BONFIGLIOLI TRASMITAL

300 Series

Industrial Planetary Gearboxes



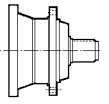

BONFIGLIOLI

Power & Control Solutions

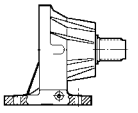
DESCRIPTION KEY

3 11 L 2 16.7 NPC

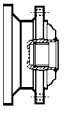
OUTPUT



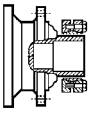
HZ
Heavy duty splined male shaft



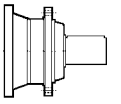
PZ
Foot mounted with splined shaft



FZ
Hollow splined shaft

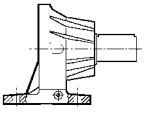


FP
Hollow shaft for shrink disc



NHC
Heavy duty flanged output - keyed shaft, inch dims.

HC
Heavy duty flanged output - keyed shaft, metric dims.



NPC
Footed output - keyed shaft, inch dims.

PC
Footed output - keyed shaft, metric dims.

GEAR RATIO

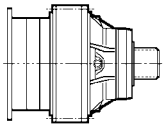
Value to be specified, including point and decimals, as listed in the rating charts

Ex.: 1/5.33 = 5.33 1/44.6 = 44.6 1/131 = 131

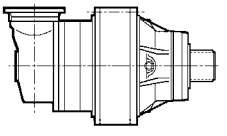
REDUCTIONS
1 - 2 - 3 - 4

DESIGN

L = In line



R = Right angle



FRAME SIZE

00, 01, 03, 05, 06, 07, 09, 10, 11, 13, 15, 16, 17, 18, 19, 21

SERIES

3

GENERAL INFORMATION

SERIES 300 MODULAR PLANETARY GEARBOXES

Revisions
Refer to page 272 for the catalogue revision index.
Visit www.bonfiglioli.com to search for catalogues with up-to-date revisions.

1.0 - SPECIFICATIONS

The 300 series consists of a range of multi-purpose planetary gearboxes.
Key features are:

- 16 frame sizes in modular design
- versions:
  - in-line with 1 to 4 reductions
  - right angle (spiral bevel gear set into first stage) with 2 to 4 reductions
- combinations with:
  - worm gear units
  - bevel-helical gear units
- flange, foot and shaft mounting arrangements
- keyed output shaft, splined male shaft, splined hollow shaft, hollow shaft with shrink disc
- input adaptors for:
  - integral motor
  - NEMA motors
  - IEC-normalised electric motors
- high speed input shafts
- gearmotors
- mounting accessories:
  - flanges
  - pinion gears
  - splined bars
  - shrink discs

Configurations

	Horsepower rating	Max torque capacity	Gear ratios	Efficiency
 In line	≤ 320 HP	≤ 4,600,000 in·lbs	3.4:1 ≤ i ≤ 2900:1	High
 Right-angle	≤ 100 HP	≤ 3,500,000 in·lbs	7:1 ≤ i ≤ 950:1	High
 Combined with worm gear unit	≤ 100 HP	≤ 4,600,000 in·lbs	370:1 ≤ i ≤ 5150:1	Medium
 Combined with helical bevel gear unit	≤ 50 HP	≤ 100,000 in·lbs	19:1 ≤ i ≤ 730:1	High

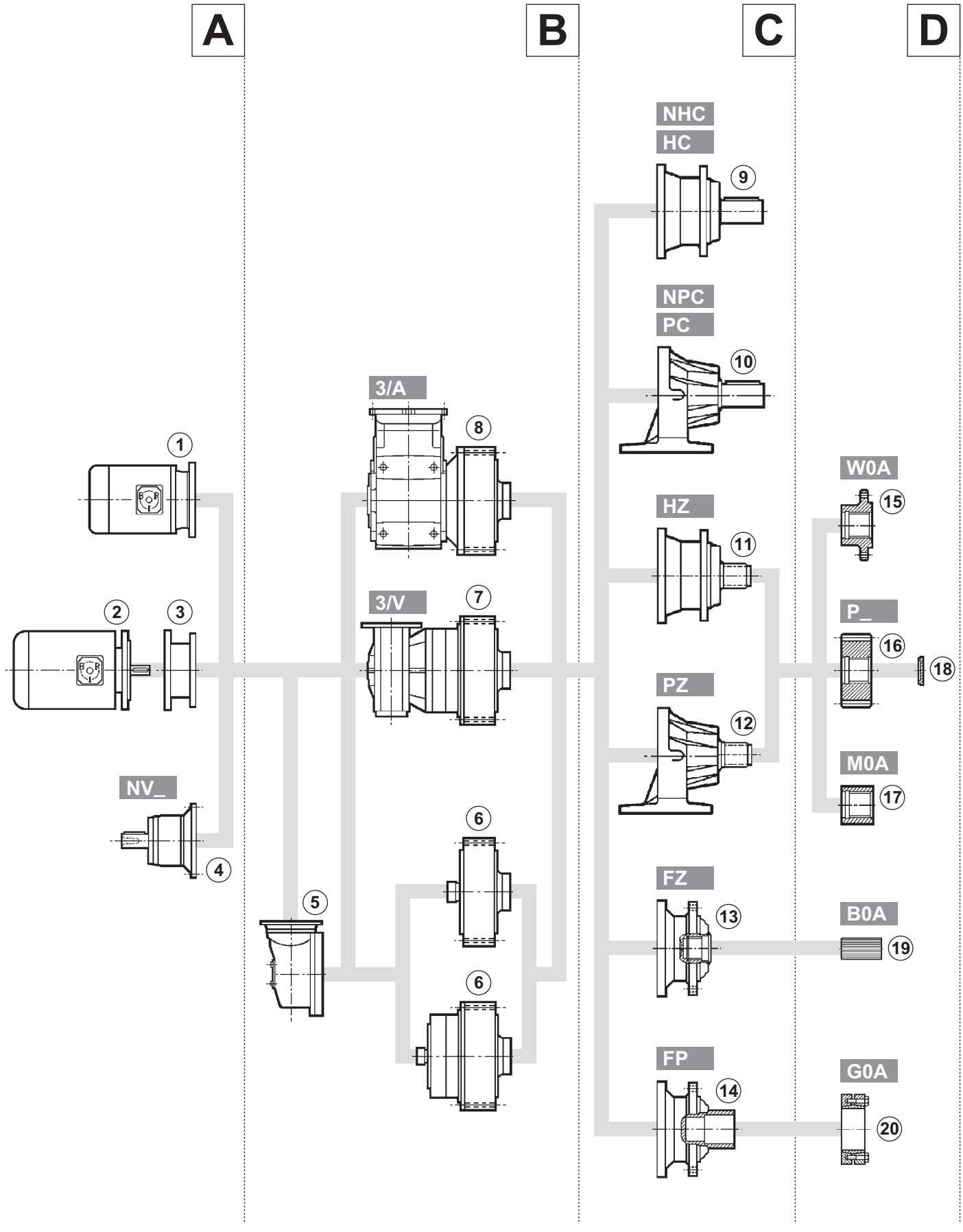
More design features:

- high torque density
- high overhung load capacity due to heavy duty taper roller bearings featured by all solid shaft gear units
- high efficiency
- inner parts are coupled through splined connections rather than keys
- planetary gears mounted onto self-centering carriers to ensure the most even load distribution among planetary gears
- housing from ductile cast iron.

2.0 - GENERAL LAYOUT

				shaft	applicability
A	1		AC electric motor		
	2		NEMA or IEC motor		
	3		NEMA or IEC input		300...321
	4	NV_	Solid input shaft - inch dimensions	parallel	300...321
B	5		Right-angle reduction stage		300...321
	6		Planetary reduction stage/s		300...321
	7	3/V	Worm/planetary combination		300...321
	8	3/A	Bevel-helical/planetary combination		300...307
C	9	NHC	Flanged output - inch dimensions	keyed shaft	300...315
		HC	Flanged output - metric	keyed shaft	316...321
	10	NPC	Footed output - inch dimensions	keyed shaft	300...315
		PC	Footed output - metric	keyed shaft	316...321
	11	HZ	Flanged output - metric	male splined	300...321
	12	PZ	Footed output - metric	male splined	300...321
	13	FZ	Flanged output - metric	female splined	300...321
	14	FP	Shaft mount output for shrink disc	keyless hollow	300...321
D	15	W0A	Flange		300...321
	16	P_	Pinion gear		300...321
	17	M0A	Sleeve coupling		300...321
	18		End plate		300...321
	19	B0A	Splined bar		300...321
	20	G0A	Shrink disc		300...321

A INPUTS **B** GEAR REDUCTIONS **C** OUTPUTS **D** FITTINGS


A
B
C
D
1
2
3
4
NV_
5
6
6
3/A
8
3/V
7
NHC
HC
9
NPC
PC
10
HZ
11
PZ
12
FZ
13
FP
14
W0A
15
P_
16
18
M0A
17
B0A
19
G0A
20

3.0 - SYMBOLS AND UNITS OF MEASUREMENT

Symb.		**Description**
A_c	[lbs]	Calculated thrust load
A_n	[lbs]	Rated axial thrust
A_r	[lbs]	Thrust load at output shaft
f_a	—	Axial thrust factor
f_L	—	Lifetime factor
f_n	—	Speed factor
f_t	—	Thermal factor
f_v	—	Speed factor for thermal capacity calculation
f_x	—	Load location factor for radial loading
i	—	Gear ratio
I	—	Intermittence factor
n	[rpm]	Speed
K_a	—	Axial load duty factor
K_r	—	Transmission factor
T	[in·lbs]	Torque
t_a	[°C/°F]	Ambient temperature
T_c	[in·lbs]	Calculated output torque
T_{max}	[in·lbs]	Maximum transmissible torque
T_n	[in·lbs]	Rated torque
T_r	[in·lbs]	Required torque
P	[HP]	Horsepower
P_n	[HP]	Rated horsepower
P_r	[HP]	Required power
P_s	[HP]	Power to be dissipated
P_t	[HP]	Thermal capacity
R_c	[lbs]	Calculated radial load
R_n	[lbs]	Rated overhung load (OHL)
R_x	[lbs]	Radial OHL for force applying off the shaft midpoint
S	—	Safety factor
S.F.	—	Service factor
Z	[1/h]	Starts per hour
η		Efficiency

Footnotes:

□ 1 Applies to input shaft

□ 2 Applies to output shaft

Icon symbolises the weight.

Columns marked with this symbol indicate the page where installation drawings can be found

This symbol identifies the page the information is available at.

These symbols identify the side the accessories are mounted onto.

Areas marked in black show the input component parts.

The number associated with the wrench indicates the rated tightening torque.

In-line unit.

Right-angle unit.

Worm-planetary combined gear unit.

Bevel helical-planetary combined gear unit.

4.0 - TORQUE

Gearmotor torque output T_2 [in·lbs]

This is the net torque delivered to the output shaft. The catalogue value takes the efficiency into account.

Rated output torque T_{n2} [in·lbs]

This is the torque output the gearbox can deliver safely, based on:
• uniform loading and service factor S.F.= 1
• 10000 hours theoretical lifetime

Maximum torque T_{2max} [in·lbs]

The output torque the gear unit will withstand in a static condition or a highly intermittent operation. It is generally meant as a momentary peak load or starting-up torque under load.

Required torque T_{r2} [in·lbs]

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

Calculated torque T_{c2} [in·lbs]

Computational torque value to be used when selecting the gearbox, considering required torque « T_{r2} » and service factor « S.F. ».
It is obtained through the equation:

$$T_{c2} = T_{r2} \times S.F. \leq T_{n2} \quad (1)$$

5.0 - HORSEPOWER

Rated input power P_{n1} [HP]

« P_{n1} » is the horsepower that can be safely applied to the gearbox when the same is operated:
• at rated speed (values listed for n_1 = 1750, 1450, 1150 and 870 rpm)
• under service factor S.F. = 1
• yielding a theoretical lifetime of 10000 hours.

Output power P_2 [HP]

This value is the net horsepower delivered to the output shaft. It can be calculated through either one of the following equations:

$$P_2 = P_1 \times \eta \quad (2)$$

$$P_2[HP] = \frac{T_2[in \cdot lbs] \times n_2[rpm]}{63025} \quad (3)$$

6.0 - THERMAL CAPACITY P_t [HP]

« P_t » is the horsepower that can be safely transmitted through the gear unit, under a continuous duty and at an ambient temperature of 70°F/20°C, without using a supplementary cooling system. Thermals are generally listed within the rating charts along with other key parameters. In the gearmotor rating charts « P_t » values are highlighted when the installed horsepower exceeds the thermal rating. Should this be the case, it is recommended that the application is closely investigated and that horsepower actually transmitted, without Service Factor, does not exceed the thermal capacity, after this is adjusted with the applicable factors, « f_t » and « f_v, » depending on ambient temperature, duty and drive speed.

Make sure that the following condition is always satisfied:

$$P_{r1} \leq P_t \times f_t \times f_v \quad (4)$$

(A1)

f_t						
t_a		Continuous duty	Intermittent duty			
			Cyclic duration factor			
[°C]	[°F]		80%	60%	40%	20%
10	50	1.2	1.3	1.6	1.8	2.0
20	70	1.0	1.1	1.3	1.5	1.7
30	85	0.9	1.0	1.2	1.3	1.5
40	105	0.7	0.8	0.9	1.0	1.2
50	120	0.5	0.6	0.7	0.8	0.9

n_1 [rpm]	f_v
750	1.50
870	1.30
1150	1.15
1450	1.00
1750	0.90
2000	0.70

Cyclic duration factor is the relationship of operating time under load « t_f » to total cycle time ($t_f + t_r$, where « t_r » is the time at rest).

$$I = \frac{t_f}{t_f + t_r} \times 100 \quad (5)$$

7.0 - EFFICIENCY

η

The parameter is defined as the relationship of the net power delivered to the output shaft « P_2 » to the power applied to the input shaft « P_1 »:

$$\eta = \frac{P_2}{P_1} \quad (6)$$

Indicative efficiency values are listed in the chart here after:

(A2)

Reductions	Configuration		
	All planetary	Combined with worm gear unit	Combined with right-angle unit
1	0.97	—	—
2	0.94	0.73	—
3	0.91	0.70	0.91
4	0.88	—	—

8.0 - OPERATING SPEED

Input speed

n_1 [rpm]

The speed the gearbox is driven at. The value is coincident with the motor speed if this is directly connected to the gearbox. In case the gearbox is driven through an external transmission, the gearbox input speed is the speed of the motor divided by the reduction of the external transmission. In this case, it is recommended that the input speed be lower than 1750 rpm.
When selecting the prime mover, 4-pole motor, or lower speed motors, should be preferred.

Output speed

n_2 [rpm]

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

$$n_2 = \frac{n_1}{i} \quad (7)$$

9.0 - SERVICE FACTOR S.F.

A parameter representing the severity of the application. This factor takes into account, although approximately, the type of load the gearbox operates with, the specific duty as well as the operating daily hours.

(A3)

Service factor S.F.						
Type of load	Number of starts/hour	Accumulated operating hours [h]				
		≤ 5000	10000	15000	25000	50000
		daily operating hours [h]				
	Z	h < 4	4 ≤ h < 8	8 ≤ h < 12	12 ≤ h < 16	16 ≤ h < 24
Uniform load	Z < 10	0.90	1.00	1.15	1.30	1.60
	10 < Z < 30	0.95	1.15	1.30	1.50	1.80
	30 < Z < 100	1.00	1.25	1.45	1.60	2.00
Moderate shock load	Z < 10	1.00	1.25	1.45	1.60	2.00
	10 < Z < 30	1.10	1.40	1.60	1.80	2.20
	30 < Z < 100	1.20	1.50	1.70	2.00	2.40
Heavy shock load	Z < 10	1.20	1.50	1.70	2.00	2.40
	10 < Z < 30	1.30	1.60	1.80	2.10	2.60
	30 < Z < 100	1.40	1.75	2.00	2.30	2.80

10.0 - SAFETY FACTOR S

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

$$S = \frac{P_{n1}}{P_1} \qquad (8)$$

11.0 - SELECTING THE PRODUCT

The key parameters that are necessary when selecting a gearbox, or a gearmotor, are listed here below.
The form, duly filled in, can be forwarded to our Technical Service which will assist the Customer in selecting the most suitable drive for the specific application.

(A4)

Type of application.....

GEARBOX

P_{r2}	Required output power	[HP]
T_{r2}	Required output torque	[lbs]
n_2	Output speed	[rpm]
n_1	Input speed	[rpm]
R_2	Radial force applying on output shaft	[lbs]
X_2	Overhung load distance from shoulder of output shaft	[in] (*)
R_1	Radial force applying on input shaft	[lbs]
X_1	Overhung load distance from shoulder of input shaft.....	[in] (*)
A_2	Axial thrust on output shaft	[lbs] (•)
A_1	Axial thrust on input shaft	[lbs] (•)
h	Lifetime expectancy	[h]
t_a	Ambient temperature	[°C/°F]

ELECTRIC MOTOR

	NEMA, or IEC frame size	
P_n	Rated horsepower	[HP]
	Mains voltage.....	[V]
	Number of poles	
	Frequency.....	[Hz]
	Duty type to IEC norms.....S...../.....%	
Z	Starts per hour	[1/h]
	Degree of protection.....IP.....	
	Insulation class	

BRAKE (IF SPECIFIED)

	Brake voltage.....	[V]
T_b	Brake torque	[in·lbs]

Type ☐ In line ☐ Right angle

☐ Combined worm gear/planetary ☐ Combined bevel-helical/planetary

Output version .....
Accessories .....
Mounting position.....

N.B: Table (A4)

(*) If a distance is not specified, a radial force acting at midpoint of the shaft will be assumed.

(•) + = push – = pull

NOTE:

The selection criteria and specifications reported in this catalogue are not valid for every and each application, including those where the gearbox operates as a safety device preventing injury to persons or damage to objects, as is the case with hoisting equipment.
For these applications, the gearbox should be selected according to specific criteria and in compliance with the applicable safety regulations. Should this be the case we recommend that you seek advice from BONFIGLIOLI Technical Service.

Selecting a gearmotor

Consider the specific application and establish on beforehand:

a) service factor « S.F. » according to type of duty, number of starts per hour and expected lifetime (tab. A3.);

b) Required motor power :

$$P_{r1}[HP] = \frac{T_{r2}[in \cdot lbs] \times n_2[rpm]}{63025 \times \eta} \quad (9)$$

Table (A2) lists the indicative values of efficiency « η » for the various types of gear units.

c) After required power « P_{r1} » and output speed « n_2 » are known, locate the gearmotor rating charts and select the one relevant to normalized power « P_n » equal to or greater than « P_{r1} »:

$$P_n \geq P_{r1} \quad (10)$$

Unless otherwise specified, power « P_n » listed in the motor rating chart refers to continuous duty.

For the output speed « n_2», or closest to, select the gearmotor that yields a safety factor « S » meeting the following condition:

$$S \geq S.F. \quad (11)$$

Selecting a gearbox

Examine the application and establish:

a) service factor « S.F. » according to type of duty, number of starts per hour and expected lifetime (tab. A3);

b) Determine calculated torque according to required output torque « M_{r2} » as follows:

$$T_{c2} = T_{r2} \times S.F. \quad (12)$$

c) Determine gear ratio from required output speed « n_2 » and drive speed « n_1 »:

$$i = \frac{n_1}{n_2} \quad (13)$$

d) Once « T_{c2} » and « i » are determined, locate the gearbox rating chart for the drive speed « n_1 » and select a gearbox featuring the gear ratio « i » nearest to calculated ratio that also satisfies the condition:

$$T_{n2} \geq T_{c2} \quad (14)$$

If a motor is to be fitted to the gearbox, check availability of the relevant adapter.

12.0 - VERIFICATIONS

After the selection of the applicable drive unit is complete, check the following:

a) Thermal capacity
Make sure that the thermal capacity of the gearbox is equal to or greater than the mechanical horsepower drawn by the application, as per equation (4).
If this is not the case provide a supplementary cooling system (see chapter 26.0) or select a larger gearbox.

b) Maximum torque
Make sure that neither the momentary peak torque nor the starting torque under load ever exceed the « T_{2max} » value that the gearbox is rated for (see following table for reference).

(A5)

Model	T_{2max} [in·lbs]		Model	T_{2max} [in·lbs]
300	14,000		**311**	490,000
301	21,500		**313**	580,000
303	32,000		**315**	1,150,000
305	62,000		**316**	1,500,000
306	106,000		**317**	2,000,000
307	160,000		**318**	2,600,000
309	222,000		**319**	4,000,000
310	354,000		**321**	5,800,000

c) Overhung load
Examine the application and establish:
- overhung load applying to input and/or output shaft through the following formula:

$$R_c[\text{lbs}] = \frac{2 \times T\,[\text{in}\cdot\text{lbs}] \times K_r}{D\,[\text{in}]} \quad (15)$$

R_c	Overhung load [lbs]
T	Torque [in·lbs]
D	P.C.D [in] of transmission element (sprocket, gear, pulley, etc.)
K_r =1	Factor for chain transmission
K_r =1.25	Factor for gear transmission
K_r =1.5-2.0	Factor for V-belt transmission

- for extended lifetime requirements, locate the applicable adjusting factor « f_L », listed in the table here under:

(A6)

Expected lifetime	2500 h	5000 h	10000 h	15000 h	25000 h	50000 h	100000 h
$\mathbf{f_L}$	0.81	1.00	1.23	1.39	1.62	2.00	2.46

c_1) output shaft

- for loads applying at shaft mid-point, check that the following condition is verified:

$$R_{n2} \geq R_{c2} \times f_L \qquad (16)$$

where « R_{n2} » is the permitted overhung load, as listed in the rating charts.

- Should the force be acting off the shaft midpoint - with the exception of version FZ - establish the offset value « x » and find the adjusting factor « f_{x2} » in the relevant diagram (following the pages showing the installation drawing of gearbox under study).
  The following condition must be verified:

$$R_{x2} = R_{n2} \times f_{x2} \geq R_{c2} \times f_L \qquad (17)$$

Look up the diagram relevant to the gearbox under study and identify permitted radial load « R_{x2} » corresponding to distance « x » and the ratio A_{n2}/R_{n2} nearest to value A_{c2}/R_{c2}.
Make sure the following condition is verified:

$$R_{x2} \geq R_{c2} \qquad (18)$$

For different speed, or lifetime expectancy, consider:
- a speed factor « f_{n2} », see table below for reference:

(A7)

n_2 [rpm]	1	2.5	5	10	15	25	50	100
$\mathbf{f_{n2}}$	2.0	1.51	1.23	1.00	0.88	0.76	0.62	0.50

- a lifetime factor « f_L », from table (A6).
  The following condition must be verified:

$$R_{n2} \times f_{n2} \geq R_{c2} \times f_L \qquad (19)$$

c_2) input shaft

For the resulting force « R_{c1} » calculated through formula (15), determine the distance the force applies from shaft shoulder « x ». From the radial load diagram relevant to the specific unit locate the permitted overhung load « R_{n1} » corresponding to the actual « x » distance.
The following condition must be verified:

$$R_{n1} \geq R_{c1} \quad (20)$$

Values listed in the diagram apply for:
- drive speed n_1 = 1000 rpm
- 5000 hrs theoretical lifetime

For different speed, or life expectancy, consider:
- The adjusting factor « f_{n1} » as per table (A8) here below:

(A8)

n_1 [rpm]	500	750	900	1200	1500	1800
$\mathbf{f_{n1}}$	1.23	1.09	1.03	0.95	0.89	0.84

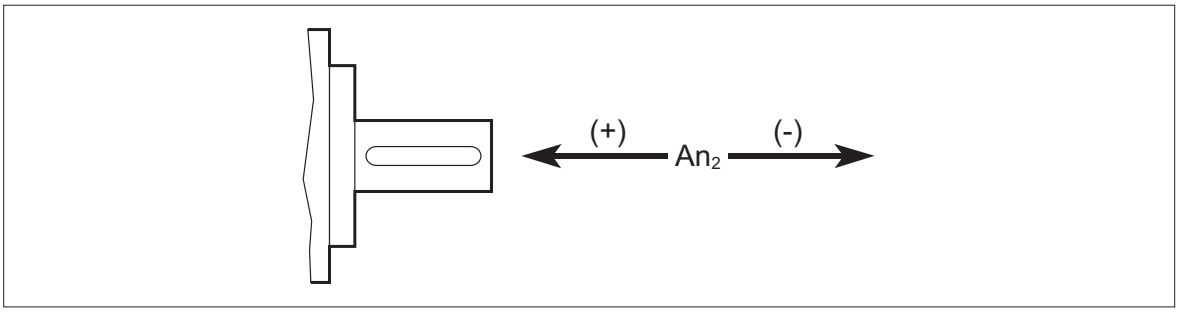
- a lifetime factor « f_L » as per table (A6).

The following condition must be verified:

$$R_{n1} \times f_{n1} \geq R_{c1} \times f_L \quad (21)$$

d) Thrust loads

Calculate value and direction of thrust $\mathbf{Ac_2}$ that applies axially onto the shaft. For the gearbox under study locate the adjusting factor $\mathbf{fa_2}$ corresponding to the type of output and the direction the thrust load applies, with the signs (+) and (-)conventionally applied as follows:



From $\mathbf{Rn_2}$ and $\mathbf{fa_2}$ determine the value of admissible thrust load $\mathbf{An_2}$:

$$An_2 = Rn_2 \times fa_2 \quad (22)$$

From chart (A6) select the adjusting factor $\mathbf{f_L}$ corresponding to the theoretical lifetime of bearings that is to be expected.

From chart below locate the axial load duty factor **Ka** depending on the type of loading that is applicable:

	Type of duty		
	Uniform	Moderate shock	Heavy shock
K_a	1.0	1.25	1.5

With all factors so determined verify that the following condition is satisfied:

$$Ac_2 \times f_L \times K_a \leq An_2 \quad (23)$$

If radial and axial loads apply simultaneously, please consult Bonfiglioli's Technical Service.

13.0 - SELECTING THE MOTOR

a) Through the formula here after calculate the power required to gearbox input shaft. The following parameters must be determined on beforehand:
   - required torque T_{r2} [in·lbs]
   - output speed n_2 [rpm]
   - efficiency η

$$P_{r1}[HP] = \frac{T_{r2}[in \cdot lbs] \times n_2[rpm]}{63025 \times \eta} \quad (24)$$

Table (A2) lists indicative efficiency values « η » for the various types of gearboxes.

b) In the electric motor section select a motor that is sufficiently rated, as per the following condition:

$$P_n \geq P_{r1} \quad (25)$$

4-Pole motors, or lower speed motors, should be preferred.

14.0 - INSTALLATION GUIDELINES

Observing the rules for correct installation is essential to the reliable operation of the gearbox.
The rules set out here are intended as a preliminary guide only to installing a gear unit.
For effective and proper installation, follow the instructions given in the Installation, use and maintenance manual available from our Sales network.

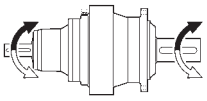
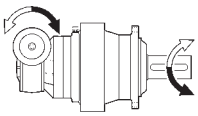
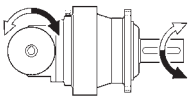
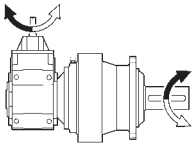
a) Fastening:
- Place the gearbox on a surface that is sufficiently rigid. Mating surfaces should be machined and flat. The recommendation applies especially to flange-mounted gearboxes with splined hollow output shafts.
- Where heavy radial loads apply on the output shaft, flange mounting is recommended for some gearboxes as this mounting pattern benefits from the double pilot diameters provided on these gearboxes.
- Make sure the gear unit is configured for the mounting position specified when ordering.

- Use bolts of grade 8.8 or greater to secure the gearbox. Tighten the bolts to the rated values specified in the relevant charts.
  With transmitted torque greater than or equal to 70% of the given « T_{2max} », and with frequent reversals, use bolts with minimum grade 10.9.
  Some gearboxes can be fastened using both bolts and pins. If a pin is used, the portion of the pin inserted into the equipment the gearbox is being installed to should be at least 1.5 times its diameter.

b) Connections

- When fitting transmission elements onto the input or output shaft do not tap them with hammers or similar tools. To slide these parts in, use the service screws and taps provided at the shaft ends.
  Be sure to clean off any grease or rust preventative from the shafts before fitting any parts.
- Direction of rotation
  Before wiring the motor please note the input/output shaft arrangement, as described in the diagram here after:

(A9)

In line		Combined worm/planetary gear unit	
Right angle		Combined bevel-helical/planetary gear unit	

c) Paint coating

- Use paint compatible with the primer applied to the gearbox, see: Conditions of supply.
  Prior to painting, tape the seal rings installed on the shafts.
  Contact with the solvent may deteriorate the seals with subsequent oil leakage.

d) Lubrication

- Prior to commissioning, fill the gearbox with the recommended type and quantity of oil (see: Lubrication).
  The level is to be checked through the appropriate plug, each gearbox is provided with, and located according to the mounting position originally specified.

NOTE: Combined gearboxes feature separate lubrication for planetary stages and for worm gears (series 3/V) or bevel helical units (series 3/A).
The operations described above are not to be performed with life-lubed gearboxes, that are factory filled with synthetic oil (see tab. A25).

15.0 - MAINTENANCE

Check the tightness of mounting bolts after the initial 50 hours of operation.
Flush the gearbox and replace the oil after the initial 100-150 hours of operation.
Subsequently, change the oil every 2000 - 3000 hours operation, depending on the application.
Alternatively change oil once a year.
However, oil level should be checked at regular intervals and topped up as required.
Check monthly if unit operates under intermittent duty, more frequently if duty is continuous.

16.0 - STORAGE

Observe the following instructions to ensure correct storage of the products:

a) Do not store outdoors, in areas exposed to weather or with excessive humidity.

b) Always place boards, wood, or other material between the products and the floor.
The gearbox should not have direct contact with the floor.

c) For storage periods of over 60 days, all machined surfaces such as flanges, shafts and couplings must be protected with a suitable anti-oxidation product (Mobilarma 248 or equivalent product).

d) When units are expected to be in storage for more than 6 months, the following extra measures are required:
- Smear all machined parts with grease to prevent oxidation.
- Place the gearbox so that the breather plug is uppermost and fill it with oil (this does not apply to life-lubricated gearboxes). Before the gearbox is put into operation, the appropriate type and quantity of oil should be restored (tab. A24 - A25).

17.0 - CONDITIONS OF SUPPLY

Gearboxes are generally supplied as follows:

a) Configured for installation in the mounting position specified at the time of order;

b) Unlubricated. Inner parts are protected by a film of the oil used for factory testing (type SHELL ENSIS OIL N);

c) primer coated with grey antioxidant water-based primer type Idrayon Primer-Ral 7042/C441.
Mounting surfaces will not paint coated.
Finish coating is to be applied by the Customer;

d) tested to factory specifications;

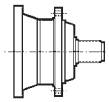
e) suitably packed;

f) helical or worm gear units lubricated “for life” are factory filled with oil.

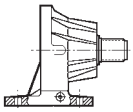
18.0 - PRODUCT DESIGNATION

3 11 L 2 16.7 NPC

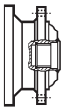
OUTPUT VERSION



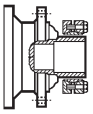
HZ
Heavy duty splined male shaft



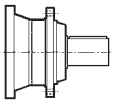
PZ
Foot mounted with splined shaft



FZ
Hollow splined shaft

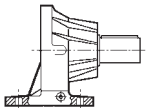


FP
Hollow shaft for shrink disc



NHC
Heavy duty flanged output - keyed shaft, inch dims.

HC
Heavy duty flanged output - keyed shaft, metric dims.



NPC
Footed output - keyed shaft, inch dims.

PC
Footed output - keyed shaft, metric dims.

GEAR RATIO

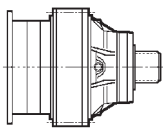
Value to be specified, including point and decimals, as listed in the rating charts

Ex.: 1/5.33 = 5.33 1/44.6 = 44.6 1/131 = 131

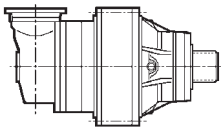
REDUCTIONS
1 - 2 - 3 - 4

DESIGN

L = In line



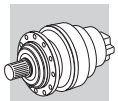
R = Right angle



FRAME SIZE

00 = 300	138	**06** = 306	170	**11** = 311	204	**17** = 317	236
01 = 301	146	**07** = 307	178	**13** = 313	212	**18** = 318	244
03 = 303	154	**09** = 309	186	**15** = 315	220	**19** = 319	252
05 = 305	162	**10** = 310	196	**16** = 316	228	**21** = 321	260

SERIES



N320TC A ... ...

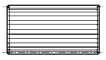
OPTIONS	
PV	OIL SEALS FROM VITON® COMPOUND
RO (CW) **RA** (CCW)	INPUT SHAFT PREFERRED ROTATION (right angle units only)

SUPPLEMENTARY COOLING SYSTEM
CR1, CR2, CR3

269

OUTPUT FITTINGS

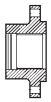
P... = Pinion gear



B0A = Splined bar

M0A = Sleeve coupling

G0A = Shrink disc



W0A = Flange

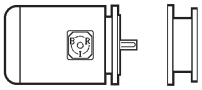
MOUNTING POSITION

26
27

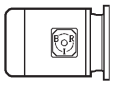
INPUT

Input keyed shaft

NV01A - DIAM 1.125
NV01B - DIAM 1.625
NV05B - DIAM 1.875
NV06B - DIAM 2.375
NV07B - DIAM 3.000
NV11B - DIAM 3.000



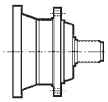
Electric motor adapter
P + IEC motor size (80, 90, 100,...)
N + NEMA motor size (56C, 140TC, 180TC,...)



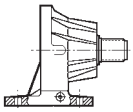
Compact gearmotor with integral AC motor: **S2_, S3_, S4_**
Available up to size 307

3/V 05 L 3 623 NPC

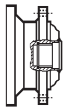
OUTPUT VERSION



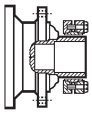
HZ
Heavy duty splined male shaft



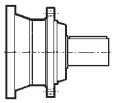
PZ
Foot mounted with splined shaft



FZ
Hollow splined shaft

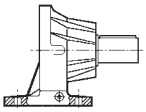


FP
Hollow shaft for shrink disc



NHC
Heavy duty flanged output - keyed shaft, inch dims.

HC
Heavy duty flanged output - keyed shaft, metric dims.



NPC
Footed output - keyed shaft, inch dims.

PC
Footed output - keyed shaft, metric dims.

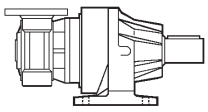
GEAR RATIO

Value to be specified, including point and decimals, as listed in the rating charts

Ex.: 1/773 = 773

REDUCTIONS (1 worm, balance planetary)
3 - 4

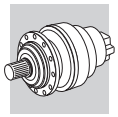
DESIGN
L



FRAME SIZE

00 = 300	138	**06** = 306	170	**11** = 311	204	**17** = 317	236
01 = 301	146	**07** = 307	178	**13** = 313	212	**18** = 318	244
03 = 303	154	**09** = 309	186	**15** = 315	220	**19** = 319	252
05 = 305	162	**10** = 310	196	**16** = 316	228	**21** = 321	260

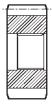
SERIES
Combined worm+planetary gear unit



N140TC B5 AF ... ...

OPTIONS	
PV	OIL SEALS FROM VITON® COMPOUND

OUTPUT FITTINGS

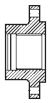


P... = Pinion gear

B0A = Splined bar

M0A = Sleeve coupling

G0A = Shrink disc

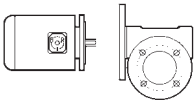


W0A = Flange

MOUNTING POSITION

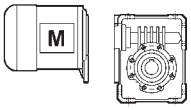
MOTOR EXECUTION (only for IEC motors)
B5, B14

INPUT



Electric motor connection
P + IEC motor size (80, 90, 100,...)
N + NEMA motor size (56C, 140TC, 180TC, ...)

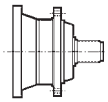
Input keyed shaft
NHS



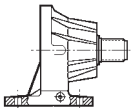
S1
S2
S3

3/A 06 L 2 69.9 NPC

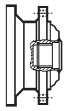
OUTPUT VERSION



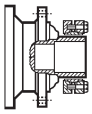
HZ
Heavy duty splined male shaft



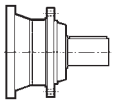
PZ
Foot mounted with splined shaft



FZ
Hollow splined shaft

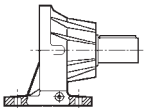


FP
Hollow shaft for shrink disc



NHC
Heavy duty flanged output - keyed shaft, inch dims.

HC
Heavy duty flanged output - keyed shaft, metric dims.



NPC
Footed output - keyed shaft, inch dims.

PC
Footed output - keyed shaft, metric dims.

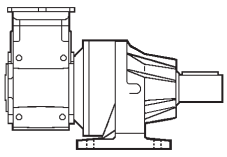
GEAR RATIO

Value to be specified, including point and decimals, as listed in the rating charts

Ex.: 1/19.4 = 19.4 1/175 = 175

REDUCTION UNITS
2

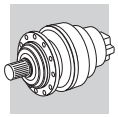
DESIGN
L



FRAME SIZE

00 = 3/A 00 (300+A10)	138	**06** = 3/A 06 (306+A50)	170
01 = 3/A 01 (301+A20)	146	**07** = 3/A 07 (307+A60)	178
03 = 3/A 03 (303+A30)	154		
05 = 3/A 05 (305+A41)	262		

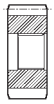
SERIES
Combined bevel helical+planetary gear unit



S4 EF ... ...

OPTIONS	
PV	OIL SEALS FROM VITON® COMPOUND

OUTPUT FITTINGS

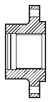


P... = Pinion gear

B0A = Splined bar

M0A = Sleeve coupling

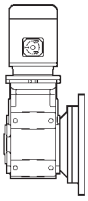
G0A = Shrink disc



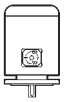
W0A = Flange

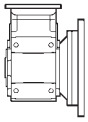
MOUNTING POSITION

INPUT

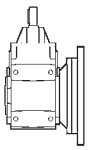


Compact gearmotor with integral AC motor
S2, S3, S4





Electric motor adapter:
P + IEC motor size (80, 90, 100,...)
N+ NEMA motor size (56C, 140TC, 180TC, ...)



Input keyed shaft
NHS

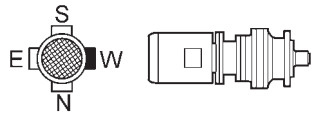
19.0 - MOUNTING POSITION

Mounting position is a mandatory information when specifying the gear unit. Please refer to table (A10) for in-line gear units and to (A11) for right angle drives.

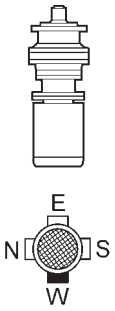
In-line units

(A10)

A



O



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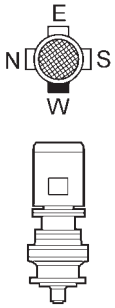

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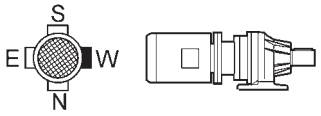
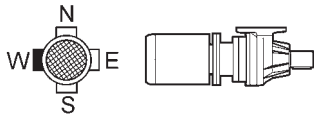
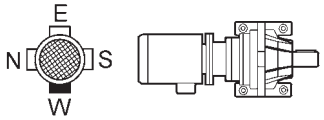


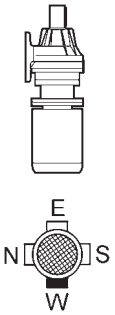
F



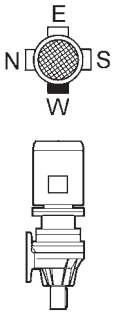
G



Q

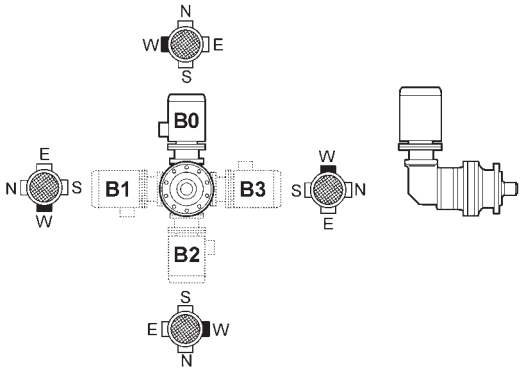


V

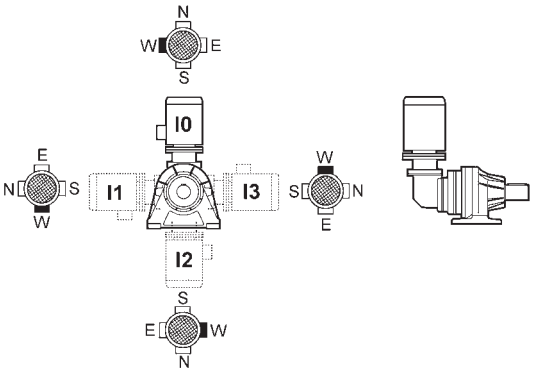


(A11)

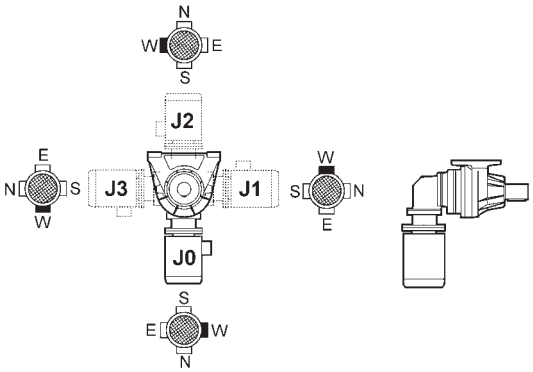
B0 - B1 - B2 - B3



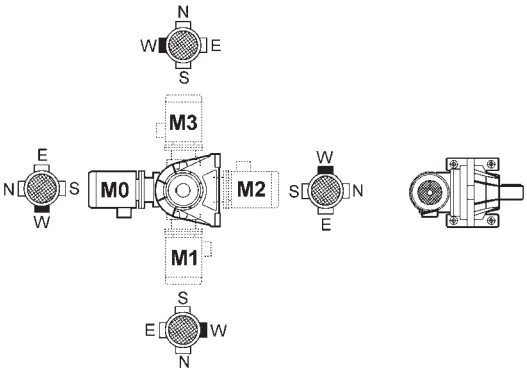
I0 - I1 - I2 - I3



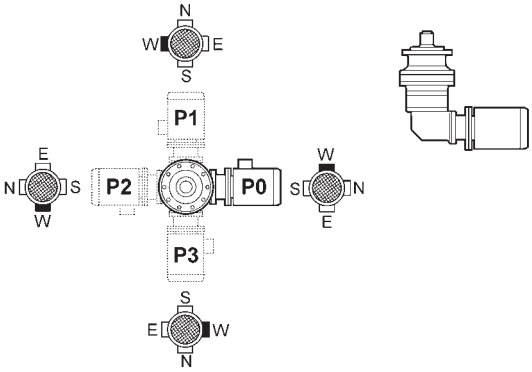
J0 - J1 - J2 - J3



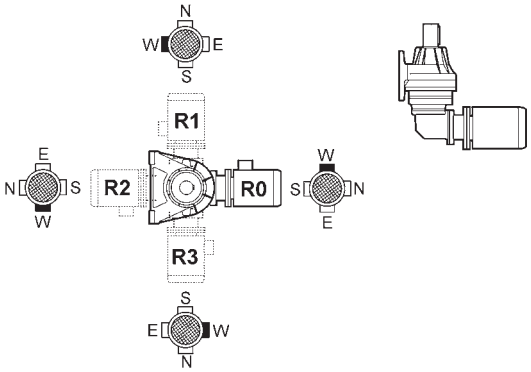
M0 - M1 - M2 - M3



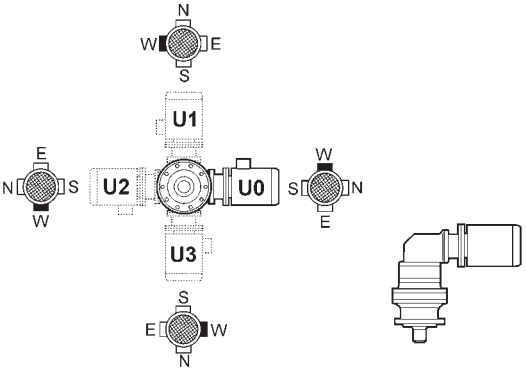
P0 - P1 - P2 - P3



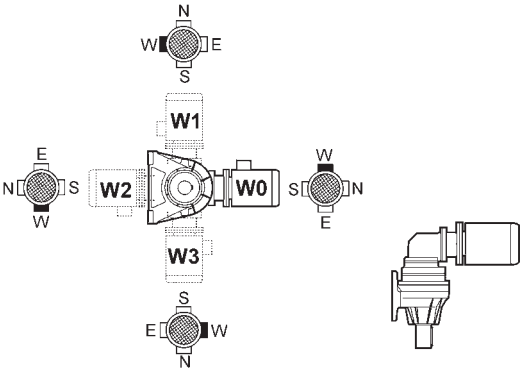
R0 - R1 - R2 - R3



U0 - U1 - U2 - U3

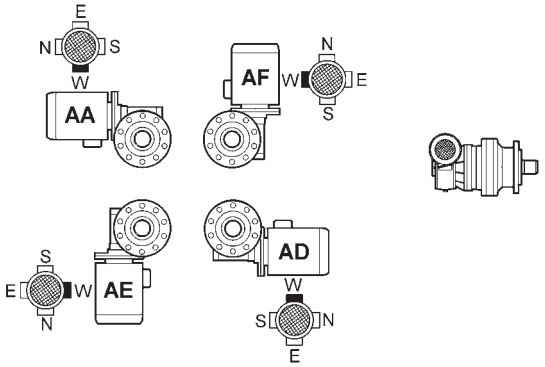


W0 - W1 - W2 - W3

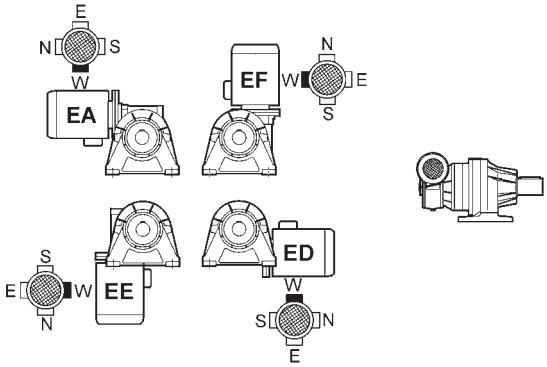


(A12)

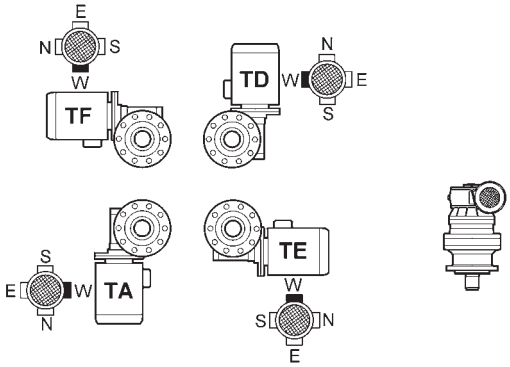
AA - AE - AF - AD



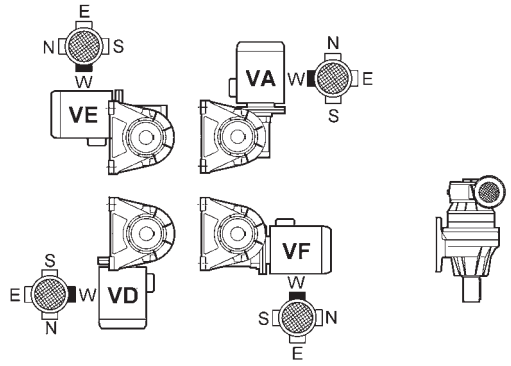
EA - EE - EF - ED



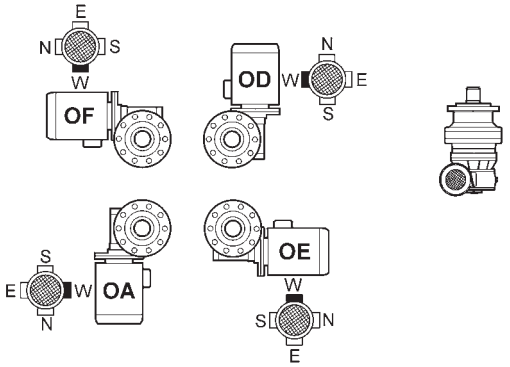
TA - TE - TF - TD



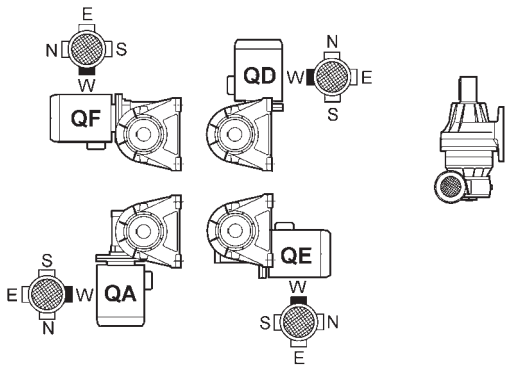
VA - VE - VF - VD



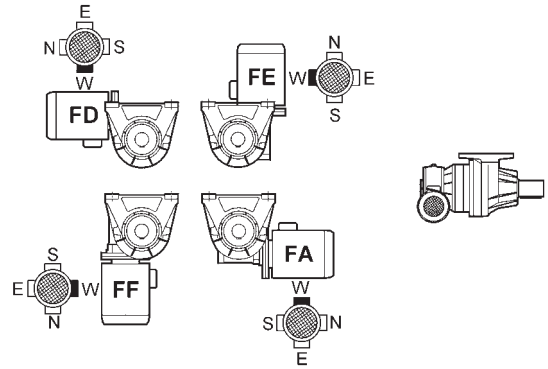
OA - OE - OF - OD



QA - QE - QF - QD

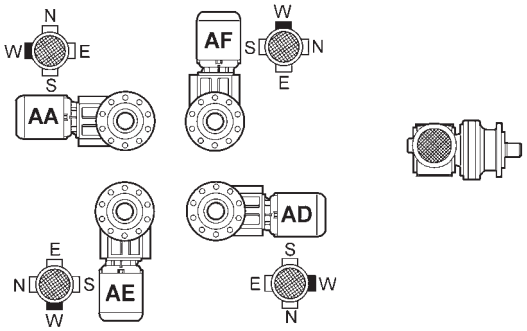


FA - FE - FF - FD

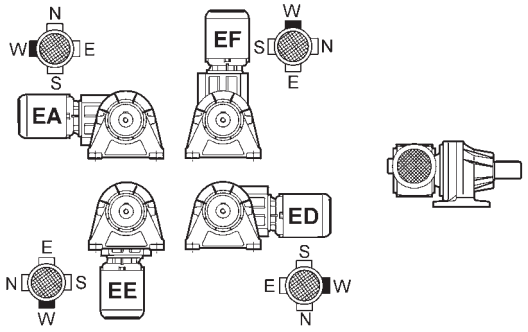


(A13)

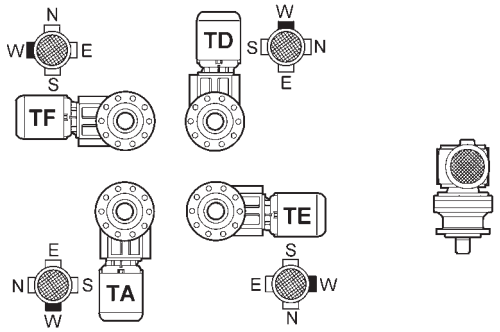
AA - AE - AF - AD



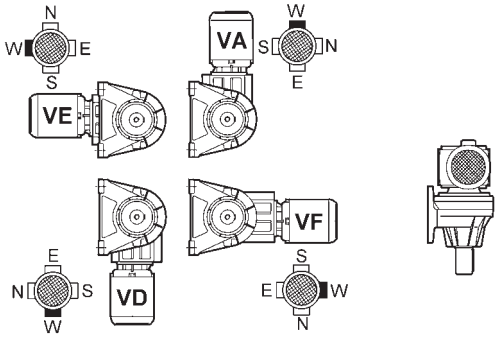
EA - EE - EF - ED



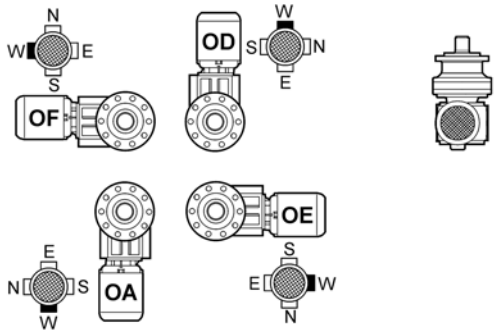
TA - TE - TF - TD



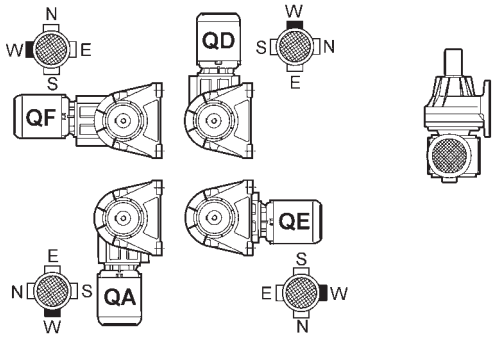
VA - VE - VF - VD



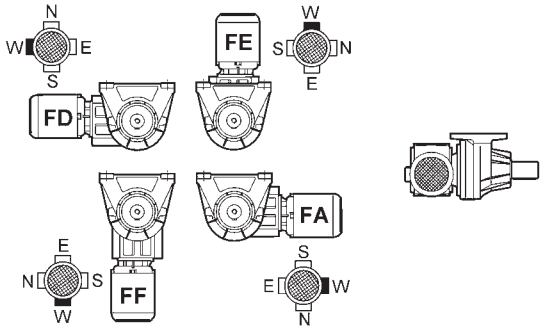
OA - OE - OF - OD

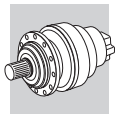


QA - QE - QF - QD



FA - FE - FF - FD





20.0 - LUBRICATION (prior to start-up)

Gear units are oil lubricated. For gearboxes specified for vertical installation, whereas the oil quantity may not be sufficient to ensure proper lubrication of the uppermost bearings, extra lubrication provisions (e.g. grease retainers) are used.

Prior to starting-up, fill the gearbox with the appropriate quantity of oil, selecting the viscosity as per table (A14). Gearboxes are generally provided with oil fill, level and drain plugs. As such, the mounting position needs always to be specified at the time the order for the gearbox is placed.
The table (A14) lists the most common brands of lubricant and the types recommended for normal applications.

- Note: For applications with non-routine operating conditions, consult factory with complete information.
- Oil temperature must not exceed 80 °C / 180 °F in operation.
- Gear units are generally supplied unlubricated and feature fill, drain and level plugs, except for life-lubed combined gearboxes (series 3/V and 3/A) that are factory filled with synthetic oil.
- The oil quantities listed for the various types of unit are indicative only. Fill the gearbox up to the level plug, located as per the mounting position specified at the time of the order to ensure the gearbox is properly filled.
- Should transmitted horsepower exceed the thermal capacity of the unit a supplementary cooling unit must be provided (see: Supplementary cooling systems).

NOTE: Combined gearboxes and gearmotors feature separate lubrication for planetary stages and for worm gearboxes (3/V) or helical bevel units (3/A).

(A14)

	PLANETARY STAGES		
	ISO standard 3448 E.P. grade		
Ambient temperature	-10...+30 °C / 15...85 °F	+10...+45 °C / 50...115 °F	-20...+60 °C / -5...140 °F
	ISO VG 150	ISO VG 220	ISO VG 150-220
SHELL	**OMALA EP150**	**OMALA EP220**	**TIVELA OIL S**
AGIP	BLASIA150	BLASIA 220	BLASIA S220
ARAL	DEGOL BG 150	DEGOL BG 220	DEGOL GS 220
BP-MACH	ENERGOL GR XP 150	ENERGOL GR XP 220	ENERSYN HTX 220
CASTROL	ALPHA SP 150	ALPHA SP 220	ALPHASYN PG 150
CHEVRON	N.L. GEAR COMPOUND 150	N.L. GEAR COMPOUND 220	
ELF	REDUCTELF SP150	REDUCTELF SP 220	ELF ORITIS 125 MS ELF SYNTHERMA P20
ESSO	SPARTAN EP 150	SPARTAN EP 220	GLYCOLUBE 220
FINA	GIRAN 150	GIRAN 220	
I.P.	MELLANA150	MELLANA220	TELESIA OIL 150
KLUBER	KLUBEROIL GEM1-150	KLUBEROIL GEM1-320	KLUBERSYNT GH 6-220
Q8	GOYA 150	GOYA 220	EL GRECO 220
MOBIL	MOBILGEAR 629	MOBILGEAR 630	SHC 630
TOTAL	CARTER EP 150	CARTER EP 220	

The temperature of the gear case should never exceed 160-170 °F / 70-75 °C at the hottest point.

Synthetic oil

WORM GEAR (3/V) - HELICAL BEVEL GEAR (3/A)				
Type of duty	0...20 °C / 30...70 °F		20...40 °C / 70...100 °F	
	Mineral oil **ISO VG**	Synthetic oil **ISO VG**	Mineral oile **ISO VG**	Synthetic oil **ISO VG**
Light duty	150	150	220	220
Medium duty	150	150	320	220
Heavy duty	220	220	460	320

Oil plug arrangement

(A15)

ALL UNITS

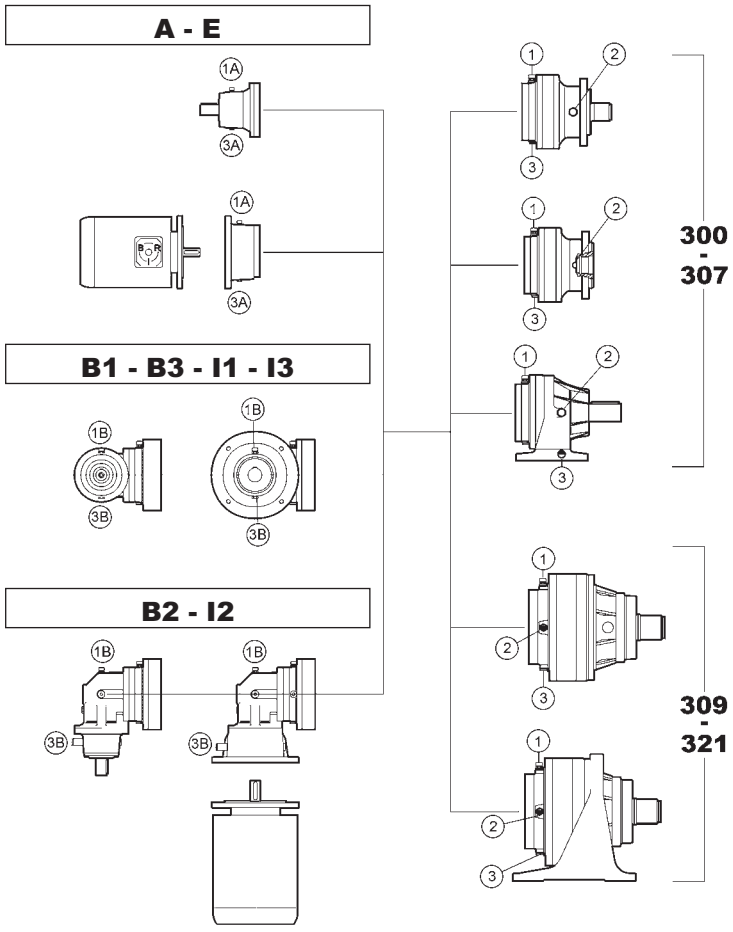
1 Vented filler plug
2 Level plug
3 Drain plug

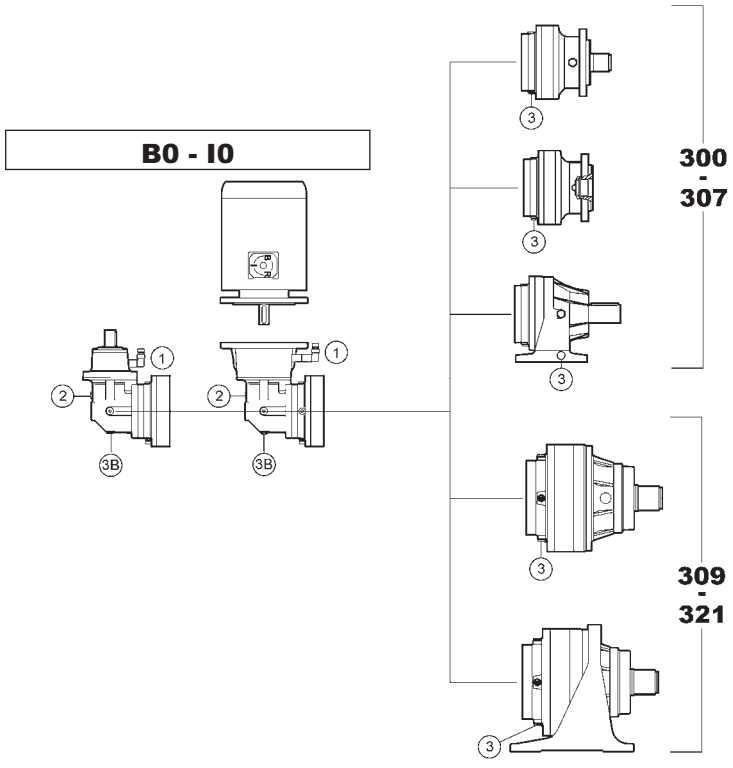
1-STAGE IN-LINE GEAR UNITS

1A Vented filler plug
3A Drain plug

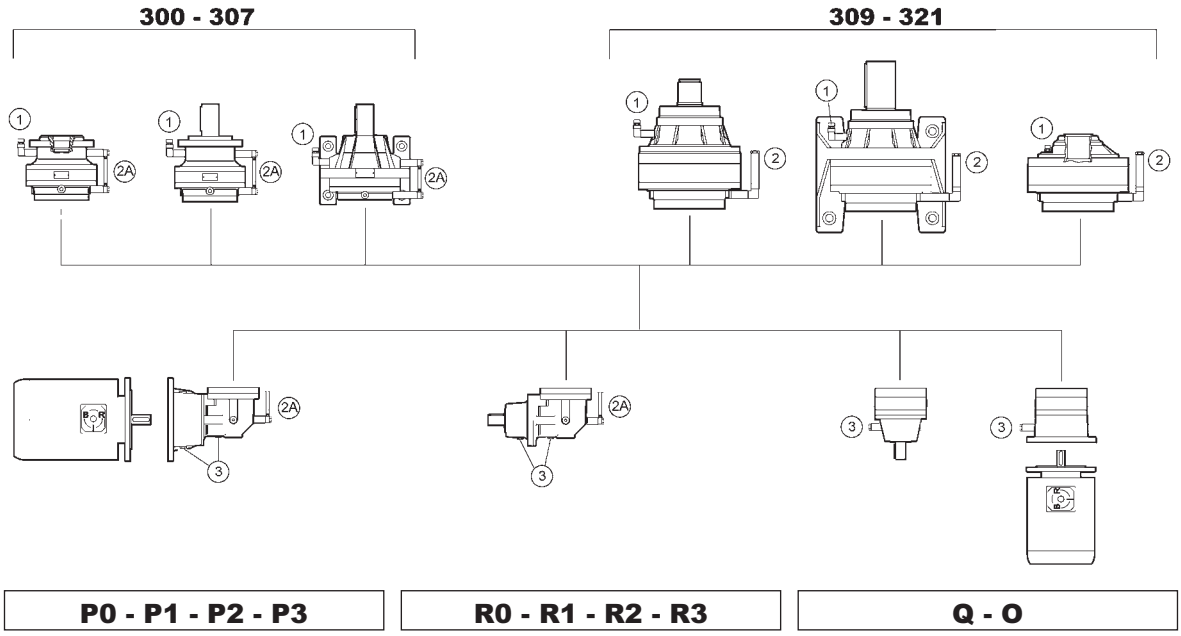
2-STAGE RIGHT ANGLE GEAR UNITS

1B Vented filler plug
3B Drain plug





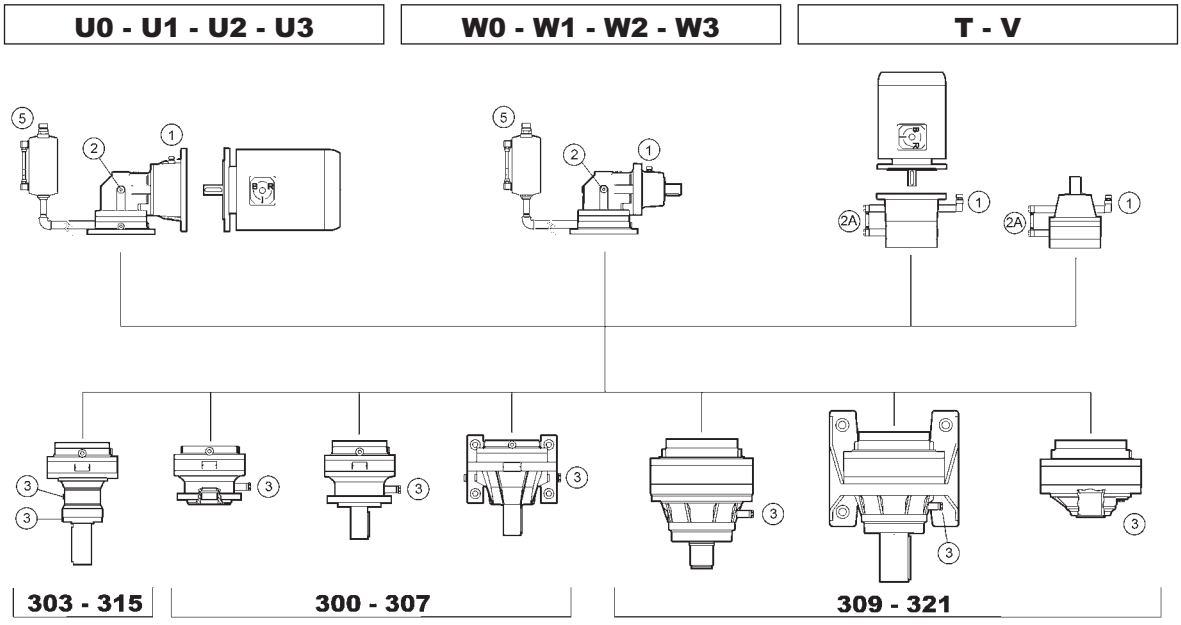
(A16)



ALL GEARBOXES

1 Vented filler plug
2 Level plug
2A Transparent oil level pipe
3 Drain plug
5 Expansion tank for continuous duty

(A17)



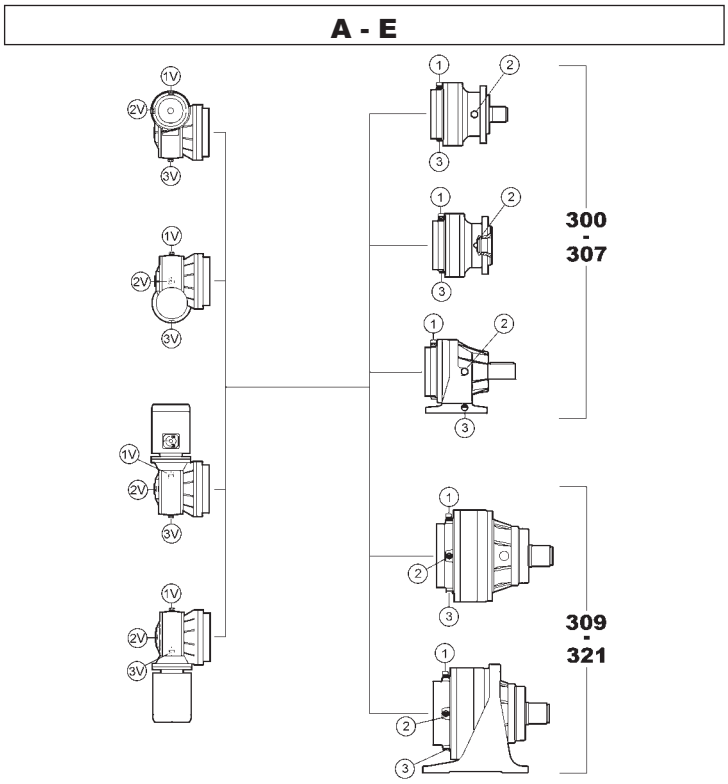
(A18)

ALL GEARBOXES (planetary stages)

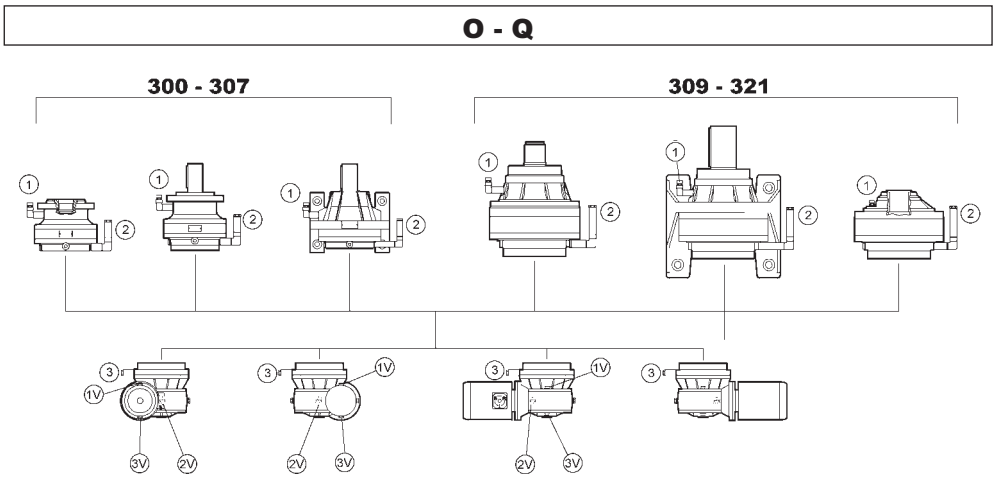
1 Vented filler plug
2 Level plug
3 Drain plug

(worm gear unit)

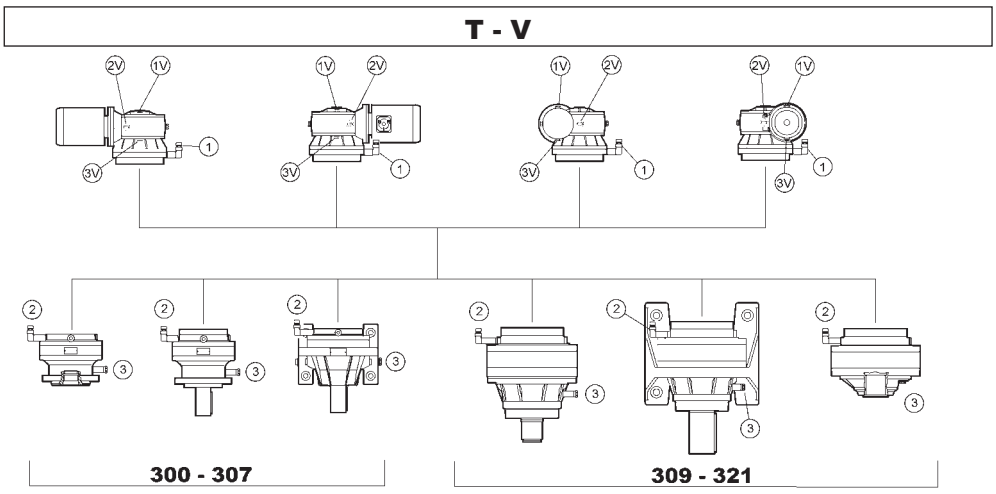
1V Vented filler plug
2V Level plug
3V Drain plug



(A19)



(A20)



(A21)

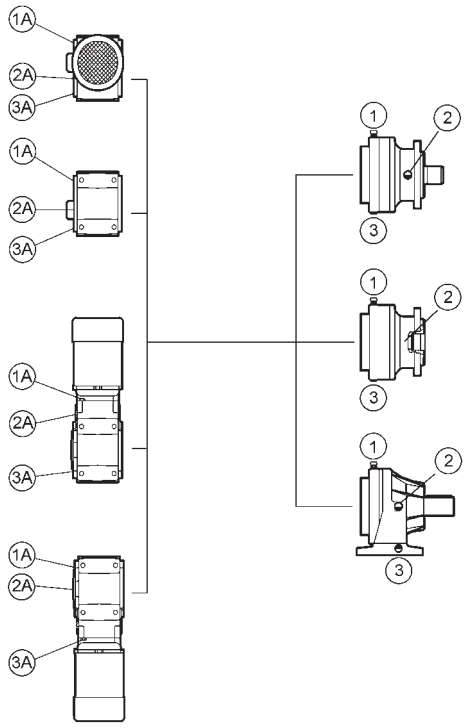
A - E

ALL GEARBOXES (planetary stages)

1 Vented filler plug
2 Level plug
3 Drain plug

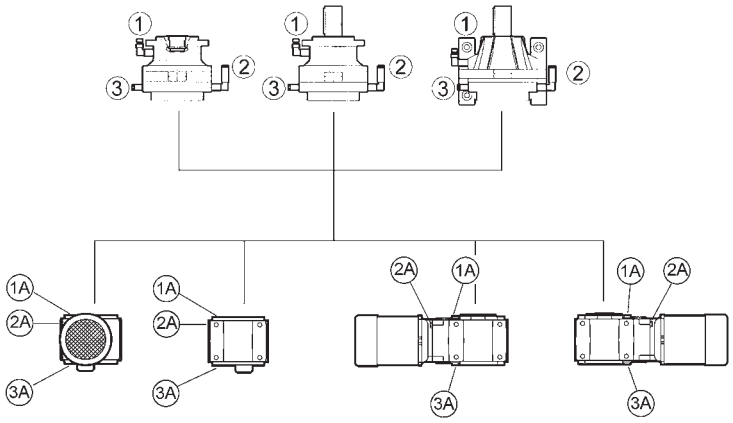
(helical bevel gear unit)

1A Vented filler plug
2A Level plug
3A Drain plug



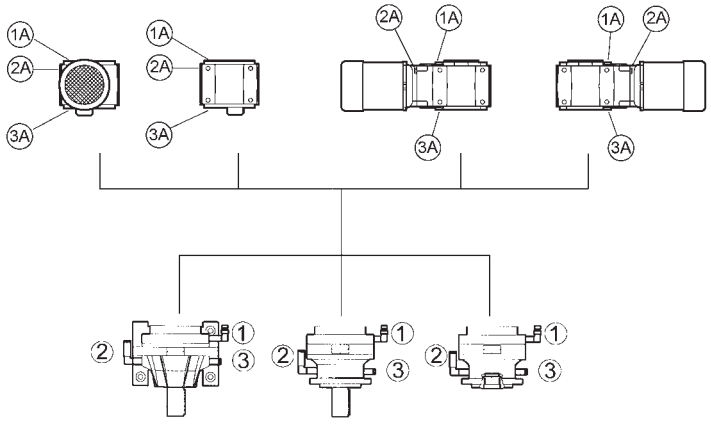
(A22)

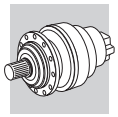
O - Q



(A23)

T - V





Oil quantity [liters] - 1 liter = 1.056 US quart

(A24)

Type		Mounting position		
		A	**T**	**O**
300	**L1**	0.6	1.0	0.9
	L2	0.9	1.3	1.2
	L3	1.2	1.6	1.5
	L4	1.5	1.9	1.8
301	**L1**	0.8	1.2	1.1
	L2	1.1	1.5	1.4
	L3	1.4	1.8	1.7
	L4	1.7	2.1	2.0
303	**L1**	1.3	2.3	2.0
	L2	1.6	2.6	2.3
	L3	1.9	2.9	2.6
	L4	2.2	3.2	2.9
305	**L1**	1.6	2.6	2.4
	L2	2.1	3.1	2.9
	L3	2.4	3.4	3.2
	L4	2.7	3.7	3.5
306	**L1**	2.5	3.5	3.2
	L2	3.3	4.3	4.0
	L3	3.6	4.6	4.3
	L4	3.9	4.9	4.6
307	**L1**	3.5	5.0	4.5
	L2	4.5	6.0	5.5
	L3	5.0	6.5	6.0
	L4	5.3	6.8	6.3
309	**L1**	4.0	5.5	5.0
	L2	5.0	6.5	6.0
	L3	5.5	7.0	6.5
	L4	5.8	7.3	6.8
310	**L1**	5.0	6.5	6.0
	L2	6.3	7.8	7.3
	L3	7.1	8.6	8.1
	L4	7.4	8.9	8.4
311	**L1**	7.0	12	10
	L2	9.0	14	12
	L3	10	15	13
	L4	10.5	15.5	13.5
313	**L1**	9.0	14	12
	L2	11.5	16.5	14.5
	L3	12.5	17.5	15.5
	L4	13	18	16
315	**L1**	15	23	19
	L2	19	27	23
	L3	21	29	25
	L4	22	30	26
316	**L1**	18	26	22
	L2	22	30	26
	L3	24	32	28
	L4	25	33	29
317	**L1**	20	35	30
	L2	26	41	36
	L3	29	44	39
	L4	30	45	40
318	**L1**	25	40	35
	L2	35	50	45
	L3	40	55	50
	L4	43	58	53
319	**L1**	35	55	45
	L2	45	65	55
	L3	50	70	60
	L4	53	73	63
321	**L1**	35	55	45
	L2	50	70	60
	L3	56	76	66
	L4	60	80	70

Type		Mounting position		
		B0	**U***	**P***
300	**R2**	1.2	1.7	1.5
	R3	1.5	2.0	1.8
	R4	1.8	2.3	2.1
301	**R2**	1.6	2.1	1.9
	R3	1.9	2.4	2.2
	R4	2.2	2.7	2.5
303	**R2**	2.2	2.8	2.6
	R3	2.5	3.1	2.9
	R4	2.8	3.4	3.2
305	**R2**	2.5	3.1	2.9
	R3	3.0	3.6	3.4
	R4	3.3	3.9	3.7
306	**R2**	4.0	5.0	4.8
	R3	4.8	5.8	5.6
	R4	5.1	6.1	5.9
307	**R2**	6.0	8.0	7.0
	R3	7.0	9.0	8.0
	R4	7.5	9.5	8.5
309	**R2**	6.5	8.5	7.5
	R3	7.5	9.5	8.5
	R4	8.0	10	9
310	**R3**	11	13	12
	R4	12	14	13
311	**R2**	14	19	17
	R3	16	21	19
	R4	17	22	20
313	**R2**	16	21	19
	R3	19	24	22
	R4	20	25	23
315	**R3**	27	35	31
	R4	30	38	34
316	**R3**	30	38	34
	R4	33	41	37
317	**R3**	38	52	48
	R4	42	56	52
318	**R4**	48	63	58

Quantities are indicative. Fill the gear unit up to the appropriate level plug.

Oil quantity [liters] - 1 liter = 1.056 US quart

(A25A)

	[l]											
	AA - EA - FD			AF - EF - FE		AE - EE - FF		AD - ED - FA		TA - TE - TF - TD VA - VC - VF - IO		OA - OE - OF- OD QA - QE - QF- QD	
		input P(IEC)	input HS		input P(IEC) HS		input P(IEC) HS		input P(IEC) HS		input P(IEC) HS		input P(IEC) HS
3/V 00 L3	0.9	0.12	0.12	0.9	0.12	0.9	0.12	0.9	0.12	1.3	0.12	1.2	0.12
3/V 01 L3	1.1			1.1		1.1		1.1		1.5		1.4	
3/V 03 L3	1.6	0.25	0.25	1.6	0.31	1.6	0.31	1.6	0.38	2.6	0.31	2.3	0.25
3/V 05 L3	2.1	0.38	0.38	2.1	0.43	2.1	0.43	2.1	0.52	3.1	0.52	2.9	0.38
3/V 06 L3	3.3	0.64	0.64	3.3	0.76	3.3	0.76	3.3	0.85	4.3	0.76	4	0.76
3/V 10 L4	7.1			7.1		7.1		7.1		8.6		8.1	
3/V 07 L3	4.5	2.4	2.8	4.5	2.6	4.5	2.6	4.5	1.7	6	1.9	5.5	1.9
3/V 11 L4	10			10		10		10		15		13	
3/V 13 L4	13			13		13		13		18		16	
3/V 09 L3	5	4.3	4.5	5	3.9	5.0	3.9	5	3.0	6.5	3.5	6	3.5
3/V 10 L3	6.3			6.3		6.3		6.3		7.8		7.3	
3/V 15 L4	21			21		21		21		29		25	
3/V 16 L4	24			24		24		24		32		28	
3/V 11 L3	9	7.8	9.6	9	6.7	9	6.7	9	5.0	14	5.5	12	5.5
3/V 13 L3	12			12		12		12		17		15	
3/V 17 L4	29			29		29		29		44		39	
3/V 15 L3	19	11	15	19	8.9	19	9.4	19	7.5	27	9.5	23	9.5
3/V 16 L3	22			22		22		22		30		26	
3/V 18 L4	40			40		40		40		55		50	
3/V 19 L4	50			50		50		50		70		60	
3/V 17 L3	26	23	28	26	16.8	26	17.5	26	10.7	41	17	36	17
3/V 21 L4	56			56		56		56		76		66	

Life lubricated

(A25B)

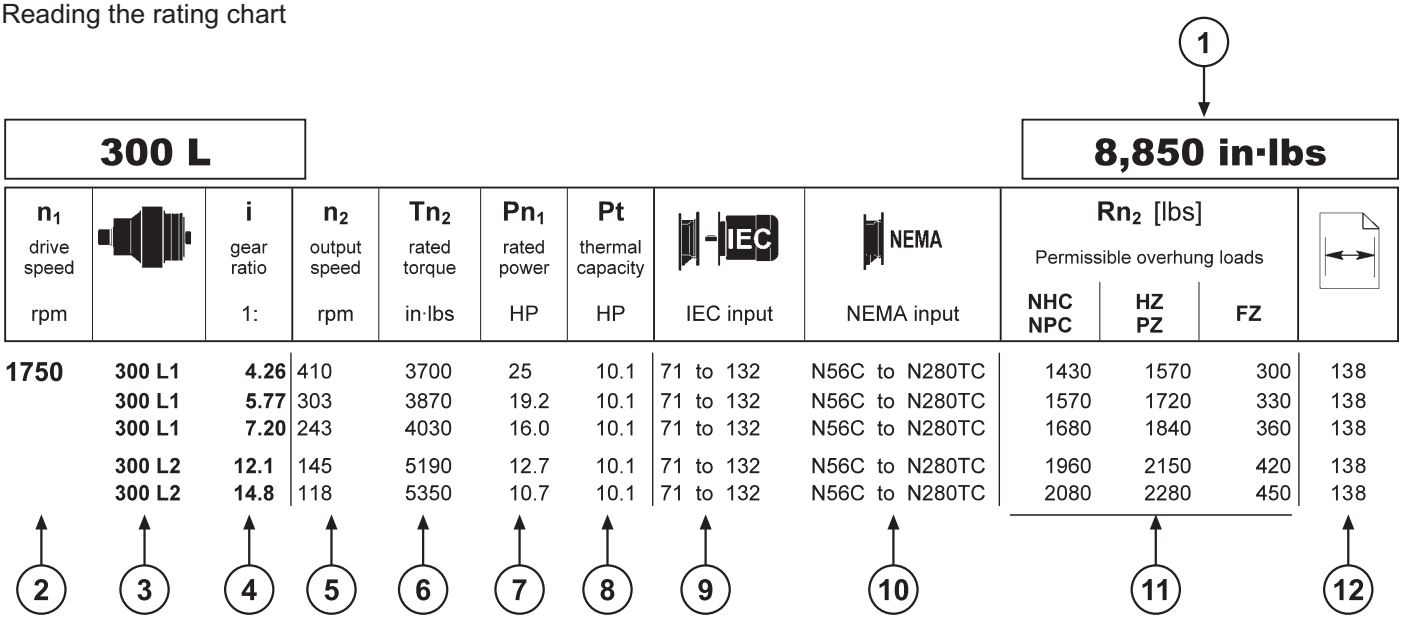
	[l]											
	AA - EA - FD		TA - TE - TF - TD VA - VC - VF -IO		OA - OE - OF- OD QA - QE - QF- QD		AD - ED - FA		AF - EF - FE		AE - EE - FF	
3/A 00 L2	0.60	1.4	1.0	1.4	0.9	1.4	0.6	1.4	0.6	1.4	0.6	1.4
3/A 01 L2	0.80	2.3	1.2	2.3	1.1	2.3	0.8	2.3	0.8	2.3	0.8	2.3
3/A 03 L2	1.3	3.2	2.3	3.2	2.0	3.2	1.3	3.2	1.3	3.2	1.3	3.2
3/A 05 L2	1.6	4.0	2.6	4.1	2.4	4.1	1.6	4.7	1.6	5.2	1.6	4.4
3/A 06 L2	2.5	4.9	3.5	8.1	3.2	4.7	2.5	8.4	2.5	11	2.5	9.2
3/A 07 L2	3.5	6.8	5.0	8.1	4.5	12	3.5	15	3.5	18	3.5	15

Life lubricated

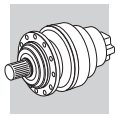
NOTE: Combined gearboxes feature separate lubrication for planetary stages and for worm gearboxes (3/V), or helical bevel units (3/A).

21.0 - SPEED REDUCER RATING CHARTS: 300L (inline)

Reading the rating chart



1	Max. transmissible torque
2	Gearbox drive speed
3	Frame size of the in-line gear unit
4	Gear ratio
5	Gearbox output speed
6	Gearbox rated output torque
7	Gearbox rated input power
8	Gearbox thermal capacity
9	Frame size of available IEC motor
10	Frame size of available NEMA motor
11	Permissible overhung load on output shaft
12	Page showing installation drawings and dimensions. Gearmotor overall dimensions refer to matches with BONFIGLIOLI motors only

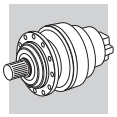


3□ L

300 L

8,850 in•lbs

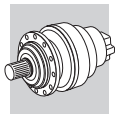
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**300 L1**	**4.26**	410	3700	25	10.1	71 to 132	N56C to N280TC	1430	1570	300	138
	300 L1	**5.77**	303	3870	19.2	10.1	71 to 132	N56C to N280TC	1570	1720	330	138
	300 L1	**7.20**	243	4030	16.0	10.1	71 to 132	N56C to N280TC	1680	1840	360	138
	300 L2	**12.1**	145	5190	12.7	10.1	71 to 132	N56C to N280TC	1960	2150	420	138
	300 L2	**14.8**	118	5350	10.7	10.1	71 to 132	N56C to N280TC	2080	2280	450	138
	300 L2	**18.2**	96	5680	9.2	10.1	71 to 132	N56C to N280TC	2210	2430	480	138
	300 L2	**20.1**	87	5350	7.9	10.1	71 to 132	N56C to N280TC	2280	2500	500	138
	300 L2	**24.6**	71	6170	7.4	10.1	71 to 132	N56C to N280TC	2420	2650	540	138
	300 L2	**30.7**	57	6670	6.4	10.1	71 to 132	N56C to N280TC	2590	2840	580	138
	300 L2	**33.3**	53	5350	4.7	10.1	71 to 132	N56C to N280TC	2650	2920	590	138
	300 L2	**41.5**	42	5350	3.8	10.1	71 to 132	N56C to N280TC	2840	3100	640	138
	300 L2	**51.8**	34	4530	2.6	10.1	71 to 132	N56C to N280TC	3020	3310	690	138
	300 L3	**42.1**	42	5350	3.9	10.1	71 to 90	N56C to N280TC	2840	3130	640	138
	300 L3	**51.6**	34	7000	4.1	10.1	71 to 132	N56C to N280TC	3020	3310	690	138
	300 L3	**63.2**	27.7	7000	3.4	10.1	71 to 90	N56C to N280TC	3210	3520	740	138
	300 L3	**69.9**	25.0	5350	2.3	10.1	71 to 90	N56C to N280TC	3310	3630	760	138
	300 L3	**77.5**	22.6	7000	2.8	10.1	71 to 90	N56C to N280TC	3420	3760	790	138
	300 L3	**85.6**	20.4	7000	2.5	10.1	71 to 90	N56C to N280TC	3520	3860	810	138
	300 L3	**105**	16.7	7000	2.0	10.1	71 to 90	N56C to N280TC	3730	4100	870	138
	300 L3	**116**	15.1	5350	1.4	10.1	71 to 90	N56C to N280TC	3860	4230	900	138
	300 L3	**131**	13.4	7000	1.6	10.1	71 to 90	N56C to N280TC	3990	4390	940	138
	300 L3	**142**	12.3	7000	1.5	10.1	71 to 90	N56C to N280TC	4100	4490	960	138
	300 L3	**177**	9.9	7000	1.2	10.1	71 to 90	N56C to N280TC	4390	4810	1040	138
	300 L3	**192**	9.1	5350	0.85	10.1	71 to 90	N56C to N280TC	4490	4910	1070	138
	300 L3	**221**	7.9	7000	0.97	10.1	71 to 90	N56C to N280TC	4680	5120	1110	138
	300 L3	**240**	7.3	5350	0.68	10.1	71 to 90	N56C to N280TC	4810	5260	1150	138
	300 L3	**299**	5.9	5430	0.55	10.1	71 to 90	N56C to N280TC	5120	5620	1230	138
	300 L3	**373**	4.7	4610	0.38	10.1	71 to 90	N56C to N280TC	5490	6020	1330	138
	300 L4	**403**	4.3	5680	0.44	8.0	71 to 90	N56C to N280TC	5600	6150	1360	138
	300 L4	**447**	3.9	7980	0.56	8.0	71 to 90	N56C to N280TC	5780	6330	1410	138
	300 L4	**494**	3.5	8070	0.52	8.0	71 to 90	N56C to N280TC	5970	6540	1460	138
	300 L4	**558**	3.1	8230	0.47	8.0	71 to 90	N56C to N280TC	6180	6780	1520	138
	300 L4	**616**	2.8	8230	0.42	8.0	71 to 90	N56C to N280TC	6360	6990	1570	138
	300 L4	**755**	2.3	8230	0.34	8.0	71 to 90	N56C to N280TC	6780	7410	1680	138
	300 L4	**819**	2.1	8230	0.32	8.0	71 to 90	N56C to N280TC	6940	7590	1730	138
	300 L4	**942**	1.9	8230	0.28	8.0	71 to 90	N56C to N280TC	7230	7940	1810	138
	300 L4	**1022**	1.7	8230	0.25	8.0	71 to 90	N56C to N280TC	7410	8120	1860	138
	300 L4	**1108**	1.6	6830	0.19	8.0	71 to 90	N56C to N280TC	7590	8330	1910	138
	300 L4	**1275**	1.4	8230	0.20	8.0	71 to 90	N56C to N280TC	7910	8700	2000	138
	300 L4	**1383**	1.3	7080	0.16	8.0	71 to 90	N56C to N280TC	8120	8910	2060	138
	300 L4	**1591**	1.1	8230	0.16	8.0	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**1725**	1.0	7080	0.13	8.0	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**2153**	0.81	7080	0.10	8.0	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**2687**	0.65	5760	0.07	8.0	71 to 90	N56C to N280TC	8150	8930	2060	138
1450	**300 L1**	**4.26**	340	3980	22	10.1	71 to 132	N56C to N280TC	1540	1690	320	138
	300 L1	**5.77**	251	4160	17.1	10.1	71 to 132	N56C to N280TC	1690	1850	350	138
	300 L1	**7.20**	201	4340	14.3	10.1	71 to 132	N56C to N280TC	1800	1980	380	138
	300 L2	**12.1**	120	5580	11.3	10.1	71 to 132	N56C to N280TC	2110	2310	450	138
	300 L2	**14.8**	98	5750	9.5	10.1	71 to 132	N56C to N280TC	2240	2460	490	138
	300 L2	**18.2**	80	6110	8.2	10.1	71 to 132	N56C to N280TC	2380	2610	520	138
	300 L2	**20.1**	72	5750	7.0	10.1	71 to 132	N56C to N280TC	2450	2690	540	138
	300 L2	**24.6**	59	6640	6.6	10.1	71 to 132	N56C to N280TC	2610	2850	580	138
	300 L2	**30.7**	47	7170	5.7	10.1	71 to 132	N56C to N280TC	2780	3050	620	138
	300 L2	**33.3**	44	5750	4.2	10.1	71 to 132	N56C to N280TC	2850	3140	640	138
	300 L2	**41.5**	35	5750	3.4	10.1	71 to 132	N56C to N280TC	3050	3330	690	138



300 L

8,850 in•lbs

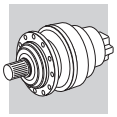
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**300 L2**	**51.8**	28.0	4870	2.3	10.1	71 to 132	N56C to N280TC	3250	3560	740	138
	300 L3	**42.1**	34	5750	3.4	10.1	71 to 90	N56C to N280TC	3050	3360	690	138
	300 L3	**51.6**	28.1	7520	3.7	10.1	71 to 90	N56C to N280TC	3250	3560	740	138
	300 L3	**63.2**	22.9	7520	3.0	10.1	71 to 90	N56C to N280TC	3450	3790	790	138
	300 L3	**69.9**	20.8	5750	2.1	10.1	71 to 90	N56C to N280TC	3560	3900	820	138
	300 L3	**77.5**	18.7	7520	2.5	10.1	71 to 90	N56C to N280TC	3670	4040	850	138
	300 L3	**85.6**	16.9	7520	2.2	10.1	71 to 90	N56C to N280TC	3790	4150	870	138
	300 L3	**105**	13.8	7520	1.8	10.1	71 to 90	N56C to N280TC	4010	4410	930	138
	300 L3	**116**	12.5	5750	1.3	10.1	71 to 90	N56C to N280TC	4150	4550	970	138
	300 L3	**131**	11.1	7520	1.5	10.1	71 to 90	N56C to N280TC	4300	4720	1010	138
	300 L3	**142**	10.2	7520	1.3	10.1	71 to 90	N56C to N280TC	4410	4830	1030	138
	300 L3	**177**	8.2	7520	1.1	10.1	71 to 90	N56C to N280TC	4720	5170	1120	138
	300 L3	**192**	7.6	5750	0.76	10.1	71 to 90	N56C to N280TC	4830	5280	1150	138
	300 L3	**221**	6.6	7520	0.86	10.1	71 to 90	N56C to N280TC	5030	5510	1200	138
	300 L3	**240**	6.1	5750	0.61	10.1	71 to 90	N56C to N280TC	5170	5650	1230	138
	300 L3	**299**	4.8	5840	0.49	10.1	71 to 90	N56C to N280TC	5510	6050	1330	138
	300 L3	**373**	3.9	4960	0.34	10.1	71 to 90	N56C to N280TC	5910	6470	1430	138
	300 L4	**403**	3.6	6110	0.40	8.0	71 to 90	N56C to N280TC	6020	6610	1460	138
	300 L4	**447**	3.2	8580	0.50	8.0	71 to 90	N56C to N280TC	6220	6810	1520	138
	300 L4	**494**	2.9	8670	0.46	8.0	71 to 90	N56C to N280TC	6410	7040	1570	138
	300 L4	**558**	2.6	8850	0.41	8.0	71 to 90	N56C to N280TC	6640	7290	1630	138
	300 L4	**616**	2.4	8850	0.38	8.0	71 to 90	N56C to N280TC	6840	7520	1690	138
	300 L4	**755**	1.9	8850	0.31	8.0	71 to 90	N56C to N280TC	7290	7970	1810	138
	300 L4	**819**	1.8	8850	0.28	8.0	71 to 90	N56C to N280TC	7460	8170	1860	138
	300 L4	**942**	1.5	8850	0.25	8.0	71 to 90	N56C to N280TC	7770	8530	1940	138
	300 L4	**1022**	1.4	8850	0.23	8.0	71 to 90	N56C to N280TC	7970	8730	2000	138
	300 L4	**1108**	1.3	7350	0.17	8.0	71 to 90	N56C to N280TC	8170	8960	2050	138
	300 L4	**1275**	1.1	8850	0.18	8.0	71 to 90	N56C to N280TC	8510	9350	2150	138
	300 L4	**1383**	1.0	7610	0.14	8.0	71 to 90	N56C to N280TC	8730	9580	2210	138
	300 L4	**1591**	0.91	8850	0.15	8.0	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**1725**	0.84	7610	0.12	8.0	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**2153**	0.67	7610	0.09	8.0	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**2687**	0.54	6190	0.06	8.0	71 to 90	N56C to N280TC	8760	9610	2220	138
1150	**300 L1**	**3.48**	330	4030	22	12.1	71 to 132	N56C to N280TC	1540	1690	320	138
	300 L1	**4.26**	270	4200	18.5	12.1	71 to 132	N56C to N280TC	1630	1790	350	138
	300 L1	**5.77**	199	4440	14.5	12.1	71 to 132	N56C to N280TC	1790	1960	380	138
	300 L1	**7.20**	160	4530	11.8	12.1	71 to 132	N56C to N280TC	1910	2100	410	138
	300 L2	**12.1**	95	5350	8.6	12.1	71 to 132	N56C to N280TC	2240	2450	490	138
	300 L2	**14.8**	78	5350	7.0	12.1	71 to 132	N56C to N280TC	2380	2610	530	138
	300 L2	**18.2**	63	6500	6.9	12.1	71 to 132	N56C to N280TC	2530	2760	560	138
	300 L2	**20.1**	57	5350	5.2	12.1	71 to 132	N56C to N280TC	2600	2860	580	138
	300 L2	**24.6**	47	7000	5.5	12.1	71 to 132	N56C to N280TC	2760	3020	620	138
	300 L2	**30.7**	37	7000	4.4	12.1	71 to 132	N56C to N280TC	2970	3230	670	138
	300 L2	**33.3**	35	5350	3.1	12.1	71 to 132	N56C to N280TC	3020	3310	690	138
	300 L2	**41.5**	27.7	5350	2.5	12.1	71 to 132	N56C to N280TC	3230	3550	740	138
	300 L2	**51.8**	22.2	4530	1.7	12.1	71 to 132	N56C to N280TC	3470	3780	800	138
	300 L3	**42.1**	27.3	5350	2.5	12.1	71 to 90	N56C to N280TC	3260	3570	740	138
	300 L3	**51.6**	22.3	7000	2.7	12.1	71 to 90	N56C to N280TC	3470	3780	800	138
	300 L3	**63.2**	18.2	7000	2.2	12.1	71 to 90	N56C to N280TC	3680	4020	850	138
	300 L3	**69.9**	16.5	5350	1.5	12.1	71 to 90	N56C to N280TC	3780	4150	880	138
	300 L3	**77.5**	14.8	7000	1.8	12.1	71 to 90	N56C to N280TC	3920	4280	910	138
	300 L3	**85.6**	13.4	7000	1.6	12.1	71 to 90	N56C to N280TC	4020	4410	940	138
	300 L3	**105**	11.0	7000	1.3	12.1	71 to 90	N56C to N280TC	4280	4680	1010	138
	300 L3	**116**	9.9	5350	0.93	12.1	71 to 90	N56C to N280TC	4410	4840	1040	138
	300 L3	**131**	8.8	7000	1.1	12.1	71 to 90	N56C to N280TC	4570	5020	1090	138



