any goods sold. Any costs of the return of such goods to Seller shall be borne by Buyer. Goods sold but not manufactured by Seller are being warranted as to defects in material and workmanship consistent with the limited warranty policy of the original manufacturer of the goods and if there is not such a limited warranty policy, the warranty shall be limited to the provisions of Article 4 herein. Standards for the operating characteristics of the gearboxes and the gear motors are in conformity with Seller's tests. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE SELLER DOES NOT ASSUME, NOR DOES IT AUTHORIZE ANY PERSON TO ASSUME, ON ITS BEHALF, ANY OTHER OBLIGATION OR LIABILITY.

5. SHORTAGE AND NONCONFORMITY
Any claim of shortage or that the goods do not conform with the specifications of the order or model must be made in writing within ten (10) days after delivery of the goods (as to which such claim is made) to Buyer or its nominees, but in no event shall the claim be later than within the time limit provided by the carrier or insurance company, otherwise such claim shall be deemed waived. The samples, measurements, dimensions and weights contained in Seller's catalogs, sales manuals, photographs and drawings constitute only an approximate guide. Seller reserves the right to make any changes which Seller, in its absolute discretion, considers necessary. While the goods will be delivered principally according to specifications of standards or quantities agreed upon, insignificant deviations or insignificant changes in construction are permissible. The same applies to partial deliveries. In the event that Buyer has a verified claim of shortage or nonconformity of the goods to the specifications of the order or the model, and if such claim has been submitted within the required time limit as set forth above, Seller shall, at its own expense, make up for the shortage of the goods, or replace or repair the goods, as the cause may be, but in no event shall Seller be or become liable to Buyer or to any other person or persons for any loss in damage, direct or indirect, arising out of or caused by such incidents or for the loss of profits, business of good will. Shipping dates are estimates unless parties expressly agree on time of the essence.

6. FORCE MAJEURE
The obligation of Seller shall be modified or excused, as the case may be, for reasons of Acts of God, war, governmental law regulations, strikes or lock-outs, fire, breakdown of machinery, whether in its own business enterprise, or if for any other cause beyond Seller's control, the goods cannot be delivered or their delivery becomes delayed in whole or in part. In the above instances time for delivery shall be extended for the period of the delay caused, with the proviso, however, that either party may cancel in writing the undelivered portion of the order of contract if the delay exceeds six (6) months from the delivery date originally confirmed by Seller. In no event shall Seller become liable in the aforesaid instances to Buyer or any third party for consequential damages or business loss.

7. SHIPMENT AS UNIT
Each shipment by Seller shall be treated as a separate and distinct unit with respect, but only with respect to forwarding, terms of payment, and the making of claims by Buyer; provided, however, that if Buyer defaults in the payment of any obligation to Seller or any installments thereof, under any agreement between Buyer and Seller, or if Buyer refuses to accept any goods when tendered for delivery, Seller may, on fifteen (15) days written notice to Buyer, without prejudice to Seller's other lawful remedies, either defer further performance until the defaulted payments are made in full, or make future deliveries for cash in advance only, or to treat the entire contract or contracts with Buyer as breached by Buyer and pursue its remedies for breach.

8. BUYER'S REFUSAL OF D ELIVERY
If Buyer refuses to accept delivery of any goods tendered for delivery, then Seller, without prejudice to Seller's other lawful remedies, may either store or cause such goods to be stored in a warehouse, for Buyer's account and at Buyer's cost, risk and expense, or sell such goods (without notice) to any purchaser at public or private sale, and hold Buyer liable for any difference between (A) the contract price of the goods, and (B) the price at which goods are resold less the costs and expense of such resale including brokerage commissions, or restocking charges.

9. GOODS IN TRANSIT
If prior to delivery or while the goods are in transit, Buyer or Seller becomes bankrupt or insolvent, or any petition in bankruptcy or for the reorganization or for appointment of a receiver is filed against Buyer or Seller, as the case may be, then the other party hereto may forthwith terminate this contract by giving written notice of such termination. Such termination shall not affect any claim for damages available to Buyer, to Seller, as actually paid in money, is abated by any order of judgment entered or any plan adopted in any bankruptcy, reorganization, receivership, or similar proceeding. Such termination shall not prejudice Seller's rights to any amounts then due under the contract. If Buyer becomes bankrupt or insolvent or any petition in bankruptcy or for reorganization or if a state court receivership is filed against Buyer, then, at its option, Seller may take possession of any goods theretofore sold to Buyer, in connection with which the full purchase price has not been paid, analogous to the terms and provisions set forth in Paragraphs 11 and 12 hereinafter.