300 L

8,850 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**300 L3**	**142**	8.1	7000	0.99	12.1	71 to 90	N56C to N280TC	4680	5120	1110	138
	300 L3	**177**	6.5	7330	0.83	12.1	71 to 90	N56C to N280TC	4990	5490	1200	138
	300 L3	**192**	6.0	5430	0.57	12.1	71 to 90	N56C to N280TC	5120	5620	1230	138
	300 L3	**221**	5.2	7570	0.69	12.1	71 to 90	N56C to N280TC	5330	5860	1290	138
	300 L3	**240**	4.8	5600	0.47	12.1	71 to 90	N56C to N280TC	5470	6020	1330	138
	300 L3	**299**	3.8	5840	0.39	12.1	71 to 90	N56C to N280TC	5860	6410	1430	138
	300 L3	**373**	3.1	4940	0.27	12.1	71 to 90	N56C to N280TC	6250	6860	1540	138
	300 L4	**403**	2.9	6170	0.32	10.1	71 to 90	N56C to N280TC	6410	7020	1580	138
	300 L4	**447**	2.6	8230	0.38	10.1	71 to 90	N56C to N280TC	6600	7250	1640	138
	300 L4	**494**	2.3	8230	0.35	10.1	71 to 90	N56C to N280TC	6810	7460	1690	138
	300 L4	**558**	2.1	8230	0.31	10.1	71 to 90	N56C to N280TC	7070	7750	1760	138
	300 L4	**616**	1.9	8230	0.28	10.1	71 to 90	N56C to N280TC	7280	7960	1820	138
	300 L4	**755**	1.5	8230	0.23	10.1	71 to 90	N56C to N280TC	7730	8490	1950	138
	300 L4	**819**	1.4	8230	0.21	10.1	71 to 90	N56C to N280TC	7910	8670	2000	138
	300 L4	**942**	1.2	8230	0.18	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**1022**	1.1	8230	0.17	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**1108**	1.0	7080	0.13	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**1275**	0.90	8230	0.13	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**1383**	0.83	7080	0.11	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**1591**	0.72	8230	0.11	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**1725**	0.67	7080	0.09	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**2153**	0.53	7080	0.07	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
	300 L4	**2687**	0.43	5760	0.04	10.1	71 to 90	N56C to N280TC	8150	8930	2060	138
870	**300 L1**	**3.48**	250	4340	17.7	12.1	71 to 132	N56C to N280TC	1660	1810	350	138
	300 L1	**4.26**	204	4510	15.1	12.1	71 to 132	N56C to N280TC	1760	1930	370	138
	300 L1	**5.77**	151	4780	11.8	12.1	71 to 132	N56C to N280TC	1920	2110	410	138
	300 L1	**7.20**	121	4870	9.6	12.1	71 to 132	N56C to N280TC	2060	2260	440	138
	300 L2	**12.1**	72	5750	7.0	12.1	71 to 132	N56C to N280TC	2400	2640	530	138
	300 L2	**14.8**	59	5750	5.7	12.1	71 to 132	N56C to N280TC	2560	2800	570	138
	300 L2	**18.2**	48	6990	5.6	12.1	71 to 132	N56C to N280TC	2720	2970	600	138
	300 L2	**20.1**	43	5750	4.2	12.1	71 to 132	N56C to N280TC	2800	3080	620	138
	300 L2	**24.6**	35	7520	4.5	12.1	71 to 132	N56C to N280TC	2970	3250	670	138
	300 L2	**30.7**	28.3	7520	3.6	12.1	71 to 132	N56C to N280TC	3190	3480	720	138
	300 L2	**33.3**	26.1	5750	2.5	12.1	71 to 132	N56C to N280TC	3250	3560	740	138
	300 L2	**41.5**	20.9	5750	2.0	12.1	71 to 132	N56C to N280TC	3480	3810	800	138
	300 L2	**51.8**	16.8	4870	1.4	12.1	71 to 132	N56C to N280TC	3730	4070	860	138
	300 L3	**42.1**	20.6	5750	2.1	12.1	71 to 90	N56C to N280TC	3500	3840	800	138
	300 L3	**51.6**	16.9	7520	2.2	12.1	71 to 90	N56C to N280TC	3730	4070	860	138
	300 L3	**63.2**	13.8	7520	1.8	12.1	71 to 90	N56C to N280TC	3960	4320	920	138
	300 L3	**69.9**	12.5	5750	1.2	12.1	71 to 90	N56C to N280TC	4070	4460	950	138
	300 L3	**77.5**	11.2	7520	1.5	12.1	71 to 90	N56C to N280TC	4210	4610	980	138
	300 L3	**85.6**	10.2	7520	1.3	12.1	71 to 90	N56C to N280TC	4320	4750	1010	138
	300 L3	**105**	8.3	7520	1.1	12.1	71 to 90	N56C to N280TC	4610	5030	1080	138
	300 L3	**116**	7.5	5750	0.75	12.1	71 to 90	N56C to N280TC	4750	5200	1120	138
	300 L3	**131**	6.6	7520	0.87	12.1	71 to 90	N56C to N280TC	4920	5400	1170	138
	300 L3	**142**	6.1	7520	0.80	12.1	71 to 90	N56C to N280TC	5030	5510	1200	138
	300 L3	**177**	4.9	7880	0.68	12.1	71 to 90	N56C to N280TC	5370	5910	1290	138
	300 L3	**192**	4.5	5840	0.46	12.1	71 to 90	N56C to N280TC	5510	6050	1330	138
	300 L3	**221**	3.9	8140	0.56	12.1	71 to 90	N56C to N280TC	5740	6300	1390	138
	300 L3	**240**	3.6	6020	0.38	12.1	71 to 90	N56C to N280TC	5880	6470	1430	138
	300 L3	**299**	2.9	6280	0.32	12.1	71 to 90	N56C to N280TC	6300	6890	1540	138
	300 L3	**373**	2.3	5310	0.22	12.1	71 to 90	N56C to N280TC	6730	7380	1660	138
	300 L4	**403**	2.2	6640	0.26	10.1	71 to 90	N56C to N280TC	6890	7540	1700	138
	300 L4	**447**	1.9	8850	0.31	10.1	71 to 90	N56C to N280TC	7090	7800	1760	138
	300 L4	**494**	1.8	8850	0.28	10.1	71 to 90	N56C to N280TC	7320	8020	1820	138



300 L

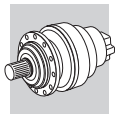
8,850 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**300 L4**	**558**	1.6	8850	0.25	10.1	71 to 90	N56C to N280TC	7600	8340	1890	138
	300 L4	**616**	1.4	8850	0.23	10.1	71 to 90	N56C to N280TC	7830	8560	1960	138
	300 L4	**755**	1.2	8850	0.18	10.1	71 to 90	N56C to N280TC	8310	9130	2090	138
	300 L4	**819**	1.1	8850	0.17	10.1	71 to 90	N56C to N280TC	8510	9320	2150	138
	300 L4	**942**	0.92	8850	0.15	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**1022**	0.85	8850	0.14	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**1108**	0.79	7610	0.11	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**1275**	0.68	8850	0.11	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**1383**	0.63	7610	0.09	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**1591**	0.55	8850	0.09	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**1725**	0.50	7610	0.07	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**2153**	0.40	7610	0.06	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138
	300 L4	**2687**	0.32	6190	0.04	10.1	71 to 90	N56C to N280TC	8760	9610	2220	138

301 L

17,700 in•bs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**301 L1**	**4.26**	410	6580	44	10.1	71 to 132	N56C to N280TC	1430	1570	300	146
	301 L1	**5.77**	303	7000	35	10.1	71 to 132	N56C to N280TC	1570	1720	330	146
	301 L1	**7.20**	243	7240	29	10.1	71 to 132	N56C to N280TC	1680	1840	360	146
	301 L2	**12.1**	145	9300	23	10.1	71 to 132	N56C to N280TC	1960	2150	420	146
	301 L2	**14.8**	118	9880	19.7	10.1	71 to 132	N56C to N280TC	2080	2280	450	146
	301 L2	**18.2**	96	10200	16.6	10.1	71 to 132	N56C to N280TC	2210	2430	480	146
	301 L2	**20.1**	87	10700	15.7	10.1	71 to 132	N56C to N280TC	2280	2500	500	146
	301 L2	**24.6**	71	11200	13.5	10.1	71 to 132	N56C to N280TC	2420	2650	540	146
	301 L2	**30.7**	57	11900	11.5	10.1	71 to 132	N56C to N280TC	2590	2840	580	146
	301 L2	**33.3**	53	10700	9.5	10.1	71 to 132	N56C to N280TC	2650	2920	590	146
	301 L2	**41.5**	42	10700	7.6	10.1	71 to 132	N56C to N280TC	2840	3100	640	146
	301 L2	**51.8**	34	9460	5.4	10.1	71 to 132	N56C to N280TC	3020	3310	690	146
	301 L3	**42.1**	42	10700	7.7	10.1	71 to 100	N56C to N280TC	2840	3130	640	146
	301 L3	**51.6**	34	14000	8.3	10.1	71 to 100	N56C to N280TC	3020	3310	690	146
	301 L3	**63.2**	27.7	14000	6.8	10.1	71 to 100	N56C to N280TC	3210	3520	740	146
	301 L3	**69.9**	25.0	10700	4.7	10.1	71 to 100	N56C to N280TC	3310	3630	760	146
	301 L3	**77.5**	22.6	14000	5.5	10.1	71 to 100	N56C to N280TC	3420	3760	790	146
	301 L3	**85.6**	20.4	14000	5.0	10.1	71 to 100	N56C to N280TC	3520	3860	810	146
	301 L3	**105**	16.7	14000	4.1	10.1	71 to 100	N56C to N280TC	3730	4100	870	146
	301 L3	**116**	15.1	10700	2.8	10.1	71 to 100	N56C to N280TC	3860	4230	900	146
	301 L3	**131**	13.4	14000	3.3	10.1	71 to 100	N56C to N280TC	3990	4390	940	146
	301 L3	**142**	12.3	14000	3.0	10.1	71 to 100	N56C to N280TC	4100	4490	960	146
	301 L3	**177**	9.9	14000	2.4	10.1	71 to 100	N56C to N280TC	4390	4810	1040	146
	301 L3	**192**	9.1	10700	1.7	10.1	71 to 100	N56C to N280TC	4490	4910	1070	146
	301 L3	**221**	7.9	14100	1.9	10.1	71 to 100	N56C to N280TC	4680	5120	1110	146
	301 L3	**240**	7.3	10700	1.4	10.1	71 to 100	N56C to N280TC	4810	5260	1150	146
	301 L3	**299**	5.9	10800	1.1	10.1	71 to 100	N56C to N280TC	5120	5620	1230	146
	301 L3	**373**	4.7	9460	0.77	10.1	71 to 100	N56C to N280TC	5490	6020	1330	146
	301 L4	**403**	4.3	11300	0.88	8.0	71 to 100	N56C to N280TC	5600	6150	1360	146

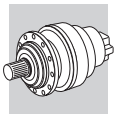


3□ L

301 L

17,700 in•lbs

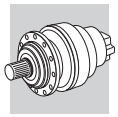
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**301 L4**	**447**	3.9	15700	1.1	8.0	71 to 100	N56C to N280TC	5780	6330	1410	146
	301 L4	**494**	3.5	16000	1.0	8.0	71 to 100	N56C to N280TC	5970	6540	1460	146
	301 L4	**558**	3.1	16300	0.92	8.0	71 to 100	N56C to N280TC	6180	6780	1520	146
	301 L4	**616**	2.8	16500	0.84	8.0	71 to 100	N56C to N280TC	6360	6990	1570	146
	301 L4	**755**	2.3	16500	0.69	8.0	71 to 100	N56C to N280TC	6780	7410	1680	146
	301 L4	**819**	2.1	16500	0.64	8.0	71 to 100	N56C to N280TC	6940	7590	1730	146
	301 L4	**942**	1.9	16500	0.55	8.0	71 to 100	N56C to N280TC	7230	7940	1810	146
	301 L4	**1022**	1.7	16500	0.51	8.0	71 to 100	N56C to N280TC	7410	8120	1860	146
	301 L4	**1108**	1.6	13400	0.38	8.0	71 to 100	N56C to N280TC	7590	8330	1910	146
	301 L4	**1275**	1.4	16500	0.41	8.0	71 to 100	N56C to N280TC	7910	8700	2000	146
	301 L4	**1383**	1.3	14000	0.32	8.0	71 to 100	N56C to N280TC	8120	8910	2060	146
	301 L4	**1591**	1.1	16500	0.33	8.0	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**1725**	1.0	14000	0.26	8.0	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**2153**	0.81	14000	0.21	8.0	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**2687**	0.65	9460	0.11	8.0	71 to 100	N56C to N280TC	8150	8930	2060	146
1450	**301 L1**	**4.26**	340	7080	39	10.1	71 to 132	N56C to N280TC	1540	1690	320	146
	301 L1	**5.77**	251	7520	31	10.1	71 to 132	N56C to N280TC	1690	1850	350	146
	301 L1	**7.20**	201	7790	26	10.1	71 to 132	N56C to N280TC	1800	1980	380	146
	301 L2	**12.1**	120	10000	20	10.1	71 to 132	N56C to N280TC	2110	2310	450	146
	301 L2	**14.8**	98	10600	17.5	10.1	71 to 132	N56C to N280TC	2240	2460	490	146
	301 L2	**18.2**	80	11000	14.8	10.1	71 to 132	N56C to N280TC	2380	2610	520	146
	301 L2	**20.1**	72	11500	14.0	10.1	71 to 132	N56C to N280TC	2450	2690	540	146
	301 L2	**24.6**	59	12000	11.9	10.1	71 to 132	N56C to N280TC	2610	2850	580	146
	301 L2	**30.7**	47	12800	10.2	10.1	71 to 132	N56C to N280TC	2780	3050	620	146
	301 L2	**33.3**	44	11500	8.5	10.1	71 to 132	N56C to N280TC	2850	3140	640	146
	301 L2	**41.5**	35	11500	6.8	10.1	71 to 132	N56C to N280TC	3050	3330	690	146
	301 L2	**51.8**	28.0	10200	4.8	10.1	71 to 132	N56C to N280TC	3250	3560	740	146
	301 L3	**42.1**	34	11500	6.9	10.1	71 to 100	N56C to N280TC	3050	3360	690	146
	301 L3	**51.6**	28.1	15000	7.3	10.1	71 to 100	N56C to N280TC	3250	3560	740	146
	301 L3	**63.2**	22.9	15000	6.0	10.1	71 to 100	N56C to N280TC	3450	3790	790	146
	301 L3	**69.9**	20.8	11500	4.2	10.1	71 to 100	N56C to N280TC	3560	3900	820	146
	301 L3	**77.5**	18.7	15000	4.9	10.1	71 to 100	N56C to N280TC	3670	4040	850	146
	301 L3	**85.6**	16.9	15000	4.4	10.1	71 to 100	N56C to N280TC	3790	4150	870	146
	301 L3	**105**	13.8	15000	3.6	10.1	71 to 100	N56C to N280TC	4010	4410	930	146
	301 L3	**116**	12.5	11500	2.5	10.1	71 to 100	N56C to N280TC	4150	4550	970	146
	301 L3	**131**	11.1	15000	2.9	10.1	71 to 100	N56C to N280TC	4300	4720	1010	146
	301 L3	**142**	10.2	15000	2.7	10.1	71 to 100	N56C to N280TC	4410	4830	1030	146
	301 L3	**177**	8.2	15000	2.1	10.1	71 to 100	N56C to N280TC	4720	5170	1120	146
	301 L3	**192**	7.6	11500	1.5	10.1	71 to 100	N56C to N280TC	4830	5280	1150	146
	301 L3	**221**	6.6	15100	1.7	10.1	71 to 100	N56C to N280TC	5030	5510	1200	146
	301 L3	**240**	6.1	11500	1.2	10.1	71 to 100	N56C to N280TC	5170	5650	1230	146
	301 L3	**299**	4.8	11600	0.98	10.1	71 to 100	N56C to N280TC	5510	6050	1330	146
	301 L3	**373**	3.9	10200	0.69	10.1	71 to 100	N56C to N280TC	5910	6470	1430	146
	301 L4	**403**	3.6	12100	0.78	8.0	71 to 100	N56C to N280TC	6020	6610	1460	146
	301 L4	**447**	3.2	16900	0.99	8.0	71 to 100	N56C to N280TC	6220	6810	1520	146
	301 L4	**494**	2.9	17200	0.91	8.0	71 to 100	N56C to N280TC	6410	7040	1570	146
	301 L4	**558**	2.6	17500	0.82	8.0	71 to 100	N56C to N280TC	6640	7290	1630	146
	301 L4	**616**	2.4	17700	0.75	8.0	71 to 100	N56C to N280TC	6840	7520	1690	146
	301 L4	**755**	1.9	17700	0.61	8.0	71 to 100	N56C to N280TC	7290	7970	1810	146
	301 L4	**819**	1.8	17700	0.57	8.0	71 to 100	N56C to N280TC	7460	8170	1860	146
	301 L4	**942**	1.5	17700	0.49	8.0	71 to 100	N56C to N280TC	7770	8530	1940	146
	301 L4	**1022**	1.4	17700	0.45	8.0	71 to 100	N56C to N280TC	7970	8730	2000	146
	301 L4	**1108**	1.3	14400	0.34	8.0	71 to 100	N56C to N280TC	8170	8960	2050	146
	301 L4	**1275**	1.1	17700	0.36	8.0	71 to 100	N56C to N280TC	8510	9350	2150	146
	301 L4	**1383**	1.0	15000	0.28	8.0	71 to 100	N56C to N280TC	8730	9580	2210	146
	301 L4	**1591**	0.91	17700	0.29	8.0	71 to 100	N56C to N280TC	8760	9610	2220	146



301 L

17,700 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**301 L4**	**1725**	0.84	15000	0.23	8.0	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**2153**	0.67	15000	0.18	8.0	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**2687**	0.54	10200	0.10	8.0	71 to 100	N56C to N280TC	8760	9610	2220	146
1150	**301 L1**	**3.48**	330	7330	40	12.1	71 to 132	N56C to N280TC	1540	1690	320	146
	301 L1	**4.26**	270	7570	33	12.1	71 to 132	N56C to N280TC	1630	1790	350	146
	301 L1	**5.77**	199	7980	26	12.1	71 to 132	N56C to N280TC	1790	1960	380	146
	301 L1	**7.20**	160	8310	22	12.1	71 to 132	N56C to N280TC	1910	2100	410	146
	301 L2	**12.1**	95	10600	17.0	12.1	71 to 132	N56C to N280TC	2240	2450	490	146
	301 L2	**14.8**	78	10700	14.0	12.1	71 to 132	N56C to N280TC	2380	2610	530	146
	301 L2	**18.2**	63	11700	12.5	12.1	71 to 132	N56C to N280TC	2530	2760	560	146
	301 L2	**20.1**	57	10700	10.3	12.1	71 to 132	N56C to N280TC	2600	2860	580	146
	301 L2	**24.6**	47	12800	10.1	12.1	71 to 132	N56C to N280TC	2760	3020	620	146
	301 L2	**30.7**	37	13700	8.7	12.1	71 to 132	N56C to N280TC	2970	3230	670	146
	301 L2	**33.3**	35	10700	6.2	12.1	71 to 132	N56C to N280TC	3020	3310	690	146
	301 L2	**41.5**	27.7	10700	5.0	12.1	71 to 132	N56C to N280TC	3230	3550	740	146
	301 L2	**51.8**	22.2	9460	3.5	12.1	71 to 132	N56C to N280TC	3470	3780	800	146
	301 L3	**42.1**	27.3	10700	5.1	12.1	71 to 100	N56C to N280TC	3260	3570	740	146
	301 L3	**51.6**	22.3	14000	5.4	12.1	71 to 100	N56C to N280TC	3470	3780	800	146
	301 L3	**63.2**	18.2	14000	4.4	12.1	71 to 100	N56C to N280TC	3680	4020	850	146
	301 L3	**69.9**	16.5	10700	3.1	12.1	71 to 100	N56C to N280TC	3780	4150	880	146
	301 L3	**77.5**	14.8	14000	3.6	12.1	71 to 100	N56C to N280TC	3920	4280	910	146
	301 L3	**85.6**	13.4	14000	3.3	12.1	71 to 100	N56C to N280TC	4020	4410	940	146
	301 L3	**105**	11.0	14000	2.7	12.1	71 to 100	N56C to N280TC	4280	4680	1010	146
	301 L3	**116**	9.9	10700	1.9	12.1	71 to 100	N56C to N280TC	4410	4840	1040	146
	301 L3	**131**	8.8	14000	2.1	12.1	71 to 100	N56C to N280TC	4570	5020	1090	146
	301 L3	**142**	8.1	14100	2.0	12.1	71 to 100	N56C to N280TC	4680	5120	1110	146
	301 L3	**177**	6.5	14600	1.7	12.1	71 to 100	N56C to N280TC	4990	5490	1200	146
	301 L3	**192**	6.0	10800	1.1	12.1	71 to 100	N56C to N280TC	5120	5620	1230	146
	301 L3	**221**	5.2	15100	1.4	12.1	71 to 100	N56C to N280TC	5330	5860	1290	146
	301 L3	**240**	4.8	11200	0.94	12.1	71 to 100	N56C to N280TC	5470	6020	1330	146
	301 L3	**299**	3.8	11600	0.78	12.1	71 to 100	N56C to N280TC	5860	6410	1430	146
	301 L3	**373**	3.1	9460	0.51	12.1	71 to 100	N56C to N280TC	6250	6860	1540	146
	301 L4	**403**	2.9	12200	0.63	10.1	71 to 100	N56C to N280TC	6410	7020	1580	146
	301 L4	**447**	2.6	16500	0.77	10.1	71 to 100	N56C to N280TC	6600	7250	1640	146
	301 L4	**494**	2.3	16500	0.69	10.1	71 to 100	N56C to N280TC	6810	7460	1690	146
	301 L4	**558**	2.1	16500	0.61	10.1	71 to 100	N56C to N280TC	7070	7750	1760	146
	301 L4	**616**	1.9	16500	0.56	10.1	71 to 100	N56C to N280TC	7280	7960	1820	146
	301 L4	**755**	1.5	16500	0.45	10.1	71 to 100	N56C to N280TC	7730	8490	1950	146
	301 L4	**819**	1.4	16500	0.42	10.1	71 to 100	N56C to N280TC	7910	8670	2000	146
	301 L4	**942**	1.2	16500	0.36	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**1022**	1.1	16500	0.33	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**1108**	1.0	14000	0.26	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**1275**	0.90	16500	0.27	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**1383**	0.83	14000	0.21	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**1591**	0.72	16500	0.22	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**1725**	0.67	14000	0.17	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**2153**	0.53	14000	0.13	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
	301 L4	**2687**	0.43	9460	0.07	10.1	71 to 100	N56C to N280TC	8150	8930	2060	146
870	**301 L1**	**3.48**	250	7880	32	12.1	71 to 132	N56C to N280TC	1660	1810	350	146
	301 L1	**4.26**	204	8140	27	12.1	71 to 132	N56C to N280TC	1760	1930	370	146
	301 L1	**5.77**	151	8580	21	12.1	71 to 132	N56C to N280TC	1920	2110	410	146
	301 L1	**7.20**	121	8940	17.7	12.1	71 to 132	N56C to N280TC	2060	2260	440	146
	301 L2	**12.1**	72	11400	13.8	12.1	71 to 132	N56C to N280TC	2400	2640	530	146
	301 L2	**14.8**	59	11500	11.4	12.1	71 to 132	N56C to N280TC	2560	2800	570	146

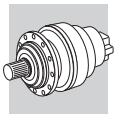


3□ L

301 L

17,700 in•lbs

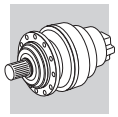
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**301 L2**	**18.2**	48	12600	10.2	12.1	71 to 132	N56C to N280TC	2720	2970	600	146
	301 L2	**20.1**	43	11500	8.4	12.1	71 to 132	N56C to N280TC	2800	3080	620	146
	301 L2	**24.6**	35	13700	8.2	12.1	71 to 132	N56C to N280TC	2970	3250	670	146
	301 L2	**30.7**	28.3	14700	7.0	12.1	71 to 132	N56C to N280TC	3190	3480	720	146
	301 L2	**33.3**	26.1	11500	5.1	12.1	71 to 132	N56C to N280TC	3250	3560	740	146
	301 L2	**41.5**	20.9	11500	4.1	12.1	71 to 132	N56C to N280TC	3480	3810	800	146
	301 L2	**51.8**	16.8	10200	2.9	12.1	71 to 132	N56C to N280TC	3730	4070	860	146
	301 L3	**42.1**	20.6	11500	4.1	12.1	71 to 100	N56C to N280TC	3500	3840	800	146
	301 L3	**51.6**	16.9	15000	4.4	12.1	71 to 100	N56C to N280TC	3730	4070	860	146
	301 L3	**63.2**	13.8	15000	3.6	12.1	71 to 100	N56C to N280TC	3960	4320	920	146
	301 L3	**69.9**	12.5	11500	2.5	12.1	71 to 100	N56C to N280TC	4070	4460	950	146
	301 L3	**77.5**	11.2	15000	2.9	12.1	71 to 100	N56C to N280TC	4210	4610	980	146
	301 L3	**85.6**	10.2	15000	2.7	12.1	71 to 100	N56C to N280TC	4320	4750	1010	146
	301 L3	**105**	8.3	15000	2.2	12.1	71 to 100	N56C to N280TC	4610	5030	1080	146
	301 L3	**116**	7.5	11500	1.5	12.1	71 to 100	N56C to N280TC	4750	5200	1120	146
	301 L3	**131**	6.6	15000	1.7	12.1	71 to 100	N56C to N280TC	4920	5400	1170	146
	301 L3	**142**	6.1	15100	1.6	12.1	71 to 100	N56C to N280TC	5030	5510	1200	146
	301 L3	**177**	4.9	15700	1.3	12.1	71 to 100	N56C to N280TC	5370	5910	1290	146
	301 L3	**192**	4.5	11600	0.92	12.1	71 to 100	N56C to N280TC	5510	6050	1330	146
	301 L3	**221**	3.9	16200	1.1	12.1	71 to 100	N56C to N280TC	5740	6300	1390	146
	301 L3	**240**	3.6	12000	0.76	12.1	71 to 100	N56C to N280TC	5880	6470	1430	146
	301 L3	**299**	2.9	12500	0.63	12.1	71 to 100	N56C to N280TC	6300	6890	1540	146
	301 L3	**373**	2.3	10200	0.41	12.1	71 to 100	N56C to N280TC	6730	7380	1660	146
	301 L4	**403**	2.2	13100	0.51	10.1	71 to 100	N56C to N280TC	6890	7540	1700	146
	301 L4	**447**	1.9	17700	0.62	10.1	71 to 100	N56C to N280TC	7090	7800	1760	146
	301 L4	**494**	1.8	17700	0.56	10.1	71 to 100	N56C to N280TC	7320	8020	1820	146
	301 L4	**558**	1.6	17700	0.50	10.1	71 to 100	N56C to N280TC	7600	8340	1890	146
	301 L4	**616**	1.4	17700	0.45	10.1	71 to 100	N56C to N280TC	7830	8560	1960	146
	301 L4	**755**	1.2	17700	0.37	10.1	71 to 100	N56C to N280TC	8310	9130	2090	146
	301 L4	**819**	1.1	17700	0.34	10.1	71 to 100	N56C to N280TC	8510	9320	2150	146
	301 L4	**942**	0.92	17700	0.29	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**1022**	0.85	17700	0.27	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**1108**	0.79	15000	0.21	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**1275**	0.68	17700	0.22	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**1383**	0.63	15000	0.17	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**1591**	0.55	17700	0.17	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**1725**	0.50	15000	0.14	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**2153**	0.40	15000	0.11	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146
	301 L4	**2687**	0.32	10200	0.06	10.1	71 to 100	N56C to N280TC	8760	9610	2220	146



303 L

25,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**303 L1**	**4.25**	412	9220	62	14.8	132 to 180	N250TC - N280TC	2940	3420	900	154
	303 L1	**5.33**	328	11100	60	14.8	132 to 180	N250TC - N280TC	3150	3650	970	154
	303 L1	**6.20**	282	11500	53	14.8	132 to 180	N250TC - N280TC	3310	3840	1020	154
	303 L1	**7.50**	233	11900	45	14.8	132 to 180	N250TC - N280TC	3500	4050	1080	154
	303 L2	**12.5**	140	12300	29	12.1	71 to 132	N56C to N280TC	4070	4730	1280	154
	303 L2	**15.3**	114	12800	25	12.1	71 to 132	N56C to N280TC	4340	5020	1370	154
	303 L2	**18.1**	97	15100	25	12.1	71 to 132	N56C to N280TC	4570	5280	1450	154
	303 L2	**20.8**	84	13500	19.2	12.1	71 to 132	N56C to N280TC	4760	5490	1520	154
	303 L2	**22.7**	77	17200	22	12.1	71 to 132	N56C to N280TC	4890	5650	1570	154
	303 L2	**24.5**	71	16000	19.3	12.1	71 to 132	N56C to N280TC	4990	5780	1610	154
	303 L2	**26.4**	66	14800	16.5	12.1	71 to 132	N56C to N280TC	5120	5910	1650	154
	303 L2	**30.8**	57	18100	17.4	12.1	71 to 132	N56C to N280TC	5360	6180	1730	154
	303 L2	**35.8**	49	14800	12.2	12.1	71 to 132	N56C to N280TC	5600	6460	1820	154
	303 L2	**38.4**	46	18100	13.9	12.1	71 to 132	N56C to N280TC	5730	6620	1870	154
	303 L2	**44.6**	39	14800	9.8	12.1	71 to 132	N56C to N280TC	5990	6910	1960	154
	303 L2	**54.0**	32	13600	7.4	12.1	71 to 132	N56C to N280TC	6330	7330	2090	154
	303 L3	**43.6**	40	17300	12.1	10.1	71 to 132	N56C to N280TC	5940	6860	1950	154
	303 L3	**53.4**	33	17300	9.9	10.1	71 to 132	N56C to N280TC	6310	7310	2080	154
	303 L3	**63.1**	27.8	21400	10.4	10.1	71 to 132	N56C to N280TC	6620	7670	2200	154
	303 L3	**72.3**	24.2	17300	7.3	10.1	71 to 132	N56C to N280TC	6910	7990	2310	154
	303 L3	**77.2**	22.7	21400	8.5	10.1	71 to 132	N56C to N280TC	7040	8150	2360	154
	303 L3	**90.2**	19.4	17300	5.9	10.1	71 to 132	N56C to N280TC	7380	8540	2480	154
	303 L3	**105**	16.7	21400	6.2	10.1	71 to 132	N56C to N280TC	7730	8930	2610	154
	303 L3	**113**	15.5	14800	4.0	10.1	71 to 132	N56C to N280TC	7910	9120	2680	154
	303 L3	**124**	14.1	14800	3.6	10.1	71 to 132	N56C to N280TC	8150	9410	2760	154
	303 L3	**141**	12.4	21400	4.6	10.1	71 to 132	N56C to N280TC	8460	9780	2890	154
	303 L3	**152**	11.5	14800	3.0	10.1	71 to 132	N56C to N280TC	8650	10000	2970	154
	303 L3	**164**	10.7	18100	3.4	10.1	71 to 132	N56C to N280TC	8830	10200	3020	154
	303 L3	**178**	9.9	18100	3.1	10.1	71 to 132	N56C to N280TC	9040	10500	3120	154
	303 L3	**190**	9.2	14800	2.4	10.1	71 to 132	N56C to N280TC	9250	10700	3170	154
	303 L3	**220**	7.9	18700	2.6	10.1	71 to 132	N56C to N280TC	9670	11200	3350	154
	303 L3	**258**	6.8	14800	1.8	10.1	71 to 132	N56C to N280TC	10100	11700	3510	154
	303 L3	**276**	6.3	18100	2.0	10.1	71 to 132	N56C to N280TC	10300	12000	3610	154
	303 L3	**312**	5.6	13600	1.3	10.1	71 to 132	N56C to N280TC	10700	12400	3740	154
	303 L3	**389**	4.5	13600	1.1	10.1	71 to 132	N56C to N280TC	11500	13200	4050	154
	303 L4	**413**	4.2	19300	1.5	8.0	71 to 132	N56C to N280TC	11700	13500	4130	154
	303 L4	**446**	3.9	22300	1.6	8.0	71 to 132	N56C to N280TC	11900	13800	4230	154
	303 L4	**492**	3.6	22100	1.4	8.0	71 to 132	N56C to N280TC	12300	14200	4360	154
	303 L4	**556**	3.1	22600	1.3	8.0	71 to 132	N56C to N280TC	12700	14700	4540	154
	303 L4	**649**	2.7	18400	0.89	8.0	71 to 132	N56C to N280TC	13300	15500	4800	154
	303 L4	**718**	2.4	17000	0.75	8.0	71 to 132	N56C to N280TC	13800	15900	4950	154
	303 L4	**816**	2.1	22100	0.85	8.0	71 to 132	N56C to N280TC	14300	16500	5160	154
	303 L4	**896**	2.0	17600	0.62	8.0	71 to 132	N56C to N280TC	14700	17000	5340	154
	303 L4	**1018**	1.7	22100	0.68	8.0	71 to 132	N56C to N280TC	15300	17700	5570	154
	303 L4	**1098**	1.6	18200	0.52	8.0	71 to 132	N56C to N280TC	15600	18100	5700	154
	303 L4	**1278**	1.4	23100	0.57	8.0	71 to 132	N56C to N280TC	16400	18900	6010	154
	303 L4	**1370**	1.3	18800	0.43	8.0	71 to 132	N56C to N280TC	16700	19300	6140	154
	303 L4	**1586**	1.1	18800	0.37	8.0	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1854**	0.94	18900	0.32	8.0	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1991**	0.88	23500	0.37	8.0	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**2243**	0.78	16500	0.23	8.0	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**2799**	0.63	16500	0.19	8.0	71 to 132	N56C to N280TC	16800	19400	6190	154
1450	**303 L1**	**4.25**	341	9910	55	14.8	132 to 180	N250TC - N280TC	3160	3670	970	154
	303 L1	**5.33**	272	11900	53	14.8	132 to 180	N250TC - N280TC	3390	3930	1040	154
	303 L1	**6.20**	234	12400	47	14.8	132 to 180	N250TC - N280TC	3560	4130	1090	154

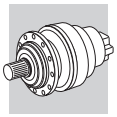


3□ L

303 L

25,000 in•lbs

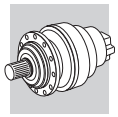
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**303 L1**	**7.50**	193	12700	40	14.8	132 to 180	N250TC - N280TC	3760	4350	1160	154
	303 L2	**12.5**	116	13300	26	12.1	71 to 132	N56C to N280TC	4380	5090	1380	154
	303 L2	**15.3**	94	13800	22	12.1	71 to 132	N56C to N280TC	4660	5400	1480	154
	303 L2	**18.1**	80	16300	22	12.1	71 to 132	N56C to N280TC	4920	5680	1560	154
	303 L2	**20.8**	70	14500	17.1	12.1	71 to 132	N56C to N280TC	5110	5910	1640	154
	303 L2	**22.7**	64	18500	19.9	12.1	71 to 132	N56C to N280TC	5260	6080	1690	154
	303 L2	**24.5**	59	17200	17.2	12.1	71 to 132	N56C to N280TC	5370	6220	1730	154
	303 L2	**26.4**	55	15900	14.7	12.1	71 to 132	N56C to N280TC	5510	6360	1770	154
	303 L2	**30.8**	47	19500	15.5	12.1	71 to 132	N56C to N280TC	5760	6640	1860	154
	303 L2	**35.8**	41	15900	10.9	12.1	71 to 132	N56C to N280TC	6020	6950	1960	154
	303 L2	**38.4**	38	19500	12.4	12.1	71 to 132	N56C to N280TC	6160	7120	2010	154
	303 L2	**44.6**	32	15900	8.7	12.1	71 to 132	N56C to N280TC	6440	7430	2110	154
	303 L2	**54.0**	26.9	14600	6.6	12.1	71 to 132	N56C to N280TC	6810	7880	2250	154
	303 L3	**43.6**	33	18600	10.8	10.1	71 to 132	N56C to N280TC	6390	7380	2090	154
	303 L3	**53.4**	27.1	18600	8.8	10.1	71 to 132	N56C to N280TC	6780	7860	2240	154
	303 L3	**63.1**	23.0	23000	9.2	10.1	71 to 132	N56C to N280TC	7120	8250	2370	154
	303 L3	**72.3**	20.1	18600	6.5	10.1	71 to 132	N56C to N280TC	7430	8590	2480	154
	303 L3	**77.2**	18.8	23000	7.5	10.1	71 to 132	N56C to N280TC	7570	8760	2540	154
	303 L3	**90.2**	16.1	18600	5.2	10.1	71 to 132	N56C to N280TC	7940	9180	2670	154
	303 L3	**105**	13.9	23000	5.6	10.1	71 to 132	N56C to N280TC	8310	9610	2800	154
	303 L3	**113**	12.9	15900	3.6	10.1	71 to 132	N56C to N280TC	8510	9810	2880	154
	303 L3	**124**	11.6	15900	3.2	10.1	71 to 132	N56C to N280TC	8760	10100	2970	154
	303 L3	**141**	10.3	23000	4.1	10.1	71 to 132	N56C to N280TC	9100	10500	3110	154
	303 L3	**152**	9.5	15900	2.6	10.1	71 to 132	N56C to N280TC	9300	10800	3190	154
	303 L3	**164**	8.9	19500	3.0	10.1	71 to 132	N56C to N280TC	9490	11000	3250	154
	303 L3	**178**	8.2	19500	2.8	10.1	71 to 132	N56C to N280TC	9720	11200	3360	154
	303 L3	**190**	7.6	15900	2.1	10.1	71 to 132	N56C to N280TC	9950	11500	3410	154
	303 L3	**220**	6.6	20100	2.3	10.1	71 to 132	N56C to N280TC	10400	12000	3610	154
	303 L3	**258**	5.6	15900	1.6	10.1	71 to 132	N56C to N280TC	10900	12600	3770	154
	303 L3	**276**	5.2	19500	1.8	10.1	71 to 132	N56C to N280TC	11100	12900	3880	154
	303 L3	**312**	4.7	14600	1.2	10.1	71 to 132	N56C to N280TC	11500	13300	4020	154
	303 L3	**389**	3.7	14600	0.95	10.1	71 to 132	N56C to N280TC	12300	14200	4360	154
	303 L4	**413**	3.5	20700	1.3	8.0	71 to 132	N56C to N280TC	12500	14500	4440	154
	303 L4	**446**	3.3	24000	1.4	8.0	71 to 132	N56C to N280TC	12800	14800	4550	154
	303 L4	**492**	2.9	23700	1.3	8.0	71 to 132	N56C to N280TC	13200	15300	4690	154
	303 L4	**556**	2.6	24300	1.1	8.0	71 to 132	N56C to N280TC	13700	15900	4880	154
	303 L4	**649**	2.2	19700	0.79	8.0	71 to 132	N56C to N280TC	14400	16600	5160	154
	303 L4	**718**	2.0	18200	0.66	8.0	71 to 132	N56C to N280TC	14800	17100	5330	154
	303 L4	**816**	1.8	23700	0.76	8.0	71 to 132	N56C to N280TC	15400	17800	5550	154
	303 L4	**896**	1.6	18900	0.55	8.0	71 to 132	N56C to N280TC	15800	18300	5740	154
	303 L4	**1018**	1.4	23700	0.61	8.0	71 to 132	N56C to N280TC	16400	19000	5990	154
	303 L4	**1098**	1.3	19600	0.47	8.0	71 to 132	N56C to N280TC	16800	19400	6130	154
	303 L4	**1278**	1.1	24900	0.51	8.0	71 to 132	N56C to N280TC	17600	20300	6460	154
	303 L4	**1370**	1.1	20300	0.39	8.0	71 to 132	N56C to N280TC	18000	20800	6600	154
	303 L4	**1586**	0.91	20300	0.33	8.0	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1854**	0.78	20400	0.29	8.0	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1991**	0.73	25200	0.33	8.0	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**2243**	0.65	17700	0.21	8.0	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**2799**	0.52	17700	0.17	8.0	71 to 132	N56C to N280TC	18100	20900	6660	154
1150	**303 L1**	**3.60**	319	11900	62	18.8	132 to 180	N250TC - N280TC	3210	3710	980	154
	303 L1	**4.25**	271	12200	54	18.8	132 to 180	N250TC - N280TC	3360	3890	1040	154
	303 L1	**5.33**	216	12700	45	18.8	132 to 180	N250TC - N280TC	3600	4180	1120	154
	303 L1	**6.20**	185	13200	40	18.8	132 to 180	N250TC - N280TC	3780	4360	1180	154
	303 L1	**7.50**	153	13600	34	18.8	132 to 180	N250TC - N280TC	3990	4630	1260	154
	303 L2	**12.5**	92	14100	22	14.8	71 to 132	N56C to N280TC	4680	5390	1490	154



303 L

25,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**303 L2**	**15.3**	75	14600	18.5	14.8	71 to 132	N56C to N280TC	4970	5730	1590	154
	303 L2	**18.1**	63	17300	18.5	14.8	71 to 132	N56C to N280TC	5200	6020	1680	154
	303 L2	**20.8**	55	15400	14.4	14.8	71 to 132	N56C to N280TC	5440	6280	1760	154
	303 L2	**22.7**	51	18100	15.5	14.8	71 to 132	N56C to N280TC	5570	6440	1820	154
	303 L2	**24.5**	47	18200	14.4	14.8	71 to 132	N56C to N280TC	5700	6600	1860	154
	303 L2	**26.4**	44	14800	10.9	14.8	71 to 132	N56C to N280TC	5830	6750	1910	154
	303 L2	**30.8**	37	18100	11.4	14.8	71 to 132	N56C to N280TC	6100	7070	2010	154
	303 L2	**35.8**	32	14800	8.0	14.8	71 to 132	N56C to N280TC	6390	7380	2110	154
	303 L2	**38.4**	29.9	18100	9.1	14.8	71 to 132	N56C to N280TC	6520	7540	2160	154
	303 L2	**44.6**	25.8	14800	6.4	14.8	71 to 132	N56C to N280TC	6830	7910	2280	154
	303 L2	**54.0**	21.3	13600	4.9	14.8	71 to 132	N56C to N280TC	7230	8360	2420	154
	303 L3	**43.6**	26.4	17300	8.0	12.1	71 to 132	N56C to N280TC	6780	7830	2260	154
	303 L3	**53.4**	21.5	17300	6.5	12.1	71 to 132	N56C to N280TC	7200	8330	2410	154
	303 L3	**63.1**	18.2	21400	6.8	12.1	71 to 132	N56C to N280TC	7570	8750	2550	154
	303 L3	**72.3**	15.9	17300	4.8	12.1	71 to 132	N56C to N280TC	7880	9120	2680	154
	303 L3	**77.2**	14.9	21400	5.6	12.1	71 to 132	N56C to N280TC	8040	9300	2730	154
	303 L3	**90.2**	12.7	17300	3.8	12.1	71 to 132	N56C to N280TC	8440	9750	2860	154
	303 L3	**105**	11.0	21400	4.1	12.1	71 to 132	N56C to N280TC	8800	10200	3020	154
	303 L3	**113**	10.2	14800	2.6	12.1	71 to 132	N56C to N280TC	9010	10400	3100	154
	303 L3	**124**	9.2	14800	2.4	12.1	71 to 132	N56C to N280TC	9300	10700	3200	154
	303 L3	**141**	8.1	21400	3.0	12.1	71 to 132	N56C to N280TC	9640	11200	3350	154
	303 L3	**152**	7.5	14800	1.9	12.1	71 to 132	N56C to N280TC	9880	11400	3430	154
	303 L3	**164**	7.0	18100	2.2	12.1	71 to 132	N56C to N280TC	10100	11700	3510	154
	303 L3	**178**	6.5	18100	2.0	12.1	71 to 132	N56C to N280TC	10300	12000	3610	154
	303 L3	**190**	6.0	14800	1.6	12.1	71 to 132	N56C to N280TC	10600	12200	3690	154
	303 L3	**220**	5.2	18700	1.7	12.1	71 to 132	N56C to N280TC	11000	12700	3870	154
	303 L3	**258**	4.5	15400	1.2	12.1	71 to 132	N56C to N280TC	11600	13300	4080	154
	303 L3	**276**	4.2	19400	1.4	12.1	71 to 132	N56C to N280TC	11800	13600	4180	154
	303 L3	**312**	3.7	14100	0.91	12.1	71 to 132	N56C to N280TC	12200	14100	4360	154
	303 L3	**389**	3.0	14500	0.75	12.1	71 to 132	N56C to N280TC	13100	15100	4670	154
	303 L4	**413**	2.8	20700	1.0	10.1	71 to 132	N56C to N280TC	13300	15400	4770	154
	303 L4	**446**	2.6	22900	1.1	10.1	71 to 132	N56C to N280TC	13600	15700	4900	154
	303 L4	**492**	2.3	22100	0.93	10.1	71 to 132	N56C to N280TC	14000	16200	5060	154
	303 L4	**556**	2.1	23200	0.86	10.1	71 to 132	N56C to N280TC	14600	16800	5260	154
	303 L4	**649**	1.8	18700	0.60	10.1	71 to 132	N56C to N280TC	15200	17600	5550	154
	303 L4	**718**	1.6	18300	0.53	10.1	71 to 132	N56C to N280TC	15700	18200	5750	154
	303 L4	**816**	1.4	22300	0.57	10.1	71 to 132	N56C to N280TC	16300	18900	5990	154
	303 L4	**896**	1.3	18900	0.44	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1018**	1.1	23200	0.47	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1098**	1.0	18900	0.36	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1278**	0.90	23500	0.38	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1370**	0.84	18900	0.29	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1586**	0.72	20400	0.27	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1854**	0.62	18900	0.21	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**1991**	0.58	23500	0.24	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**2243**	0.51	16500	0.15	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
	303 L4	**2799**	0.41	16500	0.12	10.1	71 to 132	N56C to N280TC	16800	19400	6190	154
870	**303 L1**	**3.60**	242	12700	50	18.8	132 to 180	N250TC - N280TC	3450	3980	1060	154
	303 L1	**4.25**	205	13100	44	18.8	132 to 180	N250TC - N280TC	3620	4180	1120	154
	303 L1	**5.33**	163	13600	36	18.8	132 to 180	N250TC - N280TC	3870	4490	1200	154
	303 L1	**6.20**	140	14200	33	18.8	132 to 180	N250TC - N280TC	4070	4690	1270	154
	303 L1	**7.50**	116	14600	28	18.8	132 to 180	N250TC - N280TC	4300	4970	1350	154
	303 L2	**12.5**	69	15100	17.7	14.8	71 to 132	N56C to N280TC	5030	5790	1600	154
	303 L2	**15.3**	57	15800	15.1	14.8	71 to 132	N56C to N280TC	5340	6160	1710	154
	303 L2	**18.1**	48	18600	15.1	14.8	71 to 132	N56C to N280TC	5590	6470	1810	154

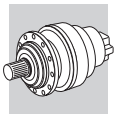


3□ L

303 L

25,000 in•lbs

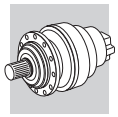
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**303 L2**	**20.8**	42	16500	11.7	14.8	71 to 132	N56C to N280TC	5850	6750	1890	154
	303 L2	**22.7**	38	19500	12.6	14.8	71 to 132	N56C to N280TC	5990	6920	1950	154
	303 L2	**24.5**	35	19600	11.7	14.8	71 to 132	N56C to N280TC	6130	7090	2000	154
	303 L2	**26.4**	33	15900	8.8	14.8	71 to 132	N56C to N280TC	6270	7260	2050	154
	303 L2	**30.8**	28.3	19500	9.3	14.8	71 to 132	N56C to N280TC	6560	7600	2160	154
	303 L2	**35.8**	24.3	15900	6.5	14.8	71 to 132	N56C to N280TC	6870	7940	2270	154
	303 L2	**38.4**	22.7	19500	7.5	14.8	71 to 132	N56C to N280TC	7010	8110	2330	154
	303 L2	**44.6**	19.5	15900	5.2	14.8	71 to 132	N56C to N280TC	7350	8510	2450	154
	303 L2	**54.0**	16.1	14600	4.0	14.8	71 to 132	N56C to N280TC	7770	8990	2610	154
	303 L3	**43.6**	20.0	18600	6.5	12.1	71 to 132	N56C to N280TC	7290	8420	2430	154
	303 L3	**53.4**	16.3	18600	5.3	12.1	71 to 132	N56C to N280TC	7740	8960	2600	154
	303 L3	**63.1**	13.8	23000	5.5	12.1	71 to 132	N56C to N280TC	8140	9410	2740	154
	303 L3	**72.3**	12.0	18600	3.9	12.1	71 to 132	N56C to N280TC	8480	9810	2880	154
	303 L3	**77.2**	11.3	23000	4.5	12.1	71 to 132	N56C to N280TC	8650	10000	2940	154
	303 L3	**90.2**	9.6	18600	3.1	12.1	71 to 132	N56C to N280TC	9070	10500	3080	154
	303 L3	**105**	8.3	23000	3.3	12.1	71 to 132	N56C to N280TC	9470	11000	3250	154
	303 L3	**113**	7.7	15900	2.1	12.1	71 to 132	N56C to N280TC	9690	11200	3330	154
	303 L3	**124**	7.0	15900	1.9	12.1	71 to 132	N56C to N280TC	10000	11600	3440	154
	303 L3	**141**	6.2	23000	2.5	12.1	71 to 132	N56C to N280TC	10400	12000	3610	154
	303 L3	**152**	5.7	15900	1.6	12.1	71 to 132	N56C to N280TC	10600	12300	3690	154
	303 L3	**164**	5.3	19500	1.8	12.1	71 to 132	N56C to N280TC	10800	12500	3770	154
	303 L3	**178**	4.9	19500	1.7	12.1	71 to 132	N56C to N280TC	11100	12900	3880	154
	303 L3	**190**	4.6	15900	1.3	12.1	71 to 132	N56C to N280TC	11400	13100	3970	154
	303 L3	**220**	3.9	20100	1.4	12.1	71 to 132	N56C to N280TC	11900	13700	4160	154
	303 L3	**258**	3.4	16500	0.97	12.1	71 to 132	N56C to N280TC	12400	14400	4380	154
	303 L3	**276**	3.1	20900	1.1	12.1	71 to 132	N56C to N280TC	12700	14700	4490	154
	303 L3	**312**	2.8	15100	0.74	12.1	71 to 132	N56C to N280TC	13200	15200	4690	154
	303 L3	**389**	2.2	15600	0.61	12.1	71 to 132	N56C to N280TC	14100	16200	5020	154
	303 L4	**413**	2.1	22200	0.84	10.1	71 to 132	N56C to N280TC	14300	16600	5130	154
	303 L4	**446**	2.0	24600	0.87	10.1	71 to 132	N56C to N280TC	14600	16900	5270	154
	303 L4	**492**	1.8	23700	0.76	10.1	71 to 132	N56C to N280TC	15100	17400	5440	154
	303 L4	**556**	1.6	25000	0.71	10.1	71 to 132	N56C to N280TC	15700	18100	5660	154
	303 L4	**649**	1.3	20100	0.49	10.1	71 to 132	N56C to N280TC	16400	19000	5960	154
	303 L4	**718**	1.2	19600	0.43	10.1	71 to 132	N56C to N280TC	16900	19600	6190	154
	303 L4	**816**	1.1	24000	0.46	10.1	71 to 132	N56C to N280TC	17500	20300	6440	154
	303 L4	**896**	0.97	20400	0.36	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1018**	0.85	25000	0.39	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1098**	0.79	20400	0.29	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1278**	0.68	25200	0.31	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1370**	0.63	20400	0.23	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1586**	0.55	21900	0.22	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1854**	0.47	20400	0.17	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**1991**	0.44	25200	0.20	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**2243**	0.39	17700	0.12	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154
	303 L4	**2799**	0.31	17700	0.10	10.1	71 to 132	N56C to N280TC	18100	20900	6660	154



305 L

49,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**305 L1**	**4.25**	412	13900	94	17.4	132 to 180	N250TC - N280TC	2940	3420	900	162
	305 L1	**5.33**	328	17400	93	17.4	132 to 180	N250TC - N280TC	3150	3650	970	162
	305 L1	**6.20**	282	19700	91	17.4	132 to 180	N250TC - N280TC	3310	3840	1020	162
	305 L1	**7.50**	233	20300	77	17.4	132 to 180	N250TC - N280TC	3500	4050	1080	162
	305 L2	**12.5**	140	19800	47	12.1	71 to 132	N56C to N280TC	4070	4730	1280	162
	305 L2	**15.3**	114	23000	44	12.1	71 to 132	N56C to N280TC	4340	5020	1370	162
	305 L2	**18.1**	97	27200	44	12.1	71 to 132	N56C to N280TC	4570	5280	1450	162
	305 L2	**20.8**	84	24400	35	12.1	71 to 132	N56C to N280TC	4760	5490	1520	162
	305 L2	**22.7**	77	29500	38	12.1	71 to 132	N56C to N280TC	4890	5650	1570	162
	305 L2	**24.5**	71	28800	35	12.1	71 to 132	N56C to N280TC	4990	5780	1610	162
	305 L2	**26.4**	66	29600	33	12.1	71 to 132	N56C to N280TC	5120	5910	1650	162
	305 L2	**30.8**	57	32300	31	12.1	71 to 132	N56C to N280TC	5360	6180	1730	162
	305 L2	**35.8**	49	29600	24	12.1	71 to 132	N56C to N280TC	5600	6460	1820	162
	305 L2	**38.4**	46	34500	27	12.1	71 to 132	N56C to N280TC	5730	6620	1870	162
	305 L2	**44.6**	39	29600	19.6	12.1	71 to 132	N56C to N280TC	5990	6910	1960	162
	305 L2	**54.0**	32	25500	13.9	12.1	71 to 132	N56C to N280TC	6330	7330	2090	162
	305 L3	**43.6**	40	32400	23	10.1	71 to 132	N56C to N280TC	5940	6860	1950	162
	305 L3	**53.4**	33	33600	19.2	10.1	71 to 132	N56C to N280TC	6310	7310	2080	162
	305 L3	**63.1**	27.8	40700	19.7	10.1	71 to 132	N56C to N280TC	6620	7670	2200	162
	305 L3	**72.3**	24.2	34600	14.6	10.1	71 to 132	N56C to N280TC	6910	7990	2310	162
	305 L3	**77.2**	22.7	42100	16.6	10.1	71 to 132	N56C to N280TC	7040	8150	2360	162
	305 L3	**90.2**	19.4	34600	11.7	10.1	71 to 132	N56C to N280TC	7380	8540	2480	162
	305 L3	**105**	16.7	42800	12.5	10.1	71 to 132	N56C to N280TC	7730	8930	2610	162
	305 L3	**113**	15.5	29600	8.0	10.1	71 to 132	N56C to N280TC	7910	9120	2680	162
	305 L3	**124**	14.1	29600	7.3	10.1	71 to 132	N56C to N280TC	8150	9410	2760	162
	305 L3	**141**	12.4	42800	9.2	10.1	71 to 132	N56C to N280TC	8460	9780	2890	162
	305 L3	**152**	11.5	29600	5.9	10.1	71 to 132	N56C to N280TC	8650	10000	2970	162
	305 L3	**164**	10.7	36200	6.7	10.1	71 to 132	N56C to N280TC	8830	10200	3020	162
	305 L3	**178**	9.9	36200	6.2	10.1	71 to 132	N56C to N280TC	9040	10500	3120	162
	305 L3	**190**	9.2	29600	4.7	10.1	71 to 132	N56C to N280TC	9250	10700	3170	162
	305 L3	**220**	7.9	39000	5.4	10.1	71 to 132	N56C to N280TC	9670	11200	3350	162
	305 L3	**258**	6.8	29600	3.5	10.1	71 to 132	N56C to N280TC	10100	11700	3510	162
	305 L3	**276**	6.3	36200	4.0	10.1	71 to 132	N56C to N280TC	10300	12000	3610	162
	305 L3	**312**	5.6	25500	2.5	10.1	71 to 132	N56C to N280TC	10700	12400	3740	162
	305 L3	**389**	4.5	25500	2.0	10.1	71 to 132	N56C to N280TC	11500	13200	4050	162
	305 L4	**413**	4.2	38400	2.9	8.0	71 to 132	N56C to N280TC	11700	13500	4130	162
	305 L4	**446**	3.9	44800	3.2	8.0	71 to 132	N56C to N280TC	11900	13800	4230	162
	305 L4	**492**	3.6	44100	2.8	8.0	71 to 132	N56C to N280TC	12300	14200	4360	162
	305 L4	**556**	3.1	45300	2.6	8.0	71 to 132	N56C to N280TC	12700	14700	4540	162
	305 L4	**649**	2.7	37000	1.8	8.0	71 to 132	N56C to N280TC	13300	15500	4800	162
	305 L4	**718**	2.4	34000	1.5	8.0	71 to 132	N56C to N280TC	13800	15900	4950	162
	305 L4	**816**	2.1	44100	1.7	8.0	71 to 132	N56C to N280TC	14300	16500	5160	162
	305 L4	**896**	2.0	35200	1.2	8.0	71 to 132	N56C to N280TC	14700	17000	5340	162
	305 L4	**1018**	1.7	44100	1.4	8.0	71 to 132	N56C to N280TC	15300	17700	5570	162
	305 L4	**1098**	1.6	36400	1.0	8.0	71 to 132	N56C to N280TC	15600	18100	5700	162
	305 L4	**1278**	1.4	45400	1.1	8.0	71 to 132	N56C to N280TC	16400	18900	6010	162
	305 L4	**1370**	1.3	37700	0.87	8.0	71 to 132	N56C to N280TC	16700	19300	6140	162
	305 L4	**1586**	1.1	39000	0.78	8.0	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1854**	0.94	37900	0.64	8.0	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1991**	0.88	46100	0.73	8.0	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**2243**	0.78	31300	0.44	8.0	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**2799**	0.63	31300	0.35	8.0	71 to 132	N56C to N280TC	16800	19400	6190	162
1450	**305 L1**	**4.25**	341	15000	84	17.4	132 to 180	N250TC - N280TC	3160	3670	970	162
	305 L1	**5.33**	272	18800	84	17.4	132 to 180	N250TC - N280TC	3390	3930	1040	162
	305 L1	**6.20**	234	21200	81	17.4	132 to 180	N250TC - N280TC	3560	4130	1090	162

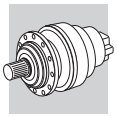


3□ L

305 L

49,000 in•lbs

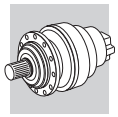
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**305 L1**	**7.50**	193	21900	69	17.4	132 to 180	N250TC - N280TC	3760	4350	1160	162
	305 L2	**12.5**	116	21300	42	12.1	71 to 132	N56C to N280TC	4380	5090	1380	162
	305 L2	**15.3**	94	24800	40	12.1	71 to 132	N56C to N280TC	4660	5400	1480	162
	305 L2	**18.1**	80	29300	40	12.1	71 to 132	N56C to N280TC	4920	5680	1560	162
	305 L2	**20.8**	70	26200	31	12.1	71 to 132	N56C to N280TC	5110	5910	1640	162
	305 L2	**22.7**	64	31700	34	12.1	71 to 132	N56C to N280TC	5260	6080	1690	162
	305 L2	**24.5**	59	31000	31	12.1	71 to 132	N56C to N280TC	5370	6220	1730	162
	305 L2	**26.4**	55	31900	30	12.1	71 to 132	N56C to N280TC	5510	6360	1770	162
	305 L2	**30.8**	47	34700	28	12.1	71 to 132	N56C to N280TC	5760	6640	1860	162
	305 L2	**35.8**	41	31900	22	12.1	71 to 132	N56C to N280TC	6020	6950	1960	162
	305 L2	**38.4**	38	37100	24	12.1	71 to 132	N56C to N280TC	6160	7120	2010	162
	305 L2	**44.6**	32	31900	17.5	12.1	71 to 132	N56C to N280TC	6440	7430	2110	162
	305 L2	**54.0**	26.9	27400	12.4	12.1	71 to 132	N56C to N280TC	6810	7880	2250	162
	305 L3	**43.6**	33	34900	20	10.1	71 to 132	N56C to N280TC	6390	7380	2090	162
	305 L3	**53.4**	27.1	36100	17.1	10.1	71 to 132	N56C to N280TC	6780	7860	2240	162
	305 L3	**63.1**	23.0	43700	17.5	10.1	71 to 132	N56C to N280TC	7120	8250	2370	162
	305 L3	**72.3**	20.1	37200	13.0	10.1	71 to 132	N56C to N280TC	7430	8590	2480	162
	305 L3	**77.2**	18.8	45300	14.8	10.1	71 to 132	N56C to N280TC	7570	8760	2540	162
	305 L3	**90.2**	16.1	37200	10.4	10.1	71 to 132	N56C to N280TC	7940	9180	2670	162
	305 L3	**105**	13.9	46000	11.1	10.1	71 to 132	N56C to N280TC	8310	9610	2800	162
	305 L3	**113**	12.9	31900	7.2	10.1	71 to 132	N56C to N280TC	8510	9810	2880	162
	305 L3	**124**	11.6	31900	6.5	10.1	71 to 132	N56C to N280TC	8760	10100	2970	162
	305 L3	**141**	10.3	46000	8.2	10.1	71 to 132	N56C to N280TC	9100	10500	3110	162
	305 L3	**152**	9.5	31900	5.3	10.1	71 to 132	N56C to N280TC	9300	10800	3190	162
	305 L3	**164**	8.9	38900	6.0	10.1	71 to 132	N56C to N280TC	9490	11000	3250	162
	305 L3	**178**	8.2	38900	5.5	10.1	71 to 132	N56C to N280TC	9720	11200	3360	162
	305 L3	**190**	7.6	31900	4.2	10.1	71 to 132	N56C to N280TC	9950	11500	3410	162
	305 L3	**220**	6.6	41900	4.8	10.1	71 to 132	N56C to N280TC	10400	12000	3610	162
	305 L3	**258**	5.6	31900	3.1	10.1	71 to 132	N56C to N280TC	10900	12600	3770	162
	305 L3	**276**	5.2	38900	3.6	10.1	71 to 132	N56C to N280TC	11100	12900	3880	162
	305 L3	**312**	4.7	27400	2.2	10.1	71 to 132	N56C to N280TC	11500	13300	4020	162
	305 L3	**389**	3.7	27400	1.8	10.1	71 to 132	N56C to N280TC	12300	14200	4360	162
	305 L4	**413**	3.5	41200	2.6	8.0	71 to 132	N56C to N280TC	12500	14500	4440	162
	305 L4	**446**	3.3	48100	2.8	8.0	71 to 132	N56C to N280TC	12800	14800	4550	162
	305 L4	**492**	2.9	47400	2.5	8.0	71 to 132	N56C to N280TC	13200	15300	4690	162
	305 L4	**556**	2.6	48800	2.3	8.0	71 to 132	N56C to N280TC	13700	15900	4880	162
	305 L4	**649**	2.2	39800	1.6	8.0	71 to 132	N56C to N280TC	14400	16600	5160	162
	305 L4	**718**	2.0	36500	1.3	8.0	71 to 132	N56C to N280TC	14800	17100	5330	162
	305 L4	**816**	1.8	47400	1.5	8.0	71 to 132	N56C to N280TC	15400	17800	5550	162
	305 L4	**896**	1.6	37900	1.1	8.0	71 to 132	N56C to N280TC	15800	18300	5740	162
	305 L4	**1018**	1.4	47400	1.2	8.0	71 to 132	N56C to N280TC	16400	19000	5990	162
	305 L4	**1098**	1.3	39100	0.93	8.0	71 to 132	N56C to N280TC	16800	19400	6130	162
	305 L4	**1278**	1.1	48900	1.0	8.0	71 to 132	N56C to N280TC	17600	20300	6460	162
	305 L4	**1370**	1.1	40500	0.77	8.0	71 to 132	N56C to N280TC	18000	20800	6600	162
	305 L4	**1586**	0.91	41900	0.69	8.0	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1854**	0.78	40700	0.57	8.0	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1991**	0.73	49600	0.65	8.0	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**2243**	0.65	33600	0.39	8.0	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**2799**	0.52	33600	0.31	8.0	71 to 132	N56C to N280TC	18100	20900	6660	162
1150	**305 L1**	**3.60**	319	18300	96	21	132 to 180	N250TC - N280TC	3210	3710	980	162
	305 L1	**4.25**	271	20900	93	21	132 to 180	N250TC - N280TC	3360	3890	1040	162
	305 L1	**5.33**	216	21700	77	21	132 to 180	N250TC - N280TC	3600	4180	1120	162
	305 L1	**6.20**	185	22500	68	21	132 to 180	N250TC - N280TC	3780	4360	1180	162
	305 L1	**7.50**	153	23300	58	21	132 to 180	N250TC - N280TC	3990	4630	1260	162
	305 L2	**12.5**	92	25400	39	14.8	71 to 132	N56C to N280TC	4680	5390	1490	162



305 L

49,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**305 L2**	**15.3**	75	26300	33	14.8	71 to 132	N56C to N280TC	4970	5730	1590	162
	305 L2	**18.1**	63	31100	33	14.8	71 to 132	N56C to N280TC	5200	6020	1680	162
	305 L2	**20.8**	55	27800	26	14.8	71 to 132	N56C to N280TC	5440	6280	1760	162
	305 L2	**22.7**	51	33700	29	14.8	71 to 132	N56C to N280TC	5570	6440	1820	162
	305 L2	**24.5**	47	32800	26	14.8	71 to 132	N56C to N280TC	5700	6600	1860	162
	305 L2	**26.4**	44	29600	22	14.8	71 to 132	N56C to N280TC	5830	6750	1910	162
	305 L2	**30.8**	37	36200	23	14.8	71 to 132	N56C to N280TC	6100	7070	2010	162
	305 L2	**35.8**	32	29600	16.1	14.8	71 to 132	N56C to N280TC	6390	7380	2110	162
	305 L2	**38.4**	29.9	36200	18.3	14.8	71 to 132	N56C to N280TC	6520	7540	2160	162
	305 L2	**44.6**	25.8	29600	12.9	14.8	71 to 132	N56C to N280TC	6830	7910	2280	162
	305 L2	**54.0**	21.3	25500	9.2	14.8	71 to 132	N56C to N280TC	7230	8360	2420	162
	305 L3	**43.6**	26.4	34600	15.9	12.1	71 to 132	N56C to N280TC	6780	7830	2260	162
	305 L3	**53.4**	21.5	34600	13.0	12.1	71 to 132	N56C to N280TC	7200	8330	2410	162
	305 L3	**63.1**	18.2	42800	13.6	12.1	71 to 132	N56C to N280TC	7570	8750	2550	162
	305 L3	**72.3**	15.9	34600	9.6	12.1	71 to 132	N56C to N280TC	7880	9120	2680	162
	305 L3	**77.2**	14.9	42800	11.1	12.1	71 to 132	N56C to N280TC	8040	9300	2730	162
	305 L3	**90.2**	12.7	34600	7.7	12.1	71 to 132	N56C to N280TC	8440	9750	2860	162
	305 L3	**105**	11.0	42800	8.2	12.1	71 to 132	N56C to N280TC	8800	10200	3020	162
	305 L3	**113**	10.2	29600	5.3	12.1	71 to 132	N56C to N280TC	9010	10400	3100	162
	305 L3	**124**	9.2	29600	4.8	12.1	71 to 132	N56C to N280TC	9300	10700	3200	162
	305 L3	**141**	8.1	43000	6.1	12.1	71 to 132	N56C to N280TC	9640	11200	3350	162
	305 L3	**152**	7.5	29600	3.9	12.1	71 to 132	N56C to N280TC	9880	11400	3430	162
	305 L3	**164**	7.0	36200	4.4	12.1	71 to 132	N56C to N280TC	10100	11700	3510	162
	305 L3	**178**	6.5	36200	4.1	12.1	71 to 132	N56C to N280TC	10300	12000	3610	162
	305 L3	**190**	6.0	29600	3.1	12.1	71 to 132	N56C to N280TC	10600	12200	3690	162
	305 L3	**220**	5.2	39000	3.5	12.1	71 to 132	N56C to N280TC	11000	12700	3870	162
	305 L3	**258**	4.5	30900	2.4	12.1	71 to 132	N56C to N280TC	11600	13300	4080	162
	305 L3	**276**	4.2	38600	2.8	12.1	71 to 132	N56C to N280TC	11800	13600	4180	162
	305 L3	**312**	3.7	26400	1.7	12.1	71 to 132	N56C to N280TC	12200	14100	4360	162
	305 L3	**389**	3.0	27400	1.4	12.1	71 to 132	N56C to N280TC	13100	15100	4670	162
	305 L4	**413**	2.8	41000	2.1	10.1	71 to 132	N56C to N280TC	13300	15400	4770	162
	305 L4	**446**	2.6	45900	2.1	10.1	71 to 132	N56C to N280TC	13600	15700	4900	162
	305 L4	**492**	2.3	44100	1.9	10.1	71 to 132	N56C to N280TC	14000	16200	5060	162
	305 L4	**556**	2.1	46500	1.7	10.1	71 to 132	N56C to N280TC	14600	16800	5260	162
	305 L4	**649**	1.8	38000	1.2	10.1	71 to 132	N56C to N280TC	15200	17600	5550	162
	305 L4	**718**	1.6	36500	1.1	10.1	71 to 132	N56C to N280TC	15700	18200	5750	162
	305 L4	**816**	1.4	44300	1.1	10.1	71 to 132	N56C to N280TC	16300	18900	5990	162
	305 L4	**896**	1.3	37900	0.88	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1018**	1.1	46000	0.94	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1098**	1.0	37900	0.72	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1278**	0.90	46100	0.75	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1370**	0.84	37900	0.57	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1586**	0.72	39000	0.51	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1854**	0.62	37900	0.42	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**1991**	0.58	46100	0.48	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**2243**	0.51	31300	0.29	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
	305 L4	**2799**	0.41	31300	0.23	10.1	71 to 132	N56C to N280TC	16800	19400	6190	162
870	**305 L1**	**3.60**	242	19600	77	21	132 to 180	N250TC - N280TC	3450	3980	1060	162
	305 L1	**4.25**	205	22500	75	21	132 to 180	N250TC - N280TC	3620	4180	1120	162
	305 L1	**5.33**	163	23400	62	21	132 to 180	N250TC - N280TC	3870	4490	1200	162
	305 L1	**6.20**	140	24200	56	21	132 to 180	N250TC - N280TC	4070	4690	1270	162
	305 L1	**7.50**	116	25000	47	21	132 to 180	N250TC - N280TC	4300	4970	1350	162
	305 L2	**12.5**	69	27300	32	14.8	71 to 132	N56C to N280TC	5030	5790	1600	162
	305 L2	**15.3**	57	28300	27	14.8	71 to 132	N56C to N280TC	5340	6160	1710	162
	305 L2	**18.1**	48	33500	27	14.8	71 to 132	N56C to N280TC	5590	6470	1810	162

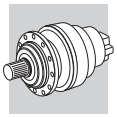


3□ L

305 L

49,000 in•lbs

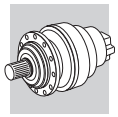
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in•lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**305 L2**	**20.8**	42	29900	21	14.8	71 to 132	N56C to N280TC	5850	6750	1890	162
	305 L2	**22.7**	38	36200	23	14.8	71 to 132	N56C to N280TC	5990	6920	1950	162
	305 L2	**24.5**	35	35300	21	14.8	71 to 132	N56C to N280TC	6130	7090	2000	162
	305 L2	**26.4**	33	31900	17.7	14.8	71 to 132	N56C to N280TC	6270	7260	2050	162
	305 L2	**30.8**	28.3	38900	18.6	14.8	71 to 132	N56C to N280TC	6560	7600	2160	162
	305 L2	**35.8**	24.3	31900	13.1	14.8	71 to 132	N56C to N280TC	6870	7940	2270	162
	305 L2	**38.4**	22.7	38900	14.9	14.8	71 to 132	N56C to N280TC	7010	8110	2330	162
	305 L2	**44.6**	19.5	31900	10.5	14.8	71 to 132	N56C to N280TC	7350	8510	2450	162
	305 L2	**54.0**	16.1	27400	7.5	14.8	71 to 132	N56C to N280TC	7770	8990	2610	162
	305 L3	**43.6**	20.0	37200	12.9	12.1	71 to 132	N56C to N280TC	7290	8420	2430	162
	305 L3	**53.4**	16.3	37200	10.6	12.1	71 to 132	N56C to N280TC	7740	8960	2600	162
	305 L3	**63.1**	13.8	46000	11.1	12.1	71 to 132	N56C to N280TC	8140	9410	2740	162
	305 L3	**72.3**	12.0	37200	7.8	12.1	71 to 132	N56C to N280TC	8480	9810	2880	162
	305 L3	**77.2**	11.3	46000	9.0	12.1	71 to 132	N56C to N280TC	8650	10000	2940	162
	305 L3	**90.2**	9.6	37200	6.3	12.1	71 to 132	N56C to N280TC	9070	10500	3080	162
	305 L3	**105**	8.3	46000	6.7	12.1	71 to 132	N56C to N280TC	9470	11000	3250	162
	305 L3	**113**	7.7	31900	4.3	12.1	71 to 132	N56C to N280TC	9690	11200	3330	162
	305 L3	**124**	7.0	31900	3.9	12.1	71 to 132	N56C to N280TC	10000	11600	3440	162
	305 L3	**141**	6.2	46300	5.0	12.1	71 to 132	N56C to N280TC	10400	12000	3610	162
	305 L3	**152**	5.7	31900	3.2	12.1	71 to 132	N56C to N280TC	10600	12300	3690	162
	305 L3	**164**	5.3	38900	3.6	12.1	71 to 132	N56C to N280TC	10800	12500	3770	162
	305 L3	**178**	4.9	38900	3.3	12.1	71 to 132	N56C to N280TC	11100	12900	3880	162
	305 L3	**190**	4.6	31900	2.5	12.1	71 to 132	N56C to N280TC	11400	13100	3970	162
	305 L3	**220**	3.9	41900	2.9	12.1	71 to 132	N56C to N280TC	11900	13700	4160	162
	305 L3	**258**	3.4	33200	2.0	12.1	71 to 132	N56C to N280TC	12400	14400	4380	162
	305 L3	**276**	3.1	41500	2.3	12.1	71 to 132	N56C to N280TC	12700	14700	4490	162
	305 L3	**312**	2.8	28400	1.4	12.1	71 to 132	N56C to N280TC	13200	15200	4690	162
	305 L3	**389**	2.2	29500	1.2	12.1	71 to 132	N56C to N280TC	14100	16200	5020	162
	305 L4	**413**	2.1	44100	1.7	10.1	71 to 132	N56C to N280TC	14300	16600	5130	162
	305 L4	**446**	2.0	49400	1.7	10.1	71 to 132	N56C to N280TC	14600	16900	5270	162
	305 L4	**492**	1.8	47400	1.5	10.1	71 to 132	N56C to N280TC	15100	17400	5440	162
	305 L4	**556**	1.6	50000	1.4	10.1	71 to 132	N56C to N280TC	15700	18100	5660	162
	305 L4	**649**	1.3	40900	0.99	10.1	71 to 132	N56C to N280TC	16400	19000	5960	162
	305 L4	**718**	1.2	39200	0.86	10.1	71 to 132	N56C to N280TC	16900	19600	6190	162
	305 L4	**816**	1.1	47600	0.91	10.1	71 to 132	N56C to N280TC	17500	20300	6440	162
	305 L4	**896**	0.97	40700	0.71	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1018**	0.85	49500	0.76	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1098**	0.79	40700	0.58	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1278**	0.68	49600	0.61	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1370**	0.63	40700	0.47	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1586**	0.55	41900	0.41	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1854**	0.47	40700	0.34	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**1991**	0.44	49600	0.39	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**2243**	0.39	33600	0.23	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162
	305 L4	**2799**	0.31	33600	0.19	10.1	71 to 132	N56C to N280TC	18100	20900	6660	162



306 L

84,000 in•lbs

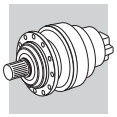
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**306 L1**	**5.33**	328	21800	117	24	160 to 225	N320TC-N360TC	4990	5890	1410	170
	306 L1	**6.20**	282	25300	117	24	160 to 225	N320TC-N360TC	5230	6150	1480	170
	306 L1	**7.50**	233	30600	117	24	160 to 225	N320TC-N360TC	5520	6520	1580	170
	306 L2	**13.0**	135	27400	62	17.4	132 to 180	N250TC - N280TC	6520	7670	1900	170
	306 L2	**15.3**	114	32300	62	17.4	132 to 180	N250TC - N280TC	6860	8070	2000	170
	306 L2	**18.1**	97	38200	62	17.4	132 to 180	N250TC - N280TC	7200	8490	2120	170
	306 L2	**22.7**	77	45800	60	17.4	132 to 180	N250TC - N280TC	7700	9070	2280	170
	306 L2	**26.4**	66	47400	53	17.4	132 to 180	N250TC - N280TC	8070	9490	2400	170
	306 L2	**28.4**	62	49800	52	17.4	132 to 180	N250TC - N280TC	8250	9720	2460	170
	306 L2	**33.1**	53	52100	47	17.4	132 to 180	N250TC - N280TC	8620	10200	2580	170
	306 L2	**38.4**	46	53500	41	17.4	132 to 180	N250TC - N280TC	9010	10600	2730	170
	306 L2	**46.5**	38	53500	34	17.4	132 to 180	N250TC - N280TC	9570	11200	2920	170
	306 L2	**56.3**	31	45300	24	17.4	132 to 180	N250TC - N280TC	10100	11900	3100	170
	306 L3	**45.1**	39	43100	29	10.1	71 to 132	N56C to N280TC	9460	11200	2860	170
	306 L3	**53.2**	33	50900	29	10.1	71 to 132	N56C to N280TC	9960	11700	3040	170
	306 L3	**65.2**	26.8	52800	25	10.1	71 to 132	N56C to N280TC	10600	12500	3250	170
	306 L3	**77.0**	22.7	62400	25	10.1	71 to 132	N56C to N280TC	11100	13100	3430	170
	306 L3	**81.9**	21.4	59900	22	10.1	71 to 132	N56C to N280TC	11300	13300	3510	170
	306 L3	**88.3**	19.8	55700	19.3	10.1	71 to 132	N56C to N280TC	11600	13600	3590	170
	306 L3	**104**	16.8	65800	19.3	10.1	71 to 132	N56C to N280TC	12200	14300	3790	170
	306 L3	**112**	15.6	61100	16.6	10.1	71 to 132	N56C to N280TC	12500	14700	3900	170
	306 L3	**121**	14.4	63800	16.1	10.1	71 to 132	N56C to N280TC	12700	15000	4000	170
	306 L3	**141**	12.4	63800	13.8	10.1	71 to 132	N56C to N280TC	13300	15700	4210	170
	306 L3	**152**	11.5	61100	12.3	10.1	71 to 132	N56C to N280TC	13600	16100	4310	170
	306 L3	**184**	9.5	56000	9.3	10.1	71 to 132	N56C to N280TC	14400	17000	4590	170
	306 L3	**205**	8.5	63800	9.5	10.1	71 to 132	N56C to N280TC	14900	17600	4750	170
	306 L3	**222**	7.9	53500	7.4	10.1	71 to 132	N56C to N280TC	15300	18000	4880	170
	306 L3	**238**	7.4	63800	8.2	10.1	71 to 132	N56C to N280TC	15600	18400	5000	170
	306 L3	**268**	6.5	45300	5.2	10.1	71 to 132	N56C to N280TC	16200	19100	5210	170
	306 L3	**288**	6.1	45300	4.8	10.1	71 to 132	N56C to N280TC	16500	19500	5340	170
	306 L3	**325**	5.4	45300	4.3	10.1	71 to 132	N56C to N280TC	17100	20200	5550	170
	306 L3	**405**	4.3	45800	3.5	10.1	71 to 132	N56C to N280TC	18300	21500	5960	170
	306 L4	**444**	3.9	78400	5.6	8.0	71 to 132	N56C to N280TC	18800	22200	6170	170
	306 L4	**509**	3.4	71300	4.4	8.0	71 to 132	N56C to N280TC	19600	23100	6450	170
	306 L4	**589**	3.0	70300	3.8	8.0	71 to 132	N56C to N280TC	20500	24100	6760	170
	306 L4	**636**	2.8	71300	3.5	8.0	71 to 132	N56C to N280TC	20900	24700	6940	170
	306 L4	**700**	2.5	71800	3.2	8.0	71 to 132	N56C to N280TC	21500	25400	7170	170
	306 L4	**809**	2.2	61100	2.4	8.0	71 to 132	N56C to N280TC	22500	26500	7530	170
	306 L4	**877**	2.0	61100	2.2	8.0	71 to 132	N56C to N280TC	23100	27200	7710	170
	306 L4	**1015**	1.7	75100	2.3	8.0	71 to 132	N56C to N280TC	24100	28400	8100	170
	306 L4	**1095**	1.6	61100	1.8	8.0	71 to 132	N56C to N280TC	24600	29000	8310	170
	306 L4	**1279**	1.4	68800	1.7	8.0	71 to 132	N56C to N280TC	25800	30400	8770	170
	306 L4	**1475**	1.2	78200	1.7	8.0	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**1597**	1.1	70000	1.4	8.0	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**1872**	0.93	57600	0.97	8.0	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**2074**	0.84	57600	0.88	8.0	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**2337**	0.75	57600	0.78	8.0	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**2916**	0.60	57600	0.62	8.0	71 to 132	N56C to N280TC	26500	31300	9030	170
1450	**306 L1**	**5.33**	272	23500	105	24	160 to 225	N320TC-N360TC	5370	6330	1520	170
	306 L1	**6.20**	234	27300	104	24	160 to 225	N320TC-N360TC	5620	6610	1590	170
	306 L1	**7.50**	193	32900	104	24	160 to 225	N320TC-N360TC	5930	7010	1700	170
	306 L2	**13.0**	112	29500	56	17.4	132 to 180	N250TC - N280TC	7010	8250	2040	170
	306 L2	**15.3**	95	34800	56	17.4	132 to 180	N250TC - N280TC	7380	8670	2160	170
	306 L2	**18.1**	80	41100	56	17.4	132 to 180	N250TC - N280TC	7740	9130	2280	170
	306 L2	**22.7**	64	49200	53	17.4	132 to 180	N250TC - N280TC	8280	9750	2450	170



306 L

84,000 in•lbs

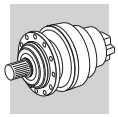
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**306 L2**	**26.4**	55	51000	47	17.4	132 to 180	N250TC - N280TC	8670	10200	2580	170
	306 L2	**28.4**	51	53500	46	17.4	132 to 180	N250TC - N280TC	8870	10500	2650	170
	306 L2	**33.1**	44	56000	41	17.4	132 to 180	N250TC - N280TC	9270	10900	2770	170
	306 L2	**38.4**	38	57500	37	17.4	132 to 180	N250TC - N280TC	9690	11400	2940	170
	306 L2	**46.5**	31	57500	30	17.4	132 to 180	N250TC - N280TC	10300	12100	3130	170
	306 L2	**56.3**	25.8	48700	21	17.4	132 to 180	N250TC - N280TC	10900	12800	3330	170
	306 L3	**45.1**	32	46400	26	10.1	71 to 132	N56C to N280TC	10200	12000	3080	170
	306 L3	**53.2**	27.2	54800	26	10.1	71 to 132	N56C to N280TC	10700	12600	3270	170
	306 L3	**65.2**	22.2	56800	22	10.1	71 to 132	N56C to N280TC	11400	13400	3500	170
	306 L3	**77.0**	18.8	67100	22	10.1	71 to 132	N56C to N280TC	12000	14100	3690	170
	306 L3	**81.9**	17.7	64400	19.9	10.1	71 to 132	N56C to N280TC	12200	14400	3770	170
	306 L3	**88.3**	16.4	59900	17.2	10.1	71 to 132	N56C to N280TC	12500	14700	3860	170
	306 L3	**104**	13.9	70700	17.2	10.1	71 to 132	N56C to N280TC	13100	15400	4080	170
	306 L3	**112**	12.9	65700	14.8	10.1	71 to 132	N56C to N280TC	13400	15800	4190	170
	306 L3	**121**	12.0	68600	14.3	10.1	71 to 132	N56C to N280TC	13700	16100	4300	170
	306 L3	**141**	10.3	68600	12.3	10.1	71 to 132	N56C to N280TC	14300	16900	4520	170
	306 L3	**152**	9.5	65700	10.9	10.1	71 to 132	N56C to N280TC	14700	17300	4630	170
	306 L3	**184**	7.9	60200	8.3	10.1	71 to 132	N56C to N280TC	15500	18300	4940	170
	306 L3	**205**	7.1	68600	8.5	10.1	71 to 132	N56C to N280TC	16000	18900	5100	170
	306 L3	**222**	6.5	57500	6.6	10.1	71 to 132	N56C to N280TC	16400	19400	5240	170
	306 L3	**238**	6.1	68600	7.3	10.1	71 to 132	N56C to N280TC	16800	19800	5380	170
	306 L3	**268**	5.4	48700	4.6	10.1	71 to 132	N56C to N280TC	17400	20500	5600	170
	306 L3	**288**	5.0	48700	4.3	10.1	71 to 132	N56C to N280TC	17700	20900	5740	170
	306 L3	**325**	4.5	48700	3.8	10.1	71 to 132	N56C to N280TC	18400	21700	5960	170
	306 L3	**405**	3.6	49300	3.1	10.1	71 to 132	N56C to N280TC	19700	23200	6410	170
	306 L4	**444**	3.3	84300	5.0	8.0	71 to 132	N56C to N280TC	20200	23800	6630	170
	306 L4	**509**	2.8	76600	3.9	8.0	71 to 132	N56C to N280TC	21100	24800	6930	170
	306 L4	**589**	2.5	75600	3.4	8.0	71 to 132	N56C to N280TC	22000	25900	7270	170
	306 L4	**636**	2.3	76600	3.2	8.0	71 to 132	N56C to N280TC	22500	26500	7460	170
	306 L4	**700**	2.1	77200	2.9	8.0	71 to 132	N56C to N280TC	23200	27300	7710	170
	306 L4	**809**	1.8	65700	2.1	8.0	71 to 132	N56C to N280TC	24200	28500	8100	170
	306 L4	**877**	1.7	65700	2.0	8.0	71 to 132	N56C to N280TC	24800	29200	8290	170
	306 L4	**1015**	1.4	80800	2.1	8.0	71 to 132	N56C to N280TC	25900	30500	8710	170
	306 L4	**1095**	1.3	65700	1.6	8.0	71 to 132	N56C to N280TC	26500	31200	8930	170
	306 L4	**1279**	1.1	74000	1.5	8.0	71 to 132	N56C to N280TC	27800	32700	9430	170
	306 L4	**1475**	0.98	84100	1.5	8.0	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**1597**	0.91	75200	1.2	8.0	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**1872**	0.77	61900	0.86	8.0	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**2074**	0.70	61900	0.78	8.0	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**2337**	0.62	61900	0.69	8.0	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**2916**	0.50	61900	0.55	8.0	71 to 132	N56C to N280TC	28500	33600	9710	170
1150	**306 L1**	**3.60**	319	22900	120	30	160 to 225	N320TC-N360TC	5070	5970	1430	170
	306 L1	**4.25**	271	27000	120	30	160 to 225	N320TC-N360TC	5330	6280	1510	170
	306 L1	**5.33**	216	33900	120	30	160 to 225	N320TC-N360TC	5700	6700	1630	170
	306 L1	**6.20**	185	35500	108	30	160 to 225	N320TC-N360TC	5970	7020	1720	170
	306 L1	**7.50**	153	36600	92	30	160 to 225	N320TC-N360TC	6310	7440	1830	170
	306 L2	**13.0**	89	41300	62	21	132 to 180	N250TC - N280TC	7440	8750	2200	170
	306 L2	**15.3**	75	42600	54	21	132 to 180	N250TC - N280TC	7800	9200	2320	170
	306 L2	**18.1**	64	50300	54	21	132 to 180	N250TC - N280TC	8230	9670	2450	170
	306 L2	**22.7**	51	52300	45	21	132 to 180	N250TC - N280TC	8800	10400	2660	170
	306 L2	**26.4**	44	54200	40	21	132 to 180	N250TC - N280TC	9200	10900	2790	170
	306 L2	**28.4**	40	56900	39	21	132 to 180	N250TC - N280TC	9410	11100	2860	170
	306 L2	**33.1**	35	59500	35	21	132 to 180	N250TC - N280TC	9850	11600	2990	170
	306 L2	**38.4**	29.9	53500	27	21	132 to 180	N250TC - N280TC	10300	12100	3150	170
	306 L2	**46.5**	24.7	53500	22	21	132 to 180	N250TC - N280TC	10900	12800	3350	170



306 L

84,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**306 L2**	**56.3**	20.4	45300	15.6	21	132 to 180	N250TC - N280TC	11600	13600	3590	170
	306 L3	**45.1**	25.5	49300	22	12.1	71 to 132	N56C to N280TC	10800	12700	3330	170
	306 L3	**53.2**	21.6	58200	22	12.1	71 to 132	N56C to N280TC	11400	13400	3510	170
	306 L3	**65.2**	17.6	60300	18.5	12.1	71 to 132	N56C to N280TC	12100	14200	3770	170
	306 L3	**77.0**	14.9	71200	18.5	12.1	71 to 132	N56C to N280TC	12700	15000	3970	170
	306 L3	**81.9**	14.0	61700	15.1	12.1	71 to 132	N56C to N280TC	12900	15200	4050	170
	306 L3	**88.3**	13.0	63600	14.4	12.1	71 to 132	N56C to N280TC	13200	15600	4150	170
	306 L3	**104**	11.0	75100	14.5	12.1	71 to 132	N56C to N280TC	13900	16400	4410	170
	306 L3	**112**	10.2	61100	10.9	12.1	71 to 132	N56C to N280TC	14200	16700	4510	170
	306 L3	**121**	9.5	63800	10.5	12.1	71 to 132	N56C to N280TC	14600	17100	4620	170
	306 L3	**141**	8.2	63800	9.1	12.1	71 to 132	N56C to N280TC	15200	17900	4880	170
	306 L3	**152**	7.6	61100	8.1	12.1	71 to 132	N56C to N280TC	15600	18300	4980	170
	306 L3	**184**	6.3	56000	6.1	12.1	71 to 132	N56C to N280TC	16500	19400	5310	170
	306 L3	**205**	5.6	65200	6.4	12.1	71 to 132	N56C to N280TC	17000	20100	5520	170
	306 L3	**222**	5.2	54300	4.9	12.1	71 to 132	N56C to N280TC	17400	20500	5650	170
	306 L3	**238**	4.8	66400	5.6	12.1	71 to 132	N56C to N280TC	17800	21000	5800	170
	306 L3	**268**	4.3	46100	3.4	12.1	71 to 132	N56C to N280TC	18400	21800	6040	170
	306 L3	**288**	4.0	46700	3.3	12.1	71 to 132	N56C to N280TC	18900	22200	6170	170
	306 L3	**325**	3.5	47700	2.9	12.1	71 to 132	N56C to N280TC	19600	23000	6420	170
	306 L3	**405**	2.8	49700	2.5	12.1	71 to 132	N56C to N280TC	20900	24600	6910	170
	306 L4	**444**	2.6	79900	3.7	10.1	71 to 132	N56C to N280TC	21500	25300	7150	170
	306 L4	**509**	2.3	71600	2.9	10.1	71 to 132	N56C to N280TC	22400	26400	7460	170
	306 L4	**589**	2.0	74200	2.6	10.1	71 to 132	N56C to N280TC	23400	27500	7840	170
	306 L4	**636**	1.8	72300	2.4	10.1	71 to 132	N56C to N280TC	23900	28200	8050	170
	306 L4	**700**	1.6	75800	2.2	10.1	71 to 132	N56C to N280TC	24600	29000	8310	170
	306 L4	**809**	1.4	61100	1.6	10.1	71 to 132	N56C to N280TC	25700	30300	8720	170
	306 L4	**877**	1.3	61200	1.4	10.1	71 to 132	N56C to N280TC	26300	31000	8950	170
	306 L4	**1015**	1.1	76600	1.6	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**1095**	1.1	63500	1.2	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**1279**	0.90	70000	1.1	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**1475**	0.78	78200	1.1	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**1597**	0.72	70000	0.91	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**1872**	0.61	57600	0.64	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**2074**	0.55	57600	0.58	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**2337**	0.49	57600	0.51	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
	306 L4	**2916**	0.39	57600	0.41	10.1	71 to 132	N56C to N280TC	26500	31300	9030	170
870	**306 L1**	**3.60**	242	24600	97	30	160 to 225	N320TC-N360TC	5450	6410	1540	170
	306 L1	**4.25**	205	29000	97	30	160 to 225	N320TC-N360TC	5740	6750	1630	170
	306 L1	**5.33**	163	36500	97	30	160 to 225	N320TC-N360TC	6130	7210	1760	170
	306 L1	**6.20**	140	38100	87	30	160 to 225	N320TC-N360TC	6410	7540	1850	170
	306 L1	**7.50**	116	39400	75	30	160 to 225	N320TC-N360TC	6780	8000	1970	170
	306 L2	**13.0**	67	44400	50	21	132 to 180	N250TC - N280TC	8000	9410	2360	170
	306 L2	**15.3**	57	45800	44	21	132 to 180	N250TC - N280TC	8390	9890	2500	170
	306 L2	**18.1**	48	54100	44	21	132 to 180	N250TC - N280TC	8840	10400	2640	170
	306 L2	**22.7**	38	56200	36	21	132 to 180	N250TC - N280TC	9470	11100	2860	170
	306 L2	**26.4**	33	58200	32	21	132 to 180	N250TC - N280TC	9890	11700	3000	170
	306 L2	**28.4**	31	61200	32	21	132 to 180	N250TC - N280TC	10100	11900	3080	170
	306 L2	**33.1**	26.3	64000	28	21	132 to 180	N250TC - N280TC	10600	12500	3220	170
	306 L2	**38.4**	22.6	57500	22	21	132 to 180	N250TC - N280TC	11100	13100	3380	170
	306 L2	**46.5**	18.7	57500	18.2	21	132 to 180	N250TC - N280TC	11700	13800	3610	170
	306 L2	**56.3**	15.5	48700	12.7	21	132 to 180	N250TC - N280TC	12400	14600	3860	170
	306 L3	**45.1**	19.3	53000	17.8	12.1	71 to 132	N56C to N280TC	11600	13700	3580	170
	306 L3	**53.2**	16.3	62600	17.8	12.1	71 to 132	N56C to N280TC	12200	14400	3770	170
	306 L3	**65.2**	13.3	64900	15.1	12.1	71 to 132	N56C to N280TC	13000	15300	4050	170
	306 L3	**77.0**	11.3	76600	15.1	12.1	71 to 132	N56C to N280TC	13600	16100	4270	170



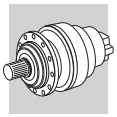
3□ L

306 L — 84,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**306 L3**	**81.9**	10.6	66400	12.3	12.1	71 to 132	N56C to N280TC	13900	16400	4360	170
	306 L3	**88.3**	9.9	68400	11.8	12.1	71 to 132	N56C to N280TC	14200	16800	4470	170
	306 L3	**104**	8.3	80700	11.7	12.1	71 to 132	N56C to N280TC	14900	17600	4740	170
	306 L3	**112**	7.7	65700	8.9	12.1	71 to 132	N56C to N280TC	15300	18000	4850	170
	306 L3	**121**	7.2	68600	8.6	12.1	71 to 132	N56C to N280TC	15700	18400	4970	170
	306 L3	**141**	6.2	68600	7.4	12.1	71 to 132	N56C to N280TC	16400	19300	5240	170
	306 L3	**152**	5.7	65700	6.6	12.1	71 to 132	N56C to N280TC	16700	19700	5350	170
	306 L3	**184**	4.7	60200	5.0	12.1	71 to 132	N56C to N280TC	17700	20900	5710	170
	306 L3	**205**	4.2	70100	5.2	12.1	71 to 132	N56C to N280TC	18300	21600	5940	170
	306 L3	**222**	3.9	58400	4.0	12.1	71 to 132	N56C to N280TC	18700	22100	6080	170
	306 L3	**238**	3.7	71400	4.5	12.1	71 to 132	N56C to N280TC	19200	22600	6240	170
	306 L3	**268**	3.2	49600	2.8	12.1	71 to 132	N56C to N280TC	19800	23400	6490	170
	306 L3	**288**	3.0	50200	2.6	12.1	71 to 132	N56C to N280TC	20300	23900	6630	170
	306 L3	**325**	2.7	51300	2.4	12.1	71 to 132	N56C to N280TC	21000	24800	6910	170
	306 L3	**405**	2.1	53500	2.0	12.1	71 to 132	N56C to N280TC	22500	26500	7430	170
	306 L4	**444**	2.0	85900	3.0	10.1	71 to 132	N56C to N280TC	23100	27200	7680	170
	306 L4	**509**	1.7	77000	2.4	10.1	71 to 132	N56C to N280TC	24000	28300	8020	170
	306 L4	**589**	1.5	79800	2.1	10.1	71 to 132	N56C to N280TC	25100	29600	8430	170
	306 L4	**636**	1.4	77800	1.9	10.1	71 to 132	N56C to N280TC	25700	30300	8650	170
	306 L4	**700**	1.2	81500	1.8	10.1	71 to 132	N56C to N280TC	26400	31200	8930	170
	306 L4	**809**	1.1	65700	1.3	10.1	71 to 132	N56C to N280TC	27600	32600	9380	170
	306 L4	**877**	0.99	65800	1.2	10.1	71 to 132	N56C to N280TC	28300	33400	9630	170
	306 L4	**1015**	0.86	82400	1.3	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**1095**	0.79	68200	0.98	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**1279**	0.68	75200	0.92	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**1475**	0.59	84100	0.89	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**1597**	0.54	75200	0.74	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**1872**	0.46	61900	0.52	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**2074**	0.42	61900	0.47	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**2337**	0.37	61900	0.42	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170
	306 L4	**2916**	0.30	61900	0.33	10.1	71 to 132	N56C to N280TC	28500	33600	9710	170

307 L — 125,000 in•lbs

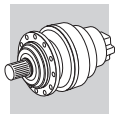
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**307 L1**	**5.25**	333	28600	156	30	160 to 225	N320TC - N360TC	5360	7120	1800	178
	307 L1	**6.23**	281	33900	156	30	160 to 225	N320TC - N360TC	5650	7520	1910	178
	307 L2	**12.3**	142	39100	94	24	132 to 180	N250TC - N280TC	6940	9220	2400	178
	307 L2	**14.7**	119	46700	94	24	132 to 180	N250TC - N280TC	7310	9720	2540	178
	307 L2	**17.4**	101	55100	94	24	132 to 180	N250TC - N280TC	7670	10200	2680	178
	307 L2	**21.8**	80	62900	85	24	132 to 180	N250TC - N280TC	8230	10900	2890	178
	307 L2	**25.4**	69	65800	77	24	132 to 180	N250TC - N280TC	8590	11400	3040	178
	307 L2	**28.0**	63	65800	69	24	132 to 180	N250TC - N280TC	8860	11800	3150	178
	307 L2	**30.7**	57	69600	67	24	132 to 180	N250TC - N280TC	9090	12100	3250	178
	307 L2	**32.6**	54	68800	62	24	132 to 180	N250TC - N280TC	9280	12300	3300	178
	307 L2	**38.6**	45	71600	55	24	132 to 180	N250TC - N280TC	9750	13000	3510	178



307 L

125,000 in•lbs

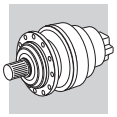
n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	Pt thermal capacity	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**307 L2**	**46.7**	37	71600	45	24	132 to 180	N250TC - N280TC	10300	13700	3740	178
	307 L3	**51.3**	34	78800	47	14.8	71 to 160	N56C to N280TC	10600	14100	3840	178
	307 L3	**60.5**	28.9	85600	43	14.8	71 to 160	N56C to N280TC	11200	14800	4080	178
	307 L3	**74.1**	23.6	90500	37	14.8	71 to 160	N56C to N280TC	11900	15800	4360	178
	307 L3	**80.6**	21.7	86400	33	14.8	71 to 160	N56C to N280TC	12200	16200	4490	178
	307 L3	**93.0**	18.8	97100	32	14.8	71 to 160	N56C to N280TC	12700	16900	4700	178
	307 L3	**100**	17.4	99600	30	14.8	71 to 160	N56C to N280TC	13000	17300	4820	178
	307 L3	**113**	15.4	86400	23	14.8	71 to 160	N56C to N280TC	13500	17900	5030	178
	307 L3	**126**	13.9	102900	25	14.8	71 to 160	N56C to N280TC	13900	18500	5210	178
	307 L3	**139**	12.6	86400	19.0	14.8	71 to 160	N56C to N280TC	14300	19100	5370	178
	307 L3	**153**	11.5	71600	14.3	14.8	71 to 160	N56C to N280TC	14700	19600	5550	178
	307 L3	**162**	10.8	86400	16.3	14.8	71 to 160	N56C to N280TC	15000	19900	5650	178
	307 L3	**177**	9.9	101200	17.4	14.8	71 to 160	N56C to N280TC	15400	20500	5830	178
	307 L3	**202**	8.7	86400	13.1	14.8	71 to 160	N56C to N280TC	16000	21300	6090	178
	307 L3	**223**	7.9	71600	9.8	14.8	71 to 160	N56C to N280TC	16500	21900	6290	178
	307 L3	**239**	7.3	71600	9.1	14.8	71 to 160	N56C to N280TC	16900	22400	6450	178
	307 L3	**284**	6.2	88900	9.6	14.8	71 to 160	N56C to N280TC	17700	23600	6810	178
	307 L3	**336**	5.2	72800	6.6	14.8	71 to 160	N56C to N280TC	18700	24800	7220	178
	307 L4	**349**	5.0	108600	9.8	10.1	71 to 160	N56C to N280TC	18900	25100	7300	178
	307 L4	**405**	4.3	93800	7.3	10.1	71 to 160	N56C to N280TC	19700	26300	7690	178
	307 L4	**465**	3.8	96300	6.5	10.1	71 to 160	N56C to N280TC	20600	27400	8050	178
	307 L4	**509**	3.4	111900	6.9	10.1	71 to 160	N56C to N280TC	21200	28100	8280	178
	307 L4	**579**	3.0	113600	6.2	10.1	71 to 160	N56C to N280TC	22000	29200	8640	178
	307 L4	**654**	2.7	102100	4.9	10.1	71 to 160	N56C to N280TC	22800	30300	9000	178
	307 L4	**722**	2.4	116000	5.1	10.1	71 to 160	N56C to N280TC	23500	31200	9310	178
	307 L4	**801**	2.2	105300	4.2	10.1	71 to 160	N56C to N280TC	24200	32200	9650	178
	307 L4	**906**	1.9	118500	4.1	10.1	71 to 160	N56C to N280TC	25100	33500	10000	178
	307 L4	**999**	1.8	108600	3.4	10.1	71 to 160	N56C to N280TC	25900	34400	10400	178
	307 L4	**1149**	1.5	88100	2.4	10.1	71 to 160	N56C to N280TC	27000	35900	10900	178
	307 L4	**1274**	1.4	101200	2.5	10.1	71 to 160	N56C to N280TC	27900	37100	11200	178
	307 L4	**1380**	1.3	90500	2.1	10.1	71 to 160	N56C to N280TC	28500	37900	11600	178
	307 L4	**1605**	1.1	90500	1.8	10.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**1723**	1.0	90500	1.7	10.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**2041**	0.86	115200	1.8	10.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**2423**	0.72	90500	1.2	10.1	71 to 160	N56C to N280TC	28600	38100	11600	178
1450	**307 L1**	**5.25**	276	30700	139	30	160 to 225	N320TC-N360TC	5760	7660	1940	178
	307 L1	**6.23**	233	36500	139	30	160 to 225	N320TC-N360TC	6080	8080	2050	178
	307 L2	**12.3**	117	42000	83	24	132 to 180	N250TC - N280TC	7460	9920	2580	178
	307 L2	**14.7**	98	50200	83	24	132 to 180	N250TC - N280TC	7860	10500	2740	178
	307 L2	**17.4**	83	59300	83	24	132 to 180	N250TC - N280TC	8250	11000	2880	178
	307 L2	**21.8**	66	67600	76	24	132 to 180	N250TC - N280TC	8840	11800	3110	178
	307 L2	**25.4**	57	70700	68	24	132 to 180	N250TC - N280TC	9240	12300	3270	178
	307 L2	**28.0**	52	70700	62	24	132 to 180	N250TC - N280TC	9520	12700	3380	178
	307 L2	**30.7**	47	74900	60	24	132 to 180	N250TC - N280TC	9780	13000	3500	178
	307 L2	**32.6**	45	74000	56	24	132 to 180	N250TC - N280TC	9970	13300	3550	178
	307 L2	**38.6**	38	77000	49	24	132 to 180	N250TC - N280TC	10500	14000	3770	178
	307 L2	**46.7**	31	77000	40	24	132 to 180	N250TC - N280TC	11100	14800	4020	178
	307 L3	**51.3**	28.3	84700	42	14.8	71 to 160	N56C to N280TC	11400	15200	4130	178
	307 L3	**60.5**	24.0	92000	38	14.8	71 to 160	N56C to N280TC	12000	16000	4380	178
	307 L3	**74.1**	19.6	97300	33	14.8	71 to 160	N56C to N280TC	12700	17000	4690	178
	307 L3	**80.6**	18.0	92900	29	14.8	71 to 160	N56C to N280TC	13100	17400	4830	178
	307 L3	**93.0**	15.6	104400	28	14.8	71 to 160	N56C to N280TC	13600	18200	5050	178
	307 L3	**100**	14.5	107100	27	14.8	71 to 160	N56C to N280TC	14000	18600	5190	178
	307 L3	**113**	12.8	92900	21	14.8	71 to 160	N56C to N280TC	14500	19300	5410	178
	307 L3	**126**	11.5	110600	22	14.8	71 to 160	N56C to N280TC	14900	19900	5600	178



307 L

125,000 in•lbs

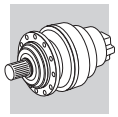
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**307 L3**	**139**	10.4	92900	16.9	14.8	71 to 160	N56C to N280TC	15400	20500	5770	178
	307 L3	**153**	9.5	77000	12.7	14.8	71 to 160	N56C to N280TC	15900	21100	5960	178
	307 L3	**162**	9.0	92900	14.5	14.8	71 to 160	N56C to N280TC	16100	21400	6080	178
	307 L3	**177**	8.2	108900	15.6	14.8	71 to 160	N56C to N280TC	16600	22000	6270	178
	307 L3	**202**	7.2	92900	11.7	14.8	71 to 160	N56C to N280TC	17200	22900	6550	178
	307 L3	**223**	6.5	77000	8.7	14.8	71 to 160	N56C to N280TC	17700	23600	6770	178
	307 L3	**239**	6.1	77000	8.1	14.8	71 to 160	N56C to N280TC	18100	24100	6930	178
	307 L3	**284**	5.1	95600	8.5	14.8	71 to 160	N56C to N280TC	19100	25400	7320	178
	307 L3	**336**	4.3	78200	5.9	14.8	71 to 160	N56C to N280TC	20100	26700	7770	178
	307 L4	**349**	4.2	116800	8.7	10.1	71 to 160	N56C to N280TC	20300	27000	7850	178
	307 L4	**405**	3.6	100900	6.5	10.1	71 to 160	N56C to N280TC	21200	28200	8270	178
	307 L4	**465**	3.1	103500	5.8	10.1	71 to 160	N56C to N280TC	22100	29400	8650	178
	307 L4	**509**	2.8	120400	6.2	10.1	71 to 160	N56C to N280TC	22700	30300	8900	178
	307 L4	**579**	2.5	122100	5.5	10.1	71 to 160	N56C to N280TC	23600	31400	9290	178
	307 L4	**654**	2.2	109700	4.4	10.1	71 to 160	N56C to N280TC	24500	32600	9680	178
	307 L4	**722**	2.0	124800	4.5	10.1	71 to 160	N56C to N280TC	25300	33600	10000	178
	307 L4	**801**	1.8	113300	3.7	10.1	71 to 160	N56C to N280TC	26100	34600	10400	178
	307 L4	**906**	1.6	127400	3.7	10.1	71 to 160	N56C to N280TC	27000	36000	10800	178
	307 L4	**999**	1.5	116800	3.1	10.1	71 to 160	N56C to N280TC	27800	37000	11200	178
	307 L4	**1149**	1.3	94700	2.2	10.1	71 to 160	N56C to N280TC	29000	38600	11700	178
	307 L4	**1274**	1.1	108900	2.2	10.1	71 to 160	N56C to N280TC	30000	39800	12100	178
	307 L4	**1380**	1.1	97300	1.8	10.1	71 to 160	N56C to N280TC	30700	40800	12400	178
	307 L4	**1605**	0.90	97300	1.6	10.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**1723**	0.84	97300	1.5	10.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**2041**	0.71	123900	1.6	10.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**2423**	0.60	97300	1.1	10.1	71 to 160	N56C to N280TC	30800	41000	12500	178
1150	**307 L1**	**3.43**	335	29100	160	36	180 to 250	N320TC-N360TC	5390	7170	1810	178
	307 L1	**4.09**	281	34600	159	36	180 to 250	N320TC-N360TC	5680	7570	1920	178
	307 L1	**5.25**	219	44400	159	36	180 to 250	N320TC-N360TC	6120	8150	2090	178
	307 L1	**6.23**	185	47200	142	36	180 to 250	N320TC-N360TC	6440	8570	2210	178
	307 L2	**12.3**	93	60800	96	30	132 to 180	N250TC - N280TC	7910	10500	2790	178
	307 L2	**14.7**	78	63800	84	30	132 to 180	N250TC - N280TC	8330	11100	2940	178
	307 L2	**17.4**	66	67000	75	30	132 to 180	N250TC - N280TC	8780	11700	3120	178
	307 L2	**21.8**	53	71800	64	30	132 to 180	N250TC - N280TC	9380	12500	3350	178
	307 L2	**25.4**	45	75100	57	30	132 to 180	N250TC - N280TC	9830	13100	3530	178
	307 L2	**28.0**	41	75100	52	30	132 to 180	N250TC - N280TC	10100	13500	3660	178
	307 L2	**30.7**	37	79500	50	30	132 to 180	N250TC - N280TC	10400	13800	3770	178
	307 L2	**32.6**	35	78500	47	30	132 to 180	N250TC - N280TC	10600	14100	3840	178
	307 L2	**38.6**	29.8	71600	36	30	132 to 180	N250TC - N280TC	11100	14800	4080	178
	307 L2	**46.7**	24.6	71600	30	30	132 to 180	N250TC - N280TC	11800	15700	4330	178
	307 L3	**51.3**	22.4	93000	36	17.4	71 to 160	N56C to N280TC	12100	16100	4460	178
	307 L3	**60.5**	19.0	97100	32	17.4	71 to 160	N56C to N280TC	12700	16900	4720	178
	307 L3	**74.1**	15.5	102900	28	17.4	71 to 160	N56C to N280TC	13500	18000	5060	178
	307 L3	**80.6**	14.3	86400	22	17.4	71 to 160	N56C to N280TC	13900	18500	5190	178
	307 L3	**93.0**	12.4	102900	22	17.4	71 to 160	N56C to N280TC	14500	19300	5440	178
	307 L3	**100**	11.5	102900	21	17.4	71 to 160	N56C to N280TC	14800	19700	5600	178
	307 L3	**113**	10.2	86400	15.3	17.4	71 to 160	N56C to N280TC	15400	20500	5830	178
	307 L3	**126**	9.1	102900	16.4	17.4	71 to 160	N56C to N280TC	15900	21100	6040	178
	307 L3	**139**	8.3	86400	12.5	17.4	71 to 160	N56C to N280TC	16300	21800	6220	178
	307 L3	**153**	7.5	71600	9.4	17.4	71 to 160	N56C to N280TC	16800	22400	6420	178
	307 L3	**162**	7.1	87200	10.8	17.4	71 to 160	N56C to N280TC	17100	22800	6550	178
	307 L3	**177**	6.5	101200	11.5	17.4	71 to 160	N56C to N280TC	17600	23400	6760	178
	307 L3	**202**	5.7	89700	8.9	17.4	71 to 160	N56C to N280TC	18300	24300	7040	178
	307 L3	**223**	5.2	73100	6.6	17.4	71 to 160	N56C to N280TC	18800	25100	7300	178
	307 L3	**239**	4.8	73800	6.2	17.4	71 to 160	N56C to N280TC	19300	25600	7460	178
	307 L3	**284**	4.1	95500	6.8	17.4	71 to 160	N56C to N280TC	20300	26900	7890	178



307 L

125,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**307 L3**	**336**	3.4	77900	4.6	17.4	71 to 160	N56C to N280TC	21300	28400	8360	178
	307 L4	**349**	3.3	112800	6.7	12.1	71 to 160	N56C to N280TC	21500	28700	8460	178
	307 L4	**405**	2.8	101200	5.2	12.1	71 to 160	N56C to N280TC	22500	30000	8900	178
	307 L4	**465**	2.5	103700	4.6	12.1	71 to 160	N56C to N280TC	23500	31200	9310	178
	307 L4	**509**	2.3	116900	4.8	12.1	71 to 160	N56C to N280TC	24100	32100	9600	178
	307 L4	**579**	2.0	118500	4.2	12.1	71 to 160	N56C to N280TC	25100	33400	10000	178
	307 L4	**654**	1.8	109500	3.5	12.1	71 to 160	N56C to N280TC	26000	34600	10400	178
	307 L4	**722**	1.6	121000	3.5	12.1	71 to 160	N56C to N280TC	26800	35700	10800	178
	307 L4	**801**	1.4	112800	2.9	12.1	71 to 160	N56C to N280TC	27600	36800	11200	178
	307 L4	**906**	1.3	123500	2.8	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**999**	1.2	115200	2.4	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**1149**	1.0	90500	1.6	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**1274**	0.90	104500	1.7	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**1380**	0.83	90500	1.4	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**1605**	0.72	90500	1.2	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**1723**	0.67	90500	1.1	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**2041**	0.56	115200	1.2	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
	307 L4	**2423**	0.47	90500	0.77	12.1	71 to 160	N56C to N280TC	28600	38100	11600	178
870	**307 L1**	**3.43**	254	31200	130	36	180 to 250	N320TC-N360TC	5790	7710	1950	178
	307 L1	**4.09**	213	37300	130	36	180 to 250	N320TC-N360TC	6100	8140	2070	178
	307 L1	**5.25**	166	47800	130	36	180 to 250	N320TC-N360TC	6580	8760	2250	178
	307 L1	**6.23**	140	50800	116	36	180 to 250	N320TC-N360TC	6920	9210	2380	178
	307 L2	**12.3**	70	65400	78	30	132 to 180	N250TC - N280TC	8510	11300	3000	178
	307 L2	**14.7**	59	68600	68	30	132 to 180	N250TC - N280TC	8960	11900	3160	178
	307 L2	**17.4**	50	72000	61	30	132 to 180	N250TC - N280TC	9440	12500	3360	178
	307 L2	**21.8**	40	77200	52	30	132 to 180	N250TC - N280TC	10100	13400	3610	178
	307 L2	**25.4**	34	80700	47	30	132 to 180	N250TC - N280TC	10600	14000	3800	178
	307 L2	**28.0**	31	80700	42	30	132 to 180	N250TC - N280TC	10900	14500	3940	178
	307 L2	**30.7**	28.4	85500	41	30	132 to 180	N250TC - N280TC	11200	14900	4050	178
	307 L2	**32.6**	26.7	84400	38	30	132 to 180	N250TC - N280TC	11400	15100	4130	178
	307 L2	**38.6**	22.5	77000	29	30	132 to 180	N250TC - N280TC	12000	15900	4380	178
	307 L2	**46.7**	18.6	77000	24	30	132 to 180	N250TC - N280TC	12700	16900	4660	178
	307 L3	**51.3**	17.0	100000	30	17.4	71 to 160	N56C to N280TC	13000	17300	4800	178
	307 L3	**60.5**	14.4	104400	26	17.4	71 to 160	N56C to N280TC	13700	18200	5080	178
	307 L3	**74.1**	11.7	110600	23	17.4	71 to 160	N56C to N280TC	14600	19400	5440	178
	307 L3	**80.6**	10.8	92900	17.5	17.4	71 to 160	N56C to N280TC	14900	19900	5580	178
	307 L3	**93.0**	9.4	110600	18.0	17.4	71 to 160	N56C to N280TC	15600	20700	5850	178
	307 L3	**100**	8.7	110600	16.7	17.4	71 to 160	N56C to N280TC	15900	21200	6020	178
	307 L3	**113**	7.7	92900	12.4	17.4	71 to 160	N56C to N280TC	16500	22000	6270	178
	307 L3	**126**	6.9	110600	13.3	17.4	71 to 160	N56C to N280TC	17100	22700	6490	178
	307 L3	**139**	6.3	92900	10.2	17.4	71 to 160	N56C to N280TC	17600	23400	6690	178
	307 L3	**153**	5.7	77000	7.6	17.4	71 to 160	N56C to N280TC	18100	24100	6910	178
	307 L3	**162**	5.4	93800	8.8	17.4	71 to 160	N56C to N280TC	18400	24500	7050	178
	307 L3	**177**	4.9	108900	9.3	17.4	71 to 160	N56C to N280TC	18900	25100	7270	178
	307 L3	**202**	4.3	96500	7.3	17.4	71 to 160	N56C to N280TC	19700	26200	7570	178
	307 L3	**223**	3.9	78600	5.3	17.4	71 to 160	N56C to N280TC	20300	27000	7850	178
	307 L3	**239**	3.6	79400	5.0	17.4	71 to 160	N56C to N280TC	20700	27500	8020	178
	307 L3	**284**	3.1	102700	5.5	17.4	71 to 160	N56C to N280TC	21800	29000	8490	178
	307 L3	**336**	2.6	83700	3.8	17.4	71 to 160	N56C to N280TC	22900	30500	8990	178
	307 L4	**349**	2.5	121200	5.4	12.1	71 to 160	N56C to N280TC	23200	30800	9100	178
	307 L4	**405**	2.1	108900	4.2	12.1	71 to 160	N56C to N280TC	24200	32200	9570	178
	307 L4	**465**	1.9	111500	3.8	12.1	71 to 160	N56C to N280TC	25300	33600	10000	178
	307 L4	**509**	1.7	125700	3.9	12.1	71 to 160	N56C to N280TC	26000	34500	10300	178
	307 L4	**579**	1.5	127400	3.5	12.1	71 to 160	N56C to N280TC	27000	35900	10800	178
	307 L4	**654**	1.3	117700	2.8	12.1	71 to 160	N56C to N280TC	28000	37200	11200	178



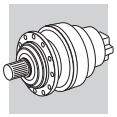
3□ L

307 L — 125,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**307 L4**	**722**	1.2	130100	2.8	12.1	71 to 160	N56C to N280TC	28800	38300	11600	178
	307 L4	**801**	1.1	121200	2.4	12.1	71 to 160	N56C to N280TC	29700	39600	12000	178
	307 L4	**906**	0.96	132700	2.3	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**999**	0.87	123900	1.9	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**1149**	0.76	97300	1.3	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**1274**	0.68	112400	1.4	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**1380**	0.63	97300	1.1	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**1605**	0.54	97300	0.95	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**1723**	0.51	97300	0.89	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**2041**	0.43	123900	0.95	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178
	307 L4	**2423**	0.36	97300	0.63	12.1	71 to 160	N56C to N280TC	30800	41000	12500	178

309 L — 180,000 in•lbs

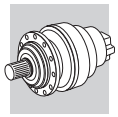
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**309 L1**	**5.25**	333	42900	234	34	180 to 250	N320TC-N360TC	5410	7120	1440	186
	309 L1	**6.23**	281	50900	234	34	180 to 250	N320TC-N360TC	5700	7520	1530	186
	309 L2	**12.3**	142	39100	94	24	132 to 180	N250TC - N280TC	6990	9220	1920	186
	309 L2	**14.7**	119	46700	94	24	132 to 180	N250TC - N280TC	7380	9720	2040	186
	309 L2	**17.4**	101	55100	94	24	132 to 180	N250TC - N280TC	7750	10200	2150	186
	309 L2	**21.8**	80	69100	94	24	132 to 180	N250TC - N280TC	8300	10900	2320	186
	309 L2	**25.4**	69	78200	91	24	132 to 180	N250TC - N280TC	8670	11400	2440	186
	309 L2	**28.0**	63	88700	94	24	132 to 180	N250TC - N280TC	8930	11800	2520	186
	309 L2	**30.7**	57	80800	78	24	132 to 180	N250TC - N280TC	9200	12100	2610	186
	309 L2	**32.6**	54	94600	86	24	132 to 180	N250TC - N280TC	9360	12300	2660	186
	309 L2	**38.6**	45	97900	75	24	132 to 180	N250TC - N280TC	9850	13000	2810	186
	309 L2	**46.7**	37	103700	66	24	132 to 180	N250TC - N280TC	10400	13700	2990	186
	309 L3	**51.3**	34	78800	47	14.8	71 to 160	N56C to N280TC	10700	14100	3100	186
	309 L3	**60.5**	28.9	93000	47	14.8	71 to 160	N56C to N280TC	11300	14800	3250	186
	309 L3	**74.1**	23.6	107800	44	14.8	71 to 160	N56C to N280TC	12000	15800	3480	186
	309 L3	**80.6**	21.7	117700	45	14.8	71 to 160	N56C to N280TC	12300	16200	3590	186
	309 L3	**93.0**	18.8	116900	38	14.8	71 to 160	N56C to N280TC	12800	16900	3770	186
	309 L3	**100**	17.4	114400	35	14.8	71 to 160	N56C to N280TC	13100	17300	3870	186
	309 L3	**113**	15.4	131700	35	14.8	71 to 160	N56C to N280TC	13600	17900	4020	186
	309 L3	**126**	13.9	128400	31	14.8	71 to 160	N56C to N280TC	14000	18500	4150	186
	309 L3	**139**	12.6	131700	29	14.8	71 to 160	N56C to N280TC	14500	19100	4310	186
	309 L3	**153**	11.5	107000	21	14.8	71 to 160	N56C to N280TC	14900	19600	4440	186
	309 L3	**162**	10.8	131700	25	14.8	71 to 160	N56C to N280TC	15100	19900	4510	186
	309 L3	**177**	9.9	101200	17.4	14.8	71 to 160	N56C to N280TC	15500	20500	4670	186
	309 L3	**202**	8.7	131700	19.9	14.8	71 to 160	N56C to N280TC	16200	21300	4880	186
	309 L3	**223**	7.9	107000	14.6	14.8	71 to 160	N56C to N280TC	16700	21900	5030	186
	309 L3	**239**	7.3	107000	13.6	14.8	71 to 160	N56C to N280TC	17000	22400	5160	186
	309 L3	**284**	6.2	130000	14.0	14.8	71 to 160	N56C to N280TC	17900	23600	5440	186
	309 L3	**336**	5.2	107800	9.8	14.8	71 to 160	N56C to N280TC	18800	24800	5780	186
	309 L4	**349**	5.0	165400	15.0	10.1	71 to 160	N56C to N280TC	19100	25100	5860	186
	309 L4	**405**	4.3	141600	11.0	10.1	71 to 160	N56C to N280TC	19900	26300	6140	186



309 L

180,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**309 L4**	**465**	3.8	144900	9.8	10.1	71 to 160	N56C to N280TC	20800	27400	6420	186
	309 L4	**509**	3.4	117700	7.3	10.1	71 to 160	N56C to N280TC	21300	28100	6630	186
	309 L4	**579**	3.0	169500	9.2	10.1	71 to 160	N56C to N280TC	22200	29200	6910	186
	309 L4	**654**	2.7	150600	7.3	10.1	71 to 160	N56C to N280TC	23000	30300	7200	186
	309 L4	**722**	2.4	169500	7.4	10.1	71 to 160	N56C to N280TC	23700	31200	7460	186
	309 L4	**801**	2.2	150600	5.9	10.1	71 to 160	N56C to N280TC	24400	32200	7710	186
	309 L4	**906**	1.9	144000	5.0	10.1	71 to 160	N56C to N280TC	25400	33500	8020	186
	309 L4	**999**	1.8	150600	4.8	10.1	71 to 160	N56C to N280TC	26100	34400	8310	186
	309 L4	**1149**	1.5	135000	3.7	10.1	71 to 160	N56C to N280TC	27300	35900	8690	186
	309 L4	**1274**	1.4	101200	2.5	10.1	71 to 160	N56C to N280TC	28100	37100	9000	186
	309 L4	**1380**	1.3	139900	3.2	10.1	71 to 160	N56C to N280TC	28800	37900	9240	186
	309 L4	**1605**	1.1	139900	2.8	10.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**1723**	1.0	139900	2.6	10.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**2041**	0.86	130000	2.0	10.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**2423**	0.72	139900	1.8	10.1	71 to 160	N56C to N280TC	28900	38100	9290	186
1450	**309 L1**	**5.25**	276	46100	208	34	180 to 250	N320TC-N360TC	5820	7660	1550	186
	309 L1	**6.23**	233	54700	208	34	180 to 250	N320TC-N360TC	6130	8080	1640	186
	309 L2	**12.3**	117	42000	83	24	132 to 180	N250TC - N280TC	7520	9920	2060	186
	309 L2	**14.7**	98	50200	83	24	132 to 180	N250TC - N280TC	7940	10500	2190	186
	309 L2	**17.4**	83	59300	83	24	132 to 180	N250TC - N280TC	8340	11000	2310	186
	309 L2	**21.8**	66	74300	83	24	132 to 180	N250TC - N280TC	8930	11800	2490	186
	309 L2	**25.4**	57	84100	81	24	132 to 180	N250TC - N280TC	9320	12300	2620	186
	309 L2	**28.0**	52	95400	83	24	132 to 180	N250TC - N280TC	9610	12700	2710	186
	309 L2	**30.7**	47	86900	69	24	132 to 180	N250TC - N280TC	9890	13000	2800	186
	309 L2	**32.6**	45	101800	77	24	132 to 180	N250TC - N280TC	10100	13300	2860	186
	309 L2	**38.6**	38	105300	67	24	132 to 180	N250TC - N280TC	10600	14000	3020	186
	309 L2	**46.7**	31	111500	58	24	132 to 180	N250TC - N280TC	11200	14800	3220	186
	309 L3	**51.3**	28.3	84700	42	14.8	71 to 160	N56C to N280TC	11500	15200	3330	186
	309 L3	**60.5**	24.0	100000	42	14.8	71 to 160	N56C to N280TC	12100	16000	3500	186
	309 L3	**74.1**	19.6	115900	40	14.8	71 to 160	N56C to N280TC	12900	17000	3740	186
	309 L3	**80.6**	18.0	126600	40	14.8	71 to 160	N56C to N280TC	13200	17400	3860	186
	309 L3	**93.0**	15.6	125700	34	14.8	71 to 160	N56C to N280TC	13800	18200	4050	186
	309 L3	**100**	14.5	123000	31	14.8	71 to 160	N56C to N280TC	14100	18600	4160	186
	309 L3	**113**	12.8	141600	32	14.8	71 to 160	N56C to N280TC	14600	19300	4330	186
	309 L3	**126**	11.5	138100	28	14.8	71 to 160	N56C to N280TC	15100	19900	4470	186
	309 L3	**139**	10.4	141600	26	14.8	71 to 160	N56C to N280TC	15500	20500	4630	186
	309 L3	**153**	9.5	115000	19.0	14.8	71 to 160	N56C to N280TC	16000	21100	4770	186
	309 L3	**162**	9.0	141600	22	14.8	71 to 160	N56C to N280TC	16200	21400	4850	186
	309 L3	**177**	8.2	108900	15.6	14.8	71 to 160	N56C to N280TC	16700	22000	5020	186
	309 L3	**202**	7.2	141600	17.8	14.8	71 to 160	N56C to N280TC	17400	22900	5240	186
	309 L3	**223**	6.5	115000	13.0	14.8	71 to 160	N56C to N280TC	17900	23600	5410	186
	309 L3	**239**	6.1	115000	12.2	14.8	71 to 160	N56C to N280TC	18300	24100	5550	186
	309 L3	**284**	5.1	139800	12.5	14.8	71 to 160	N56C to N280TC	19200	25400	5850	186
	309 L3	**336**	4.3	115900	8.7	14.8	71 to 160	N56C to N280TC	20300	26700	6210	186
	309 L4	**349**	4.2	177900	13.3	10.1	71 to 160	N56C to N280TC	20500	27000	6300	186
	309 L4	**405**	3.6	152200	9.8	10.1	71 to 160	N56C to N280TC	21400	28200	6600	186
	309 L4	**465**	3.1	155800	8.8	10.1	71 to 160	N56C to N280TC	22300	29400	6910	186
	309 L4	**509**	2.8	126600	6.5	10.1	71 to 160	N56C to N280TC	22900	30300	7130	186
	309 L4	**579**	2.5	182300	8.2	10.1	71 to 160	N56C to N280TC	23800	31400	7430	186
	309 L4	**654**	2.2	162000	6.5	10.1	71 to 160	N56C to N280TC	24700	32600	7740	186
	309 L4	**722**	2.0	182300	6.6	10.1	71 to 160	N56C to N280TC	25500	33600	8020	186
	309 L4	**801**	1.8	162000	5.3	10.1	71 to 160	N56C to N280TC	26300	34600	8290	186
	309 L4	**906**	1.6	154900	4.5	10.1	71 to 160	N56C to N280TC	27300	36000	8630	186
	309 L4	**999**	1.5	162000	4.2	10.1	71 to 160	N56C to N280TC	28100	37000	8930	186
	309 L4	**1149**	1.3	145100	3.3	10.1	71 to 160	N56C to N280TC	29300	38600	9350	186

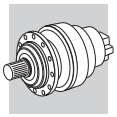


3□ L

309 L

180,000 in•lbs

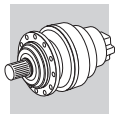
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**309 L4**	**1274**	1.1	108900	2.2	10.1	71 to 160	N56C to N280TC	30200	39800	9680	186
	309 L4	**1380**	1.1	150400	2.8	10.1	71 to 160	N56C to N280TC	30900	40800	9930	186
	309 L4	**1605**	0.90	150400	2.5	10.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**1723**	0.84	150400	2.3	10.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**2041**	0.71	139800	1.8	10.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**2423**	0.60	150400	1.6	10.1	71 to 160	N56C to N280TC	31100	41000	9990	186
1150	**309 L1**	**3.43**	335	43500	239	40	180 to 250	N320TC-N360TC	5440	7170	1450	186
	309 L1	**4.09**	281	52000	239	40	180 to 250	N320TC-N360TC	5730	7570	1540	186
	309 L1	**5.25**	219	62700	225	40	180 to 250	N320TC-N360TC	6180	8150	1670	186
	309 L1	**6.23**	185	64700	195	40	180 to 250	N320TC-N360TC	6490	8570	1770	186
	309 L2	**12.3**	93	60800	96	30	132 to 180	N250TC - N280TC	7990	10500	2220	186
	309 L2	**14.7**	78	72600	96	30	132 to 180	N250TC - N280TC	8410	11100	2360	186
	309 L2	**17.4**	66	83100	93	30	132 to 180	N250TC - N280TC	8860	11700	2490	186
	309 L2	**21.8**	53	86400	77	30	132 to 180	N250TC - N280TC	9460	12500	2680	186
	309 L2	**25.4**	45	88900	68	30	132 to 180	N250TC - N280TC	9910	13100	2840	186
	309 L2	**28.0**	41	103700	72	30	132 to 180	N250TC - N280TC	10200	13500	2920	186
	309 L2	**30.7**	37	92200	58	30	132 to 180	N250TC - N280TC	10500	13800	3020	186
	309 L2	**32.6**	35	108600	65	30	132 to 180	N250TC - N280TC	10700	14100	3070	186
	309 L2	**38.6**	29.8	107000	54	30	132 to 180	N250TC - N280TC	11200	14800	3250	186
	309 L2	**46.7**	24.6	107000	44	30	132 to 180	N250TC - N280TC	11900	15700	3460	186
	309 L3	**51.3**	22.4	101200	40	17.4	71 to 160	N56C to N280TC	12200	16100	3590	186
	309 L3	**60.5**	19.0	119300	40	17.4	71 to 160	N56C to N280TC	12800	16900	3770	186
	309 L3	**74.1**	15.5	123500	33	17.4	71 to 160	N56C to N280TC	13700	18000	4050	186
	309 L3	**80.6**	14.3	131700	33	17.4	71 to 160	N56C to N280TC	14000	18500	4150	186
	309 L3	**93.0**	12.4	133300	29	17.4	71 to 160	N56C to N280TC	14600	19300	4360	186
	309 L3	**100**	11.5	130000	26	17.4	71 to 160	N56C to N280TC	15000	19700	4460	186
	309 L3	**113**	10.2	131700	23	17.4	71 to 160	N56C to N280TC	15500	20500	4640	186
	309 L3	**126**	9.1	144000	23	17.4	71 to 160	N56C to N280TC	16000	21100	4820	186
	309 L3	**139**	8.3	131700	19.0	17.4	71 to 160	N56C to N280TC	16500	21800	4980	186
	309 L3	**153**	7.5	107000	14.0	17.4	71 to 160	N56C to N280TC	17000	22400	5130	186
	309 L3	**162**	7.1	131700	16.3	17.4	71 to 160	N56C to N280TC	17300	22800	5240	186
	309 L3	**177**	6.5	101200	11.5	17.4	71 to 160	N56C to N280TC	17700	23400	5390	186
	309 L3	**202**	5.7	135800	13.5	17.4	71 to 160	N56C to N280TC	18400	24300	5650	186
	309 L3	**223**	5.2	108600	9.8	17.4	71 to 160	N56C to N280TC	19000	25100	5830	186
	309 L3	**239**	4.8	110300	9.2	17.4	71 to 160	N56C to N280TC	19400	25600	5960	186
	309 L3	**284**	4.1	130000	9.2	17.4	71 to 160	N56C to N280TC	20400	26900	6320	186
	309 L3	**336**	3.4	116900	7.0	17.4	71 to 160	N56C to N280TC	21500	28400	6680	186
	309 L4	**349**	3.3	169500	10.1	12.1	71 to 160	N56C to N280TC	21800	28700	6780	186
	309 L4	**405**	2.8	152300	7.8	12.1	71 to 160	N56C to N280TC	22800	30000	7120	186
	309 L4	**465**	2.5	155600	6.9	12.1	71 to 160	N56C to N280TC	23700	31200	7460	186
	309 L4	**509**	2.3	117700	4.8	12.1	71 to 160	N56C to N280TC	24400	32100	7690	186
	309 L4	**579**	2.0	170400	6.1	12.1	71 to 160	N56C to N280TC	25300	33400	8020	186
	309 L4	**654**	1.8	150600	4.8	12.1	71 to 160	N56C to N280TC	26300	34600	8360	186
	309 L4	**722**	1.6	172800	5.0	12.1	71 to 160	N56C to N280TC	27100	35700	8640	186
	309 L4	**801**	1.4	150600	3.9	12.1	71 to 160	N56C to N280TC	27900	36800	8930	186
	309 L4	**906**	1.3	148100	3.4	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**999**	1.2	150600	3.1	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**1149**	1.0	139900	2.5	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**1274**	0.90	104500	1.7	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**1380**	0.83	139900	2.1	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**1605**	0.72	139900	1.8	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**1723**	0.67	139900	1.7	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**2041**	0.56	139100	1.4	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
	309 L4	**2423**	0.47	139900	1.2	12.1	71 to 160	N56C to N280TC	28900	38100	9290	186
870	**309 L1**	**3.43**	254	46800	194	40	180 to 250	N320TC-N360TC	5850	7710	1560	186



309 L

180,000 in•lbs

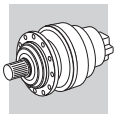
n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	Pt thermal capacity	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
870	**309 L1**	**4.09**	213	55900	194	40	180 to 250	N320TC-N360TC	6160	8140	1650	186
	309 L1	**5.25**	166	67400	183	40	180 to 250	N320TC-N360TC	6640	8760	1800	186
	309 L1	**6.23**	140	69600	159	40	180 to 250	N320TC-N360TC	6980	9210	1900	186
	309 L2	**12.3**	70	65400	78	30	132 to 180	N250TC-N280TC	8590	11300	2390	186
	309 L2	**14.7**	59	78100	78	30	132 to 180	N250TC-N280TC	9040	11900	2540	186
	309 L2	**17.4**	50	89400	76	30	132 to 180	N250TC-N280TC	9520	12500	2680	186
	309 L2	**21.8**	40	92900	63	30	132 to 180	N250TC-N280TC	10200	13400	2880	186
	309 L2	**25.4**	34	95600	55	30	132 to 180	N250TC-N280TC	10700	14000	3050	186
	309 L2	**28.0**	31	111500	58	30	132 to 180	N250TC-N280TC	11000	14500	3130	186
	309 L2	**30.7**	28.4	99100	47	30	132 to 180	N250TC-N280TC	11300	14900	3250	186
	309 L2	**32.6**	26.7	116800	53	30	132 to 180	N250TC-N280TC	11500	15100	3300	186
	309 L2	**38.6**	22.5	115000	44	30	132 to 180	N250TC-N280TC	12100	15900	3500	186
	309 L2	**46.7**	18.6	115000	36	30	132 to 180	N250TC-N280TC	12800	16900	3720	186
	309 L3	**51.3**	17.0	108900	32	17.4	71 to 160	N56C to N280TC	13200	17300	3860	186
	309 L3	**60.5**	14.4	128300	32	17.4	71 to 160	N56C to N280TC	13800	18200	4050	186
	309 L3	**74.1**	11.7	132700	27	17.4	71 to 160	N56C to N280TC	14700	19400	4360	186
	309 L3	**80.6**	10.8	141600	27	17.4	71 to 160	N56C to N280TC	15100	19900	4470	186
	309 L3	**93.0**	9.4	143400	23	17.4	71 to 160	N56C to N280TC	15700	20700	4690	186
	309 L3	**100**	8.7	139800	21	17.4	71 to 160	N56C to N280TC	16100	21200	4800	186
	309 L3	**113**	7.7	141600	19.0	17.4	71 to 160	N56C to N280TC	16700	22000	4990	186
	309 L3	**126**	6.9	154900	18.7	17.4	71 to 160	N56C to N280TC	17200	22700	5190	186
	309 L3	**139**	6.3	141600	15.5	17.4	71 to 160	N56C to N280TC	17700	23400	5350	186
	309 L3	**153**	5.7	115000	11.4	17.4	71 to 160	N56C to N280TC	18300	24100	5520	186
	309 L3	**162**	5.4	141600	13.3	17.4	71 to 160	N56C to N280TC	18600	24500	5630	186
	309 L3	**177**	4.9	108900	9.3	17.4	71 to 160	N56C to N280TC	19100	25100	5800	186
	309 L3	**202**	4.3	146000	11.0	17.4	71 to 160	N56C to N280TC	19800	26200	6080	186
	309 L3	**223**	3.9	116800	7.9	17.4	71 to 160	N56C to N280TC	20500	27000	6270	186
	309 L3	**239**	3.6	118600	7.5	17.4	71 to 160	N56C to N280TC	20900	27500	6410	186
	309 L3	**284**	3.1	139800	7.5	17.4	71 to 160	N56C to N280TC	22000	29000	6800	186
	309 L3	**336**	2.6	125700	5.7	17.4	71 to 160	N56C to N280TC	23100	30500	7180	186
	309 L4	**349**	2.5	182300	8.2	12.1	71 to 160	N56C to N280TC	23400	30800	7300	186
	309 L4	**405**	2.1	163700	6.3	12.1	71 to 160	N56C to N280TC	24500	32200	7660	186
	309 L4	**465**	1.9	167300	5.6	12.1	71 to 160	N56C to N280TC	25500	33600	8020	186
	309 L4	**509**	1.7	126600	3.9	12.1	71 to 160	N56C to N280TC	26200	34500	8270	186
	309 L4	**579**	1.5	183200	5.0	12.1	71 to 160	N56C to N280TC	27200	35900	8630	186
	309 L4	**654**	1.3	162000	3.9	12.1	71 to 160	N56C to N280TC	28200	37200	8990	186
	309 L4	**722**	1.2	185800	4.0	12.1	71 to 160	N56C to N280TC	29100	38300	9290	186
	309 L4	**801**	1.1	162000	3.2	12.1	71 to 160	N56C to N280TC	30000	39600	9600	186
	309 L4	**906**	0.96	159300	2.8	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**999**	0.87	162000	2.5	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**1149**	0.76	150400	2.1	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**1274**	0.68	112400	1.4	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**1380**	0.63	150400	1.7	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**1605**	0.54	150400	1.5	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**1723**	0.51	150400	1.4	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**2041**	0.43	149600	1.1	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186
	309 L4	**2423**	0.36	150400	0.97	12.1	71 to 160	N56C to N280TC	31100	41000	9990	186



3□ L

310 L — 250,000 in•lbs

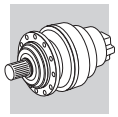
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**310 L1**	**4.09**	428	33400	234	47	200 to 250	N320TC-N360TC	6070	7590	2400	196
	310 L1	**5.25**	333	42900	234	47	200 to 250	N320TC-N360TC	6540	8170	2610	196
	310 L1	**6.23**	281	50900	234	47	200 to 250	N320TC-N360TC	6910	8620	2760	196
	310 L2	**14.7**	119	58400	117	30	160 to 225	N320TC-N360TC	8910	11100	3660	196
	310 L2	**17.4**	101	68900	117	30	160 to 225	N320TC-N360TC	9380	11700	3900	196
	310 L2	**21.8**	80	86400	117	30	160 to 225	N320TC-N360TC	10000	12500	4180	196
	310 L2	**25.4**	69	100400	117	30	160 to 225	N320TC-N360TC	10500	13100	4410	196
	310 L2	**28.0**	63	104500	110	30	160 to 225	N320TC-N360TC	10800	13500	4540	196
	310 L2	**30.7**	57	111100	107	30	160 to 225	N320TC-N360TC	11100	13900	4700	196
	310 L2	**32.6**	54	109500	99	30	160 to 225	N320TC-N360TC	11300	14100	4800	196
	310 L2	**38.6**	45	114400	87	30	160 to 225	N320TC-N360TC	11900	14800	5060	196
	310 L2	**46.7**	37	121000	76	30	160 to 225	N320TC-N360TC	12600	15700	5390	196
	310 L3	**53.0**	33	108600	63	24	132 to 180	N250TC-N280TC	13100	16300	5620	196
	310 L3	**62.6**	28.0	128400	63	24	132 to 180	N250TC-N280TC	13800	17200	5960	196
	310 L3	**73.9**	23.7	144900	60	24	132 to 180	N250TC-N280TC	14500	18100	6290	196
	310 L3	**80.3**	21.8	143200	54	24	132 to 180	N250TC-N280TC	14800	18500	6480	196
	310 L3	**91.3**	19.2	153900	51	24	132 to 180	N250TC-N280TC	15400	19200	6760	196
	310 L3	**101**	17.4	153100	46	24	132 to 180	N250TC-N280TC	15900	19800	6970	196
	310 L3	**110**	15.8	163000	45	24	132 to 180	N250TC-N280TC	16300	20400	7200	196
	310 L3	**119**	14.7	160500	41	24	132 to 180	N250TC-N280TC	16700	20800	7380	196
	310 L3	**130**	13.4	171200	40	24	132 to 180	N250TC-N280TC	17200	21400	7610	196
	310 L3	**142**	12.3	169500	36	24	132 to 180	N250TC-N280TC	17600	21900	7820	196
	310 L3	**164**	10.7	183500	34	24	132 to 180	N250TC-N280TC	18400	22900	8200	196
	310 L3	**177**	9.9	146500	25	24	132 to 180	N250TC-N280TC	18800	23500	8410	196
	310 L3	**202**	8.7	178600	27	24	132 to 180	N250TC-N280TC	19600	24400	8800	196
	310 L3	**230**	7.6	179400	24	24	132 to 180	N250TC-N280TC	20300	25400	9180	196
	310 L3	**249**	7.0	146500	17.9	24	132 to 180	N250TC-N280TC	20800	26000	9440	196
	310 L3	**295**	5.9	188500	19.5	24	132 to 180	N250TC-N280TC	21900	27400	9980	196
	310 L3	**350**	5.0	156400	13.6	24	132 to 180	N250TC-N280TC	23100	28800	10600	196
	310 L4	**389**	4.5	204900	16.6	14.8	71 to 160	N56C to N280TC	23800	29700	10900	196
	310 L4	**451**	3.9	229600	16.1	14.8	71 to 160	N56C to N280TC	24900	31000	11500	196
	310 L4	**507**	3.4	205800	12.8	14.8	71 to 160	N56C to N280TC	25800	32200	11900	196
	310 L4	**556**	3.1	222200	12.6	14.8	71 to 160	N56C to N280TC	26500	33100	12300	196
	310 L4	**637**	2.7	188500	9.3	14.8	71 to 160	N56C to N280TC	27600	34500	12900	196
	310 L4	**726**	2.4	218100	9.5	14.8	71 to 160	N56C to N280TC	28700	35800	13500	196
	310 L4	**818**	2.1	222200	8.6	14.8	71 to 160	N56C to N280TC	29700	37100	14000	196
	310 L4	**939**	1.9	222200	7.5	14.8	71 to 160	N56C to N280TC	31000	38700	14700	196
	310 L4	**1021**	1.7	230500	7.1	14.8	71 to 160	N56C to N280TC	31800	39700	15100	196
	310 L4	**1164**	1.5	235400	6.4	14.8	71 to 160	N56C to N280TC	33100	41300	15800	196
	310 L4	**1259**	1.4	230500	5.8	14.8	71 to 160	N56C to N280TC	33800	42300	16200	196
	310 L4	**1438**	1.2	214000	4.7	14.8	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1657**	1.1	181900	3.5	14.8	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1794**	0.98	214000	3.8	14.8	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**2022**	0.87	214000	3.3	14.8	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**2523**	0.69	214000	2.7	14.8	71 to 160	N56C to N280TC	35000	43600	16800	196
1450	**310 L1**	**4.09**	355	35900	208	47	200 to 250	N320TC-N360TC	6530	8170	2580	196
	310 L1	**5.25**	276	46100	208	47	200 to 250	N320TC-N360TC	7040	8790	2800	196
	310 L1	**6.23**	233	54700	208	47	200 to 250	N320TC-N360TC	7430	9270	2970	196
	310 L2	**14.7**	98	62700	104	30	160 to 225	N320TC-N360TC	9580	12000	3940	196
	310 L2	**17.4**	83	74100	104	30	160 to 225	N320TC-N360TC	10100	12600	4190	196
	310 L2	**21.8**	66	92900	104	30	160 to 225	N320TC-N360TC	10800	13400	4490	196
	310 L2	**25.4**	57	108000	104	30	160 to 225	N320TC-N360TC	11300	14100	4740	196
	310 L2	**28.0**	52	112400	98	30	160 to 225	N320TC-N360TC	11600	14500	4880	196
	310 L2	**30.7**	47	119500	95	30	160 to 225	N320TC-N360TC	12000	14900	5050	196
	310 L2	**32.6**	45	117700	89	30	160 to 225	N320TC-N360TC	12100	15200	5160	196



310 L

250,000 in•lbs

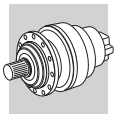
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**310 L2**	**38.6**	38	123000	78	30	160 to 225	N320TC-N360TC	12800	16000	5440	196
	310 L2	**46.7**	31	130100	68	30	160 to 225	N320TC-N360TC	13600	16900	5800	196
	310 L3	**53.0**	27.3	116800	56	24	132 to 180	N250TC-N280TC	14100	17600	6050	196
	310 L3	**62.6**	23.2	138100	56	24	132 to 180	N250TC-N280TC	14800	18500	6410	196
	310 L3	**73.9**	19.6	155800	53	24	132 to 180	N250TC-N280TC	15500	19400	6770	196
	310 L3	**80.3**	18.1	154000	48	24	132 to 180	N250TC-N280TC	15900	19900	6960	196
	310 L3	**91.3**	15.9	165500	46	24	132 to 180	N250TC-N280TC	16600	20700	7270	196
	310 L3	**101**	14.4	164600	41	24	132 to 180	N250TC-N280TC	17100	21300	7490	196
	310 L3	**110**	13.1	175200	40	24	132 to 180	N250TC-N280TC	17500	21900	7740	196
	310 L3	**119**	12.2	172600	37	24	132 to 180	N250TC-N280TC	17900	22400	7930	196
	310 L3	**130**	11.1	184100	36	24	132 to 180	N250TC-N280TC	18500	23000	8180	196
	310 L3	**142**	10.2	182300	33	24	132 to 180	N250TC-N280TC	18900	23600	8410	196
	310 L3	**164**	8.9	197400	30	24	132 to 180	N250TC-N280TC	19800	24600	8820	196
	310 L3	**177**	8.2	157500	22	24	132 to 180	N250TC-N280TC	20200	25200	9040	196
	310 L3	**202**	7.2	192000	24	24	132 to 180	N250TC-N280TC	21000	26200	9460	196
	310 L3	**230**	6.3	192900	21	24	132 to 180	N250TC-N280TC	21900	27300	9880	196
	310 L3	**249**	5.8	157500	16.0	24	132 to 180	N250TC-N280TC	22400	27900	10200	196
	310 L3	**295**	4.9	202700	17.4	24	132 to 180	N250TC-N280TC	23600	29400	10700	196
	310 L3	**350**	4.1	168100	12.1	24	132 to 180	N250TC-N280TC	24800	31000	11400	196
	310 L4	**389**	3.7	220400	14.8	14.8	71 to 160	N56C to N280TC	25600	32000	11800	196
	310 L4	**451**	3.2	246900	14.3	14.8	71 to 160	N56C to N280TC	26800	33400	12300	196
	310 L4	**507**	2.9	221200	11.4	14.8	71 to 160	N56C to N280TC	27700	34600	12800	196
	310 L4	**556**	2.6	238900	11.2	14.8	71 to 160	N56C to N280TC	28500	35500	13300	196
	310 L4	**637**	2.3	202700	8.3	14.8	71 to 160	N56C to N280TC	29700	37000	13900	196
	310 L4	**726**	2.0	234500	8.4	14.8	71 to 160	N56C to N280TC	30900	38500	14500	196
	310 L4	**818**	1.8	238900	7.6	14.8	71 to 160	N56C to N280TC	32000	39900	15100	196
	310 L4	**939**	1.5	238900	6.7	14.8	71 to 160	N56C to N280TC	33300	41600	15800	196
	310 L4	**1021**	1.4	247800	6.3	14.8	71 to 160	N56C to N280TC	34200	42700	16200	196
	310 L4	**1164**	1.2	253100	5.7	14.8	71 to 160	N56C to N280TC	35500	44400	16900	196
	310 L4	**1259**	1.2	247800	5.1	14.8	71 to 160	N56C to N280TC	36400	45400	17400	196
	310 L4	**1438**	1.0	230100	4.2	14.8	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1657**	0.88	195600	3.1	14.8	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1794**	0.81	230100	3.4	14.8	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**2022**	0.72	230100	3.0	14.8	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**2523**	0.57	230100	2.4	14.8	71 to 160	N56C to N280TC	37600	46900	18000	196
1150	**310 L1**	**4.09**	281	52000	239	56	200 to 250	N320TC-N360TC	6940	8670	2790	196
	310 L1	**5.25**	219	66700	239	56	200 to 250	N320TC-N360TC	7490	9330	3040	196
	310 L1	**6.23**	185	79200	239	56	200 to 250	N320TC-N360TC	7880	9830	3200	196
	310 L2	**14.7**	78	90500	119	36	160 to 225	N320TC-N360TC	10200	12700	4260	196
	310 L2	**17.4**	66	107000	119	36	160 to 225	N320TC-N360TC	10700	13300	4490	196
	310 L2	**21.8**	53	114400	102	36	160 to 225	N320TC-N360TC	11500	14300	4850	196
	310 L2	**25.4**	45	120200	92	36	160 to 225	N320TC-N360TC	12000	15000	5110	196
	310 L2	**28.0**	41	119300	83	36	160 to 225	N320TC-N360TC	12400	15400	5260	196
	310 L2	**30.7**	37	126700	80	36	160 to 225	N320TC-N360TC	12700	15800	5440	196
	310 L2	**32.6**	35	124300	74	36	160 to 225	N320TC-N360TC	12900	16100	5550	196
	310 L2	**38.6**	29.8	130000	65	36	160 to 225	N320TC-N360TC	13600	17000	5880	196
	310 L2	**46.7**	24.6	138300	57	36	160 to 225	N320TC-N360TC	14400	17900	6240	196
	310 L3	**53.0**	21.7	149800	57	30	132 to 180	N250TC-N280TC	15000	18700	6530	196
	310 L3	**62.6**	18.4	157200	50	30	132 to 180	N250TC-N280TC	15700	19600	6890	196
	310 L3	**73.9**	15.6	165400	45	30	132 to 180	N250TC-N280TC	16500	20600	7300	196
	310 L3	**80.3**	14.3	163000	41	30	132 to 180	N250TC-N280TC	16900	21100	7480	196
	310 L3	**91.3**	12.6	176100	39	30	132 to 180	N250TC-N280TC	17600	22000	7820	196
	310 L3	**101**	11.4	174500	35	30	132 to 180	N250TC-N280TC	18100	22600	8070	196
	310 L3	**110**	10.4	186800	34	30	132 to 180	N250TC-N280TC	18600	23300	8330	196
	310 L3	**119**	9.7	178600	30	30	132 to 180	N250TC-N280TC	19100	23800	8540	196



310 L

250,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**310 L3**	**130**	8.8	195900	30	30	132 to 180	N250TC-N280TC	19600	24400	8800	196
	310 L3	**142**	8.1	179400	25	30	132 to 180	N250TC-N280TC	20100	25000	9060	196
	310 L3	**164**	7.0	209900	26	30	132 to 180	N250TC-N280TC	21000	26100	9490	196
	310 L3	**177**	6.5	148100	16.8	30	132 to 180	N250TC-N280TC	21500	26800	9750	196
	310 L3	**202**	5.7	190100	18.9	30	132 to 180	N250TC-N280TC	22300	27900	10200	196
	310 L3	**230**	5.0	179400	15.6	30	132 to 180	N250TC-N280TC	23200	29000	10700	196
	310 L3	**249**	4.6	160500	12.9	30	132 to 180	N250TC-N280TC	23800	29700	10900	196
	310 L3	**295**	3.9	202500	13.7	30	132 to 180	N250TC-N280TC	25000	31200	11600	196
	310 L3	**350**	3.3	172800	9.9	30	132 to 180	N250TC-N280TC	26300	32900	12300	196
	310 L4	**389**	3.0	204900	10.9	17.4	71 to 160	N56C to N280TC	27200	33900	12700	196
	310 L4	**451**	2.6	245300	11.3	17.4	71 to 160	N56C to N280TC	28400	35400	13300	196
	310 L4	**507**	2.3	221400	9.0	17.4	71 to 160	N56C to N280TC	29400	36700	13900	196
	310 L4	**556**	2.1	222200	8.3	17.4	71 to 160	N56C to N280TC	30200	37800	14300	196
	310 L4	**637**	1.8	188500	6.1	17.4	71 to 160	N56C to N280TC	31500	39300	14900	196
	310 L4	**726**	1.6	234600	6.7	17.4	71 to 160	N56C to N280TC	32800	40900	15600	196
	310 L4	**818**	1.4	238700	6.1	17.4	71 to 160	N56C to N280TC	34000	42400	16300	196
	310 L4	**939**	1.2	222200	4.9	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1021**	1.1	241200	4.9	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1164**	0.99	242800	4.3	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1259**	0.91	230500	3.8	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1438**	0.80	214000	3.1	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1657**	0.69	197500	2.5	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**1794**	0.64	214000	2.5	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**2022**	0.57	214000	2.2	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
	310 L4	**2523**	0.46	214000	1.8	17.4	71 to 160	N56C to N280TC	35000	43600	16800	196
870	**310 L1**	**4.09**	213	55900	195	56	200 to 250	N320TC-N360TC	7460	9320	3000	196
	310 L1	**5.25**	166	71800	195	56	200 to 250	N320TC-N360TC	8050	10000	3270	196
	310 L1	**6.23**	140	85100	194	56	200 to 250	N320TC-N360TC	8480	10600	3440	196
	310 L2	**14.7**	59	97300	97	36	160 to 225	N320TC-N360TC	10900	13600	4580	196
	310 L2	**17.4**	50	115000	97	36	160 to 225	N320TC-N360TC	11500	14400	4830	196
	310 L2	**21.8**	40	123000	83	36	160 to 225	N320TC-N360TC	12300	15400	5220	196
	310 L2	**25.4**	34	129200	75	36	160 to 225	N320TC-N360TC	12900	16100	5490	196
	310 L2	**28.0**	31	128300	67	36	160 to 225	N320TC-N360TC	13300	16600	5660	196
	310 L2	**30.7**	28.4	136300	65	36	160 to 225	N320TC-N360TC	13600	17000	5850	196
	310 L2	**32.6**	26.7	133600	60	36	160 to 225	N320TC-N360TC	13900	17300	5960	196
	310 L2	**38.6**	22.5	139800	53	36	160 to 225	N320TC-N360TC	14600	18300	6320	196
	310 L2	**46.7**	18.6	148700	47	36	160 to 225	N320TC-N360TC	15500	19300	6710	196
	310 L3	**53.0**	16.4	161100	46	30	132 to 180	N250TC-N280TC	16100	20100	7020	196
	310 L3	**62.6**	13.9	169000	41	30	132 to 180	N250TC-N280TC	16900	21100	7410	196
	310 L3	**73.9**	11.8	177900	37	30	132 to 180	N250TC-N280TC	17700	22200	7850	196
	310 L3	**80.3**	10.8	175200	33	30	132 to 180	N250TC-N280TC	18200	22700	8040	196
	310 L3	**91.3**	9.5	189400	31	30	132 to 180	N250TC-N280TC	18900	23600	8410	196
	310 L3	**101**	8.6	187600	28	30	132 to 180	N250TC-N280TC	19500	24300	8680	196
	310 L3	**110**	7.9	200900	28	30	132 to 180	N250TC-N280TC	20000	25000	8960	196
	310 L3	**119**	7.3	192000	24	30	132 to 180	N250TC-N280TC	20500	25600	9180	196
	310 L3	**130**	6.7	210600	24	30	132 to 180	N250TC-N280TC	21100	26300	9460	196
	310 L3	**142**	6.1	192900	21	30	132 to 180	N250TC-N280TC	21600	26900	9740	196
	310 L3	**164**	5.3	225700	21	30	132 to 180	N250TC-N280TC	22500	28100	10200	196
	310 L3	**177**	4.9	159300	13.6	30	132 to 180	N250TC-N280TC	23100	28800	10500	196
	310 L3	**202**	4.3	204400	15.4	30	132 to 180	N250TC-N280TC	24000	30000	11000	196
	310 L3	**230**	3.8	192900	12.7	30	132 to 180	N250TC-N280TC	25000	31200	11500	196
	310 L3	**249**	3.5	172600	10.5	30	132 to 180	N250TC-N280TC	25600	31900	11800	196
	310 L3	**295**	2.9	217700	11.2	30	132 to 180	N250TC-N280TC	26900	33600	12400	196
	310 L3	**350**	2.5	185800	8.0	30	132 to 180	N250TC-N280TC	28300	35300	13200	196
	310 L4	**389**	2.2	220400	8.9	17.4	71 to 160	N56C to N280TC	29200	36500	13600	196



310 L

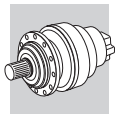
250,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**310 L4**	**451**	1.9	263700	9.2	17.4	71 to 160	N56C to N280TC	30500	38100	14300	196
	310 L4	**507**	1.7	238100	7.4	17.4	71 to 160	N56C to N280TC	31600	39500	14900	196
	310 L4	**556**	1.6	238900	6.7	17.4	71 to 160	N56C to N280TC	32500	40600	15400	196
	310 L4	**637**	1.4	202700	5.0	17.4	71 to 160	N56C to N280TC	33900	42300	16100	196
	310 L4	**726**	1.2	252200	5.5	17.4	71 to 160	N56C to N280TC	35200	44000	16800	196
	310 L4	**818**	1.1	256600	4.9	17.4	71 to 160	N56C to N280TC	36500	45600	17500	196
	310 L4	**939**	0.93	238900	4.0	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1021**	0.85	259300	4.0	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1164**	0.75	261100	3.5	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1259**	0.69	247800	3.1	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1438**	0.61	230100	2.5	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1657**	0.53	212400	2.0	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**1794**	0.48	230100	2.0	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**2022**	0.43	230100	1.8	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196
	310 L4	**2523**	0.34	230100	1.4	17.4	71 to 160	N56C to N280TC	37600	46900	18000	196

311 L

400,000 in•lbs

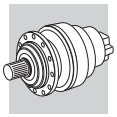
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**311 L2**	**14.0**	125	74100	156	35	180 to 250	N320TC-N360TC	10400	12900	3610	204
	311 L2	**16.7**	105	88100	156	35	180 to 250	N320TC-N360TC	10900	13600	3840	204
	311 L2	**18.0**	97	95500	157	35	180 to 250	N320TC-N360TC	11200	13900	3920	204
	311 L2	**21.5**	81	113600	156	35	180 to 250	N320TC-N360TC	11800	14600	4180	204
	311 L2	**25.5**	69	135000	156	35	180 to 250	N320TC-N360TC	12400	15400	4410	204
	311 L2	**27.6**	63	145700	156	35	180 to 250	N320TC-N360TC	12700	15800	4540	204
	311 L2	**32.7**	53	159700	144	35	180 to 250	N320TC-N360TC	13400	16600	4800	204
	311 L2	**38.8**	45	165400	126	35	180 to 250	N320TC-N360TC	14100	17500	5080	204
	311 L3	**50.5**	35	155600	94	24	132 to 180	N250TC-N280TC	15200	18900	5550	204
	311 L3	**60.2**	29.0	185200	94	24	132 to 180	N250TC-N280TC	16100	19900	5880	204
	311 L3	**71.1**	24.6	208200	89	24	132 to 180	N250TC-N280TC	16900	21000	6220	204
	311 L3	**77.3**	22.6	214000	84	24	132 to 180	N250TC-N280TC	17300	21500	6400	204
	311 L3	**87.0**	20.1	221400	78	24	132 to 180	N250TC-N280TC	17900	22300	6630	204
	311 L3	**104**	16.9	233700	69	24	132 to 180	N250TC-N280TC	18900	23500	7040	204
	311 L3	**115**	15.3	240300	64	24	132 to 180	N250TC-N280TC	19500	24200	7280	204
	311 L3	**126**	13.9	246900	60	24	132 to 180	N250TC-N280TC	20000	24900	7510	204
	311 L3	**133**	13.1	251900	58	24	132 to 180	N250TC-N280TC	20400	25300	7660	204
	311 L3	**147**	11.9	250200	52	24	132 to 180	N250TC-N280TC	21000	26100	7920	204
	311 L3	**161**	10.9	266700	51	24	132 to 180	N250TC-N280TC	21600	26800	8150	204
	311 L3	**171**	10.2	261700	47	24	132 to 180	N250TC-N280TC	21900	27300	8310	204
	311 L3	**191**	9.2	280700	45	24	132 to 180	N250TC-N280TC	22700	28200	8640	204
	311 L3	**203**	8.6	263400	40	24	132 to 180	N250TC-N280TC	23100	28700	8800	204
	311 L3	**245**	7.1	263400	33	24	132 to 180	N250TC-N280TC	24500	30400	9390	204
	311 L3	**291**	6.0	222200	23	24	132 to 180	N250TC-N280TC	25800	32000	9930	204
	311 L4	**348**	5.0	335800	30	14.8	71 to 160	N56C to N280TC	27200	33700	10600	204
	311 L4	**410**	4.3	353100	27	14.8	71 to 160	N56C to N280TC	28500	35400	11100	204
	311 L4	**512**	3.4	370400	23	14.8	71 to 160	N56C to N280TC	30500	37900	12000	204



3□ L

311 L — 400,000 in•lbs

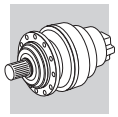
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**311 L4**	**568**	3.1	343200	19.1	14.8	71 to 160	N56C to N280TC	31500	39100	12400	204
	311 L4	**626**	2.8	293800	14.8	14.8	71 to 160	N56C to N280TC	32400	40300	12800	204
	311 L4	**724**	2.4	370400	16.1	14.8	71 to 160	N56C to N280TC	33800	42000	13500	204
	311 L4	**825**	2.1	343200	13.1	14.8	71 to 160	N56C to N280TC	35200	43700	14100	204
	311 L4	**904**	1.9	370400	12.9	14.8	71 to 160	N56C to N280TC	36200	44900	14500	204
	311 L4	**986**	1.8	332500	10.6	14.8	71 to 160	N56C to N280TC	37100	46100	14900	204
	311 L4	**1103**	1.6	284000	8.1	14.8	71 to 160	N56C to N280TC	38400	47700	15500	204
	311 L4	**1230**	1.4	345700	8.9	14.8	71 to 160	N56C to N280TC	39700	49300	16100	204
	311 L4	**1415**	1.2	353900	7.9	14.8	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**1680**	1.0	279800	5.3	14.8	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**1766**	0.99	353900	6.3	14.8	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**2096**	0.83	279800	4.2	14.8	71 to 160	N56C to N280TC	41300	51200	16800	204
1450	**311 L2**	**14.0**	103	79600	139	35	180 to 250	N320TC-N360TC	11200	13800	3880	204
	311 L2	**16.7**	87	94700	138	35	180 to 250	N320TC-N360TC	11800	14600	4130	204
	311 L2	**18.0**	81	102700	140	35	180 to 250	N320TC-N360TC	12000	14900	4220	204
	311 L2	**21.5**	68	122100	139	35	180 to 250	N320TC-N360TC	12700	15700	4490	204
	311 L2	**25.5**	57	145100	139	35	180 to 250	N320TC-N360TC	13300	16600	4740	204
	311 L2	**27.6**	53	156600	139	35	180 to 250	N320TC-N360TC	13600	17000	4880	204
	311 L2	**32.7**	44	171700	128	35	180 to 250	N320TC-N360TC	14400	17900	5160	204
	311 L2	**38.8**	37	177900	112	35	180 to 250	N320TC-N360TC	15100	18800	5460	204
	311 L3	**50.5**	28.7	167300	84	24	132 to 180	N250TC-N280TC	16400	20300	5960	204
	311 L3	**60.2**	24.1	199100	84	24	132 to 180	N250TC-N280TC	17300	21400	6320	204
	311 L3	**71.1**	20.4	223900	80	24	132 to 180	N250TC-N280TC	18100	22500	6690	204
	311 L3	**77.3**	18.8	230100	75	24	132 to 180	N250TC-N280TC	18600	23100	6880	204
	311 L3	**87.0**	16.7	238100	69	24	132 to 180	N250TC-N280TC	19300	23900	7130	204
	311 L3	**104**	14.0	251300	61	24	132 to 180	N250TC-N280TC	20300	25200	7570	204
	311 L3	**115**	12.7	258400	57	24	132 to 180	N250TC-N280TC	20900	26000	7820	204
	311 L3	**126**	11.6	265500	53	24	132 to 180	N250TC-N280TC	21500	26700	8070	204
	311 L3	**133**	10.9	270800	51	24	132 to 180	N250TC-N280TC	21900	27200	8240	204
	311 L3	**147**	9.9	269000	46	24	132 to 180	N250TC-N280TC	22500	28000	8520	204
	311 L3	**161**	9.0	286700	45	24	132 to 180	N250TC-N280TC	23200	28800	8770	204
	311 L3	**171**	8.5	281400	42	24	132 to 180	N250TC-N280TC	23600	29300	8930	204
	311 L3	**191**	7.6	301800	40	24	132 to 180	N250TC-N280TC	24400	30300	9290	204
	311 L3	**203**	7.1	283200	35	24	132 to 180	N250TC-N280TC	24800	30900	9460	204
	311 L3	**245**	5.9	283200	29	24	132 to 180	N250TC-N280TC	26300	32700	10100	204
	311 L3	**291**	5.0	238900	21	24	132 to 180	N250TC-N280TC	27700	34400	10700	204
	311 L4	**348**	4.2	361100	27	14.8	71 to 160	N56C to N280TC	29200	36300	11300	204
	311 L4	**410**	3.5	379700	24	14.8	71 to 160	N56C to N280TC	30700	38100	12000	204
	311 L4	**512**	2.8	398200	20	14.8	71 to 160	N56C to N280TC	32800	40700	12900	204
	311 L4	**568**	2.6	369000	17.0	14.8	71 to 160	N56C to N280TC	33900	42000	13300	204
	311 L4	**626**	2.3	315900	13.2	14.8	71 to 160	N56C to N280TC	34800	43300	13800	204
	311 L4	**724**	2.0	398200	14.4	14.8	71 to 160	N56C to N280TC	36400	45200	14500	204
	311 L4	**825**	1.8	369000	11.7	14.8	71 to 160	N56C to N280TC	37900	47000	15100	204
	311 L4	**904**	1.6	398200	11.5	14.8	71 to 160	N56C to N280TC	38900	48300	15600	204
	311 L4	**986**	1.5	357500	9.5	14.8	71 to 160	N56C to N280TC	39900	49600	16000	204
	311 L4	**1103**	1.3	305300	7.2	14.8	71 to 160	N56C to N280TC	41300	51300	16600	204
	311 L4	**1230**	1.2	371700	7.9	14.8	71 to 160	N56C to N280TC	42700	53000	17300	204
	311 L4	**1415**	1.0	380500	7.0	14.8	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**1680**	0.86	300900	4.7	14.8	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**1766**	0.82	380500	5.6	14.8	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**2096**	0.69	300900	3.8	14.8	71 to 160	N56C to N280TC	44400	55100	18000	204
1150	**311 L1**	**4.09**	281	69300	319	54	—	N400TC	8170	10200	2790	204
	311 L1	**5.25**	219	88900	319	54	—	N400TC	8800	11000	3020	204
	311 L1	**6.23**	185	105300	318	54	—	N400TC	9280	11500	3200	204
	311 L2	**14.0**	82	115200	159	42	180 to 250	N320TC-N360TC	11900	14700	4180	204



311 L

400,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**311 L2**	**16.7**	69	137400	159	42	180 to 250	N320TC-N360TC	12500	15500	4440	204
	311 L2	**18.0**	64	148100	160	42	180 to 250	N320TC-N360TC	12800	15800	4540	204
	311 L2	**21.5**	54	166300	150	42	180 to 250	N320TC-N360TC	13500	16700	4820	204
	311 L2	**25.5**	45	174500	133	42	180 to 250	N320TC-N360TC	14200	17600	5110	204
	311 L2	**27.6**	42	172800	122	42	180 to 250	N320TC-N360TC	14500	18000	5240	204
	311 L2	**32.7**	35	181900	108	42	180 to 250	N320TC-N360TC	15300	18900	5550	204
	311 L2	**38.8**	29.6	189300	95	42	180 to 250	N320TC-N360TC	16100	19900	5880	204
	311 L3	**50.5**	22.8	214800	85	30	132 to 180	N250TC-N280TC	17400	21600	6420	204
	311 L3	**60.2**	19.1	226300	75	30	132 to 180	N250TC-N280TC	18300	22800	6810	204
	311 L3	**71.1**	16.2	237900	67	30	132 to 180	N250TC-N280TC	19300	23900	7200	204
	311 L3	**77.3**	14.9	243600	63	30	132 to 180	N250TC-N280TC	19800	24500	7400	204
	311 L3	**87.0**	13.2	252700	58	30	132 to 180	N250TC-N280TC	20500	25400	7690	204
	311 L3	**104**	11.1	266700	52	30	132 to 180	N250TC-N280TC	21600	26800	8150	204
	311 L3	**115**	10.0	274900	48	30	132 to 180	N250TC-N280TC	22200	27600	8440	204
	311 L3	**126**	9.2	282300	45	30	132 to 180	N250TC-N280TC	22800	28400	8690	204
	311 L3	**133**	8.6	287200	43	30	132 to 180	N250TC-N280TC	23300	28900	8870	204
	311 L3	**147**	7.8	263400	36	30	132 to 180	N250TC-N280TC	24000	29700	9160	204
	311 L3	**161**	7.1	304500	38	30	132 to 180	N250TC-N280TC	24600	30600	9440	204
	311 L3	**171**	6.7	263400	31	30	132 to 180	N250TC-N280TC	25100	31100	9650	204
	311 L3	**191**	6.0	284000	30	30	132 to 180	N250TC-N280TC	25900	32200	10000	204
	311 L3	**203**	5.7	271600	27	30	132 to 180	N250TC-N280TC	26400	32800	10200	204
	311 L3	**245**	4.7	280700	23	30	132 to 180	N250TC-N280TC	27900	34700	10900	204
	311 L3	**291**	3.9	234600	16.2	30	132 to 180	N250TC-N280TC	29400	36500	11500	204
	311 L4	**348**	3.3	370400	22	17.4	71 to 160	N56C to N280TC	31000	38500	12200	204
	311 L4	**410**	2.8	370400	18.7	17.4	71 to 160	N56C to N280TC	32600	40500	12900	204
	311 L4	**512**	2.2	370400	15.0	17.4	71 to 160	N56C to N280TC	34800	43300	13900	204
	311 L4	**568**	2.0	343200	12.5	17.4	71 to 160	N56C to N280TC	35900	44600	14400	204
	311 L4	**626**	1.8	293800	9.7	17.4	71 to 160	N56C to N280TC	37000	46000	14900	204
	311 L4	**724**	1.6	370400	10.6	17.4	71 to 160	N56C to N280TC	38700	48000	15600	204
	311 L4	**825**	1.4	357200	9.0	17.4	71 to 160	N56C to N280TC	40200	49900	16300	204
	311 L4	**904**	1.3	370400	8.5	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**986**	1.2	353900	7.4	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**1103**	1.0	298800	5.6	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**1230**	0.93	353900	6.0	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**1415**	0.81	353900	5.2	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**1680**	0.68	279800	3.5	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**1766**	0.65	353900	4.2	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
	311 L4	**2096**	0.55	279800	2.8	17.4	71 to 160	N56C to N280TC	41300	51200	16800	204
870	**311 L1**	**4.09**	213	74500	259	54	—	N400TC	8790	10900	3000	204
	311 L1	**5.25**	166	95600	259	54	—	N400TC	9470	11800	3250	204
	311 L1	**6.23**	140	113300	259	54	—	N400TC	9970	12400	3440	204
	311 L2	**14.0**	62	123900	130	42	180 to 250	N320TC-N360TC	12700	15800	4490	204
	311 L2	**16.7**	52	147800	130	42	180 to 250	N320TC-N360TC	13400	16700	4770	204
	311 L2	**18.0**	48	159300	130	42	180 to 250	N320TC-N360TC	13700	17000	4880	204
	311 L2	**21.5**	41	178800	122	42	180 to 250	N320TC-N360TC	14500	18000	5190	204
	311 L2	**25.5**	34	187600	108	42	180 to 250	N320TC-N360TC	15200	18900	5490	204
	311 L2	**27.6**	32	185800	99	42	180 to 250	N320TC-N360TC	15600	19400	5630	204
	311 L2	**32.7**	26.6	195600	88	42	180 to 250	N320TC-N360TC	16400	20400	5960	204
	311 L2	**38.8**	22.4	203500	77	42	180 to 250	N320TC-N360TC	17300	21400	6320	204
	311 L3	**50.5**	17.2	231000	69	30	132 to 180	N250TC-N280TC	18700	23200	6910	204
	311 L3	**60.2**	14.4	243400	61	30	132 to 180	N250TC-N280TC	19700	24500	7320	204
	311 L3	**71.1**	12.2	255800	55	30	132 to 180	N250TC-N280TC	20700	25700	7740	204
	311 L3	**77.3**	11.3	262000	51	30	132 to 180	N250TC-N280TC	21200	26400	7960	204
	311 L3	**87.0**	10.0	271700	47	30	132 to 180	N250TC-N280TC	22000	27300	8270	204
	311 L3	**104**	8.4	286700	42	30	132 to 180	N250TC-N280TC	23200	28800	8770	204

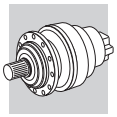


311 L — 400,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**311 L3**	**115**	7.6	295600	39	30	132 to 180	N250TC-N280TC	23900	29700	9070	204
	311 L3	**126**	6.9	303600	37	30	132 to 180	N250TC-N280TC	24600	30500	9350	204
	311 L3	**133**	6.5	308900	35	30	132 to 180	N250TC-N280TC	25000	31100	9540	204
	311 L3	**147**	5.9	283200	29	30	132 to 180	N250TC-N280TC	25800	32000	9850	204
	311 L3	**161**	5.4	327400	31	30	132 to 180	N250TC-N280TC	26500	32900	10200	204
	311 L3	**171**	5.1	283200	25	30	132 to 180	N250TC-N280TC	27000	33500	10400	204
	311 L3	**191**	4.6	305300	24	30	132 to 180	N250TC-N280TC	27900	34600	10800	204
	311 L3	**203**	4.3	292000	22	30	132 to 180	N250TC-N280TC	28400	35200	11000	204
	311 L3	**245**	3.5	301800	18.7	30	132 to 180	N250TC-N280TC	30000	37300	11700	204
	311 L3	**291**	3.0	252200	13.1	30	132 to 180	N250TC-N280TC	31600	39300	12400	204
	311 L4	**348**	2.5	398200	18.0	17.4	71 to 160	N56C to N280TC	33300	41400	13100	204
	311 L4	**410**	2.1	398200	15.2	17.4	71 to 160	N56C to N280TC	35000	43500	13900	204
	311 L4	**512**	1.7	398200	12.2	17.4	71 to 160	N56C to N280TC	37500	46500	15000	204
	311 L4	**568**	1.5	369000	10.2	17.4	71 to 160	N56C to N280TC	38600	48000	15500	204
	311 L4	**626**	1.4	315900	7.9	17.4	71 to 160	N56C to N280TC	39800	49400	16000	204
	311 L4	**724**	1.2	398200	8.6	17.4	71 to 160	N56C to N280TC	41600	51600	16800	204
	311 L4	**825**	1.1	384100	7.3	17.4	71 to 160	N56C to N280TC	43200	53700	17500	204
	311 L4	**904**	0.96	398200	6.9	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**986**	0.88	380500	6.1	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**1103**	0.79	321300	4.6	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**1230**	0.71	380500	4.9	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**1415**	0.61	380500	4.2	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**1680**	0.52	300900	2.8	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**1766**	0.49	380500	3.4	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204
	311 L4	**2096**	0.41	300900	2.3	17.4	71 to 160	N56C to N280TC	44400	55100	18000	204

313 L — 485,000 in•lbs

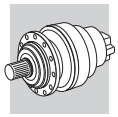
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**313 L2**	**14.2**	123	97900	204	40	180 to 250	N320TC-N360TC	12700	15300	4460	212
	313 L2	**16.9**	103	116000	202	40	180 to 250	N320TC-N360TC	13400	16100	4750	212
	313 L2	**18.5**	95	126700	202	40	180 to 250	N320TC-N360TC	13800	16600	4880	212
	313 L2	**21.8**	80	149000	202	40	180 to 250	N320TC-N360TC	14500	17400	5160	212
	313 L2	**25.8**	68	177000	203	40	180 to 250	N320TC-N360TC	15200	18300	5440	212
	313 L2	**28.4**	62	195100	203	40	180 to 250	N320TC-N360TC	15700	18800	5620	212
	313 L2	**33.6**	52	231300	203	40	180 to 250	N320TC-N360TC	16500	19800	5960	212
	313 L2	**40.5**	43	240300	175	40	180 to 250	N320TC-N360TC	17400	21000	6350	212
	313 L3	**51.1**	34	157200	94	24	132 to 200	N250TC-N280TC	18700	22500	6840	212
	313 L3	**61.0**	28.7	187700	94	24	132 to 200	N250TC-N280TC	19700	23700	7280	212
	313 L3	**72.0**	24.3	221400	94	24	132 to 200	N250TC-N280TC	20700	24900	7690	212
	313 L3	**78.3**	22.3	240300	94	24	132 to 200	N250TC-N280TC	21200	25600	7890	212
	313 L3	**92.4**	18.9	284000	94	24	132 to 200	N250TC-N280TC	22300	26900	8330	212
	313 L3	**110**	16.0	337400	94	24	132 to 200	N250TC-N280TC	23500	28300	8820	212
	313 L3	**120**	14.5	342400	87	24	132 to 200	N250TC-N280TC	24200	29100	9110	212
	313 L3	**135**	13.0	365400	83	24	132 to 200	N250TC-N280TC	25000	30100	9470	212
	313 L3	**151**	11.6	366300	74	24	132 to 200	N250TC-N280TC	25900	31100	9830	212



313 L

485,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**313 L3**	**163**	10.7	387700	73	24	132 to 200	N250TC-N280TC	26500	31800	10100	212
	313 L3	**176**	10.0	370400	64	24	132 to 200	N250TC-N280TC	27100	32600	10300	212
	313 L3	**194**	9.0	407400	64	24	132 to 200	N250TC-N280TC	27900	33500	10700	212
	313 L3	**209**	8.4	370400	54	24	132 to 200	N250TC-N280TC	28500	34300	10900	212
	313 L3	**252**	6.9	370400	45	24	132 to 200	N250TC-N280TC	30200	36300	11700	212
	313 L3	**212**	5.8	321000	32	24	132 to 200	N250TC-N280TC	31900	38400	12400	212
	313 L4	**352**	5.0	388500	35	14.8	71 to 160	N56C to N280TC	33300	40100	13000	212
	313 L4	**394**	4.4	452700	36	14.8	71 to 160	N56C to N280TC	34500	41500	13500	212
	313 L4	**452**	3.9	452700	32	14.8	71 to 160	N56C to N280TC	35900	43200	14200	212
	313 L4	**514**	3.4	391800	24	14.8	71 to 160	N56C to N280TC	37300	44900	14800	212
	313 L4	**564**	3.1	452700	25	14.8	71 to 160	N56C to N280TC	38400	46200	15200	212
	313 L4	**633**	2.8	429600	21	14.8	71 to 160	N56C to N280TC	39800	47800	15800	212
	313 L4	**695**	2.5	409100	18.6	14.8	71 to 160	N56C to N280TC	40900	49200	16300	212
	313 L4	**790**	2.2	429600	17.2	14.8	71 to 160	N56C to N280TC	42500	51100	17100	212
	313 L4	**889**	2.0	423900	15.0	14.8	71 to 160	N56C to N280TC	44000	53000	17700	212
	313 L4	**1014**	1.7	432100	13.4	14.8	71 to 160	N56C to N280TC	45800	55100	18500	212
	313 L4	**1117**	1.6	429600	12.1	14.8	71 to 160	N56C to N280TC	47100	56700	19100	212
	313 L4	**1266**	1.4	446100	11.1	14.8	71 to 160	N56C to N280TC	49000	58900	20000	212
	313 L4	**1394**	1.3	434600	9.8	14.8	71 to 160	N56C to N280TC	50400	60600	20600	212
	313 L4	**1502**	1.2	452700	9.5	14.8	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**1817**	0.96	452700	7.9	14.8	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**2187**	0.80	403300	5.8	14.8	71 to 160	N56C to N280TC	50500	60700	20600	212
1450	**313 L2**	**14.2**	102	105300	181	40	180 to 250	N320TC-N360TC	13700	16500	4800	212
	313 L2	**16.9**	86	124800	180	40	180 to 250	N320TC-N360TC	14400	17300	5100	212
	313 L2	**18.5**	78	136300	180	40	180 to 250	N320TC-N360TC	14800	17800	5240	212
	313 L2	**21.8**	67	160200	180	40	180 to 250	N320TC-N360TC	15500	18700	5550	212
	313 L2	**25.8**	56	190300	180	40	180 to 250	N320TC-N360TC	16400	19700	5850	212
	313 L2	**28.4**	51	209700	181	40	180 to 250	N320TC-N360TC	16800	20300	6050	212
	313 L2	**33.6**	43	248700	181	40	180 to 250	N320TC-N360TC	17700	21300	6410	212
	313 L2	**40.5**	36	258400	156	40	180 to 250	N320TC-N360TC	18700	22500	6820	212
	313 L3	**51.1**	28.4	169000	84	24	132 to 200	N250TC-N280TC	20100	24200	7350	212
	313 L3	**61.0**	23.8	201800	84	24	132 to 200	N250TC-N280TC	21200	25500	7820	212
	313 L3	**72.0**	20.1	238100	84	24	132 to 200	N250TC-N280TC	22300	26800	8270	212
	313 L3	**78.3**	18.5	258400	83	24	132 to 200	N250TC-N280TC	22800	27500	8490	212
	313 L3	**92.4**	15.7	305300	84	24	132 to 200	N250TC-N280TC	24000	28900	8960	212
	313 L3	**110**	13.2	362800	84	24	132 to 200	N250TC-N280TC	25300	30400	9490	212
	313 L3	**120**	12.0	368200	77	24	132 to 200	N250TC-N280TC	26000	31300	9790	212
	313 L3	**135**	10.8	392900	74	24	132 to 200	N250TC-N280TC	26900	32400	10200	212
	313 L3	**151**	9.6	393800	66	24	132 to 200	N250TC-N280TC	27800	33500	10600	212
	313 L3	**163**	8.9	416800	65	24	132 to 200	N250TC-N280TC	28500	34200	10800	212
	313 L3	**176**	8.2	398200	57	24	132 to 200	N250TC-N280TC	29100	35000	11100	212
	313 L3	**194**	7.5	438100	57	24	132 to 200	N250TC-N280TC	30000	36100	11500	212
	313 L3	**209**	7.0	398200	48	24	132 to 200	N250TC-N280TC	30700	36900	11800	212
	313 L3	**252**	5.7	398200	40	24	132 to 200	N250TC-N280TC	32400	39100	12500	212
	313 L3	**212**	4.8	345100	29	24	132 to 200	N250TC-N280TC	34300	41300	13300	212
	313 L4	**352**	4.1	417700	31	14.8	71 to 160	N56C to N280TC	35900	43100	14000	212
	313 L4	**394**	3.7	486700	32	14.8	71 to 160	N56C to N280TC	37100	44600	14500	212
	313 L4	**452**	3.2	486700	28	14.8	71 to 160	N56C to N280TC	38600	46500	15200	212
	313 L4	**514**	2.8	421300	21	14.8	71 to 160	N56C to N280TC	40200	48300	15900	212
	313 L4	**564**	2.6	486700	23	14.8	71 to 160	N56C to N280TC	41300	49700	16400	212
	313 L4	**633**	2.3	462000	19.1	14.8	71 to 160	N56C to N280TC	42800	51400	17000	212
	313 L4	**695**	2.1	439800	16.5	14.8	71 to 160	N56C to N280TC	44000	52900	17600	212
	313 L4	**790**	1.8	462000	15.3	14.8	71 to 160	N56C to N280TC	45700	55000	18300	212
	313 L4	**889**	1.6	455800	13.4	14.8	71 to 160	N56C to N280TC	47400	57000	19100	212
	313 L4	**1014**	1.4	464600	12.0	14.8	71 to 160	N56C to N280TC	49300	59300	19900	212

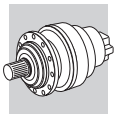


3□ L

313 L

485,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**313 L4**	**1117**	1.3	462000	10.8	14.8	71 to 160	N56C to N280TC	50700	61000	20600	212
	313 L4	**1266**	1.1	479700	9.9	14.8	71 to 160	N56C to N280TC	52600	63300	21500	212
	313 L4	**1394**	1.0	467300	8.8	14.8	71 to 160	N56C to N280TC	54200	65200	22200	212
	313 L4	**1502**	0.97	486700	8.5	14.8	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**1817**	0.80	486700	7.0	14.8	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**2187**	0.66	433600	5.2	14.8	71 to 160	N56C to N280TC	54300	65300	22200	212
1150	**313 L1**	**4.14**	278	88100	400	60	—	-	10000	12100	3430	212
	313 L1	**5.40**	213	114400	399	60	—	-	10900	13100	3740	212
	313 L1	**6.50**	177	137400	398	60	—	-	11500	13800	4000	212
	313 L2	**14.2**	81	151400	207	48	180 to 250	N320TC-N360TC	14500	17500	5190	212
	313 L2	**16.9**	68	181100	207	48	180 to 250	N320TC-N360TC	15300	18400	5490	212
	313 L2	**18.5**	62	197500	207	48	180 to 250	N320TC-N360TC	15700	18900	5650	212
	313 L2	**21.8**	53	232100	207	48	180 to 250	N320TC-N360TC	16500	19900	5960	212
	313 L2	**25.8**	45	254300	191	48	180 to 250	N320TC-N360TC	17400	20900	6320	212
	313 L2	**28.4**	41	253500	174	48	180 to 250	N320TC-N360TC	17900	21500	6530	212
	313 L2	**33.6**	34	266700	154	48	180 to 250	N320TC-N360TC	18800	22700	6890	212
	313 L2	**40.5**	28.4	274900	132	48	180 to 250	N320TC-N360TC	19900	23900	7350	212
	313 L3	**51.1**	22.5	244400	96	30	132 to 200	N250TC-N280TC	21300	25700	7950	212
	313 L3	**61.0**	18.8	292200	96	30	132 to 200	N250TC-N280TC	22500	27100	8410	212
	313 L3	**72.0**	16.0	333300	93	30	132 to 200	N250TC-N280TC	23700	28500	8900	212
	313 L3	**78.3**	14.7	354700	91	30	132 to 200	N250TC-N280TC	24300	29200	9130	212
	313 L3	**92.4**	12.4	372800	81	30	132 to 200	N250TC-N280TC	25500	30700	9670	212
	313 L3	**110**	10.5	392600	72	30	132 to 200	N250TC-N280TC	26800	32300	10200	212
	313 L3	**120**	9.5	370400	62	30	132 to 200	N250TC-N280TC	27600	33200	10600	212
	313 L3	**135**	8.5	417300	62	30	132 to 200	N250TC-N280TC	28500	34300	11000	212
	313 L3	**151**	7.6	370400	49	30	132 to 200	N250TC-N280TC	29500	35600	11400	212
	313 L3	**163**	7.0	442000	54	30	132 to 200	N250TC-N280TC	30200	36400	11700	212
	313 L3	**176**	6.5	370400	42	30	132 to 200	N250TC-N280TC	30900	37200	12000	212
	313 L3	**194**	5.9	429600	44	30	132 to 200	N250TC-N280TC	31800	38300	12400	212
	313 L3	**209**	5.5	370400	36	30	132 to 200	N250TC-N280TC	32500	39200	12700	212
	313 L3	**252**	4.6	377000	30	30	132 to 200	N250TC-N280TC	34500	41400	13500	212
	313 L3	**212**	3.8	339100	22	30	132 to 200	N250TC-N280TC	36400	43800	14400	212
	313 L4	**352**	3.3	443600	26	17.4	71 to 160	N56C to N280TC	38100	45800	15100	212
	313 L4	**394**	2.9	452700	24	17.4	71 to 160	N56C to N280TC	39400	47400	15700	212
	313 L4	**452**	2.5	452700	21	17.4	71 to 160	N56C to N280TC	41000	49400	16400	212
	313 L4	**514**	2.2	417300	16.8	17.4	71 to 160	N56C to N280TC	42700	51300	17100	212
	313 L4	**564**	2.0	452700	16.7	17.4	71 to 160	N56C to N280TC	43900	52800	17700	212
	313 L4	**633**	1.8	429600	14.1	17.4	71 to 160	N56C to N280TC	45400	54600	18300	212
	313 L4	**695**	1.7	436200	13.0	17.4	71 to 160	N56C to N280TC	46700	56200	18900	212
	313 L4	**790**	1.5	429600	11.3	17.4	71 to 160	N56C to N280TC	48500	58400	19800	212
	313 L4	**889**	1.3	451900	10.5	17.4	71 to 160	N56C to N280TC	50300	60500	20600	212
	313 L4	**1014**	1.1	452700	9.3	17.4	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**1117**	1.0	451900	8.4	17.4	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**1266**	0.91	452700	7.4	17.4	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**1394**	0.83	452700	6.7	17.4	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**1502**	0.77	452700	6.2	17.4	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**1817**	0.63	452700	5.2	17.4	71 to 160	N56C to N280TC	50500	60700	20600	212
	313 L4	**2187**	0.53	403300	3.8	17.4	71 to 160	N56C to N280TC	50500	60700	20600	212
870	**313 L1**	**4.14**	210	94700	325	60	—	-	10800	13000	3690	212
	313 L1	**5.40**	161	123000	324	60	—	-	11700	14100	4020	212
	313 L1	**6.50**	134	147800	324	60	—	-	12300	14900	4300	212
	313 L2	**14.2**	61	162800	168	48	180 to 250	N320TC-N360TC	15600	18800	5580	212
	313 L2	**16.9**	51	194700	169	48	180 to 250	N320TC-N360TC	16500	19800	5910	212
	313 L2	**18.5**	47	212400	168	48	180 to 250	N320TC-N360TC	16900	20300	6080	212



313 L

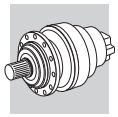
485,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**313 L2**	**21.8**	40	249600	169	48	180 to 250	N320TC-N360TC	17700	21400	6410	212
	313 L2	**25.8**	34	273500	156	48	180 to 250	N320TC-N360TC	18700	22500	6800	212
	313 L2	**28.4**	31	272600	141	48	180 to 250	N320TC-N360TC	19200	23100	7020	212
	313 L2	**33.6**	25.9	286700	125	48	180 to 250	N320TC-N360TC	20200	24400	7410	212
	313 L2	**40.5**	21.5	295600	107	48	180 to 250	N320TC-N360TC	21400	25700	7910	212
	313 L3	**51.1**	17.0	262800	78	30	132 to 200	N250TC-N280TC	22900	27600	8540	212
	313 L3	**61.0**	14.3	314200	78	30	132 to 200	N250TC-N280TC	24200	29100	9040	212
	313 L3	**72.0**	12.1	358400	75	30	132 to 200	N250TC-N280TC	25400	30600	9570	212
	313 L3	**78.3**	11.1	381400	74	30	132 to 200	N250TC-N280TC	26100	31400	9820	212
	313 L3	**92.4**	9.4	400900	66	30	132 to 200	N250TC-N280TC	27400	33000	10400	212
	313 L3	**110**	7.9	422100	58	30	132 to 200	N250TC-N280TC	28800	34700	11000	212
	313 L3	**120**	7.2	398200	50	30	132 to 200	N250TC-N280TC	29700	35700	11300	212
	313 L3	**135**	6.5	448700	50	30	132 to 200	N250TC-N280TC	30700	36900	11800	212
	313 L3	**151**	5.8	398200	40	30	132 to 200	N250TC-N280TC	31800	38200	12200	212
	313 L3	**163**	5.3	475200	44	30	132 to 200	N250TC-N280TC	32500	39100	12600	212
	313 L3	**176**	4.9	398200	34	30	132 to 200	N250TC-N280TC	33200	40000	12900	212
	313 L3	**194**	4.5	462000	36	30	132 to 200	N250TC-N280TC	34200	41200	13300	212
	313 L3	**209**	4.2	398200	29	30	132 to 200	N250TC-N280TC	35000	42100	13600	212
	313 L3	**252**	3.4	405300	24	30	132 to 200	N250TC-N280TC	37000	44600	14500	212
	313 L3	**212**	2.9	364600	18.2	30	132 to 200	N250TC-N280TC	39200	47100	15500	212
	313 L4	**352**	2.5	477000	21	17.4	71 to 160	N56C to N280TC	40900	49300	16200	212
	313 L4	**394**	2.2	486700	19.4	17.4	71 to 160	N56C to N280TC	42400	50900	16800	212
	313 L4	**452**	1.9	486700	16.9	17.4	71 to 160	N56C to N280TC	44100	53100	17600	212
	313 L4	**514**	1.7	448700	13.7	17.4	71 to 160	N56C to N280TC	45900	55200	18400	212
	313 L4	**564**	1.5	486700	13.5	17.4	71 to 160	N56C to N280TC	47200	56700	19000	212
	313 L4	**633**	1.4	462000	11.5	17.4	71 to 160	N56C to N280TC	48800	58700	19700	212
	313 L4	**695**	1.3	469000	10.6	17.4	71 to 160	N56C to N280TC	50200	60400	20400	212
	313 L4	**790**	1.1	462000	9.2	17.4	71 to 160	N56C to N280TC	52200	62800	21200	212
	313 L4	**889**	0.98	485900	8.6	17.4	71 to 160	N56C to N280TC	54100	65000	22100	212
	313 L4	**1014**	0.86	486700	7.5	17.4	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**1117**	0.78	485900	6.8	17.4	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**1266**	0.69	486700	6.0	17.4	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**1394**	0.62	486700	5.5	17.4	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**1502**	0.58	486700	5.1	17.4	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**1817**	0.48	486700	4.2	17.4	71 to 160	N56C to N280TC	54300	65300	22200	212
	313 L4	**2187**	0.40	433600	3.1	17.4	71 to 160	N56C to N280TC	54300	65300	22200	212

315 L

900,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**315 L3**	**57.4**	30	293800	156	40	180 to 225	N320TC-N360TC	20800	24500	8000	220
	315 L3	**68.5**	25.6	350600	156	40	180 to 225	N320TC-N360TC	21900	25800	8490	220
	315 L3	**87.9**	19.9	450200	156	40	180 to 225	N320TC-N360TC	23600	27800	9240	220
	315 L3	**104**	16.8	534200	156	40	180 to 225	N320TC-N360TC	24800	29300	9780	220
	315 L3	**134**	13.1	577000	132	40	180 to 225	N320TC-N360TC	26800	31600	10600	220
	315 L3	**159**	11.0	607400	117	40	180 to 225	N320TC-N360TC	28200	33200	11200	220

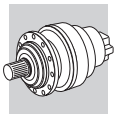


3□ L

315 L

900,000 in•lbs

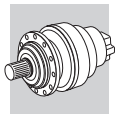
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**315 L3**	**172**	10.2	604900	107	40	180 to 225	N320TC-N360TC	28900	34000	11500	220
	315 L3	**204**	8.6	637000	95	40	180 to 225	N320TC-N360TC	30400	35800	12200	220
	315 L3	**242**	7.2	535000	67	40	180 to 225	N320TC-N360TC	32000	37700	12900	220
	315 L4	**291**	6.0	728400	79	24	132 to 180	N250TC-N280TC	33800	39900	13700	220
	315 L4	**356**	4.9	773700	69	24	132 to 180	N250TC-N280TC	35900	42300	14700	220
	315 L4	**424**	4.1	790100	59	24	132 to 180	N250TC-N280TC	37800	44600	15600	220
	315 L4	**469**	3.7	795900	54	24	132 to 180	N250TC-N280TC	39000	46000	16100	220
	315 L4	**513**	3.4	801600	49	24	132 to 180	N250TC-N280TC	40100	47300	16600	220
	315 L4	**569**	3.1	807400	45	24	132 to 180	N250TC-N280TC	41300	48700	17200	220
	315 L4	**647**	2.7	815600	40	24	132 to 180	N250TC-N280TC	42900	50600	18000	220
	315 L4	**714**	2.5	821400	36	24	132 to 180	N250TC-N280TC	44200	52200	18500	220
	315 L4	**830**	2.1	831300	32	24	132 to 180	N250TC-N280TC	46300	54600	19500	220
	315 L4	**916**	1.9	766300	26	24	132 to 180	N250TC-N280TC	47700	56200	20100	220
	315 L4	**1004**	1.7	842800	26	24	132 to 180	N250TC-N280TC	49000	57800	20800	220
	315 L4	**1087**	1.6	786000	23	24	132 to 180	N250TC-N280TC	50200	59200	21300	220
	315 L4	**1264**	1.4	803300	20	24	132 to 180	N250TC-N280TC	52500	61900	22400	220
	315 L4	**1500**	1.2	658400	13.9	24	132 to 180	N250TC-N280TC	54100	63900	23200	220
	315 L4	**1814**	0.96	658400	11.5	24	132 to 180	N250TC-N280TC	54100	63900	23200	220
1450	**315 L3**	**57.4**	25.3	315900	139	40	180 to 225	N320TC-N360TC	22300	26300	8600	220
	315 L3	**68.5**	21.2	377000	139	40	180 to 225	N320TC-N360TC	23500	27800	9130	220
	315 L3	**87.9**	16.5	484100	139	40	180 to 225	N320TC-N360TC	25400	29900	9930	220
	315 L3	**104**	13.9	574400	139	40	180 to 225	N320TC-N360TC	26700	31500	10500	220
	315 L3	**134**	10.8	620400	117	40	180 to 225	N320TC-N360TC	28800	34000	11400	220
	315 L3	**159**	9.1	653100	104	40	180 to 225	N320TC-N360TC	30300	35700	12100	220
	315 L3	**172**	8.4	650500	96	40	180 to 225	N320TC-N360TC	31000	36600	12400	220
	315 L3	**204**	7.1	685000	85	40	180 to 225	N320TC-N360TC	32700	38500	13100	220
	315 L3	**242**	6.0	575200	60	40	180 to 225	N320TC-N360TC	34400	40500	13900	220
	315 L4	**291**	5.0	783200	70	24	132 to 180	N250TC-N280TC	36300	42900	14800	220
	315 L4	**356**	4.1	831900	61	24	132 to 180	N250TC-N280TC	38600	45500	15800	220
	315 L4	**424**	3.4	849600	52	24	132 to 180	N250TC-N280TC	40700	48000	16800	220
	315 L4	**469**	3.1	855800	48	24	132 to 180	N250TC-N280TC	41900	49400	17300	220
	315 L4	**513**	2.8	862000	44	24	132 to 180	N250TC-N280TC	43100	50800	17900	220
	315 L4	**569**	2.5	868200	40	24	132 to 180	N250TC-N280TC	44400	52400	18500	220
	315 L4	**647**	2.2	877000	35	24	132 to 180	N250TC-N280TC	46200	54500	19300	220
	315 L4	**714**	2.0	883200	32	24	132 to 180	N250TC-N280TC	47600	56100	19900	220
	315 L4	**830**	1.7	893800	28	24	132 to 180	N250TC-N280TC	49800	58700	21000	220
	315 L4	**916**	1.6	823900	24	24	132 to 180	N250TC-N280TC	51300	60500	21700	220
	315 L4	**1004**	1.4	906200	24	24	132 to 180	N250TC-N280TC	52700	62100	22300	220
	315 L4	**1087**	1.3	845200	20	24	132 to 180	N250TC-N280TC	53900	63600	22900	220
	315 L4	**1264**	1.1	863800	17.9	24	132 to 180	N250TC-N280TC	56500	66600	24100	220
	315 L4	**1500**	0.97	708000	12.3	24	132 to 180	N250TC-N280TC	58200	68700	25000	220
	315 L4	**1814**	0.80	708000	10.2	24	132 to 180	N250TC-N280TC	58200	68700	25000	220
1150	**315 L2**	**16.7**	69	247700	287	60	—	N400TC	16400	19300	6140	220
	315 L2	**21.5**	54	317700	287	60	—	N400TC	17700	20800	6680	220
	315 L2	**25.5**	45	377000	287	60	—	N400TC	18600	21900	7070	220
	315 L2	**27.6**	42	399200	281	60	—	N400TC	19000	22400	7280	220
	315 L2	**32.7**	35	419800	249	60	—	N400TC	20000	23600	7690	220
	315 L2	**38.8**	29.6	435400	218	60	—	N400TC	21100	24900	8150	220
	315 L3	**57.4**	20.0	457600	160	48	180 to 225	N320TC-N360TC	23700	28000	9290	220
	315 L3	**68.5**	16.8	539100	158	48	180 to 225	N320TC-N360TC	25000	29500	9830	220
	315 L3	**87.9**	13.1	581100	133	48	180 to 225	N320TC-N360TC	26900	31800	10700	220
	315 L3	**104**	11.0	611500	118	48	180 to 225	N320TC-N360TC	28400	33500	11300	220
	315 L3	**134**	8.6	658400	99	48	180 to 225	N320TC-N360TC	30600	36100	12300	220
	315 L3	**159**	7.2	693800	88	48	180 to 225	N320TC-N360TC	32200	37900	13000	220
	315 L3	**172**	6.7	642000	75	48	180 to 225	N320TC-N360TC	32900	38800	13400	220