10.DELIVERY
(A)Unless otherwise agreed, delivery of the goods to any carrier shall constitute delivery to Buyer, and thereafter the risk of loss or damage to the goods shall be upon Buyer. (B) If Buyer does not give delivery instructions to Seller at least ten (10) days prior to the delivery date ex factory confirmed by Seller, Seller may deliver the goods to a carrier of its own choosing, at Buyer's cost and risk, or, at Seller's option may store the goods on the pier or on any warehouse at Buyer's cost and risk. Any purchase price in such event becomes due and payable within ten (10) days of such storage.

11. PAYMENT OF PURCHASE PRICE
Time of payment is of the essence under the contract. Upon default in any of the terms of the contract, or failure to comply with any of the conditions thereof, or upon seizure of the property under execution or other legal process, or if Buyer becomes bankrupt or insolvent, or any petitions for reorganization or for appointment of a receiver is filed against Buyer, or if Buyer makes any assignment for the benefit of its creditors or otherwise sells, encumbers or disposes of the goods, or if for any other reason Seller should deem itself insecure, the full amount of the purchase price then remaining unpaid shall at once become due and payable at the option of Seller. Interest on the delinquent payment from the due date thereof until paid shall be at a rate of two (2%) percent per month.

12. BUYER'S DEFAULT
Upon Buyer's default, Seller may dispose of the merchandise in any manner that it deems fit and, if it desires to resell same, may do so at private or public sale, with or without notice, and with or without the property being at the place of sale, subject, however, to applicable laws. Seller or its assigns shall have the right to bid at such sale and may become the purchaser of the property. The proceeds of the sale shall first be applied to the expenses incurred in retaking, repairing, storing and selling the goods; reasonable solicitor's fees included, and then shall be applied to the payment of the balance due under the contract. Any surplus amount shall be paid to Buyer. If a deficiency results after the sale, Buyer agrees to pay such forthwith, together with reasonable solicitor's fees, for the recovery of the goods incurred by Seller. If upon Buyer's default, Seller elects not to resell any goods which it may repossess, then the cost of repossession, including reasonable solicitor's fees, shall forthwith be due and payable from Buyer to Seller.

13. SECURITY INTEREST AND TITLE
In provinces which are governed by a Personal Property Security Act, this contract shall serve as a security agreement, reserving in Seller a security interest until full payment of the purchase price. The provisions of the Personal Property Security Act regarding security interest shall have preference and apply if inconsistent with other terms of the conditions of sale herein. In provinces where a Personal Property Security Act does not apply, title to the goods shall remain in the Seller or its assigns until full payment of the purchase price. Buyer agrees to execute forthwith any and all documents in such a way and form as Seller may need for filing or recording the security interest under a Personal Property Security Act with the proper registers or offices, or for filing or recording the Conditional Sales Contract herein.

14. SALES AND USE TAX
Seller's prices do not include sales, use, excise or other taxes payable to any governmental authority in respect of the sale of Seller's goods. Buyer shall pay, in addition to Seller's price, the amount of any such taxes or shall reimburse Seller for the amount thereof that Seller may be required to pay. At the option of Seller, Buyer shall give evidence of payment or of exemption certificate.

15. INSURANCE
Buyer shall keep the goods insured against damage by fire, water or other casualty as required by Seller, with a company acceptable to Seller, with loss payable to Seller for the total purchase price until Seller is fully paid. Seller, if it so elects, may place said insurance at Buyer's expense; Seller may cancel such insurance at any time and without notice and may receive the return premium, if any.

16. MODIFICATION BY SELLER
Any contract may be assigned or transferred by Seller, or the time for the making of any payment due by Buyer may be extended by Seller without derogation of any of the rights of Seller or its assigns. Waiver by any party of any default shall not be deemed a waiver of any subsequent default.