315 L

900,000 in•lbs

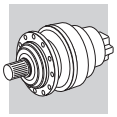
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**315 L3**	**204**	5.6	658400	65	48	180 to 225	N320TC-N360TC	34700	40900	14200	220
	315 L3	**242**	4.8	547300	45	48	180 to 225	N320TC-N360TC	36500	43000	15000	220
	315 L4	**291**	4.0	794200	57	30	132 to 180	N250TC-N280TC	38600	45500	15900	220
	315 L4	**356**	3.2	805800	47	30	132 to 180	N250TC-N280TC	41000	48300	17100	220
	315 L4	**424**	2.7	816500	40	30	132 to 180	N250TC-N280TC	43200	51000	18100	220
	315 L4	**469**	2.5	823000	36	30	132 to 180	N250TC-N280TC	44500	52500	18700	220
	315 L4	**513**	2.2	828800	33	30	132 to 180	N250TC-N280TC	45800	54000	19200	220
	315 L4	**569**	2.0	834600	30	30	132 to 180	N250TC-N280TC	47200	55600	19900	220
	315 L4	**647**	1.8	842800	27	30	132 to 180	N250TC-N280TC	49000	57800	20800	220
	315 L4	**714**	1.6	849400	25	30	132 to 180	N250TC-N280TC	50500	59600	21500	220
	315 L4	**830**	1.4	859300	21	30	132 to 180	N250TC-N280TC	52800	62300	22600	220
	315 L4	**916**	1.3	814800	18.4	30	132 to 180	N250TC-N280TC	54100	63900	23200	220
	315 L4	**1004**	1.1	864200	17.9	30	132 to 180	N250TC-N280TC	54100	63900	23200	220
	315 L4	**1087**	1.1	814800	15.5	30	132 to 180	N250TC-N280TC	54100	63900	23200	220
	315 L4	**1264**	0.91	814800	13.4	30	132 to 180	N250TC-N280TC	54100	63900	23200	220
	315 L4	**1500**	0.77	658400	9.1	30	132 to 180	N250TC-N280TC	54100	63900	23200	220
	315 L4	**1814**	0.63	658400	7.5	30	132 to 180	N250TC-N280TC	54100	63900	23200	220
870	**315 L2**	**16.7**	52	266400	234	60	—	N400TC	17600	20800	6600	220
	315 L2	**21.5**	41	341600	234	60	—	N400TC	19000	22400	7180	220
	315 L2	**25.5**	34	405300	234	60	—	N400TC	20000	23600	7600	220
	315 L2	**27.6**	32	429200	229	60	—	N400TC	20500	24100	7820	220
	315 L2	**32.7**	26.6	451300	203	60	—	N400TC	21500	25400	8270	220
	315 L2	**38.8**	22.4	468200	177	60	—	N400TC	22700	26700	8770	220
	315 L3	**57.4**	15.2	492100	130	48	180 to 225	N320TC-N360TC	25500	30100	9990	220
	315 L3	**68.5**	12.7	579700	128	48	180 to 225	N320TC-N360TC	26900	31700	10600	220
	315 L3	**87.9**	9.9	624800	108	48	180 to 225	N320TC-N360TC	29000	34200	11500	220
	315 L3	**104**	8.3	657600	96	48	180 to 225	N320TC-N360TC	30500	36000	12200	220
	315 L3	**134**	6.5	708000	80	48	180 to 225	N320TC-N360TC	32900	38800	13200	220
	315 L3	**159**	5.5	746100	71	48	180 to 225	N320TC-N360TC	34600	40800	14000	220
	315 L3	**172**	5.1	690300	61	48	180 to 225	N320TC-N360TC	35400	41800	14400	220
	315 L3	**204**	4.3	708000	53	48	180 to 225	N320TC-N360TC	37300	44000	15200	220
	315 L3	**242**	3.6	588500	37	48	180 to 225	N320TC-N360TC	39200	46300	16100	220
	315 L4	**291**	3.0	854000	46	30	132 to 180	N250TC-N280TC	41500	48900	17100	220
	315 L4	**356**	2.4	866400	38	30	132 to 180	N250TC-N280TC	44100	52000	18300	220
	315 L4	**424**	2.0	877900	32	30	132 to 180	N250TC-N280TC	46500	54800	19400	220
	315 L4	**469**	1.9	885000	30	30	132 to 180	N250TC-N280TC	47900	56500	20100	220
	315 L4	**513**	1.7	891200	27	30	132 to 180	N250TC-N280TC	49200	58000	20700	220
	315 L4	**569**	1.5	897400	25	30	132 to 180	N250TC-N280TC	50700	59800	21400	220
	315 L4	**647**	1.3	906200	22	30	132 to 180	N250TC-N280TC	52700	62200	22400	220
	315 L4	**714**	1.2	913300	20	30	132 to 180	N250TC-N280TC	54300	64100	23100	220
	315 L4	**830**	1.0	923900	17.5	30	132 to 180	N250TC-N280TC	56800	67000	24300	220
	315 L4	**916**	0.95	876100	15.0	30	132 to 180	N250TC-N280TC	58200	68700	25000	220
	315 L4	**1004**	0.87	929200	14.5	30	132 to 180	N250TC-N280TC	58200	68700	25000	220
	315 L4	**1087**	0.80	876100	12.6	30	132 to 180	N250TC-N280TC	58200	68700	25000	220
	315 L4	**1264**	0.69	876100	10.9	30	132 to 180	N250TC-N280TC	58200	68700	25000	220
	315 L4	**1500**	0.58	708000	7.4	30	132 to 180	N250TC-N280TC	58200	68700	25000	220
	315 L4	**1814**	0.48	708000	6.1	30	132 to 180	N250TC-N280TC	58200	68700	25000	220



316 L

1,100,000 in•lbs

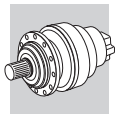
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**316 L3**	**61.7**	28.4	363400	180	40	180 to 225	N320TC-N360TC	35500	39700	10000	228
	316 L3	**73.6**	23.8	434200	180	40	180 to 225	N320TC-N360TC	37400	41800	10700	228
	316 L3	**79.2**	22.1	465800	179	40	180 to 225	N320TC-N360TC	38300	42800	10900	228
	316 L3	**94.5**	18.5	557200	180	40	180 to 225	N320TC-N360TC	40300	45100	11600	228
	316 L3	**112**	15.6	659700	180	40	180 to 225	N320TC-N360TC	42400	47400	12200	228
	316 L3	**121**	14.5	674500	170	40	180 to 225	N320TC-N360TC	43400	48500	12600	228
	316 L3	**144**	12.2	711900	151	40	180 to 225	N320TC-N360TC	45800	51100	13300	228
	316 L3	**171**	10.2	739100	132	40	180 to 225	N320TC-N360TC	48200	53800	14100	228
	316 L4	**222**	7.9	661700	94	24	132 to 180	N250TC-N280TC	52100	58200	15400	228
	316 L4	**265**	6.6	790100	94	24	132 to 180	N250TC-N280TC	55000	61400	16300	228
	316 L4	**313**	5.6	917700	93	24	132 to 180	N250TC-N280TC	57800	64600	17200	228
	316 L4	**340**	5.1	943200	88	24	132 to 180	N250TC-N280TC	59200	66200	17700	228
	316 L4	**383**	4.6	972800	80	24	132 to 180	N250TC-N280TC	61400	68600	18400	228
	316 L4	**457**	3.8	1014000	70	24	132 to 180	N250TC-N280TC	64700	72300	19600	228
	316 L4	**504**	3.5	1014800	64	24	132 to 180	N250TC-N280TC	66600	74500	20200	228
	316 L4	**552**	3.2	1014800	58	24	132 to 180	N250TC-N280TC	68500	76600	20800	228
	316 L4	**586**	3.0	1015600	55	24	132 to 180	N250TC-N280TC	69700	77900	21200	228
	316 L4	**612**	2.9	1015200	52	24	132 to 180	N250TC-N280TC	70600	78900	21500	228
	316 L4	**647**	2.7	1015600	50	24	132 to 180	N250TC-N280TC	71800	80300	22000	228
	316 L4	**709**	2.5	1015600	45	24	132 to 180	N250TC-N280TC	73800	82500	22600	228
	316 L4	**752**	2.3	1016100	43	24	132 to 180	N250TC-N280TC	75200	84000	23100	228
	316 L4	**768**	2.3	1016500	42	24	132 to 180	N250TC-N280TC	75600	84500	23200	228
	316 L4	**841**	2.1	934200	35	24	132 to 180	N250TC-N280TC	77700	86900	24000	228
	316 L4	**892**	2.0	1023900	36	24	132 to 180	N250TC-N280TC	79100	88400	24400	228
	316 L4	**1079**	1.6	1051000	31	24	132 to 180	N250TC-N280TC	83800	93600	26000	228
	316 L4	**1281**	1.4	896300	22	24	132 to 180	N250TC-N280TC	88200	98500	27600	228
1450	**316 L3**	**61.7**	23.5	390700	160	40	180 to 225	N320TC-N360TC	38200	42700	10800	228
	316 L3	**73.6**	19.7	466800	160	40	180 to 225	N320TC-N360TC	40200	45000	11500	228
	316 L3	**79.2**	18.3	500900	160	40	180 to 225	N320TC-N360TC	41100	46000	11700	228
	316 L3	**94.5**	15.3	599100	160	40	180 to 225	N320TC-N360TC	43400	48500	12400	228
	316 L3	**112**	12.9	709300	160	40	180 to 225	N320TC-N360TC	45600	51000	13100	228
	316 L3	**121**	12.0	725300	152	40	180 to 225	N320TC-N360TC	46700	52200	13500	228
	316 L3	**144**	10.1	765500	134	40	180 to 225	N320TC-N360TC	49200	55000	14300	228
	316 L3	**171**	8.5	794700	117	40	180 to 225	N320TC-N360TC	51800	57900	15100	228
	316 L4	**222**	6.5	711500	84	24	132 to 180	N250TC-N280TC	56000	62600	16500	228
	316 L4	**265**	5.5	849600	84	24	132 to 180	N250TC-N280TC	59100	66000	17500	228
	316 L4	**313**	4.6	986800	82	24	132 to 180	N250TC-N280TC	62100	69400	18500	228
	316 L4	**340**	4.3	1014200	78	24	132 to 180	N250TC-N280TC	63700	71200	19100	228
	316 L4	**383**	3.8	1046100	71	24	132 to 180	N250TC-N280TC	66000	73800	19800	228
	316 L4	**457**	3.2	1090300	62	24	132 to 180	N250TC-N280TC	69600	77800	21000	228
	316 L4	**504**	2.9	1091200	57	24	132 to 180	N250TC-N280TC	71700	80100	21700	228
	316 L4	**552**	2.6	1091200	52	24	132 to 180	N250TC-N280TC	73700	82300	22400	228
	316 L4	**586**	2.5	1092100	49	24	132 to 180	N250TC-N280TC	75000	83800	22800	228
	316 L4	**612**	2.4	1091600	47	24	132 to 180	N250TC-N280TC	76000	84900	23200	228
	316 L4	**647**	2.2	1092100	44	24	132 to 180	N250TC-N280TC	77300	86300	23600	228
	316 L4	**709**	2.0	1092100	40	24	132 to 180	N250TC-N280TC	79400	88700	24300	228
	316 L4	**752**	1.9	1092500	38	24	132 to 180	N250TC-N280TC	80800	90300	24800	228
	316 L4	**768**	1.9	1093000	37	24	132 to 180	N250TC-N280TC	81300	90900	25000	228
	316 L4	**841**	1.7	1004500	31	24	132 to 180	N250TC-N280TC	83600	93400	25800	228
	316 L4	**892**	1.6	1100900	32	24	132 to 180	N250TC-N280TC	85100	95100	26300	228
	316 L4	**1079**	1.3	1130100	27	24	132 to 180	N250TC-N280TC	90100	100600	28000	228
	316 L4	**1281**	1.1	963800	20	24	132 to 180	N250TC-N280TC	94800	105900	29600	228
1150	**316 L2**	**18.0**	64	280700	303	60	—	N400TC	28000	31300	7710	228
	316 L2	**23.1**	50	360100	303	60	—	N400TC	30200	33700	8380	228
	316 L2	**27.4**	42	428000	303	60	—	N400TC	31800	35500	8870	228



316 L

1,100,000 in•lbs

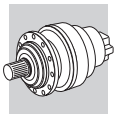
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**316 L3**	**61.7**	18.6	564600	183	40	180 to 225	N320TC-N360TC	40500	45300	11600	228
	316 L3	**73.6**	15.6	675700	184	40	180 to 225	N320TC-N360TC	42700	47700	12300	228
	316 L3	**79.2**	14.5	677800	172	40	180 to 225	N320TC-N360TC	43700	48800	12600	228
	316 L3	**94.5**	12.2	732900	156	40	180 to 225	N320TC-N360TC	46100	51500	13400	228
	316 L3	**112**	10.3	768700	138	40	180 to 225	N320TC-N360TC	48500	54200	14200	228
	316 L3	**121**	9.5	772000	128	40	180 to 225	N320TC-N360TC	49600	55400	14500	228
	316 L3	**144**	8.0	810300	113	40	180 to 225	N320TC-N360TC	52300	58400	15400	228
	316 L3	**171**	6.7	772800	91	40	180 to 225	N320TC-N360TC	55000	61500	16300	228
	316 L4	**222**	5.2	943600	88	24	132 to 180	N250TC-N280TC	59500	66500	17800	228
	316 L4	**265**	4.3	996700	78	24	132 to 180	N250TC-N280TC	62800	70100	18900	228
	316 L4	**313**	3.7	1014000	67	24	132 to 180	N250TC-N280TC	66000	73700	20000	228
	316 L4	**340**	3.4	1014800	62	24	132 to 180	N250TC-N280TC	67600	75600	20500	228
	316 L4	**383**	3.0	1015200	55	24	132 to 180	N250TC-N280TC	70100	78300	21400	228
	316 L4	**457**	2.5	1015600	46	24	132 to 180	N250TC-N280TC	73900	82600	22700	228
	316 L4	**504**	2.3	1016900	42	24	132 to 180	N250TC-N280TC	76100	85000	23400	228
	316 L4	**552**	2.1	1023900	38	24	132 to 180	N250TC-N280TC	78200	87400	24100	228
	316 L4	**586**	2.0	1032100	37	24	132 to 180	N250TC-N280TC	79600	89000	24600	228
	316 L4	**612**	1.9	1032100	35	24	132 to 180	N250TC-N280TC	80700	90100	25000	228
	316 L4	**647**	1.8	1041200	33	24	132 to 180	N250TC-N280TC	82000	91700	25400	228
	316 L4	**709**	1.6	1051000	31	24	132 to 180	N250TC-N280TC	84300	94200	26200	228
	316 L4	**752**	1.5	1060500	29	24	132 to 180	N250TC-N280TC	85800	95900	26800	228
	316 L4	**768**	1.5	1060500	29	24	132 to 180	N250TC-N280TC	86400	96500	26900	228
	316 L4	**841**	1.4	1046500	26	24	132 to 180	N250TC-N280TC	88700	99200	27800	228
	316 L4	**892**	1.3	1085200	25	24	132 to 180	N250TC-N280TC	90300	100900	28300	228
	316 L4	**1079**	1.1	1115200	21	24	132 to 180	N250TC-N280TC	90700	101200	28400	228
	316 L4	**1281**	0.90	975300	15.8	24	132 to 180	N250TC-N280TC	90700	101200	28400	228
870	**316 L2**	**18.0**	48	301800	246	60	—	N400TC	30100	33700	8290	228
	316 L2	**23.1**	38	387200	246	60	—	N400TC	32500	36300	9020	228
	316 L2	**27.4**	32	460200	247	60	—	N400TC	34200	38200	9540	228
	316 L3	**61.7**	14.1	607100	149	40	180 to 225	N320TC-N360TC	43600	48700	12500	228
	316 L3	**73.6**	11.8	726600	150	40	180 to 225	N320TC-N360TC	45900	51300	13300	228
	316 L3	**79.2**	11.0	728800	140	40	180 to 225	N320TC-N360TC	47000	52500	13600	228
	316 L3	**94.5**	9.2	788100	127	40	180 to 225	N320TC-N360TC	49500	55400	14400	228
	316 L3	**112**	7.8	826600	112	40	180 to 225	N320TC-N360TC	52100	58200	15300	228
	316 L3	**121**	7.2	830100	104	40	180 to 225	N320TC-N360TC	53300	59600	15600	228
	316 L3	**144**	6.0	871300	92	40	180 to 225	N320TC-N360TC	56200	62800	16600	228
	316 L3	**171**	5.1	831000	74	40	180 to 225	N320TC-N360TC	59200	66100	17600	228
	316 L4	**222**	3.9	1014700	72	24	132 to 180	N250TC-N280TC	64000	71500	19100	228
	316 L4	**265**	3.3	1071700	63	24	132 to 180	N250TC-N280TC	67500	75400	20300	228
	316 L4	**313**	2.8	1090300	55	24	132 to 180	N250TC-N280TC	70900	79300	21500	228
	316 L4	**340**	2.6	1091200	50	24	132 to 180	N250TC-N280TC	72700	81200	22100	228
	316 L4	**383**	2.3	1091600	45	24	132 to 180	N250TC-N280TC	75400	84200	23000	228
	316 L4	**457**	1.9	1092100	37	24	132 to 180	N250TC-N280TC	79500	88800	24400	228
	316 L4	**504**	1.7	1093400	34	24	132 to 180	N250TC-N280TC	81800	91400	25200	228
	316 L4	**552**	1.6	1100900	31	24	132 to 180	N250TC-N280TC	84100	94000	25900	228
	316 L4	**586**	1.5	1109800	30	24	132 to 180	N250TC-N280TC	85600	95700	26500	228
	316 L4	**612**	1.4	1109800	28	24	132 to 180	N250TC-N280TC	86700	96900	26900	228
	316 L4	**647**	1.3	1119500	27	24	132 to 180	N250TC-N280TC	88200	98600	27400	228
	316 L4	**709**	1.2	1130100	25	24	132 to 180	N250TC-N280TC	90600	101300	28200	228
	316 L4	**752**	1.2	1140300	24	24	132 to 180	N250TC-N280TC	92300	103100	28800	228
	316 L4	**768**	1.1	1140300	23	24	132 to 180	N250TC-N280TC	92900	103800	29000	228
	316 L4	**841**	1.0	1125300	21	24	132 to 180	N250TC-N280TC	95400	106600	29800	228
	316 L4	**892**	0.98	1166900	21	24	132 to 180	N250TC-N280TC	97100	108500	30400	228
	316 L4	**1079**	0.81	1199200	17.4	24	132 to 180	N250TC-N280TC	97500	108800	30500	228
	316 L4	**1281**	0.68	1048700	12.8	24	132 to 180	N250TC-N280TC	97500	108800	30500	228



317 L

1,500,000 in•lbs

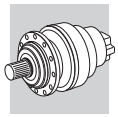
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**317 L3**	**58.1**	30	386800	203	47	180 to 250	N320TC-N360TC	44700	47500	13400	236
	317 L3	**69.3**	25.2	461700	203	47	180 to 250	N320TC-N360TC	47100	50100	14200	236
	317 L3	**89.0**	19.7	592600	203	47	180 to 250	N320TC-N360TC	50800	54000	15500	236
	317 L3	**106**	16.6	703700	203	47	180 to 250	N320TC-N360TC	53500	56900	16400	236
	317 L3	**116**	15.1	772800	203	47	180 to 250	N320TC-N360TC	55000	58500	16900	236
	317 L3	**138**	12.7	916900	203	47	180 to 250	N320TC-N360TC	57900	61600	17900	236
	317 L3	**166**	10.6	954700	176	47	180 to 250	N320TC-N360TC	61200	65100	19000	236
	317 L3	**179**	9.8	1147300	195	47	180 to 250	N320TC-N360TC	62700	66600	19500	236
	317 L3	**213**	8.2	1152300	165	47	180 to 250	N320TC-N360TC	66000	70200	20600	236
	317 L3	**252**	6.9	946500	114	47	180 to 250	N320TC-N360TC	69500	73900	21900	236
	317 L4	**310**	5.6	924300	94	24	132 to 180	N250TC-N280TC	73900	78600	23400	236
	317 L4	**360**	4.9	1044400	91	24	132 to 180	N250TC-N280TC	77300	82200	24600	236
	317 L4	**449**	3.9	1338300	94	24	132 to 180	N250TC-N280TC	82600	87800	26500	236
	317 L4	**493**	3.6	1358900	87	24	132 to 180	N250TC-N280TC	84900	90300	27300	236
	317 L4	**552**	3.2	1451000	83	24	132 to 180	N250TC-N280TC	87900	93400	28400	236
	317 L4	**619**	2.8	1455200	74	24	132 to 180	N250TC-N280TC	90900	96700	29500	236
	317 L4	**719**	2.4	1470000	65	24	132 to 180	N250TC-N280TC	95100	101100	31000	236
	317 L4	**792**	2.2	1481500	59	24	132 to 180	N250TC-N280TC	97900	104100	32000	236
	317 L4	**904**	1.9	1329200	46	24	132 to 180	N250TC-N280TC	101900	108300	33400	236
	317 L4	**1032**	1.7	1470000	45	24	132 to 180	N250TC-N280TC	106000	112700	35000	236
	317 L4	**1134**	1.5	1365400	38	24	132 to 180	N250TC-N280TC	109000	115900	36100	236
	317 L4	**1318**	1.3	1389300	33	24	132 to 180	N250TC-N280TC	114100	121300	37900	236
	317 L4	**1595**	1.1	1399200	28	24	132 to 180	N250TC-N280TC	116200	123500	38700	236
	317 L4	**1893**	0.92	1193400	19.9	24	132 to 180	N250TC-N280TC	116200	123500	38700	236
1450	**317 L3**	**58.1**	25.0	415900	181	47	180 to 250	N320TC-N360TC	48100	51100	14400	236
	317 L3	**69.3**	20.9	496500	181	47	180 to 250	N320TC-N360TC	50700	53900	15300	236
	317 L3	**89.0**	16.3	637200	181	47	180 to 250	N320TC-N360TC	54600	58100	16600	236
	317 L3	**106**	13.7	756700	181	47	180 to 250	N320TC-N360TC	57500	61200	17600	236
	317 L3	**116**	12.5	831000	181	47	180 to 250	N320TC-N360TC	59200	62900	18100	236
	317 L3	**138**	10.5	985900	181	47	180 to 250	N320TC-N360TC	62300	66200	19200	236
	317 L3	**166**	8.8	1026600	157	47	180 to 250	N320TC-N360TC	65800	70000	20400	236
	317 L3	**179**	8.1	1233700	174	47	180 to 250	N320TC-N360TC	67400	71700	21000	236
	317 L3	**213**	6.8	1239000	147	47	180 to 250	N320TC-N360TC	71000	75400	22200	236
	317 L3	**252**	5.7	1017700	102	47	180 to 250	N320TC-N360TC	74700	79400	23500	236
	317 L4	**310**	4.7	993900	84	24	132 to 180	N250TC-N280TC	79500	84500	25200	236
	317 L4	**360**	4.0	1123100	82	24	132 to 180	N250TC-N280TC	83100	88400	26500	236
	317 L4	**449**	3.2	1439000	84	24	132 to 180	N250TC-N280TC	88800	94400	28500	236
	317 L4	**493**	2.9	1461100	77	24	132 to 180	N250TC-N280TC	91300	97100	29400	236
	317 L4	**552**	2.6	1560300	74	24	132 to 180	N250TC-N280TC	94500	100400	30500	236
	317 L4	**619**	2.3	1564700	66	24	132 to 180	N250TC-N280TC	97700	104000	31700	236
	317 L4	**719**	2.0	1580600	57	24	132 to 180	N250TC-N280TC	102300	108700	33300	236
	317 L4	**792**	1.8	1593000	53	24	132 to 180	N250TC-N280TC	105300	112000	34400	236
	317 L4	**904**	1.6	1429300	41	24	132 to 180	N250TC-N280TC	109500	116500	36000	236
	317 L4	**1032**	1.4	1580600	40	24	132 to 180	N250TC-N280TC	114000	121200	37600	236
	317 L4	**1134**	1.3	1468200	34	24	132 to 180	N250TC-N280TC	117200	124700	38800	236
	317 L4	**1318**	1.1	1493900	30	24	132 to 180	N250TC-N280TC	122700	130400	40800	236
	317 L4	**1595**	0.91	1504500	25	24	132 to 180	N250TC-N280TC	124900	132800	41600	236
	317 L4	**1893**	0.77	1283200	17.7	24	132 to 180	N250TC-N280TC	124900	132800	41600	236
1150	**317 L2**	**16.9**	68	278200	319	67	—	-	35300	37500	10300	236
	317 L2	**22.1**	52	363000	319	67	—	-	38200	40600	11200	236
	317 L2	**26.6**	43	437000	319	67	—	-	40400	42900	12000	236
	317 L2	**28.4**	41	465800	319	67	—	-	41200	43800	12200	236
	317 L2	**34.1**	34	560500	319	67	—	-	43500	46300	13000	236
	317 L2	**40.5**	28.4	665800	319	67	—	-	45800	48700	13800	236
	317 L3	**58.1**	19.8	602500	208	56	180 to 250	N320TC-N360TC	51100	54300	15500	236



317 L

1,500,000 in•lbs

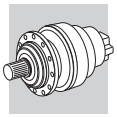
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**317 L3**	**69.3**	16.6	718500	208	56	180 to 250	N320TC-N360TC	53800	57200	16500	236
	317 L3	**89.0**	12.9	921800	208	56	180 to 250	N320TC-N360TC	58000	61700	17900	236
	317 L3	**106**	10.9	1009100	192	56	180 to 250	N320TC-N360TC	61100	64900	18900	236
	317 L3	**116**	9.9	1004900	174	56	180 to 250	N320TC-N360TC	62800	66800	19600	236
	317 L3	**138**	8.4	1058400	154	56	180 to 250	N320TC-N360TC	66100	70300	20700	236
	317 L3	**166**	6.9	1089700	132	56	180 to 250	N320TC-N360TC	69900	74300	22000	236
	317 L3	**179**	6.4	1158000	130	56	180 to 250	N320TC-N360TC	71600	76100	22600	236
	317 L3	**213**	5.4	1181900	111	56	180 to 250	N320TC-N360TC	75300	80100	23900	236
	317 L3	**252**	4.6	983500	78	56	180 to 250	N320TC-N360TC	79300	84300	25300	236
	317 L4	**310**	3.7	1154700	77	30	132 to 180	N250TC-N280TC	84400	89700	27100	236
	317 L4	**360**	3.2	1193400	69	30	132 to 180	N250TC-N280TC	88200	93800	28500	236
	317 L4	**449**	2.6	1481500	68	30	132 to 180	N250TC-N280TC	94300	100300	30700	236
	317 L4	**493**	2.3	1470000	62	30	132 to 180	N250TC-N280TC	97000	103100	31700	236
	317 L4	**552**	2.1	1481500	56	30	132 to 180	N250TC-N280TC	100300	106600	32900	236
	317 L4	**619**	1.9	1470000	49	30	132 to 180	N250TC-N280TC	103800	110400	34200	236
	317 L4	**719**	1.6	1470000	42	30	132 to 180	N250TC-N280TC	108600	115500	35900	236
	317 L4	**792**	1.5	1481500	39	30	132 to 180	N250TC-N280TC	111800	118900	37100	236
	317 L4	**904**	1.3	1399200	32	30	132 to 180	N250TC-N280TC	116200	123500	38700	236
	317 L4	**1032**	1.1	1481500	30	30	132 to 180	N250TC-N280TC	116200	123500	38700	236
	317 L4	**1134**	1.0	1399200	26	30	132 to 180	N250TC-N280TC	116200	123500	38700	236
	317 L4	**1318**	0.87	1399200	22	30	132 to 180	N250TC-N280TC	116200	123500	38700	236
	317 L4	**1595**	0.72	1399200	18.2	30	132 to 180	N250TC-N280TC	116200	123500	38700	236
	317 L4	**1893**	0.61	1193400	13.1	30	132 to 180	N250TC-N280TC	116200	123500	38700	236
870	**317 L2**	**16.9**	51	299100	259	67	—	-	37900	40300	11100	236
	317 L2	**22.1**	39	390300	259	67	—	-	41100	43700	12100	236
	317 L2	**26.6**	33	469900	260	67	—	-	43400	46200	12900	236
	317 L2	**28.4**	31	500900	259	67	—	-	44300	47100	13100	236
	317 L2	**34.1**	25.5	602700	259	67	—	-	46800	49800	14000	236
	317 L2	**40.5**	21.5	716000	260	67	—	-	49300	52400	14800	236
	317 L3	**58.1**	15.0	647800	169	56	180 to 250	N320TC-N360TC	54900	58400	16700	236
	317 L3	**69.3**	12.5	772600	169	56	180 to 250	N320TC-N360TC	57900	61500	17700	236
	317 L3	**89.0**	9.8	991200	169	56	180 to 250	N320TC-N360TC	62400	66300	19300	236
	317 L3	**106**	8.2	1085000	156	56	180 to 250	N320TC-N360TC	65700	69800	20400	236
	317 L3	**116**	7.5	1080600	141	56	180 to 250	N320TC-N360TC	67500	71800	21000	236
	317 L3	**138**	6.3	1138100	125	56	180 to 250	N320TC-N360TC	71100	75600	22200	236
	317 L3	**166**	5.3	1171700	107	56	180 to 250	N320TC-N360TC	75200	79900	23700	236
	317 L3	**179**	4.9	1245200	105	56	180 to 250	N320TC-N360TC	76900	81800	24300	236
	317 L3	**213**	4.1	1270900	91	56	180 to 250	N320TC-N360TC	81000	86200	25700	236
	317 L3	**252**	3.4	1057600	64	56	180 to 250	N320TC-N360TC	85300	90700	27200	236
	317 L4	**310**	2.8	1241700	63	30	132 to 180	N250TC-N280TC	90700	96400	29200	236
	317 L4	**360**	2.4	1283200	56	30	132 to 180	N250TC-N280TC	94900	100900	30700	236
	317 L4	**449**	1.9	1593000	56	30	132 to 180	N250TC-N280TC	101400	107800	33000	236
	317 L4	**493**	1.8	1580600	50	30	132 to 180	N250TC-N280TC	104300	110900	34000	236
	317 L4	**552**	1.6	1593000	45	30	132 to 180	N250TC-N280TC	107800	114700	35300	236
	317 L4	**619**	1.4	1580600	40	30	132 to 180	N250TC-N280TC	111600	118700	36700	236
	317 L4	**719**	1.2	1580600	34	30	132 to 180	N250TC-N280TC	116800	124200	38600	236
	317 L4	**792**	1.1	1593000	32	30	132 to 180	N250TC-N280TC	120200	127800	39900	236
	317 L4	**904**	0.96	1504500	26	30	132 to 180	N250TC-N280TC	124900	132800	41600	236
	317 L4	**1032**	0.84	1593000	24	30	132 to 180	N250TC-N280TC	124900	132800	41600	236
	317 L4	**1134**	0.77	1504500	21	30	132 to 180	N250TC-N280TC	124900	132800	41600	236
	317 L4	**1318**	0.66	1504500	17.9	30	132 to 180	N250TC-N280TC	124900	132800	41600	236
	317 L4	**1595**	0.55	1504500	14.8	30	132 to 180	N250TC-N280TC	124900	132800	41600	236
	317 L4	**1893**	0.46	1283200	10.6	30	132 to 180	N250TC-N280TC	124900	132800	41600	236



318 L

2,200,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	Pt thermal capacity	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**318 L3**	**73.6**	23.8	528400	219	47	—	N400TC	54600	61400	16400	244
	318 L3	**94.5**	18.5	678200	219	47	—	N400TC	58900	66100	17900	244
	318 L3	**112**	15.6	803300	219	47	—	N400TC	62000	69600	18900	244
	318 L3	**121**	14.5	868300	219	47	—	N400TC	63400	71200	19400	244
	318 L3	**144**	12.2	1032900	219	47	—	N400TC	66800	75100	20600	244
	318 L3	**171**	10.2	1226300	219	47	—	N400TC	70300	79000	21800	244
	318 L4	**253**	6.9	754700	94	24	180 to 225	N320TC-N360TC	79100	88900	24800	244
	318 L4	**301**	5.8	897900	94	24	180 to 225	N320TC-N360TC	83400	93600	26300	244
	318 L4	**324**	5.4	966300	94	24	180 to 225	N320TC-N360TC	85200	95700	26900	244
	318 L4	**387**	4.5	1153900	94	24	180 to 225	N320TC-N360TC	89900	101000	28600	244
	318 L4	**416**	4.2	1240300	94	24	180 to 225	N320TC-N360TC	91900	103200	29300	244
	318 L4	**459**	3.8	1368700	94	24	180 to 225	N320TC-N360TC	94600	106300	30300	244
	318 L4	**496**	3.5	1479000	94	24	180 to 225	N320TC-N360TC	96800	108800	31000	244
	318 L4	**589**	3.0	1756400	94	24	180 to 225	N320TC-N360TC	102000	114500	32900	244
	318 L4	**637**	2.7	1899600	94	24	180 to 225	N320TC-N360TC	104400	117300	33700	244
	318 L4	**698**	2.5	2057600	93	24	180 to 225	N320TC-N360TC	107300	120500	34800	244
	318 L4	**756**	2.3	2057600	86	24	180 to 225	N320TC-N360TC	109900	123400	35700	244
	318 L4	**897**	2.0	2057600	72	24	180 to 225	N320TC-N360TC	115700	129900	37800	244
	318 L4	**1064**	1.6	1947300	58	24	180 to 225	N320TC-N360TC	121800	136800	40000	244
1450	**318 L3**	**73.6**	19.7	568200	195	47	—	N400TC	58700	66000	17700	244
	318 L3	**94.5**	15.3	729200	195	47	—	N400TC	63300	71100	19200	244
	318 L3	**112**	12.9	863800	195	47	—	N400TC	66600	74900	20300	244
	318 L3	**121**	12.0	933700	195	47	—	N400TC	68200	76600	20900	244
	318 L3	**144**	10.1	1110700	195	47	—	N400TC	71900	80700	22100	244
	318 L3	**171**	8.5	1318600	195	47	—	N400TC	75600	85000	23400	244
	318 L4	**253**	5.7	811500	84	24	180 to 225	N320TC-N360TC	85100	95600	26700	244
	318 L4	**301**	4.8	965500	84	24	180 to 225	N320TC-N360TC	89600	100700	28300	244
	318 L4	**324**	4.5	1039000	84	24	180 to 225	N320TC-N360TC	91600	102900	29000	244
	318 L4	**387**	3.7	1240800	84	24	180 to 225	N320TC-N360TC	96700	108600	30700	244
	318 L4	**416**	3.5	1333700	84	24	180 to 225	N320TC-N360TC	98800	110900	31500	244
	318 L4	**459**	3.2	1471800	84	24	180 to 225	N320TC-N360TC	101700	114300	32500	244
	318 L4	**496**	2.9	1590300	84	24	180 to 225	N320TC-N360TC	104100	117000	33400	244
	318 L4	**589**	2.5	1888600	84	24	180 to 225	N320TC-N360TC	109600	123100	35300	244
	318 L4	**637**	2.3	2042600	84	24	180 to 225	N320TC-N360TC	112200	126100	36300	244
	318 L4	**698**	2.1	2212500	83	24	180 to 225	N320TC-N360TC	115400	129600	37400	244
	318 L4	**756**	1.9	2212500	77	24	180 to 225	N320TC-N360TC	118200	132700	38400	244
	318 L4	**897**	1.6	2212500	64	24	180 to 225	N320TC-N360TC	124400	139700	40700	244
	318 L4	**1064**	1.4	2093900	51	24	180 to 225	N320TC-N360TC	130900	147100	43100	244
1150	**318 L2**	**18.0**	64	325100	351	74	—	-	40900	45900	11900	244
	318 L2	**23.1**	50	417300	351	74	—	-	44100	49500	12900	244
	318 L2	**27.4**	42	495500	351	74	—	-	46400	52100	13700	244
	318 L3	**73.6**	15.6	821400	224	47	—	N400TC	62400	70100	19000	244
	318 L3	**94.5**	12.2	1054300	224	47	—	N400TC	67200	75500	20700	244
	318 L3	**112**	10.3	1250200	224	47	—	N400TC	70700	79500	21900	244
	318 L3	**121**	9.5	1350600	224	47	—	N400TC	72400	81300	22500	244
	318 L3	**144**	8.0	1606600	224	47	—	N400TC	76300	85700	23800	244
	318 L3	**171**	6.7	1704500	200	47	—	N400TC	80300	90200	25200	244
	318 L4	**253**	4.5	1173700	96	24	180 to 225	N320TC-N360TC	90300	101500	28700	244
	318 L4	**301**	3.8	1396700	96	24	180 to 225	N320TC-N360TC	95200	106900	30500	244
	318 L4	**324**	3.5	1502900	96	24	180 to 225	N320TC-N360TC	97300	109300	31200	244
	318 L4	**387**	3.0	1795100	96	24	180 to 225	N320TC-N360TC	102600	115300	33100	244
	318 L4	**416**	2.8	1930100	96	24	180 to 225	N320TC-N360TC	104900	117800	33900	244
	318 L4	**459**	2.5	2057600	93	24	180 to 225	N320TC-N360TC	108000	121300	35100	244
	318 L4	**496**	2.3	2057600	86	24	180 to 225	N320TC-N360TC	110600	124200	36000	244

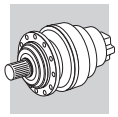


318 L — 2,200,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**318 L4**	**589**	2.0	2057600	72	24	180 to 225	N320TC-N360TC	116400	130800	38100	244
	318 L4	**637**	1.8	2057600	67	24	180 to 225	N320TC-N360TC	119200	133900	39100	244
	318 L4	**698**	1.6	2057600	61	24	180 to 225	N320TC-N360TC	122500	137600	40300	244
	318 L4	**756**	1.5	2057600	56	24	180 to 225	N320TC-N360TC	125500	140900	41400	244
	318 L4	**897**	1.3	2057600	48	24	180 to 225	N320TC-N360TC	132100	148300	43800	244
	318 L4	**1064**	1.1	2008200	39	24	180 to 225	N320TC-N360TC	132200	148500	43900	244
870	**318 L2**	**18.0**	48	349600	285	74	—	-	44000	49400	12800	244
	318 L2	**23.1**	38	448700	285	74	—	-	47400	53200	13900	244
	318 L2	**27.4**	32	532800	286	74	—	-	49900	56000	14700	244
	318 L3	**73.6**	11.8	883200	182	47	—	N400TC	67100	75300	20500	244
	318 L3	**94.5**	9.2	1133700	182	47	—	N400TC	72300	81200	22300	244
	318 L3	**112**	7.8	1344300	182	47	—	N400TC	76100	85400	23600	244
	318 L3	**121**	7.2	1452300	182	47	—	N400TC	77900	87500	24200	244
	318 L3	**144**	6.0	1727500	182	47	—	N400TC	82000	92100	25600	244
	318 L3	**171**	5.1	1832800	163	47	—	N400TC	86400	97000	27100	244
	318 L4	**253**	3.4	1262000	78	24	180 to 225	N320TC-N360TC	97100	109100	30900	244
	318 L4	**301**	2.9	1501800	78	24	180 to 225	N320TC-N360TC	102300	114900	32800	244
	318 L4	**324**	2.7	1616000	78	24	180 to 225	N320TC-N360TC	104600	117500	33600	244
	318 L4	**387**	2.2	1930200	78	24	180 to 225	N320TC-N360TC	110300	124000	35600	244
	318 L4	**416**	2.1	2075300	78	24	180 to 225	N320TC-N360TC	112800	126700	36500	244
	318 L4	**459**	1.9	2212500	76	24	180 to 225	N320TC-N360TC	116100	130500	37700	244
	318 L4	**496**	1.8	2212500	70	24	180 to 225	N320TC-N360TC	118900	133500	38700	244
	318 L4	**589**	1.5	2212500	59	24	180 to 225	N320TC-N360TC	125200	140600	40900	244
	318 L4	**637**	1.4	2212500	54	24	180 to 225	N320TC-N360TC	128100	143900	42100	244
	318 L4	**698**	1.2	2212500	50	24	180 to 225	N320TC-N360TC	131700	148000	43300	244
	318 L4	**756**	1.2	2212500	46	24	180 to 225	N320TC-N360TC	134900	151500	44500	244
	318 L4	**897**	0.97	2212500	39	24	180 to 225	N320TC-N360TC	142000	159500	47100	244
	318 L4	**1064**	0.82	2159400	32	24	180 to 225	N320TC-N360TC	142100	159700	47200	244

319 L — 3,000,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**319 L4**	**334**	5.2	1659300	157	40	180 to 225	N320TC-N360TC	109100	120000	32000	252
	319 L4	**428**	4.1	2129200	157	40	180 to 225	N320TC-N360TC	117500	129300	34800	252
	319 L4	**508**	3.4	2526800	157	40	180 to 225	N320TC-N360TC	123700	136100	36800	252
	319 L4	**550**	3.2	2591800	149	40	180 to 225	N320TC-N360TC	126700	139400	37800	252
	319 L4	**652**	2.7	2728400	132	40	180 to 225	N320TC-N360TC	133300	146700	40000	252
	319 L4	**705**	2.5	2718500	122	40	180 to 225	N320TC-N360TC	136500	150200	41000	252
	319 L4	**837**	2.1	2861700	108	40	180 to 225	N320TC-N360TC	143700	158100	43500	252
	319 L4	**916**	1.9	2607400	90	40	180 to 225	N320TC-N360TC	147600	162500	44800	252
	319 L4	**991**	1.8	2642000	84	40	180 to 225	N320TC-N360TC	151100	166300	46000	252
	319 L4	**1179**	1.5	2530100	68	40	180 to 225	N320TC-N360TC	159300	175200	48700	252
	319 L4	**1396**	1.3	2796700	63	40	180 to 225	N320TC-N360TC	167500	184300	51500	252
1450	**319 L4**	**334**	4.3	1784200	140	40	180 to 225	N320TC-N360TC	117300	129000	34400	252
	319 L4	**428**	3.4	2289500	140	40	180 to 225	N320TC-N360TC	126400	139100	37400	252

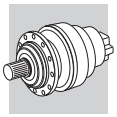


3□ L

319 L

3,000,000 in•lbs

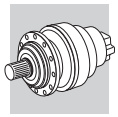
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**319 L4**	**508**	2.9	2716900	140	40	180 to 225	N320TC-N360TC	133000	146400	39600	252
	319 L4	**550**	2.6	2786900	133	40	180 to 225	N320TC-N360TC	136200	149800	40600	252
	319 L4	**652**	2.2	2933800	118	40	180 to 225	N320TC-N360TC	143400	157800	43000	252
	319 L4	**705**	2.1	2923200	108	40	180 to 225	N320TC-N360TC	146800	161500	44100	252
	319 L4	**837**	1.7	3077100	96	40	180 to 225	N320TC-N360TC	154500	170000	46700	252
	319 L4	**916**	1.6	2803700	80	40	180 to 225	N320TC-N360TC	158700	174700	48200	252
	319 L4	**991**	1.5	2840800	75	40	180 to 225	N320TC-N360TC	162500	178800	49400	252
	319 L4	**1179**	1.2	2720500	60	40	180 to 225	N320TC-N360TC	171200	188400	52400	252
	319 L4	**1396**	1.0	3007200	56	40	180 to 225	N320TC-N360TC	180100	198200	55400	252
1150	**319 L3**	**81.6**	14.1	1170400	288	67	—	N400TC	81600	89800	23200	252
	319 L3	**105**	11.0	1502100	288	67	—	N400TC	87900	96800	25200	252
	319 L3	**124**	9.3	1782700	288	67	—	N400TC	92600	101900	26700	252
	319 L3	**134**	8.6	1886400	282	67	—	N400TC	94800	104300	27400	252
	319 L3	**159**	7.2	2139900	270	67	—	N400TC	99700	109700	28900	252
	319 L3	**189**	6.1	2060100	218	67	—	N400TC	105000	115500	30700	252
	319 L3	**224**	5.1	2218900	199	67	—	N400TC	110500	121500	32500	252
	319 L4	**334**	3.4	2548200	158	48	180 to 225	N320TC-N360TC	124500	137000	37100	252
	319 L4	**428**	2.7	2746500	133	48	180 to 225	N320TC-N360TC	134200	147600	40300	252
	319 L4	**508**	2.3	2880700	118	48	180 to 225	N320TC-N360TC	141300	155400	42600	252
	319 L4	**550**	2.1	2880700	109	48	180 to 225	N320TC-N360TC	144600	159100	43800	252
	319 L4	**652**	1.8	2880700	92	48	180 to 225	N320TC-N360TC	152200	167500	46400	252
	319 L4	**705**	1.6	2880700	85	48	180 to 225	N320TC-N360TC	155800	171500	47600	252
	319 L4	**837**	1.4	2880700	71	48	180 to 225	N320TC-N360TC	164100	180500	50400	252
	319 L4	**916**	1.3	2798400	63	48	180 to 225	N320TC-N360TC	167700	184500	51600	252
	319 L4	**991**	1.2	2798400	59	48	180 to 225	N320TC-N360TC	167700	184500	51600	252
	319 L4	**1179**	0.98	2590100	46	48	180 to 225	N320TC-N360TC	167700	184500	51600	252
	319 L4	**1396**	0.82	2798400	42	48	180 to 225	N320TC-N360TC	167700	184500	51600	252
870	**319 L3**	**81.6**	10.7	1258500	234	67	—	N400TC	87700	96500	24900	252
	319 L3	**105**	8.3	1615100	234	67	—	N400TC	94500	104000	27100	252
	319 L3	**124**	7.0	1916900	234	67	—	N400TC	99500	109500	28700	252
	319 L3	**134**	6.5	2028400	229	67	—	N400TC	101900	112100	29400	252
	319 L3	**159**	5.5	2301000	220	67	—	N400TC	107200	117900	31100	252
	319 L3	**189**	4.6	2215200	178	67	—	N400TC	112900	124200	33000	252
	319 L3	**224**	3.9	2386000	162	67	—	N400TC	118800	130700	34900	252
	319 L4	**334**	2.6	2740000	129	48	180 to 225	N320TC-N360TC	133900	147300	39900	252
	319 L4	**428**	2.0	2953200	108	48	180 to 225	N320TC-N360TC	144300	158700	43300	252
	319 L4	**508**	1.7	3097500	96	48	180 to 225	N320TC-N360TC	151900	167100	45900	252
	319 L4	**550**	1.6	3097500	88	48	180 to 225	N320TC-N360TC	155500	171100	47100	252
	319 L4	**652**	1.3	3097500	74	48	180 to 225	N320TC-N360TC	163700	180100	49800	252
	319 L4	**705**	1.2	3097500	69	48	180 to 225	N320TC-N360TC	167600	184400	51200	252
	319 L4	**837**	1.0	3097500	58	48	180 to 225	N320TC-N360TC	176400	194100	54100	252
	319 L4	**916**	0.95	3009000	52	48	180 to 225	N320TC-N360TC	180300	198400	55500	252
	319 L4	**991**	0.88	3009000	48	48	180 to 225	N320TC-N360TC	180300	198400	55500	252
	319 L4	**1179**	0.74	2785100	37	48	180 to 225	N320TC-N360TC	180300	198400	55500	252
	319 L4	**1396**	0.62	3009000	34	48	180 to 225	N320TC-N360TC	180300	198400	55500	252



321 L

4,500,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**321 L4**	**258**	6.8	1668300	204	47	180 to 250	N320TC-N360TC	123300	146100	186400	260
	321 L4	**308**	5.7	1991000	204	47	180 to 250	N320TC-N360TC	130000	154000	196600	260
	321 L4	**395**	4.4	2555600	204	47	180 to 250	N320TC-N360TC	140100	166000	211900	260
	321 L4	**469**	3.7	3032900	204	47	180 to 250	N320TC-N360TC	147500	174800	223000	260
	321 L4	**515**	3.4	3330900	204	47	180 to 250	N320TC-N360TC	151700	179700	229400	260
	321 L4	**612**	2.9	3953100	204	47	180 to 250	N320TC-N360TC	159700	189200	241500	260
	321 L4	**736**	2.4	4078200	175	47	180 to 250	N320TC-N360TC	168800	200000	255300	260
	321 L4	**796**	2.2	4102100	163	47	180 to 250	N320TC-N360TC	172800	204800	261400	260
	321 L4	**945**	1.9	4155600	139	47	180 to 250	N320TC-N360TC	182000	215600	275100	260
	321 L4	**1122**	1.6	4080700	115	47	180 to 250	N320TC-N360TC	191500	226900	289700	260
1450	**321 L4**	**258**	5.6	1793900	182	47	180 to 250	N320TC-N360TC	132600	157100	200500	260
	321 L4	**308**	4.7	2140800	182	47	180 to 250	N320TC-N360TC	139800	165600	211400	260
	321 L4	**395**	3.7	2747900	182	47	180 to 250	N320TC-N360TC	150600	178500	227800	260
	321 L4	**469**	3.1	3261200	182	47	180 to 250	N320TC-N360TC	158600	187900	239800	260
	321 L4	**515**	2.8	3581600	182	47	180 to 250	N320TC-N360TC	163100	193300	246700	260
	321 L4	**612**	2.4	4250700	182	47	180 to 250	N320TC-N360TC	171700	203500	259700	260
	321 L4	**736**	2.0	4385200	156	47	180 to 250	N320TC-N360TC	181500	215100	274500	260
	321 L4	**796**	1.8	4410800	145	47	180 to 250	N320TC-N360TC	185800	220200	281000	260
	321 L4	**945**	1.5	4468400	124	47	180 to 250	N320TC-N360TC	195700	231800	295800	260
	321 L4	**1122**	1.3	4387800	102	47	180 to 250	N320TC-N360TC	206000	244000	311500	260
1150	**321 L3**	**75.3**	15.3	1200800	228	80	—	—	97300	115200	147100	260
	321 L3	**98.2**	11.7	1565400	228	80	—	—	105300	124800	159300	260
	321 L3	**118**	9.7	1884000	228	80	—	—	111300	131900	168400	260
	321 L3	**126**	9.1	2008200	228	80	—	—	113500	134500	171600	260
	321 L3	**152**	7.6	2418100	228	80	—	—	120000	142200	181500	260
	321 L3	**180**	6.4	2869200	228	80	—	—	126300	149700	191000	260
	321 L4	**258**	4.5	2595900	208	56	180 to 250	N320TC-N360TC	140800	166800	212900	260
	321 L4	**308**	3.7	3097100	208	56	180 to 250	N320TC-N360TC	148400	175900	224400	260
	321 L4	**395**	2.9	3974500	208	56	180 to 250	N320TC-N360TC	160000	189500	241900	260
	321 L4	**469**	2.5	4075700	180	56	180 to 250	N320TC-N360TC	168400	199500	254700	260
	321 L4	**515**	2.2	4104500	165	56	180 to 250	N320TC-N360TC	173200	205200	261900	260
	321 L4	**612**	1.9	4157200	141	56	180 to 250	N320TC-N360TC	182300	216000	275700	260
	321 L4	**736**	1.6	4215700	119	56	180 to 250	N320TC-N360TC	192800	228400	291500	260
	321 L4	**796**	1.4	4240400	110	56	180 to 250	N320TC-N360TC	197300	233800	298400	260
	321 L4	**945**	1.2	4279900	94	56	180 to 250	N320TC-N360TC	204700	242600	309600	260
	321 L4	**1122**	1.0	4241200	78	56	180 to 250	N320TC-N360TC	204700	242600	309600	260
870	**321 L3**	**75.3**	11.6	1291200	260	80	—	—	104600	123900	158200	260
	321 L3	**98.2**	8.9	1683300	260	80	—	—	113300	134200	171200	260
	321 L3	**118**	7.4	2025800	260	80	—	—	119700	141900	181000	260
	321 L3	**126**	6.9	2159400	260	80	—	—	122000	144600	184600	260
	321 L3	**152**	5.7	2600100	260	80	—	—	129000	152900	195100	260
	321 L3	**180**	4.8	3085100	260	80	—	—	135800	160900	205400	260
	321 L4	**258**	3.4	2791300	170	56	180 to 250	N320TC-N360TC	151300	179300	228900	260
	321 L4	**308**	2.8	3330300	170	56	180 to 250	N320TC-N360TC	159600	189100	241300	260
	321 L4	**395**	2.2	4273700	170	56	180 to 250	N320TC-N360TC	172000	203800	260100	260
	321 L4	**469**	1.9	4382500	146	56	180 to 250	N320TC-N360TC	181100	214500	273800	260
	321 L4	**515**	1.7	4413500	134	56	180 to 250	N320TC-N360TC	186200	220700	281600	260
	321 L4	**612**	1.4	4470100	115	56	180 to 250	N320TC-N360TC	196000	232300	296500	260
	321 L4	**736**	1.2	4533000	97	56	180 to 250	N320TC-N360TC	207300	245600	313400	260
	321 L4	**796**	1.1	4559500	90	56	180 to 250	N320TC-N360TC	212200	251400	320900	260
	321 L4	**945**	0.92	4602000	76	56	180 to 250	N320TC-N360TC	220100	260800	332900	260
	321 L4	**1122**	0.78	4560400	64	56	180 to 250	N320TC-N360TC	220100	260800	332900	260



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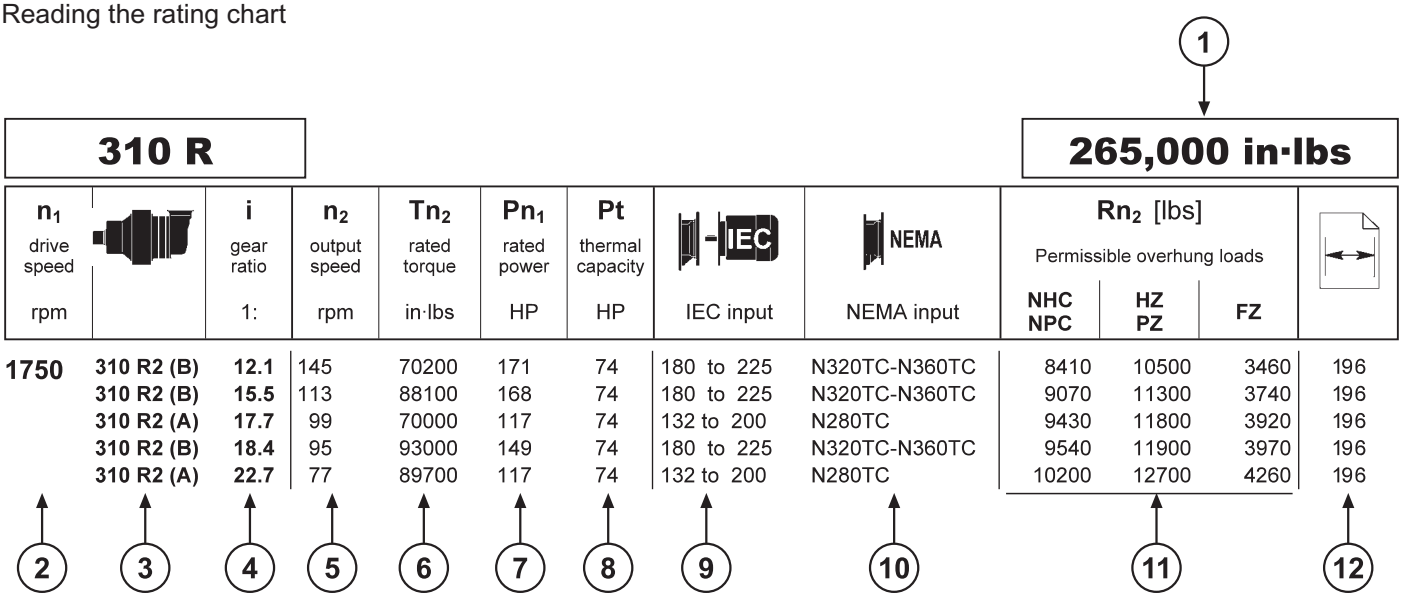
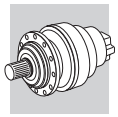
22.0 - SPEED REDUCER RATING CHARTS: 300R (right angle)

Reading the rating chart



310 R										265,000 in·lbs			
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	310 R2 (B)	12.1	145	70200	171	74	180 to 225	N320TC-N360TC	8410	10500	3460	196
	310 R2 (B)	15.5	113	88100	168	74	180 to 225	N320TC-N360TC	9070	11300	3740	196
	310 R2 (A)	17.7	99	70000	117	74	132 to 200	N280TC	9430	11800	3920	196
	310 R2 (B)	18.4	95	93000	149	74	180 to 225	N320TC-N360TC	9540	11900	3970	196
	310 R2 (A)	22.7	77	89700	117	74	132 to 200	N280TC	10200	12700	4260	196

1	Max. transmissible torque
2	Gearbox drive speed
3	Frame size of the right-angle gear unit NOTE: Suffix (A), (B) or (C) alongside the frame size refers to different bevel gear sets. See installation drawings for reference
4	Gear ratio
5	Gearbox output speed
6	Gearbox rated output torque
7	Gearbox rated input power
8	Gearbox thermal capacity
9	Frame size of available IEC motor
10	Frame size of available NEMA motor
11	Permissible overhung load on output shaft
12	Page showing installation drawings and dimensions. Gearmotor overall dimensions refer to matches with BONFIGLIOLI motors only

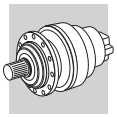


3□ R

300 R

8,850 in•lbs

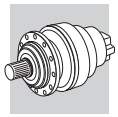
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**300 R2**	**7.13**	245	4360	18.1	16.1	71 to 132	N56C to N280TC	1670	1830	360	138
	300 R2	**8.74**	200	4530	15.3	16.1	71 to 132	N56C to N280TC	1780	1950	380	138
	300 R2	**11.8**	148	4770	11.9	16.1	71 to 132	N56C to N280TC	1940	2130	420	138
	300 R2	**14.8**	119	4530	9.1	16.1	71 to 132	N56C to N280TC	2080	2280	450	138
	300 R3	**24.8**	70	5350	6.6	16.1	71 to 100	N56C to N280TC	2430	2650	540	138
	300 R3	**30.4**	58	5350	5.4	16.1	71 to 100	N56C to N280TC	2580	2840	580	138
	300 R3	**37.3**	47	7000	5.7	16.1	71 to 100	N56C to N280TC	2730	3020	620	138
	300 R3	**41.2**	43	5350	4.0	16.1	71 to 100	N56C to N280TC	2840	3100	640	138
	300 R3	**50.4**	35	7000	4.2	16.1	71 to 100	N56C to N280TC	3000	3280	680	138
	300 R3	**62.9**	27.8	7000	3.4	16.1	71 to 100	N56C to N280TC	3210	3520	730	138
	300 R3	**68.2**	25.6	5350	2.4	16.1	71 to 100	N56C to N280TC	3280	3600	750	138
	300 R3	**85.2**	20.6	5350	1.9	16.1	71 to 100	N56C to N280TC	3520	3860	810	138
	300 R3	**106**	16.5	4530	1.3	16.1	71 to 100	N56C to N280TC	3760	4130	870	138
	300 R4	**86.4**	20.3	5350	2.0	13.4	71 to 90	N56C to N280TC	3520	3860	820	138
	300 R4	**106**	16.5	7000	2.1	13.4	71 to 90	N56C to N280TC	3760	4130	870	138
	300 R4	**130**	13.5	7000	1.7	13.4	71 to 90	N56C to N280TC	3990	4360	930	138
	300 R4	**143**	12.2	5350	1.2	13.4	71 to 90	N56C to N280TC	4100	4520	960	138
	300 R4	**159**	11.0	7000	1.4	13.4	71 to 90	N56C to N280TC	4230	4650	1000	138
	300 R4	**175**	10.0	7000	1.3	13.4	71 to 90	N56C to N280TC	4360	4780	1030	138
	300 R4	**215**	8.1	7000	1.0	13.4	71 to 90	N56C to N280TC	4650	5100	1100	138
	300 R4	**237**	7.4	5350	0.71	13.4	71 to 90	N56C to N280TC	4780	5260	1140	138
	300 R4	**268**	6.5	7240	0.85	13.4	71 to 90	N56C to N280TC	4970	5440	1190	138
	300 R4	**291**	6.0	7410	0.80	13.4	71 to 90	N56C to N280TC	5070	5570	1220	138
	300 R4	**363**	4.8	7650	0.66	13.4	71 to 90	N56C to N280TC	5440	5970	1320	138
	300 R4	**394**	4.4	5680	0.46	13.4	71 to 90	N56C to N280TC	5570	6100	1350	138
	300 R4	**453**	3.9	7980	0.56	13.4	71 to 90	N56C to N280TC	5810	6360	1420	138
	300 R4	**491**	3.6	5930	0.38	13.4	71 to 90	N56C to N280TC	5940	6520	1450	138
	300 R4	**613**	2.9	6170	0.32	13.4	71 to 90	N56C to N280TC	6360	6960	1570	138
	300 R4	**765**	2.3	5190	0.21	13.4	71 to 90	N56C to N280TC	6810	7460	1690	138
1450	**300 R2**	**7.13**	203	4690	16.1	16.1	71 to 132	N56C to N280TC	1800	1970	380	138
	300 R2	**8.74**	166	4870	13.6	16.1	71 to 132	N56C to N280TC	1910	2090	410	138
	300 R2	**11.8**	123	5130	10.6	16.1	71 to 132	N56C to N280TC	2090	2290	450	138
	300 R2	**14.8**	98	4870	8.1	16.1	71 to 132	N56C to N280TC	2240	2450	490	138
	300 R3	**24.8**	58	5750	5.9	16.1	71 to 100	N56C to N280TC	2610	2850	580	138
	300 R3	**30.4**	48	5750	4.8	16.1	71 to 100	N56C to N280TC	2780	3050	620	138
	300 R3	**37.3**	39	7520	5.1	16.1	71 to 100	N56C to N280TC	2940	3250	660	138
	300 R3	**41.2**	35	5750	3.5	16.1	71 to 100	N56C to N280TC	3050	3330	690	138
	300 R3	**50.4**	28.8	7520	3.8	16.1	71 to 100	N56C to N280TC	3220	3530	730	138
	300 R3	**62.9**	23.0	7520	3.0	16.1	71 to 100	N56C to N280TC	3450	3790	790	138
	300 R3	**68.2**	21.3	5750	2.1	16.1	71 to 100	N56C to N280TC	3530	3870	810	138
	300 R3	**85.2**	17.0	5750	1.7	16.1	71 to 100	N56C to N280TC	3790	4150	870	138
	300 R3	**106**	13.6	4870	1.2	16.1	71 to 100	N56C to N280TC	4040	4440	940	138
	300 R4	**86.4**	16.8	5750	1.7	13.4	71 to 90	N56C to N280TC	3790	4150	880	138
	300 R4	**106**	13.7	7520	1.9	13.4	71 to 90	N56C to N280TC	4040	4440	940	138
	300 R4	**130**	11.2	7520	1.5	13.4	71 to 90	N56C to N280TC	4300	4690	1000	138
	300 R4	**143**	10.1	5750	1.0	13.4	71 to 90	N56C to N280TC	4410	4860	1040	138
	300 R4	**159**	9.1	7520	1.2	13.4	71 to 90	N56C to N280TC	4550	5000	1070	138
	300 R4	**175**	8.3	7520	1.1	13.4	71 to 90	N56C to N280TC	4690	5140	1110	138
	300 R4	**215**	6.7	7520	0.91	13.4	71 to 90	N56C to N280TC	5000	5480	1190	138
	300 R4	**237**	6.1	5750	0.63	13.4	71 to 90	N56C to N280TC	5140	5650	1230	138
	300 R4	**268**	5.4	7790	0.76	13.4	71 to 90	N56C to N280TC	5340	5850	1280	138
	300 R4	**291**	5.0	7960	0.72	13.4	71 to 90	N56C to N280TC	5450	5990	1310	138
	300 R4	**363**	4.0	8230	0.59	13.4	71 to 90	N56C to N280TC	5850	6410	1410	138
	300 R4	**394**	3.7	6110	0.41	13.4	71 to 90	N56C to N280TC	5990	6560	1450	138
	300 R4	**453**	3.2	8580	0.50	13.4	71 to 90	N56C to N280TC	6240	6840	1520	138



300 R

8,850 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**300 R4**	**491**	3.0	6370	0.34	13.4	71 to 90	N56C to N280TC	6390	7010	1560	138
	300 R4	**613**	2.4	6640	0.28	13.4	71 to 90	N56C to N280TC	6840	7490	1690	138
	300 R4	**765**	1.9	5580	0.19	13.4	71 to 90	N56C to N280TC	7320	8020	1810	138
1150	**300 R2**	**7.13**	161	5020	13.7	20	71 to 132	N56C to N280TC	1910	2090	410	138
	300 R2	**8.74**	132	5190	11.5	20	71 to 132	N56C to N280TC	2030	2230	440	138
	300 R2	**11.8**	97	5350	8.8	20	71 to 132	N56C to N280TC	2220	2440	490	138
	300 R2	**14.8**	78	4530	6.0	20	71 to 132	N56C to N280TC	2370	2600	520	138
	300 R3	**24.8**	46	5350	4.3	20	71 to 100	N56C to N280TC	2790	3050	620	138
	300 R3	**30.4**	38	5350	3.5	20	71 to 100	N56C to N280TC	2940	3230	670	138
	300 R3	**37.3**	31	7000	3.8	20	71 to 100	N56C to N280TC	3130	3440	710	138
	300 R3	**41.2**	27.9	5350	2.6	20	71 to 100	N56C to N280TC	3230	3550	740	138
	300 R3	**50.4**	22.8	7000	2.8	20	71 to 100	N56C to N280TC	3440	3760	790	138
	300 R3	**62.9**	18.3	7000	2.2	20	71 to 100	N56C to N280TC	3680	4020	850	138
	300 R3	**68.2**	16.9	5350	1.6	20	71 to 100	N56C to N280TC	3760	4130	870	138
	300 R3	**85.2**	13.5	5350	1.3	20	71 to 100	N56C to N280TC	4020	4410	940	138
	300 R3	**106**	10.8	4530	0.85	20	71 to 100	N56C to N280TC	4280	4700	1010	138
	300 R4	**86.4**	13.3	5350	1.3	16.1	71 to 90	N56C to N280TC	4020	4410	940	138
	300 R4	**106**	10.9	7000	1.4	16.1	71 to 90	N56C to N280TC	4280	4700	1010	138
	300 R4	**130**	8.9	7000	1.1	16.1	71 to 90	N56C to N280TC	4550	4990	1080	138
	300 R4	**143**	8.0	5510	0.80	16.1	71 to 90	N56C to N280TC	4700	5150	1120	138
	300 R4	**159**	7.2	7160	0.93	16.1	71 to 90	N56C to N280TC	4840	5310	1160	138
	300 R4	**175**	6.6	7330	0.87	16.1	71 to 90	N56C to N280TC	4990	5470	1200	138
	300 R4	**215**	5.4	7570	0.73	16.1	71 to 90	N56C to N280TC	5310	5810	1280	138
	300 R4	**237**	4.8	5600	0.49	16.1	71 to 90	N56C to N280TC	5470	5990	1320	138
	300 R4	**268**	4.3	7820	0.60	16.1	71 to 90	N56C to N280TC	5680	6200	1380	138
	300 R4	**291**	4.0	7980	0.57	16.1	71 to 90	N56C to N280TC	5810	6360	1420	138
	300 R4	**363**	3.2	8230	0.47	16.1	71 to 90	N56C to N280TC	6200	6810	1520	138
	300 R4	**394**	2.9	6090	0.32	16.1	71 to 90	N56C to N280TC	6360	6960	1570	138
	300 R4	**453**	2.5	8230	0.38	16.1	71 to 90	N56C to N280TC	6620	7280	1640	138
	300 R4	**491**	2.3	6340	0.27	16.1	71 to 90	N56C to N280TC	6810	7460	1690	138
	300 R4	**613**	1.9	6580	0.22	16.1	71 to 90	N56C to N280TC	7250	7960	1820	138
	300 R4	**765**	1.5	5600	0.15	16.1	71 to 90	N56C to N280TC	7750	8510	1960	138
870	**300 R2**	**7.13**	122	5400	11.1	20	71 to 132	N56C to N280TC	2050	2250	440	138
	300 R2	**8.74**	100	5580	9.4	20	71 to 132	N56C to N280TC	2180	2390	470	138
	300 R2	**11.8**	74	5750	7.1	20	71 to 132	N56C to N280TC	2390	2620	520	138
	300 R2	**14.8**	59	4870	4.8	20	71 to 132	N56C to N280TC	2550	2800	560	138
	300 R3	**24.8**	35	5750	3.5	20	71 to 100	N56C to N280TC	3000	3280	670	138
	300 R3	**30.4**	28.6	5750	2.9	20	71 to 100	N56C to N280TC	3160	3480	720	138
	300 R3	**37.3**	23.4	7520	3.1	20	71 to 100	N56C to N280TC	3360	3700	770	138
	300 R3	**41.2**	21.1	5750	2.1	20	71 to 100	N56C to N280TC	3480	3810	790	138
	300 R3	**50.4**	17.3	7520	2.3	20	71 to 100	N56C to N280TC	3700	4040	850	138
	300 R3	**62.9**	13.8	7520	1.8	20	71 to 100	N56C to N280TC	3960	4320	920	138
	300 R3	**68.2**	12.8	5750	1.3	20	71 to 100	N56C to N280TC	4040	4440	940	138
	300 R3	**85.2**	10.2	5750	1.0	20	71 to 100	N56C to N280TC	4320	4750	1010	138
	300 R3	**106**	8.2	4870	0.70	20	71 to 100	N56C to N280TC	4610	5060	1090	138
	300 R4	**86.4**	10.1	5750	1.0	16.1	71 to 90	N56C to N280TC	4320	4750	1020	138
	300 R4	**106**	8.2	7520	1.1	16.1	71 to 90	N56C to N280TC	4610	5060	1090	138
	300 R4	**130**	6.7	7520	0.91	16.1	71 to 90	N56C to N280TC	4890	5370	1160	138
	300 R4	**143**	6.1	5930	0.65	16.1	71 to 90	N56C to N280TC	5060	5540	1200	138
	300 R4	**159**	5.5	7700	0.76	16.1	71 to 90	N56C to N280TC	5200	5710	1250	138
	300 R4	**175**	5.0	7880	0.70	16.1	71 to 90	N56C to N280TC	5370	5880	1290	138
	300 R4	**215**	4.0	8140	0.59	16.1	71 to 90	N56C to N280TC	5710	6240	1380	138
	300 R4	**237**	3.7	6020	0.40	16.1	71 to 90	N56C to N280TC	5880	6440	1420	138
	300 R4	**268**	3.2	8410	0.49	16.1	71 to 90	N56C to N280TC	6100	6670	1480	138



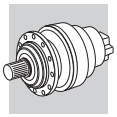
3□ R

300 R — 8,850 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**300 R4**	**291**	3.0	8580	0.46	16.1	71 to 90	N56C to N280TC	6240	6840	1520	138
	300 R4	**363**	2.4	8850	0.38	16.1	71 to 90	N56C to N280TC	6670	7320	1640	138
	300 R4	**394**	2.2	6550	0.26	16.1	71 to 90	N56C to N280TC	6840	7490	1680	138
	300 R4	**453**	1.9	8850	0.31	16.1	71 to 90	N56C to N280TC	7120	7830	1760	138
	300 R4	**491**	1.8	6810	0.22	16.1	71 to 90	N56C to N280TC	7320	8020	1810	138
	300 R4	**613**	1.4	7080	0.18	16.1	71 to 90	N56C to N280TC	7800	8560	1950	138
	300 R4	**765**	1.1	6020	0.12	16.1	71 to 90	N56C to N280TC	8340	9160	2100	138

301 R — 17,000 in•lbs

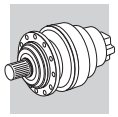
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**301 R2**	**7.13**	245	6010	25	16.1	71 to 132	N56C to N280TC	1670	1830	360	146
	301 R2	**8.74**	200	7330	25	16.1	71 to 132	N56C to N280TC	1780	1950	380	146
	301 R2	**11.8**	148	8640	22	16.1	71 to 132	N56C to N280TC	1940	2130	420	146
	301 R2	**14.8**	119	8970	18.0	16.1	71 to 132	N56C to N280TC	2080	2280	450	146
	301 R3	**24.8**	70	10700	13.2	16.1	71 to 112	N56C to N280TC	2430	2650	540	146
	301 R3	**30.4**	58	10700	10.7	16.1	71 to 112	N56C to N280TC	2580	2840	580	146
	301 R3	**37.3**	47	12700	10.4	16.1	71 to 112	N56C to N280TC	2730	3020	620	146
	301 R3	**41.2**	43	10700	7.9	16.1	71 to 112	N56C to N280TC	2840	3100	640	146
	301 R3	**50.4**	35	13900	8.4	16.1	71 to 112	N56C to N280TC	3000	3280	680	146
	301 R3	**62.9**	27.8	14000	6.8	16.1	71 to 112	N56C to N280TC	3210	3520	730	146
	301 R3	**68.2**	25.6	10700	4.8	16.1	71 to 112	N56C to N280TC	3280	3600	750	146
	301 R3	**85.2**	20.6	10700	3.8	16.1	71 to 112	N56C to N280TC	3520	3860	810	146
	301 R3	**106**	16.5	9460	2.7	16.1	71 to 112	N56C to N280TC	3760	4130	870	146
	301 R4	**86.4**	20.3	10700	3.9	13.4	71 to 90	N56C to N280TC	3520	3860	820	146
	301 R4	**106**	16.5	14000	4.2	13.4	71 to 90	N56C to N280TC	3760	4130	870	146
	301 R4	**130**	13.5	14000	3.4	13.4	71 to 90	N56C to N280TC	3990	4360	930	146
	301 R4	**143**	12.2	10700	2.4	13.4	71 to 90	N56C to N280TC	4100	4520	960	146
	301 R4	**159**	11.0	14000	2.8	13.4	71 to 90	N56C to N280TC	4230	4650	1000	146
	301 R4	**175**	10.0	14000	2.5	13.4	71 to 90	N56C to N280TC	4360	4780	1030	146
	301 R4	**215**	8.1	14000	2.1	13.4	71 to 90	N56C to N280TC	4650	5100	1100	146
	301 R4	**237**	7.4	10700	1.4	13.4	71 to 90	N56C to N280TC	4780	5260	1140	146
	301 R4	**268**	6.5	14500	1.7	13.4	71 to 90	N56C to N280TC	4970	5440	1190	146
	301 R4	**291**	6.0	14600	1.6	13.4	71 to 90	N56C to N280TC	5070	5570	1220	146
	301 R4	**363**	4.8	15200	1.3	13.4	71 to 90	N56C to N280TC	5440	5970	1320	146
	301 R4	**394**	4.4	11300	0.91	13.4	71 to 90	N56C to N280TC	5570	6100	1350	146
	301 R4	**453**	3.9	15800	1.1	13.4	71 to 90	N56C to N280TC	5810	6360	1420	146
	301 R4	**491**	3.6	11700	0.75	13.4	71 to 90	N56C to N280TC	5940	6520	1450	146
	301 R4	**613**	2.9	12200	0.63	13.4	71 to 90	N56C to N280TC	6360	6960	1570	146
	301 R4	**765**	2.3	9460	0.39	13.4	71 to 90	N56C to N280TC	6810	7460	1690	146
1450	**301 R2**	**7.13**	203	6460	22	16.1	71 to 132	N56C to N280TC	1800	1970	380	146
	301 R2	**8.74**	166	7880	22	16.1	71 to 132	N56C to N280TC	1910	2090	410	146
	301 R2	**11.8**	123	9290	19.2	16.1	71 to 132	N56C to N280TC	2090	2290	450	146
	301 R2	**14.8**	98	9650	16.0	16.1	71 to 132	N56C to N280TC	2240	2450	490	146
	301 R3	**24.8**	58	11500	11.7	16.1	71 to 112	N56C to N280TC	2610	2850	580	146



301 R

17,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**301 R3**	**30.4**	48	11500	9.6	16.1	71 to 112	N56C to N280TC	2780	3050	620	146
	301 R3	**37.3**	39	13600	9.2	16.1	71 to 112	N56C to N280TC	2940	3250	660	146
	301 R3	**41.2**	35	11500	7.1	16.1	71 to 112	N56C to N280TC	3050	3330	690	146
	301 R3	**50.4**	28.8	15000	7.5	16.1	71 to 112	N56C to N280TC	3220	3530	730	146
	301 R3	**62.9**	23.0	15000	6.0	16.1	71 to 112	N56C to N280TC	3450	3790	790	146
	301 R3	**68.2**	21.3	11500	4.3	16.1	71 to 112	N56C to N280TC	3530	3870	810	146
	301 R3	**85.2**	17.0	11500	3.4	16.1	71 to 112	N56C to N280TC	3790	4150	870	146
	301 R3	**106**	13.6	10200	2.4	16.1	71 to 112	N56C to N280TC	4040	4440	940	146
	301 R4	**86.4**	16.8	11500	3.5	13.4	71 to 90	N56C to N280TC	3790	4150	880	146
	301 R4	**106**	13.7	15000	3.7	13.4	71 to 90	N56C to N280TC	4040	4440	940	146
	301 R4	**130**	11.2	15000	3.0	13.4	71 to 90	N56C to N280TC	4300	4690	1000	146
	301 R4	**143**	10.1	11500	2.1	13.4	71 to 90	N56C to N280TC	4410	4860	1040	146
	301 R4	**159**	9.1	15000	2.5	13.4	71 to 90	N56C to N280TC	4550	5000	1070	146
	301 R4	**175**	8.3	15000	2.2	13.4	71 to 90	N56C to N280TC	4690	5140	1110	146
	301 R4	**215**	6.7	15000	1.8	13.4	71 to 90	N56C to N280TC	5000	5480	1190	146
	301 R4	**237**	6.1	11500	1.3	13.4	71 to 90	N56C to N280TC	5140	5650	1230	146
	301 R4	**268**	5.4	15600	1.5	13.4	71 to 90	N56C to N280TC	5340	5850	1280	146
	301 R4	**291**	5.0	15800	1.4	13.4	71 to 90	N56C to N280TC	5450	5990	1310	146
	301 R4	**363**	4.0	16400	1.2	13.4	71 to 90	N56C to N280TC	5850	6410	1410	146
	301 R4	**394**	3.7	12100	0.80	13.4	71 to 90	N56C to N280TC	5990	6560	1450	146
	301 R4	**453**	3.2	17000	0.98	13.4	71 to 90	N56C to N280TC	6240	6840	1520	146
	301 R4	**491**	3.0	12600	0.67	13.4	71 to 90	N56C to N280TC	6390	7010	1560	146
	301 R4	**613**	2.4	13100	0.56	13.4	71 to 90	N56C to N280TC	6840	7490	1690	146
	301 R4	**765**	1.9	10200	0.35	13.4	71 to 90	N56C to N280TC	7320	8020	1810	146
1150	**301 R2**	**7.13**	161	6830	18.6	20	71 to 132	N56C to N280TC	1910	2090	410	146
	301 R2	**8.74**	132	8400	18.7	20	71 to 132	N56C to N280TC	2030	2230	440	146
	301 R2	**11.8**	97	9880	16.2	20	71 to 132	N56C to N280TC	2220	2440	490	146
	301 R2	**14.8**	78	9460	12.4	20	71 to 132	N56C to N280TC	2370	2600	520	146
	301 R3	**24.8**	46	10700	8.6	20	71 to 112	N56C to N280TC	2790	3050	620	146
	301 R3	**30.4**	38	10700	7.1	20	71 to 112	N56C to N280TC	2940	3230	670	146
	301 R3	**37.3**	31	14000	7.5	20	71 to 112	N56C to N280TC	3130	3440	710	146
	301 R3	**41.2**	27.9	10700	5.2	20	71 to 112	N56C to N280TC	3230	3550	740	146
	301 R3	**50.4**	22.8	14000	5.6	20	71 to 112	N56C to N280TC	3440	3760	790	146
	301 R3	**62.9**	18.3	14000	4.5	20	71 to 112	N56C to N280TC	3680	4020	850	146
	301 R3	**68.2**	16.9	10700	3.1	20	71 to 112	N56C to N280TC	3760	4130	870	146
	301 R3	**85.2**	13.5	10700	2.5	20	71 to 112	N56C to N280TC	4020	4410	940	146
	301 R3	**106**	10.8	9460	1.8	20	71 to 112	N56C to N280TC	4280	4700	1010	146
	301 R4	**86.4**	13.3	10700	2.6	16.1	71 to 90	N56C to N280TC	4020	4410	940	146
	301 R4	**106**	10.9	14000	2.7	16.1	71 to 90	N56C to N280TC	4280	4700	1010	146
	301 R4	**130**	8.9	14000	2.2	16.1	71 to 90	N56C to N280TC	4550	4990	1080	146
	301 R4	**143**	8.0	10900	1.6	16.1	71 to 90	N56C to N280TC	4700	5150	1120	146
	301 R4	**159**	7.2	14300	1.9	16.1	71 to 90	N56C to N280TC	4840	5310	1160	146
	301 R4	**175**	6.6	14600	1.7	16.1	71 to 90	N56C to N280TC	4990	5470	1200	146
	301 R4	**215**	5.4	15100	1.5	16.1	71 to 90	N56C to N280TC	5310	5810	1280	146
	301 R4	**237**	4.8	11100	0.97	16.1	71 to 90	N56C to N280TC	5470	5990	1320	146
	301 R4	**268**	4.3	15600	1.2	16.1	71 to 90	N56C to N280TC	5680	6200	1380	146
	301 R4	**291**	4.0	15800	1.1	16.1	71 to 90	N56C to N280TC	5810	6360	1420	146
	301 R4	**363**	3.2	16400	0.94	16.1	71 to 90	N56C to N280TC	6200	6810	1520	146
	301 R4	**394**	2.9	12200	0.64	16.1	71 to 90	N56C to N280TC	6360	6960	1570	146
	301 R4	**453**	2.5	16500	0.76	16.1	71 to 90	N56C to N280TC	6620	7280	1640	146
	301 R4	**491**	2.3	12600	0.53	16.1	71 to 90	N56C to N280TC	6810	7460	1690	146
	301 R4	**613**	1.9	13100	0.44	16.1	71 to 90	N56C to N280TC	7250	7960	1820	146
	301 R4	**765**	1.5	9460	0.26	16.1	71 to 90	N56C to N280TC	7750	8510	1960	146
870	**301 R2**	**7.13**	122	7350	15.1	20	71 to 132	N56C to N280TC	2050	2250	440	146
	301 R2	**8.74**	100	9030	15.2	20	71 to 132	N56C to N280TC	2180	2390	470	146



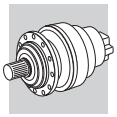
3□ R

301 R — 17,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**301 R2**	**11.8**	74	10600	13.2	20	71 to 132	N56C to N280TC	2390	2620	520	146
	301 R2	**14.8**	59	10200	10.1	20	71 to 132	N56C to N280TC	2550	2800	560	146
	301 R3	**24.8**	35	11500	7.0	20	71 to 112	N56C to N280TC	3000	3280	670	146
	301 R3	**30.4**	28.6	11500	5.7	20	71 to 112	N56C to N280TC	3160	3480	720	146
	301 R3	**37.3**	23.4	15000	6.1	20	71 to 112	N56C to N280TC	3360	3700	770	146
	301 R3	**41.2**	21.1	11500	4.2	20	71 to 112	N56C to N280TC	3480	3810	790	146
	301 R3	**50.4**	17.3	15000	4.5	20	71 to 112	N56C to N280TC	3700	4040	850	146
	301 R3	**62.9**	13.8	15000	3.6	20	71 to 112	N56C to N280TC	3960	4320	920	146
	301 R3	**68.2**	12.8	11500	2.6	20	71 to 112	N56C to N280TC	4040	4440	940	146
	301 R3	**85.2**	10.2	11500	2.0	20	71 to 112	N56C to N280TC	4320	4750	1010	146
	301 R3	**106**	8.2	10200	1.5	20	71 to 112	N56C to N280TC	4610	5060	1090	146
	301 R4	**86.4**	10.1	11500	2.1	16.1	71 to 90	N56C to N280TC	4320	4750	1020	146
	301 R4	**106**	8.2	15000	2.2	16.1	71 to 90	N56C to N280TC	4610	5060	1090	146
	301 R4	**130**	6.7	15000	1.8	16.1	71 to 90	N56C to N280TC	4890	5370	1160	146
	301 R4	**143**	6.1	11800	1.3	16.1	71 to 90	N56C to N280TC	5060	5540	1200	146
	301 R4	**159**	5.5	15400	1.5	16.1	71 to 90	N56C to N280TC	5200	5710	1250	146
	301 R4	**175**	5.0	15700	1.4	16.1	71 to 90	N56C to N280TC	5370	5880	1290	146
	301 R4	**215**	4.0	16200	1.2	16.1	71 to 90	N56C to N280TC	5710	6240	1380	146
	301 R4	**237**	3.7	11900	0.79	16.1	71 to 90	N56C to N280TC	5880	6440	1420	146
	301 R4	**268**	3.2	16700	0.98	16.1	71 to 90	N56C to N280TC	6100	6670	1480	146
	301 R4	**291**	3.0	17000	0.92	16.1	71 to 90	N56C to N280TC	6240	6840	1520	146
	301 R4	**363**	2.4	17600	0.76	16.1	71 to 90	N56C to N280TC	6670	7320	1640	146
	301 R4	**394**	2.2	13100	0.52	16.1	71 to 90	N56C to N280TC	6840	7490	1680	146
	301 R4	**453**	1.9	17700	0.61	16.1	71 to 90	N56C to N280TC	7120	7830	1760	146
	301 R4	**491**	1.8	13500	0.43	16.1	71 to 90	N56C to N280TC	7320	8020	1810	146
	301 R4	**613**	1.4	14100	0.36	16.1	71 to 90	N56C to N280TC	7800	8560	1950	146
	301 R4	**765**	1.1	10200	0.21	16.1	71 to 90	N56C to N280TC	8340	9160	2100	146

303 R — 23,000 in•lbs

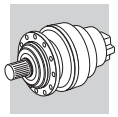
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**303 R2**	**9.23**	190	11700	37	24	71 to 132	N56C to N280TC	3730	4310	1160	154
	303 R2	**10.9**	161	13700	37	24	71 to 132	N56C to N280TC	3920	4520	1230	154
	303 R2	**13.7**	128	14700	32	24	71 to 132	N56C to N280TC	4200	4860	1320	154
	303 R2	**15.9**	110	14800	28	24	71 to 132	N56C to N280TC	4390	5070	1390	154
	303 R2	**19.2**	91	13600	21	24	71 to 132	N56C to N280TC	4650	5360	1480	154
	303 R3	**25.7**	68	15300	18.2	18.8	71 to 112	N56C to N280TC	5070	5860	1630	154
	303 R3	**31.5**	56	15900	15.4	18.8	71 to 112	N56C to N280TC	5390	6230	1750	154
	303 R3	**37.1**	47	18800	15.4	18.8	71 to 112	N56C to N280TC	5650	6540	1850	154
	303 R3	**42.6**	41	16800	12.0	18.8	71 to 112	N56C to N280TC	5890	6830	1930	154
	303 R3	**46.6**	38	18100	11.8	18.8	71 to 112	N56C to N280TC	6070	7020	1990	154
	303 R3	**50.3**	35	19800	12.0	18.8	71 to 112	N56C to N280TC	6200	7170	2040	154
	303 R3	**54.2**	32	14800	8.3	18.8	71 to 112	N56C to N280TC	6330	7330	2090	154
	303 R3	**63.1**	27.7	18100	8.8	18.8	71 to 112	N56C to N280TC	6650	7670	2200	154
	303 R3	**73.3**	23.9	14800	6.2	18.8	71 to 112	N56C to N280TC	6940	8020	2320	154
	303 R3	**78.7**	22.2	18100	7.0	18.8	71 to 112	N56C to N280TC	7100	8200	2370	154



303 R

23,000 in•lbs

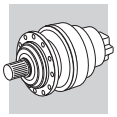
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**303 R3**	**91.5**	19.1	14800	4.9	18.8	71 to 112	N56C to N280TC	7410	8570	2490	154
	303 R3	**111**	15.8	13600	3.7	18.8	71 to 112	N56C to N280TC	7860	9090	2660	154
	303 R4	**129**	13.5	21400	5.2	16.1	71 to 112	N56C to N280TC	8230	9510	2790	154
	303 R4	**148**	11.8	17300	3.7	16.1	71 to 112	N56C to N280TC	8570	9910	2940	154
	303 R4	**158**	11.1	21400	4.3	16.1	71 to 112	N56C to N280TC	8750	10100	2990	154
	303 R4	**185**	9.5	17400	3.0	16.1	71 to 112	N56C to N280TC	9170	10600	3150	154
	303 R4	**214**	8.2	21400	3.2	16.1	71 to 112	N56C to N280TC	9570	11100	3300	154
	303 R4	**231**	7.6	14800	2.0	16.1	71 to 112	N56C to N280TC	9800	11300	3410	154
	303 R4	**255**	6.9	14800	1.8	16.1	71 to 112	N56C to N280TC	10100	11700	3510	154
	303 R4	**290**	6.0	21800	2.4	16.1	71 to 112	N56C to N280TC	10500	12100	3660	154
	303 R4	**313**	5.6	14800	1.5	16.1	71 to 112	N56C to N280TC	10700	12400	3770	154
	303 R4	**336**	5.2	18700	1.8	16.1	71 to 112	N56C to N280TC	11000	12700	3840	154
	303 R4	**364**	4.8	18800	1.6	16.1	71 to 112	N56C to N280TC	11200	13000	3950	154
	303 R4	**390**	4.5	15300	1.2	16.1	71 to 112	N56C to N280TC	11500	13200	4050	154
	303 R4	**452**	3.9	18700	1.3	16.1	71 to 112	N56C to N280TC	12000	13800	4260	154
	303 R4	**528**	3.3	16100	0.96	16.1	71 to 112	N56C to N280TC	12600	14500	4460	154
	303 R4	**567**	3.1	20200	1.1	16.1	71 to 112	N56C to N280TC	12800	14800	4590	154
	303 R4	**639**	2.7	14600	0.72	16.1	71 to 112	N56C to N280TC	13300	15400	4770	154
	303 R4	**797**	2.2	15100	0.60	16.1	71 to 112	N56C to N280TC	14200	16400	5130	154
1450	**303 R2**	**9.23**	157	12600	33	24	71 to 132	N56C to N280TC	4010	4630	1250	154
	303 R2	**10.9**	133	14800	33	24	71 to 132	N56C to N280TC	4210	4860	1320	154
	303 R2	**13.7**	106	15800	28	24	71 to 132	N56C to N280TC	4520	5230	1420	154
	303 R2	**15.9**	91	15900	24	24	71 to 132	N56C to N280TC	4720	5450	1500	154
	303 R2	**19.2**	75	14600	18.6	24	71 to 132	N56C to N280TC	5000	5760	1590	154
	303 R3	**25.7**	56	16500	16.2	18.8	71 to 112	N56C to N280TC	5450	6300	1760	154
	303 R3	**31.5**	46	17100	13.7	18.8	71 to 112	N56C to N280TC	5790	6700	1880	154
	303 R3	**37.1**	39	20200	13.7	18.8	71 to 112	N56C to N280TC	6080	7040	1990	154
	303 R3	**42.6**	34	18100	10.7	18.8	71 to 112	N56C to N280TC	6330	7350	2080	154
	303 R3	**46.6**	31	19500	10.6	18.8	71 to 112	N56C to N280TC	6530	7540	2140	154
	303 R3	**50.3**	28.8	21200	10.7	18.8	71 to 112	N56C to N280TC	6670	7710	2200	154
	303 R3	**54.2**	26.8	15900	7.4	18.8	71 to 112	N56C to N280TC	6810	7880	2250	154
	303 R3	**63.1**	23.0	19500	7.8	18.8	71 to 112	N56C to N280TC	7150	8250	2370	154
	303 R3	**73.3**	19.8	15900	5.5	18.8	71 to 112	N56C to N280TC	7460	8620	2490	154
	303 R3	**78.7**	18.4	19500	6.3	18.8	71 to 112	N56C to N280TC	7630	8820	2550	154
	303 R3	**91.5**	15.8	15900	4.4	18.8	71 to 112	N56C to N280TC	7970	9210	2680	154
	303 R3	**111**	13.1	14600	3.3	18.8	71 to 112	N56C to N280TC	8450	9780	2860	154
	303 R4	**129**	11.2	23000	4.7	16.1	71 to 112	N56C to N280TC	8840	10200	3000	154
	303 R4	**148**	9.8	18600	3.3	16.1	71 to 112	N56C to N280TC	9210	10700	3160	154
	303 R4	**158**	9.2	23000	3.8	16.1	71 to 112	N56C to N280TC	9410	10900	3220	154
	303 R4	**185**	7.8	18700	2.6	16.1	71 to 112	N56C to N280TC	9860	11400	3380	154
	303 R4	**214**	6.8	23000	2.8	16.1	71 to 112	N56C to N280TC	10300	11900	3550	154
	303 R4	**231**	6.3	15900	1.8	16.1	71 to 112	N56C to N280TC	10500	12200	3660	154
	303 R4	**255**	5.7	15900	1.6	16.1	71 to 112	N56C to N280TC	10800	12500	3770	154
	303 R4	**290**	5.0	23500	2.1	16.1	71 to 112	N56C to N280TC	11300	13000	3940	154
	303 R4	**313**	4.6	15900	1.3	16.1	71 to 112	N56C to N280TC	11500	13300	4050	154
	303 R4	**336**	4.3	20100	1.6	16.1	71 to 112	N56C to N280TC	11800	13600	4130	154
	303 R4	**364**	4.0	20300	1.5	16.1	71 to 112	N56C to N280TC	12100	14000	4240	154
	303 R4	**390**	3.7	16500	1.1	16.1	71 to 112	N56C to N280TC	12300	14200	4360	154
	303 R4	**452**	3.2	20100	1.2	16.1	71 to 112	N56C to N280TC	12900	14900	4580	154
	303 R4	**528**	2.7	17300	0.86	16.1	71 to 112	N56C to N280TC	13500	15600	4800	154
	303 R4	**567**	2.6	21800	1.0	16.1	71 to 112	N56C to N280TC	13800	15900	4940	154
	303 R4	**639**	2.3	15800	0.65	16.1	71 to 112	N56C to N280TC	14300	16500	5130	154
	303 R4	**797**	1.8	16300	0.53	16.1	71 to 112	N56C to N280TC	15300	17700	5520	154
1150	**303 R2**	**9.23**	125	13300	28	30	71 to 132	N56C to N280TC	4260	4910	1340	154
	303 R2	**10.9**	106	15700	28	30	71 to 132	N56C to N280TC	4470	5180	1420	154



3□ R

303 R — 23,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**303 R2**	**13.7**	84	16800	24	30	71 to 132	N56C to N280TC	4780	5540	1530	154
	303 R2	**15.9**	72	14800	18.1	30	71 to 132	N56C to N280TC	5020	5780	1610	154
	303 R2	**19.2**	60	13600	13.7	30	71 to 132	N56C to N280TC	5310	6120	1720	154
	303 R3	**25.7**	45	17300	13.5	23	71 to 112	N56C to N280TC	5780	6700	1890	154
	303 R3	**31.5**	37	17300	11.0	23	71 to 112	N56C to N280TC	6150	7120	2030	154
	303 R3	**37.1**	31	21400	11.6	23	71 to 112	N56C to N280TC	6460	7460	2140	154
	303 R3	**42.6**	27.0	17300	8.1	23	71 to 112	N56C to N280TC	6730	7780	2240	154
	303 R3	**46.6**	24.7	18100	7.8	23	71 to 112	N56C to N280TC	6910	7990	2310	154
	303 R3	**50.3**	22.9	21400	8.5	23	71 to 112	N56C to N280TC	7070	8170	2370	154
	303 R3	**54.2**	21.2	14800	5.5	23	71 to 112	N56C to N280TC	7230	8380	2430	154
	303 R3	**63.1**	18.2	18100	5.8	23	71 to 112	N56C to N280TC	7570	8750	2550	154
	303 R3	**73.3**	15.7	14800	4.0	23	71 to 112	N56C to N280TC	7940	9170	2680	154
	303 R3	**78.7**	14.6	18100	4.6	23	71 to 112	N56C to N280TC	8090	9360	2760	154
	303 R3	**91.5**	12.6	14800	3.2	23	71 to 112	N56C to N280TC	8460	9800	2890	154
	303 R3	**111**	10.4	13600	2.5	23	71 to 112	N56C to N280TC	8960	10400	3070	154
	303 R4	**129**	8.9	21400	3.4	20	71 to 112	N56C to N280TC	9410	10900	3250	154
	303 R4	**148**	7.8	17500	2.4	20	71 to 112	N56C to N280TC	9800	11300	3410	154
	303 R4	**158**	7.3	21600	2.8	20	71 to 112	N56C to N280TC	9990	11500	3460	154
	303 R4	**185**	6.2	17700	2.0	20	71 to 112	N56C to N280TC	10500	12100	3660	154
	303 R4	**214**	5.4	22000	2.1	20	71 to 112	N56C to N280TC	10900	12600	3840	154
	303 R4	**231**	5.0	15100	1.4	20	71 to 112	N56C to N280TC	11200	12900	3950	154
	303 R4	**255**	4.5	15400	1.3	20	71 to 112	N56C to N280TC	11500	13300	4080	154
	303 R4	**290**	4.0	22100	1.6	20	71 to 112	N56C to N280TC	12000	13800	4260	154
	303 R4	**313**	3.7	15900	1.1	20	71 to 112	N56C to N280TC	12200	14200	4360	154
	303 R4	**336**	3.4	20000	1.2	20	71 to 112	N56C to N280TC	12500	14500	4460	154
	303 R4	**364**	3.2	20200	1.2	20	71 to 112	N56C to N280TC	12800	14800	4570	154
	303 R4	**390**	2.9	16500	0.88	20	71 to 112	N56C to N280TC	13100	15100	4700	154
	303 R4	**452**	2.5	18700	0.86	20	71 to 112	N56C to N280TC	13700	15800	4930	154
	303 R4	**528**	2.2	17400	0.68	20	71 to 112	N56C to N280TC	14300	16600	5190	154
	303 R4	**567**	2.0	21800	0.80	20	71 to 112	N56C to N280TC	14600	16900	5310	154
	303 R4	**639**	1.8	15600	0.51	20	71 to 112	N56C to N280TC	15200	17600	5520	154
	303 R4	**797**	1.4	16100	0.42	20	71 to 112	N56C to N280TC	16200	18800	5930	154
870	**303 R2**	**9.23**	94	14300	23	30	71 to 132	N56C to N280TC	4580	5280	1450	154
	303 R2	**10.9**	80	16900	23	30	71 to 132	N56C to N280TC	4800	5570	1530	154
	303 R2	**13.7**	64	18100	19.4	30	71 to 132	N56C to N280TC	5140	5960	1650	154
	303 R2	**15.9**	55	15900	14.7	30	71 to 132	N56C to N280TC	5400	6220	1730	154
	303 R2	**19.2**	45	14600	11.2	30	71 to 132	N56C to N280TC	5710	6580	1850	154
	303 R3	**25.7**	34	18600	11.0	23	71 to 112	N56C to N280TC	6220	7210	2030	154
	303 R3	**31.5**	27.7	18600	9.0	23	71 to 112	N56C to N280TC	6610	7660	2180	154
	303 R3	**37.1**	23.4	23000	9.4	23	71 to 112	N56C to N280TC	6950	8020	2300	154
	303 R3	**42.6**	20.4	18600	6.6	23	71 to 112	N56C to N280TC	7230	8360	2410	154
	303 R3	**46.6**	18.7	19500	6.3	23	71 to 112	N56C to N280TC	7430	8590	2480	154
	303 R3	**50.3**	17.3	23000	6.9	23	71 to 112	N56C to N280TC	7600	8790	2540	154
	303 R3	**54.2**	16.1	15900	4.5	23	71 to 112	N56C to N280TC	7770	9010	2610	154
	303 R3	**63.1**	13.8	19500	4.7	23	71 to 112	N56C to N280TC	8140	9410	2750	154
	303 R3	**73.3**	11.9	15900	3.3	23	71 to 112	N56C to N280TC	8530	9860	2880	154
	303 R3	**78.7**	11.1	19500	3.8	23	71 to 112	N56C to N280TC	8700	10100	2970	154
	303 R3	**91.5**	9.5	15900	2.6	23	71 to 112	N56C to N280TC	9100	10500	3110	154
	303 R3	**111**	7.9	14600	2.0	23	71 to 112	N56C to N280TC	9640	11200	3300	154
	303 R4	**129**	6.7	23000	2.8	20	71 to 112	N56C to N280TC	10100	11700	3500	154
	303 R4	**148**	5.9	18800	2.0	20	71 to 112	N56C to N280TC	10500	12200	3660	154
	303 R4	**158**	5.5	23200	2.3	20	71 to 112	N56C to N280TC	10700	12400	3720	154
	303 R4	**185**	4.7	19000	1.6	20	71 to 112	N56C to N280TC	11200	13000	3940	154
	303 R4	**214**	4.1	23600	1.7	20	71 to 112	N56C to N280TC	11800	13600	4130	154
	303 R4	**231**	3.8	16300	1.1	20	71 to 112	N56C to N280TC	12000	13900	4240	154



303 R

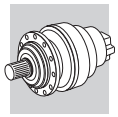
23,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**303 R4**	**255**	3.4	16500	1.0	20	71 to 112	N56C to N280TC	12400	14300	4380	154
	303 R4	**290**	3.0	23700	1.3	20	71 to 112	N56C to N280TC	12900	14900	4580	154
	303 R4	**313**	2.8	17100	0.86	20	71 to 112	N56C to N280TC	13200	15200	4690	154
	303 R4	**336**	2.6	21500	1.0	20	71 to 112	N56C to N280TC	13400	15500	4800	154
	303 R4	**364**	2.4	21800	0.94	20	71 to 112	N56C to N280TC	13800	15900	4910	154
	303 R4	**390**	2.2	17700	0.71	20	71 to 112	N56C to N280TC	14100	16300	5050	154
	303 R4	**452**	1.9	20100	0.70	20	71 to 112	N56C to N280TC	14700	17000	5300	154
	303 R4	**528**	1.6	18700	0.56	20	71 to 112	N56C to N280TC	15400	17800	5580	154
	303 R4	**567**	1.5	23500	0.65	20	71 to 112	N56C to N280TC	15700	18200	5710	154
	303 R4	**639**	1.4	16800	0.41	20	71 to 112	N56C to N280TC	16300	18900	5940	154
	303 R4	**797**	1.1	17300	0.34	20	71 to 112	N56C to N280TC	17400	20200	6380	154

305 R

47,000 in•lbs

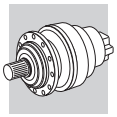
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**305 R2**	**9.23**	190	11700	37	24	71 to 132	N56C to N280TC	3730	4310	1160	162
	305 R2	**10.9**	161	13700	37	24	71 to 132	N56C to N280TC	3920	4520	1230	162
	305 R2	**13.7**	128	17300	37	24	71 to 132	N56C to N280TC	4200	4860	1320	162
	305 R2	**15.9**	110	20100	37	24	71 to 132	N56C to N280TC	4390	5070	1390	162
	305 R2	**19.2**	91	24300	37	24	71 to 132	N56C to N280TC	4650	5360	1480	162
	305 R3	**25.7**	68	20900	25	18.8	71 to 132	N56C to N280TC	5070	5860	1630	162
	305 R3	**31.5**	56	25600	25	18.8	71 to 132	N56C to N280TC	5390	6230	1750	162
	305 R3	**37.1**	47	30200	25	18.8	71 to 132	N56C to N280TC	5650	6540	1850	162
	305 R3	**42.6**	41	30200	22	18.8	71 to 132	N56C to N280TC	5890	6830	1930	162
	305 R3	**46.6**	38	36200	24	18.8	71 to 132	N56C to N280TC	6070	7020	1990	162
	305 R3	**50.3**	35	35700	22	18.8	71 to 132	N56C to N280TC	6200	7170	2040	162
	305 R3	**54.2**	32	29600	16.7	18.8	71 to 132	N56C to N280TC	6330	7330	2090	162
	305 R3	**63.1**	27.7	36200	17.5	18.8	71 to 132	N56C to N280TC	6650	7670	2200	162
	305 R3	**73.3**	23.9	29600	12.3	18.8	71 to 132	N56C to N280TC	6940	8020	2320	162
	305 R3	**78.7**	22.2	36200	14.0	18.8	71 to 132	N56C to N280TC	7100	8200	2370	162
	305 R3	**91.5**	19.1	29600	9.9	18.8	71 to 132	N56C to N280TC	7410	8570	2490	162
	305 R3	**111**	15.8	25500	7.0	18.8	71 to 132	N56C to N280TC	7860	9090	2660	162
	305 R4	**129**	13.5	42800	10.4	16.1	71 to 132	N56C to N280TC	8230	9510	2790	162
	305 R4	**148**	11.8	34600	7.4	16.1	71 to 132	N56C to N280TC	8570	9910	2940	162
	305 R4	**158**	11.1	42800	8.5	16.1	71 to 132	N56C to N280TC	8750	10100	2990	162
	305 R4	**185**	9.5	34600	5.9	16.1	71 to 132	N56C to N280TC	9170	10600	3150	162
	305 R4	**214**	8.2	43000	6.3	16.1	71 to 132	N56C to N280TC	9570	11100	3300	162
	305 R4	**231**	7.6	29600	4.0	16.1	71 to 132	N56C to N280TC	9800	11300	3410	162
	305 R4	**255**	6.9	29600	3.7	16.1	71 to 132	N56C to N280TC	10100	11700	3510	162
	305 R4	**290**	6.0	43700	4.8	16.1	71 to 132	N56C to N280TC	10500	12100	3660	162
	305 R4	**313**	5.6	29600	3.0	16.1	71 to 132	N56C to N280TC	10700	12400	3770	162
	305 R4	**336**	5.2	37200	3.5	16.1	71 to 132	N56C to N280TC	11000	12700	3840	162
	305 R4	**364**	4.8	37700	3.3	16.1	71 to 132	N56C to N280TC	11200	13000	3950	162
	305 R4	**390**	4.5	30800	2.5	16.1	71 to 132	N56C to N280TC	11500	13200	4050	162
	305 R4	**452**	3.9	39000	2.7	16.1	71 to 132	N56C to N280TC	12000	13800	4260	162
	305 R4	**528**	3.3	32300	1.9	16.1	71 to 132	N56C to N280TC	12600	14500	4460	162



3□ R

305 R — 47,000 in•lbs

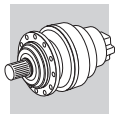
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**305 R4**	**567**	3.1	40200	2.2	16.1	71 to 132	N56C to N280TC	12800	14800	4590	162
	305 R4	**639**	2.7	27600	1.4	16.1	71 to 132	N56C to N280TC	13300	15400	4770	162
	305 R4	**797**	2.2	28600	1.1	16.1	71 to 132	N56C to N280TC	14200	16400	5130	162
1450	**305 R2**	**9.23**	157	12600	33	24	71 to 132	N56C to N280TC	4010	4630	1250	162
	305 R2	**10.9**	133	14800	33	24	71 to 132	N56C to N280TC	4210	4860	1320	162
	305 R2	**13.7**	106	18600	33	24	71 to 132	N56C to N280TC	4520	5230	1420	162
	305 R2	**15.9**	91	21600	33	24	71 to 132	N56C to N280TC	4720	5450	1500	162
	305 R2	**19.2**	75	26100	33	24	71 to 132	N56C to N280TC	5000	5760	1590	162
	305 R3	**25.7**	56	22500	22	18.8	71 to 132	N56C to N280TC	5450	6300	1760	162
	305 R3	**31.5**	46	27500	22	18.8	71 to 132	N56C to N280TC	5790	6700	1880	162
	305 R3	**37.1**	39	32500	22	18.8	71 to 132	N56C to N280TC	6080	7040	1990	162
	305 R3	**42.6**	34	32500	19.3	18.8	71 to 132	N56C to N280TC	6330	7350	2080	162
	305 R3	**46.6**	31	38900	21	18.8	71 to 132	N56C to N280TC	6530	7540	2140	162
	305 R3	**50.3**	28.8	38400	19.3	18.8	71 to 132	N56C to N280TC	6670	7710	2200	162
	305 R3	**54.2**	26.8	31900	14.9	18.8	71 to 132	N56C to N280TC	6810	7880	2250	162
	305 R3	**63.1**	23.0	38900	15.6	18.8	71 to 132	N56C to N280TC	7150	8250	2370	162
	305 R3	**73.3**	19.8	31900	11.0	18.8	71 to 132	N56C to N280TC	7460	8620	2490	162
	305 R3	**78.7**	18.4	38900	12.5	18.8	71 to 132	N56C to N280TC	7630	8820	2550	162
	305 R3	**91.5**	15.8	31900	8.8	18.8	71 to 132	N56C to N280TC	7970	9210	2680	162
	305 R3	**111**	13.1	27400	6.3	18.8	71 to 132	N56C to N280TC	8450	9780	2860	162
	305 R4	**129**	11.2	46000	9.3	16.1	71 to 132	N56C to N280TC	8840	10200	3000	162
	305 R4	**148**	9.8	37200	6.6	16.1	71 to 132	N56C to N280TC	9210	10700	3160	162
	305 R4	**158**	9.2	46000	7.6	16.1	71 to 132	N56C to N280TC	9410	10900	3220	162
	305 R4	**185**	7.8	37200	5.3	16.1	71 to 132	N56C to N280TC	9860	11400	3380	162
	305 R4	**214**	6.8	46200	5.6	16.1	71 to 132	N56C to N280TC	10300	11900	3550	162
	305 R4	**231**	6.3	31900	3.6	16.1	71 to 132	N56C to N280TC	10500	12200	3660	162
	305 R4	**255**	5.7	31900	3.3	16.1	71 to 132	N56C to N280TC	10800	12500	3770	162
	305 R4	**290**	5.0	47000	4.2	16.1	71 to 132	N56C to N280TC	11300	13000	3940	162
	305 R4	**313**	4.6	31900	2.7	16.1	71 to 132	N56C to N280TC	11500	13300	4050	162
	305 R4	**336**	4.3	40000	3.1	16.1	71 to 132	N56C to N280TC	11800	13600	4130	162
	305 R4	**364**	4.0	40500	2.9	16.1	71 to 132	N56C to N280TC	12100	14000	4240	162
	305 R4	**390**	3.7	33100	2.2	16.1	71 to 132	N56C to N280TC	12300	14200	4360	162
	305 R4	**452**	3.2	41900	2.4	16.1	71 to 132	N56C to N280TC	12900	14900	4580	162
	305 R4	**528**	2.7	34700	1.7	16.1	71 to 132	N56C to N280TC	13500	15600	4800	162
	305 R4	**567**	2.6	43300	2.0	16.1	71 to 132	N56C to N280TC	13800	15900	4940	162
	305 R4	**639**	2.3	29600	1.2	16.1	71 to 132	N56C to N280TC	14300	16500	5130	162
	305 R4	**797**	1.8	30700	1.0	16.1	71 to 132	N56C to N280TC	15300	17700	5520	162
1150	**305 R2**	**9.23**	125	13300	28	30	71 to 132	N56C to N280TC	4260	4910	1340	162
	305 R2	**10.9**	106	15700	28	30	71 to 132	N56C to N280TC	4470	5180	1420	162
	305 R2	**13.7**	84	19800	28	30	71 to 132	N56C to N280TC	4780	5540	1530	162
	305 R2	**15.9**	72	22900	28	30	71 to 132	N56C to N280TC	5020	5780	1610	162
	305 R2	**19.2**	60	25500	26	30	71 to 132	N56C to N280TC	5310	6120	1720	162
	305 R3	**25.7**	45	23900	18.7	23	71 to 132	N56C to N280TC	5780	6700	1890	162
	305 R3	**31.5**	37	29200	18.6	23	71 to 132	N56C to N280TC	6150	7120	2030	162
	305 R3	**37.1**	31	34500	18.6	23	71 to 132	N56C to N280TC	6460	7460	2140	162
	305 R3	**42.6**	27.0	34600	16.3	23	71 to 132	N56C to N280TC	6730	7780	2240	162
	305 R3	**46.6**	24.7	36200	15.6	23	71 to 132	N56C to N280TC	6910	7990	2310	162
	305 R3	**50.3**	22.9	40700	16.2	23	71 to 132	N56C to N280TC	7070	8170	2370	162
	305 R3	**54.2**	21.2	29600	11.0	23	71 to 132	N56C to N280TC	7230	8380	2430	162
	305 R3	**63.1**	18.2	36200	11.5	23	71 to 132	N56C to N280TC	7570	8750	2550	162
	305 R3	**73.3**	15.7	29600	8.1	23	71 to 132	N56C to N280TC	7940	9170	2680	162
	305 R3	**78.7**	14.6	36200	9.2	23	71 to 132	N56C to N280TC	8090	9360	2760	162
	305 R3	**91.5**	12.6	29600	6.5	23	71 to 132	N56C to N280TC	8460	9800	2890	162
	305 R3	**111**	10.4	25500	4.6	23	71 to 132	N56C to N280TC	8960	10400	3070	162



305 R

47,000 in•lbs

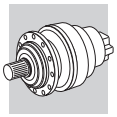
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**305 R4**	**129**	8.9	42800	6.9	20	71 to 132	N56C to N280TC	9410	10900	3250	162
	305 R4	**148**	7.8	35000	4.9	20	71 to 132	N56C to N280TC	9800	11300	3410	162
	305 R4	**158**	7.3	43300	5.7	20	71 to 132	N56C to N280TC	9990	11500	3460	162
	305 R4	**185**	6.2	35400	4.0	20	71 to 132	N56C to N280TC	10500	12100	3660	162
	305 R4	**214**	5.4	44000	4.3	20	71 to 132	N56C to N280TC	10900	12600	3840	162
	305 R4	**231**	5.0	30400	2.7	20	71 to 132	N56C to N280TC	11200	12900	3950	162
	305 R4	**255**	4.5	30900	2.5	20	71 to 132	N56C to N280TC	11500	13300	4080	162
	305 R4	**290**	4.0	44100	3.2	20	71 to 132	N56C to N280TC	12000	13800	4260	162
	305 R4	**313**	3.7	31900	2.1	20	71 to 132	N56C to N280TC	12200	14200	4360	162
	305 R4	**336**	3.4	39800	2.5	20	71 to 132	N56C to N280TC	12500	14500	4460	162
	305 R4	**364**	3.2	40200	2.3	20	71 to 132	N56C to N280TC	12800	14800	4570	162
	305 R4	**390**	2.9	33000	1.8	20	71 to 132	N56C to N280TC	13100	15100	4700	162
	305 R4	**452**	2.5	39000	1.8	20	71 to 132	N56C to N280TC	13700	15800	4930	162
	305 R4	**528**	2.2	34700	1.4	20	71 to 132	N56C to N280TC	14300	16600	5190	162
	305 R4	**567**	2.0	43000	1.6	20	71 to 132	N56C to N280TC	14600	16900	5310	162
	305 R4	**639**	1.8	29600	0.96	20	71 to 132	N56C to N280TC	15200	17600	5520	162
	305 R4	**797**	1.4	30700	0.80	20	71 to 132	N56C to N280TC	16200	18800	5930	162
870	**305 R2**	**9.23**	94	14300	23	30	71 to 132	N56C to N280TC	4580	5280	1450	162
	305 R2	**10.9**	80	16900	23	30	71 to 132	N56C to N280TC	4800	5570	1530	162
	305 R2	**13.7**	64	21200	23	30	71 to 132	N56C to N280TC	5140	5960	1650	162
	305 R2	**15.9**	55	24600	23	30	71 to 132	N56C to N280TC	5400	6220	1730	162
	305 R2	**19.2**	45	27400	21	30	71 to 132	N56C to N280TC	5710	6580	1850	162
	305 R3	**25.7**	34	25700	15.2	23	71 to 132	N56C to N280TC	6220	7210	2030	162
	305 R3	**31.5**	27.7	31400	15.1	23	71 to 132	N56C to N280TC	6610	7660	2180	162
	305 R3	**37.1**	23.4	37100	15.2	23	71 to 132	N56C to N280TC	6950	8020	2300	162
	305 R3	**42.6**	20.4	37200	13.3	23	71 to 132	N56C to N280TC	7230	8360	2410	162
	305 R3	**46.6**	18.7	38900	12.7	23	71 to 132	N56C to N280TC	7430	8590	2480	162
	305 R3	**50.3**	17.3	43800	13.2	23	71 to 132	N56C to N280TC	7600	8790	2540	162
	305 R3	**54.2**	16.1	31900	8.9	23	71 to 132	N56C to N280TC	7770	9010	2610	162
	305 R3	**63.1**	13.8	38900	9.4	23	71 to 132	N56C to N280TC	8140	9410	2750	162
	305 R3	**73.3**	11.9	31900	6.6	23	71 to 132	N56C to N280TC	8530	9860	2880	162
	305 R3	**78.7**	11.1	38900	7.5	23	71 to 132	N56C to N280TC	8700	10100	2970	162
	305 R3	**91.5**	9.5	31900	5.3	23	71 to 132	N56C to N280TC	9100	10500	3110	162
	305 R3	**111**	7.9	27400	3.8	23	71 to 132	N56C to N280TC	9640	11200	3300	162
	305 R4	**129**	6.7	46000	5.6	20	71 to 132	N56C to N280TC	10100	11700	3500	162
	305 R4	**148**	5.9	37600	4.0	20	71 to 132	N56C to N280TC	10500	12200	3660	162
	305 R4	**158**	5.5	46600	4.6	20	71 to 132	N56C to N280TC	10700	12400	3720	162
	305 R4	**185**	4.7	38100	3.2	20	71 to 132	N56C to N280TC	11200	13000	3940	162
	305 R4	**214**	4.1	47300	3.5	20	71 to 132	N56C to N280TC	11800	13600	4130	162
	305 R4	**231**	3.8	32700	2.2	20	71 to 132	N56C to N280TC	12000	13900	4240	162
	305 R4	**255**	3.4	33200	2.0	20	71 to 132	N56C to N280TC	12400	14300	4380	162
	305 R4	**290**	3.0	47400	2.6	20	71 to 132	N56C to N280TC	12900	14900	4580	162
	305 R4	**313**	2.8	34200	1.7	20	71 to 132	N56C to N280TC	13200	15200	4690	162
	305 R4	**336**	2.6	42700	2.0	20	71 to 132	N56C to N280TC	13400	15500	4800	162
	305 R4	**364**	2.4	43300	1.9	20	71 to 132	N56C to N280TC	13800	15900	4910	162
	305 R4	**390**	2.2	35500	1.4	20	71 to 132	N56C to N280TC	14100	16300	5050	162
	305 R4	**452**	1.9	41900	1.5	20	71 to 132	N56C to N280TC	14700	17000	5300	162
	305 R4	**528**	1.6	37300	1.1	20	71 to 132	N56C to N280TC	15400	17800	5580	162
	305 R4	**567**	1.5	46300	1.3	20	71 to 132	N56C to N280TC	15700	18200	5710	162
	305 R4	**639**	1.4	31900	0.78	20	71 to 132	N56C to N280TC	16300	18900	5940	162
	305 R4	**797**	1.1	33000	0.65	20	71 to 132	N56C to N280TC	17400	20200	6380	162



306 R

83,000 in•lbs

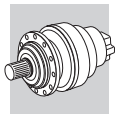
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**306 R2**	**9.23**	190	11700	37	24	71 to 160	N56C to N280TC	5890	6940	1690	170
	306 R2	**10.9**	161	13700	37	24	71 to 160	N56C to N280TC	6180	7280	1790	170
	306 R2	**13.7**	128	17300	37	24	71 to 160	N56C to N280TC	6620	7800	1930	170
	306 R2	**15.9**	110	20100	37	24	71 to 160	N56C to N280TC	6940	8150	2030	170
	306 R2	**19.2**	91	24300	37	24	71 to 160	N56C to N280TC	7330	8650	2160	170
	306 R3	**33.2**	53	27200	25	18.8	71 to 132	N56C to N280TC	8650	10200	2610	170
	306 R3	**39.2**	45	32200	25	18.8	71 to 132	N56C to N280TC	9090	10700	2730	170
	306 R3	**46.3**	38	37900	25	18.8	71 to 132	N56C to N280TC	9540	11200	2890	170
	306 R3	**58.1**	30	47700	25	18.8	71 to 132	N56C to N280TC	10200	12000	3120	170
	306 R3	**67.5**	25.9	55400	25	18.8	71 to 132	N56C to N280TC	10700	12600	3280	170
	306 R3	**72.9**	24.0	59800	25	18.8	71 to 132	N56C to N280TC	10900	12900	3380	170
	306 R3	**84.7**	20.7	63800	23	18.8	71 to 132	N56C to N280TC	11400	13500	3530	170
	306 R3	**98.5**	17.8	53500	16.6	18.8	71 to 132	N56C to N280TC	12000	14100	3710	170
	306 R3	**119**	14.7	53500	13.7	18.8	71 to 132	N56C to N280TC	12700	14900	3970	170
	306 R3	**144**	12.1	45300	9.6	18.8	71 to 132	N56C to N280TC	13400	15800	4230	170
	306 R4	**158**	11.1	76100	15.2	16.1	71 to 132	N56C to N280TC	13800	16200	4360	170
	306 R4	**168**	10.4	61700	11.6	16.1	71 to 132	N56C to N280TC	14000	16600	4460	170
	306 R4	**181**	9.7	69100	12.0	16.1	71 to 132	N56C to N280TC	14400	16900	4570	170
	306 R4	**214**	8.2	76100	11.2	16.1	71 to 132	N56C to N280TC	15100	17800	4820	170
	306 R4	**138**	7.6	61100	8.4	16.1	71 to 132	N56C to N280TC	15500	18200	4950	170
	306 R4	**249**	7.0	63800	8.1	16.1	71 to 132	N56C to N280TC	15800	18600	5080	170
	306 R4	**289**	6.1	64400	7.0	16.1	71 to 132	N56C to N280TC	16500	19500	5340	170
	306 R4	**312**	5.6	61100	6.2	16.1	71 to 132	N56C to N280TC	16900	19900	5470	170
	306 R4	**377**	4.6	56000	4.7	16.1	71 to 132	N56C to N280TC	17900	21100	5830	170
	306 R4	**420**	4.2	67400	5.1	16.1	71 to 132	N56C to N280TC	18500	21800	6040	170
	306 R4	**455**	3.8	57000	4.0	16.1	71 to 132	N56C to N280TC	18900	22300	6220	170
	306 R4	**488**	3.6	68700	4.4	16.1	71 to 132	N56C to N280TC	19300	22800	6350	170
	306 R4	**550**	3.2	48500	2.8	16.1	71 to 132	N56C to N280TC	20100	23600	6600	170
	306 R4	**590**	3.0	49100	2.6	16.1	71 to 132	N56C to N280TC	20500	24100	6760	170
	306 R4	**665**	2.6	50200	2.4	16.1	71 to 132	N56C to N280TC	21200	25000	7040	170
	306 R4	**830**	2.1	52300	2.0	16.1	71 to 132	N56C to N280TC	22700	26700	7580	170
1450	**306 R2**	**9.23**	157	12600	33	24	71 to 160	N56C to N280TC	6330	7460	1820	170
	306 R2	**10.9**	133	14800	33	24	71 to 160	N56C to N280TC	6640	7830	1920	170
	306 R2	**13.7**	106	18600	33	24	71 to 160	N56C to N280TC	7120	8390	2070	170
	306 R2	**15.9**	91	21600	33	24	71 to 160	N56C to N280TC	7460	8760	2180	170
	306 R2	**19.2**	75	26100	33	24	71 to 160	N56C to N280TC	7880	9300	2320	170
	306 R3	**33.2**	44	29300	22	18.8	71 to 132	N56C to N280TC	9300	10900	2800	170
	306 R3	**39.2**	37	34600	22	18.8	71 to 132	N56C to N280TC	9780	11500	2940	170
	306 R3	**46.3**	31	40800	22	18.8	71 to 132	N56C to N280TC	10300	12100	3110	170
	306 R3	**58.1**	25.0	51200	22	18.8	71 to 132	N56C to N280TC	11000	12900	3360	170
	306 R3	**67.5**	21.5	59600	22	18.8	71 to 132	N56C to N280TC	11500	13500	3520	170
	306 R3	**72.9**	19.9	64300	22	18.8	71 to 132	N56C to N280TC	11800	13800	3630	170
	306 R3	**84.7**	17.1	68600	20	18.8	71 to 132	N56C to N280TC	12300	14500	3800	170
	306 R3	**98.5**	14.7	57500	14.8	18.8	71 to 132	N56C to N280TC	12900	15200	3990	170
	306 R3	**119**	12.2	57500	12.2	18.8	71 to 132	N56C to N280TC	13600	16000	4270	170
	306 R3	**144**	10.1	48700	8.5	18.8	71 to 132	N56C to N280TC	14400	17000	4550	170
	306 R4	**158**	9.2	81900	13.6	16.1	71 to 132	N56C to N280TC	14800	17500	4690	170
	306 R4	**168**	8.6	66400	10.3	16.1	71 to 132	N56C to N280TC	15100	17800	4800	170
	306 R4	**181**	8.0	74300	10.7	16.1	71 to 132	N56C to N280TC	15500	18200	4910	170
	306 R4	**214**	6.8	81900	10.0	16.1	71 to 132	N56C to N280TC	16200	19100	5190	170
	306 R4	**138**	6.3	65700	7.5	16.1	71 to 132	N56C to N280TC	16600	19600	5330	170
	306 R4	**249**	5.8	68600	7.2	16.1	71 to 132	N56C to N280TC	17000	20000	5460	170
	306 R4	**289**	5.0	69300	6.3	16.1	71 to 132	N56C to N280TC	17800	20900	5740	170
	306 R4	**312**	4.7	65700	5.5	16.1	71 to 132	N56C to N280TC	18200	21400	5880	170
	306 R4	**377**	3.8	60200	4.2	16.1	71 to 132	N56C to N280TC	19200	22700	6270	170



306 R

83,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**306 R4**	**420**	3.5	72500	4.5	16.1	71 to 132	N56C to N280TC	19900	23400	6490	170
	306 R4	**455**	3.2	61300	3.5	16.1	71 to 132	N56C to N280TC	20400	24000	6690	170
	306 R4	**488**	3.0	73900	4.0	16.1	71 to 132	N56C to N280TC	20800	24500	6820	170
	306 R4	**550**	2.6	52100	2.5	16.1	71 to 132	N56C to N280TC	21600	25400	7100	170
	306 R4	**590**	2.5	52800	2.3	16.1	71 to 132	N56C to N280TC	22000	25900	7270	170
	306 R4	**665**	2.2	54000	2.1	16.1	71 to 132	N56C to N280TC	22800	26900	7570	170
	306 R4	**830**	1.7	56300	1.8	16.1	71 to 132	N56C to N280TC	24400	28700	8160	170
1150	**306 R2**	**9.23**	125	13300	28	30	71 to 160	N56C to N280TC	6730	7910	1960	170
	306 R2	**10.9**	106	15700	28	30	71 to 160	N56C to N280TC	7070	8330	2070	170
	306 R2	**13.7**	84	19800	28	30	71 to 160	N56C to N280TC	7570	8910	2240	170
	306 R2	**15.9**	72	22900	28	30	71 to 160	N56C to N280TC	7910	9300	2350	170
	306 R2	**19.2**	60	27700	28	30	71 to 160	N56C to N280TC	8380	9850	2500	170
	306 R3	**33.2**	35	42400	26	23	71 to 132	N56C to N280TC	9850	11600	3020	170
	306 R3	**39.2**	29.3	50000	26	23	71 to 132	N56C to N280TC	10400	12200	3170	170
	306 R3	**46.3**	24.8	59000	26	23	71 to 132	N56C to N280TC	10900	12800	3350	170
	306 R3	**58.1**	19.8	69300	24	23	71 to 132	N56C to N280TC	11700	13700	3610	170
	306 R3	**67.5**	17.0	61100	18.1	23	71 to 132	N56C to N280TC	12200	14400	3820	170
	306 R3	**72.9**	15.8	63800	17.6	23	71 to 132	N56C to N280TC	12500	14700	3900	170
	306 R3	**84.7**	13.6	63800	15.1	23	71 to 132	N56C to N280TC	13100	15400	4100	170
	306 R3	**98.5**	11.7	53500	10.9	23	71 to 132	N56C to N280TC	13700	16100	4310	170
	306 R3	**119**	9.7	53500	9.0	23	71 to 132	N56C to N280TC	14500	17100	4590	170
	306 R3	**144**	8.0	45300	6.3	23	71 to 132	N56C to N280TC	15300	18100	4900	170
	306 R4	**158**	7.3	76500	10.0	20	71 to 132	N56C to N280TC	15700	18600	5060	170
	306 R4	**168**	6.9	62800	7.8	20	71 to 132	N56C to N280TC	16000	18900	5160	170
	306 R4	**181**	6.4	71300	8.2	20	71 to 132	N56C to N280TC	16400	19300	5290	170
	306 R4	**214**	5.4	77500	7.5	20	71 to 132	N56C to N280TC	17200	20300	5600	170
	306 R4	**138**	5.0	61100	5.5	20	71 to 132	N56C to N280TC	17600	20800	5730	170
	306 R4	**249**	4.6	66700	5.6	20	71 to 132	N56C to N280TC	18100	21300	5880	170
	306 R4	**289**	4.0	68000	4.9	20	71 to 132	N56C to N280TC	18900	22200	6190	170
	306 R4	**312**	3.7	61100	4.1	20	71 to 132	N56C to N280TC	19300	22800	6350	170
	306 R4	**377**	3.1	56000	3.1	20	71 to 132	N56C to N280TC	20400	24100	6760	170
	306 R4	**420**	2.7	71200	3.5	20	71 to 132	N56C to N280TC	21100	24900	6990	170
	306 R4	**455**	2.5	61800	2.8	20	71 to 132	N56C to N280TC	21600	25500	7200	170
	306 R4	**488**	2.4	72500	3.1	20	71 to 132	N56C to N280TC	22100	26000	7350	170
	306 R4	**550**	2.1	52600	2.0	20	71 to 132	N56C to N280TC	22900	27000	7660	170
	306 R4	**590**	1.9	53300	1.9	20	71 to 132	N56C to N280TC	23400	27600	7840	170
	306 R4	**665**	1.7	54500	1.7	20	71 to 132	N56C to N280TC	24200	28600	8150	170
	306 R4	**830**	1.4	56800	1.4	20	71 to 132	N56C to N280TC	25900	30500	8800	170
870	**306 R2**	**9.23**	94	14300	23	30	71 to 160	N56C to N280TC	7230	8510	2110	170
	306 R2	**10.9**	80	16900	23	30	71 to 160	N56C to N280TC	7600	8960	2230	170
	306 R2	**13.7**	64	21200	23	30	71 to 160	N56C to N280TC	8140	9580	2400	170
	306 R2	**15.9**	55	24600	23	30	71 to 160	N56C to N280TC	8510	10000	2530	170
	306 R2	**19.2**	45	29800	23	30	71 to 160	N56C to N280TC	9010	10600	2690	170
	306 R3	**33.2**	26.2	45600	21	23	71 to 132	N56C to N280TC	10600	12500	3250	170
	306 R3	**39.2**	22.2	53800	21	23	71 to 132	N56C to N280TC	11200	13100	3410	170
	306 R3	**46.3**	18.8	63500	21	23	71 to 132	N56C to N280TC	11700	13800	3610	170
	306 R3	**58.1**	15.0	74500	19.5	23	71 to 132	N56C to N280TC	12500	14800	3880	170
	306 R3	**67.5**	12.9	65700	14.8	23	71 to 132	N56C to N280TC	13100	15500	4110	170
	306 R3	**72.9**	11.9	68600	14.3	23	71 to 132	N56C to N280TC	13400	15800	4190	170
	306 R3	**84.7**	10.3	68600	12.3	23	71 to 132	N56C to N280TC	14000	16600	4410	170
	306 R3	**98.5**	8.8	57500	8.9	23	71 to 132	N56C to N280TC	14700	17300	4630	170
	306 R3	**119**	7.3	57500	7.3	23	71 to 132	N56C to N280TC	15600	18300	4940	170
	306 R3	**144**	6.0	48700	5.1	23	71 to 132	N56C to N280TC	16500	19400	5270	170
	306 R4	**158**	5.5	82300	8.2	20	71 to 132	N56C to N280TC	16900	19900	5440	170



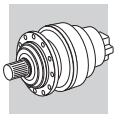
3□ R

306 R — 83,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**306 R4**	**168**	5.2	67500	6.3	20	71 to 132	N56C to N280TC	17200	20300	5550	170
	306 R4	**181**	4.8	76600	6.6	20	71 to 132	N56C to N280TC	17600	20800	5690	170
	306 R4	**214**	4.1	83400	6.1	20	71 to 132	N56C to N280TC	18500	21800	6020	170
	306 R4	**138**	3.8	65700	4.5	20	71 to 132	N56C to N280TC	19000	22400	6160	170
	306 R4	**249**	3.5	71800	4.5	20	71 to 132	N56C to N280TC	19400	22900	6320	170
	306 R4	**289**	3.0	73100	4.0	20	71 to 132	N56C to N280TC	20300	23900	6660	170
	306 R4	**312**	2.8	65700	3.3	20	71 to 132	N56C to N280TC	20800	24500	6820	170
	306 R4	**377**	2.3	60200	2.5	20	71 to 132	N56C to N280TC	22000	25900	7270	170
	306 R4	**420**	2.1	76600	2.9	20	71 to 132	N56C to N280TC	22700	26800	7520	170
	306 R4	**455**	1.9	66500	2.3	20	71 to 132	N56C to N280TC	23300	27400	7740	170
	306 R4	**488**	1.8	78000	2.5	20	71 to 132	N56C to N280TC	23800	28000	7910	170
	306 R4	**550**	1.6	56600	1.6	20	71 to 132	N56C to N280TC	24600	29000	8240	170
	306 R4	**590**	1.5	57300	1.5	20	71 to 132	N56C to N280TC	25100	29600	8430	170
	306 R4	**665**	1.3	58600	1.4	20	71 to 132	N56C to N280TC	26100	30700	8770	170
	306 R4	**830**	1.0	61100	1.2	20	71 to 132	N56C to N280TC	27900	32800	9460	170

307 R — 115,000 in•lbs

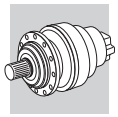
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**307 R2**	**13.0**	135	34300	78	47	132 to 200	N280TC	7020	9360	2440	178
	307 R2	**15.5**	113	40900	78	47	132 to 200	N280TC	7410	9850	2580	178
	307 R2	**19.8**	88	52500	78	47	132 to 200	N280TC	7990	10600	2810	178
	307 R2	**23.5**	74	61700	77	47	132 to 200	N280TC	8410	11200	2970	178
	307 R3	**31.6**	55	38800	37	30	71 to 160	N56C to N280TC	9200	12200	3280	178
	307 R3	**37.7**	46	46300	37	30	71 to 160	N56C to N280TC	9700	12900	3480	178
	307 R3	**44.6**	39	54600	37	30	71 to 160	N56C to N280TC	10200	13500	3690	178
	307 R3	**55.9**	31	68600	37	30	71 to 160	N56C to N280TC	10900	14500	3970	178
	307 R3	**65.0**	26.9	79700	37	30	71 to 160	N56C to N280TC	11400	15200	4180	178
	307 R3	**71.8**	24.4	86400	37	30	71 to 160	N56C to N280TC	11700	15600	4310	178
	307 R3	**78.6**	22.3	92200	36	30	71 to 160	N56C to N280TC	12100	16100	4440	178
	307 R3	**83.4**	21.0	86400	32	30	71 to 160	N56C to N280TC	12300	16300	4540	178
	307 R3	**99.0**	17.7	71600	22	30	71 to 160	N56C to N280TC	12900	17200	4800	178
	307 R3	**120**	14.6	71600	18.2	30	71 to 160	N56C to N280TC	13700	18200	5110	178
	307 R4	**152**	11.5	102900	21	20	71 to 132	N56C to N280TC	14700	19600	5550	178
	307 R4	**165**	10.6	86400	16.5	20	71 to 132	N56C to N280TC	15100	20100	5700	178
	307 R4	**191**	9.2	102900	17.0	20	71 to 132	N56C to N280TC	15700	20900	5990	178
	307 R4	**206**	8.5	102900	15.8	20	71 to 132	N56C to N280TC	16100	21400	6110	178
	307 R4	**232**	7.5	86400	11.7	20	71 to 132	N56C to N280TC	16700	22200	6370	178
	307 R4	**258**	6.8	105300	12.9	20	71 to 132	N56C to N280TC	17200	22900	6600	178
	307 R4	**284**	6.2	88900	9.9	20	71 to 132	N56C to N280TC	17800	23600	6840	178
	307 R4	**313**	5.6	71900	7.2	20	71 to 132	N56C to N280TC	18300	24300	7040	178
	307 R4	**331**	5.3	90500	8.6	20	71 to 132	N56C to N280TC	18600	24700	7170	178
	307 R4	**363**	4.8	101200	8.8	20	71 to 132	N56C to N280TC	19100	25400	7400	178
	307 R4	**413**	4.2	94600	7.2	20	71 to 132	N56C to N280TC	19900	26400	7740	178
	307 R4	**457**	3.8	76200	5.3	20	71 to 132	N56C to N280TC	20500	27200	8000	178
	307 R4	**490**	3.6	77000	5.0	20	71 to 132	N56C to N280TC	20900	27800	8180	178



307 R

115,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**307 R4**	**581**	3.0	99600	5.4	20	71 to 132	N56C to N280TC	22000	29300	8670	178
	307 R4	**690**	2.5	81200	3.7	20	71 to 132	N56C to N280TC	23200	30800	9160	178
1450	**307 R2**	**13.0**	112	36900	70	47	132 to 200	N280TC	7540	10100	2620	178
	307 R2	**15.5**	94	44000	70	47	132 to 200	N280TC	7970	10600	2770	178
	307 R2	**19.8**	73	56500	70	47	132 to 200	N280TC	8590	11400	3020	178
	307 R2	**23.5**	62	66400	69	47	132 to 200	N280TC	9040	12000	3190	178
	307 R3	**31.6**	46	41700	33	30	71 to 160	N56C to N280TC	9890	13100	3520	178
	307 R3	**37.7**	38	49700	33	30	71 to 160	N56C to N280TC	10400	13800	3740	178
	307 R3	**44.6**	33	58700	33	30	71 to 160	N56C to N280TC	10900	14600	3970	178
	307 R3	**55.9**	25.9	73700	33	30	71 to 160	N56C to N280TC	11700	15600	4270	178
	307 R3	**65.0**	22.3	85700	33	30	71 to 160	N56C to N280TC	12300	16300	4490	178
	307 R3	**71.8**	20.2	92900	33	30	71 to 160	N56C to N280TC	12600	16800	4630	178
	307 R3	**78.6**	18.4	99100	32	30	71 to 160	N56C to N280TC	13000	17300	4770	178
	307 R3	**83.4**	17.4	92900	28	30	71 to 160	N56C to N280TC	13200	17600	4880	178
	307 R3	**99.0**	14.6	77000	19.7	30	71 to 160	N56C to N280TC	13900	18500	5160	178
	307 R3	**120**	12.1	77000	16.3	30	71 to 160	N56C to N280TC	14700	19600	5490	178
	307 R4	**152**	9.5	110600	19.0	20	71 to 132	N56C to N280TC	15800	21100	5960	178
	307 R4	**165**	8.8	92900	14.7	20	71 to 132	N56C to N280TC	16200	21600	6130	178
	307 R4	**191**	7.6	110600	15.2	20	71 to 132	N56C to N280TC	16900	22500	6440	178
	307 R4	**206**	7.1	110600	14.1	20	71 to 132	N56C to N280TC	17300	23100	6570	178
	307 R4	**232**	6.2	92900	10.5	20	71 to 132	N56C to N280TC	18000	23900	6850	178
	307 R4	**258**	5.6	113300	11.5	20	71 to 132	N56C to N280TC	18500	24700	7100	178
	307 R4	**284**	5.1	95600	8.8	20	71 to 132	N56C to N280TC	19100	25400	7350	178
	307 R4	**313**	4.6	77300	6.5	20	71 to 132	N56C to N280TC	19700	26100	7570	178
	307 R4	**331**	4.4	97300	7.7	20	71 to 132	N56C to N280TC	20000	26600	7710	178
	307 R4	**363**	4.0	108900	7.8	20	71 to 132	N56C to N280TC	20500	27300	7960	178
	307 R4	**413**	3.5	101800	6.4	20	71 to 132	N56C to N280TC	21400	28400	8320	178
	307 R4	**457**	3.2	82000	4.7	20	71 to 132	N56C to N280TC	22000	29300	8600	178
	307 R4	**490**	3.0	82800	4.4	20	71 to 132	N56C to N280TC	22500	29900	8790	178
	307 R4	**581**	2.5	107100	4.8	20	71 to 132	N56C to N280TC	23700	31500	9320	178
	307 R4	**690**	2.1	87300	3.3	20	71 to 132	N56C to N280TC	24900	33100	9850	178
1150	**307 R2**	**13.0**	89	39200	59	56	132 to 200	N280TC	8020	10700	2810	178
	307 R2	**15.5**	74	46700	59	56	132 to 200	N280TC	8460	11200	2990	178
	307 R2	**19.8**	58	60000	59	56	132 to 200	N280TC	9120	12100	3250	178
	307 R2	**23.5**	49	70500	58	56	132 to 200	N280TC	9590	12800	3460	178
	307 R3	**31.6**	36	44300	28	36	71 to 160	N56C to N280TC	10500	14000	3790	178
	307 R3	**37.7**	30	52800	28	36	71 to 160	N56C to N280TC	11100	14700	4020	178
	307 R3	**44.6**	25.8	62300	28	36	71 to 160	N56C to N280TC	11600	15500	4260	178
	307 R3	**55.9**	20.6	78300	28	36	71 to 160	N56C to N280TC	12500	16600	4590	178
	307 R3	**65.0**	17.7	91400	28	36	71 to 160	N56C to N280TC	13000	17300	4820	178
	307 R3	**71.8**	16.0	86400	24	36	71 to 160	N56C to N280TC	13400	17800	5000	178
	307 R3	**78.6**	14.6	101200	26	36	71 to 160	N56C to N280TC	13800	18300	5160	178
	307 R3	**83.4**	13.8	86400	21	36	71 to 160	N56C to N280TC	14000	18700	5260	178
	307 R3	**99.0**	11.6	71600	14.5	36	71 to 160	N56C to N280TC	14800	19700	5570	178
	307 R3	**120**	9.6	71600	12.0	36	71 to 160	N56C to N280TC	15600	20800	5930	178
	307 R4	**152**	7.6	104500	14.3	24	71 to 132	N56C to N280TC	16800	22300	6420	178
	307 R4	**165**	7.0	87200	10.9	24	71 to 132	N56C to N280TC	17200	22900	6600	178
	307 R4	**191**	6.0	107000	11.6	24	71 to 132	N56C to N280TC	18000	23900	6910	178
	307 R4	**206**	5.6	107800	10.9	24	71 to 132	N56C to N280TC	18400	24500	7090	178
	307 R4	**232**	5.0	92200	8.2	24	71 to 132	N56C to N280TC	19100	25400	7380	178
	307 R4	**258**	4.5	109500	8.8	24	71 to 132	N56C to N280TC	19700	26200	7660	178
	307 R4	**284**	4.0	95500	7.0	24	71 to 132	N56C to N280TC	20300	27000	7920	178
	307 R4	**313**	3.7	77000	5.1	24	71 to 132	N56C to N280TC	20900	27700	8180	178
	307 R4	**331**	3.5	97900	6.1	24	71 to 132	N56C to N280TC	21200	28200	8310	178



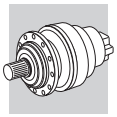
3□ R

307 R — 115,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**307 R4**	**363**	3.2	101200	5.8	24	71 to 132	N56C to N280TC	21800	29000	8570	178
	307 R4	**413**	2.8	101200	5.1	24	71 to 132	N56C to N280TC	22700	30200	8950	178
	307 R4	**457**	2.5	81600	3.7	24	71 to 132	N56C to N280TC	23400	31100	9260	178
	307 R4	**490**	2.3	82300	3.5	24	71 to 132	N56C to N280TC	23900	31800	9490	178
	307 R4	**581**	2.0	107000	3.8	24	71 to 132	N56C to N280TC	25100	33400	10000	178
	307 R4	**690**	1.7	87200	2.6	24	71 to 132	N56C to N280TC	26400	35200	10600	178
870	**307 R2**	**13.0**	67	42100	48	56	132 to 200	N280TC	8620	11500	3020	178
	307 R2	**15.5**	56	50300	48	56	132 to 200	N280TC	9100	12100	3220	178
	307 R2	**19.8**	44	64500	48	56	132 to 200	N280TC	9810	13100	3500	178
	307 R2	**23.5**	37	75800	47	56	132 to 200	N280TC	10300	13700	3720	178
	307 R3	**31.6**	27.5	47600	23	36	71 to 160	N56C to N280TC	11300	15000	4080	178
	307 R3	**37.7**	23.1	56800	23	36	71 to 160	N56C to N280TC	11900	15800	4330	178
	307 R3	**44.6**	19.5	67000	23	36	71 to 160	N56C to N280TC	12500	16600	4580	178
	307 R3	**55.9**	15.6	84200	23	36	71 to 160	N56C to N280TC	13400	17800	4940	178
	307 R3	**65.0**	13.4	98200	23	36	71 to 160	N56C to N280TC	14000	18600	5190	178
	307 R3	**71.8**	12.1	92900	19.6	36	71 to 160	N56C to N280TC	14400	19200	5380	178
	307 R3	**78.6**	11.1	108900	21	36	71 to 160	N56C to N280TC	14800	19700	5550	178
	307 R3	**83.4**	10.4	92900	16.9	36	71 to 160	N56C to N280TC	15100	20100	5660	178
	307 R3	**99.0**	8.8	77000	11.8	36	71 to 160	N56C to N280TC	15900	21100	5990	178
	307 R3	**120**	7.3	77000	9.8	36	71 to 160	N56C to N280TC	16800	22400	6380	178
	307 R4	**152**	5.7	112400	11.6	24	71 to 132	N56C to N280TC	18100	24000	6910	178
	307 R4	**165**	5.3	93800	8.9	24	71 to 132	N56C to N280TC	18500	24600	7100	178
	307 R4	**191**	4.6	115000	9.5	24	71 to 132	N56C to N280TC	19300	25700	7430	178
	307 R4	**206**	4.2	115900	8.8	24	71 to 132	N56C to N280TC	19800	26300	7630	178
	307 R4	**232**	3.7	99100	6.7	24	71 to 132	N56C to N280TC	20500	27300	7930	178
	307 R4	**258**	3.4	117700	7.2	24	71 to 132	N56C to N280TC	21200	28200	8240	178
	307 R4	**284**	3.1	102700	5.7	24	71 to 132	N56C to N280TC	21800	29000	8520	178
	307 R4	**313**	2.8	82700	4.1	24	71 to 132	N56C to N280TC	22400	29800	8790	178
	307 R4	**331**	2.6	105300	5.0	24	71 to 132	N56C to N280TC	22800	30300	8930	178
	307 R4	**363**	2.4	108900	4.7	24	71 to 132	N56C to N280TC	23500	31200	9210	178
	307 R4	**413**	2.1	108900	4.1	24	71 to 132	N56C to N280TC	24400	32400	9630	178
	307 R4	**457**	1.9	87700	3.0	24	71 to 132	N56C to N280TC	25100	33400	9960	178
	307 R4	**490**	1.8	88500	2.8	24	71 to 132	N56C to N280TC	25700	34200	10200	178
	307 R4	**581**	1.5	115000	3.1	24	71 to 132	N56C to N280TC	27000	35900	10800	178
	307 R4	**690**	1.3	93800	2.1	24	71 to 132	N56C to N280TC	28400	37800	11400	178

309 R — 170,000 in•lbs

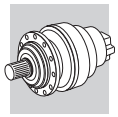
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**309 R2**	**13.0**	135	34300	78	47	132 to 200	N280TC	7100	9360	1950	186
	309 R2	**15.5**	113	40900	78	47	132 to 200	N280TC	7490	9850	2070	186
	309 R2	**19.8**	88	52500	78	47	132 to 200	N280TC	8070	10600	2250	186
	309 R2	**23.5**	74	62300	78	47	132 to 200	N280TC	8490	11200	2380	186
	309 R3	**31.6**	55	38800	37	30	71 to 160	N56C to N280TC	9280	12200	2630	186
	309 R3	**37.7**	46	46300	37	30	71 to 160	N56C to N280TC	9780	12900	2790	186



309 R

170,000 in•lbs

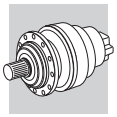
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**309 R3**	**44.6**	39	54600	37	30	71 to 160	N56C to N280TC	10300	13500	2940	186
	309 R3	**55.9**	31	68600	37	30	71 to 160	N56C to N280TC	11000	14500	3170	186
	309 R3	**65.0**	26.9	79700	37	30	71 to 160	N56C to N280TC	11500	15200	3330	186
	309 R3	**71.8**	24.4	88100	37	30	71 to 160	N56C to N280TC	11900	15600	3460	186
	309 R3	**78.6**	22.3	96300	37	30	71 to 160	N56C to N280TC	12200	16100	3560	186
	309 R3	**83.4**	21.0	102100	37	30	71 to 160	N56C to N280TC	12400	16300	3640	186
	309 R3	**99.0**	17.7	107000	33	30	71 to 160	N56C to N280TC	13100	17200	3840	186
	309 R3	**120**	14.6	107000	27	30	71 to 160	N56C to N280TC	13800	18200	4100	186
	309 R4	**152**	11.5	120200	25	20	71 to 132	N56C to N280TC	14800	19600	4440	186
	309 R4	**165**	10.6	130000	25	20	71 to 132	N56C to N280TC	15200	20100	4570	186
	309 R4	**191**	9.2	144000	24	20	71 to 132	N56C to N280TC	15900	20900	4770	186
	309 R4	**206**	8.5	141600	22	20	71 to 132	N56C to N280TC	16300	21400	4900	186
	309 R4	**232**	7.5	131700	17.9	20	71 to 132	N56C to N280TC	16900	22200	5110	186
	309 R4	**258**	6.8	144000	17.6	20	71 to 132	N56C to N280TC	17400	22900	5290	186
	309 R4	**284**	6.2	134200	14.9	20	71 to 132	N56C to N280TC	17900	23600	5470	186
	309 R4	**313**	5.6	107000	10.8	20	71 to 132	N56C to N280TC	18400	24300	5650	186
	309 R4	**331**	5.3	137400	13.1	20	71 to 132	N56C to N280TC	18800	24700	5750	186
	309 R4	**363**	4.8	101200	8.8	20	71 to 132	N56C to N280TC	19300	25400	5930	186
	309 R4	**413**	4.2	142400	10.9	20	71 to 132	N56C to N280TC	20100	26400	6190	186
	309 R4	**457**	3.8	114400	7.9	20	71 to 132	N56C to N280TC	20700	27200	6400	186
	309 R4	**490**	3.6	116000	7.5	20	71 to 132	N56C to N280TC	21100	27800	6550	186
	309 R4	**581**	3.0	130000	7.1	20	71 to 132	N56C to N280TC	22200	29300	6940	186
	309 R4	**690**	2.5	123500	5.6	20	71 to 132	N56C to N280TC	23400	30800	7330	186
1450	**309 R2**	**13.0**	112	36900	70	47	132 to 200	N280TC	7630	10100	2100	186
	309 R2	**15.5**	94	44000	70	47	132 to 200	N280TC	8050	10600	2220	186
	309 R2	**19.8**	73	56500	70	47	132 to 200	N280TC	8670	11400	2420	186
	309 R2	**23.5**	62	67000	70	47	132 to 200	N280TC	9130	12000	2560	186
	309 R3	**31.6**	46	41700	33	30	71 to 160	N56C to N280TC	9970	13100	2830	186
	309 R3	**37.7**	38	49700	33	30	71 to 160	N56C to N280TC	10500	13800	3000	186
	309 R3	**44.6**	33	58700	33	30	71 to 160	N56C to N280TC	11000	14600	3160	186
	309 R3	**55.9**	25.9	73700	33	30	71 to 160	N56C to N280TC	11800	15600	3410	186
	309 R3	**65.0**	22.3	85700	33	30	71 to 160	N56C to N280TC	12400	16300	3580	186
	309 R3	**71.8**	20.2	94700	33	30	71 to 160	N56C to N280TC	12700	16800	3720	186
	309 R3	**78.6**	18.4	103500	33	30	71 to 160	N56C to N280TC	13100	17300	3830	186
	309 R3	**83.4**	17.4	109700	33	30	71 to 160	N56C to N280TC	13300	17600	3910	186
	309 R3	**99.0**	14.6	115000	29	30	71 to 160	N56C to N280TC	14000	18500	4130	186
	309 R3	**120**	12.1	115000	24	30	71 to 160	N56C to N280TC	14900	19600	4410	186
	309 R4	**152**	9.5	129200	22	20	71 to 132	N56C to N280TC	16000	21100	4770	186
	309 R4	**165**	8.8	139800	22	20	71 to 132	N56C to N280TC	16400	21600	4910	186
	309 R4	**191**	7.6	154900	21	20	71 to 132	N56C to N280TC	17100	22500	5130	186
	309 R4	**206**	7.1	152200	19.4	20	71 to 132	N56C to N280TC	17500	23100	5270	186
	309 R4	**232**	6.2	141600	15.9	20	71 to 132	N56C to N280TC	18100	23900	5490	186
	309 R4	**258**	5.6	154900	15.7	20	71 to 132	N56C to N280TC	18700	24700	5690	186
	309 R4	**284**	5.1	144300	13.3	20	71 to 132	N56C to N280TC	19300	25400	5880	186
	309 R4	**313**	4.6	115000	9.6	20	71 to 132	N56C to N280TC	19800	26100	6080	186
	309 R4	**331**	4.4	147800	11.7	20	71 to 132	N56C to N280TC	20200	26600	6190	186
	309 R4	**363**	4.0	108900	7.8	20	71 to 132	N56C to N280TC	20700	27300	6380	186
	309 R4	**413**	3.5	153100	9.7	20	71 to 132	N56C to N280TC	21600	28400	6660	186
	309 R4	**457**	3.2	123000	7.0	20	71 to 132	N56C to N280TC	22200	29300	6880	186
	309 R4	**490**	3.0	124800	6.7	20	71 to 132	N56C to N280TC	22700	29900	7050	186
	309 R4	**581**	2.5	139800	6.3	20	71 to 132	N56C to N280TC	23900	31500	7460	186
	309 R4	**690**	2.1	132700	5.0	20	71 to 132	N56C to N280TC	25100	33100	7880	186
1150	**309 R2**	**13.0**	89	39200	59	56	132 to 200	N280TC	8090	10700	2260	186
	309 R2	**15.5**	74	46700	59	56	132 to 200	N280TC	8540	11200	2400	186
	309 R2	**19.8**	58	60000	59	56	132 to 200	N280TC	9200	12100	2610	186



309 R

170,000 in•lbs

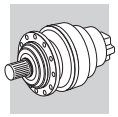
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**309 R2**	**23.5**	49	71200	59	56	132 to 200	N280TC	9700	12800	2760	186
	309 R3	**31.6**	36	44300	28	36	71 to 160	N56C to N280TC	10600	14000	3040	186
	309 R3	**37.7**	30	52800	28	36	71 to 160	N56C to N280TC	11200	14700	3220	186
	309 R3	**44.6**	25.8	62300	28	36	71 to 160	N56C to N280TC	11700	15500	3410	186
	309 R3	**55.9**	20.6	78300	28	36	71 to 160	N56C to N280TC	12600	16600	3690	186
	309 R3	**65.0**	17.7	91400	28	36	71 to 160	N56C to N280TC	13100	17300	3870	186
	309 R3	**71.8**	16.0	100400	28	36	71 to 160	N56C to N280TC	13500	17800	4000	186
	309 R3	**78.6**	14.6	101200	26	36	71 to 160	N56C to N280TC	13900	18300	4130	186
	309 R3	**83.4**	13.8	116900	28	36	71 to 160	N56C to N280TC	14200	18700	4210	186
	309 R3	**99.0**	11.6	107000	22	36	71 to 160	N56C to N280TC	14900	19700	4440	186
	309 R3	**120**	9.6	107000	17.9	36	71 to 160	N56C to N280TC	15800	20800	4750	186
	309 R4	**152**	7.6	136600	18.6	24	71 to 132	N56C to N280TC	16900	22300	5130	186
	309 R4	**165**	7.0	131700	16.5	24	71 to 132	N56C to N280TC	17400	22900	5290	186
	309 R4	**191**	6.0	144000	15.7	24	71 to 132	N56C to N280TC	18200	23900	5550	186
	309 R4	**206**	5.6	162100	16.3	24	71 to 132	N56C to N280TC	18600	24500	5680	186
	309 R4	**232**	5.0	139100	12.4	24	71 to 132	N56C to N280TC	19300	25400	5910	186
	309 R4	**258**	4.5	144000	11.6	24	71 to 132	N56C to N280TC	19900	26200	6110	186
	309 R4	**284**	4.0	144000	10.5	24	71 to 132	N56C to N280TC	20500	27000	6320	186
	309 R4	**313**	3.7	115200	7.6	24	71 to 132	N56C to N280TC	21000	27700	6530	186
	309 R4	**331**	3.5	147300	9.2	24	71 to 132	N56C to N280TC	21400	28200	6660	186
	309 R4	**363**	3.2	101200	5.8	24	71 to 132	N56C to N280TC	22000	29000	6860	186
	309 R4	**413**	2.8	152300	7.6	24	71 to 132	N56C to N280TC	22900	30200	7170	186
	309 R4	**457**	2.5	123500	5.6	24	71 to 132	N56C to N280TC	23600	31100	7400	186
	309 R4	**490**	2.3	125100	5.3	24	71 to 132	N56C to N280TC	24100	31800	7580	186
	309 R4	**581**	2.0	130000	4.6	24	71 to 132	N56C to N280TC	25400	33400	8020	186
	309 R4	**690**	1.7	133300	4.0	24	71 to 132	N56C to N280TC	26700	35200	8490	186
870	**309 R2**	**13.0**	67	42100	48	56	132 to 200	N280TC	8700	11500	2430	186
	309 R2	**15.5**	56	50300	48	56	132 to 200	N280TC	9180	12100	2580	186
	309 R2	**19.8**	44	64500	48	56	132 to 200	N280TC	9890	13100	2800	186
	309 R2	**23.5**	37	76600	48	56	132 to 200	N280TC	10400	13700	2970	186
	309 R3	**31.6**	27.5	47600	23	36	71 to 160	N56C to N280TC	11400	15000	3270	186
	309 R3	**37.7**	23.1	56800	23	36	71 to 160	N56C to N280TC	12000	15800	3470	186
	309 R3	**44.6**	19.5	67000	23	36	71 to 160	N56C to N280TC	12600	16600	3660	186
	309 R3	**55.9**	15.6	84200	23	36	71 to 160	N56C to N280TC	13500	17800	3970	186
	309 R3	**65.0**	13.4	98200	23	36	71 to 160	N56C to N280TC	14100	18600	4160	186
	309 R3	**71.8**	12.1	108000	23	36	71 to 160	N56C to N280TC	14600	19200	4300	186
	309 R3	**78.6**	11.1	108900	21	36	71 to 160	N56C to N280TC	14900	19700	4440	186
	309 R3	**83.4**	10.4	125700	23	36	71 to 160	N56C to N280TC	15200	20100	4520	186
	309 R3	**99.0**	8.8	115000	17.6	36	71 to 160	N56C to N280TC	16000	21100	4770	186
	309 R3	**120**	7.3	115000	14.6	36	71 to 160	N56C to N280TC	17000	22400	5100	186
	309 R4	**152**	5.7	146900	15.2	24	71 to 132	N56C to N280TC	18200	24000	5520	186
	309 R4	**165**	5.3	141600	13.4	24	71 to 132	N56C to N280TC	18700	24600	5690	186
	309 R4	**191**	4.6	154900	12.7	24	71 to 132	N56C to N280TC	19500	25700	5960	186
	309 R4	**206**	4.2	174300	13.3	24	71 to 132	N56C to N280TC	19900	26300	6100	186
	309 R4	**232**	3.7	149600	10.1	24	71 to 132	N56C to N280TC	20700	27300	6350	186
	309 R4	**258**	3.4	154900	9.4	24	71 to 132	N56C to N280TC	21400	28200	6570	186
	309 R4	**284**	3.1	154900	8.5	24	71 to 132	N56C to N280TC	22000	29000	6800	186
	309 R4	**313**	2.8	123900	6.2	24	71 to 132	N56C to N280TC	22600	29800	7020	186
	309 R4	**331**	2.6	158400	7.5	24	71 to 132	N56C to N280TC	23000	30300	7160	186
	309 R4	**363**	2.4	108900	4.7	24	71 to 132	N56C to N280TC	23700	31200	7380	186
	309 R4	**413**	2.1	163700	6.2	24	71 to 132	N56C to N280TC	24600	32400	7710	186
	309 R4	**457**	1.9	132700	4.6	24	71 to 132	N56C to N280TC	25400	33400	7960	186
	309 R4	**490**	1.8	134500	4.3	24	71 to 132	N56C to N280TC	25900	34200	8160	186
	309 R4	**581**	1.5	139800	3.8	24	71 to 132	N56C to N280TC	27300	35900	8630	186
	309 R4	**690**	1.3	143400	3.3	24	71 to 132	N56C to N280TC	28700	37800	9130	186



310 R

265,000 in•lbs

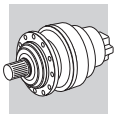
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**310 R2 (B)**	**12.1**	145	70200	171	74	180 to 225	N320TC-N360TC	8410	10500	3460	196
	310 R2 (B)	**15.5**	113	88100	168	74	180 to 225	N320TC-N360TC	9070	11300	3740	196
	310 R2 (A)	**17.7**	99	70000	117	74	132 to 200	N280TC	9430	11800	3920	196
	310 R2 (B)	**18.4**	95	93000	149	74	180 to 225	N320TC-N360TC	9540	11900	3970	196
	310 R2 (A)	**22.7**	77	89700	117	74	132 to 200	N280TC	10200	12700	4260	196
	310 R2 (A)	**27.0**	65	102900	113	74	132 to 200	N280TC	10700	13300	4510	196
	310 R3	**37.7**	46	46300	37	30	71 to 160	N56C to N280TC	11800	14700	5030	196
	310 R3	**44.6**	39	54600	37	30	71 to 160	N56C to N280TC	12400	15500	5310	196
	310 R3	**55.9**	31	68600	37	30	71 to 160	N56C to N280TC	13300	16600	5730	196
	310 R3	**65.0**	26.9	79700	37	30	71 to 160	N56C to N280TC	13900	17400	6040	196
	310 R3	**71.8**	24.4	88100	37	30	71 to 160	N56C to N280TC	14300	17900	6220	196
	310 R3	**78.6**	22.3	96300	37	30	71 to 160	N56C to N280TC	14700	18400	6420	196
	310 R3	**83.4**	21.0	102100	37	30	71 to 160	N56C to N280TC	15000	18700	6550	196
	310 R3	**99.0**	17.7	121000	37	30	71 to 160	N56C to N280TC	15800	19700	6940	196
	310 R3	**120**	14.6	146500	37	30	71 to 160	N56C to N280TC	16700	20900	7380	196
	310 R4	**136**	12.9	107800	25	20	71 to 160	N56C to N280TC	17400	21700	7710	196
	310 R4	**160**	10.9	127600	25	20	71 to 160	N56C to N280TC	18200	22800	8150	196
	310 R4	**189**	9.2	150600	25	20	71 to 160	N56C to N280TC	19200	23900	8620	196
	310 R4	**206**	8.5	163800	25	20	71 to 160	N56C to N280TC	19700	24500	8850	196
	310 R4	**234**	7.5	186000	25	20	71 to 160	N56C to N280TC	20400	25500	9240	196
	310 R4	**258**	6.8	184400	23	20	71 to 160	N56C to N280TC	21000	26300	9550	196
	310 R4	**283**	6.2	188500	21	20	71 to 160	N56C to N280TC	21600	27000	9830	196
	310 R4	**305**	5.7	189300	19.6	20	71 to 160	N56C to N280TC	22100	27600	10100	196
	310 R4	**334**	5.2	222200	21	20	71 to 160	N56C to N280TC	22700	28400	10400	196
	310 R4	**363**	4.8	194200	16.9	20	71 to 160	N56C to N280TC	23300	29100	10700	196
	310 R4	**419**	4.2	243600	18.3	20	71 to 160	N56C to N280TC	24300	30400	11200	196
	310 R4	**454**	3.9	166300	11.6	20	71 to 160	N56C to N280TC	24900	31100	11500	196
	310 R4	**517**	3.4	206600	12.6	20	71 to 160	N56C to N280TC	25900	32300	12000	196
	310 R4	**590**	3.0	179400	9.6	20	71 to 160	N56C to N280TC	27000	33700	12600	196
	310 R4	**639**	2.7	179400	8.9	20	71 to 160	N56C to N280TC	27600	34500	12900	196
	310 R4	**757**	2.3	219800	9.2	20	71 to 160	N56C to N280TC	29100	36300	13600	196
	310 R4	**898**	1.9	193400	6.8	20	71 to 160	N56C to N280TC	30600	38200	14500	196
1450	**310 R2 (B)**	**12.1**	120	75500	153	74	180 to 225	N320TC-N360TC	9040	11300	3720	196
	310 R2 (B)	**15.5**	94	94700	150	74	180 to 225	N320TC-N360TC	9750	12100	4020	196
	310 R2 (A)	**17.7**	82	75300	104	74	132 to 200	N280TC	10100	12700	4220	196
	310 R2 (B)	**18.4**	79	100000	133	74	180 to 225	N320TC-N360TC	10300	12800	4270	196
	310 R2 (A)	**22.7**	64	96500	104	74	132 to 200	N280TC	10900	13600	4580	196
	310 R2 (A)	**27.0**	54	110600	100	74	132 to 200	N280TC	11500	14400	4850	196
	310 R3	**37.7**	38	49700	33	30	71 to 160	N56C to N280TC	12700	15900	5410	196
	310 R3	**44.6**	33	58700	33	30	71 to 160	N56C to N280TC	13400	16700	5710	196
	310 R3	**55.9**	25.9	73700	33	30	71 to 160	N56C to N280TC	14300	17900	6160	196
	310 R3	**65.0**	22.3	85700	33	30	71 to 160	N56C to N280TC	15000	18700	6490	196
	310 R3	**71.8**	20.2	94700	33	30	71 to 160	N56C to N280TC	15400	19200	6690	196
	310 R3	**78.6**	18.4	103500	33	30	71 to 160	N56C to N280TC	15900	19800	6910	196
	310 R3	**83.4**	17.4	109700	33	30	71 to 160	N56C to N280TC	16100	20100	7050	196
	310 R3	**99.0**	14.6	130100	33	30	71 to 160	N56C to N280TC	17000	21200	7460	196
	310 R3	**120**	12.1	157500	33	30	71 to 160	N56C to N280TC	18000	22400	7930	196
	310 R4	**136**	10.7	115900	22	20	71 to 160	N56C to N280TC	18700	23300	8290	196
	310 R4	**160**	9.0	137200	22	20	71 to 160	N56C to N280TC	19600	24500	8770	196
	310 R4	**189**	7.7	162000	22	20	71 to 160	N56C to N280TC	20600	25700	9270	196
	310 R4	**206**	7.0	176100	22	20	71 to 160	N56C to N280TC	21100	26400	9510	196
	310 R4	**234**	6.2	200000	22	20	71 to 160	N56C to N280TC	22000	27400	9930	196
	310 R4	**258**	5.6	198200	20	20	71 to 160	N56C to N280TC	22600	28300	10300	196
	310 R4	**283**	5.1	202700	18.7	20	71 to 160	N56C to N280TC	23300	29000	10600	196
	310 R4	**305**	4.8	203500	17.4	20	71 to 160	N56C to N280TC	23800	29700	10800	196



3□ R

310 R — 265,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**310 R4**	**334**	4.3	238900	18.7	20	71 to 160	N56C to N280TC	24400	30500	11200	196
	310 R4	**363**	4.0	208900	15.0	20	71 to 160	N56C to N280TC	25100	31300	11500	196
	310 R4	**419**	3.5	262000	16.3	20	71 to 160	N56C to N280TC	26200	32700	12100	196
	310 R4	**454**	3.2	178800	10.3	20	71 to 160	N56C to N280TC	26800	33500	12400	196
	310 R4	**517**	2.8	222100	11.2	20	71 to 160	N56C to N280TC	27900	34800	12900	196
	310 R4	**590**	2.5	192900	8.6	20	71 to 160	N56C to N280TC	29000	36200	13500	196
	310 R4	**639**	2.3	192900	7.9	20	71 to 160	N56C to N280TC	29700	37100	13900	196
	310 R4	**757**	1.9	236300	8.2	20	71 to 160	N56C to N280TC	31300	39000	14700	196
	310 R4	**898**	1.6	208000	6.1	20	71 to 160	N56C to N280TC	32900	41100	15600	196
1150	**310 R2 (B)**	**12.1**	95	89700	144	89	180 to 225	N320TC-N360TC	9620	12000	4000	196
	310 R2 (B)	**15.5**	74	88900	111	89	180 to 225	N320TC-N360TC	10400	12900	4330	196
	310 R2 (A)	**17.7**	65	78400	86	89	132 to 200	N280TC	10800	13400	4540	196
	310 R2 (B)	**18.4**	63	104500	110	89	180 to 225	N320TC-N360TC	10900	13600	4590	196
	310 R2 (A)	**22.7**	51	100400	86	89	132 to 200	N280TC	11600	14500	4930	196
	310 R2 (A)	**27.0**	43	119300	86	89	132 to 200	N280TC	12200	15200	5210	196
	310 R3	**37.7**	30	52800	28	36	71 to 160	N56C to N280TC	13500	16800	5830	196
	310 R3	**44.6**	25.8	62300	28	36	71 to 160	N56C to N280TC	14200	17700	6170	196
	310 R3	**55.9**	20.6	78300	28	36	71 to 160	N56C to N280TC	15200	18900	6630	196
	310 R3	**65.0**	17.7	91400	28	36	71 to 160	N56C to N280TC	15900	19800	6990	196
	310 R3	**71.8**	16.0	100400	28	36	71 to 160	N56C to N280TC	16400	20400	7220	196
	310 R3	**78.6**	14.6	110300	28	36	71 to 160	N56C to N280TC	16800	21000	7430	196
	310 R3	**83.4**	13.8	116900	28	36	71 to 160	N56C to N280TC	17100	21400	7580	196
	310 R3	**99.0**	11.6	138300	28	36	71 to 160	N56C to N280TC	18000	22500	8020	196
	310 R3	**120**	9.6	146500	25	36	71 to 160	N56C to N280TC	19100	23800	8570	196
	310 R4	**136**	8.5	167900	26	24	71 to 160	N56C to N280TC	19800	24700	8930	196
	310 R4	**160**	7.2	198400	26	24	71 to 160	N56C to N280TC	20800	26000	9440	196
	310 R4	**189**	6.1	218900	24	24	71 to 160	N56C to N280TC	21900	27300	9980	196
	310 R4	**206**	5.6	190900	19.2	24	71 to 160	N56C to N280TC	22400	28000	10300	196
	310 R4	**234**	4.9	204900	18.2	24	71 to 160	N56C to N280TC	23300	29100	10700	196
	310 R4	**258**	4.5	197500	15.9	24	71 to 160	N56C to N280TC	24000	30000	11100	196
	310 R4	**283**	4.1	188500	13.8	24	71 to 160	N56C to N280TC	24700	30800	11400	196
	310 R4	**305**	3.8	203300	13.8	24	71 to 160	N56C to N280TC	25300	31500	11700	196
	310 R4	**334**	3.4	222200	13.8	24	71 to 160	N56C to N280TC	26000	32400	12000	196
	310 R4	**363**	3.2	209100	11.9	24	71 to 160	N56C to N280TC	26600	33200	12400	196
	310 R4	**419**	2.7	246900	12.2	24	71 to 160	N56C to N280TC	27800	34700	13000	196
	310 R4	**454**	2.5	183500	8.4	24	71 to 160	N56C to N280TC	28500	35500	13300	196
	310 R4	**517**	2.2	221400	8.9	24	71 to 160	N56C to N280TC	29600	36900	13900	196
	310 R4	**590**	2.0	179400	6.3	24	71 to 160	N56C to N280TC	30800	38400	14600	196
	310 R4	**639**	1.8	198400	6.4	24	71 to 160	N56C to N280TC	31500	39400	15000	196
	310 R4	**757**	1.5	230500	6.3	24	71 to 160	N56C to N280TC	33200	41400	15800	196
	310 R4	**898**	1.3	214000	4.9	24	71 to 160	N56C to N280TC	34900	43600	16800	196
870	**310 R2 (B)**	**12.1**	72	96500	117	89	180 to 225	N320TC-N360TC	10300	12900	4300	196
	310 R2 (B)	**15.5**	56	95600	91	89	180 to 225	N320TC-N360TC	11100	13900	4660	196
	310 R2 (A)	**17.7**	49	84300	70	89	132 to 200	N280TC	11600	14400	4880	196
	310 R2 (B)	**18.4**	47	112400	90	89	180 to 225	N320TC-N360TC	11700	14600	4940	196
	310 R2 (A)	**22.7**	38	108000	70	89	132 to 200	N280TC	12500	15600	5300	196
	310 R2 (A)	**27.0**	32	128300	70	89	132 to 200	N280TC	13100	16400	5600	196
	310 R3	**37.7**	23.1	56800	23	36	71 to 160	N56C to N280TC	14500	18100	6270	196
	310 R3	**44.6**	19.5	67000	23	36	71 to 160	N56C to N280TC	15300	19000	6630	196
	310 R3	**55.9**	15.6	84200	23	36	71 to 160	N56C to N280TC	16300	20400	7130	196
	310 R3	**65.0**	13.4	98200	23	36	71 to 160	N56C to N280TC	17100	21300	7520	196
	310 R3	**71.8**	12.1	108000	23	36	71 to 160	N56C to N280TC	17600	22000	7770	196
	310 R3	**78.6**	11.1	118600	23	36	71 to 160	N56C to N280TC	18100	22600	7990	196
	310 R3	**83.4**	10.4	125700	23	36	71 to 160	N56C to N280TC	18400	23000	8160	196
	310 R3	**99.0**	8.8	148700	23	36	71 to 160	N56C to N280TC	19400	24200	8630	196

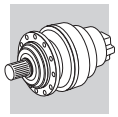


310 R — 265,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**310 R3**	**120**	7.3	157500	20	36	71 to 160	N56C to N280TC	20500	25600	9210	196
	310 R4	**136**	6.4	180500	21	24	71 to 160	N56C to N280TC	21300	26600	9600	196
	310 R4	**160**	5.4	213300	21	24	71 to 160	N56C to N280TC	22400	27900	10200	196
	310 R4	**189**	4.6	235400	19.5	24	71 to 160	N56C to N280TC	23500	29400	10700	196
	310 R4	**206**	4.2	205300	15.6	24	71 to 160	N56C to N280TC	24100	30100	11000	196
	310 R4	**234**	3.7	220400	14.8	24	71 to 160	N56C to N280TC	25100	31300	11500	196
	310 R4	**258**	3.4	212400	12.9	24	71 to 160	N56C to N280TC	25900	32200	11900	196
	310 R4	**283**	3.1	202700	11.2	24	71 to 160	N56C to N280TC	26600	33100	12300	196
	310 R4	**305**	2.9	218600	11.2	24	71 to 160	N56C to N280TC	27200	33900	12600	196
	310 R4	**334**	2.6	238900	11.2	24	71 to 160	N56C to N280TC	27900	34800	13000	196
	310 R4	**363**	2.4	224800	9.7	24	71 to 160	N56C to N280TC	28600	35700	13300	196
	310 R4	**419**	2.1	265500	9.9	24	71 to 160	N56C to N280TC	29900	37300	14000	196
	310 R4	**454**	1.9	197400	6.8	24	71 to 160	N56C to N280TC	30600	38200	14300	196
	310 R4	**517**	1.7	238100	7.2	24	71 to 160	N56C to N280TC	31800	39700	15000	196
	310 R4	**590**	1.5	192900	5.1	24	71 to 160	N56C to N280TC	33100	41300	15700	196
	310 R4	**639**	1.4	213300	5.2	24	71 to 160	N56C to N280TC	33900	42300	16100	196
	310 R4	**757**	1.1	247800	5.1	24	71 to 160	N56C to N280TC	35700	44500	17000	196
	310 R4	**898**	0.97	230100	4.0	24	71 to 160	N56C to N280TC	37600	46900	18000	196

311 R — 398,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**311 R2 (B)**	**12.0**	146	88900	219	101	180 to 225	N320TC-N360TC	9910	12300	3460	204
	311 R2 (B)	**15.4**	114	113600	218	101	180 to 225	N320TC-N360TC	10700	13300	3740	204
	311 R2 (C)	**16.6**	105	85600	152	121	180 to 225	N320TC-N360TC	10900	13600	3840	204
	311 R2 (A)	**17.7**	99	69100	115	101	132 to 200	N280TC	11100	13800	3920	204
	311 R2 (B)	**18.3**	96	135000	218	101	180 to 225	N320TC-N360TC	11200	14000	3970	204
	311 R2 (C)	**21.3**	82	110300	153	121	180 to 225	N320TC-N360TC	11800	14600	4180	204
	311 R2 (A)	**22.8**	77	88900	115	101	132 to 200	N280TC	12000	14900	4260	204
	311 R2 (C)	**25.3**	69	128400	150	121	180 to 225	N320TC-N360TC	12400	15400	4410	204
	311 R2 (A)	**27.0**	65	105300	115	101	132 to 200	N280TC	12600	15700	4490	204
	311 R3	**53.0**	33	135800	78	54	132 to 180	N280TC	15500	19200	5620	204
	311 R3	**63.2**	27.7	162100	78	54	132 to 180	N280TC	16300	20200	5960	204
	311 R3	**68.0**	25.7	174500	78	54	132 to 180	N280TC	16700	20700	6110	204
	311 R3	**81.1**	21.6	208200	78	54	132 to 180	N280TC	17600	21800	6500	204
	311 R3	**96.3**	18.2	228000	72	54	132 to 180	N280TC	18500	23000	6860	204
	311 R3	**104**	16.8	225500	66	54	132 to 180	N280TC	18900	23500	7040	204
	311 R3	**124**	14.2	237000	59	54	132 to 180	N280TC	19900	24700	7460	204
	311 R3	**147**	11.9	222200	46	54	132 to 180	N280TC	21000	26000	7890	204
	311 R4	**154**	11.3	183500	38	30	71 to 160	N56C to N280TC	21300	26400	8050	204
	311 R4	**182**	9.6	216500	37	30	71 to 160	N56C to N280TC	22400	27800	8490	204
	311 R4	**198**	8.8	235400	37	30	71 to 160	N56C to N280TC	22900	28500	8750	204
	311 R4	**223**	7.9	265000	38	30	71 to 160	N56C to N280TC	23800	29500	9080	204
	311 R4	**266**	6.6	309500	37	30	71 to 160	N56C to N280TC	25100	31100	9650	204
	311 R4	**294**	6.0	319300	34	30	71 to 160	N56C to N280TC	25800	32100	9960	204
	311 R4	**322**	5.4	327600	32	30	71 to 160	N56C to N280TC	26500	33000	10300	204

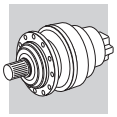


3□ R

311 R

398,000 in•lbs

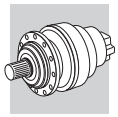
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**311 R4**	**341**	5.1	334200	31	30	71 to 160	N56C to N280TC	27000	33600	10500	204
	311 R4	**377**	4.6	279800	23	30	71 to 160	N56C to N280TC	27800	34600	10800	204
	311 R4	**413**	4.2	343200	26	30	71 to 160	N56C to N280TC	28600	35500	11200	204
	311 R4	**438**	4.0	288100	21	30	71 to 160	N56C to N280TC	29100	36200	11400	204
	311 R4	**490**	3.6	284000	18.3	30	71 to 160	N56C to N280TC	30100	37400	11800	204
	311 R4	**520**	3.4	296300	18.0	30	71 to 160	N56C to N280TC	30600	38100	12000	204
	311 R4	**629**	2.8	307000	15.4	30	71 to 160	N56C to N280TC	32500	40300	12800	204
	311 R4	**746**	2.3	253500	10.7	30	71 to 160	N56C to N280TC	34200	42400	13600	204
1450	**311 R2 (B)**	**12.0**	121	95600	195	101	180 to 225	N320TC-N360TC	10700	13200	3720	204
	311 R2 (B)	**15.4**	94	122100	194	101	180 to 225	N320TC-N360TC	11500	14300	4020	204
	311 R2 (C)	**16.6**	87	92000	136	121	180 to 225	N320TC-N360TC	11800	14600	4130	204
	311 R2 (A)	**17.7**	82	74300	103	101	132 to 200	N280TC	12000	14900	4220	204
	311 R2 (B)	**18.3**	79	145100	194	101	180 to 225	N320TC-N360TC	12100	15000	4270	204
	311 R2 (C)	**21.3**	68	118600	136	121	180 to 225	N320TC-N360TC	12700	15700	4490	204
	311 R2 (A)	**22.8**	64	95600	103	101	132 to 200	N280TC	12900	16000	4580	204
	311 R2 (C)	**25.3**	57	138100	134	121	180 to 225	N320TC-N360TC	13300	16500	4740	204
	311 R2 (A)	**27.0**	54	113300	103	101	132 to 200	N280TC	13600	16800	4830	204
	311 R3	**53.0**	27.4	146000	70	54	132 to 180	N280TC	16600	20600	6050	204
	311 R3	**63.2**	22.9	174300	70	54	132 to 180	N280TC	17500	21800	6410	204
	311 R3	**68.0**	21.3	187600	70	54	132 to 180	N280TC	17900	22200	6570	204
	311 R3	**81.1**	17.9	223900	70	54	132 to 180	N280TC	18900	23500	6990	204
	311 R3	**96.3**	15.1	245100	64	54	132 to 180	N280TC	19900	24700	7380	204
	311 R3	**104**	13.9	242500	59	54	132 to 180	N280TC	20300	25300	7570	204
	311 R3	**124**	11.7	254900	52	54	132 to 180	N280TC	21400	26600	8020	204
	311 R3	**147**	9.9	238900	41	54	132 to 180	N280TC	22500	28000	8490	204
	311 R4	**154**	9.4	197400	33	30	71 to 160	N56C to N280TC	22900	28400	8650	204
	311 R4	**182**	8.0	232800	33	30	71 to 160	N56C to N280TC	24100	29900	9130	204
	311 R4	**198**	7.3	253100	33	30	71 to 160	N56C to N280TC	24700	30700	9400	204
	311 R4	**223**	6.5	285000	33	30	71 to 160	N56C to N280TC	25600	31800	9760	204
	311 R4	**266**	5.5	332800	33	30	71 to 160	N56C to N280TC	27000	33500	10400	204
	311 R4	**294**	4.9	343400	31	30	71 to 160	N56C to N280TC	27800	34500	10700	204
	311 R4	**322**	4.5	352200	29	30	71 to 160	N56C to N280TC	28500	35400	11000	204
	311 R4	**341**	4.2	359300	28	30	71 to 160	N56C to N280TC	29000	36100	11300	204
	311 R4	**377**	3.8	300900	21	30	71 to 160	N56C to N280TC	29900	37200	11600	204
	311 R4	**413**	3.5	369000	23	30	71 to 160	N56C to N280TC	30700	38200	12000	204
	311 R4	**438**	3.3	309700	18.5	30	71 to 160	N56C to N280TC	31300	38900	12200	204
	311 R4	**490**	3.0	305300	16.3	30	71 to 160	N56C to N280TC	32400	40200	12700	204
	311 R4	**520**	2.8	318600	16.0	30	71 to 160	N56C to N280TC	32900	40900	13000	204
	311 R4	**629**	2.3	330100	13.7	30	71 to 160	N56C to N280TC	34900	43300	13800	204
	311 R4	**746**	1.9	272600	9.6	30	71 to 160	N56C to N280TC	36700	45600	14600	204
1150	**311 R2 (B)**	**12.0**	96	98800	160	121	180 to 225	N320TC-N360TC	11300	14000	4000	204
	311 R2 (B)	**15.4**	75	126700	160	121	180 to 225	N320TC-N360TC	12200	15100	4330	204
	311 R2 (C)	**16.6**	69	95500	112	145	180 to 225	N320TC-N360TC	12500	15500	4440	204
	311 R2 (A)	**17.7**	65	79000	87	121	132 to 200	N280TC	12700	15800	4540	204
	311 R2 (B)	**18.3**	63	150600	160	121	180 to 225	N320TC-N360TC	12800	16000	4590	204
	311 R2 (C)	**21.3**	54	130900	119	145	180 to 225	N320TC-N360TC	13400	16700	4820	204
	311 R2 (A)	**22.8**	51	101200	86	121	132 to 200	N280TC	13700	17000	4930	204
	311 R2 (C)	**25.3**	45	159700	123	145	180 to 225	N320TC-N360TC	14100	17600	5110	204
	311 R2 (A)	**27.0**	43	120200	86	121	132 to 200	N280TC	14400	17900	5210	204
	311 R3	**53.0**	21.7	155600	59	64	132 to 180	N280TC	17600	21900	6530	204
	311 R3	**63.2**	18.2	185200	59	64	132 to 180	N280TC	18600	23100	6910	204
	311 R3	**68.0**	16.9	199200	59	64	132 to 180	N280TC	19000	23600	7090	204
	311 R3	**81.1**	14.2	237900	59	64	132 to 180	N280TC	20100	24900	7510	204
	311 R3	**96.3**	11.9	260900	54	64	132 to 180	N280TC	21100	26200	7970	204
	311 R3	**104**	11.0	257600	50	64	132 to 180	N280TC	21600	26800	8180	204



311 R

398,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**311 R3**	**124**	9.3	263400	43	64	132 to 180	N280TC	22700	28200	8640	204
	311 R3	**147**	7.8	222200	30	64	132 to 180	N280TC	23900	29700	9160	204
	311 R4	**154**	7.4	209900	28	36	71 to 160	N56C to N280TC	24300	30200	9310	204
	311 R4	**182**	6.3	247700	28	36	71 to 160	N56C to N280TC	25500	31700	9850	204
	311 R4	**198**	5.8	269100	28	36	71 to 160	N56C to N280TC	26200	32500	10100	204
	311 R4	**223**	5.2	293800	27	36	71 to 160	N56C to N280TC	27100	33700	10500	204
	311 R4	**266**	4.3	353900	28	36	71 to 160	N56C to N280TC	28600	35600	11200	204
	311 R4	**294**	3.9	343200	24	36	71 to 160	N56C to N280TC	29500	36600	11500	204
	311 R4	**322**	3.6	370400	24	36	71 to 160	N56C to N280TC	30300	37600	11900	204
	311 R4	**341**	3.4	343200	21	36	71 to 160	N56C to N280TC	30900	38300	12100	204
	311 R4	**377**	3.1	302900	16.7	36	71 to 160	N56C to N280TC	31800	39500	12500	204
	311 R4	**413**	2.8	343200	17.2	36	71 to 160	N56C to N280TC	32700	40500	12900	204
	311 R4	**438**	2.6	311100	14.7	36	71 to 160	N56C to N280TC	33200	41300	13200	204
	311 R4	**490**	2.3	284000	12.0	36	71 to 160	N56C to N280TC	34400	42700	13700	204
	311 R4	**520**	2.2	321000	12.8	36	71 to 160	N56C to N280TC	35000	43500	14000	204
	311 R4	**629**	1.8	331700	10.9	36	71 to 160	N56C to N280TC	37100	46000	14900	204
	311 R4	**746**	1.5	271600	7.5	36	71 to 160	N56C to N280TC	39000	48400	15800	204
870	**311 R2 (B)**	**12.0**	73	106200	130	121	180 to 225	N320TC-N360TC	12100	15100	4300	204
	311 R2 (B)	**15.4**	56	136300	130	121	180 to 225	N320TC-N360TC	13100	16300	4660	204
	311 R2 (C)	**16.6**	52	102700	91	145	180 to 225	N320TC-N360TC	13400	16600	4770	204
	311 R2 (A)	**17.7**	49	85000	70	121	132 to 200	N280TC	13600	17000	4880	204
	311 R2 (B)	**18.3**	48	162000	130	121	180 to 225	N320TC-N360TC	13800	17200	4940	204
	311 R2 (C)	**21.3**	41	140700	97	145	180 to 225	N320TC-N360TC	14400	17900	5190	204
	311 R2 (A)	**22.8**	38	108900	70	121	132 to 200	N280TC	14700	18300	5300	204
	311 R2 (C)	**25.3**	34	171700	100	145	180 to 225	N320TC-N360TC	15200	18900	5490	204
	311 R2 (A)	**27.0**	32	129200	70	121	132 to 200	N280TC	15500	19200	5600	204
	311 R3	**53.0**	16.4	167300	48	64	132 to 180	N280TC	19000	23600	7020	204
	311 R3	**63.2**	13.8	199100	48	64	132 to 180	N280TC	20000	24800	7430	204
	311 R3	**68.0**	12.8	214200	48	64	132 to 180	N280TC	20400	25400	7630	204
	311 R3	**81.1**	10.7	255800	48	64	132 to 180	N280TC	21600	26800	8070	204
	311 R3	**96.3**	9.0	280500	44	64	132 to 180	N280TC	22700	28200	8570	204
	311 R3	**104**	8.4	277000	40	64	132 to 180	N280TC	23200	28800	8790	204
	311 R3	**124**	7.0	283200	35	64	132 to 180	N280TC	24400	30400	9290	204
	311 R3	**147**	5.9	238900	25	64	132 to 180	N280TC	25700	32000	9850	204
	311 R4	**154**	5.6	225700	23	36	71 to 160	N56C to N280TC	26100	32500	10000	204
	311 R4	**182**	4.8	266400	23	36	71 to 160	N56C to N280TC	27500	34100	10600	204
	311 R4	**198**	4.4	289400	23	36	71 to 160	N56C to N280TC	28200	35000	10900	204
	311 R4	**223**	3.9	315900	22	36	71 to 160	N56C to N280TC	29200	36300	11300	204
	311 R4	**266**	3.3	380500	22	36	71 to 160	N56C to N280TC	30800	38200	12000	204
	311 R4	**294**	3.0	369000	19.7	36	71 to 160	N56C to N280TC	31700	39400	12400	204
	311 R4	**322**	2.7	398200	19.4	36	71 to 160	N56C to N280TC	32600	40500	12800	204
	311 R4	**341**	2.5	369000	17.0	36	71 to 160	N56C to N280TC	33200	41200	13000	204
	311 R4	**377**	2.3	325700	13.6	36	71 to 160	N56C to N280TC	34200	42400	13500	204
	311 R4	**413**	2.1	369000	14.0	36	71 to 160	N56C to N280TC	35100	43600	13900	204
	311 R4	**438**	2.0	334500	12.0	36	71 to 160	N56C to N280TC	35700	44400	14200	204
	311 R4	**490**	1.8	305300	9.8	36	71 to 160	N56C to N280TC	37000	45900	14700	204
	311 R4	**520**	1.7	345100	10.4	36	71 to 160	N56C to N280TC	37600	46700	15000	204
	311 R4	**629**	1.4	356700	8.9	36	71 to 160	N56C to N280TC	39800	49500	16000	204
	311 R4	**746**	1.2	292000	6.1	36	71 to 160	N56C to N280TC	41900	52100	16900	204

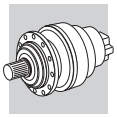


3□ R

313 R

485,000 in•lbs

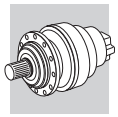
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**313 R2 (B)**	**12.2**	143	90500	219	101	180 to 225	N320TC-N360TC	12200	14600	4260	212
	313 R2 (B)	**15.9**	110	117700	219	101	180 to 225	N320TC-N360TC	13200	15800	4640	212
	313 R2 (C)	**16.8**	104	87200	153	121	180 to 225	N320TC-N360TC	13400	16100	4750	212
	313 R2 (A)	**18.0**	97	70000	115	101	132 to 200	N280TC	13700	16400	4820	212
	313 R2 (B)	**19.1**	92	140700	218	101	180 to 225	N320TC-N360TC	13900	16700	4950	212
	313 R2 (C)	**22.0**	80	111100	149	121	180 to 225	N320TC-N360TC	14500	17500	5190	212
	313 R2 (A)	**23.4**	75	91400	115	101	132 to 200	N280TC	14800	17800	5290	212
	313 R2 (C)	**26.4**	66	134200	150	121	180 to 225	N320TC-N360TC	15300	18400	5490	212
	313 R2 (A)	**28.2**	62	109500	115	101	132 to 200	N280TC	15600	18800	5620	212
	313 R3	**53.7**	33	137400	78	54	132 to 200	N280TC	19000	22800	6970	212
	313 R3	**64.0**	27.3	164600	78	54	132 to 200	N280TC	20000	24100	7380	212
	313 R3	**69.9**	25.0	179400	78	54	132 to 200	N280TC	20500	24700	7610	212
	313 R3	**82.2**	21.3	210700	78	54	132 to 200	N280TC	21500	25900	8020	212
	313 R3	**97.5**	17.9	250200	78	54	132 to 200	N280TC	22700	27300	8490	212
	313 R3	**107**	16.3	274900	78	54	132 to 200	N280TC	23300	28100	8770	212
	313 R3	**127**	13.8	326700	78	54	132 to 200	N280TC	24600	29600	9290	212
	313 R3	**153**	11.4	321000	64	54	132 to 200	N280TC	26000	31200	9850	212
	313 R4	**185**	9.5	219800	38	30	71 to 160	N56C to N280TC	27500	33100	10500	212
	313 R4	**201**	8.7	238700	38	30	71 to 160	N56C to N280TC	28200	33900	10800	212
	313 R4	**237**	7.4	281500	37	30	71 to 160	N56C to N280TC	29600	35600	11400	212
	313 R4	**281**	6.2	334200	38	30	71 to 160	N56C to N280TC	31200	37500	12100	212
	313 R4	**309**	5.7	367100	38	30	71 to 160	N56C to N280TC	32100	38600	12500	212
	313 R4	**346**	5.1	410700	38	30	71 to 160	N56C to N280TC	33200	39900	12900	212
	313 R4	**387**	4.5	376100	31	30	71 to 160	N56C to N280TC	34300	41300	13400	212
	313 R4	**418**	4.2	452700	34	30	71 to 160	N56C to N280TC	35100	42200	13800	212
	313 R4	**450**	3.9	384400	27	30	71 to 160	N56C to N280TC	35900	43200	14100	212
	313 R4	**496**	3.5	429600	27	30	71 to 160	N56C to N280TC	36900	44500	14600	212
	313 R4	**535**	3.3	393400	23	30	71 to 160	N56C to N280TC	37800	45500	15000	212
	313 R4	**647**	2.7	404900	19.8	30	71 to 160	N56C to N280TC	40000	48100	15900	212
	313 R4	**778**	2.2	367100	14.9	30	71 to 160	N56C to N280TC	42300	50900	17000	212
1450	**313 R2 (B)**	**12.2**	119	97300	195	101	180 to 225	N320TC-N360TC	13100	15700	4580	212
	313 R2 (B)	**15.9**	91	126600	195	101	180 to 225	N320TC-N360TC	14200	17000	4990	212
	313 R2 (C)	**16.8**	86	93800	137	121	180 to 225	N320TC-N360TC	14400	17300	5100	212
	313 R2 (A)	**18.0**	81	75200	103	101	132 to 200	N280TC	14700	17700	5190	212
	313 R2 (B)	**19.1**	76	151300	194	101	180 to 225	N320TC-N360TC	15000	18000	5330	212
	313 R2 (C)	**22.0**	66	119500	133	121	180 to 225	N320TC-N360TC	15600	18800	5580	212
	313 R2 (A)	**23.4**	62	98200	103	101	132 to 200	N280TC	15900	19100	5690	212
	313 R2 (C)	**26.4**	55	144300	134	121	180 to 225	N320TC-N360TC	16500	19800	5910	212
	313 R2 (A)	**28.2**	51	117700	102	101	132 to 200	N280TC	16800	20200	6050	212
	313 R3	**53.7**	27.0	147800	70	54	132 to 200	N280TC	20400	24500	7490	212
	313 R3	**64.0**	22.6	177000	70	54	132 to 200	N280TC	21500	25900	7930	212
	313 R3	**69.9**	20.7	192900	70	54	132 to 200	N280TC	22100	26600	8180	212
	313 R3	**82.2**	17.6	226600	70	54	132 to 200	N280TC	23200	27900	8630	212
	313 R3	**97.5**	14.9	269000	70	54	132 to 200	N280TC	24400	29400	9130	212
	313 R3	**107**	13.5	295600	70	54	132 to 200	N280TC	25100	30200	9430	212
	313 R3	**127**	11.4	351300	70	54	132 to 200	N280TC	26400	31800	9990	212
	313 R3	**153**	9.5	345100	57	54	132 to 200	N280TC	27900	33600	10600	212
	313 R4	**185**	7.9	236300	33	30	71 to 160	N56C to N280TC	29500	35500	11300	212
	313 R4	**201**	7.2	256600	33	30	71 to 160	N56C to N280TC	30300	36500	11600	212
	313 R4	**237**	6.1	302700	33	30	71 to 160	N56C to N280TC	31800	38300	12300	212
	313 R4	**281**	5.2	359300	33	30	71 to 160	N56C to N280TC	33500	40300	13000	212
	313 R4	**309**	4.7	394700	33	30	71 to 160	N56C to N280TC	34500	41500	13400	212
	313 R4	**346**	4.2	441600	33	30	71 to 160	N56C to N280TC	35700	42900	13900	212
	313 R4	**387**	3.7	404400	27	30	71 to 160	N56C to N280TC	36900	44400	14500	212
	313 R4	**418**	3.5	486700	30	30	71 to 160	N56C to N280TC	37800	45400	14800	212



313 R

485,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**313 R4**	**450**	3.2	413300	24	30	71 to 160	N56C to N280TC	38600	46500	15200	212
	313 R4	**496**	2.9	462000	24	30	71 to 160	N56C to N280TC	39700	47800	15700	212
	313 R4	**535**	2.7	423000	21	30	71 to 160	N56C to N280TC	40600	48900	16100	212
	313 R4	**647**	2.2	435400	17.6	30	71 to 160	N56C to N280TC	43000	51800	17100	212
	313 R4	**778**	1.9	394700	13.3	30	71 to 160	N56C to N280TC	45500	54700	18300	212
1150	**313 R2 (B)**	**12.2**	94	100400	160	121	180 to 225	N320TC-N360TC	13900	16700	4930	212
	313 R2 (B)	**15.9**	72	130900	160	121	180 to 225	N320TC-N360TC	15100	18100	5390	212
	313 R2 (C)	**16.8**	68	96300	111	145	180 to 225	N320TC-N360TC	15300	18400	5490	212
	313 R2 (A)	**18.0**	64	79800	86	121	132 to 200	N280TC	15600	18800	5600	212
	313 R2 (B)	**19.1**	60	157200	160	121	180 to 225	N320TC-N360TC	15900	19100	5730	212
	313 R2 (C)	**22.0**	52	135800	120	145	180 to 225	N320TC-N360TC	16600	19900	6010	212
	313 R2 (A)	**23.4**	49	104500	87	121	132 to 200	N280TC	16900	20300	6110	212
	313 R2 (C)	**26.4**	44	167100	123	145	180 to 225	N320TC-N360TC	17500	21100	6370	212
	313 R2 (A)	**28.2**	41	125100	86	121	132 to 200	N280TC	17800	21500	6500	212
	313 R3	**53.7**	21.4	157200	59	64	132 to 200	N280TC	21700	26000	8070	212
	313 R3	**64.0**	18.0	187700	59	64	132 to 200	N280TC	22800	27500	8540	212
	313 R3	**69.9**	16.4	204900	59	64	132 to 200	N280TC	23400	28200	8800	212
	313 R3	**82.2**	14.0	241200	59	64	132 to 200	N280TC	24600	29600	9290	212
	313 R3	**97.5**	11.8	285600	59	64	132 to 200	N280TC	25900	31200	9830	212
	313 R3	**107**	10.7	314400	59	64	132 to 200	N280TC	26600	32100	10100	212
	313 R3	**127**	9.0	370400	58	64	132 to 200	N280TC	28000	33700	10800	212
	313 R3	**153**	7.5	321000	42	64	132 to 200	N280TC	29600	35700	11400	212
	313 R4	**185**	6.2	250200	28	36	71 to 160	N56C to N280TC	31400	37700	12200	212
	313 R4	**201**	5.7	272400	28	36	71 to 160	N56C to N280TC	32200	38700	12500	212
	313 R4	**237**	4.9	321800	28	36	71 to 160	N56C to N280TC	33800	40700	13200	212
	313 R4	**281**	4.1	381900	28	36	71 to 160	N56C to N280TC	35600	42800	14000	212
	313 R4	**309**	3.7	387700	26	36	71 to 160	N56C to N280TC	36600	44000	14400	212
	313 R4	**346**	3.3	452700	27	36	71 to 160	N56C to N280TC	37900	45500	15000	212
	313 R4	**387**	3.0	400800	21	36	71 to 160	N56C to N280TC	39200	47100	15600	212
	313 R4	**418**	2.8	452700	22	36	71 to 160	N56C to N280TC	40100	48200	16000	212
	313 R4	**450**	2.6	409900	18.9	36	71 to 160	N56C to N280TC	41000	49300	16400	212
	313 R4	**496**	2.3	429600	18.0	36	71 to 160	N56C to N280TC	42200	50800	16900	212
	313 R4	**535**	2.2	419800	16.3	36	71 to 160	N56C to N280TC	43100	51900	17300	212
	313 R4	**647**	1.8	431300	13.8	36	71 to 160	N56C to N280TC	45700	55000	18500	212
	313 R4	**778**	1.5	394200	10.5	36	71 to 160	N56C to N280TC	48300	58100	19700	212
870	**313 R2 (B)**	**12.2**	71	108000	130	121	180 to 225	N320TC-N360TC	14900	18000	5300	212
	313 R2 (B)	**15.9**	55	140700	130	121	180 to 225	N320TC-N360TC	16200	19500	5800	212
	313 R2 (C)	**16.8**	52	103500	90	145	180 to 225	N320TC-N360TC	16400	19800	5910	212
	313 R2 (A)	**18.0**	48	85800	70	121	132 to 200	N280TC	16800	20200	6020	212
	313 R2 (B)	**19.1**	46	169000	130	121	180 to 225	N320TC-N360TC	17100	20600	6160	212
	313 R2 (C)	**22.0**	40	146000	97	145	180 to 225	N320TC-N360TC	17800	21400	6460	212
	313 R2 (A)	**23.4**	37	112400	71	121	132 to 200	N280TC	18100	21800	6570	212
	313 R2 (C)	**26.4**	33	179700	100	145	180 to 225	N320TC-N360TC	18800	22700	6850	212
	313 R2 (A)	**28.2**	31	134500	70	121	132 to 200	N280TC	19200	23100	6990	212
	313 R3	**53.7**	16.2	169000	48	64	132 to 200	N280TC	23300	28000	8680	212
	313 R3	**64.0**	13.6	201800	48	64	132 to 200	N280TC	24600	29500	9180	212
	313 R3	**69.9**	12.4	220400	48	64	132 to 200	N280TC	25200	30300	9460	212
	313 R3	**82.2**	10.6	259300	48	64	132 to 200	N280TC	26400	31800	9990	212
	313 R3	**97.5**	8.9	307100	48	64	132 to 200	N280TC	27900	33500	10600	212
	313 R3	**107**	8.1	338100	48	64	132 to 200	N280TC	28700	34500	10900	212
	313 R3	**127**	6.8	398200	48	64	132 to 200	N280TC	30100	36300	11600	212
	313 R3	**153**	5.7	345100	34	64	132 to 200	N280TC	31900	38400	12300	212
	313 R4	**185**	4.7	269000	23	36	71 to 160	N56C to N280TC	33700	40600	13100	212
	313 R4	**201**	4.3	292900	23	36	71 to 160	N56C to N280TC	34600	41600	13500	212
	313 R4	**237**	3.7	346000	23	36	71 to 160	N56C to N280TC	36300	43700	14200	212