17. RETURNED GOODS
No goods will be accepted for return unless authorized in writing by Seller. In all cases, transportation and restocking charges will be borne by Buyer.

18. PACKING
Seller does not charge for standard packaging for domestic shipment. Buyer will be charged, however, for export packaging or other special packing desired. Cost for cartage to ship or transfer express will be added to the invoice. No credit will be allowed if no packing is required.

19. EXPORT ORDER
Export orders are to be accompanied by a confirmed irrevocable Letter of Credit in Seller's favor, in Canadian currency, with an accredited Canadian bank, subject to Seller's draft, with shipping documents attached.

20. CANCELLATION
Placing orders on hold or cancellation of orders require Seller's written approval, and are subject to cancellation and/or restocking charges.

21. BUYER'S RESPONSIBILITY AS TO MAINTENANCE
Buyer shall use and shall require its employees and agents to use all safety devices and guards and shall maintain the same in proper working order. Buyer shall use and require its employees and agents to use safe operating procedures in operating the equipment and shall further obey and have its employees and agents obey safety instructions given by Seller. If Buyer fails to meet the obligations herein, Buyer agrees to indemnify and save Seller harmless from any liability or obligation with regard to any personal injuries or property damages directly or indirectly connected with the operation of the equipment. Buyer further agrees to notify Seller promptly and in any event not later than ten (10) days after notice or knowledge of any accident or malfunction involving Seller's equipment which has caused personal injury or property damages and to cooperate fully with Seller in investigating and determining the causes of such accident and malfunction. In the event that Buyer fails to give such notice to Seller or to cooperate with Seller, Buyer shall be obligated to indemnify and save Seller harmless from any such claims arising from such accident.

22. MISCELLANOUS PROVISIONS
(A)If for any reason a provision of a contract is legally invalid, then in such event the rest of the contract shall remain in full force and affect, except that the parties shall try to replace such invalid provision with a provision closest to their original mutual intentions. (B) Any amendments to any contract or contracts require the consent in writing by both parties. Headings in this document are for ease of reference only.

23. NON ASSIGNMENT BY BUYER
Contract or contracts may not be assigned by Buyer without prior written consent of Seller.

24. APPLICABLE LAW
This agreement shall be governed by the laws of the Province of Ontario and the applicable laws of Canada. Buyer and Seller agree that any judicial proceeding with respect to this agreement must be brought and maintained in the City of Toronto, In the Province of Ontario.

25.
This instrument sets forth the entire understanding and agreement of the parties hereto in respect of the subject matter hereof, and all prior undertaking between the parties hereto, together with all representations and obligations of such parties in respect of such subject matter, shall be superseded by and merged into this instrument.

26.
The provisions of this agreement shall bind and ensure to the benefit of the parties hereto and their respective heirs, executors, administrators, successors and (subject to any restrictions or assignment herein above set forth) assigns, as the case may be.

27.
The parties acknowledge that they have requested this document and all notices or other documents relating thereto be drafted in the English language.

Les parties reconnaissent qu'ils ont requis que ce contrat et tous les avis ou autres documents qui s'y rapportent soient rédiges en langue anglaise.

"Terms and Conditions in French available upon request."

Notes

Notes

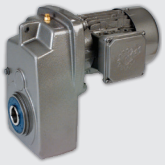
Notes

DRIVESYSTEMS

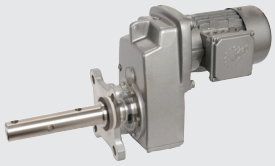
UNICASE™ SPEED REDUCERS

HELICAL IN-LINE
- Foot or Flange Mount
- Torque up to 205,000 lb-in
- Gear ratios – 1.82:1 to over 300,000:1

NORDBLOC®.1 HELICAL IN-LINE
- Foot or Flange Mount
- Torque up to 26,550 lb-in
- Gear ratios – 1.88:1 to over 370:1

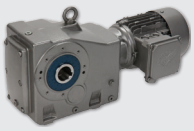


PARALLEL HELICAL CLINCHER™
- Shaft, Flange or Foot Mount
- Torque up to 797,000 lb-in
- Gear ratios – 4.26:1 to over 300,000:1