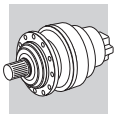
3□ R

313 R — 485,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**313 R4**	**281**	3.1	410600	23	36	71 to 160	N56C to N280TC	38300	46000	15100	212
	313 R4	**309**	2.8	416800	21	36	71 to 160	N56C to N280TC	39400	47400	15500	212
	313 R4	**346**	2.5	486700	22	36	71 to 160	N56C to N280TC	40700	49000	16100	212
	313 R4	**387**	2.2	431000	17.4	36	71 to 160	N56C to N280TC	42100	50700	16800	212
	313 R4	**418**	2.1	486700	18.3	36	71 to 160	N56C to N280TC	43100	51900	17200	212
	313 R4	**450**	1.9	440700	15.3	36	71 to 160	N56C to N280TC	44100	53000	17600	212
	313 R4	**496**	1.8	462000	14.6	36	71 to 160	N56C to N280TC	45400	54600	18200	212
	313 R4	**535**	1.6	451300	13.2	36	71 to 160	N56C to N280TC	46400	55800	18600	212
	313 R4	**647**	1.3	463700	11.2	36	71 to 160	N56C to N280TC	49100	59100	19900	212
	313 R4	**778**	1.1	423900	8.5	36	71 to 160	N56C to N280TC	51900	62500	21100	212

315 R — 900,000 in•lbs

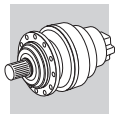
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**315 R3 (B)**	**49.2**	36	352300	218	101	180 to 225	N320TC-N360TC	19800	23400	7610	220
	315 R3 (B)	**63.1**	27.7	451000	218	101	180 to 225	N320TC-N360TC	21400	25200	8280	220
	315 R3 (C)	**68.0**	25.7	347300	156	121	180 to 225	N320TC-N360TC	21900	25800	8490	220
	315 R3 (A)	**72.5**	24.1	274100	115	101	132 to 200	N280TC	22300	26300	8640	220
	315 R3 (B)	**74.9**	23.4	535800	218	101	180 to 225	N320TC-N360TC	22500	26500	8770	220
	315 R3 (B)	**81.0**	21.6	579400	218	101	180 to 225	N320TC-N360TC	23000	27200	9000	220
	315 R3 (C)	**87.3**	20.0	446100	156	121	180 to 225	N320TC-N360TC	23600	27800	9210	220
	315 R3 (A)	**93.1**	18.8	352300	116	101	132 to 200	N280TC	24000	28300	9420	220
	315 R3 (B)	**96.2**	18.2	614000	195	101	180 to 225	N320TC-N360TC	24300	28600	9520	220
	315 R3 (C)	**104**	16.8	531700	156	121	180 to 225	N320TC-N360TC	24800	29300	9780	220
	315 R3 (A)	**110**	15.8	418100	115	101	132 to 200	N280TC	25300	29800	9960	220
	315 R3 (C)	**112**	15.6	560500	153	121	180 to 225	N320TC-N360TC	25400	30000	10000	220
	315 R3 (B)	**114**	15.4	524300	140	101	180 to 225	N320TC-N360TC	25500	30100	10100	220
	315 R3 (A)	**119**	14.7	451900	115	101	132 to 200	N280TC	25900	30500	10200	220
	315 R3 (C)	**133**	13.2	638700	147	121	180 to 225	N320TC-N360TC	26700	31500	10600	220
	315 R3 (A)	**142**	12.3	535800	115	101	132 to 200	N280TC	27200	32100	10800	220
	315 R3 (C)	**158**	11.1	532500	103	121	180 to 225	N320TC-N360TC	28100	33200	11200	220
	315 R3 (A)	**168**	10.4	535000	97	101	132 to 200	N280TC	28700	33800	11500	220
	315 R4	**217**	8.1	539900	79	54	132 to 200	N280TC	30900	36500	12500	220
	315 R4	**259**	6.8	644400	79	54	132 to 200	N280TC	32600	38500	13200	220
	315 R4	**332**	5.3	758000	72	54	132 to 200	N280TC	35200	41500	14400	220
	315 R4	**394**	4.4	786000	63	54	132 to 200	N280TC	37000	43600	15200	220
	315 R4	**506**	3.5	800800	50	54	132 to 200	N280TC	39900	47000	16500	220
	315 R4	**600**	2.9	810700	43	54	132 to 200	N280TC	42000	49500	17500	220
	315 R4	**649**	2.7	729200	35	54	132 to 200	N280TC	43000	50700	18000	220
	315 R4	**770**	2.3	747300	31	54	132 to 200	N280TC	45300	53400	19000	220
	315 R4	**914**	1.9	620600	21	54	132 to 200	N280TC	47600	56200	20100	220
1450	**315 R3 (B)**	**49.2**	29.5	378800	195	101	180 to 225	N320TC-N360TC	21300	25100	8180	220
	315 R3 (B)	**63.1**	23.0	485000	194	101	180 to 225	N320TC-N360TC	23000	27100	8900	220
	315 R3 (C)	**68.0**	21.3	373500	139	121	180 to 225	N320TC-N360TC	23500	27700	9130	220
	315 R3 (A)	**72.5**	20.0	294700	103	101	132 to 200	N280TC	24000	28300	9290	220
	315 R3 (B)	**74.9**	19.4	576100	194	101	180 to 225	N320TC-N360TC	24200	28500	9430	220



315 R

900,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**315 R3 (B)**	**81.0**	17.9	623000	194	101	180 to 225	N320TC-N360TC	24800	29200	9680	220
	315 R3 (C)	**87.3**	16.6	479700	139	121	180 to 225	N320TC-N360TC	25300	29900	9900	220
	315 R3 (A)	**93.1**	15.6	378800	103	101	132 to 200	N280TC	25800	30400	10100	220
	315 R3 (B)	**96.2**	15.1	660200	174	101	180 to 225	N320TC-N360TC	26100	30800	10200	220
	315 R3 (C)	**104**	13.9	571700	139	121	180 to 225	N320TC-N360TC	26700	31500	10500	220
	315 R3 (A)	**110**	13.1	449600	103	101	132 to 200	N280TC	27200	32000	10700	220
	315 R3 (C)	**112**	12.9	602700	136	121	180 to 225	N320TC-N360TC	27300	32200	10800	220
	315 R3 (B)	**114**	12.7	563700	125	101	180 to 225	N320TC-N360TC	27400	32400	10800	220
	315 R3 (A)	**119**	12.1	485900	103	101	132 to 200	N280TC	27800	32800	11000	220
	315 R3 (C)	**133**	10.9	686800	131	121	180 to 225	N320TC-N360TC	28700	33900	11400	220
	315 R3 (A)	**142**	10.2	576100	103	101	132 to 200	N280TC	29300	34500	11600	220
	315 R3 (C)	**158**	9.2	572600	92	121	180 to 225	N320TC-N360TC	30300	35700	12100	220
	315 R3 (A)	**168**	8.6	575200	86	101	132 to 200	N280TC	30800	36400	12300	220
	315 R4	**217**	6.7	580600	70	54	132 to 200	N280TC	33300	39200	13400	220
	315 R4	**259**	5.6	693000	70	54	132 to 200	N280TC	35100	41400	14200	220
	315 R4	**332**	4.4	815100	64	54	132 to 200	N280TC	37800	44600	15500	220
	315 R4	**394**	3.7	845200	56	54	132 to 200	N280TC	39800	46900	16400	220
	315 R4	**506**	2.9	861100	45	54	132 to 200	N280TC	42900	50600	17800	220
	315 R4	**600**	2.4	871700	38	54	132 to 200	N280TC	45200	53300	18800	220
	315 R4	**649**	2.2	784100	32	54	132 to 200	N280TC	46200	54500	19300	220
	315 R4	**770**	1.9	803600	27	54	132 to 200	N280TC	48700	57400	20400	220
	315 R4	**914**	1.6	667300	19.1	54	132 to 200	N280TC	51200	60400	21700	220
1150	**315 R3 (B)**	**49.2**	23.4	488900	199	121	180 to 225	N320TC-N360TC	22700	26700	8820	220
	315 R3 (B)	**63.1**	18.2	627200	199	121	180 to 225	N320TC-N360TC	24400	28800	9600	220
	315 R3 (C)	**68.0**	16.9	378600	112	145	180 to 225	N320TC-N360TC	25000	29400	9830	220
	315 R3 (A)	**72.5**	15.9	313600	87	121	132 to 200	N280TC	25400	30000	10000	220
	315 R3 (B)	**74.9**	15.4	624700	167	121	180 to 225	N320TC-N360TC	25700	30300	10100	220
	315 R3 (B)	**81.0**	14.2	631300	156	121	180 to 225	N320TC-N360TC	26300	31000	10400	220
	315 R3 (C)	**87.3**	13.2	485600	112	145	180 to 225	N320TC-N360TC	26900	31700	10700	220
	315 R3 (A)	**93.1**	12.4	401600	87	121	132 to 200	N280TC	27400	32300	10900	220
	315 R3 (B)	**96.2**	12.0	642000	134	121	180 to 225	N320TC-N360TC	27700	32700	11000	220
	315 R3 (C)	**104**	11.1	570400	110	145	180 to 225	N320TC-N360TC	28400	33400	11300	220
	315 R3 (A)	**110**	10.4	477400	87	121	132 to 200	N280TC	28900	34000	11500	220
	315 R3 (C)	**112**	10.3	604900	108	145	180 to 225	N320TC-N360TC	29000	34200	11600	220
	315 R3 (B)	**114**	10.1	534200	94	121	180 to 225	N320TC-N360TC	29100	34400	11700	220
	315 R3 (A)	**119**	9.6	516100	87	121	132 to 200	N280TC	29500	34800	11800	220
	315 R3 (C)	**133**	8.6	644400	97	145	180 to 225	N320TC-N360TC	30500	36000	12300	220
	315 R3 (A)	**142**	8.1	612300	87	121	132 to 200	N280TC	31100	36700	12500	220
	315 R3 (C)	**158**	7.3	539900	69	145	180 to 225	N320TC-N360TC	32100	37900	13000	220
	315 R3 (A)	**168**	6.8	535000	64	121	132 to 200	N280TC	32700	38600	13300	220
	315 R4	**217**	5.3	616500	59	64	132 to 200	N280TC	35300	41700	14400	220
	315 R4	**259**	4.4	735800	59	64	132 to 200	N280TC	37200	43900	15300	220
	315 R4	**332**	3.5	801600	50	64	132 to 200	N280TC	40100	47400	16600	220
	315 R4	**394**	2.9	812300	43	64	132 to 200	N280TC	42300	49900	17600	220
	315 R4	**506**	2.3	828000	34	64	132 to 200	N280TC	45500	53700	19200	220
	315 R4	**600**	1.9	838700	29	64	132 to 200	N280TC	47900	56600	20300	220
	315 R4	**649**	1.8	777800	25	64	132 to 200	N280TC	49100	57900	20800	220
	315 R4	**770**	1.5	796700	21	64	132 to 200	N280TC	51700	60900	22000	220
	315 R4	**914**	1.3	658400	14.9	64	132 to 200	N280TC	54100	63900	23200	220
870	**315 R3 (B)**	**49.2**	17.7	525700	162	121	180 to 225	N320TC-N360TC	24400	28700	9490	220
	315 R3 (B)	**63.1**	13.8	674400	162	121	180 to 225	N320TC-N360TC	26300	30900	10300	220
	315 R3 (C)	**68.0**	12.8	407100	91	145	180 to 225	N320TC-N360TC	26800	31600	10600	220
	315 R3 (A)	**72.5**	12.0	337200	71	121	132 to 200	N280TC	27400	32200	10800	220
	315 R3 (B)	**74.9**	11.6	671700	136	121	180 to 225	N320TC-N360TC	27600	32600	10900	220
	315 R3 (B)	**81.0**	10.7	678800	127	121	180 to 225	N320TC-N360TC	28300	33300	11200	220

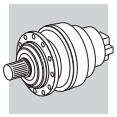


315 R — 900,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
870	**315 R3 (C)**	**87.3**	10.0	522100	91	145	180 to 225	N320TC-N360TC	28900	34100	11500	220
	315 R3 (A)	**93.1**	9.3	431900	70	121	132 to 200	N280TC	29500	34800	11700	220
	315 R3 (B)	**96.2**	9.0	690300	109	121	180 to 225	N320TC-N360TC	29800	35100	11900	220
	315 R3 (C)	**104**	8.4	613300	89	145	180 to 225	N320TC-N360TC	30500	35900	12200	220
	315 R3 (A)	**110**	7.9	513300	70	121	132 to 200	N280TC	31000	36600	12400	220
	315 R3 (C)	**112**	7.8	650500	88	145	180 to 225	N320TC-N360TC	31200	36800	12500	220
	315 R3 (B)	**114**	7.6	574400	76	121	180 to 225	N320TC-N360TC	31300	37000	12500	220
	315 R3 (A)	**119**	7.3	554900	70	121	132 to 200	N280TC	31800	37500	12700	220
	315 R3 (C)	**133**	6.5	693000	79	145	180 to 225	N320TC-N360TC	32800	38700	13200	220
	315 R3 (A)	**142**	6.1	658400	70	121	132 to 200	N280TC	33400	39400	13500	220
	315 R3 (C)	**158**	5.5	580600	56	145	180 to 225	N320TC-N360TC	34600	40700	14000	220
	315 R3 (A)	**168**	5.2	575200	52	121	132 to 200	N280TC	35200	41500	14300	220
	315 R4	**217**	4.0	662900	48	64	132 to 200	N280TC	38000	44800	15500	220
	315 R4	**259**	3.4	791200	48	64	132 to 200	N280TC	40000	47200	16500	220
	315 R4	**332**	2.6	862000	41	64	132 to 200	N280TC	43100	50900	17900	220
	315 R4	**394**	2.2	873500	35	64	132 to 200	N280TC	45400	53600	18900	220
	315 R4	**506**	1.7	890300	28	64	132 to 200	N280TC	49000	57800	20600	220
	315 R4	**600**	1.5	901800	24	64	132 to 200	N280TC	51500	60800	21800	220
	315 R4	**649**	1.3	836300	20	64	132 to 200	N280TC	52800	62200	22400	220
	315 R4	**770**	1.1	856700	17.5	64	132 to 200	N280TC	55600	65500	23700	220
	315 R4	**914**	0.95	708000	12.2	64	132 to 200	N280TC	58200	68700	25000	220

316 R — 1,150,000 in•lbs

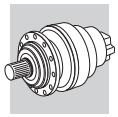
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**316 R3 (B)**	**52.9**	33	378600	218	101	180 to 225	N320TC-N360TC	33900	37900	9550	228
	316 R3 (B)	**67.9**	25.8	485600	218	101	180 to 225	N320TC-N360TC	36500	40800	10400	228
	316 R3 (C)	**73.2**	23.9	373700	156	121	180 to 225	N320TC-N360TC	37400	41800	10600	228
	316 R3 (B)	**81.0**	21.6	579400	218	101	180 to 225	N320TC-N360TC	38500	43000	11000	228
	316 R3 (C)	**93.9**	18.6	479800	156	121	180 to 225	N320TC-N360TC	40300	45000	11500	228
	316 R3 (C)	**111**	15.8	567100	156	121	180 to 225	N320TC-N360TC	42300	47300	12200	228
	316 R4	**233**	7.5	832900	113	60	132 to 200	N280TC	52900	59100	15600	228
	316 R4	**186**	6.3	866700	98	60	132 to 200	N280TC	55800	62300	16600	228
	316 R4	**299**	5.9	931700	98	60	132 to 200	N280TC	57000	63700	17000	228
	316 R4	**357**	4.9	948200	84	60	132 to 200	N280TC	60100	67200	18000	228
	316 R4	**424**	4.1	974500	73	60	132 to 200	N280TC	63300	70700	19100	228
	316 R4	**458**	3.8	1029600	71	60	132 to 200	N280TC	64800	72400	19600	228
	316 R4	**544**	3.2	1028000	60	60	132 to 200	N280TC	68200	76200	20700	228
	316 R4	**645**	2.7	988500	48	60	132 to 200	N280TC	71800	80200	21900	228
1450	**316 R3 (B)**	**52.9**	27.4	407100	195	101	180 to 225	N320TC-N360TC	36500	40700	10300	228
	316 R3 (B)	**67.9**	21.4	522100	194	101	180 to 225	N320TC-N360TC	39300	43900	11200	228
	316 R3 (C)	**73.2**	19.8	401800	139	121	180 to 225	N320TC-N360TC	40200	44900	11400	228
	316 R3 (B)	**81.0**	17.9	623000	194	101	180 to 225	N320TC-N360TC	41400	46300	11800	228
	316 R3 (C)	**93.9**	15.4	516000	139	121	180 to 225	N320TC-N360TC	43300	48400	12400	228
	316 R3 (C)	**111**	13.1	609800	139	121	180 to 225	N320TC-N360TC	45500	50900	13100	228



316 R

1,150,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1450	**316 R4**	**233**	6.2	895600	100	60	132 to 200	N280TC	56900	63500	16800	228
	316 R4	**186**	5.2	931900	88	60	132 to 200	N280TC	60000	67000	17800	228
	316 R4	**299**	4.8	1001800	88	60	132 to 200	N280TC	61300	68500	18300	228
	316 R4	**357**	4.1	1019500	75	60	132 to 200	N280TC	64600	72200	19400	228
	316 R4	**424**	3.4	1047800	65	60	132 to 200	N280TC	68000	76000	20500	228
	316 R4	**458**	3.2	1107100	63	60	132 to 200	N280TC	69600	77800	21000	228
	316 R4	**544**	2.7	1105400	53	60	132 to 200	N280TC	73300	81900	22300	228
	316 R4	**645**	2.2	1062900	43	60	132 to 200	N280TC	77200	86200	23600	228
1150	**316 R3 (B)**	**52.9**	21.7	525900	199	121	180 to 225	N320TC-N360TC	38700	43300	11000	228
	316 R3 (B)	**67.9**	16.9	647700	191	121	180 to 225	N320TC-N360TC	41700	46600	12000	228
	316 R3 (C)	**73.2**	15.7	407400	112	145	180 to 225	N320TC-N360TC	42700	47700	12300	228
	316 R3 (B)	**81.0**	14.2	643600	159	121	180 to 225	N320TC-N360TC	44000	49100	12700	228
	316 R3 (C)	**93.9**	12.2	522600	112	145	180 to 225	N320TC-N360TC	46000	51400	13400	228
	316 R3 (C)	**111**	10.4	617300	112	145	180 to 225	N320TC-N360TC	48300	54000	14100	228
	316 R4	**233**	4.9	963000	86	72	132 to 200	N280TC	60400	67500	18100	228
	316 R4	**186**	4.1	1016500	76	72	132 to 200	N280TC	63600	71100	19200	228
	316 R4	**299**	3.8	1021400	71	72	132 to 200	N280TC	65100	72700	19700	228
	316 R4	**357**	3.2	1049400	61	72	132 to 200	N280TC	68600	76700	20900	228
	316 R4	**424**	2.7	1044400	51	72	132 to 200	N280TC	72200	80700	22100	228
	316 R4	**458**	2.5	1092200	49	72	132 to 200	N280TC	73900	82600	22700	228
	316 R4	**544**	2.1	1080700	41	72	132 to 200	N280TC	77900	87000	24000	228
	316 R4	**645**	1.8	1025500	33	72	132 to 200	N280TC	81900	91600	25400	228
870	**316 R3 (B)**	**52.9**	16.4	565500	162	121	180 to 225	N320TC-N360TC	41600	46500	11900	228
	316 R3 (B)	**67.9**	12.8	696500	156	121	180 to 225	N320TC-N360TC	44800	50100	12900	228
	316 R3 (C)	**73.2**	11.9	438100	91	145	180 to 225	N320TC-N360TC	45900	51300	13200	228
	316 R3 (B)	**81.0**	10.7	692100	130	121	180 to 225	N320TC-N360TC	47300	52800	13700	228
	316 R3 (C)	**93.9**	9.3	562000	91	145	180 to 225	N320TC-N360TC	49400	55200	14400	228
	316 R3 (C)	**111**	7.8	663700	91	145	180 to 225	N320TC-N360TC	52000	58100	15200	228
	316 R4	**233**	3.7	1035400	70	72	132 to 200	N280TC	64900	72500	19500	228
	316 R4	**186**	3.1	1093000	62	72	132 to 200	N280TC	68400	76500	20600	228
	316 R4	**299**	2.9	1098300	58	72	132 to 200	N280TC	70000	78200	21100	228
	316 R4	**357**	2.4	1128400	50	72	132 to 200	N280TC	73800	82500	22400	228
	316 R4	**424**	2.1	1123100	42	72	132 to 200	N280TC	77700	86800	23700	228
	316 R4	**458**	1.9	1174400	40	72	132 to 200	N280TC	79500	88800	24400	228
	316 R4	**544**	1.6	1162000	34	72	132 to 200	N280TC	83700	93600	25800	228
	316 R4	**645**	1.3	1102700	27	72	132 to 200	N280TC	88100	98400	27300	228

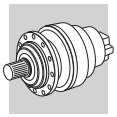


3□ R

317 R

1,500,000 in•lbs

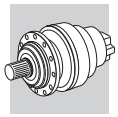
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**317 R3 (A)**	**73.4**	23.8	278200	116	121	132 to 200	N280TC	48000	51000	14500	236
	317 R3 (B)	**78.2**	22.4	599200	234	121	180 to 225	N320TC-N360TC	48900	52000	14800	236
	317 R3 (B)	**83.3**	21.0	638700	234	121	180 to 225	N320TC-N360TC	49800	53000	15100	236
	317 R3 (A)	**95.7**	18.3	362100	115	121	132 to 200	N280TC	51900	55200	15800	236
	317 R3 (B)	**100**	17.5	766300	234	121	180 to 225	N320TC-N360TC	52600	56000	16100	236
	317 R3 (C)	**108**	16.2	551400	156	134	180 to 225	N320TC-N360TC	53900	57300	16500	236
	317 R3 (A)	**115**	15.2	436200	116	121	132 to 200	N280TC	54900	58400	16800	236
	317 R3 (C)	**116**	15.1	576100	152	134	180 to 225	N320TC-N360TC	54900	58400	16800	236
	317 R3 (B)	**119**	14.7	911900	234	121	180 to 225	N320TC-N360TC	55400	59000	17000	236
	317 R3 (A)	**123**	14.2	465000	115	121	132 to 200	N280TC	56000	59500	17200	236
	317 R3 (C)	**139**	12.6	681500	150	134	180 to 225	N320TC-N360TC	58100	61800	17900	236
	317 R3 (A)	**148**	11.8	559700	115	121	132 to 200	N280TC	59200	62900	18300	236
	317 R3 (C)	**165**	10.6	809100	150	134	180 to 225	N320TC-N360TC	61200	65000	19000	236
	317 R3 (A)	**176**	10.0	664200	115	121	132 to 200	N280TC	62300	66200	19400	236
	317 R4	**220**	8.0	547300	79	67	132 to 200	N280TC	66600	70800	20900	236
	317 R4	**262**	6.7	652700	79	67	132 to 200	N280TC	70200	74700	22100	236
	317 R4	**336**	5.2	837900	79	67	132 to 200	N280TC	75700	80500	24000	236
	317 R4	**399**	4.4	994200	79	67	132 to 200	N280TC	79700	84700	25500	236
	317 R4	**438**	4.0	1091400	79	67	132 to 200	N280TC	82000	87200	26300	236
	317 R4	**520**	3.4	1295500	79	67	132 to 200	N280TC	86300	91800	27800	236
	317 R4	**626**	2.8	1274100	64	67	132 to 200	N280TC	91200	97000	29600	236
	317 R4	**677**	2.6	1284800	60	67	132 to 200	N280TC	93400	99300	30400	236
	317 R4	**803**	2.2	1311100	52	67	132 to 200	N280TC	98300	104500	32100	236
	317 R4	**953**	1.8	1125900	37	67	132 to 200	N280TC	103500	110100	34100	236
1450	**317 R3 (A)**	**73.4**	19.7	299100	103	121	132 to 200	N280TC	51600	54800	15600	236
	317 R3 (B)	**78.2**	18.5	644300	208	121	180 to 225	N320TC-N360TC	52600	55900	15900	236
	317 R3 (B)	**83.3**	17.4	686800	208	121	180 to 225	N320TC-N360TC	53600	57000	16300	236
	317 R3 (A)	**95.7**	15.1	389400	103	121	132 to 200	N280TC	55800	59400	17000	236
	317 R3 (B)	**100**	14.5	823900	208	121	180 to 225	N320TC-N360TC	56600	60200	17300	236
	317 R3 (C)	**108**	13.4	592900	139	134	180 to 225	N320TC-N360TC	57900	61600	17700	236
	317 R3 (A)	**115**	12.6	469000	103	121	132 to 200	N280TC	59100	62800	18100	236
	317 R3 (C)	**116**	12.5	619500	135	134	180 to 225	N320TC-N360TC	59000	62800	18100	236
	317 R3 (B)	**119**	12.2	980600	208	121	180 to 225	N320TC-N360TC	59600	63400	18300	236
	317 R3 (A)	**123**	11.8	500000	103	121	132 to 200	N280TC	60200	64000	18500	236
	317 R3 (C)	**139**	10.4	732800	133	134	180 to 225	N320TC-N360TC	62500	66400	19300	236
	317 R3 (A)	**148**	9.8	601800	103	121	132 to 200	N280TC	63600	67700	19700	236
	317 R3 (C)	**165**	8.8	870000	133	134	180 to 225	N320TC-N360TC	65800	69900	20400	236
	317 R3 (A)	**176**	8.3	714200	103	121	132 to 200	N280TC	67000	71200	20800	236
	317 R4	**220**	6.6	588500	70	67	132 to 200	N280TC	71600	76200	22400	236
	317 R4	**262**	5.5	701800	70	67	132 to 200	N280TC	75500	80300	23800	236
	317 R4	**336**	4.3	900900	70	67	132 to 200	N280TC	81400	86600	25900	236
	317 R4	**399**	3.6	1069100	70	67	132 to 200	N280TC	85700	91100	27400	236
	317 R4	**438**	3.3	1173500	70	67	132 to 200	N280TC	88100	93700	28200	236
	317 R4	**520**	2.8	1393000	70	67	132 to 200	N280TC	92800	98700	29900	236
	317 R4	**626**	2.3	1370000	57	67	132 to 200	N280TC	98100	104300	31800	236
	317 R4	**677**	2.1	1381500	53	67	132 to 200	N280TC	100400	106800	32600	236
	317 R4	**803**	1.8	1409800	46	67	132 to 200	N280TC	105700	112400	34600	236
	317 R4	**953**	1.5	1210700	33	67	132 to 200	N280TC	111300	118300	36600	236
1150	**317 R3 (A)**	**73.4**	15.7	316900	87	145	132 to 200	N280TC	54800	58200	16800	236
	317 R3 (B)	**78.2**	14.7	745700	191	145	180 to 225	N320TC-N360TC	55800	59400	17200	236
	317 R3 (B)	**83.3**	13.8	781100	188	145	180 to 225	N320TC-N360TC	56900	60500	17500	236
	317 R3 (A)	**95.7**	12.0	413200	87	145	132 to 200	N280TC	59300	63100	18300	236
	317 R3 (B)	**100**	11.5	937500	188	145	180 to 225	N320TC-N360TC	60100	63900	18600	236
	317 R3 (C)	**108**	10.6	626300	116	161	180 to 225	N320TC-N360TC	61500	65400	19100	236
	317 R3 (A)	**115**	10.0	497900	87	145	132 to 200	N280TC	62700	66700	19500	236



317 R

1,500,000 in•lbs

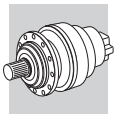
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**317 R3 (C)**	**116**	9.9	648600	112	161	180 to 225	N320TC-N360TC	62700	66600	19500	236
	317 R3 (B)	**119**	9.7	945700	159	145	180 to 225	N320TC-N360TC	63300	67300	19700	236
	317 R3 (A)	**123**	9.4	530900	87	145	132 to 200	N280TC	63900	68000	19900	236
	317 R3 (C)	**139**	8.3	784400	113	161	180 to 225	N320TC-N360TC	66300	70500	20800	236
	317 R3 (A)	**148**	7.8	638700	87	145	132 to 200	N280TC	67600	71800	21200	236
	317 R3 (C)	**165**	7.0	917700	112	161	180 to 225	N320TC-N360TC	69800	74300	22000	236
	317 R3 (A)	**176**	6.6	758000	87	145	132 to 200	N280TC	71100	75600	22400	236
	317 R4	**220**	5.2	624700	59	80	132 to 200	N280TC	76100	80900	24200	236
	317 R4	**262**	4.4	744900	59	80	132 to 200	N280TC	80200	85300	25600	236
	317 R4	**336**	3.4	956400	59	80	132 to 200	N280TC	86400	91900	27900	236
	317 R4	**399**	2.9	1135000	59	80	132 to 200	N280TC	91000	96800	29500	236
	317 R4	**438**	2.6	1246100	59	80	132 to 200	N280TC	93600	99500	30400	236
	317 R4	**520**	2.2	1470000	59	80	132 to 200	N280TC	98500	104800	32200	236
	317 R4	**626**	1.8	1274100	42	80	132 to 200	N280TC	104200	110800	34300	236
	317 R4	**677**	1.7	1353100	41	80	132 to 200	N280TC	106600	113400	35200	236
	317 R4	**803**	1.4	1381100	36	80	132 to 200	N280TC	112300	119400	37300	236
	317 R4	**953**	1.2	1193400	26	80	132 to 200	N280TC	116200	123500	38700	236
870	**317 R3 (A)**	**73.4**	11.8	340700	70	145	132 to 200	N280TC	58900	62600	18100	236
	317 R3 (B)	**78.2**	11.1	801800	156	145	180 to 225	N320TC-N360TC	60000	63800	18400	236
	317 R3 (B)	**83.3**	10.4	839900	153	145	180 to 225	N320TC-N360TC	61200	65000	18800	236
	317 R3 (A)	**95.7**	9.1	444300	70	145	132 to 200	N280TC	63800	67800	19700	236
	317 R3 (B)	**100**	8.7	1008000	153	145	180 to 225	N320TC-N360TC	64600	68700	20000	236
	317 R3 (C)	**108**	8.1	673500	95	161	180 to 225	N320TC-N360TC	66100	70300	20500	236
	317 R3 (A)	**115**	7.6	535400	70	145	132 to 200	N280TC	67400	71700	21000	236
	317 R3 (C)	**116**	7.5	697400	91	161	180 to 225	N320TC-N360TC	67400	71700	21000	236
	317 R3 (B)	**119**	7.3	1016900	130	145	180 to 225	N320TC-N360TC	68100	72400	21200	236
	317 R3 (A)	**123**	7.1	570800	70	145	132 to 200	N280TC	68700	73100	21400	236
	317 R3 (C)	**139**	6.3	843400	92	161	180 to 225	N320TC-N360TC	71300	75800	22300	236
	317 R3 (A)	**148**	5.9	686800	70	145	132 to 200	N280TC	72600	77300	22800	236
	317 R3 (C)	**165**	5.3	986800	91	161	180 to 225	N320TC-N360TC	75100	79900	23700	236
	317 R3 (A)	**176**	5.0	815100	70	145	132 to 200	N280TC	76500	81300	24100	236
	317 R4	**220**	4.0	671700	48	80	132 to 200	N280TC	81800	87000	26000	236
	317 R4	**262**	3.3	800900	48	80	132 to 200	N280TC	86200	91700	27600	236
	317 R4	**336**	2.6	1028400	48	80	132 to 200	N280TC	92900	98800	30000	236
	317 R4	**399**	2.2	1220400	48	80	132 to 200	N280TC	97900	104000	31700	236
	317 R4	**438**	2.0	1339900	48	80	132 to 200	N280TC	100600	107000	32700	236
	317 R4	**520**	1.7	1580600	48	80	132 to 200	N280TC	105900	112700	34600	236
	317 R4	**626**	1.4	1370000	34	80	132 to 200	N280TC	112000	119100	36900	236
	317 R4	**677**	1.3	1454900	34	80	132 to 200	N280TC	114700	121900	37800	236
	317 R4	**803**	1.1	1485000	29	80	132 to 200	N280TC	120700	128300	40100	236
	317 R4	**953**	0.91	1283200	21	80	132 to 200	N280TC	124900	132800	41600	236



318 R

2,200,000 in•lbs

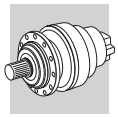
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**318 R4 (B)**	**216**	8.1	1600800	234	121	180 to 225	N320TC-N360TC	75500	84800	23500	244
	318 R4 (B)	**186**	6.3	1744000	198	121	180 to 225	N320TC-N360TC	81400	91400	25600	244
	318 R4 (C)	**299**	5.9	1432900	151	148	180 to 225	N320TC-N360TC	83200	93400	26200	244
	318 R4 (B)	**330**	5.3	1826300	175	121	180 to 225	N320TC-N360TC	85700	96300	27100	244
	318 R4 (B)	**357**	4.9	1870000	165	121	180 to 225	N320TC-N360TC	87700	98500	27800	244
	318 R4 (C)	**384**	4.6	1840300	151	148	180 to 225	N320TC-N360TC	89700	100700	28500	244
	318 R4 (B)	**423**	4.1	1943200	145	121	180 to 225	N320TC-N360TC	92300	103700	29400	244
	318 R4 (C)	**456**	3.8	1982700	137	148	180 to 225	N320TC-N360TC	94400	106100	30200	244
	318 R4 (C)	**493**	3.5	1997500	128	148	180 to 225	N320TC-N360TC	96700	108600	31000	244
	318 R4 (B)	**502**	3.5	1711100	108	121	180 to 225	N320TC-N360TC	97200	109200	31200	244
	318 R4 (C)	**585**	3.0	2051900	111	148	180 to 225	N320TC-N360TC	101800	114300	32800	244
	318 R4 (C)	**695**	2.5	1785200	81	148	180 to 225	N320TC-N360TC	107100	120400	34700	244
1450	**318 R4 (B)**	**216**	6.7	1721300	208	121	180 to 225	N320TC-N360TC	81200	91200	25300	244
	318 R4 (B)	**186**	5.2	1875300	176	121	180 to 225	N320TC-N360TC	87500	98300	27500	244
	318 R4 (C)	**299**	4.8	1540800	135	148	180 to 225	N320TC-N360TC	89500	100500	28200	244
	318 R4 (B)	**330**	4.4	1963800	156	121	180 to 225	N320TC-N360TC	92100	103500	29200	244
	318 R4 (B)	**357**	4.1	2010700	147	121	180 to 225	N320TC-N360TC	94400	106000	29900	244
	318 R4 (C)	**384**	3.8	1978900	135	148	180 to 225	N320TC-N360TC	96400	108300	30700	244
	318 R4 (B)	**423**	3.4	2089500	129	121	180 to 225	N320TC-N360TC	99300	111500	31700	244
	318 R4 (C)	**456**	3.2	2132000	122	148	180 to 225	N320TC-N360TC	101500	114000	32500	244
	318 R4 (C)	**493**	2.9	2147900	114	148	180 to 225	N320TC-N360TC	103900	116800	33300	244
	318 R4 (B)	**502**	2.9	1839900	96	121	180 to 225	N320TC-N360TC	104500	117400	33500	244
	318 R4 (C)	**585**	2.5	2206300	99	148	180 to 225	N320TC-N360TC	109400	122900	35300	244
	318 R4 (C)	**695**	2.1	1919600	72	148	180 to 225	N320TC-N360TC	115200	129400	37400	244
1150	**318 R4 (B)**	**216**	5.3	1826300	175	145	180 to 225	N320TC-N360TC	86200	96800	27300	244
	318 R4 (B)	**186**	4.1	1944000	145	145	180 to 225	N320TC-N360TC	92900	104400	29700	244
	318 R4 (C)	**299**	3.8	1631300	113	177	180 to 225	N320TC-N360TC	95000	106700	30400	244
	318 R4 (B)	**330**	3.5	2028800	127	145	180 to 225	N320TC-N360TC	97800	109900	31400	244
	318 R4 (B)	**357**	3.2	2057600	120	145	180 to 225	N320TC-N360TC	100200	112500	32200	244
	318 R4 (C)	**384**	3.0	2006600	108	177	180 to 225	N320TC-N360TC	102400	115000	33000	244
	318 R4 (B)	**423**	2.7	2047700	100	145	180 to 225	N320TC-N360TC	105400	118400	34100	244
	318 R4 (C)	**456**	2.5	2032900	92	177	180 to 225	N320TC-N360TC	107800	121100	35000	244
	318 R4 (C)	**493**	2.3	2046100	86	177	180 to 225	N320TC-N360TC	110400	124000	35900	244
	318 R4 (B)	**502**	2.3	1851900	76	145	180 to 225	N320TC-N360TC	111000	124600	36100	244
	318 R4 (C)	**585**	2.0	2023100	72	177	180 to 225	N320TC-N360TC	116200	130500	38000	244
	318 R4 (C)	**695**	1.7	1922600	57	177	180 to 225	N320TC-N360TC	122300	137400	40200	244
870	**318 R4 (B)**	**216**	4.0	1963800	143	145	180 to 225	N320TC-N360TC	92700	104100	29300	244
	318 R4 (B)	**186**	3.1	2090400	118	145	180 to 225	N320TC-N360TC	99900	112200	31900	244
	318 R4 (C)	**299**	2.9	1754100	92	177	180 to 225	N320TC-N360TC	102100	114700	32700	244
	318 R4 (B)	**330**	2.6	2181500	104	145	180 to 225	N320TC-N360TC	105200	118200	33800	244
	318 R4 (B)	**357**	2.4	2212500	97	145	180 to 225	N320TC-N360TC	107700	121000	34700	244
	318 R4 (C)	**384**	2.3	2157600	88	177	180 to 225	N320TC-N360TC	110100	123700	35500	244
	318 R4 (B)	**423**	2.1	2201900	82	145	180 to 225	N320TC-N360TC	113300	127300	36700	244
	318 R4 (C)	**456**	1.9	2185900	75	177	180 to 225	N320TC-N360TC	115900	130200	37600	244
	318 R4 (C)	**493**	1.8	2200100	70	177	180 to 225	N320TC-N360TC	118700	133300	38600	244
	318 R4 (B)	**502**	1.7	1991200	62	145	180 to 225	N320TC-N360TC	119300	134000	38800	244
	318 R4 (C)	**585**	1.5	2175300	58	177	180 to 225	N320TC-N360TC	124900	140300	40900	244
	318 R4 (C)	**695**	1.3	2067400	47	177	180 to 225	N320TC-N360TC	131500	147800	43300	244



319 R

3,000,000 in lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**319 R4 (B)**	**240**	7.3	1778600	234	127	180 to 225	N320TC-N360TC	98800	108700	28700	252
	319 R4 (B)	**308**	5.7	2282300	234	127	180 to 225	N320TC-N360TC	106500	117200	31200	252
	319 R4 (C)	**332**	5.3	1591000	151	154	180 to 225	N320TC-N360TC	108900	119800	31900	252
	319 R4 (A)	**354**	4.9	1297100	116	127	132 to 200	N280TC	111000	122100	32600	252
	319 R4 (B)	**365**	4.8	2560500	221	127	180 to 225	N320TC-N360TC	112000	123300	33000	252
	319 R4 (B)	**395**	4.4	2634600	210	127	180 to 225	N320TC-N360TC	114700	126200	33800	252
	319 R4 (C)	**426**	4.1	2020600	150	154	180 to 225	N320TC-N360TC	117300	129100	34700	252
	319 R4 (A)	**454**	3.9	1665000	116	127	132 to 200	N280TC	119600	131600	35400	252
	319 R4 (B)	**468**	3.7	2335000	157	127	180 to 225	N320TC-N360TC	120700	132800	35800	252
	319 R4 (C)	**505**	3.5	2395100	150	154	180 to 225	N320TC-N360TC	123500	135900	36700	252
	319 R4 (A)	**538**	3.2	1975300	116	127	132 to 200	N280TC	125900	138500	37500	252
	319 R4 (C)	**546**	3.2	2563000	148	154	180 to 225	N320TC-N360TC	126400	139100	37700	252
	319 R4 (B)	**556**	3.1	2417300	137	127	180 to 225	N320TC-N360TC	127100	139900	37900	252
	319 R4 (A)	**582**	3.0	2136600	116	127	132 to 200	N280TC	128900	141800	38500	252
	319 R4 (C)	**647**	2.7	2493000	122	154	180 to 225	N320TC-N360TC	133000	146300	39900	252
	319 R4 (B)	**658**	2.7	2470800	118	127	180 to 225	N320TC-N360TC	133700	147100	40100	252
	319 R4 (A)	**689**	2.5	2486400	114	127	132 to 200	N280TC	135500	149100	40700	252
	319 R4 (C)	**770**	2.3	2472400	101	154	180 to 225	N320TC-N360TC	140100	154200	42300	252
	319 R4 (A)	**820**	2.1	2530100	97	127	132 to 200	N280TC	142800	157100	43200	252
	319 R4 (C)	**911**	1.9	2655200	92	154	180 to 225	N320TC-N360TC	147400	162200	44700	252
	319 R4 (A)	**971**	1.8	2632900	86	127	132 to 200	N280TC	150200	165300	45700	252
1450	**319 R4 (B)**	**240**	6.0	1912500	208	127	180 to 225	N320TC-N360TC	106200	116900	30800	252
	319 R4 (B)	**308**	4.7	2454100	208	127	180 to 225	N320TC-N360TC	114500	126000	33500	252
	319 R4 (C)	**332**	4.4	1710700	135	154	180 to 225	N320TC-N360TC	117100	128800	34300	252
	319 R4 (A)	**354**	4.1	1394800	103	127	132 to 200	N280TC	119300	131300	35100	252
	319 R4 (B)	**365**	4.0	2753200	197	127	180 to 225	N320TC-N360TC	120500	132600	35500	252
	319 R4 (B)	**395**	3.7	2832900	188	127	180 to 225	N320TC-N360TC	123300	135700	36400	252
	319 R4 (C)	**426**	3.4	2172700	133	154	180 to 225	N320TC-N360TC	126200	138800	37300	252
	319 R4 (A)	**454**	3.2	1790400	103	127	132 to 200	N280TC	128600	141500	38100	252
	319 R4 (B)	**468**	3.1	2510700	140	127	180 to 225	N320TC-N360TC	129800	142800	38500	252
	319 R4 (C)	**505**	2.9	2575300	133	154	180 to 225	N320TC-N360TC	132800	146100	39500	252
	319 R4 (A)	**538**	2.7	2124000	103	127	132 to 200	N280TC	135400	148900	40300	252
	319 R4 (C)	**546**	2.7	2755900	132	154	180 to 225	N320TC-N360TC	135900	149600	40600	252
	319 R4 (B)	**556**	2.6	2599200	122	127	180 to 225	N320TC-N360TC	136700	150400	40800	252
	319 R4 (A)	**582**	2.5	2297500	103	127	132 to 200	N280TC	138600	152500	41400	252
	319 R4 (C)	**647**	2.2	2680700	108	154	180 to 225	N320TC-N360TC	143000	157400	42900	252
	319 R4 (B)	**658**	2.2	2656800	106	127	180 to 225	N320TC-N360TC	143700	158200	43100	252
	319 R4 (A)	**689**	2.1	2673600	101	127	132 to 200	N280TC	145800	160400	43800	252
	319 R4 (C)	**770**	1.9	2658500	90	154	180 to 225	N320TC-N360TC	150700	165800	45500	252
	319 R4 (A)	**820**	1.8	2720500	87	127	132 to 200	N280TC	153500	168900	46400	252
	319 R4 (C)	**911**	1.6	2855000	82	154	180 to 225	N320TC-N360TC	158500	174400	48100	252
	319 R4 (A)	**971**	1.5	2831100	76	127	132 to 200	N280TC	161500	177700	49100	252
1150	**319 R4 (B)**	**240**	4.8	2121000	183	153	180 to 225	N320TC-N360TC	112800	124100	33200	252
	319 R4 (B)	**308**	3.7	2721800	183	153	180 to 225	N320TC-N360TC	121600	133700	36100	252
	319 R4 (C)	**332**	3.5	1786000	112	185	180 to 225	N320TC-N360TC	124300	136800	37000	252
	319 R4 (A)	**354**	3.3	1480700	87	153	132 to 200	N280TC	126700	139400	37800	252
	319 R4 (B)	**365**	3.2	2832900	161	153	180 to 225	N320TC-N360TC	127900	140700	38200	252
	319 R4 (B)	**395**	2.9	2853500	150	153	180 to 225	N320TC-N360TC	131000	144100	39200	252
	319 R4 (C)	**426**	2.7	2324300	113	185	180 to 225	N320TC-N360TC	134000	147400	40200	252
	319 R4 (A)	**454**	2.5	1900400	87	153	132 to 200	N280TC	136500	150200	41100	252
	319 R4 (B)	**468**	2.5	2553900	113	153	180 to 225	N320TC-N360TC	137800	151600	41500	252
	319 R4 (C)	**505**	2.3	2639500	108	185	180 to 225	N320TC-N360TC	141000	155100	42600	252
	319 R4 (A)	**538**	2.1	2256000	87	153	132 to 200	N280TC	143700	158100	43500	252
	319 R4 (C)	**546**	2.1	2727600	104	185	180 to 225	N320TC-N360TC	144300	158800	43700	252
	319 R4 (B)	**556**	2.1	2478200	92	153	180 to 225	N320TC-N360TC	145100	159700	44000	252
	319 R4 (A)	**582**	2.0	2438700	87	153	132 to 200	N280TC	147100	161900	44600	252



319 R

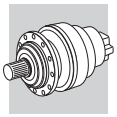
3,000,000 in·lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1150	**319 R4 (C)**	**647**	1.8	2684800	86	185	180 to 225	N320TC-N360TC	151900	167100	46200	252
	319 R4 (B)	**658**	1.7	2679800	84	153	180 to 225	N320TC-N360TC	152600	168000	46500	252
	319 R4 (A)	**689**	1.7	2676600	81	153	132 to 200	N280TC	154800	170300	47200	252
	319 R4 (C)	**770**	1.5	2485600	67	185	180 to 225	N320TC-N360TC	160000	176100	49000	252
	319 R4 (A)	**820**	1.4	2530100	64	153	132 to 200	N280TC	163100	179400	50000	252
	319 R4 (C)	**911**	1.3	2800800	64	185	180 to 225	N320TC-N360TC	167700	184500	51600	252
	319 R4 (A)	**971**	1.2	2798400	60	153	132 to 200	N280TC	167700	184500	51600	252
870	**319 R4 (B)**	**240**	3.6	2280600	149	153	180 to 225	N320TC-N360TC	121300	133500	35700	252
	319 R4 (B)	**308**	2.8	2926700	149	153	180 to 225	N320TC-N360TC	130700	143800	38800	252
	319 R4 (C)	**332**	2.6	1920400	91	185	180 to 225	N320TC-N360TC	133700	147100	39800	252
	319 R4 (A)	**354**	2.5	1592100	71	153	132 to 200	N280TC	136200	149900	40600	252
	319 R4 (B)	**365**	2.4	3046200	131	153	180 to 225	N320TC-N360TC	137500	151300	41100	252
	319 R4 (B)	**395**	2.2	3068300	122	153	180 to 225	N320TC-N360TC	140800	155000	42200	252
	319 R4 (C)	**426**	2.0	2499200	92	185	180 to 225	N320TC-N360TC	144100	158500	43200	252
	319 R4 (A)	**454**	1.9	2043500	71	153	132 to 200	N280TC	146800	161500	44200	252
	319 R4 (B)	**468**	1.9	2746200	92	153	180 to 225	N320TC-N360TC	148200	163000	44600	252
	319 R4 (C)	**505**	1.7	2838200	88	185	180 to 225	N320TC-N360TC	151600	166800	45800	252
	319 R4 (A)	**538**	1.6	2425800	71	153	132 to 200	N280TC	154500	170000	46700	252
	319 R4 (C)	**546**	1.6	2932900	84	185	180 to 225	N320TC-N360TC	155200	170800	47000	252
	319 R4 (B)	**556**	1.6	2664700	75	153	180 to 225	N320TC-N360TC	156000	171700	47300	252
	319 R4 (A)	**582**	1.5	2622300	71	153	132 to 200	N280TC	158200	174100	48000	252
	319 R4 (C)	**647**	1.3	2886900	70	185	180 to 225	N320TC-N360TC	163300	179700	49700	252
	319 R4 (B)	**658**	1.3	2881600	69	153	180 to 225	N320TC-N360TC	164100	180600	50000	252
	319 R4 (A)	**689**	1.3	2878000	66	153	132 to 200	N280TC	166400	183100	50800	252
	319 R4 (C)	**770**	1.1	2672700	54	185	180 to 225	N320TC-N360TC	172100	189300	52700	252
	319 R4 (A)	**820**	1.1	2720500	52	153	132 to 200	N280TC	175300	192900	53800	252
	319 R4 (C)	**911**	0.95	3011700	52	185	180 to 225	N320TC-N360TC	180300	198400	55500	252
	319 R4 (A)	**971**	0.90	3009000	49	153	132 to 200	N280TC	180300	198400	55500	252

321 R

4,200,000 in·lbs

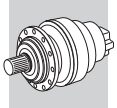
n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**321 R4 (B)**	**221**	7.9	1637900	234	141	180 to 225	N320TC-N360TC	117700	139400	167300	260
	321 R4 (B)	**289**	6.1	2141600	234	141	180 to 225	N320TC-N360TC	127500	151100	183000	260
	321 R4 (A)	**326**	5.4	1197500	116	141	132 to 200	N280TC	132300	156700	200000	260
	321 R4 (B)	**347**	5.0	2571200	234	141	180 to 225	N320TC-N360TC	134700	159600	194500	260
	321 R4 (B)	**370**	4.7	2742400	234	141	180 to 225	N320TC-N360TC	137300	162700	198700	260
	321 R4 (A)	**425**	4.1	1561300	116	141	132 to 200	N280TC	143200	169700	216600	260
	321 R4 (B)	**446**	3.9	3305400	234	141	180 to 225	N320TC-N360TC	145300	172100	211400	260
	321 R4 (C)	**481**	3.6	2305400	151	168	180 to 225	N320TC-N360TC	148600	176000	216800	260
	321 R4 (A)	**512**	3.4	1879000	116	141	132 to 200	N280TC	151400	179400	229000	260
	321 R4 (C)	**513**	3.4	2428800	149	168	180 to 225	N320TC-N360TC	151400	179400	221400	260
	321 R4 (B)	**529**	3.3	3737500	223	141	180 to 225	N320TC-N360TC	152900	181100	223800	260
	321 R4 (A)	**546**	3.2	1995900	115	141	132 to 200	N320TC-N360TC	154300	182900	226200	260
	321 R4 (C)	**617**	2.8	2926800	150	168	180 to 225	N320TC-N360TC	160100	189700	235600	260
	321 R4 (A)	**657**	2.7	2401700	115	141	132 to 200	N320TC-N360TC	163200	193300	240600	260



321 R

4,200,000 in lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	Pt thermal capacity HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**321 R4 (C)**	**732**	2.4	3616500	156	168	180 to 225	N320TC-N360TC	168500	199700	249400	260
	321 R4 (A)	**780**	2.2	2861700	116	141	132 to 200	N280TC	171800	203500	259800	260
1450	**321 R4 (B)**	**221**	6.6	1761100	208	141	180 to 225	N320TC-N360TC	126500	149900	179900	260
	321 R4 (B)	**289**	5.0	2302800	208	141	180 to 225	N320TC-N360TC	137100	162500	196800	260
	321 R4 (A)	**326**	4.4	1287700	103	141	132 to 200	N280TC	142200	168500	215100	260
	321 R4 (B)	**347**	4.2	2764700	208	141	180 to 225	N320TC-N360TC	144900	171600	209100	260
	321 R4 (B)	**370**	3.9	2948800	208	141	180 to 225	N320TC-N360TC	147700	175000	213600	260
	321 R4 (A)	**425**	3.4	1678800	103	141	132 to 200	N280TC	154000	182500	232900	260
	321 R4 (B)	**446**	3.3	3554200	208	141	180 to 225	N320TC-N360TC	156200	185100	227400	260
	321 R4 (C)	**481**	3.0	2478900	135	168	180 to 225	N320TC-N360TC	159800	189300	233200	260
	321 R4 (A)	**512**	2.8	2020500	103	141	132 to 200	N280TC	162800	192900	246200	260
	321 R4 (C)	**513**	2.8	2611600	133	168	180 to 225	N320TC-N360TC	162800	192900	238100	260
	321 R4 (B)	**529**	2.7	4018800	199	141	180 to 225	N320TC-N360TC	164400	194800	240700	260
	321 R4 (A)	**546**	2.7	2146100	103	141	132 to 200	N320TC-N360TC	166000	196600	243200	260
	321 R4 (C)	**617**	2.4	3147100	133	168	180 to 225	N320TC-N360TC	172200	204000	253400	260
	321 R4 (A)	**657**	2.2	2582400	103	141	132 to 200	N320TC-N360TC	175400	207900	258700	260
	321 R4 (C)	**732**	2.0	3888700	139	168	180 to 225	N320TC-N360TC	181200	214700	268200	260
	321 R4 (A)	**780**	1.9	3077100	103	141	132 to 200	N280TC	184700	218800	279300	260
1150	**321 R4 (B)**	**221**	5.2	2021400	190	169	180 to 225	N320TC-N360TC	134300	159200	193900	260
	321 R4 (B)	**289**	4.0	2642800	190	169	180 to 225	N320TC-N360TC	145600	172500	212000	260
	321 R4 (A)	**326**	3.5	1367100	87	169	132 to 200	N280TC	151000	178900	228400	260
	321 R4 (B)	**347**	3.3	3066700	183	169	180 to 225	N320TC-N360TC	153800	182200	225300	260
	321 R4 (B)	**370**	3.1	3326800	186	169	180 to 225	N320TC-N360TC	156800	185800	230200	260
	321 R4 (A)	**425**	2.7	1781900	87	169	132 to 200	N280TC	163500	193700	247300	260
	321 R4 (B)	**446**	2.6	3838700	178	169	180 to 225	N320TC-N360TC	165800	196500	245000	260
	321 R4 (C)	**481**	2.4	2698800	116	201	180 to 225	N320TC-N360TC	169700	201000	251300	260
	321 R4 (A)	**512**	2.2	2144900	87	169	132 to 200	N280TC	172900	204800	261400	260
	321 R4 (C)	**513**	2.2	2793400	113	201	180 to 225	N320TC-N360TC	172900	204800	256500	260
	321 R4 (B)	**529**	2.2	3902900	153	169	180 to 225	N320TC-N360TC	174600	206800	259300	260
	321 R4 (A)	**546**	2.1	2265900	86	169	132 to 200	N320TC-N360TC	176200	208800	262100	260
	321 R4 (C)	**617**	1.9	3367100	113	201	180 to 225	N320TC-N360TC	182800	216600	273000	260
	321 R4 (A)	**657**	1.8	2726800	86	169	132 to 200	N320TC-N360TC	186300	220700	278800	260
	321 R4 (C)	**732**	1.6	3938300	112	201	180 to 225	N320TC-N360TC	192400	228000	289000	260
	321 R4 (A)	**780**	1.5	3267500	87	169	132 to 200	N280TC	196100	232400	296600	260
870	**321 R4 (B)**	**221**	3.9	2173600	154	169	180 to 225	N320TC-N360TC	144500	171200	208500	260
	321 R4 (B)	**289**	3.0	2841700	154	169	180 to 225	N320TC-N360TC	156600	185500	228000	260
	321 R4 (A)	**326**	2.7	1470000	71	169	132 to 200	N280TC	162400	192400	245600	260
	321 R4 (B)	**347**	2.5	3297500	149	169	180 to 225	N320TC-N360TC	165400	196000	242300	260
	321 R4 (B)	**370**	2.4	3577200	152	169	180 to 225	N320TC-N360TC	168600	199800	247500	260
	321 R4 (A)	**425**	2.0	1916000	71	169	132 to 200	N280TC	175800	208300	265900	260
	321 R4 (B)	**446**	2.0	4127600	145	169	180 to 225	N320TC-N360TC	178300	211300	263400	260
	321 R4 (C)	**481**	1.8	2901900	95	201	180 to 225	N320TC-N360TC	182400	216100	270200	260
	321 R4 (A)	**512**	1.7	2306300	71	169	132 to 200	N280TC	185900	220200	281100	260
	321 R4 (C)	**513**	1.7	3003700	92	201	180 to 225	N320TC-N360TC	185900	220200	275800	260
	321 R4 (B)	**529**	1.6	4196700	124	169	180 to 225	N320TC-N360TC	187700	222400	278800	260
	321 R4 (A)	**546**	1.6	2436400	70	169	132 to 200	N320TC-N360TC	189500	224500	281800	260
	321 R4 (C)	**617**	1.4	3620500	92	201	180 to 225	N320TC-N360TC	196600	232900	293500	260
	321 R4 (A)	**657**	1.3	2932000	70	169	132 to 200	N320TC-N360TC	200300	237300	299700	260
	321 R4 (C)	**732**	1.2	4234700	91	201	180 to 225	N320TC-N360TC	206900	245200	310700	260
	321 R4 (A)	**780**	1.1	3513400	71	169	132 to 200	N280TC	210900	249900	318900	260



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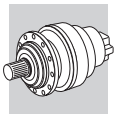
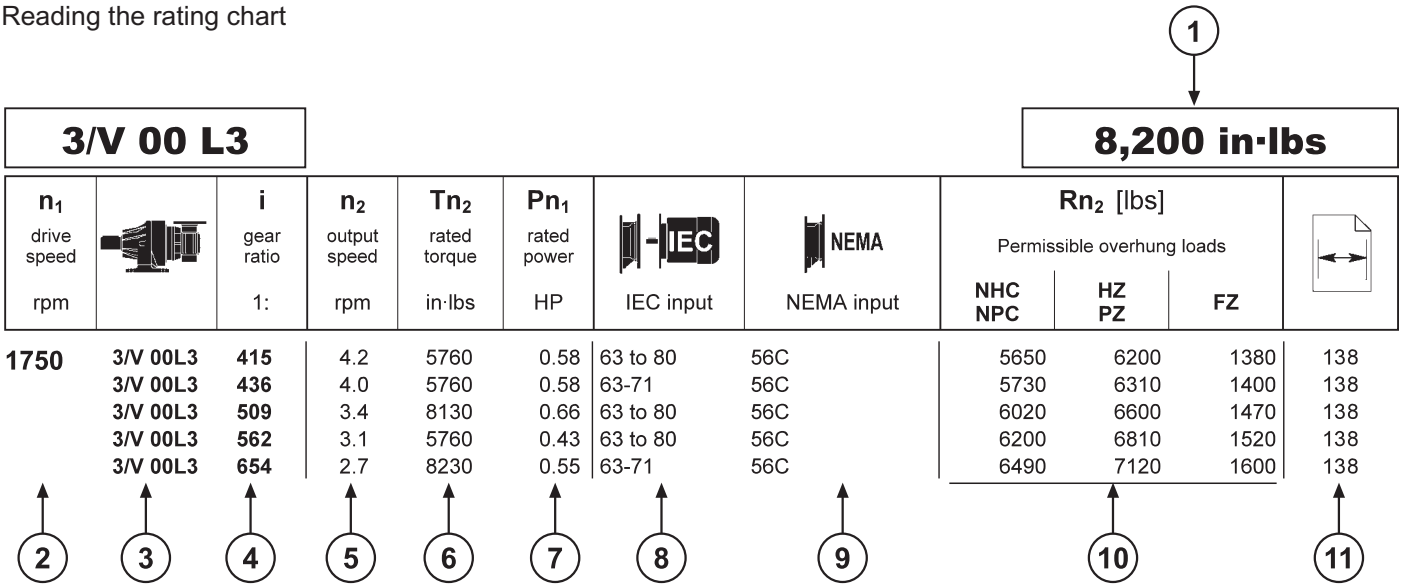
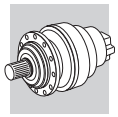


23.0 - SPEED REDUCER RATING CHARTS: 3/V (worm/planetary)

Reading the rating chart



1	Gearbox max. transmissible torque
2	Gearbox drive speed
3	Frame size of combined worm + planetary gearbox
4	Gear ratio
5	Gearbox output speed
6	Gearbox rated output torque
7	Gearbox rated input power
8	Frame size of available IEC motor
9	Frame size of available NEMA motor
10	Permissible overhung load on output shaft
11	Page showing installation drawings and dimensions. Gearmotor overall dimensions refer to matches with BONFIGLIOLI motors only



3/V□ L

3/V 00 L3

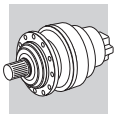
8,200 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/V 00L3**	**415**	4.2	5760	0.58	63 to 80	56C	5650	6200	1380	138
	3/V 00L3	**436**	4.0	5760	0.58	63-71	56C	5730	6310	1400	138
	3/V 00L3	**509**	3.4	8130	0.66	63 to 80	56C	6020	6600	1470	138
	3/V 00L3	**562**	3.1	5760	0.43	63 to 80	56C	6200	6810	1520	138
	3/V 00L3	**654**	2.7	8230	0.55	63-71	56C	6490	7120	1600	138
	3/V 00L3	**689**	2.5	8230	0.50	63 to 80	56C	6600	7230	1630	138
	3/V 00L3	**818**	2.1	8230	0.47	63-71	56C	6940	7590	1730	138
	3/V 00L3	**903**	1.9	5760	0.30	63-71	56C	7150	7830	1780	138
	3/V 00L3	**997**	1.8	6670	0.26	63 to 80	56C	7360	8070	1840	138
	3/V 00L3	**1107**	1.6	8230	0.35	63-71	56C	7590	8330	1910	138
	3/V 00L3	**1198**	1.5	6890	0.25	63-71	56C	7780	8510	1960	138
	3/V 00L3	**1381**	1.3	8230	0.28	63-71	56C	8120	8910	2050	138
	3/V 00L3	**1495**	1.2	7080	0.21	63-71	56C	8150	8930	2060	138
	3/V 00L3	**1869**	0.94	7080	0.18	63-71	56C	8150	8930	2060	138
	3/V 00L3	**2333**	0.75	5760	0.12	63-71	56C	8150	8930	2060	138

3/V 01 L3

16,500 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/V 01L3**	**430**	4.1	15600	1.3	63 to 80	56C	5730	6280	1390	146
	3/V 01L3	**443**	4.0	15700	1.3	63 to 80	56C	5760	6330	1410	146
	3/V 01L3	**509**	3.4	16100	1.3	63 to 80	56C	6020	6600	1470	146
	3/V 01L3	**562**	3.1	11500	0.85	63 to 80	56C	6200	6810	1520	146
	3/V 01L3	**654**	2.7	16500	1.1	63-71	56C	6490	7120	1600	146
	3/V 01L3	**689**	2.5	16500	0.99	63 to 80	56C	6600	7230	1630	146
	3/V 01L3	**799**	2.2	12700	0.63	63 to 80	56C	6890	7540	1710	146
	3/V 01L3	**903**	1.9	11500	0.60	63-71	56C	7150	7830	1780	146
	3/V 01L3	**997**	1.8	13200	0.52	63 to 80	56C	7360	8070	1840	146
	3/V 01L3	**1105**	1.6	16500	0.66	63-71	56C	7590	8330	1910	146
	3/V 01L3	**1198**	1.5	13600	0.50	63-71	56C	7780	8510	1960	146
	3/V 01L3	**1381**	1.3	16500	0.56	63-71	56C	8120	8910	2050	146
	3/V 01L3	**1495**	1.2	14000	0.41	63-71	56C	8150	8930	2060	146
	3/V 01L3	**1869**	0.94	14000	0.35	63-71	56C	8150	8930	2060	146
	3/V 01L3	**2333**	0.75	9460	0.19	63-71	56C	8150	8930	2060	146



3/V 03 L3

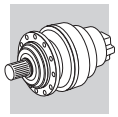
23,400 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/V 03L3**	**395**	4.4	17900	1.7	71 to 90	56C to 140TC	11500	13300	4050	154
	3/V 03L3	**460**	3.8	18100	1.6	71 to 90	56C to 140TC	12000	13900	4280	154
	3/V 03L3	**502**	3.5	16000	1.2	71 to 90	56C to 140TC	12400	14300	4410	154
	3/V 03L3	**544**	3.2	22600	1.7	71 to 90	56C to 140TC	12700	14600	4510	154
	3/V 03L3	**623**	2.8	18300	1.2	71 to 90	56C to 140TC	13200	15200	4720	154
	3/V 03L3	**736**	2.4	22100	1.2	71 to 90	56C to 140TC	13900	16000	5000	154
	3/V 03L3	**793**	2.2	17200	0.87	71 to 90	56C to 140TC	14200	16400	5130	154
	3/V 03L3	**923**	1.9	21900	0.95	71 to 90	56C to 140TC	14800	17200	5390	154
	3/V 03L3	**1023**	1.7	22300	0.96	71-80	56C	15300	17700	5570	154
	3/V 03L3	**1189**	1.5	18400	0.68	71-80	56C	16000	18500	5860	154
	3/V 03L3	**1385**	1.3	23400	0.75	71-80	56C	16800	19400	6170	154
	3/V 03L3	**1610**	1.1	18900	0.52	71-80	56C	16800	19400	6190	154
	3/V 03L3	**1728**	1.0	23400	0.60	71-80	56C	16800	19400	6190	154
	3/V 03L3	**2009**	0.87	18900	0.42	71-80	56C	16800	19400	6190	154
	3/V 03L3	**2430**	0.72	16500	0.30	71-80	56C	16800	19400	6190	154

3/V 05 L3

45,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/V 05L3**	**396**	4.4	30800	2.7	71 to 112	56C to 180TC	11500	13300	4080	162
	3/V 05L3	**462**	3.8	39000	2.9	71 to 112	56C to 180TC	12100	13900	4280	162
	3/V 05L3	**529**	3.3	32300	2.2	71 to 112	56C to 180TC	12600	14500	4460	162
	3/V 05L3	**576**	3.0	40300	2.4	71 to 112	56C to 180TC	12900	14900	4620	162
	3/V 05L3	**623**	2.8	37000	2.3	71 to 112	56C to 180TC	13200	15200	4720	162
	3/V 05L3	**715**	2.4	33900	1.7	71 to 112	56C to 180TC	13700	15900	4950	162
	3/V 05L3	**793**	2.2	34500	1.7	71 to 112	56C to 180TC	14200	16400	5130	162
	3/V 05L3	**894**	2.0	35200	1.5	71 to 112	56C to 180TC	14700	17000	5340	162
	3/V 05L3	**1057**	1.7	36200	1.4	71 to 112	56C to 180TC	15500	17900	5650	162
	3/V 05L3	**1116**	1.6	36500	1.2	71 to 112	56C to 180TC	15700	18200	5750	162
	3/V 05L3	**1231**	1.4	45200	1.5	71 to 112	56C to 180TC	16200	18700	5930	162
	3/V 05L3	**1431**	1.2	37900	1.1	71 to 112	56C to 180TC	16800	19400	6190	162
	3/V 05L3	**1620**	1.1	31300	0.74	71 to 112	56C to 180TC	16800	19400	6190	162
	3/V 05L3	**1786**	0.98	37900	0.87	71 to 112	56C to 180TC	16800	19400	6190	162
	3/V 05L3	**2160**	0.81	31300	0.59	71 to 112	56C to 180TC	16800	19400	6190	162



3/V□ L

3/V 06 L3

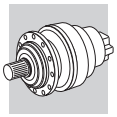
75,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 06L3**	**395**	4.4	61100	5.4	71 to 112	56C to 180TC	18200	21400	5930	170
	3/V 06L3	**427**	4.1	67600	5.5	71 to 112	56C to 180TC	18600	21900	6090	170
	3/V 06L3	**527**	3.3	61100	4.1	71 to 112	56C to 180TC	19800	23300	6530	170
	3/V 06L3	**569**	3.1	70000	4.3	71 to 112	56C to 180TC	20300	23900	6680	170
	3/V 06L3	**661**	2.6	71300	3.8	71 to 112	56C to 180TC	21200	25000	7040	170
	3/V 06L3	**698**	2.5	61700	3.1	71 to 112	56C to 180TC	21500	25400	7150	170
	3/V 06L3	**791**	2.2	61100	3.0	71 to 112	56C to 180TC	22400	26300	7460	170
	3/V 06L3	**930**	1.9	65000	2.5	71 to 112	56C to 180TC	23500	27700	7870	170
	3/V 06L3	**992**	1.8	75000	2.9	71 to 112	56C to 180TC	23900	28200	8050	170
	3/V 06L3	**1153**	1.5	67500	2.3	71 to 112	56C to 180TC	25000	29500	8460	170
	3/V 06L3	**1212**	1.4	61100	2.0	71 to 112	56C to 180TC	25400	30000	8620	170
	3/V 06L3	**1395**	1.3	69900	1.9	71 to 112	56C to 180TC	26500	31200	9030	170
	3/V 06L3	**1768**	0.99	70000	1.6	71 to 112	56C to 180TC	26500	31300	9030	170
	3/V 06L3	**2139**	0.82	70000	1.3	71 to 112	56C to 180TC	26500	31300	9030	170
	3/V 06L3	**2588**	0.68	57600	0.90	71 to 112	56C to 180TC	26500	31300	9030	170

3/V 07 L3

116,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 07L3**	**386**	4.5	74300	6.5	80 to 132	140TC to 210TC	19500	25900	7560	178
	3/V 07L3	**460**	3.8	101200	7.7	80 to 132	140TC to 210TC	20500	27300	8020	178
	3/V 07L3	**507**	3.4	112300	7.8	80 to 132	140TC to 210TC	21100	28100	8280	178
	3/V 07L3	**655**	2.7	115000	6.7	80 to 132	140TC to 210TC	22800	30300	9000	178
	3/V 07L3	**761**	2.3	116600	5.9	80 to 132	140TC to 210TC	23900	31700	9470	178
	3/V 07L3	**773**	2.3	82600	3.8	80 to 132	140TC to 210TC	24000	31900	9520	178
	3/V 07L3	**920**	1.9	101200	4.2	80 to 132	140TC to 210TC	25300	33600	10100	178
	3/V 07L3	**1015**	1.7	117600	4.5	80 to 132	140TC to 210TC	26000	34600	10400	178
	3/V 07L3	**1159**	1.5	87900	2.9	80 to 132	140TC to 210TC	27100	36000	10900	178
	3/V 07L3	**1288**	1.4	113700	3.5	80 to 132	140TC to 210TC	27900	37200	11300	178
	3/V 07L3	**1411**	1.2	101200	2.9	80 to 132	140TC to 210TC	28600	38100	11600	178
	3/V 07L3	**1545**	1.1	90500	2.3	80 to 132	140TC to 210TC	28600	38100	11600	178
	3/V 07L3	**1964**	0.89	104700	2.2	80 to 132	140TC to 210TC	28600	38100	11600	178
	3/V 07L3	**2150**	0.81	90500	1.7	80 to 132	140TC to 210TC	28600	38100	11600	178
	3/V 07L3	**2472**	0.71	90500	1.5	80 to 132	140TC to 210TC	28600	38100	11600	178



3/V 09 L3

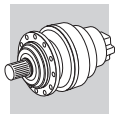
170,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/V 09L3**	**370**	4.7	107000	10.7	100 to 132	—	19400	25600	6000	186
	3/V 09L3	**442**	4.0	137200	11.5	100 to 132	—	20400	27000	6300	186
	3/V 09L3	**507**	3.4	117600	8.2	132 to 160	—	21300	28100	6600	186
	3/V 09L3	**655**	2.7	143700	8.1	100 to 132	—	23000	30300	7200	186
	3/V 09L3	**761**	2.3	117600	5.7	100 to 132	—	24100	31700	7600	186
	3/V 09L3	**800**	2.2	169800	8.1	100 to 132	—	24400	32200	7700	186
	3/V 09L3	**920**	1.9	101200	4.1	100 to 132	—	25500	33600	8100	186
	3/V 09L3	**1004**	1.7	143700	5.5	100 to 132	—	26100	34500	8300	186
	3/V 09L3	**1159**	1.5	135200	4.3	100 to 132	—	27300	36000	8700	186
	3/V 09L3	**1288**	1.4	170600	5.1	100 to 132	—	28200	37200	9000	186
	3/V 09L3	**1411**	1.2	101200	2.8	100 to 132	—	28900	38100	9300	186
	3/V 09L3	**1623**	1.1	122300	3.1	100-112	—	28900	38100	9300	186
	3/V 09L3	**1964**	0.89	104700	2.2	100-112	—	28900	38100	9300	186
	3/V 09L3	**2150**	0.81	139900	2.5	100 to 132	—	28900	38100	9300	186
	3/V 09L3	**2472**	0.71	139900	2.3	100-112	—	28900	38100	9300	186

3/V 10 L3

246,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/V 10L3**	**436**	4.0	246700	19.9	132 to 160	—	24600	30700	11400	196
	3/V 10L3	**507**	3.4	212300	14.7	132 to 160	—	25800	32200	11900	196
	3/V 10L3	**560**	3.1	208900	13.1	132 to 160	—	26500	33100	12400	196
	3/V 10L3	**614**	2.9	179600	10.3	132 to 160	—	27300	34100	12700	196
	3/V 10L3	**701**	2.5	183200	8.9	132 to 160	—	28400	35400	13300	196
	3/V 10L3	**773**	2.3	187200	8.5	132 to 160	—	29200	36500	13700	196
	3/V 10L3	**920**	1.9	179600	7.2	100 to 132	—	30800	38500	14600	196
	3/V 10L3	**1004**	1.7	246900	9.4	100 to 132	—	31600	39500	15000	196
	3/V 10L3	**1120**	1.6	234100	8.0	100 to 132	—	32700	40800	15600	196
	3/V 10L3	**1227**	1.4	179600	5.6	100 to 132	—	33600	41900	16000	196
	3/V 10L3	**1411**	1.2	179600	4.9	100 to 132	—	35000	43600	16800	196



3/V□ L

3/V 10 L4

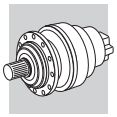
246,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 10L4**	**1657**	1.1	188200	4.1	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**1826**	0.96	205300	4.1	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**2016**	0.87	242800	4.4	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**2209**	0.79	188200	3.1	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**2455**	0.71	246900	3.6	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**2835**	0.62	241500	3.1	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**3273**	0.53	246900	2.7	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**3570**	0.49	242800	2.7	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**4036**	0.43	242800	2.2	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**4637**	0.38	242800	2.2	71 to 112	56C to 180TC	35000	43600	16800	196
	3/V 10L4	**5081**	0.34	188200	1.5	71 to 112	56C to 180TC	35000	43600	16800	196

3/V 11 L3

340,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 11L3**	**430**	4.1	342900	28	160-180	—	28900	35900	11300	204
	3/V 11L3	**510**	3.4	284100	19.4	160-180	—	30500	37800	12000	204
	3/V 11L3	**551**	3.2	299800	18.9	160-180	—	31200	38700	12300	204
	3/V 11L3	**644**	2.7	342900	18.9	132-160	—	32700	40600	12900	204
	3/V 11L3	**720**	2.4	314400	16.5	132-160	—	33800	42000	13400	204
	3/V 11L3	**827**	2.1	322200	13.9	132-160	—	35200	43800	14100	204
	3/V 11L3	**900**	1.9	327100	14.1	100 to 132	—	36100	44900	14500	204
	3/V 11L3	**1004**	1.7	370400	14.3	100 to 132	—	37300	46400	15000	204
	3/V 11L3	**1103**	1.6	339200	11.7	132-160	—	38400	47700	15500	204
	3/V 11L3	**1274**	1.4	285200	8.7	100 to 132	—	40100	49800	16300	204
	3/V 11L3	**1378**	1.3	352900	10.0	100 to 132	—	41100	51000	16700	204
	3/V 11L3	**1636**	1.1	353900	8.4	100 to 132	—	41300	51200	16800	204
	3/V 11L3	**1963**	0.89	353900	7.2	100 to 132	—	41300	51200	16800	204
	3/V 11L3	**2329**	0.75	279800	4.8	100 to 132	—	41300	51200	16800	204



3/V 11 L4

370,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 11L4**	**2510**	0.70	370400	5.4	80 to 132	140TC to 210TC	41300	51200	16800	204
	3/V 11L4	**2887**	0.61	370400	4.7	80 to 132	140TC to 210TC	41300	51200	16800	204
	3/V 11L4	**3222**	0.54	370400	4.2	80 to 132	140TC to 210TC	41300	51200	16800	204
	3/V 11L4	**3557**	0.49	370400	4.3	80 to 132	140TC to 210TC	41300	51200	16800	204
	3/V 11L4	**4000**	0.44	293900	3.0	80 to 132	140TC to 210TC	41300	51200	16800	204
	3/V 11L4	**4410**	0.40	353900	3.2	80 to 132	140TC to 210TC	41300	51200	16800	204
	3/V 11L4	**5021**	0.35	370400	3.0	80 to 132	140TC to 210TC	41300	51200	16800	204

3/V 13 L3

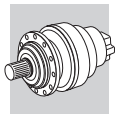
450,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 13L3**	**370**	4.7	373400	35	160-180	—	33800	40700	13300	212
	3/V 13L3	**425**	4.1	381000	30	160-180	—	35300	42500	13900	212
	3/V 13L3	**516**	3.4	430000	29	160-180	—	37400	45000	14800	212
	3/V 13L3	**567**	3.1	397200	24	160-180	—	38500	46300	15300	212
	3/V 13L3	**673**	2.6	407100	21	160-180	—	40500	48700	16200	212
	3/V 13L3	**741**	2.4	412800	21	132-160	—	41700	50100	16700	212
	3/V 13L3	**810**	2.2	369700	15.9	160-180	—	42800	51500	17200	212
	3/V 13L3	**870**	2.0	452700	19.7	132-160	—	43800	52600	17600	212
	3/V 13L3	**1009**	1.7	431700	15.2	132-160	—	45800	55000	18500	212
	3/V 13L3	**1088**	1.6	452700	16.2	100 to 132	—	46800	56300	19000	212
	3/V 13L3	**1291**	1.4	430000	12.9	100 to 132	—	49200	59200	20100	212
	3/V 13L3	**1418**	1.2	452700	12.4	100 to 132	—	50500	60700	20600	212
	3/V 13L3	**1620**	1.1	403300	9.4	132-160	—	50500	60700	20600	212
	3/V 13L3	**1682**	1.0	452700	10.5	100 to 132	—	50500	60700	20600	212
	3/V 13L3	**2019**	0.87	452700	9.0	100 to 132	—	50500	60700	20600	212
	3/V 13L3	**2430**	0.72	403300	6.6	100 to 132	—	50500	60700	20600	212

3/V 13 L4

450,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 13L4**	**2773**	0.63	452700	6.5	80 to 132	140TC to 210TC	50500	60700	20600	212
	3/V 13L4	**3263**	0.54	452700	5.0	80 to 132	140TC to 210TC	50500	60700	20600	212
	3/V 13L4	**3515**	0.50	452700	4.7	80 to 132	140TC to 210TC	50500	60700	20600	212
	3/V 13L4	**4046**	0.43	452700	4.4	80 to 132	140TC to 210TC	50500	60700	20600	212
	3/V 13L4	**4536**	0.39	452700	4.0	80 to 132	140TC to 210TC	50500	60700	20600	212
	3/V 13L4	**5046**	0.35	452700	3.7	80 to 132	140TC to 210TC	50500	60700	20600	212



3/V□ L

3/V 15 L3

800,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 15L3**	**388**	4.5	550100	47	132 to 225	—	36800	43500	15100	220
	3/V 15L3	**430**	4.1	790900	64	132 to 225	—	38000	44800	15700	220
	3/V 15L3	**491**	3.6	700800	48	132 to 225	—	39500	46600	16400	220
	3/V 15L3	**551**	3.2	712600	45	132 to 225	—	40900	48300	17000	220
	3/V 15L3	**654**	2.7	730400	39	132 to 225	—	43100	50800	18000	220
	3/V 15L3	**827**	2.1	755400	33	132 to 225	—	46200	54500	19500	220
	3/V 15L3	**981**	1.8	774200	28	132 to 225	—	48700	57400	20600	220
	3/V 15L3	**1103**	1.6	787300	27	132 to 225	—	50400	59400	21400	220
	3/V 15L3	**1308**	1.3	806900	23	132 to 225	—	53100	62600	22700	220
	3/V 15L3	**1378**	1.3	813000	23	132 to 225	—	53900	63600	23100	220
	3/V 15L3	**1636**	1.1	814800	19.4	132 to 225	—	54100	63900	23200	220
	3/V 15L3	**1963**	0.89	814800	16.8	132 to 225	—	54100	63900	23200	220
	3/V 15L3	**2329**	0.75	658400	11.4	132 to 225	—	54100	63900	23200	220

3/V 15 L4

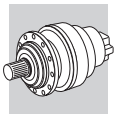
860,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 15L4**	**2676**	0.65	864200	11.7	132-160	—	54100	63900	23200	220
	3/V 15L4	**3176**	0.55	864200	9.9	132-160	—	54100	63900	23200	220
	3/V 15L4	**3435**	0.51	814800	8.6	132-160	—	54100	63900	23200	220
	3/V 15L4	**4015**	0.44	864200	8.2	100 to 132	—	54100	63900	23200	220
	3/V 15L4	**4765**	0.37	864200	6.9	100 to 132	—	54100	63900	23200	220
	3/V 15L4	**5152**	0.34	814800	6.0	100 to 132	—	54100	63900	23200	220

3/V 16 L3

1,000,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 16L3**	**411**	4.3	773700	63	132 to 225	—	61900	69000	19100	228
	3/V 16L3	**462**	3.8	1008200	76	132 to 225	—	64100	71500	19900	228
	3/V 16L3	**548**	3.2	773700	49	132 to 225	—	67500	75200	21100	228
	3/V 16L3	**693**	2.5	1012400	52	132 to 225	—	72400	80700	22800	228
	3/V 16L3	**822**	2.1	827200	36	132 to 225	—	76200	85000	24100	228
	3/V 16L3	**900**	1.9	1024700	44	132 to 225	—	78300	87300	24900	228
	3/V 16L3	**1096**	1.6	868300	30	132 to 225	—	83100	92600	26500	228
	3/V 16L3	**1386**	1.3	1082300	32	132 to 225	—	89100	99400	28700	228
	3/V 16L3	**1644**	1.1	938300	23	132 to 225	—	93800	104600	30400	228



3/V 16 L4

1,086,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	3/V 16L4	1890	0.93	1086400	21	132-160	—	97800	109100	31800	228
	3/V 16L4	2244	0.78	1086400	17.6	132-160	—	103000	114800	33700	228
	3/V 16L4	2426	0.72	1086400	16.3	132-160	—	105400	117600	34600	228
	3/V 16L4	2835	0.62	1086400	14.6	100 to 132	—	110500	123200	36500	228
	3/V 16L4	3366	0.52	1086400	12.3	100 to 132	—	116300	129700	38600	228
	3/V 16L4	3639	0.48	1086400	11.4	100 to 132	—	119100	132800	39600	228
	3/V 16L4	4317	0.41	1086400	9.6	100 to 132	—	125300	139800	41900	228
	3/V 16L4	5124	0.34	1086400	8.1	100 to 132	—	131900	147100	44400	228

3/V 17 L3

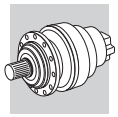
1,300,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	3/V 17L3	405	4.3	988500	80	132 to 225	—	80100	85100	25600	236
	3/V 17L3	425	4.1	1217000	96	132 to 225	—	81300	86400	26000	236
	3/V 17L3	512	3.4	1243700	82	132 to 225	—	85900	91300	27700	236
	3/V 17L3	567	3.1	1258700	76	132 to 225	—	88600	94200	28600	236
	3/V 17L3	608	2.9	1051300	58	132 to 225	—	90400	96200	29300	236
	3/V 17L3	683	2.6	1286300	65	132 to 225	—	93600	99600	30500	236
	3/V 17L3	810	2.2	1098200	47	132 to 225	—	98600	104800	32200	236
	3/V 17L3	851	2.1	1319900	55	132 to 225	—	100000	106400	32800	236
	3/V 17L3	1024	1.7	1348800	46	132 to 225	—	105700	112400	34900	236
	3/V 17L3	1134	1.5	1365100	45	132 to 225	—	109000	115900	36100	236
	3/V 17L3	1215	1.4	1168000	34	132 to 225	—	111300	118400	36900	236
	3/V 17L3	1365	1.3	1395000	38	132 to 225	—	115300	122600	38400	236

3/V 17 L4

1,480,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	3/V 16L3	411	4.3	773700	63	132 to 225	—	61900	69000	19100	236
	3/V 16L3	462	3.8	1008200	76	132 to 225	—	64100	71500	19900	236
	3/V 16L3	548	3.2	773700	49	132 to 225	—	67500	75200	21100	236
	3/V 16L3	693	2.5	1012400	52	132 to 225	—	72400	80700	22800	236
	3/V 16L3	822	2.1	827200	36	132 to 225	—	76200	85000	24100	236
	3/V 16L3	900	1.9	1024700	44	132 to 225	—	78300	87300	24900	236
	3/V 16L3	1096	1.6	868300	30	132 to 225	—	83100	92600	26500	236
	3/V 16L3	1386	1.3	1082300	32	132 to 225	—	89100	99400	28700	236
	3/V 16L3	1644	1.1	938300	23	132 to 225	—	93800	104600	30400	236



3/V□ L

3/V 18 L4

2,000,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 18L4**	**736**	2.4	2057600	96	132 to 225	—	107800	120900	34900	244
	3/V 18L4	**1122**	1.6	2057600	63	132 to 225	—	122300	137200	40200	244
	3/V 18L4	**1213**	1.4	2057600	58	132 to 225	—	125200	140400	41200	244
	3/V 18L4	**1418**	1.2	2057600	50	132 to 225	—	131200	147100	43400	244
	3/V 18L4	**1683**	1.0	2057600	42	132 to 225	—	138100	154900	46000	244
	3/V 18L4	**1820**	0.96	2057600	39	132 to 225	—	141400	158600	47200	244
	3/V 18L4	**2208**	0.79	2057600	34	132 to 225	—	149900	168000	50300	244
	3/V 18L4	**2426**	0.72	2057600	30	132 to 225	—	154200	172900	51900	244
	3/V 18L4	**2835**	0.62	2057600	27	132 to 225	—	161500	181100	54700	244
	3/V 18L4	**3366**	0.52	2057600	22	132 to 225	—	170100	190700	57900	244
	3/V 18L4	**3639**	0.48	2057600	21	132 to 225	—	174100	195200	59500	244
	3/V 18L4	**4317**	0.41	2057600	17.5	132 to 225	—	183300	205500	62900	244
	3/V 18L4	**5124**	0.34	2057600	14.8	132 to 225	—	192900	216300	66600	244

3/V 19 L4

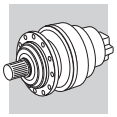
2,800,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 19L4**	**2485**	0.70	2880700	42	132 to 225	—	167700	184500	51600	252
	3/V 19L4	**3180**	0.55	2798400	32	132 to 225	—	167700	184500	51600	252
	3/V 19L4	**4031**	0.43	2880700	26	132 to 225	—	167700	184500	51600	252
	3/V 19L4	**4480**	0.39	2798400	22	132 to 225	—	167700	184500	51600	252
	3/V 19L4	**4970**	0.35	2880700	23	132 to 225	—	167700	184500	51600	252

3/V 21 L4

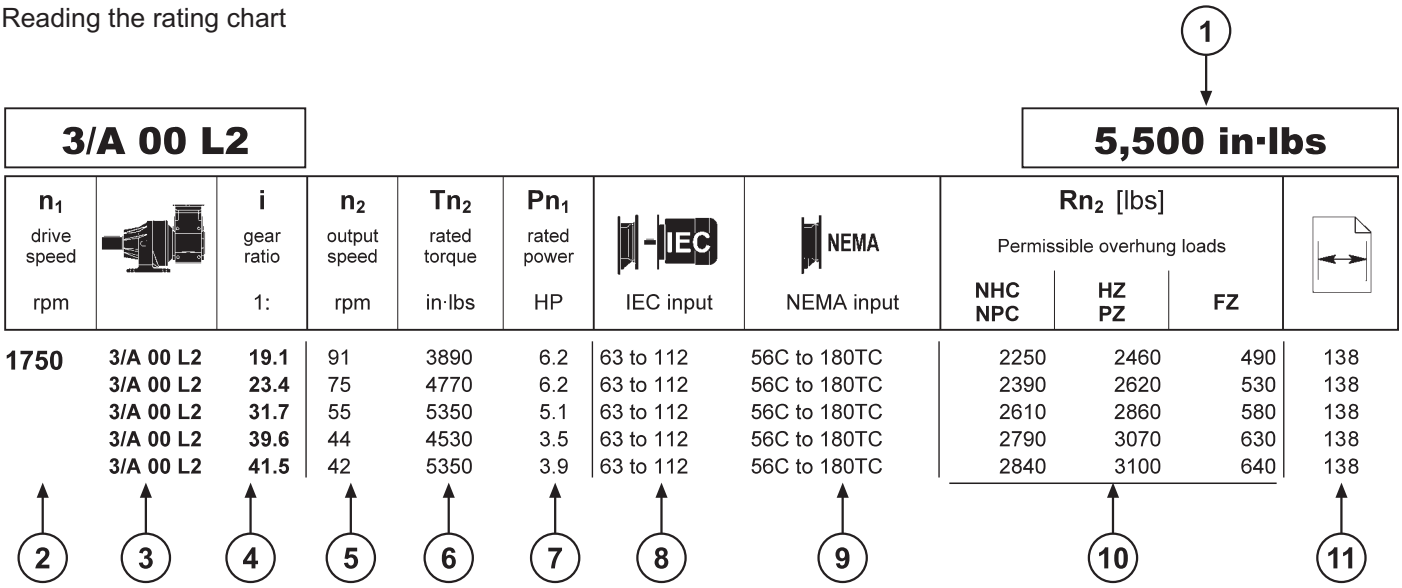
4,200,000 in•lbs

n_1 drive speed rpm		i gear ratio 1:	n_2 output speed rpm	Tn_2 rated torque in·lbs	Pn_1 rated power HP	IEC input	NEMA input	Rn_2 [lbs] Permissible overhung loads NHC NPC	HZ PZ	FZ	
1750	**3/V 21L4**	**1062**	1.6	4191800	132	132 to 225	—	188400	223200	284900	260
	3/V 21L4	**1260**	1.4	4246100	114	132 to 225	—	198400	235000	300000	260
	3/V 21L4	**1517**	1.2	4279900	96	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**1800**	0.97	4261500	80	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**1890**	0.93	4279900	79	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**2275**	0.77	4279900	65	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**2520**	0.69	4279900	60	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**2700**	0.65	4279900	55	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**3600**	0.49	4279900	42	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**3780**	0.46	4279900	41	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**4550**	0.38	4279900	34	132 to 225	—	204700	242600	309600	260
	3/V 21L4	**5040**	0.35	4279900	33	132 to 225	—	204700	242600	309600	260

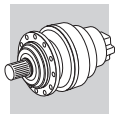


24.0 - SPEED REDUCER RATING CHARTS: 3/A (bev. helical/planetary)

Reading the rating chart



1	Gearbox max. transmissible torque
2	Gearbox drive speed
3	Frame size of combined planetary+bevel helical unit
4	Gear ratio
5	Gearbox output speed
6	Gearbox rated output torque
7	Gearbox rated input power
8	Frame size of available IEC motor
9	Frame size of available NEMA motor
10	Permissible overhung load on output shaft
11	Page showing installation drawings and dimensions. Gearmotor overall dimensions refer to matches with BONFIGLIOLI motors only

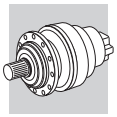


3/A□ L

3/A 00 L2

5,500 in•lbs

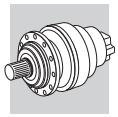
n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	3/A 00 L2	19.1	91	3890	6.2	63 to 112	56C to 180TC	2250	2460	490	138
	3/A 00 L2	23.4	75	4770	6.2	63 to 112	56C to 180TC	2390	2620	530	138
	3/A 00 L2	31.7	55	5350	5.1	63 to 112	56C to 180TC	2610	2860	580	138
	3/A 00 L2	39.6	44	4530	3.5	63 to 112	56C to 180TC	2790	3070	630	138
	3/A 00 L2	41.5	42	5350	3.9	63 to 112	56C to 180TC	2840	3100	640	138
	3/A 00 L2	51.8	34	4530	2.7	63 to 112	56C to 180TC	3020	3310	690	138
	3/A 00 L2	61.2	28.6	5350	2.7	63 to 112	56C to 180TC	3180	3500	730	138
	3/A 00 L2	71.0	24.7	5350	2.3	63 to 112	56C to 180TC	3340	3650	760	138
	3/A 00 L2	80.2	21.8	5350	2.0	63 to 112	56C to 180TC	3440	3780	790	138
	3/A 00 L2	88.6	19.8	4530	1.6	63 to 112	56C to 180TC	3550	3920	820	138
	3/A 00 L2	100	17.5	4530	1.4	63 to 112	56C to 180TC	3680	4050	860	138
	3/A 00 L2	107	16.3	5350	1.5	63 to 112	56C to 180TC	3760	4130	880	138
	3/A 00 L2	134	13.1	4530	1.0	63 to 112	56C to 180TC	4020	4410	940	138
	3/A 00 L2	171	10.2	4530	0.81	63 to 112	56C to 180TC	4340	4760	1020	138
	3/A 00 L2	203	8.6	5350	0.80	63 to 112	56C to 180TC	4570	4990	1080	138
	3/A 00 L2	219	8.0	5100	0.71	63 to 112	56C to 180TC	4680	5120	1110	138
	3/A 00 L2	253	6.9	4530	0.55	63 to 112	56C to 180TC	4860	5330	1170	138
	3/A 00 L2	296	5.9	5400	0.56	63 to 112	56C to 180TC	5100	5600	1230	138
	3/A 00 L2	319	5.5	3610	0.34	63-71	56C	5230	5730	1260	138
	3/A 00 L2	369	4.7	4570	0.38	63 to 112	56C to 180TC	5470	5990	1320	138
	3/A 00 L2	390	4.5	4430	0.35	63-71	56C	5540	6100	1350	138
	3/A 00 L2	441	4.0	5790	0.40	63-71	56C	5760	6310	1400	138
	3/A 00 L2	550	3.2	4900	0.27	63-71	56C	6150	6750	1510	138
	3/A 00 L2	660	2.7	5050	0.23	63-71	56C	6490	7120	1600	138



3/A 01 L2

11,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	3/A 01 L2	18.8	93	5840	9.5	80 to 112	56C to 180TC	2240	2450	490	146
	3/A 01 L2	23.0	76	7140	9.5	80 to 112	56C to 180TC	2380	2600	520	146
	3/A 01 L2	31.2	56	9670	9.5	80 to 112	56C to 180TC	2600	2860	580	146
	3/A 01 L2	35.8	49	6260	5.3	80 to 112	140TC-180TC	2710	2970	610	146
	3/A 01 L2	40.1	44	7140	5.4	63 to 112	56C to 180TC	2810	3070	630	146
	3/A 01 L2	43.9	40	7650	5.3	80 to 112	140TC-180TC	2890	3150	650	146
	3/A 01 L2	49.1	36	6260	3.9	63 to 112	56C to 180TC	2970	3260	680	146
	3/A 01 L2	54.2	32	9670	5.4	63 to 112	56C to 180TC	3070	3360	700	146
	3/A 01 L2	59.4	29.4	10400	5.3	80 to 112	140TC-180TC	3150	3470	720	146
	3/A 01 L2	74.2	23.6	9460	3.9	80 to 112	140TC-180TC	3360	3710	770	146
	3/A 01 L2	81.3	21.5	10700	4.0	63 to 112	56C to 180TC	3470	3810	800	146
	3/A 01 L2	102	17.2	9460	2.8	63 to 112	56C to 180TC	3710	4070	860	146
	3/A 01 L2	133	13.1	10700	2.4	63 to 112	56C to 180TC	4020	4410	940	146
	3/A 01 L2	166	10.5	9460	1.7	63 to 112	56C to 180TC	4310	4700	1010	146
	3/A 01 L2	184	9.5	8510	1.4	63 to 112	56C to 180TC	4440	4860	1050	146
	3/A 01 L2	204	8.6	10700	1.6	63 to 112	56C to 180TC	4570	5020	1090	146
	3/A 01 L2	220	8.0	6810	0.94	63 to 112	56C to 180TC	4680	5120	1110	146
	3/A 01 L2	255	6.9	9460	1.1	63 to 112	56C to 180TC	4890	5360	1170	146
	3/A 01 L2	269	6.5	8340	0.94	63 to 112	56C to 180TC	4970	5440	1190	146
	3/A 01 L2	311	5.6	9460	0.93	63 to 112	56C to 180TC	5180	5700	1250	146
	3/A 01 L2	364	4.8	11100	0.93	63 to 112	56C to 180TC	5440	5970	1320	146
	3/A 01 L2	393	4.5	6810	0.53	63-71	56C	5570	6100	1350	146
	3/A 01 L2	454	3.9	9460	0.63	63 to 112	56C to 180TC	5810	6390	1420	146
	3/A 01 L2	532	3.3	9210	0.53	63-71	56C	6100	6670	1500	146
	3/A 01 L2	665	2.6	9460	0.43	63-71	56C	6520	7150	1610	146

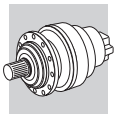


3/A□ L

3/A 03 L2

17,500 in•lbs

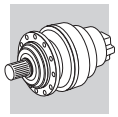
n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/A 03 L2**	**19.4**	90	8630	13.5	80 to 112	140TC-180TC	4650	5390	1490	154
	3/A 03 L2	**23.0**	76	10200	13.5	80 to 112	140TC-180TC	4890	5680	1570	154
	3/A 03 L2	**28.8**	61	12800	13.5	80 to 112	140TC-180TC	5260	6070	1700	154
	3/A 03 L2	**33.5**	52	14800	13.5	80 to 112	140TC-180TC	5490	6330	1780	154
	3/A 03 L2	**40.5**	43	13600	10.2	80 to 112	140TC-180TC	5810	6730	1900	154
	3/A 03 L2	**43.4**	40	13900	9.7	80 to 112	140TC-180TC	5940	6860	1950	154
	3/A 03 L2	**52.5**	33	13600	7.9	80 to 112	140TC-180TC	6280	7250	2070	154
	3/A 03 L2	**62.9**	27.8	12800	6.2	63 to 112	56C to 180TC	6620	7670	2200	154
	3/A 03 L2	**73.2**	23.9	14800	6.2	63 to 112	56C to 180TC	6940	8020	2310	154
	3/A 03 L2	**88.5**	19.8	13600	4.7	63 to 112	56C to 180TC	7360	8490	2470	154
	3/A 03 L2	**96.9**	18.1	13900	4.4	63 to 112	56C to 180TC	7540	8720	2540	154
	3/A 03 L2	**122**	14.4	17500	4.4	63 to 112	56C to 180TC	8070	9360	2730	154
	3/A 03 L2	**141**	12.4	14800	3.2	63 to 112	56C to 180TC	8460	9780	2890	154
	3/A 03 L2	**156**	11.2	17500	3.4	63 to 112	56C to 180TC	8720	10100	2990	154
	3/A 03 L2	**182**	9.6	14800	2.5	63 to 112	56C to 180TC	9120	10500	3150	154
	3/A 03 L2	**220**	8.0	13600	1.9	63 to 112	56C to 180TC	9640	11200	3330	154
	3/A 03 L2	**269**	6.5	14800	1.7	63 to 112	56C to 180TC	10200	11900	3590	154
	3/A 03 L2	**326**	5.4	13600	1.3	63 to 112	56C to 180TC	10900	12600	3820	154
	3/A 03 L2	**352**	5.0	16600	1.4	63 to 112	56C to 180TC	11100	12800	3900	154
	3/A 03 L2	**409**	4.3	15400	1.1	63 to 112	56C to 180TC	11600	13500	4100	154
	3/A 03 L2	**495**	3.5	14100	0.87	63 to 112	56C to 180TC	12300	14200	4390	154
	3/A 03 L2	**574**	3.1	14400	0.76	63 to 112	56C to 180TC	12900	14900	4590	154
	3/A 03 L2	**605**	2.9	14800	0.75	63 to 112	56C to 180TC	13100	15100	4670	154
	3/A 03 L2	**731**	2.4	14900	0.62	63 to 112	56C to 180TC	13800	16000	4980	154



3/A 05 L2

35,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/A 05 L2**	**18.7**	93	15800	26	80 to 132	140TC to 210TC	4600	5330	1470	162
	3/A 05 L2	**22.1**	79	18700	26	80 to 132	140TC to 210TC	4840	5600	1550	162
	3/A 05 L2	**27.7**	63	23400	26	80 to 132	140TC to 210TC	5180	5990	1670	162
	3/A 05 L2	**32.2**	54	27200	26	80 to 132	140TC to 210TC	5410	6280	1760	162
	3/A 05 L2	**39.0**	45	25500	19.9	80 to 132	140TC to 210TC	5760	6650	1880	162
	3/A 05 L2	**44.0**	40	27200	18.8	80 to 132	140TC to 210TC	5970	6890	1960	162
	3/A 05 L2	**53.3**	33	25500	14.6	80 to 132	140TC to 210TC	6310	7310	2080	162
	3/A 05 L2	**57.0**	30.7	27200	14.5	80 to 132	140TC to 210TC	6440	7440	2130	162
	3/A 05 L2	**62.6**	27.9	27200	13.2	80 to 132	140TC to 210TC	6620	7650	2200	162
	3/A 05 L2	**72.5**	24.1	27200	11.4	63 to 132	56C to 210TC	6910	7990	2310	162
	3/A 05 L2	**75.8**	23.1	25500	10.3	63 to 132	140TC to 210TC	7020	8090	2340	162
	3/A 05 L2	**85.6**	20.5	29600	10.5	80 to 132	140TC to 210TC	7280	8410	2440	162
	3/A 05 L2	**104**	16.9	25500	7.5	80 to 132	140TC to 210TC	7700	8910	2610	162
	3/A 05 L2	**121**	14.5	29000	7.3	63 to 132	56C to 210TC	8070	9330	2730	162
	3/A 05 L2	**141**	12.4	29600	6.4	63 to 132	56C to 210TC	8440	9750	2890	162
	3/A 05 L2	**162**	10.8	23900	4.5	63 to 112	56C to 210TC	8800	10200	3020	162
	3/A 05 L2	**175**	10.0	29600	5.1	63 to 112	56C to 210TC	9010	10400	3100	162
	3/A 05 L2	**212**	8.2	25500	3.7	63 to 112	56C to 210TC	9540	11000	3300	162
	3/A 05 L2	**241**	7.3	35300	4.5	63 to 112	56C to 210TC	9910	11500	3430	162
	3/A 05 L2	**280**	6.3	29600	3.2	63 to 112	56C to 210TC	10400	12000	3610	162
	3/A 05 L2	**329**	5.3	29900	2.8	63 to 112	56C to 180TC	10900	12600	3820	162
	3/A 05 L2	**398**	4.4	25600	2.0	63 to 112	56C to 180TC	11500	13300	4080	162
	3/A 05 L2	**422**	4.1	34100	2.5	63 to 112	56C to 180TC	11700	13600	4150	162
	3/A 05 L2	**491**	3.6	31900	2.0	63 to 112	56C to 180TC	12300	14200	4360	162
	3/A 05 L2	**594**	2.9	27300	1.4	63 to 112	56C to 180TC	13000	15000	4640	162

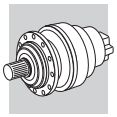


3/A□ L

3/A 06 L2

63,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/A 06 L2**	**27.7**	63	27300	30	80 to 180	140TC to 280TC	8170	9640	2440	170
	3/A 06 L2	**32.7**	53	32200	30	80 to 180	140TC to 280TC	8590	10100	2580	170
	3/A 06 L2	**34.9**	50	28700	25	80 to 180	140TC to 280TC	8780	10300	2630	170
	3/A 06 L2	**41.1**	43	40500	30	80 to 180	140TC to 280TC	9200	10900	2790	170
	3/A 06 L2	**47.2**	37	28700	19	80 to 180	140TC to 280TC	9590	11300	2920	170
	3/A 06 L2	**51.7**	34	42600	25	80 to 180	140TC to 280TC	9880	11600	3020	170
	3/A 06 L2	**55.7**	31	33900	18.6	80 to 180	140TC to 280TC	10100	11900	3070	170
	3/A 06 L2	**60.1**	29.1	49500	25	80 to 180	140TC to 280TC	10300	12200	3170	170
	3/A 06 L2	**69.9**	25.0	42600	18.6	80 to 180	140TC to 280TC	10800	12700	3330	170
	3/A 06 L2	**81.2**	21.5	49500	18.6	80 to 180	140TC to 280TC	11300	13300	3480	170
	3/A 06 L2	**88.5**	19.8	51100	17.6	80 to 180	140TC to 280TC	11600	13700	3590	170
	3/A 06 L2	**98.3**	17.8	45300	14.0	80 to 180	140TC to 280TC	12000	14100	3710	170
	3/A 06 L2	**112**	15.6	50900	14.3	80 to 180	140TC to 280TC	12500	14700	3900	170
	3/A 06 L2	**125**	14.1	45300	11.1	80 to 180	140TC to 280TC	12800	15100	4020	170
	3/A 06 L2	**141**	12.4	63800	14.3	80 to 180	140TC to 280TC	13300	15700	4210	170
	3/A 06 L2	**164**	10.7	53500	10.3	80 to 180	140TC to 280TC	13900	16400	4410	170
	3/A 06 L2	**190**	9.2	63800	10.6	80 to 180	140TC to 280TC	14600	17200	4640	170
	3/A 06 L2	**198**	8.8	45300	7.2	80 to 180	140TC to 280TC	14800	17400	4700	170
	3/A 06 L2	**221**	7.9	53500	7.6	80 to 180	140TC to 280TC	15200	18000	4880	170
	3/A 06 L2	**267**	6.6	45300	5.3	80 to 180	140TC to 280TC	16100	19000	5190	170
	3/A 06 L2	**276**	6.4	63900	7.3	63 to 180	56C to 280TC	16300	19200	5260	170
	3/A 06 L2	**321**	5.5	53600	5.3	63 to 180	56C to 280TC	17100	20100	5520	170
	3/A 06 L2	**388**	4.5	45500	3.7	63 to 180	56C to 280TC	18100	21300	5880	170
	3/A 06 L2	**435**	4.0	63900	4.6	63 to 180	56C to 280TC	18700	22000	6110	170
	3/A 06 L2	**505**	3.5	58200	3.6	63 to 180	56C to 280TC	19600	23000	6420	170
	3/A 06 L2	**555**	3.2	59200	3.4	63 to 180	56C to 280TC	20100	23700	6630	170
	3/A 06 L2	**611**	2.9	49400	2.5	63 to 180	56C to 280TC	20700	24400	6860	170
	3/A 06 L2	**671**	2.6	50300	2.4	63 to 180	56C to 280TC	21300	25100	7070	170



3/A 07 L2

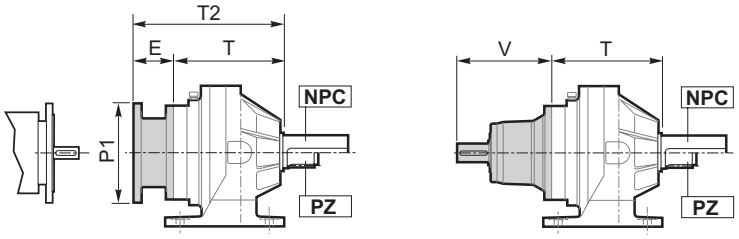
91,000 in•lbs

n_1 drive speed		i gear ratio	n_2 output speed	Tn_2 rated torque	Pn_1 rated power	IEC	NEMA	Rn_2 [lbs] Permissible overhung loads			
rpm		1:	rpm	in·lbs	HP	IEC input	NEMA input	NHC NPC	HZ PZ	FZ	
1750	**3/A 07 L2**	**27.1**	65	54700	62	132 to 180	210TC to 280TC	8780	11700	3120	178
	3/A 07 L2	**32.3**	54	65300	62	132 to 180	210TC to 280TC	9250	12300	3300	178
	3/A 07 L2	**41.5**	42	74000	54	132 to 180	210TC to 280TC	9960	13300	3590	178
	3/A 07 L2	**49.2**	36	71600	44	132 to 180	210TC to 280TC	10500	14000	3790	178
	3/A 07 L2	**57.3**	30.6	54700	29	80 to 180	140TC to 280TC	11000	14600	4000	178
	3/A 07 L2	**68.3**	25.6	65300	29	80 to 180	140TC to 280TC	11600	15400	4230	178
	3/A 07 L2	**87.7**	20.0	83800	29	80 to 180	140TC to 280TC	12500	16600	4620	178
	3/A 07 L2	**109**	16.1	74100	21	80 to 180	140TC to 280TC	13300	17700	4950	178
	3/A 07 L2	**130**	13.5	91400	22	80 to 180	140TC to 280TC	14000	18700	5260	178
	3/A 07 L2	**140**	12.5	91400	21	80 to 180	140TC to 280TC	14400	19100	5390	178
	3/A 07 L2	**155**	11.3	74100	15.0	80 to 180	140TC to 280TC	14800	19700	5570	178
	3/A 07 L2	**180**	9.7	86400	15.1	80 to 180	140TC to 280TC	15500	20600	5860	178
	3/A 07 L2	**198**	8.9	71600	11.4	80 to 180	140TC to 280TC	15900	21200	6040	178
	3/A 07 L2	**223**	7.8	74100	10.5	80 to 180	140TC to 280TC	16500	21900	6290	178
	3/A 07 L2	**241**	7.2	74100	9.6	80 to 180	140TC to 280TC	16900	22500	6450	178
	3/A 07 L2	**282**	6.2	71600	8.0	80 to 180	140TC to 280TC	17700	23500	6810	178
	3/A 07 L2	**341**	5.1	91300	8.4	80 to 180	140TC to 280TC	18800	24900	7250	178
	3/A 07 L2	**405**	4.3	74800	5.8	80 to 180	140TC to 280TC	19700	26300	7690	178
	3/A 07 L2	**439**	4.0	75700	5.4	80 to 180	140TC to 280TC	20200	26900	7890	178

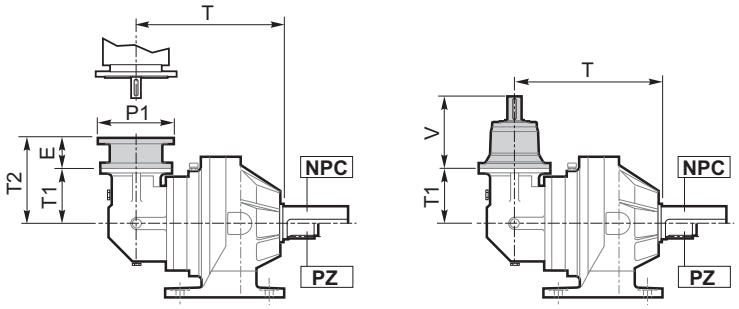
25.0 - INSTALLATION DRAWINGS

NEMA input | **Solid input shaft**

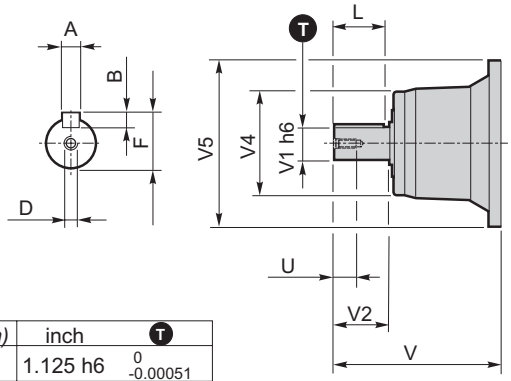
300L



300R

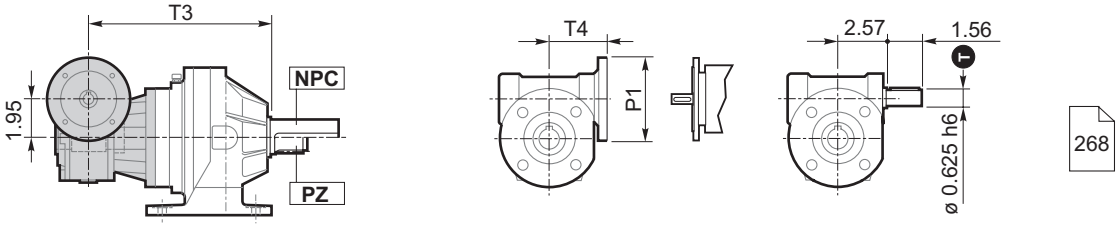


	300 L1, L2, L3, L4 300 R2, R3, R4	
	Solid input shaft	
	NV01A	NV01B
V	6.00	6.44
V1	1.125	1.625
V2	2.00	2.50
V4	4.72	4.72
V5	7.32	7.32
A	0.250	0.375
B	0.250	0.375
F	1.236	1.791
L	1.75	2.00
D	3/8 - 16UNC	1/2 - 13UNC
U	0.87	1.10
Lbs	13.2	15.4



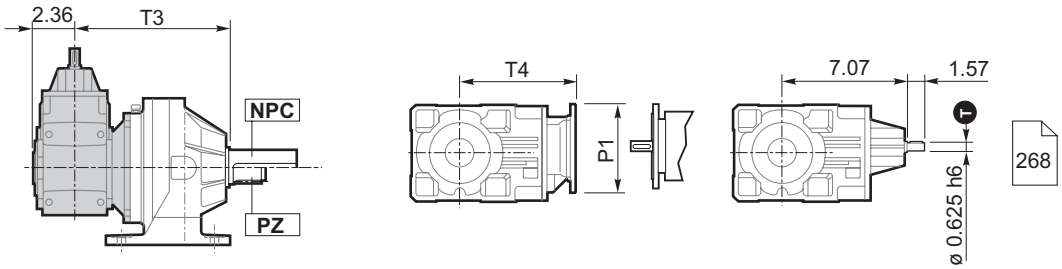
(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063

3/V 00L3



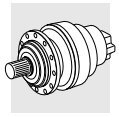
268

3/A 00L2

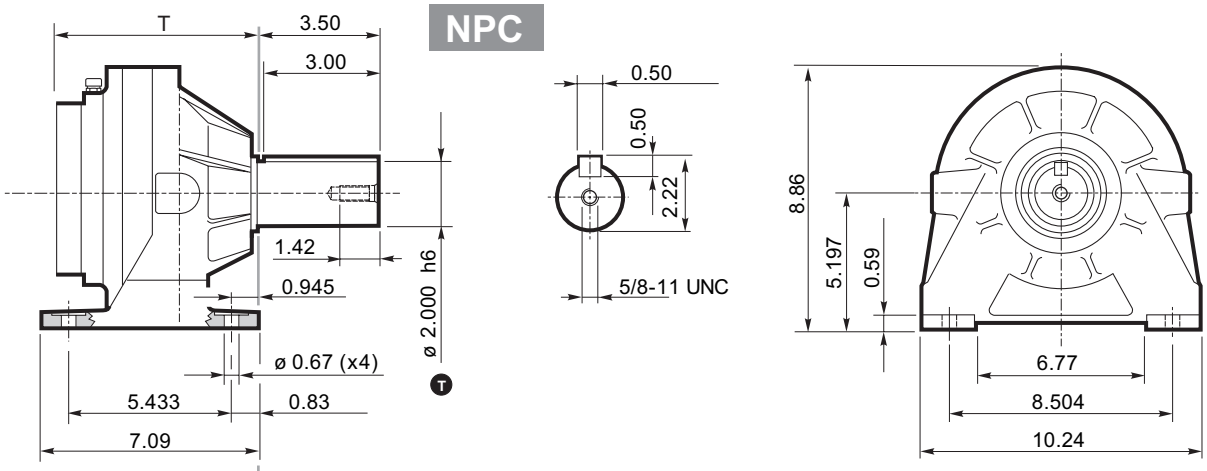


268

BONFIGLIOLI TRASMITAL



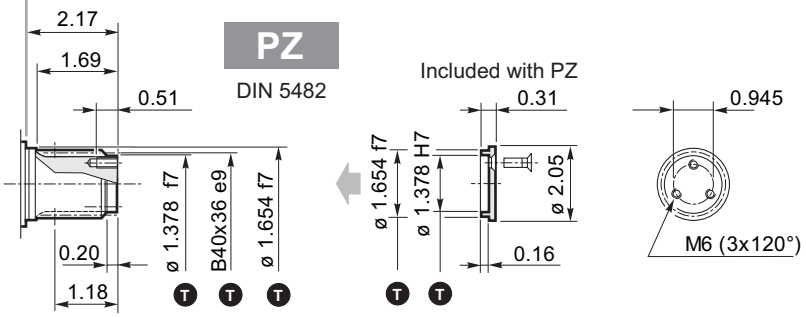
NPC



(mm)	inch	T
—	0.625 h6	0 -0.00043
—	0.750 h6	0 -0.00051
(35)	1.378 f7	-0.00098 -0.00197
(35)	1.378 H7	+0.00098 0
(42)	1.654 f7	-0.00098 -0.00197
—	2.000 h6	0 -0.00075
B40x36 e9		DIN 5482

PZ

DIN 5482

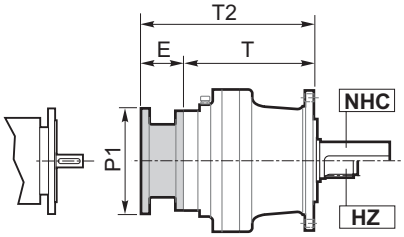


		300 L1	300 L2	300 L3	300 L4	300 R2	300 R3	300 R4
	T	4.77	6.85	8.94	11.03	8.39	10.47	12.56
	T1	—	—	—	—	4.80	4.80	4.80
	Lbs	50.7	59.5	68.4	77.2	81.6	90.4	99.2
NEMA Input								
	P1	E	T2						
N56C	9.84	4.51	9.27	11.36	13.45	15.53	9.31	9.31	9.31
N140TC	9.84	4.51	9.27	11.36	13.45	15.53	9.31	9.31	9.31
N180TC	8.82	5.22	9.98	12.07	14.16	16.24	10.02	10.02	10.02
N210TC	8.82	5.22	9.98	12.07	14.16	16.24	10.02	10.02	10.02
N250TC	8.82	5.22	9.98	12.07	14.16	16.24	10.02	10.02	10.02
N280TC	11.81	6.28	11.05	13.13	15.22	17.31	11.08	11.08	11.08

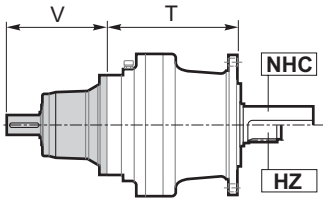
	3/V 00L3		3/A 00L2	
	T3			
	11.66		9.21	
Lbs	66.2		94.8	
	P1	T4	P1	T4
N56C	6.54	3.48	6.50	9.15
N140TC	—	—	6.50	9.15
N180TC	—	—	9.00	9.90
N210TC	—	—	—	—
N250TC	—	—	—	—
N280TC	—	—	—	—

300L

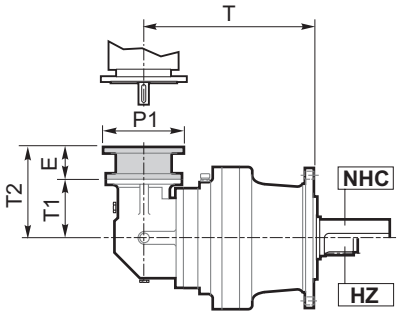
NEMA input

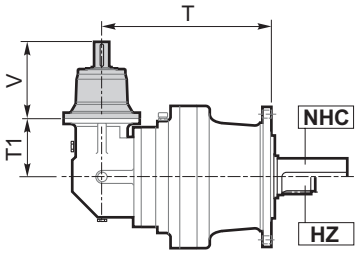


Solid input shaft

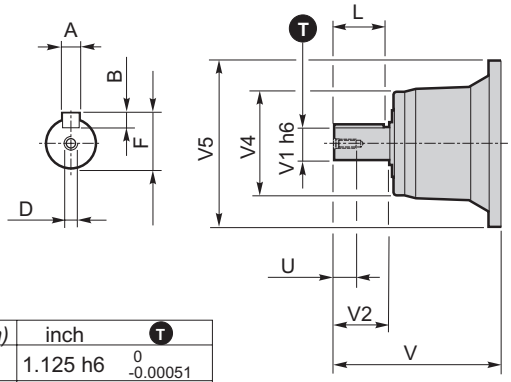


300R



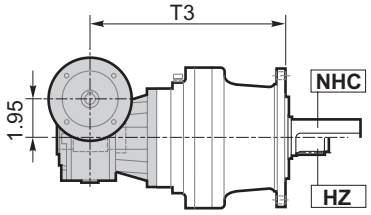


	300 L1, L2, L3, L4 300 R2, R3, R4	
	Solid input shaft	
	NV01A	NV01B
V	6.00	6.44
V1	1.125	1.625
V2	2.00	2.50
V4	4.72	4.72
V5	7.32	7.32
A	0.250	0.375
B	0.250	0.375
F	1.236	1.791
L	1.75	2.00
D	3/8 - 16UNC	1/2 - 13UNC
U	0.87	1.10
Lbs	13.2	15.4

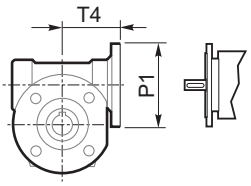


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063

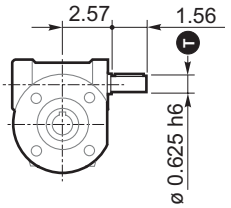
3/V 00L3



NEMA input



Solid input shaft



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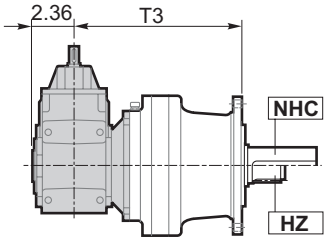
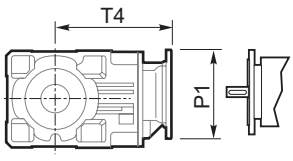
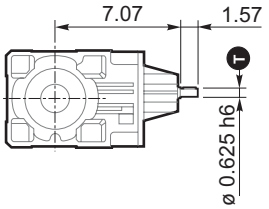
3/A 00L2



NEMA input

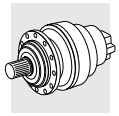


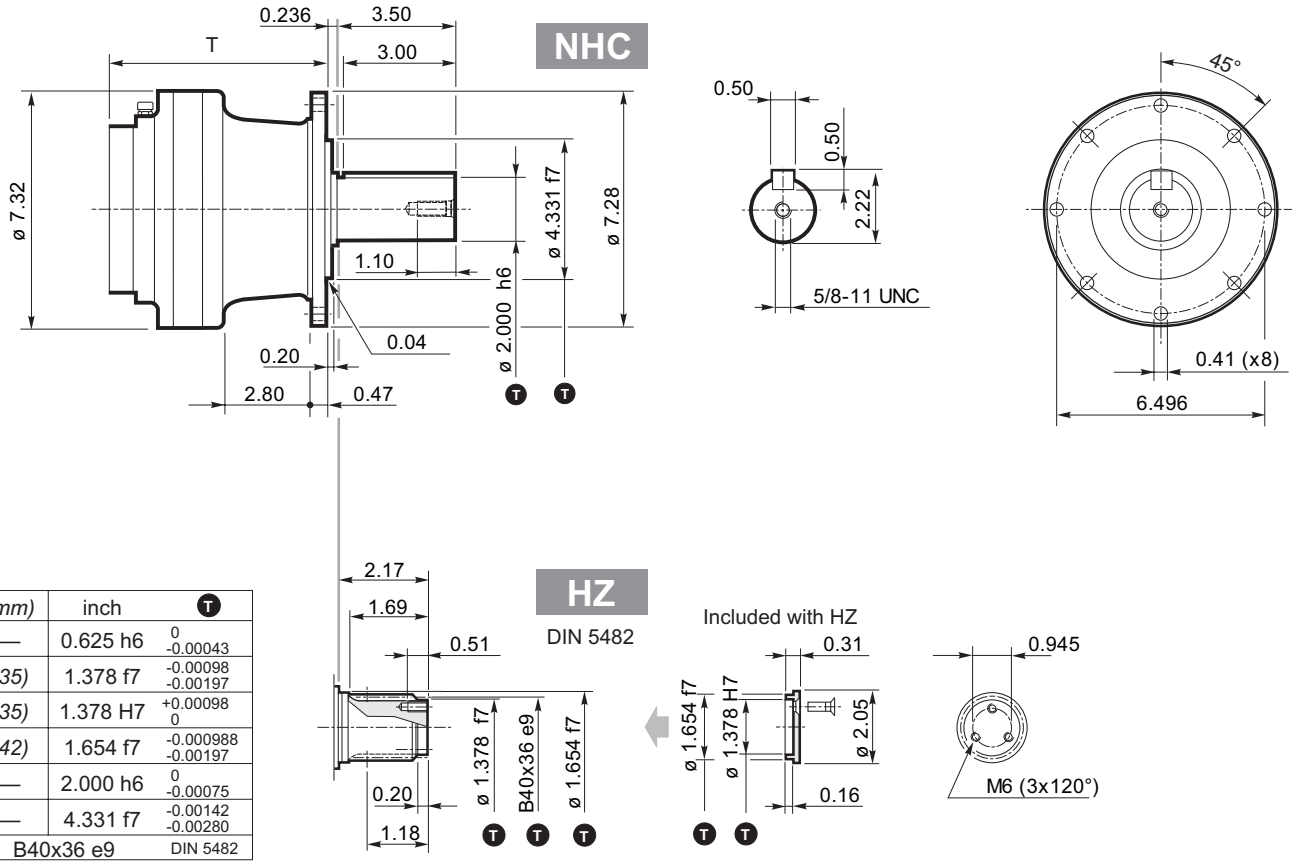
Solid input shaft



268

BONFIGLIOLI TRASMITAL





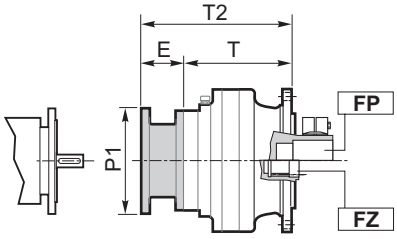
(mm)	inch	T
—	0.625 h6	0 -0.00043
(35)	1.378 f7	-0.00098 -0.00197
(35)	1.378 H7	+0.00098 0
(42)	1.654 f7	-0.000988 -0.00197
—	2.000 h6	0 -0.00075
—	4.331 f7	-0.00142 -0.00280
B40x36 e9		DIN 5482

		300 L1	300 L2	300 L3	300 L4	300 R2	300 R3	300 R4
	T	4.53	6.61	8.70	10.79	8.15	10.24	12.32
	T1	—	—	—	—	4.80	4.80	4.80
	Lbs	44.1	52.9	61.7	70.6	75.0	83.8	92.6
NEMA Input								
	P1	**E**	**T2**						
N56C	9.84	4.51	9.04	11.12	13.21	15.30	9.31	9.31	9.31
N140TC	9.84	4.51	9.04	11.12	13.21	15.30	9.31	9.31	9.31
N180TC	8.82	5.22	9.74	11.83	13.92	16.00	10.02	10.02	10.02
N210TC	8.82	5.22	9.74	11.83	13.92	16.00	10.02	10.02	10.02
N250TC	8.82	5.22	9.74	11.83	13.92	16.00	10.02	10.02	10.02
N280TC	11.81	6.28	10.81	12.89	14.98	17.07	11.08	11.08	11.08

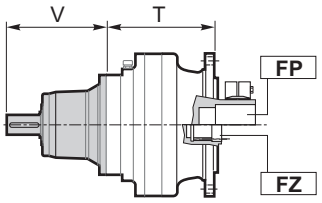
	3/V 00L3		3/A 00L2	
	T3			
	11.42		8.98	
Lbs	59.5		88.2	
	P1	T4	P1	T4
	6.54	3.48	6.50	9.15
	—	—	6.50	9.15
	—	—	9.00	9.90
	—	—	—	—
	—	—	—	—
	—	—	—	—

300L

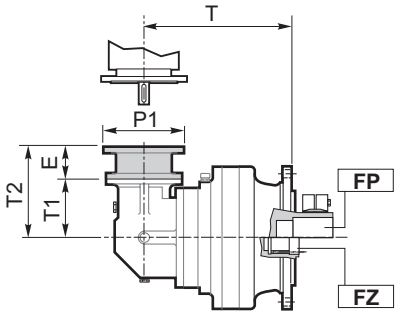
NEMA input

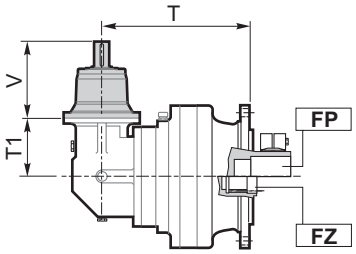


Solid input shaft

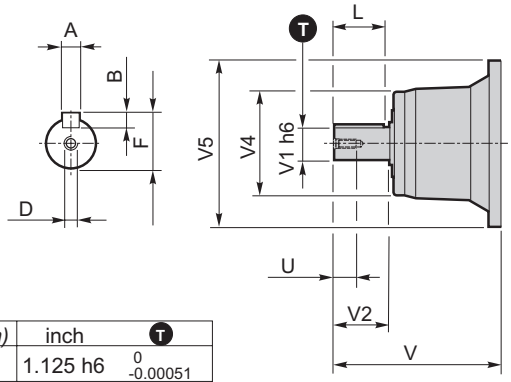


300R



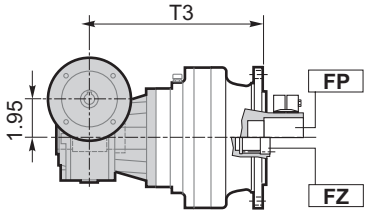


	300 L1, L2, L3, L4 300 R2, R3, R4 Solid input shaft	
	NV01A	NV01B
V	6.00	6.44
V1	1.125	1.625
V2	2.00	2.50
V4	4.72	4.72
V5	7.32	7.32
A	0.250	0.375
B	0.250	0.375
F	1.236	1.791
L	1.75	2.00
D	3/8 - 16UNC	1/2 - 13UNC
U	0.87	1.10
Lbs	13.2	15.4

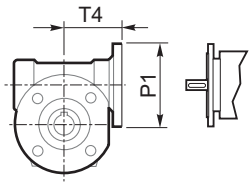


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063

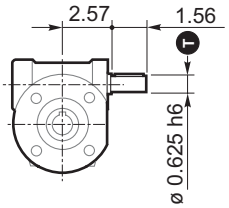
3/V 00L3



NEMA input

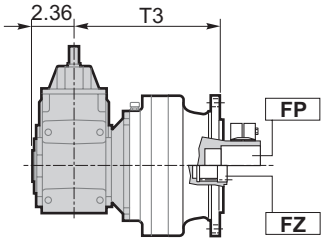


Solid input shaft

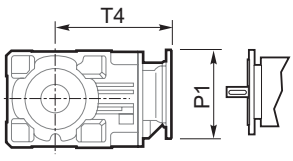


268

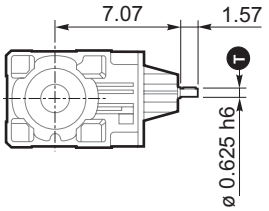
3/A 00L2



NEMA input



Solid input shaft



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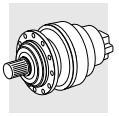
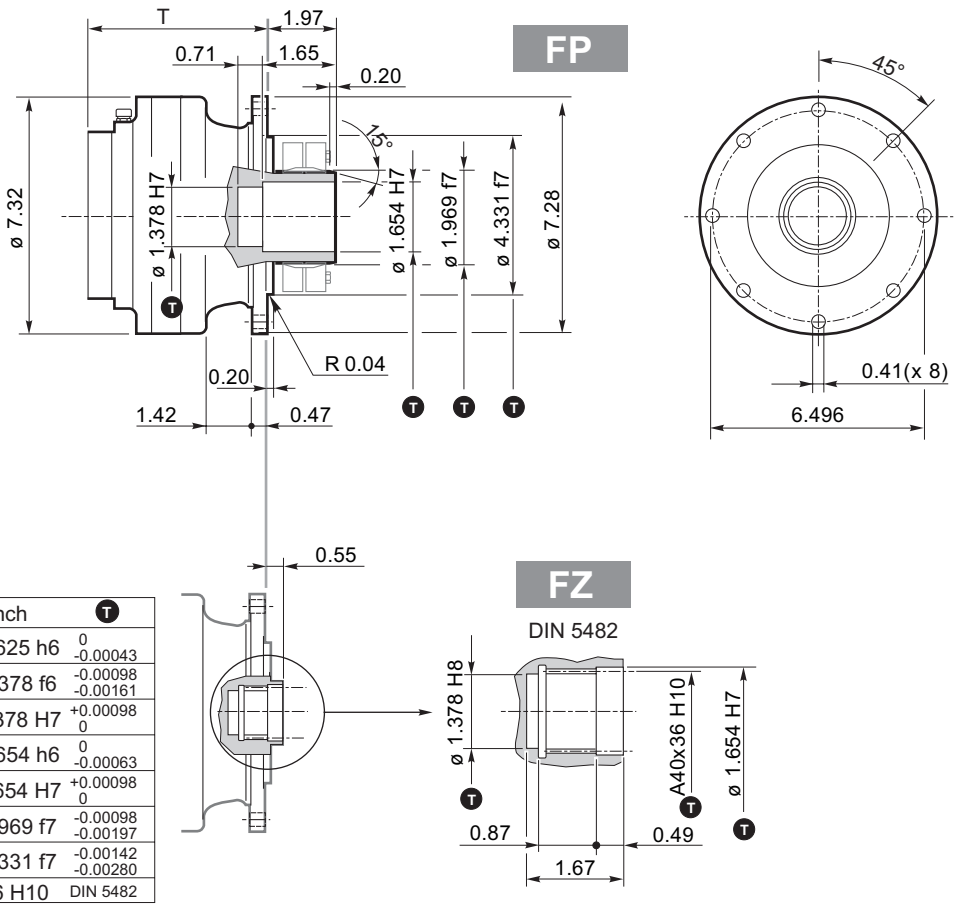
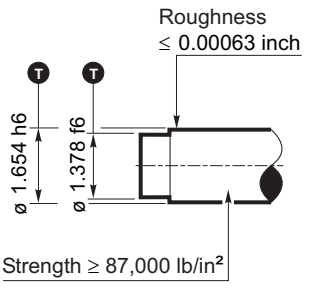
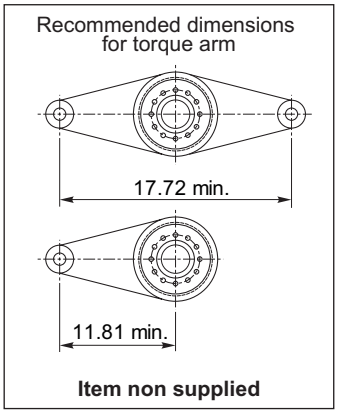
BONFIGLIOLI TRASMITAL



FP T_{2max} = 10,600 in.lbs





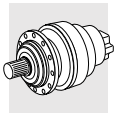


(mm)	inch	Ⓣ
—	0.625 h6	0 -0.00043
(35)	1.378 f6	-0.00098 -0.00161
(35)	1.378 H7	+0.00098 0
(42)	1.654 h6	0 -0.00063
(42)	1.654 H7	+0.00098 0
(50)	1.969 f7	-0.00098 -0.00197
(110)	4.331 f7	-0.00142 -0.00280
A40x36 H10	DIN 5482	

		300 L1	300 L2	300 L3	300 L4	300 R2	300 R3	300 R4
	T	3.15	5.24	7.32	9.41	6.77	8.86	10.94
	T1	—	—	—	—	4.80	4.80	4.80
	Lbs	35.3	44.1	52.9	61.7	66.2	75.0	83.8

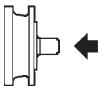
	3/V 00L3	3/A 00L2
	T3	
	10.04	7.60
Lbs	66.2	94.8

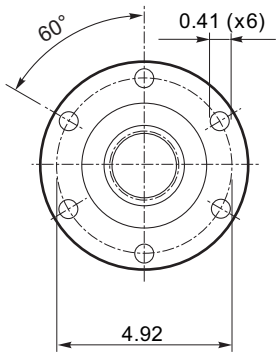
NEMA Input													
	P1	E	T2							P1	T4	P1	T4
N56C	9.84	4.51	7.66	9.74	11.83	13.92	9.31	9.31	9.31	6.54	3.48	6.50	9.15
N140TC	9.84	4.51	7.66	9.74	11.83	13.92	9.31	9.31	9.31	—	—	6.50	9.15
N180TC	8.82	5.22	8.37	10.45	12.54	14.63	10.02	10.02	10.02	—	—	9.00	9.90
N210TC	8.82	5.22	8.37	10.45	12.54	14.63	10.02	10.02	10.02	—	—	—	—
N250TC	8.82	5.22	8.37	10.45	12.54	14.63	10.02	10.02	10.02	—	—	—	—
N280TC	11.81	6.28	9.43	11.52	13.60	15.69	11.08	11.08	11.08	—	—	—	—



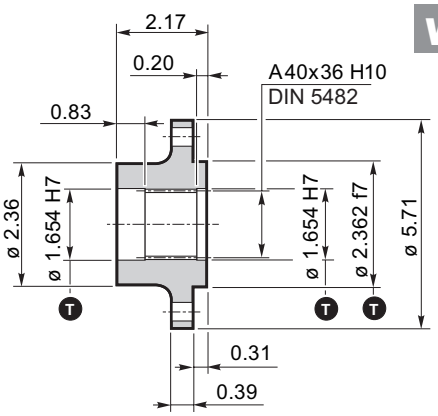
300

Flange





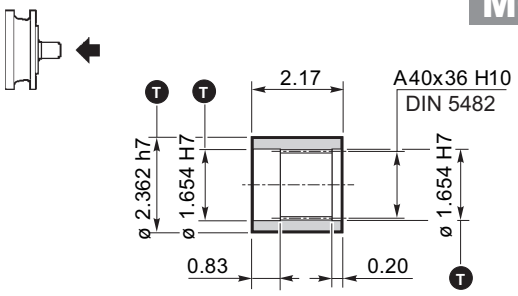
W0A



Material : Steel AISI 1040

Sleeve coupling

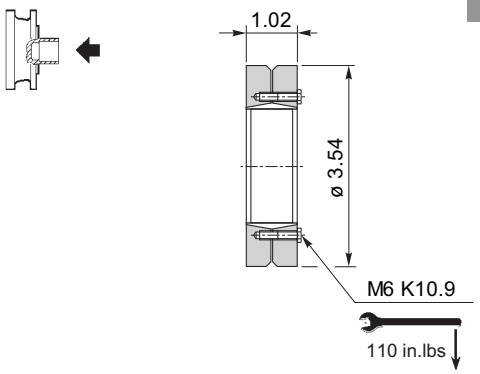
M0A



Material : Steel SAE 8620

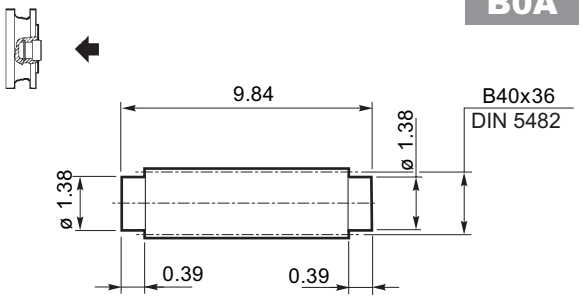
Shrink disc

G0A



Splined bar

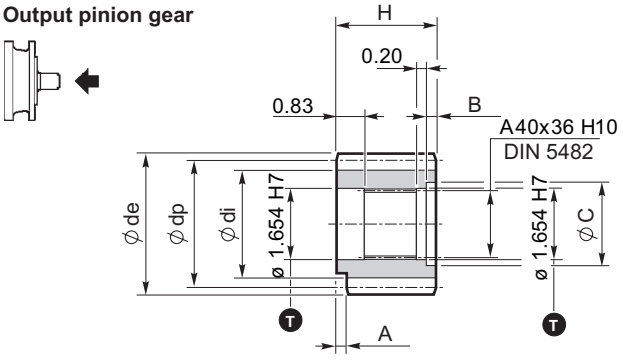
B0A



Case hardening Steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear

P...



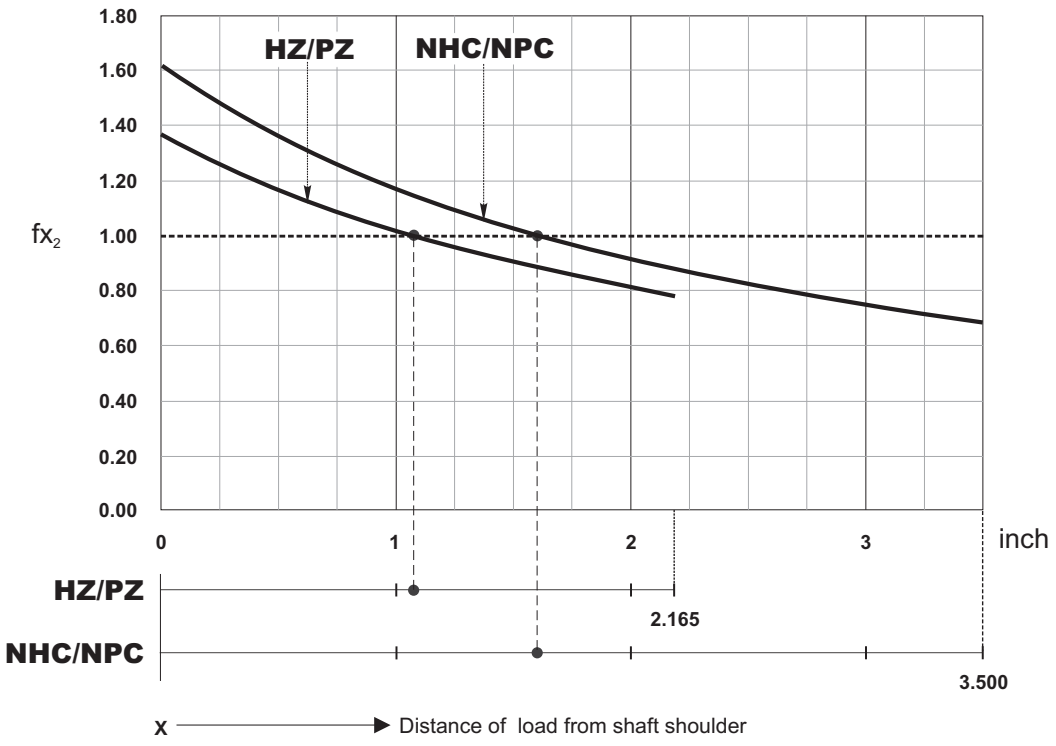
Code	m	z	x	dp	di	de	H	A	B	C	☆
PBE	4.5	14	0.507	63	56	75.5	55	0	0	0	☐
PCE	5	14	0.500	70	62.5	84.8	65	0	10	53	☐
PDC	6	12	0.250	72	61	84.8	59	14	4	54	☐
PDE	6	14	0.500	84	73	99.6	65	0	10	54	☐
⚠ Dimensions of pinion gears are in mm											

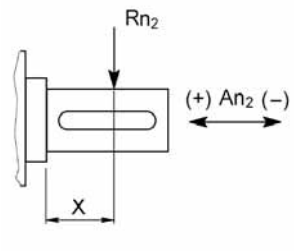
☆	Material
☐	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m	= module
z	= number of teeth
x	= addendum modification
dp	= generated pitch diameter
di	= root diameter
de	= outside diameter

(mm)	inch	T
(42)	1.654 H7	+0.00098 0
(60)	2.362 f7	-0.00118 -0.00236
(60)	2.362 h7	0 -0.00118

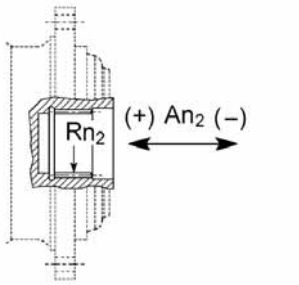
Load application factor for calculation of admissible overhung load on output shaft





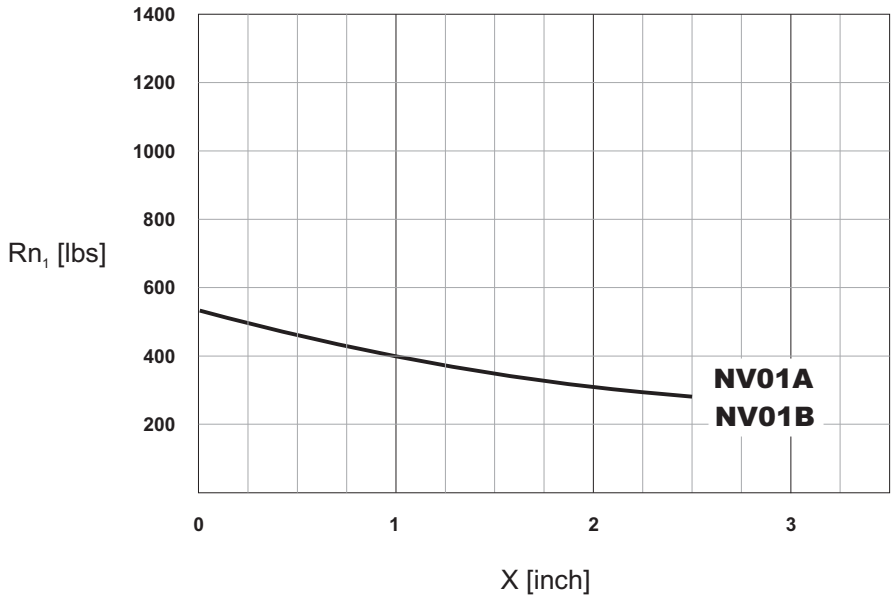
$R_{x2} = Rn_2 \cdot fx_2$

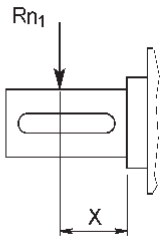
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

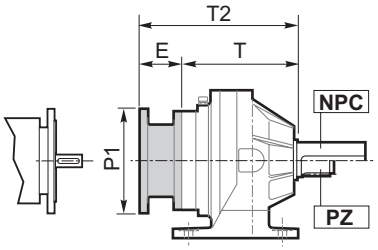
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).

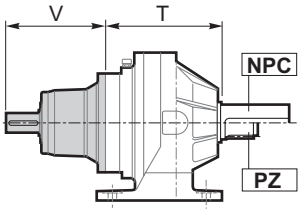




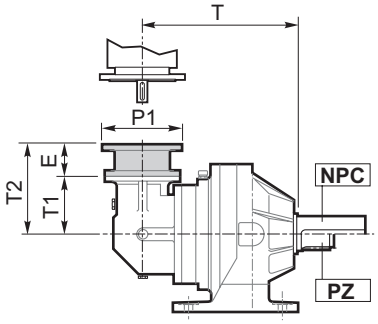
NEMA input | Solid input shaft

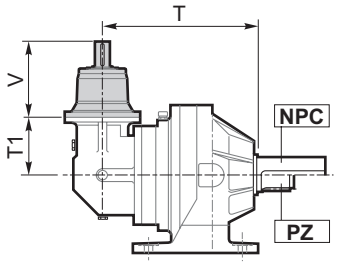
301L



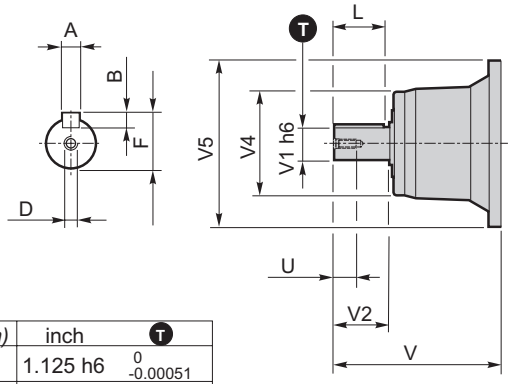


301R



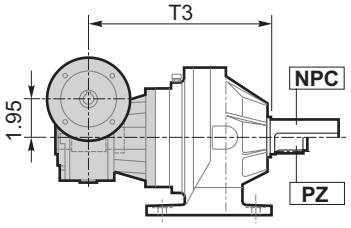


	301 L1, L2, L3, L4 301 R2, R3, R4 Solid input shaft	
	NV01A	NV01B
V	6.00	6.44
V1	1.125	1.625
V2	2.00	2.50
V4	4.72	4.72
V5	7.32	7.32
A	0.250	0.375
B	0.250	0.375
F	1.236	1.791
L	1.75	2.00
D	3/8 - 16UNC	1/2 - 13UNC
U	0.87	1.10
Lbs	13.2	15.4

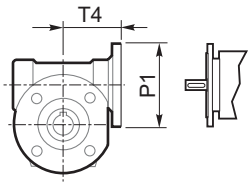


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063

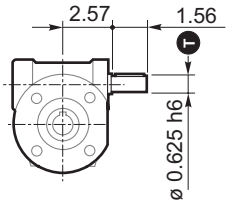
3/V 01L3



NEMA input



Solid input shaft



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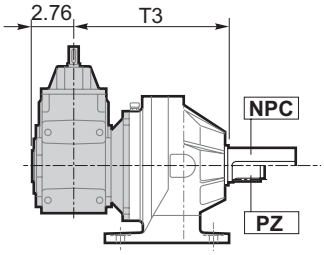
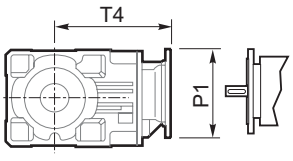
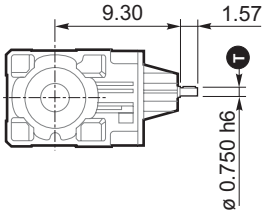
3/A 01L2



NEMA input



Solid input shaft



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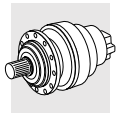
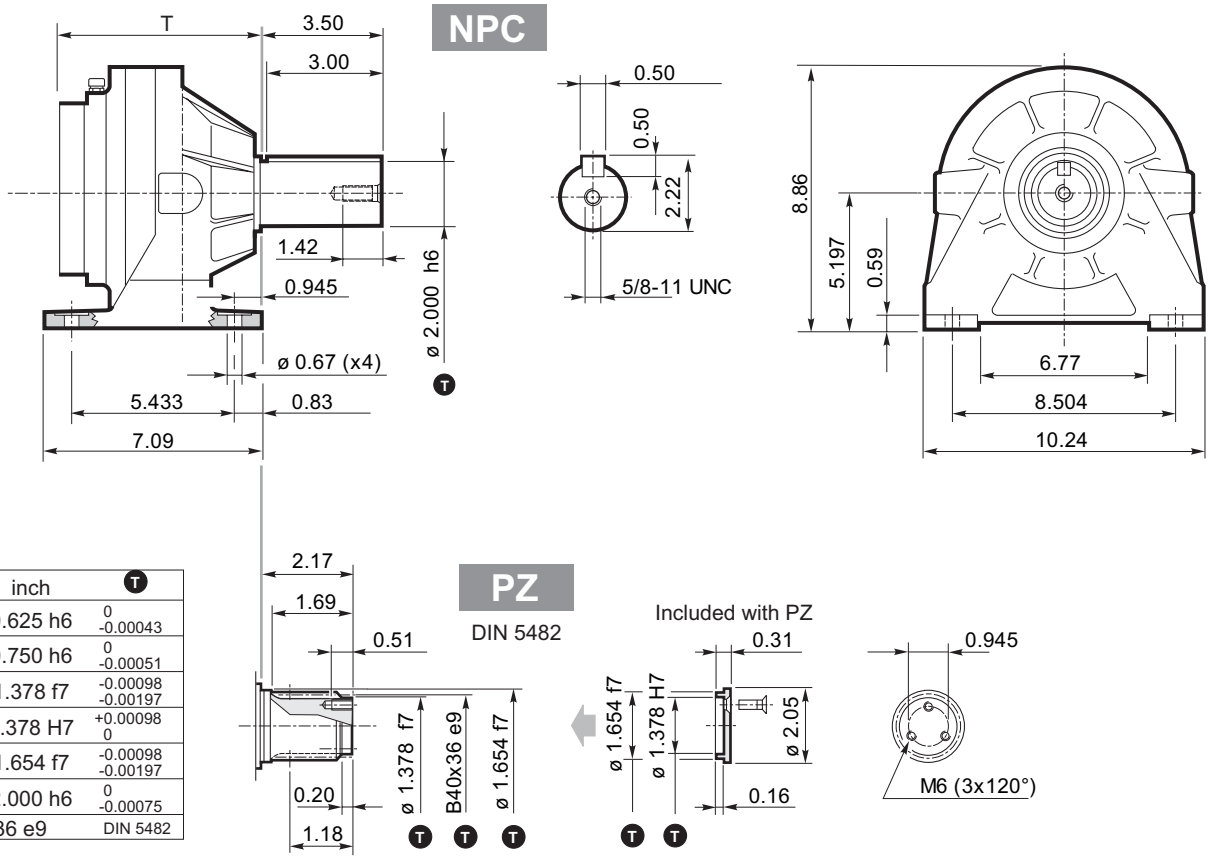
BONFIGLIOLI TRASMITAL





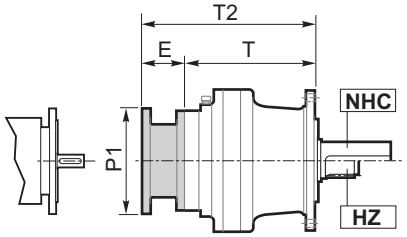
(mm)	inch	T
—	0.625 h6	0 -0.00043
—	0.750 h6	0 -0.00051
(35)	1.378 f7	-0.00098 -0.00197
(35)	1.378 H7	+0.00098 0
(42)	1.654 f7	-0.00098 -0.00197
—	2.000 h6	0 -0.00075
B40x36 e9		DIN 5482

		301 L1	301 L2	301 L3	301 L4	301 R2	301 R3	301 R4
	T	5.20	7.28	9.37	11.46	8.86	10.94	13.03
	T1	—	—	—	—	4.80	4.80	4.80
	Lbs	57.3	66.2	75.0	83.8	92.6	101.4	110.3
NEMA Input								
	P1	**E**	**T2**						
N56C	9.84	4.51	9.70	11.79	13.88	15.96	9.31	9.31	9.31
N140TC	9.84	4.51	9.70	11.79	13.88	15.96	9.31	9.31	9.31
N180TC	8.82	5.22	10.41	12.50	14.59	16.67	10.02	10.02	10.02
N210TC	8.82	5.22	10.41	12.50	14.59	16.67	10.02	10.02	10.02
N250TC	8.82	5.22	10.41	12.50	14.59	16.67	10.02	10.02	10.02
N280TC	11.81	6.28	11.48	13.56	15.65	17.74	11.08	11.08	11.08

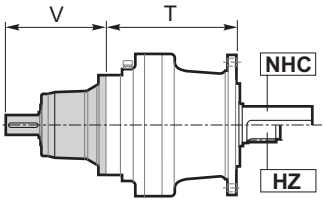
	3/V 01L3		3/A 01L2	
	T3			
	12.13		8.19	
Lbs	77.2		101.4	
	P1	T4	P1	T4
	6.54	3.48	6.50	9.69
	—	—	6.50	9.69
	—	—	9.00	10.43
	—	—	—	—
	—	—	—	—
	—	—	—	—

301L

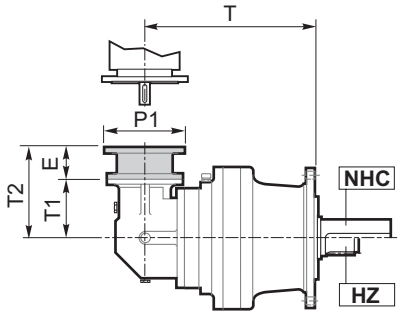
NEMA input

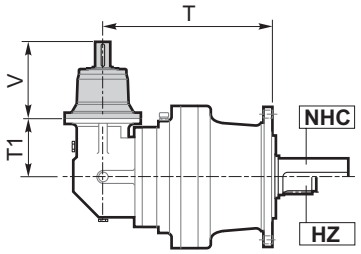


Solid input shaft

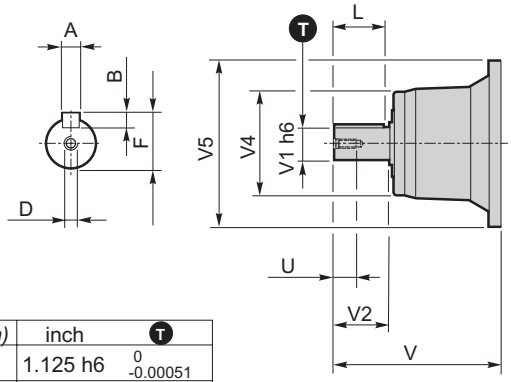


301R



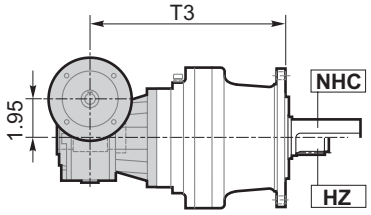


	301 L1, L2, L3, L4 301 R2, R3, R4 Solid input shaft	
	NV01A	NV01B
V	6.00	6.44
V1	1.125	1.625
V2	2.00	2.50
V4	4.72	4.72
V5	7.32	7.32
A	0.250	0.375
B	0.250	0.375
F	1.236	1.791
L	1.75	2.00
D	3/8 - 16UNC	1/2 - 13UNC
U	0.87	1.10
Lbs	13.2	15.4

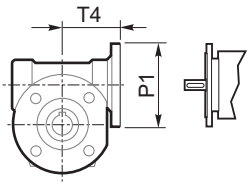


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063

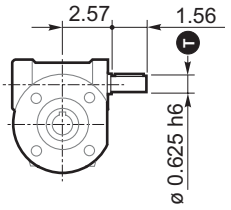
3/V 01L3



NEMA input

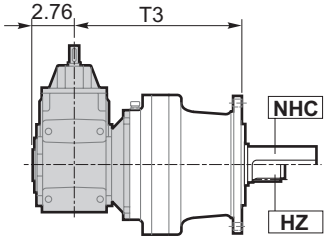


Solid input shaft

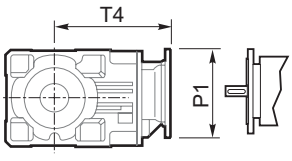


268

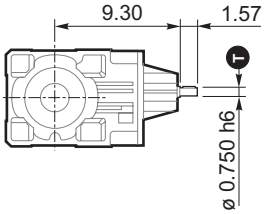
3/A 01L2



NEMA input



Solid input shaft



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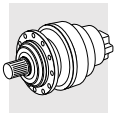
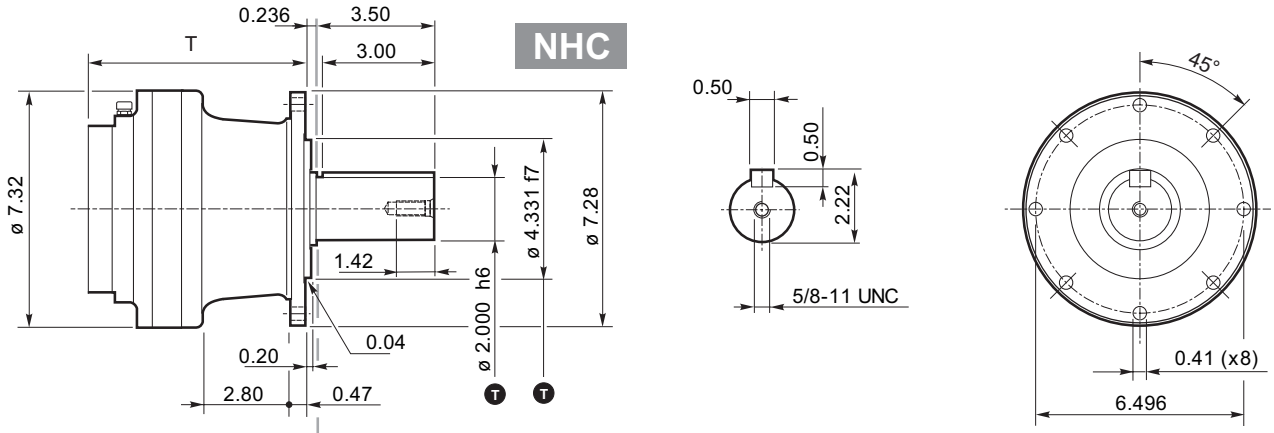
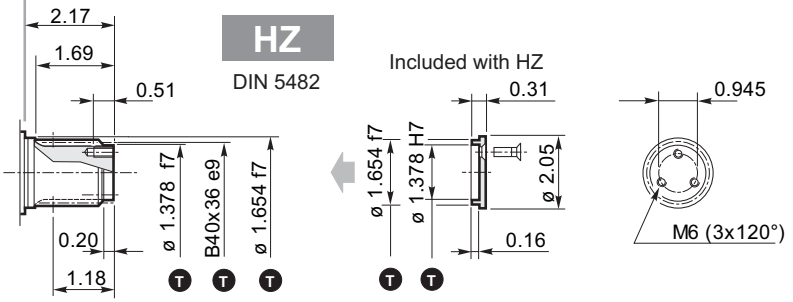






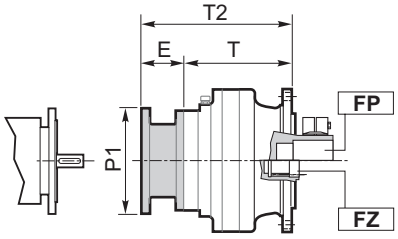
(mm)	inch	T
—	0.625 h6	0 -0.00043
—	0.750 h6	0 -0.00051
(35)	1.378 f7	-0.00098 -0.00197
(35)	1.378 H7	+0.00098 0
(42)	1.654 f7	-0.000988 -0.00197
—	2.000 h6	0 -0.00075
—	4.331 f7	-0.00142 -0.00280
B40x36 e9		DIN 5482

		301 L1	301 L2	301 L3	301 L4	301 R2	301 R3	301 R4
	T	4.96	6.93	9.13	11.22	8.62	10.71	12.80
	T1	—	—	—	—	4.80	4.80	4.80
	Lbs	50.7	59.5	68.4	77.2	81.6	90.4	99.2
NEMA Input								
	P1	**E**	**T2**						
N56C	9.84	4.51	9.47	11.44	13.64	15.73	9.31	9.31	9.31
N140TC	9.84	4.51	9.47	11.44	13.64	15.73	9.31	9.31	9.31
N180TC	8.82	5.22	10.18	12.15	14.35	16.44	10.02	10.02	10.02
N210TC	8.82	5.22	10.18	12.15	14.35	16.44	10.02	10.02	10.02
N250TC	8.82	5.22	10.18	12.15	14.35	16.44	10.02	10.02	10.02
N280TC	11.81	6.28	11.24	13.21	15.41	17.50	11.08	11.08	11.08

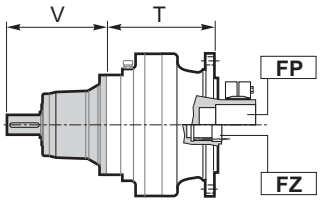
	3/V 01L3		3/A 01L2	
	T3			
	11.89		9.33	
Lbs	66.2		94.8	
	P1	**T4**	**P1**	**T4**
N56C	6.54	3.48	6.50	9.69
N140TC	—	—	6.50	9.69
N180TC	—	—	9.00	10.43
N210TC	—	—	—	—
N250TC	—	—	—	—
N280TC	—	—	—	—

301L

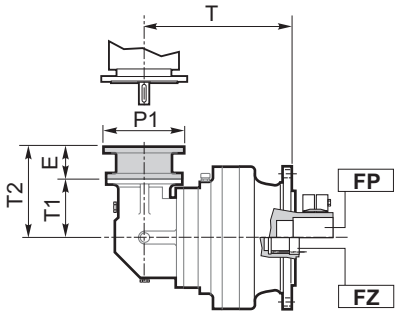
NEMA input

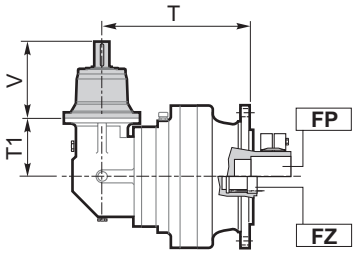


Solid input shaft

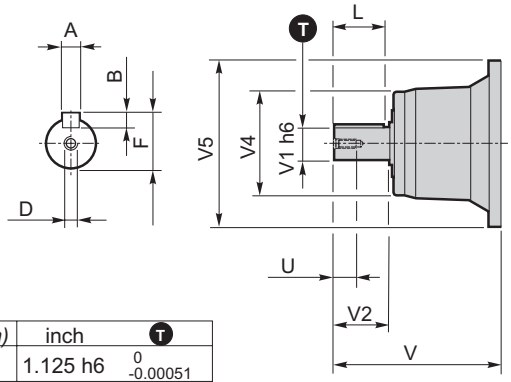


301R



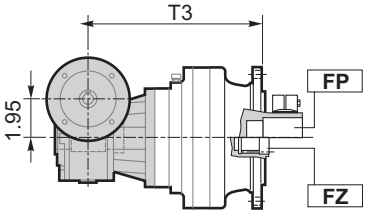


	301 L1, L2, L3, L4 301 R2, R3, R4 Solid input shaft	
	NV01A	NV01B
V	6.00	6.44
V1	1.125	1.625
V2	2.00	2.50
V4	4.72	4.72
V5	7.32	7.32
A	0.250	0.375
B	0.250	0.375
F	1.236	1.791
L	1.75	2.00
D	3/8 - 16UNC	1/2 - 13UNC
U	0.87	1.10
Lbs	13.2	15.4

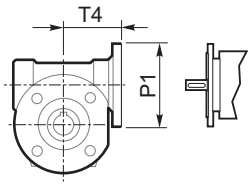


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063

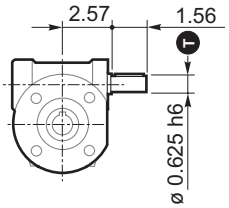
3/V 01L3



NEMA input



Solid input shaft



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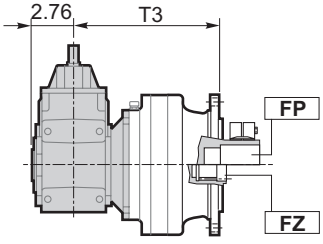
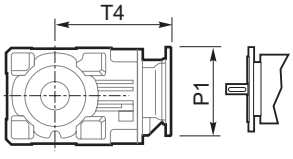
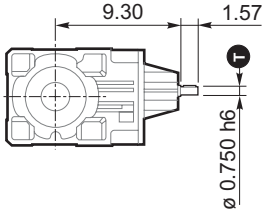
3/A 01L2



NEMA input



Solid input shaft



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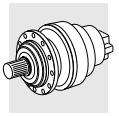
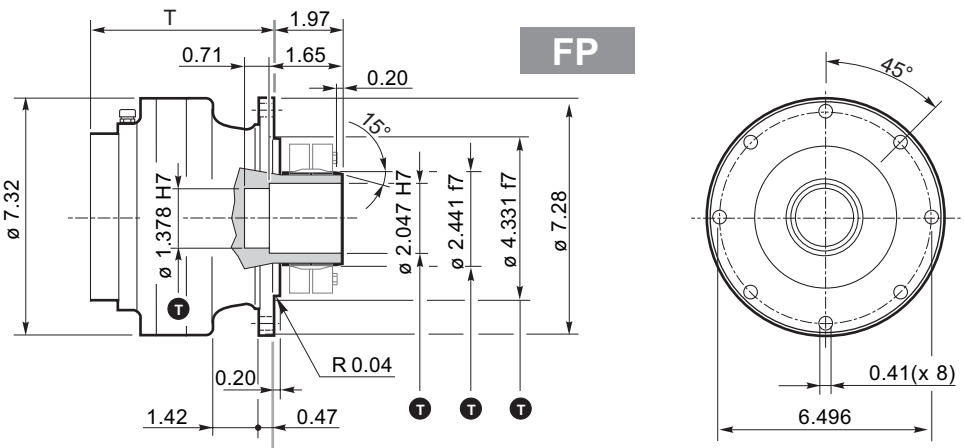
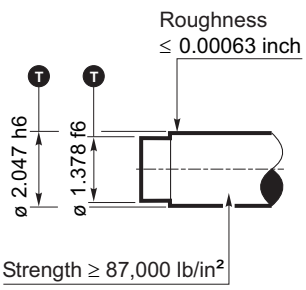
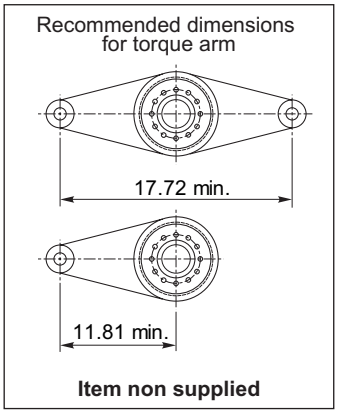


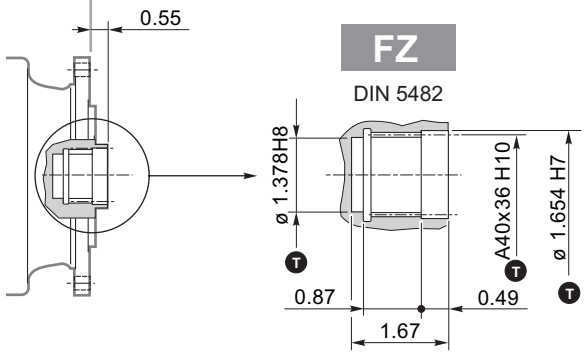
FP T_{2max} = 21,250 in.lbs







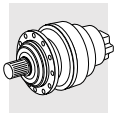
(mm)	inch	T
—	0.625 h6	0 -0.00043
—	0.750 h6	0 -0.00051
(35)	1.378 f6	-0.00098 -0.00161
(35)	1.378 H7	+0.00118 0
(52)	2.047 h6	0 -0.00075
(52)	2.047 H7	+0.00118 0
(62)	2.441 f7	-0.00118 -0.00236
(110)	4.331 f7	-0.00142 -0.00280
A40x36 H10	DIN 5482	



		301 L1	301 L2	301 L3	301 L4	301 R2	301 R3	301 R4
	T	3.62	5.71	7.80	9.88	7.24	9.33	11.42
	T1	—	—	—	—	4.80	4.80	4.80
	Lbs	41.9	50.7	59.5	68.4	72.8	81.6	90.4

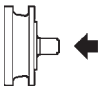
	3/V 01L3	3/A 01L2
	T3	
	10.51	7.95
Lbs	57.3	88.2

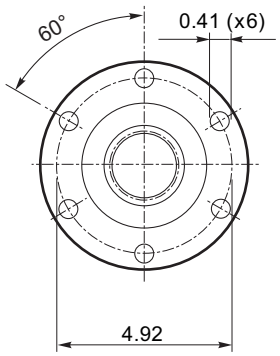
NEMA Input													
	P1	E	T2							P1	T4	P1	T4
N56C	9.84	4.51	8.13	10.22	12.30	14.39	9.31	9.31	9.31	6.54	3.48	6.50	9.69
N140TC	9.84	4.51	8.13	10.22	12.30	14.39	9.31	9.31	9.31	—	—	6.50	9.69
N180TC	8.82	5.22	8.84	10.93	13.01	15.10	10.02	10.02	10.02	—	—	9.00	10.43
N210TC	8.82	5.22	8.84	10.93	13.01	15.10	10.02	10.02	10.02	—	—	—	—
N250TC	8.82	5.22	8.84	10.93	13.01	15.10	10.02	10.02	10.02	—	—	—	—
N280TC	11.81	6.28	9.90	11.99	14.07	16.16	11.08	11.08	11.08	—	—	—	—



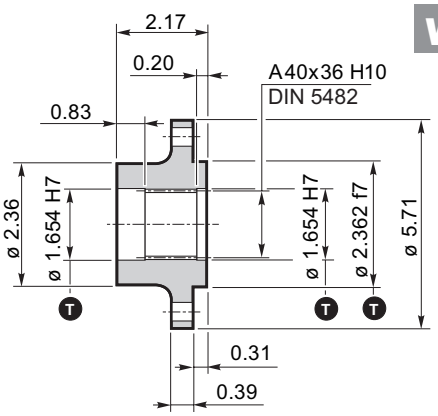
301

Flange



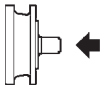


W0A

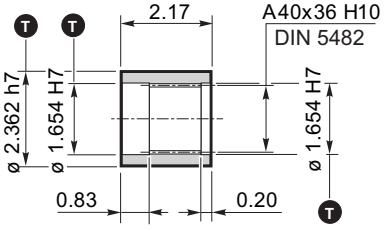


Material : Steel AISI 1040

Sleeve coupling

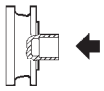


M0A

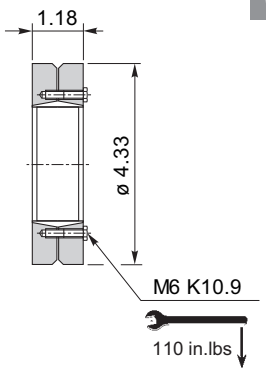


Material : Steel SAE 8620

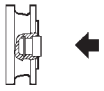
Shrink disc



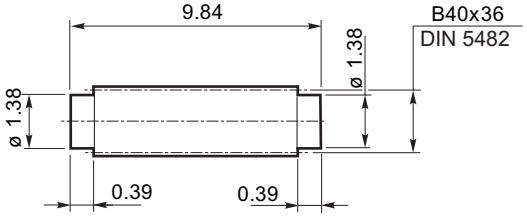
G0A



Splined bar

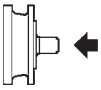


B0A

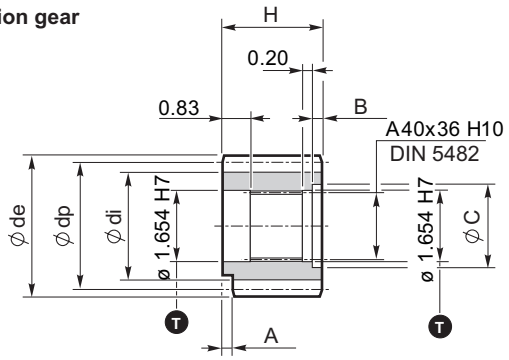


Case hardening Steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



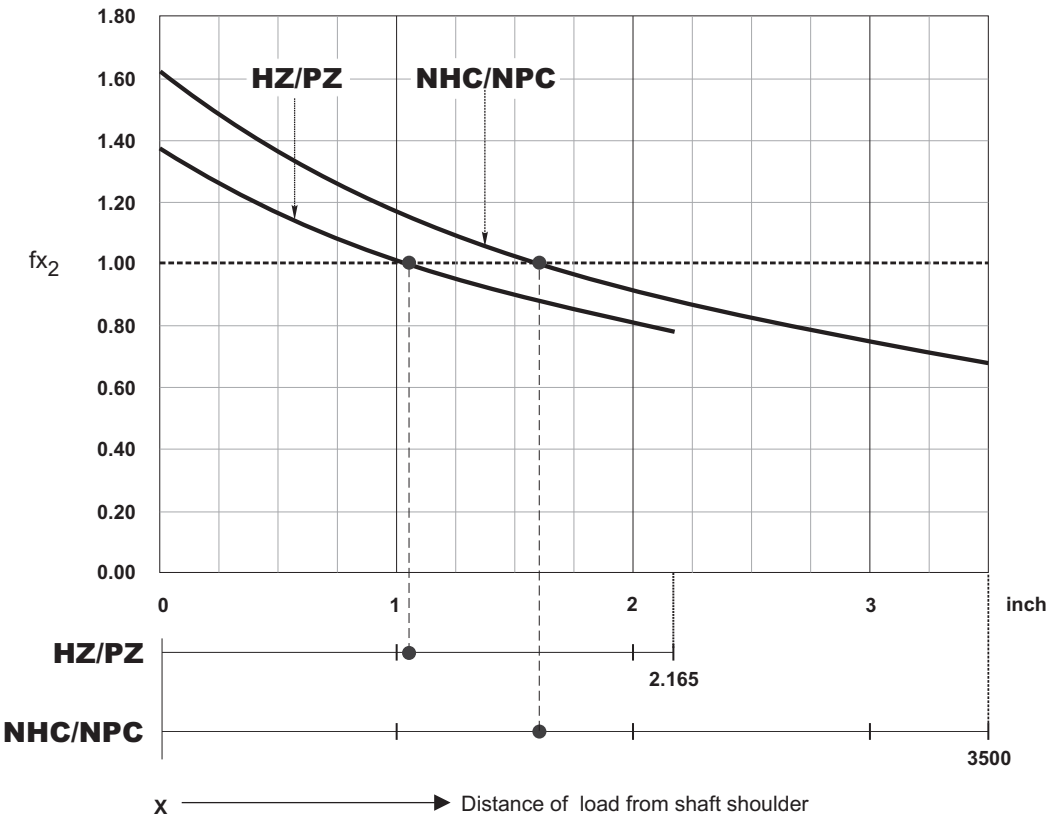
Code	m	z	x	dp	di	de	H	A	B	C	☆
PBE	4.5	14	0.507	63	56	75.5	55	0	0	0	☐
PCE	5	14	0.500	70	62.5	84.8	65	0	10	53	☐
PDC	6	12	0.250	72	61	84.8	59	14	4	54	☐
PDE	6	14	0.500	84	73	99.6	65	0	10	54	☐
⚠ Dimensions of pinion gears are in mm											

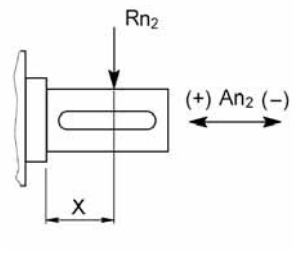
☆	Material
☐	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m	= module
z	= number of teeth
x	= addendum modification
dp	= generated pitch diameter
di	= root diameter
de	= outside diameter

(mm)	inch	Ⓣ
(42)	1.654 H7	+0.00098 0
(60)	2.362 f7	-0.00118 -0.00236
(60)	2.362 h7	0 -0.00118

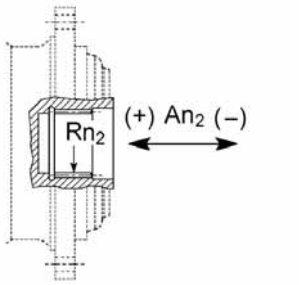
Load application factor for calculation of admissible overhung load on output shaft





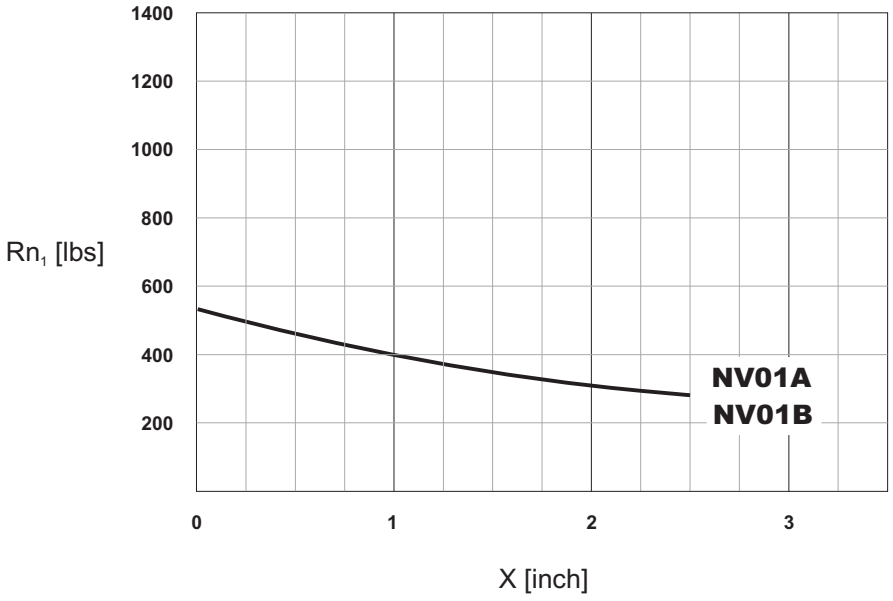
$R_{x2} = Rn_2 \cdot fx_2$

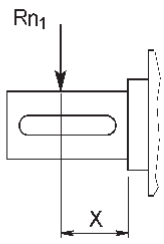
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

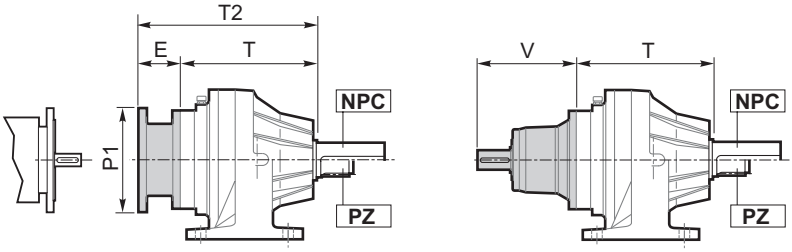
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



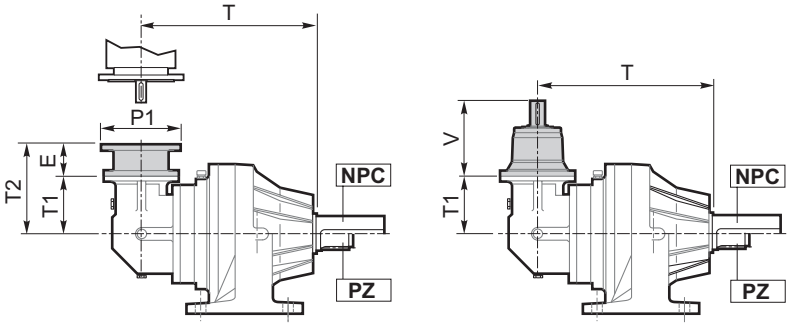


NEMA input | Solid input shaft

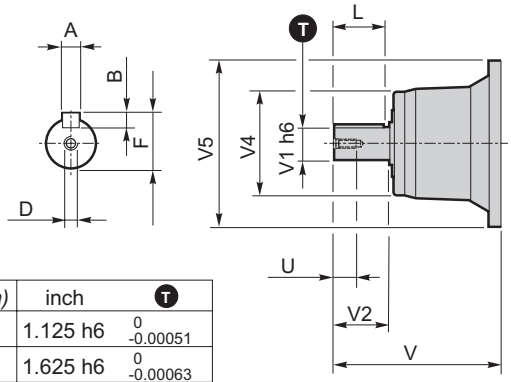
303L



303R

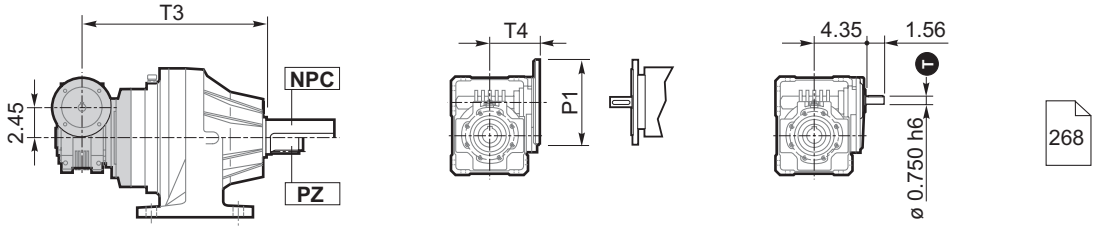


	303 L1	303 L2, L3, L4 303 R2, R3, R4	
	Solid input shaft		
	NV05B	NV01A	NV01B
V	9.68	6.00	6.44
V1	1.875	1.125	1.625
V2	3.50	2.00	2.50
V4	6.10	4.72	4.72
V5	9.65	7.32	7.32
A	0.500	0.250	0.375
B	0.500	0.250	0.375
F	2.091	1.236	1.791
L	3.00	1.75	2.00
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC
U	1.42	0.87	1.10
Lbs	33.1	13.2	15.4



(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063

3/V 03L3



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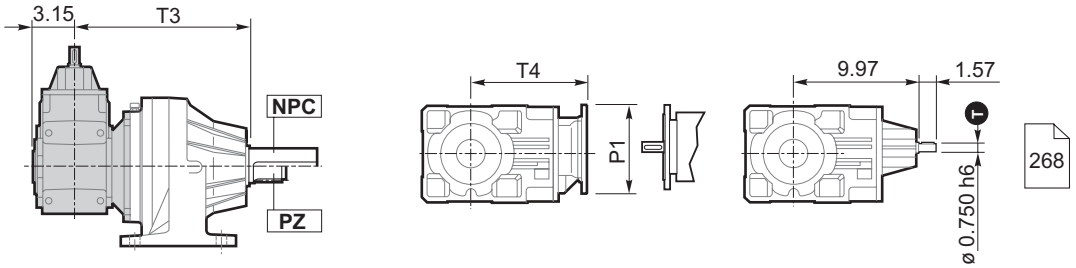
3/A 03L2



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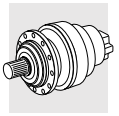
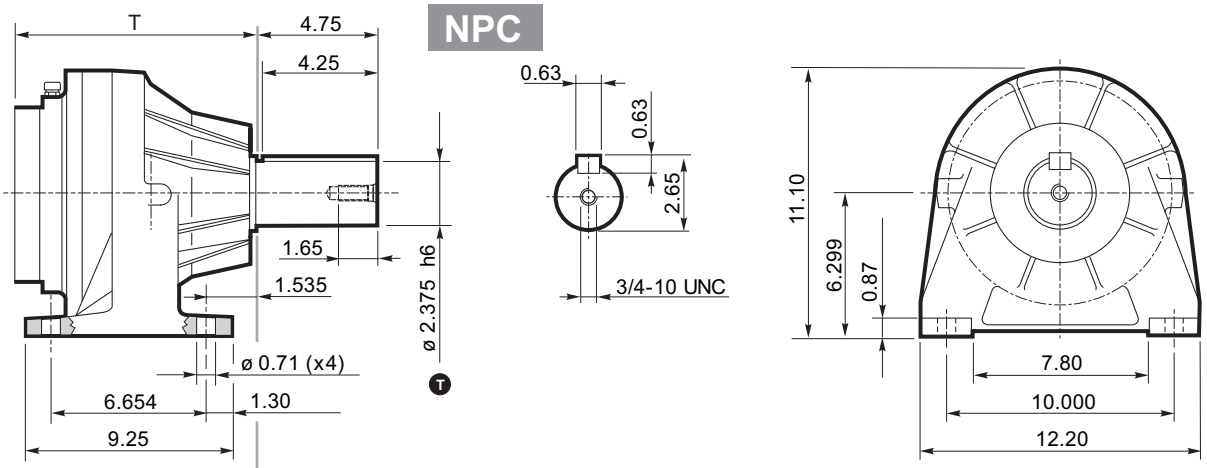
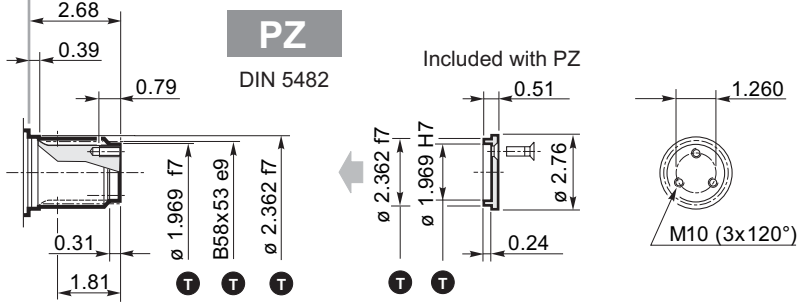




(mm)	inch	T
—	0.750 h6	0 -0.00051
(50)	1.969 f7	-0.00098 -0.00197
(50)	1.969 H7	+0.00098 0
(60)	2.362 f7	-0.00118 -0.00236
—	2.375 h6	0 -0.00075
B58x53 e9		DIN 5482



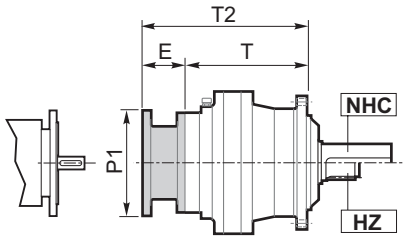
		303 L1	303 L2	303 L3	303 L4	303 R2	303 R3	303 R4
	T	6.50	8.58	10.67	12.76	10.12	12.20	14.29
	T1	—	—	—	—	5.51	4.80	4.80
	Lbs	88.2	97.0	105.8	114.7	132.3	127.9	136.7
NEMA Input								
	P1	**E**	**T2**					
N56C	9.84	4.51	—	13.09	15.18	17.26	10.02	9.31	9.31
N140TC	9.84	4.51	—	13.09	15.18	17.26	10.02	9.31	9.31
N180TC	8.82	5.22	—	13.80	15.89	17.97	10.73	10.02	10.02
N210TC	8.82	5.22	—	13.80	15.89	17.97	10.73	10.02	10.02
N250TC	8.82	5.22	—	13.80	15.89	17.97	10.73	10.02	10.02
N250TC	11.81	5.41	11.91	—	—	—	—	—	—
N280TC	11.81	6.42	12.91	15.00	17.09	19.17	11.93	11.22	11.22

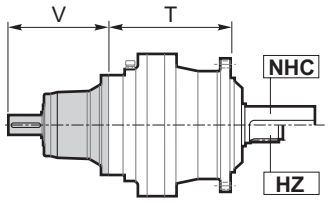
3/V 03L3		3/A 03L2	
T3			
12.99		11.22	
Lbs 112.5		156.6	
P1	**T4**	**P1**	**T4**
6.54	4.19	6.50	10.35
6.54	4.19	6.50	10.35
—	—	8.98	11.10
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

NEMA input

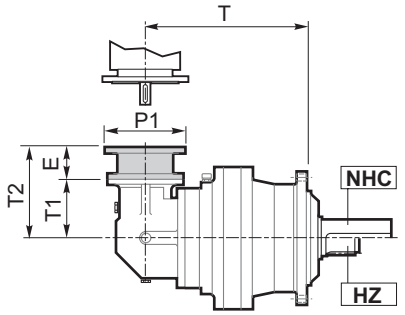
Solid input shaft

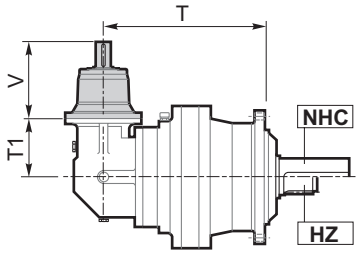
303L



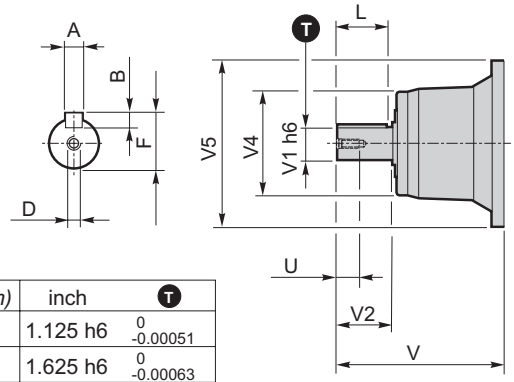


303R



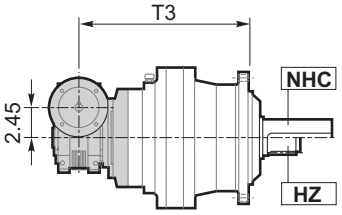


	303 L1	303 L2, L3, L4 303 R2, R3, R4	
	Solid input shaft		
	NV05B	NV01A	NV01B
V	9.68	6.00	6.44
V1	1.875	1.125	1.625
V2	3.50	2.00	2.50
V4	6.10	4.72	4.72
V5	9.65	7.32	7.32
A	0.500	0.250	0.375
B	0.500	0.250	0.375
F	2.091	1.236	1.791
L	3.00	1.75	2.00
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC
U	1.42	0.87	1.10
Lbs	33.1	13.2	15.4

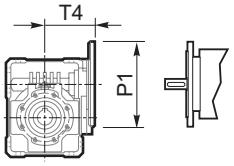


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063

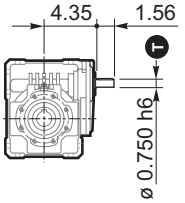
3/V 03L3



NEMA input



Solid input shaft



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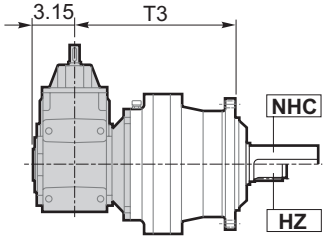
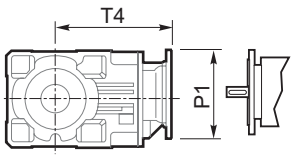
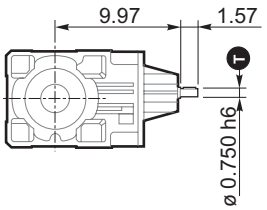
3/A 03L2



NEMA input



Solid input shaft



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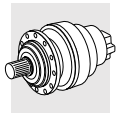
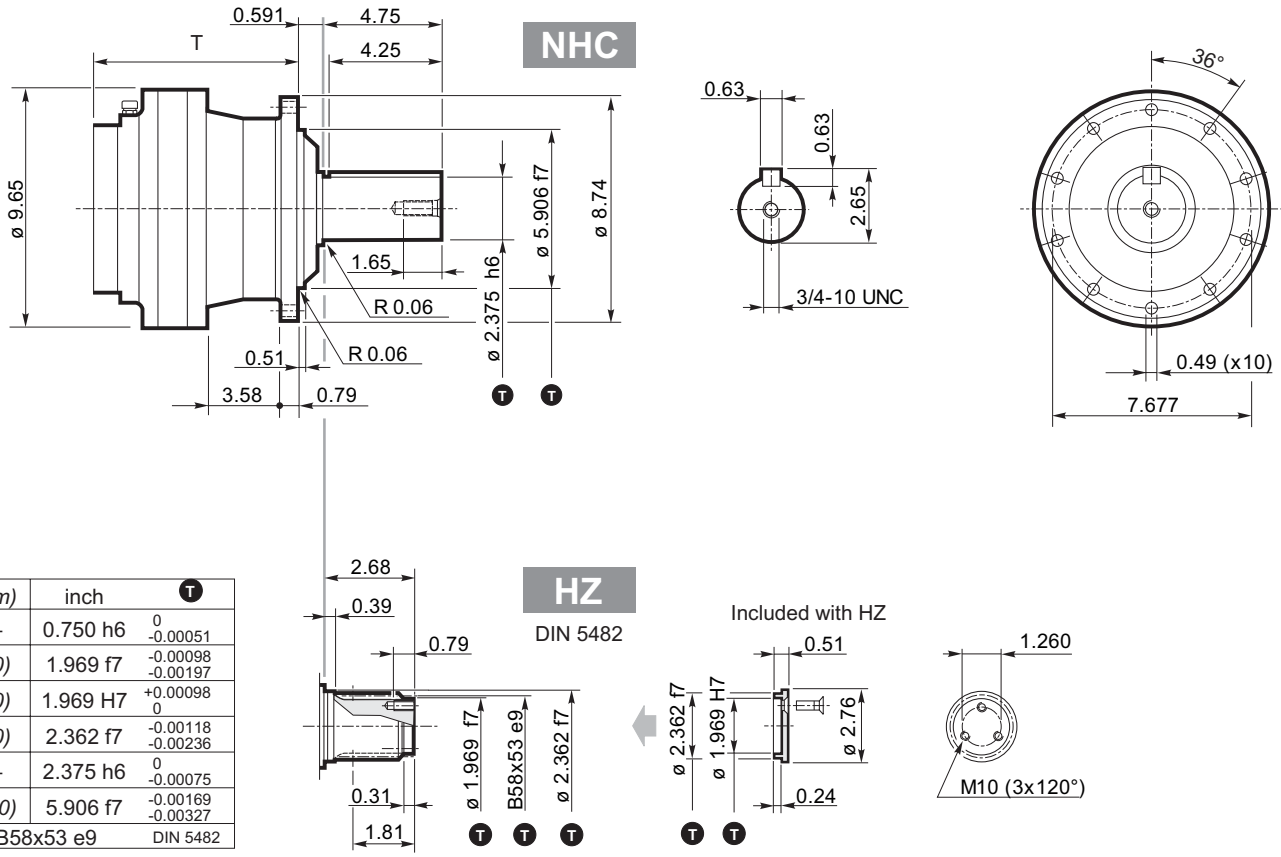
BONFIGLIOLI TRASMITAL





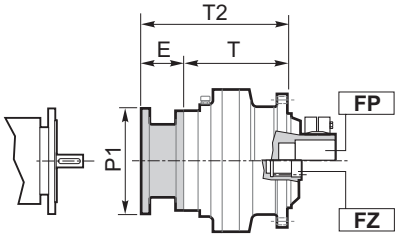
(mm)	inch	T
—	0.750 h6	0 -0.00051
(50)	1.969 f7	-0.00098 -0.00197
(50)	1.969 H7	+0.00098 0
(60)	2.362 f7	-0.00118 -0.00236
—	2.375 h6	0 -0.00075
(150)	5.906 f7	-0.00169 -0.00327
B58x53 e9		DIN 5482

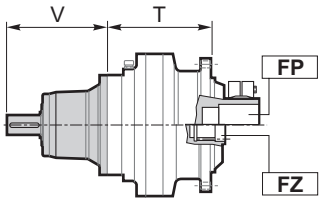
		303 L1	303 L2	303 L3	303 L4	303 R2	303 R3	303 R4
	T	5.91	7.99	10.08	12.17	9.53	11.61	13.70
	T1	—	—	—	—	5.51	4.80	4.80
	Lbs	77.2	86.0	94.8	103.6	121.3	116.9	125.7
NEMA Input								
	P1	E	T2					
N56C	9.84	4.51	—	12.50	14.59	16.67	10.02	9.31	9.31
N140TC	9.84	4.51	—	12.50	14.59	16.67	10.02	9.31	9.31
N180TC	8.82	5.22	—	13.21	15.30	17.38	10.73	10.02	10.02
N210TC	8.82	5.22	—	13.21	15.30	17.38	10.73	10.02	10.02
N250TC	8.82	5.22	—	13.21	15.30	17.38	10.73	10.02	10.02
N250TC	11.81	5.41	11.32	—	—	—	—	—	—
N280TC	11.81	6.42	12.32	14.41	16.50	18.58	11.93	11.22	11.22

	3/V 03L3		3/A 03L2	
	T3			
	12.40		10.63	
Lbs	99.2		143.3	
	P1	T4	P1	T4
	6.54	4.19	6.50	10.35
	6.54	4.19	6.50	10.35
	—	—	8.98	11.10
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

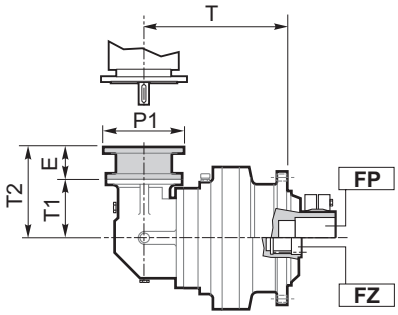
NEMA input | Solid input shaft

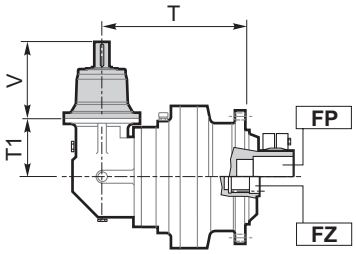
303L



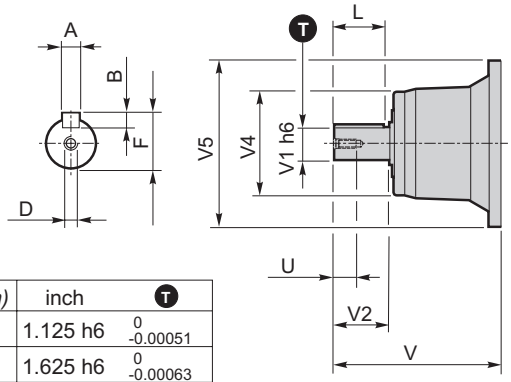


303R



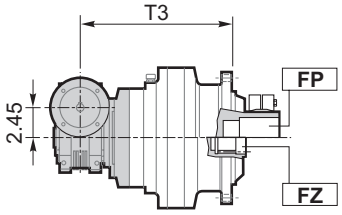


	303 L1	303 L2, L3, L4 303 R2, R3, R4	
	Solid input shaft		
	NV05B	NV01A	NV01B
V	9.68	6.00	6.44
V1	1.875	1.125	1.625
V2	3.50	2.00	2.50
V4	6.10	4.72	4.72
V5	9.65	7.32	7.32
A	0.500	0.250	0.375
B	0.500	0.250	0.375
F	2.091	1.236	1.791
L	3.00	1.75	2.00
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC
U	1.42	0.87	1.10
Lbs	33.1	13.2	15.4

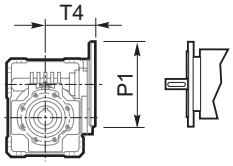


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063

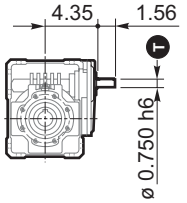
3/V 03L3



NEMA input



Solid input shaft



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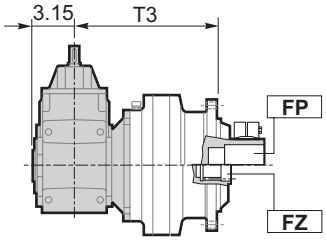
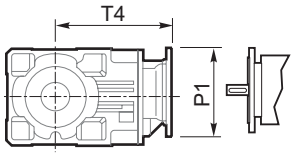
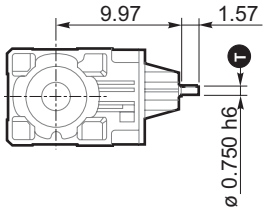
3/A 03L2