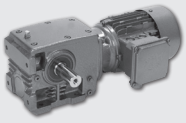


SCP SCREW CONVEYOR PACKAGE
- Shaft, or Flange Mount
- Torque up to 53,100 lb-in
- Gear ratios – 4.32:1 to over 1500:1

RIGHT ANGLE HELICAL-BEVEL 2-STAGE
- Foot, Flange or Shaft Mount
- Torque up to 5,840 lb-in
- Gear ratios – 4.1:1 to 70:1



RIGHT ANGLE HELICAL-BEVEL
- Foot, Flange or Shaft Mount
- Torque up to 283,000 lb-in
- Gear ratios – 8.04:1 to over 300,000:1



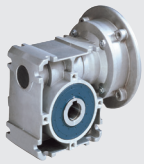
RIGHT ANGLE HELICAL-WORM
- Foot, Flange or Shaft Mount
- Torque up to 27,585 lb-in
- Gear ratios – 4.40:1 to over 300,000:1

HIGH PERFORMANCE MOTORS & BRAKEMOTORS

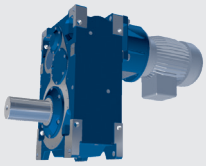
INVERTER/VECTOR DUTY
- Standard or Energy Efficient
- Integral, NEMA or Metric IEC
- 1/6 to 250 hp

UNICASE™ SPEED REDUCERS

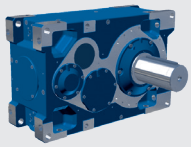
MINICASE™ RIGHT ANGLE WORM
- Foot, Flange or Shaft Mount
- Torque up to 3,540 lb-in
- Gear ratios – 5:1 to 500:1



FLEXBLOC™ WORM
- Modular bolt-on options
- Torque up to 4,683 lb-in
- Gear ratios – 5:1 to 3,000:1



MAXXDRIVE™ LARGE INDUSTRIAL GEAR UNITS PARALLEL HELICAL
- Modular bolt-on options
- Torque up to 2,027,000 lb-in
- Gear ratios – 5:1 to 1,600:1



MAXXDRIVE™ LARGE INDUSTRIAL GEAR UNITS HELICAL-BEVEL
- Modular bolt-on options
- Torque up to 2,027,000 lb-in
- Gear ratios – 5:1 to 1,600:1

NORDAC AC VECTOR DRIVES

SK180E FAMILY
- Distributed, simple speed control
- 380-480V, 3-phase to 3.0 hp
- 200-240V, 3-phase to 1.5 hp
- 200-240V, 1-phase to 1.5 hp
- 100-120V, 1-phase to 0.75 hp

SK200E **FAMILY**
- Distributed, high performance
- 380-480V, 3-phase to 30 hp
- 200-240V, 3-phase to 15 hp
- 200-240V, 1-phase to 1.5 hp
- 100-120V, 1-phase to 1 hp

SK500E FAMILY
- Compact, cabinet mount, high performance
- 380-480V, 3-phase, to 125 hp
- 200-240V, 3-phase, to 25 hp
- 200-240V, 1-phase, to 3 hp
- 100-120V, 1-phase, to 1.5 hp

Global Vision, Local Support

NORD makes its wide product range easily available through a global network that includes representation in over 60 countries. By providing all of our customers with prompt delivery, and expert support services, we are firmly committed to exceeding customer expectations and being responsive to the ideas and specifications of every customer, anywhere in the world.

Global Presence
Allows for short lead times and quick response times throughout the world.

Modular Design
More than 20 million totally unique product combinations guarantees that you wont need to look anywhere else.

Quality Manufacturing
NORD produces maintenance free products that have a long life in order to save you money for the long haul.

Dependable Service
With emergency service available 24/7 we can help you out when you need us most.

Innovative Products
Our engineers are hard at work creating solutions to everyday problems.

We Have you Covered
NORD provides Gear Drives, Motors & AC inverters in order to provide you with a complete Drivesystem solution.

DRIVESYSTEMS
www.nord.com

100200076/3019

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