NEMA input



Solid input shaft



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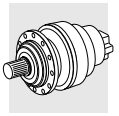
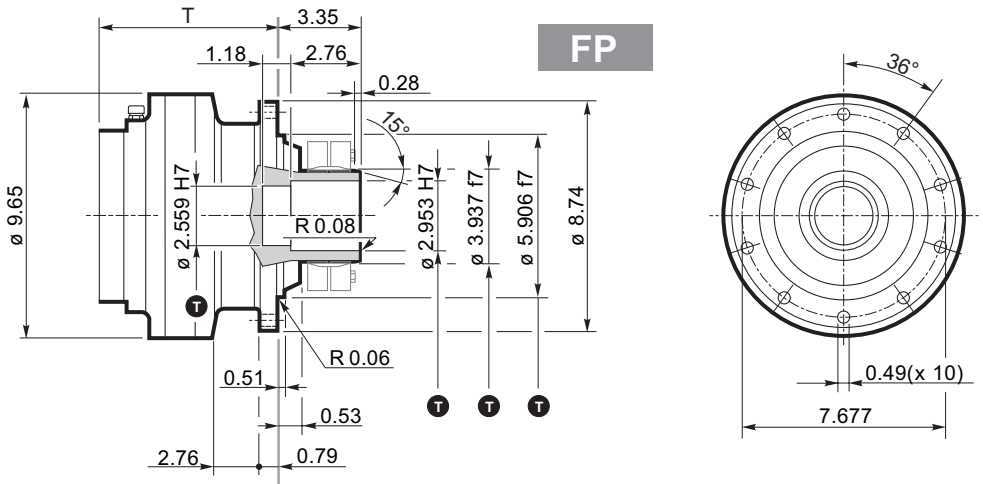
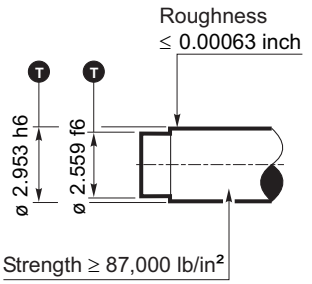
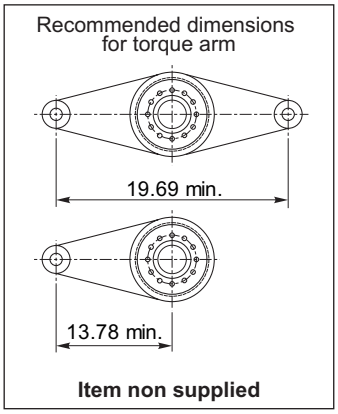
BONFIGLIOLI TRASMITAL



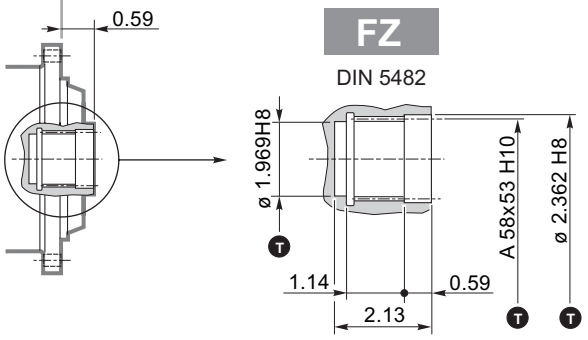
FP T_{2max} = 31,000 in.lbs





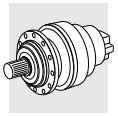


(mm)	inch	Ⓣ
—	0.750 h6	0 -0.00051
(50)	1.969 H8	+0.00154 0
(60)	2.362 H8	+0.00181 0
(65)	2.559 f6	-0.00118 -0.00193
(65)	2.559 H7	+0.00118 0
(75)	2.953 h6	0 -0.00075
(75)	2.953 H7	+0.00118 0
(100)	3.937 f7	-0.00142 -0.00280
(150)	5.906 f7	-0.00169 -0.00327
A58x53 H10	DIN 5482	



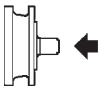
		303 L1	303 L2	303 L3	303 L4	303 R2	303 R3	303 R4
	T	4.92	7.01	9.09	11.18	8.54	10.63	12.72
	T1	—	—	—	—	5.51	4.80	4.80
	Lbs	68.4	77.2	86.0	94.8	112.5	108.0	116.9
NEMA Input								
	P1	E	T2						
N56C	9.84	4.51	—	11.52	13.60	15.69	10.02	9.31	9.31
N140TC	9.84	4.51	—	11.52	13.60	15.69	10.02	9.31	9.31
N180TC	8.82	5.22	—	12.22	14.31	16.40	10.73	10.02	10.02
N210TC	8.82	5.22	—	12.22	14.31	16.40	10.73	10.02	10.02
N250TC	8.82	5.22	—	12.22	14.31	16.40	10.73	10.02	10.02
N250TC	11.81	5.41	10.33	—	—	—	—	—	—
N280TC	11.81	6.42	11.34	13.43	15.51	17.60	11.93	11.22	11.22

3/V 03L3		3/A 03L2	
T3			
10.63		8.86	
Lbs 90.4		132.3	
P1	T4	P1	T4
6.54	4.19	6.50	10.35
6.54	4.19	6.50	10.35
—	—	8.98	11.10
—	—	—	—
—	—	—	—
—	—	—	—

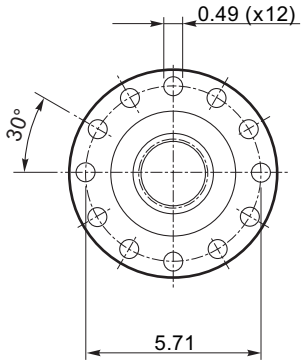


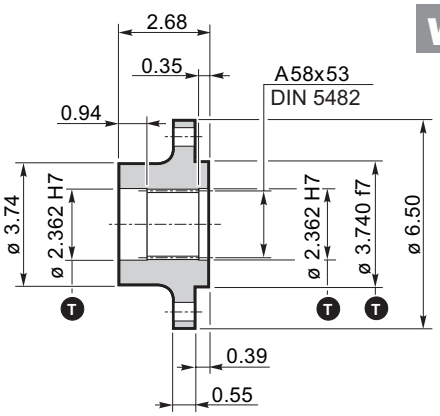
303

Flange



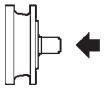
W0A



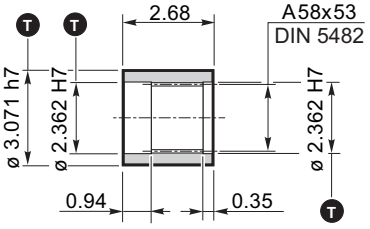


Material : Steel AISI 1040

Sleeve coupling

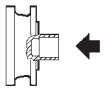


M0A

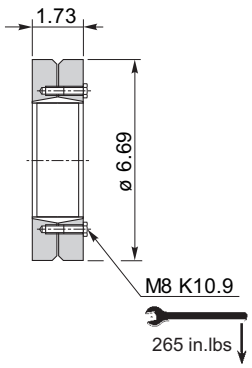


Material : Steel SAE 8620

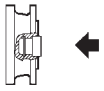
Shrink disc



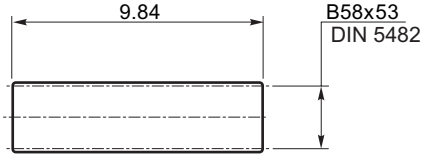
G0A



Splined bar

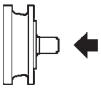


B0A

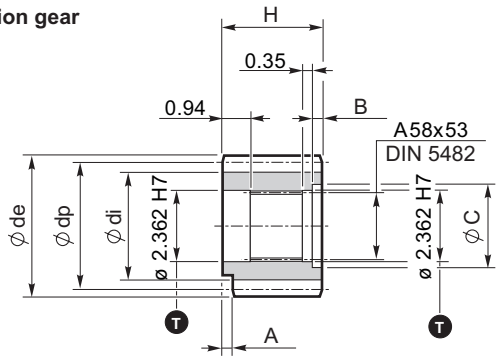


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PCL1	5	19	0	95	82	104	77	12	9	72	□
PCL2	5	19	0	95	82	104	68	0	0	0	□
PCM	5	20	0	100	87.5	110	68	18	0	0	■
PCP	5	22	0	110	97.5	120	68	18	0	0	■
PDE	6	14	0.500	84	75	99.6	68	0	0	0	□
PDI	6	18	0.500	108	99	123.6	68	0	0	0	□
PDM	6	20	0.833	120	115	140	68	0	0	0	□
PFD	8	13	0.675	104	95	127.6	68	0	0	0	■
PFE1	8	14	0	112	92	126	68	0	0	0	■
PFE2	8	14	0	112	92	126	80	0	12	72	■
PFF	8	15	0	120	100	136	68	0	0	0	□
PFP	8	22	0	176	156	190	77	12	10	71	□
PHG	10	16	0.500	160	145	188	75	0	7	72	□

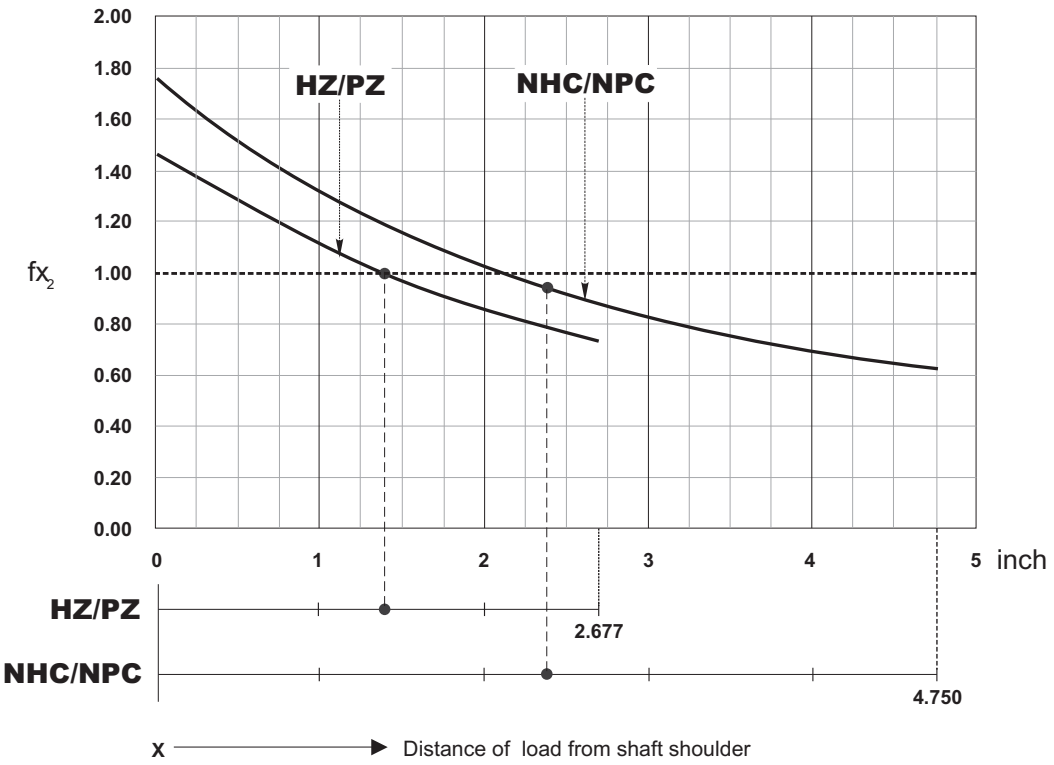
⚠ Dimensions of pinion gears are in mm

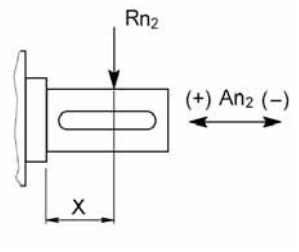
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch	T
(60)	2.362 H7	$^{+0.00118}_{0}$
(78)	3.071 h7	$^{0}_{-0.00118}$
(95)	3.740 f7	$^{-0.00142}_{-0.00280}$

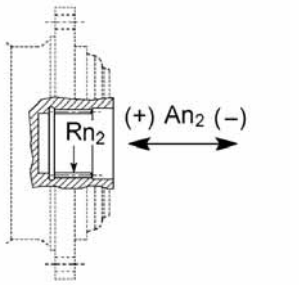
Load application factor for calculation of admissible overhung load on output shaft





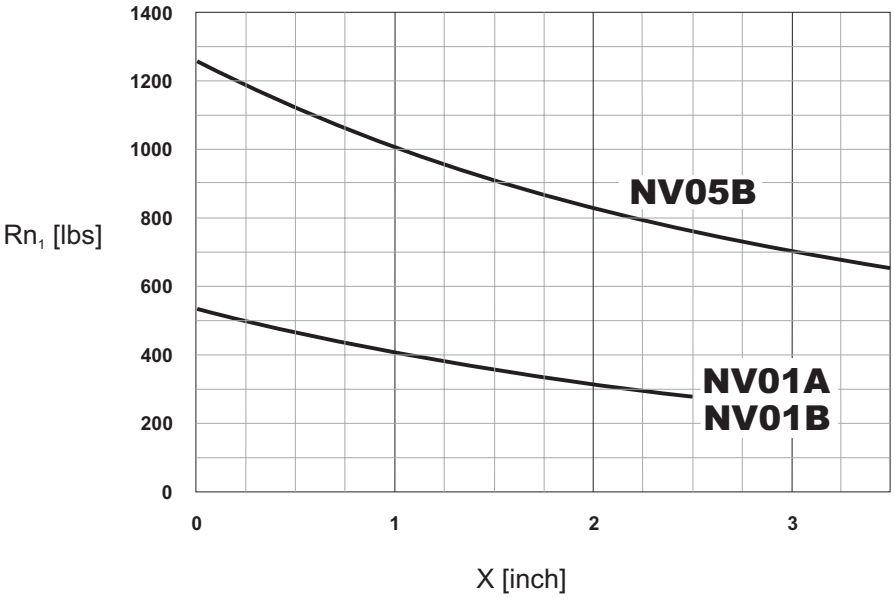
$R_{x2} = Rn_2 \cdot fx_2$

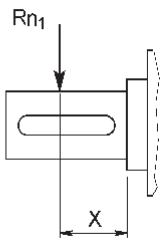
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

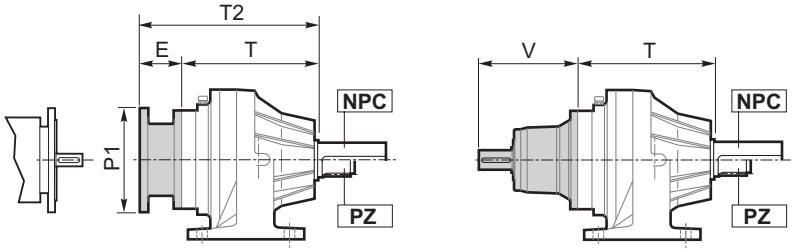
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



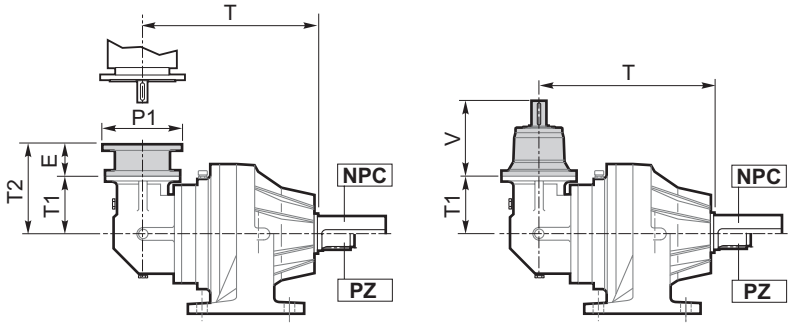


NEMA input | Solid input shaft

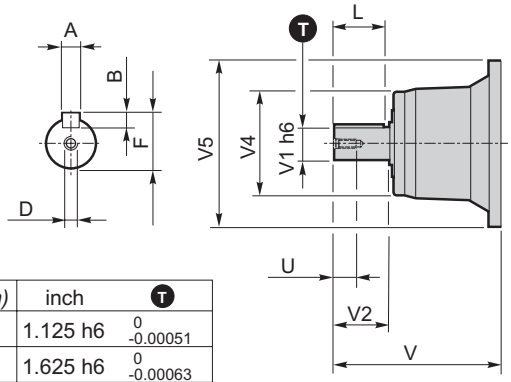
305L



305R

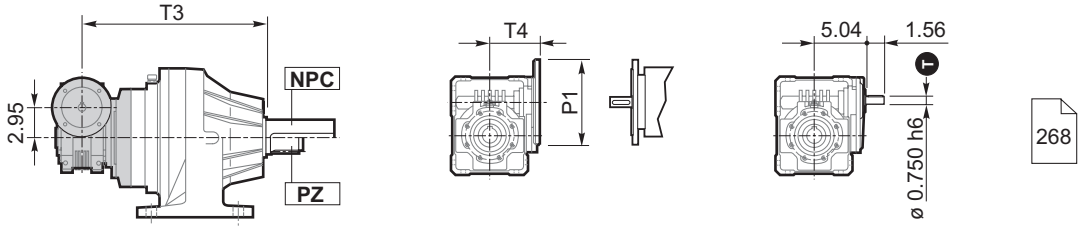


	305 L1	305 L2, L3, L4 305 R2, R3, R4	
	Solid input shaft		
	NV05B	NV01A	NV01B
V	9.681	5.996	6.437
V1	1.875	1.125	1.625
V2	3.50	2.00	2.50
V4	6.10	4.72	4.72
V5	9.65	7.32	7.32
A	0.500	0.250	0.375
B	0.500	0.250	0.375
F	2.09	1.24	1.79
L	3.00	1.75	2.00
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC
U	1.42	0.87	1.10
Lbs	33.1	13.2	15.4



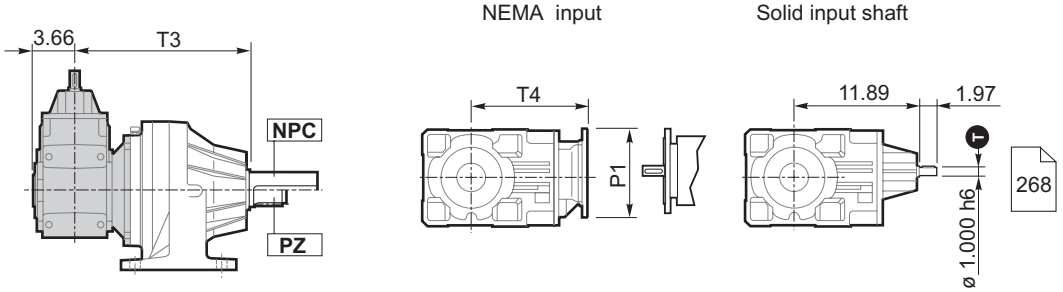
(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063

3/V 05L3

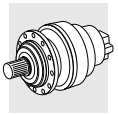


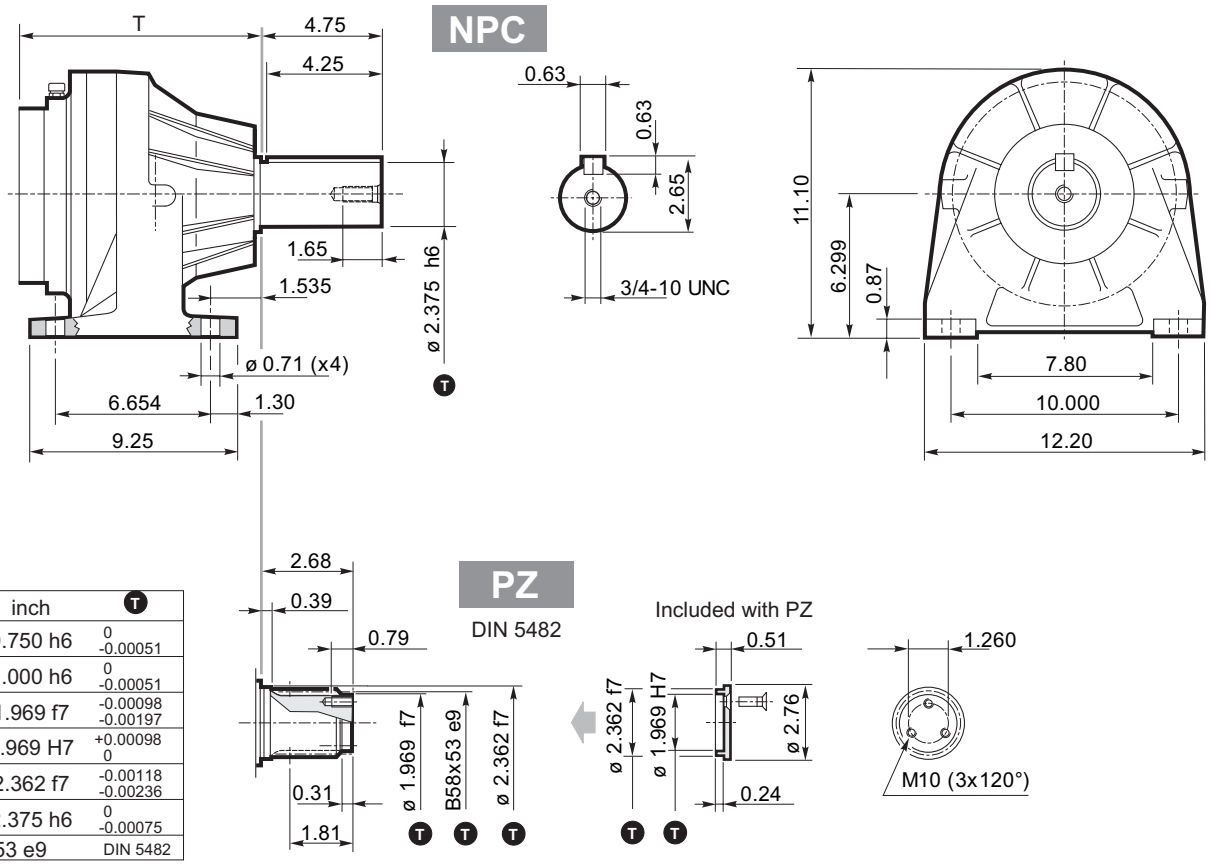
268

3/A 05L2



268





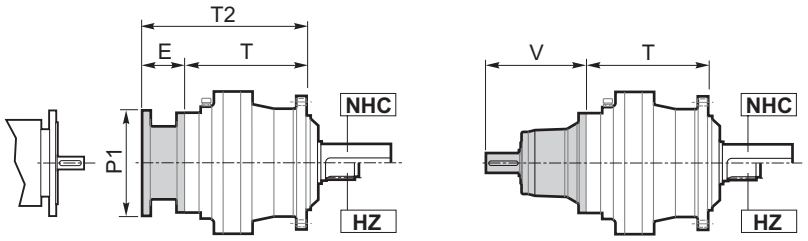
(mm)	inch	T
—	0.750 h6	0 -0.00051
—	1.000 h6	0 -0.00051
(50)	1.969 f7	-0.00098 -0.00197
(50)	1.969 H7	+0.00098 0
(60)	2.362 f7	-0.00118 -0.00236
—	2.375 h6	0 -0.00075
B58x53 e9		DIN 5482

		305 L1	305 L2	305 L3	305 L4	305 R2	305 R3	305 R4
	T	7.20	9.76	11.85	13.94	14.76	13.39	15.47
	T1	—	—	—	—	5.51	4.80	4.80
	Lbs	99.2	114.7	123.5	132.3	143.3	145.5	154.4
NEMA Input								
	P1	E	T2					
N56C	9.84	4.51	—	14.27	16.36	18.44	10.02	9.31	9.31
N140TC	9.84	4.51	—	14.27	16.36	18.44	10.02	9.31	9.31
N180TC	8.82	5.22	—	14.98	17.07	19.15	10.73	10.02	10.02
N210TC	8.82	5.22	—	14.98	17.07	19.15	10.73	10.02	10.02
N250TC	8.82	5.22	—	14.98	17.07	19.15	10.73	10.02	10.02
N250TC	11.81	5.41	12.62	—	—	—	—	—	—
N280TC	11.81	6.28	—	16.04	18.13	20.22	11.79	11.08	11.08
N280TC	13.78	6.42	13.62	—	—	—	—	—	—

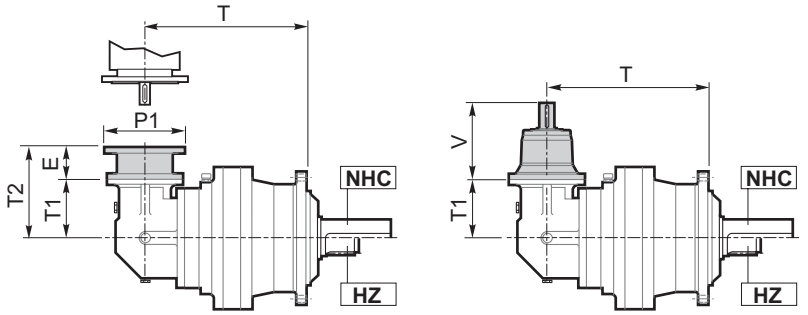
3/V 05L3		3/A 05L2	
T3			
14.29		12.44	
Lbs 132.3		231.5	
P1	T4	P1	T4
6.54	4.74	6.50	11.14
6.54	4.74	6.50	11.14
9.02	5.45	9.00	11.89
—	—	9.00	13.13
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

NEMA input | **Solid input shaft**

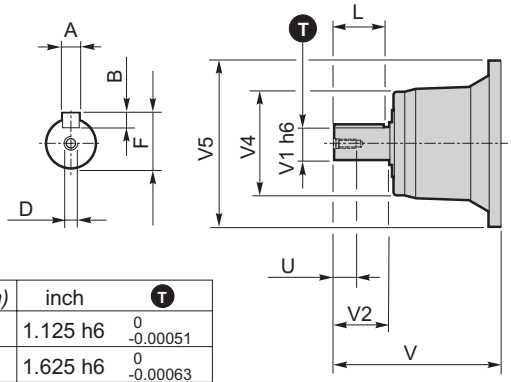
305L



305R

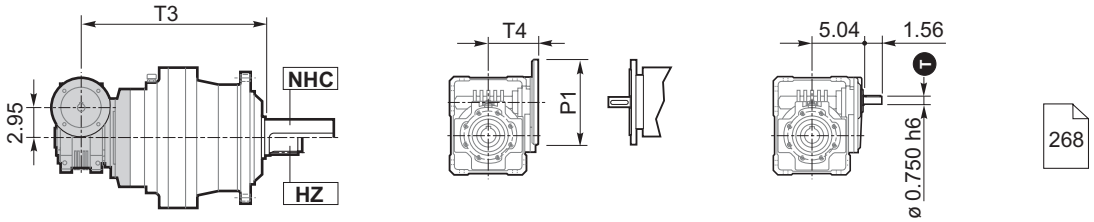


	305 L1	305 L2, L3, L4 305 R2, R3, R4	
	Solid input shaft		
	NV05B	NV01A	NV01B
V	9.681	5.996	6.437
V1	1.875	1.125	1.625
V2	3.50	2.00	2.50
V4	6.10	4.72	4.72
V5	9.65	7.32	7.32
A	0.500	0.250	0.375
B	0.500	0.250	0.375
F	2.09	1.24	1.79
L	3.00	1.75	2.00
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC
U	1.42	0.87	1.10
Lbs	33.1	13.2	15.4



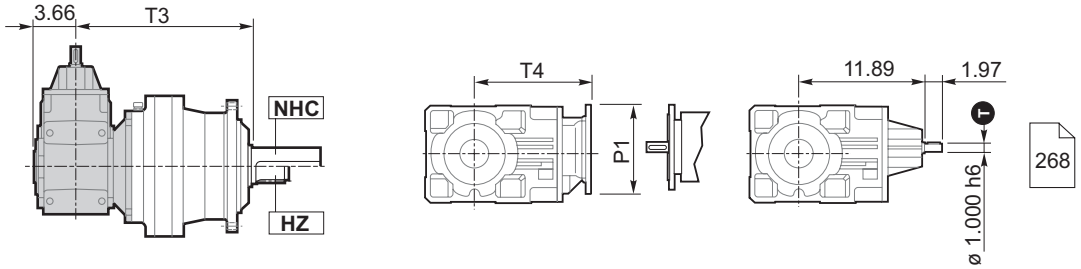
(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063

3/V 05L3

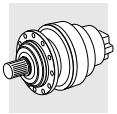


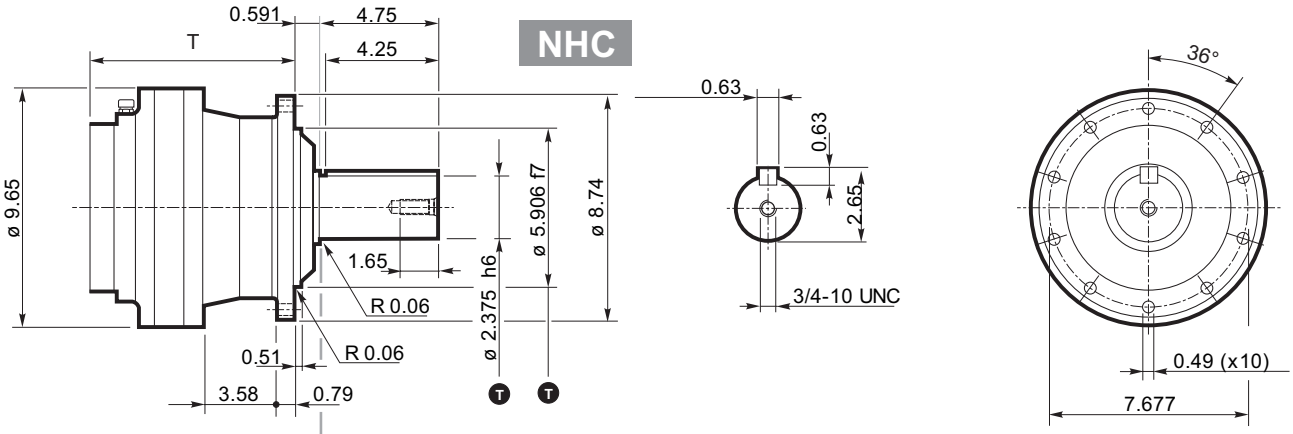
268

3/A 05L2

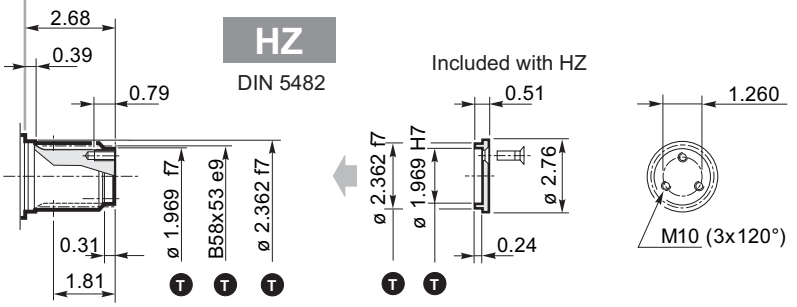


268





(mm)	inch	T
—	0.750 h6	0 -0.00051
—	1.000 h6	0 -0.00051
(50)	1.969 f7	-0.00098 -0.00197
(50)	1.969 H7	+0.00098 0
(60)	2.362 f7	-0.00118 -0.00236
—	2.375 h6	0 -0.00075
(150)	5.906 f7	-0.00169 -0.00327
B58x53 e9		DIN 5482



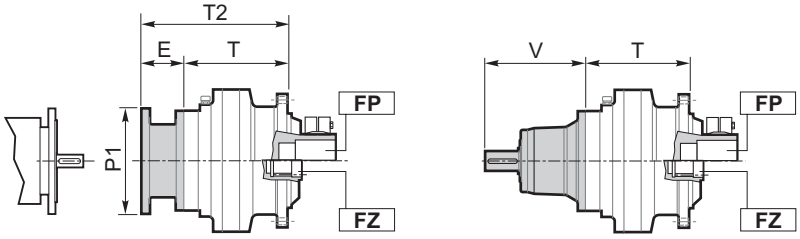
		305 L1	305 L2	305 L3	305 L4	305 R2	305 R3	305 R4
	T	6.61	9.17	11.26	13.35	10.24	12.80	14.88
	T1	—	—	—	—	5.51	4.80	4.80
	Lbs	88.2	103.6	112.5	121.3	132.3	134.5	143.3

	3/V 05L3	3/A 05L2
	T3	
	13.70	11.85
Lbs	121.3	220.5

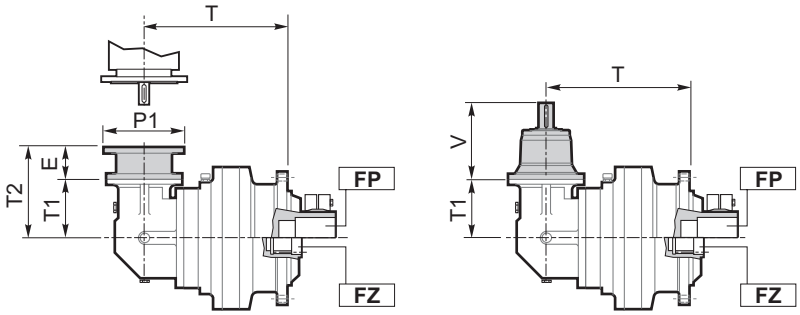
NEMA Input													
	P1	E	T2							P1	T4	P1	T4
N56C	9.84	4.51	—	13.68	15.77	17.85	10.02	9.31	9.31	6.54	4.74	6.50	11.14
N140TC	9.84	4.51	—	13.68	15.77	17.85	10.02	9.31	9.31	6.54	4.74	6.50	11.14
N180TC	8.82	5.22	—	14.39	16.48	18.56	10.73	10.02	10.02	9.02	5.45	9.00	11.89
N210TC	8.82	5.22	—	14.39	16.48	18.56	10.73	10.02	10.02	—	—	9.00	13.13
N250TC	8.82	5.22	—	14.39	16.48	18.56	10.73	10.02	10.02	—	—	—	—
N250TC	11.81	5.41	12.03	—	—	—	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	15.45	17.54	19.63	11.79	11.08	11.08	—	—	—	—
N280TC	13.78	6.42	13.03	—	—	—	—	—	—	—	—	—	—

NEMA input | Solid input shaft

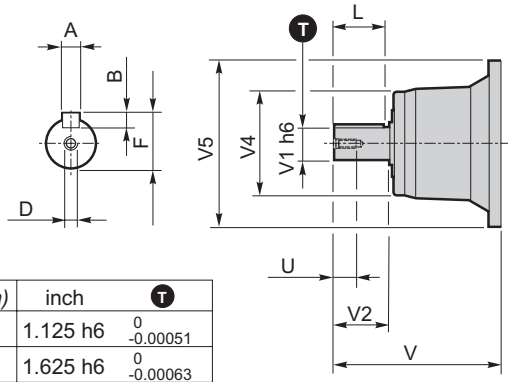
305L



305R

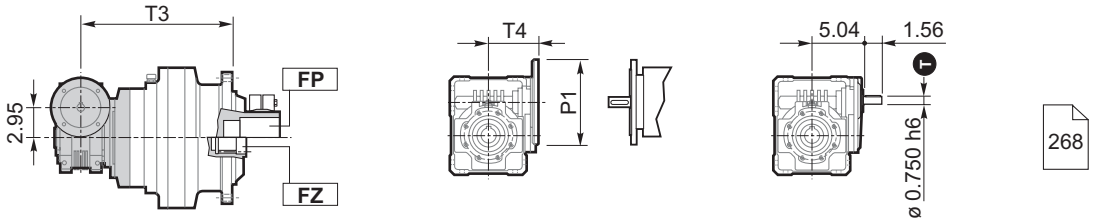


	305 L1	305 L2, L3, L4 305 R2, R3, R4	
	Solid input shaft		
	NV05B	NV01A	NV01B
V	9.681	5.996	6.437
V1	1.875	1.125	1.625
V2	3.50	2.00	2.50
V4	6.10	4.72	4.72
V5	9.65	7.32	7.32
A	0.500	0.250	0.375
B	0.500	0.250	0.375
F	2.09	1.24	1.79
L	3.00	1.75	2.00
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC
U	1.42	0.87	1.10
Lbs	33.1	13.2	15.4



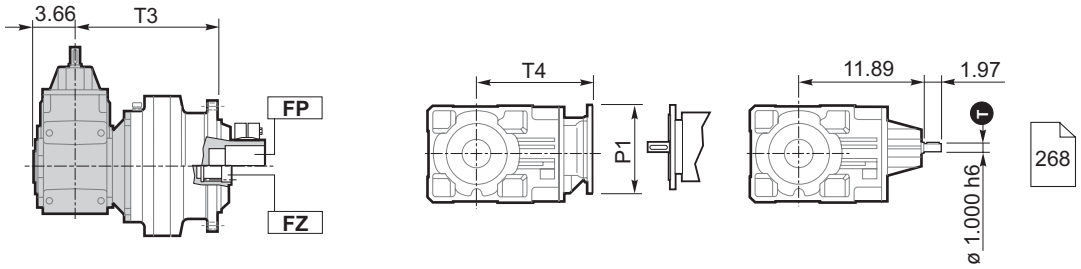
(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063

3/V 05L3



268

3/A 05L2



268

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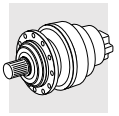
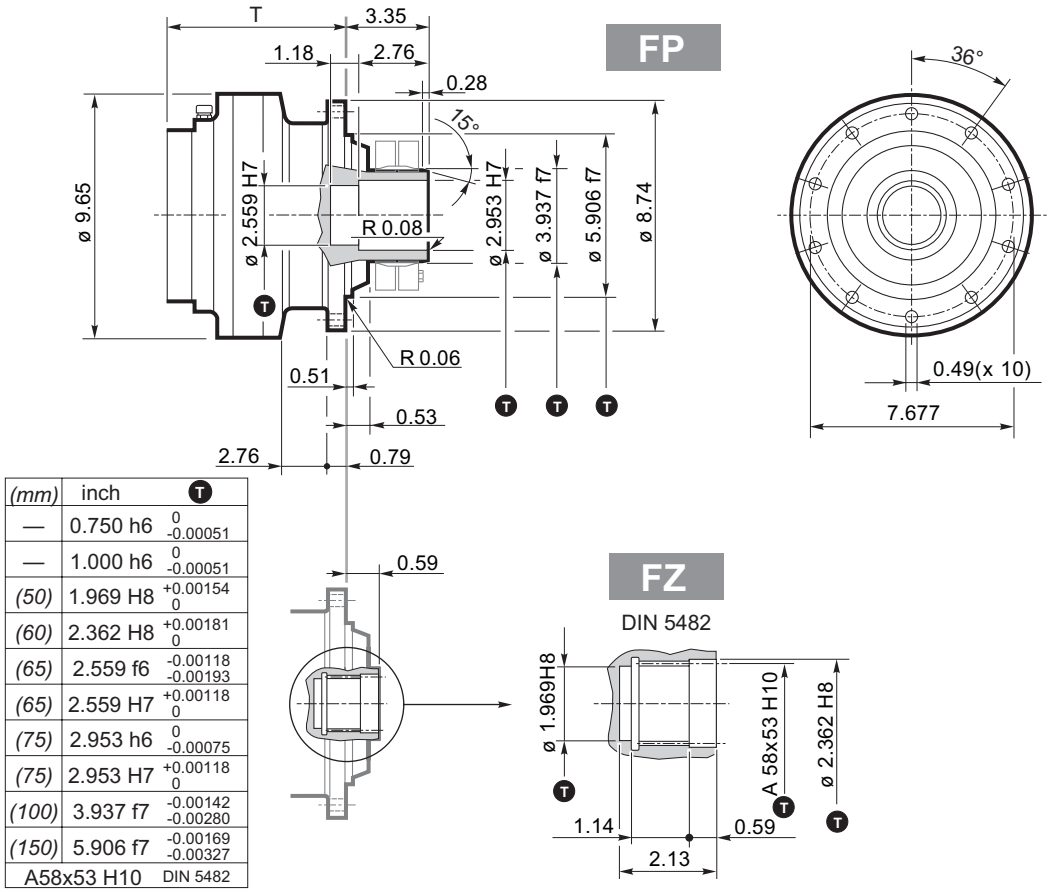
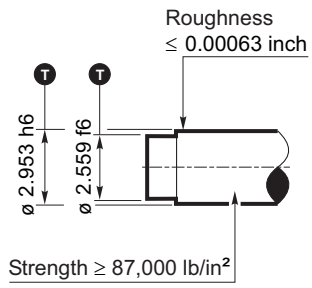
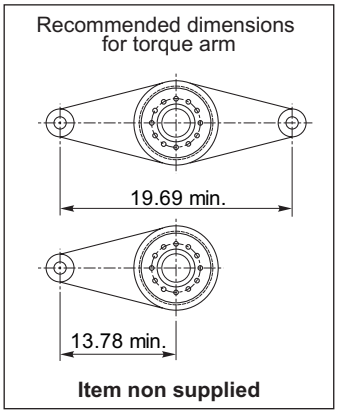


FP T_{2max} = 62,000 in.lbs



(mm)	inch	Ⓣ
—	0.750 h6	0 -0.00051
—	1.000 h6	0 -0.00051
(50)	1.969 H8	+0.00154 0
(60)	2.362 H8	+0.00181 0
(65)	2.559 f6	-0.00118 -0.00193
(65)	2.559 H7	+0.00118 0
(75)	2.953 h6	0 -0.00075
(75)	2.953 H7	+0.00118 0
(100)	3.937 f7	-0.00142 -0.00280
(150)	5.906 f7	-0.00169 -0.00327
A58x53 H10		DIN 5482

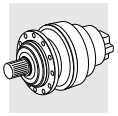




	305 L1	305 L2	305 L3	305 L4	305 R2	305 R3	305 R4
T	5.63	8.19	10.28	12.36	9.25	11.81	13.90
T1	—	—	—	—	5.51	4.80	4.80
Lbs	79.4	94.8	103.6	112.5	123.5	125.7	134.5

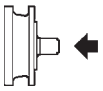
	3/V 05L3	3/A 05L2
	T3	
	12.72	10.87
Lbs	112.5	198.5

NEMA Input													
	P1	E	T2							P1	T4	P1	T4
N56C	9.84	4.51	—	12.70	14.78	16.87	10.02	9.31	9.31	6.54	4.74	6.50	11.14
N140TC	9.84	4.51	—	12.70	14.78	16.87	10.02	9.31	9.31	6.54	4.74	6.50	11.14
N180TC	8.82	5.22	—	13.41	15.49	17.58	10.73	10.02	10.02	9.02	5.45	9.00	11.89
N210TC	8.82	5.22	—	13.41	15.49	17.58	10.73	10.02	10.02	—	—	9.00	13.13
N250TC	8.82	5.22	—	13.41	15.49	17.58	10.73	10.02	10.02	—	—	—	—
N250TC	11.81	5.41	11.04	—	—	—	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	14.47	16.56	18.64	11.79	11.08	11.08	—	—	—	—
N280TC	13.78	6.42	12.05	—	—	—	—	—	—	—	—	—	—

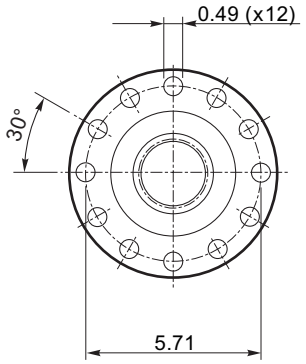


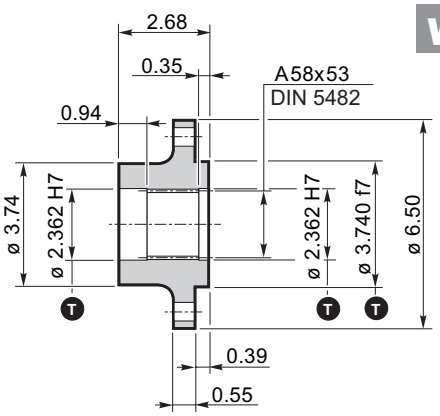
305

Flange



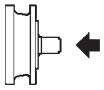
W0A



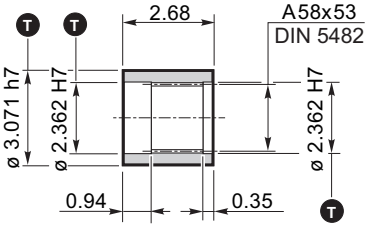


Material : Steel AISI 1040

Sleeve coupling

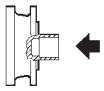


M0A

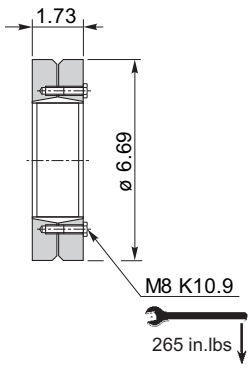


Material : Steel SAE 8620

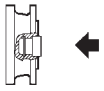
Shrink disc



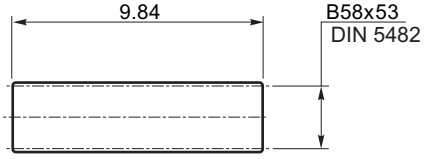
G0A



Splined bar

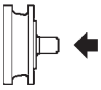


B0A

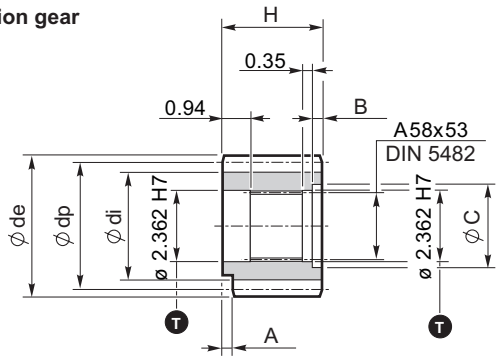


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PCL1	5	19	0	95	82	104	77	12	9	72	□
PCL2	5	19	0	95	82	104	68	0	0	0	□
PCM	5	20	0	100	87.5	110	68	18	0	0	■
PCP	5	22	0	110	97.5	120	68	18	0	0	■
PDE	6	14	0.500	84	75	99.6	68	0	0	0	□
PDI	6	18	0.500	108	99	123.6	68	0	0	0	□
PDM	6	20	0.833	120	115	140	68	0	0	0	□
PFD	8	13	0.675	104	95	127.6	68	0	0	0	■
PFE1	8	14	0	112	92	126	68	0	0	0	■
PFE2	8	14	0	112	92	126	80	0	12	72	■
PFF	8	15	0	120	100	136	68	0	0	0	□
PFP	8	22	0	176	156	190	77	12	10	71	□
PHG	10	16	0.500	160	145	188	75	0	7	72	□

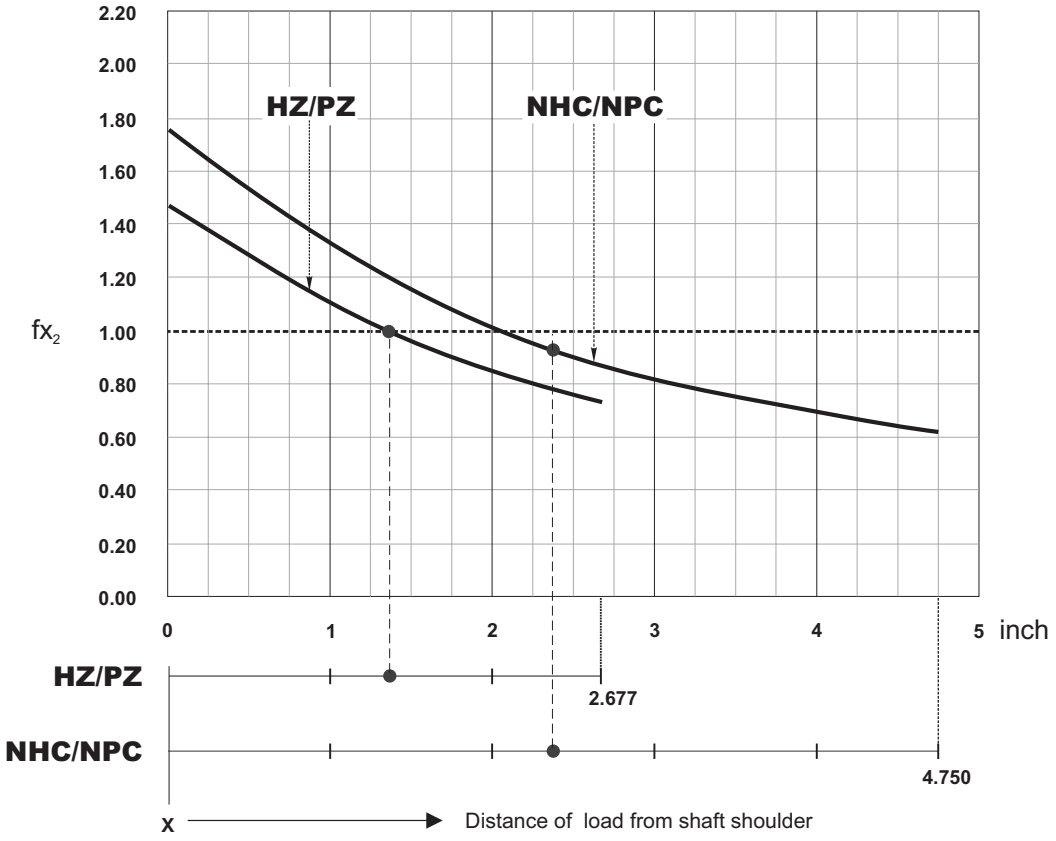
⚠ Dimensions of pinion gears are in mm

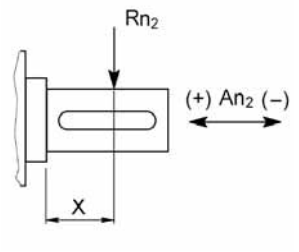
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch	T
(60)	2.362 H7	$^{+0.00118}_{0}$
(78)	3.071 h7	$^{0}_{-0.00118}$
(95)	3.740 f7	$^{-0.00142}_{-0.00280}$

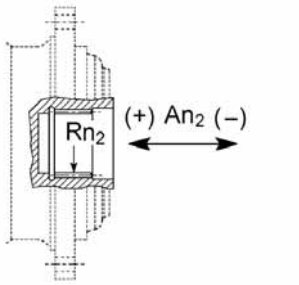
Load application factor for calculation of admissible overhung load on output shaft





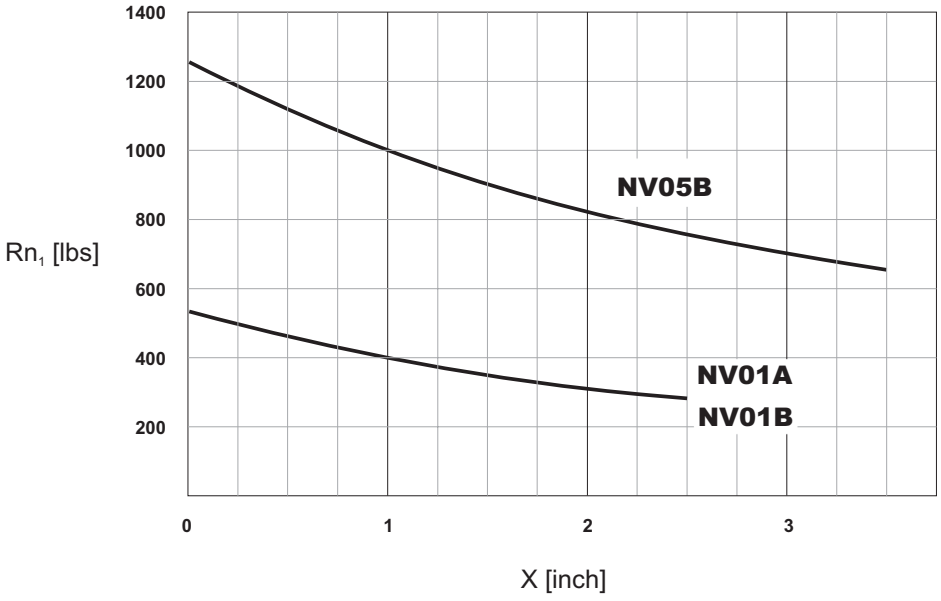
$R_{x2} = Rn_2 \cdot fx_2$

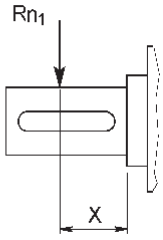
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

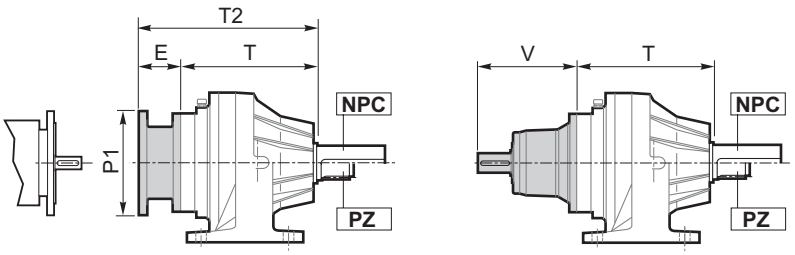
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



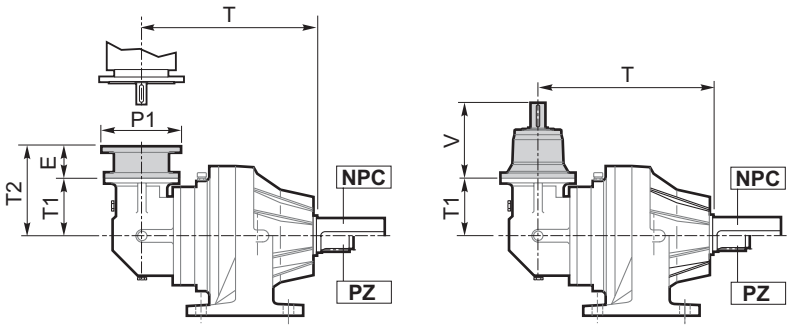


NEMA input | Solid input shaft

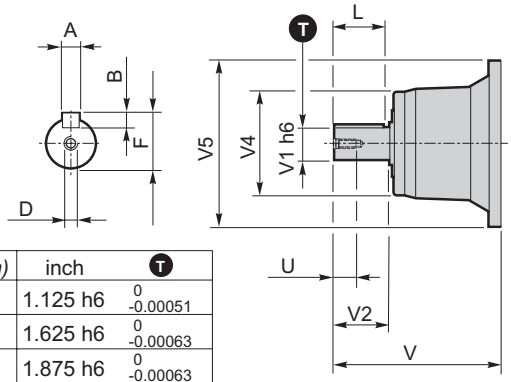
306L



306R

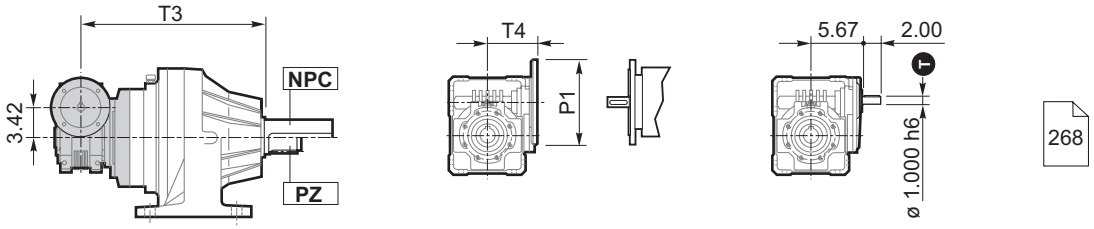


	306 L2	306 L3, L4 306 R2, R3, R4		306 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV06B
V	9.68	6.00	6.44	12.70
V1	1.875	1.125	1.625	2.375
V2	3.50	2.00	2.50	4.75
V4	6.10	4.72	4.72	6.10
V5	9.65	7.32	7.32	11.50
A	0.500	0.250	0.375	0.625
B	0.500	0.250	0.375	0.625
F	2.091	1.236	1.791	2.646
L	3.00	1.75	2.00	4.25
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	50.7



(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075

3/V 06L3



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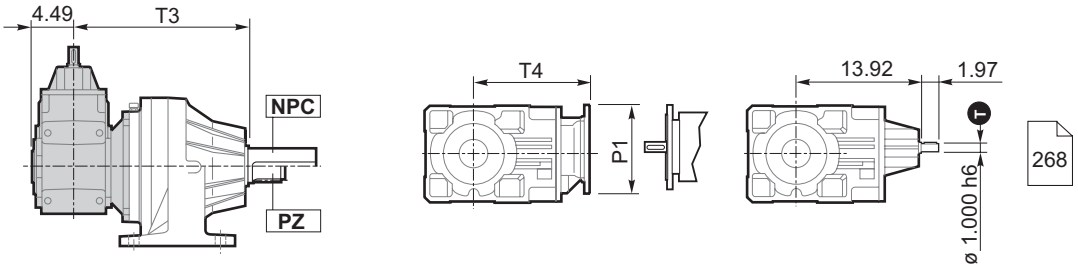
3/A 06L2



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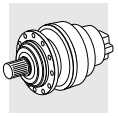
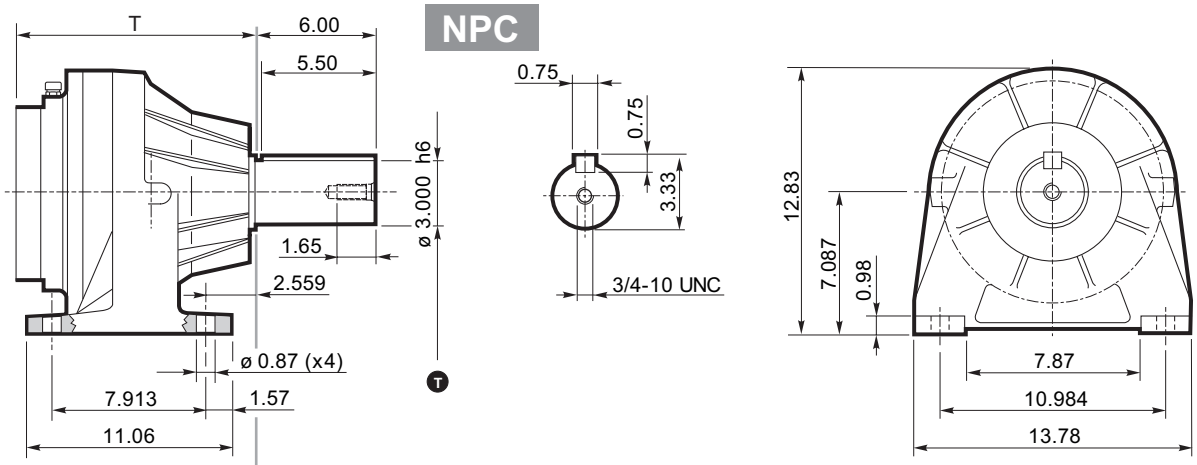
BONFIGLIOLI TRASMITAL



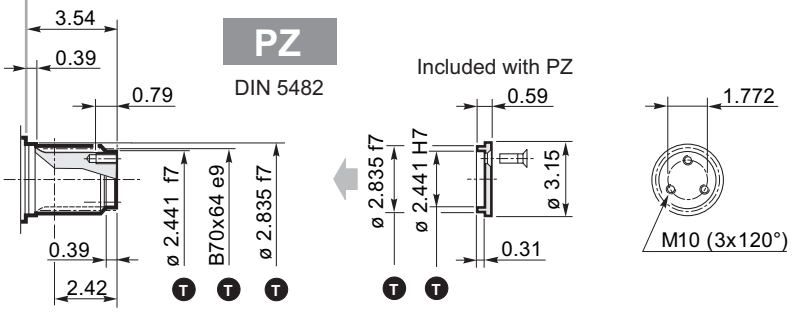
NPC



(mm)	inch	Ⓣ
—	1.000 h6	0 -0.00051
(62)	2.441 f7	-0.00118 -0.00236
(62)	2.441 H7	+0.00118 0
(72)	2.835 f7	-0.00118 -0.00236
—	3.000 h6	0 -0.00075
B70x64 e9		DIN 5482

PZ

DIN 5482

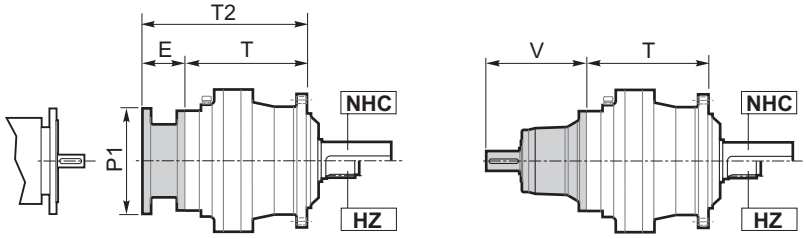


		306 L1	306 L2	306 L3	306 L4	306 R2	306 R3	306 R4
	T	9.25	11.81	13.90	15.98	14.65	15.43	17.52
	T1	—	—	—	—	5.51	5.51	4.80
	Lbs	187.4	209.5	216.1	227.1	231.5	220.5	209.5
NEMA Input								
	P1	E	T2					
N56C	9.84	4.51	—	—	18.41	20.49	10.02	10.02	9.31
N140TC	9.84	4.51	—	—	18.41	20.49	10.02	10.02	9.31
N180TC	8.82	5.22	—	—	19.11	21.20	10.73	10.73	10.02
N210TC	8.82	5.22	—	—	19.11	21.20	10.73	10.73	10.02
N250TC	8.82	5.22	—	—	19.11	21.20	10.73	10.73	10.02
N250TC	11.81	5.41	—	17.22	—	—	—	—	—
N280TC	11.81	6.28	—	—	20.18	22.26	11.79	11.79	11.08
N280TC	13.78	6.42	—	18.23	—	—	—	—	—
N320TC	13.78	7.97	17.22	—	—	—	—	—	—
N360TC	13.78	7.97	17.22	—	—	—	—	—	—

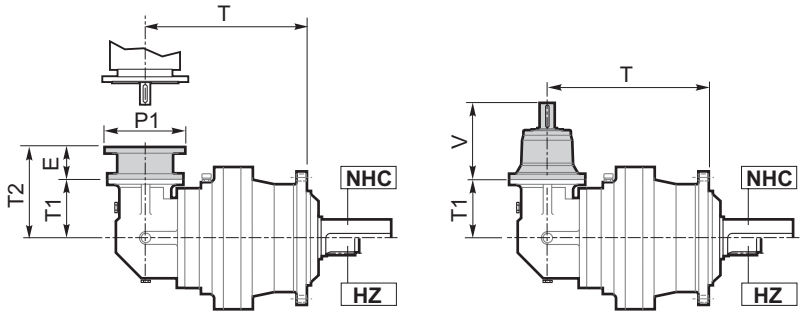
3/V 06L3		3/A 06L2	
T3			
17.52		16.34	
Lbs 244.8		374.9	
P1	T4	P1	T4
6.54	5.37	6.50	13.17
6.54	5.37	6.50	13.17
9.02	5.37	9.00	13.92
9.02	6.08	9.00	15.16
—	—	13.78	17.95
—	—	—	—
—	—	13.78	18.15
—	—	—	—
—	—	—	—
—	—	—	—

NEMA input | Solid input shaft

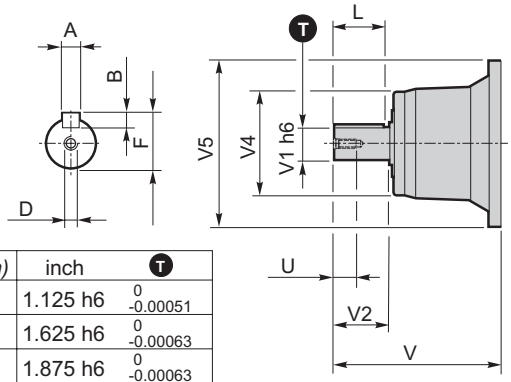
306L



306R

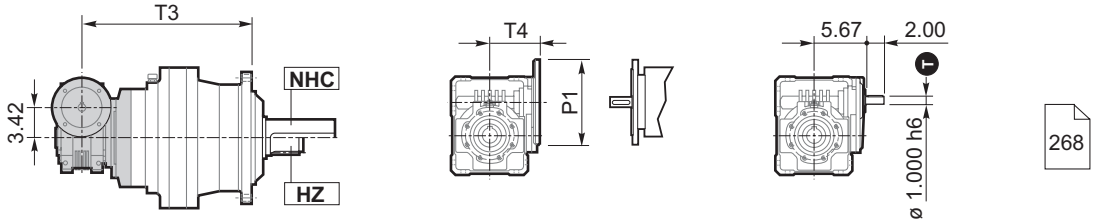


	306 L2	306 L3, L4 306 R2, R3, R4		306 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV06B
V	9.68	6.00	6.44	12.70
V1	1.875	1.125	1.625	2.375
V2	3.50	2.00	2.50	4.75
V4	6.10	4.72	4.72	6.10
V5	9.65	7.32	7.32	11.50
A	0.500	0.250	0.375	0.625
B	0.500	0.250	0.375	0.625
F	2.091	1.236	1.791	2.646
L	3.00	1.75	2.00	4.25
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	50.7



(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075

3/V 06L3



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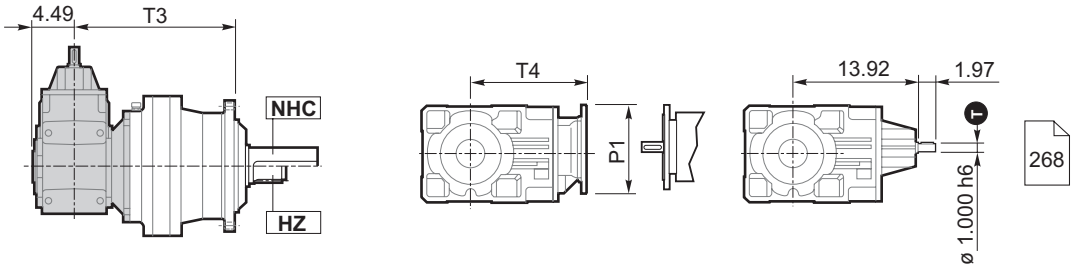
3/A 06L2



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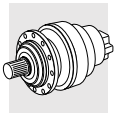
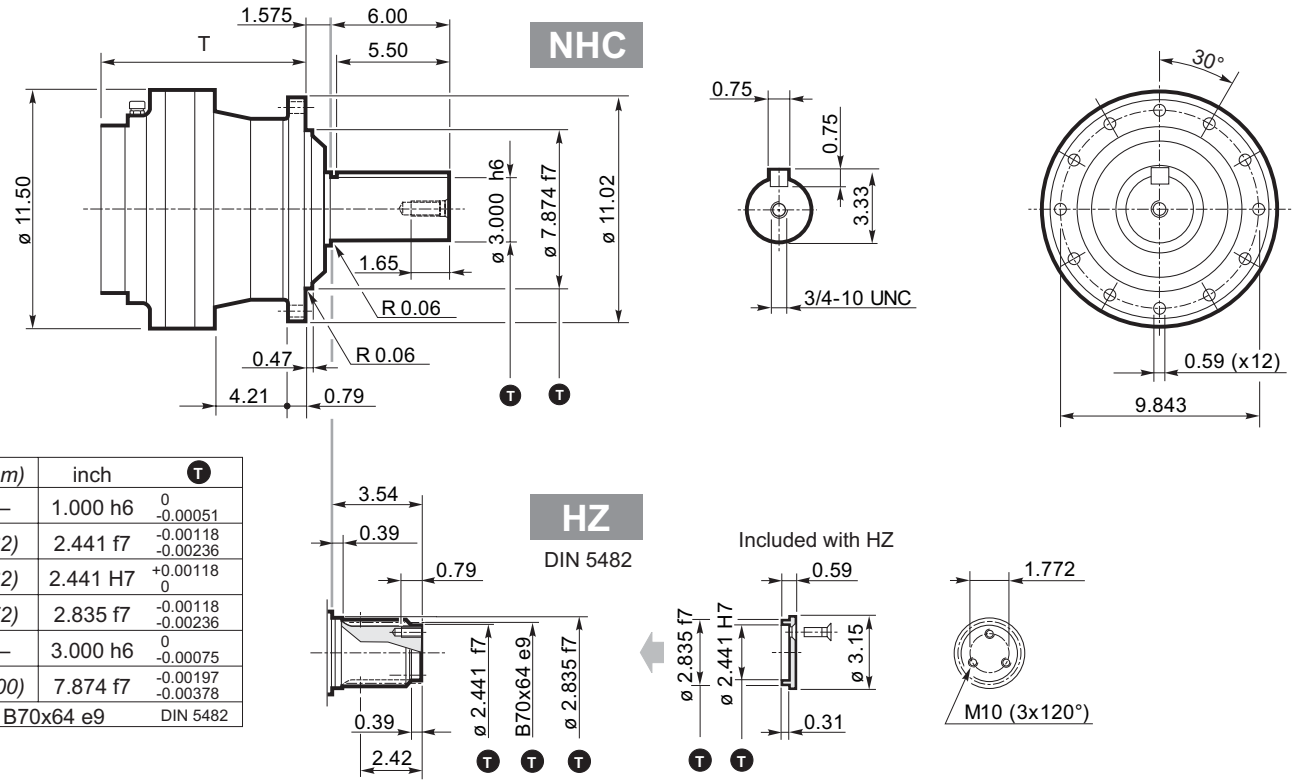
BONFIGLIOLI TRASMITAL





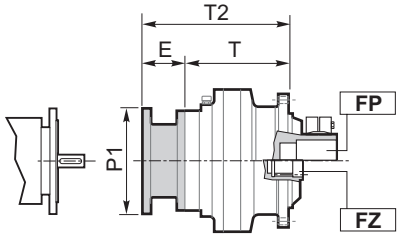
(mm)	inch	T
—	1.000 h6	0 -0.00051
(62)	2.441 f7	-0.00118 -0.00236
(62)	2.441 H7	+0.00118 0
(72)	2.835 f7	-0.00118 -0.00236
—	3.000 h6	0 -0.00075
(200)	7.874 f7	-0.00197 -0.00378
B70x64 e9		DIN 5482

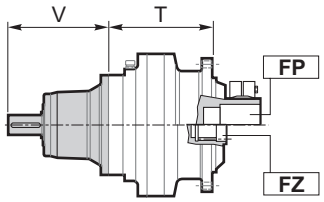
		306 L1	306 L2	306 L3	306 L4	306 R2	306 R3	306 R4
	T	7.68	10.24	12.32	14.41	13.07	13.86	15.94
	T1	—	—	—	—	5.51	5.51	4.80
	Lbs	154.4	174.2	183.0	191.8	207.3	198.5	185.2
NEMA Input								
	P1	**E**	**T2**					
N56C	9.84	4.51	—	—	16.83	18.92	10.02	10.02	9.31
N140TC	9.84	4.51	—	—	16.83	18.92	10.02	10.02	9.31
N180TC	8.82	5.22	—	—	17.54	19.63	10.73	10.73	10.02
N210TC	8.82	5.22	—	—	17.54	19.63	10.73	10.73	10.02
N250TC	8.82	5.22	—	—	17.54	19.63	10.73	10.73	10.02
N250TC	11.81	5.41	—	15.65	—	—	—	—	—
N280TC	11.81	6.28	—	—	18.60	20.69	11.79	11.79	11.08
N280TC	13.78	6.42	—	16.65	—	—	—	—	—
N320TC	13.78	7.97	15.65	—	—	—	—	—	—
N360TC	13.78	7.97	15.65	—	—	—	—	—	—

	3/V 06L3		3/A 06L2	
	T3			
	15.94		14.76	
Lbs	209.5		330.8	
	P1	T4	P1	T4
N56C	6.54	5.37	6.50	13.17
N140TC	6.54	5.37	6.50	13.17
N180TC	9.02	5.37	9.00	13.92
N210TC	9.02	6.08	9.00	15.16
N250TC	—	—	13.78	17.95
N250TC	—	—	—	—
N280TC	—	—	13.78	18.15
N280TC	—	—	—	—
N320TC	—	—	—	—
N360TC	—	—	—	—

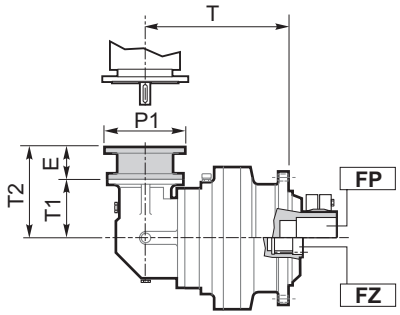
NEMA input | Solid input shaft

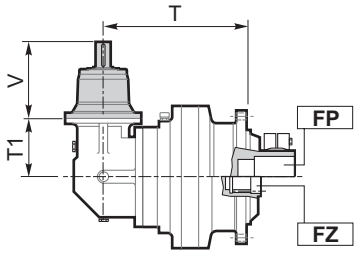
306L



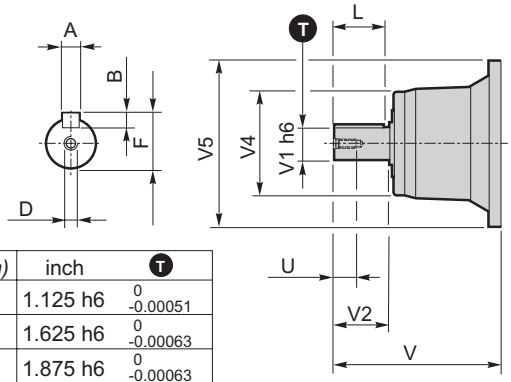


306R



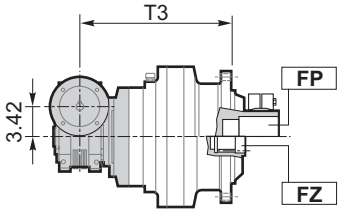


	306 L2	306 L3, L4 306 R2, R3, R4		306 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV06B
V	9.68	6.00	6.44	12.70
V1	1.875	1.125	1.625	2.375
V2	3.50	2.00	2.50	4.75
V4	6.10	4.72	4.72	6.10
V5	9.65	7.32	7.32	11.50
A	0.500	0.250	0.375	0.625
B	0.500	0.250	0.375	0.625
F	2.091	1.236	1.791	2.646
L	3.00	1.75	2.00	4.25
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	50.7

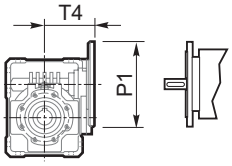


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075

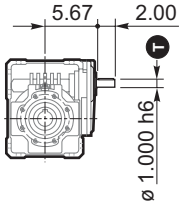
3/V 06L3



NEMA input



Solid input shaft



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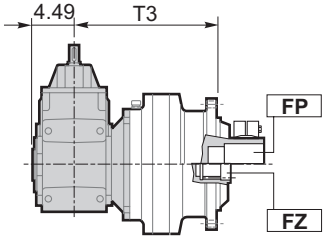
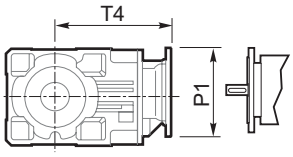
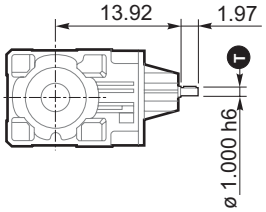
3/A 06L2



NEMA input



Solid input shaft



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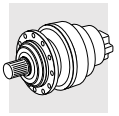
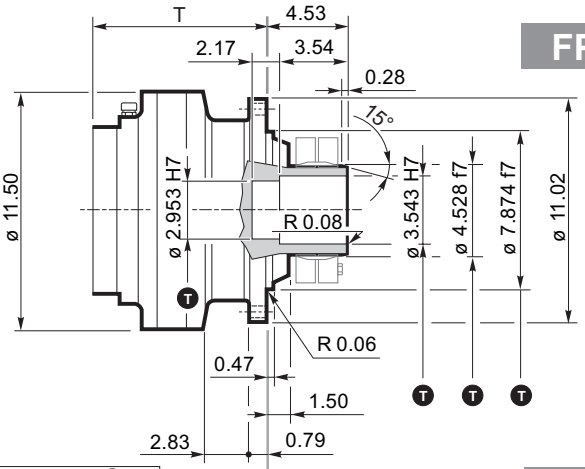
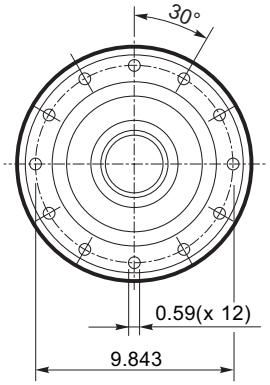




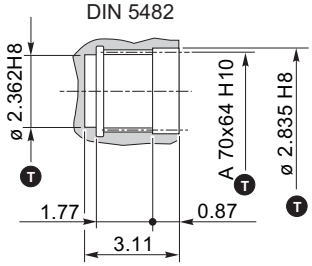
FP



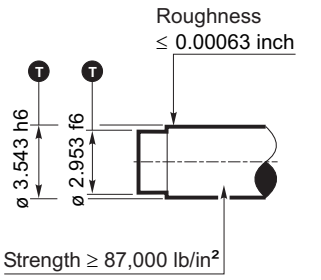
(mm)	inch	T
—	1.000 h6	0 -0.00051
(60)	2.362 H8	+0.00181 0
(72)	2.835 H8	+0.00181 0
(75)	2.953 f6	-0.00118 -0.00193
(75)	2.953 H7	+0.00118 0
(90)	3.543 h6	0 -0.00087
(90)	3.543 H7	+0.00138 0
(115)	4.528 f7	-0.00142 -0.00280
(150)	7.874 f7	-0.00197 -0.00378
A70x64 H10		DIN 5482

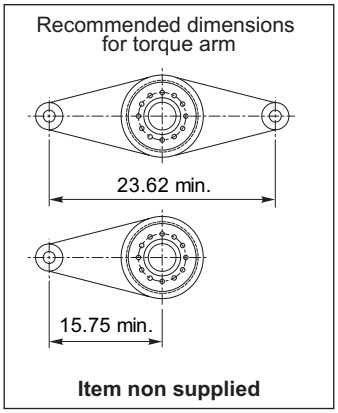
FZ

DIN 5482



FP T_{2max} = 106,200 in.lbs

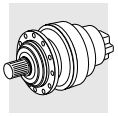




	306 L1	306 L2	306 L3	306 L4	306 R2	306 R3	306 R4
T	6.30	8.86	10.94	13.03	11.69	12.48	14.57
T1	—	—	—	—	5.51	5.51	4.80
Lbs	143.3	163.2	172.0	180.8	196.2	187.4	174.2

	3/V 06L3	3/A 06L2
	T3	
	14.57	13.39
Lbs	176.4	308.7

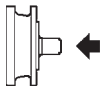
NEMA Input													
	P1	E	T2							P1	T4	P1	T4
N56C	9.84	4.51	—	—	15.45	17.54	10.02	10.02	9.31	6.54	5.37	6.50	13.17
N140TC	9.84	4.51	—	—	15.45	17.54	10.02	10.02	9.31	6.54	5.37	6.50	13.17
N180TC	8.82	5.22	—	—	16.16	18.25	10.73	10.73	10.02	9.02	5.37	9.00	13.92
N210TC	8.82	5.22	—	—	16.16	18.25	10.73	10.73	10.02	9.02	6.08	9.00	15.16
N250TC	8.82	5.22	—	—	16.16	18.25	10.73	10.73	10.02	—	—	13.78	17.95
N250TC	11.81	5.41	—	14.27	—	—	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	—	17.22	19.31	11.79	11.79	11.08	—	—	13.78	18.15
N280TC	13.78	6.42	—	15.28	—	—	—	—	—	—	—	—	—
N320TC	13.78	7.97	14.27	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	14.27	—	—	—	—	—	—	—	—	—	—

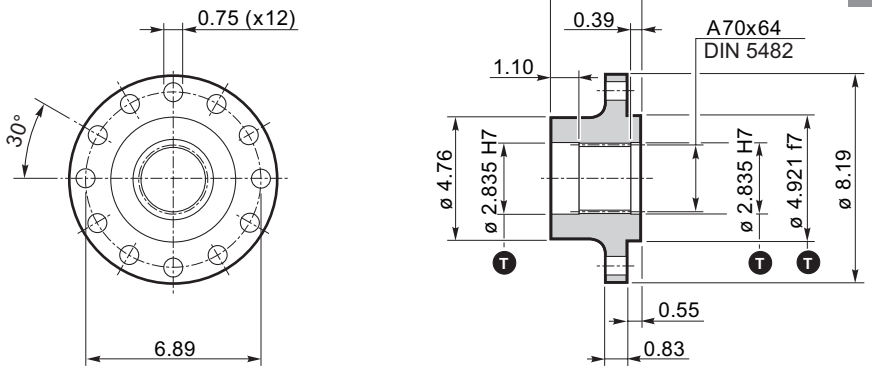


306

Flange

W0A

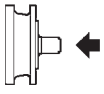


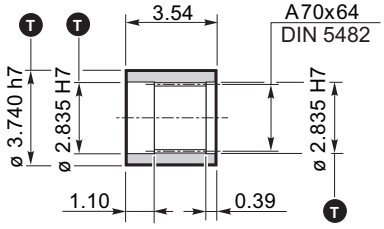


Material : Steel AISI 1040

Sleeve coupling

M0A

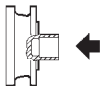


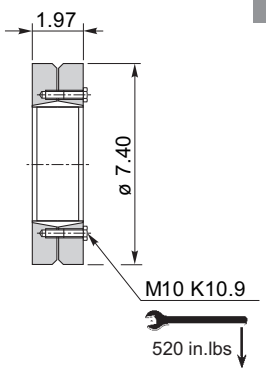


Material : Steel SAE 8620

Shrink disc

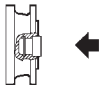
G0A

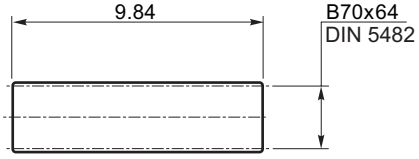




Splined bar

B0A

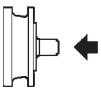


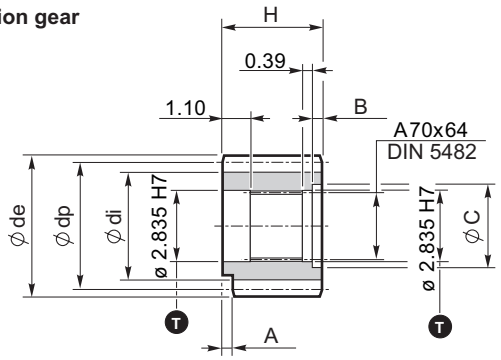


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear

P...





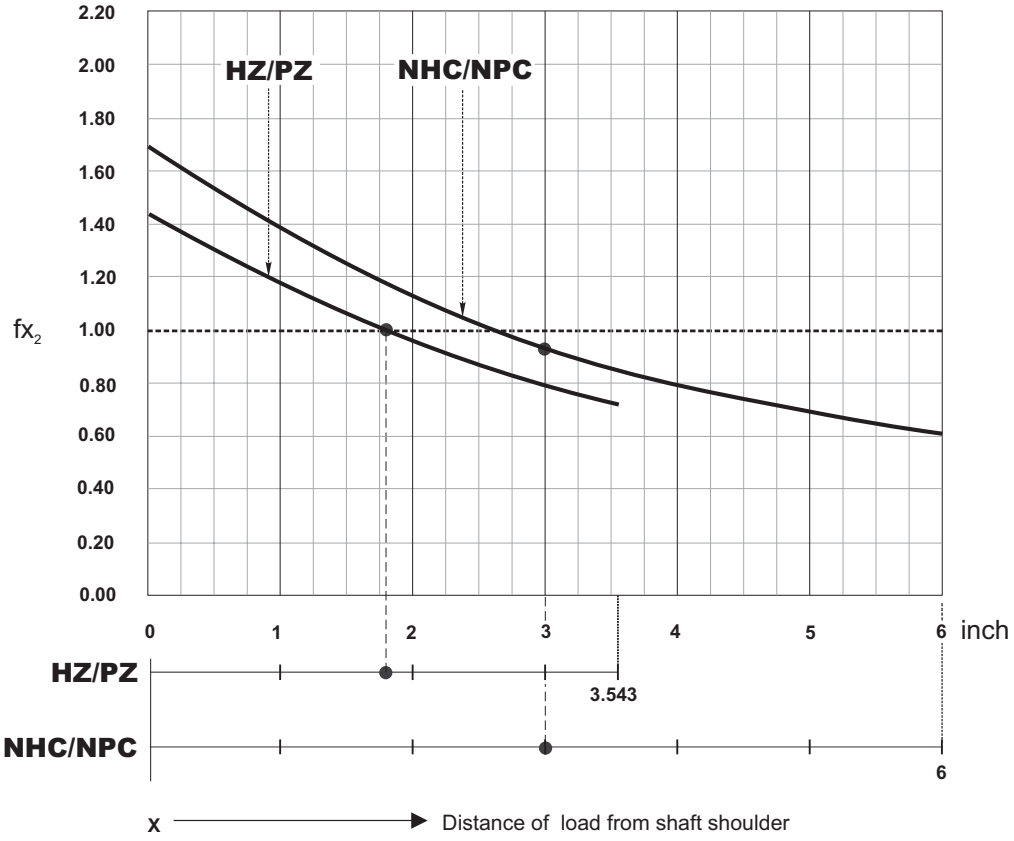
Code	m	z	x	dp	di	de	H	A	B	C	☆
PFF1	8	15	0	120	100	134	90	0	0	0	□
PFF2	8	15	0.500	120	108	141	90	0	0	0	□
PHB	10	11	0.500	110	95	136	90	10	0	0	□
PHC1	10	12	0.450	120	104	145	90	0	0	0	□
PHC2	10	12	0.320	120	100	144.2	90	0	0	0	□
PHC3	10	12	0.350	120	101	144	90	0	0	0	□
PHD1	10	13	0.950	130	124	165	90	0	0	0	□
PHD2	10	13	0.500	130	115	159	90	0	0	0	□
PHE1	10	14	0	140	115	160	90	0	0	0	□
PHE2	10	14	0.500	140	125	166	90	0	0	0	■
PHF	10	15	0	150	127	167	90	24	0	0	□
PHH	10	17	0.480	170	154	197.5	90	10	0	0	□
⚠ Dimensions of pinion gears are in mm											

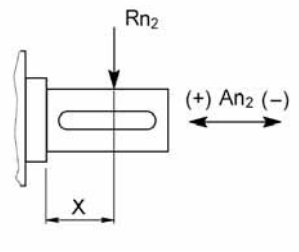
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m	= module
z	= number of teeth
x	= addendum modification
dp	= generated pitch diameter
di	= root diameter
de	= outside diameter

(mm)	inch Ⓣ	
(72)	2.835 H7	+0.00118 / 0
(95)	3.740 h7	0 / -0.00138
(125)	4.921 f7	-0.00169 / -0.00327

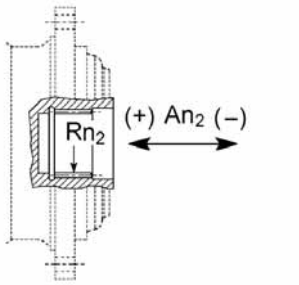
Load application factor for calculation of admissible overhung load on output shaft





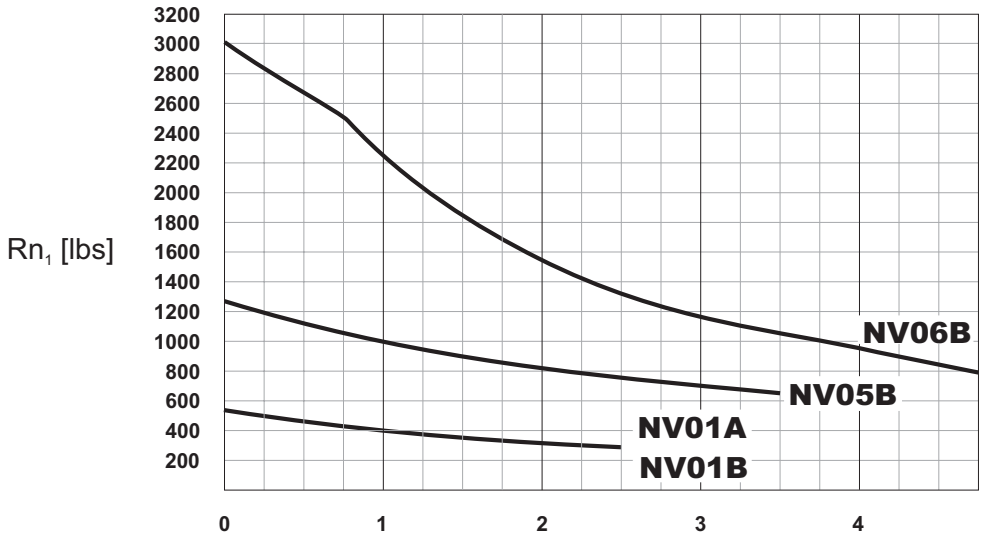
$R_{x2} = Rn_2 \cdot fx_2$

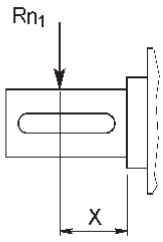
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

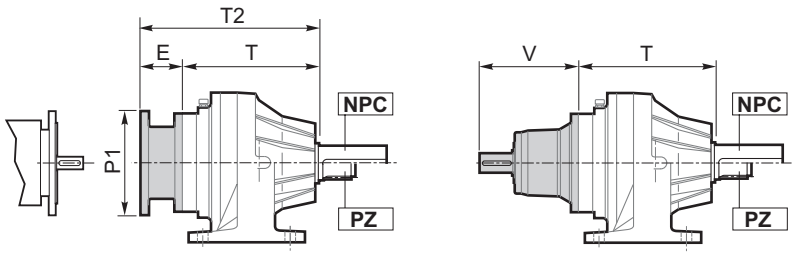
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



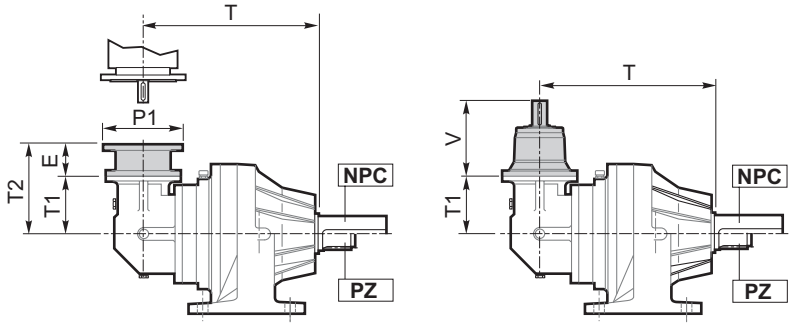


NEMA input | Solid input shaft

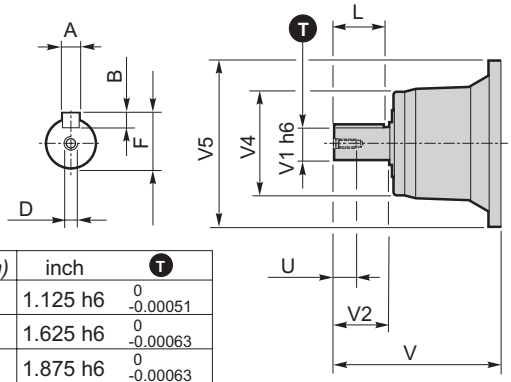
307L



307R

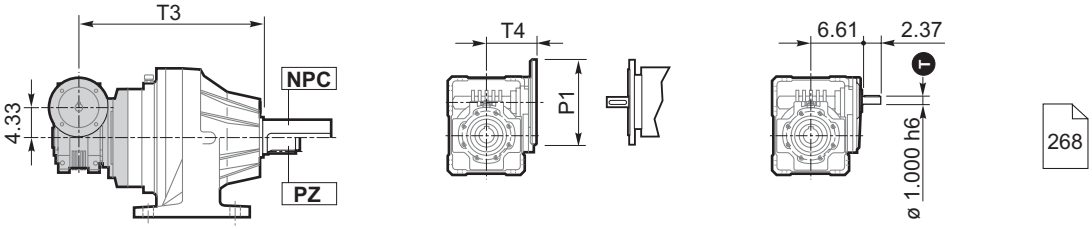


	307 L2 307 R2	307 L3, L4 307 R3, R4		307 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV07B
V	9.68	6.00	6.44	12.28
V1	1.875	1.125	1.625	3.000
V2	3.50	2.00	2.50	5.00
V4	6.10	4.72	4.72	7.87
V5	9.65	7.32	7.32	13.58
A	0.500	0.250	0.375	0.750
B	0.500	0.250	0.375	0.750
F	2.091	1.236	1.791	3.327
L	3.00	1.75	2.00	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	77.2



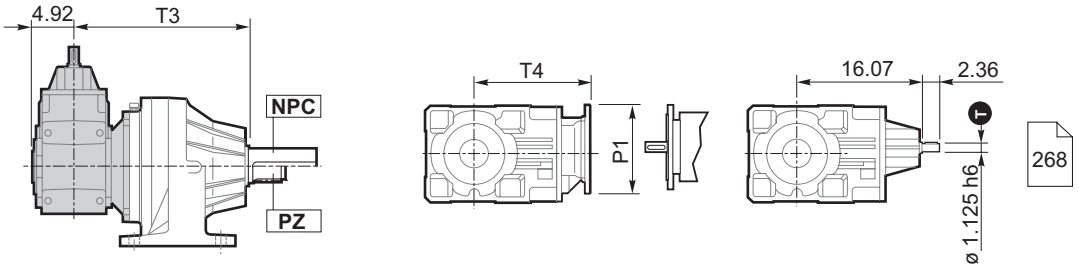
(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	3.000 h6	0 -0.00075

3/V 07L3



268

3/A 07L2



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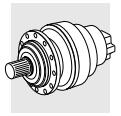
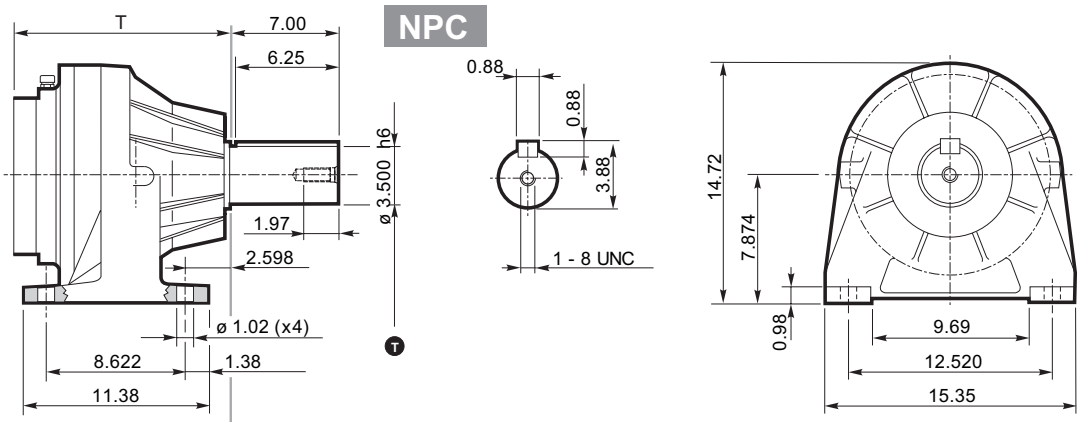
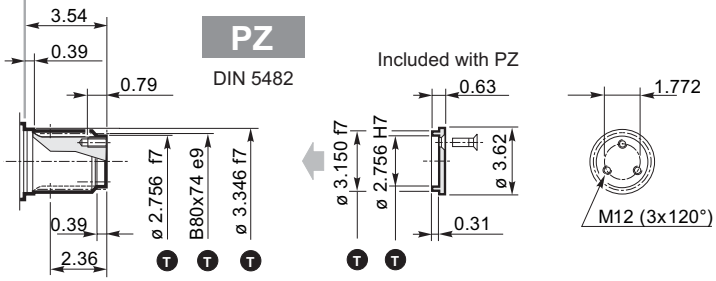




(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.125 h6	0 -0.00051
(70)	2.756 f7	-0.00118 -0.00236
(70)	2.756 H7	+0.00118 0
(85)	3.346 f7	-0.00142 -0.00280
—	3.500 h6	0 -0.00087
B80x74 e9		DIN 5482



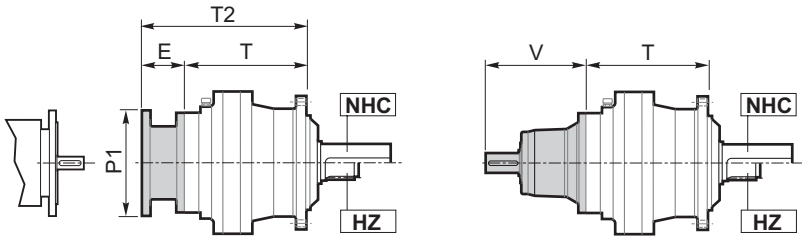
	307 L1	307 L2	307 L3	307 L4	307 R2	307 R3	307 R4
T	9.69	13.19	15.75	17.83	14.37	16.81	19.37
T1	—	—	—	—	8.86	5.51	4.80
Lbs	264.6	291.1	306.5	315.3	374.9	335.2	337.4

	3/V 07L3	3/A 07L2
	T3	
	19.49	16.42
Lbs	363.8	507.2

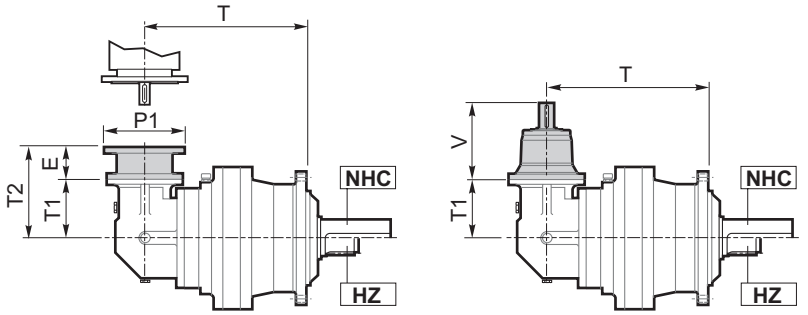
NEMA Input													
	P1	E	T2							P1	T4	P1	T4
N56C	9.84	4.51	—	—	20.26	22.34	—	10.02	9.31	—	—	—	—
N140TC	9.84	4.51	—	—	20.26	22.34	—	10.02	9.31	6.54	5.96	6.50	14.63
N180TC	8.82	5.22	—	—	20.96	23.05	—	10.73	10.02	9.02	6.67	9.00	15.37
N210TC	8.82	5.22	—	—	20.96	23.05	—	10.73	10.02	9.02	9.17	9.00	16.61
N250TC	8.82	5.22	—	—	20.96	23.05	—	10.73	10.02	—	—	13.78	19.41
N250TC	11.81	5.41	—	18.60	—	—	14.27	—	—	—	—	—	—
N280TC	11.81	6.28	—	—	22.03	24.11	—	11.79	11.08	—	—	13.78	19.61
N280TC	13.78	6.42	—	19.61	—	—	15.28	—	—	—	—	—	—
N320TC	13.78	7.97	18.33	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	18.33	—	—	—	—	—	—	—	—	—	—

NEMA input | Solid input shaft

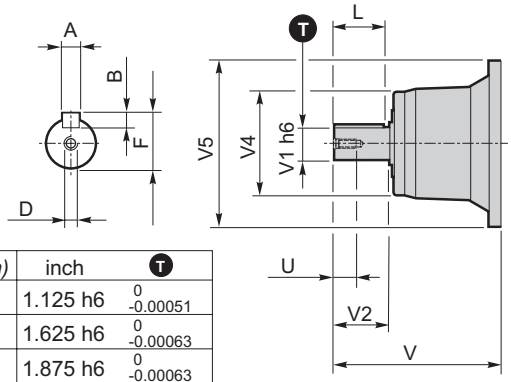
307L



307R

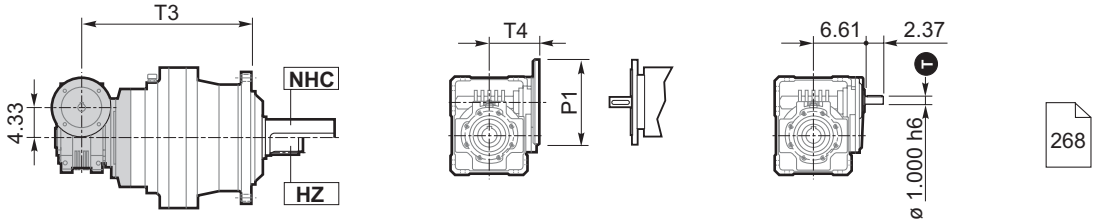


	307 L2 307 R2	307 L3, L4 307 R3, R4		307 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV07B
V	9.68	6.00	6.44	12.28
V1	1.875	1.125	1.625	3.000
V2	3.50	2.00	2.50	5.00
V4	6.10	4.72	4.72	7.87
V5	9.65	7.32	7.32	13.58
A	0.500	0.250	0.375	0.750
B	0.500	0.250	0.375	0.750
F	2.091	1.236	1.791	3.327
L	3.00	1.75	2.00	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	77.2



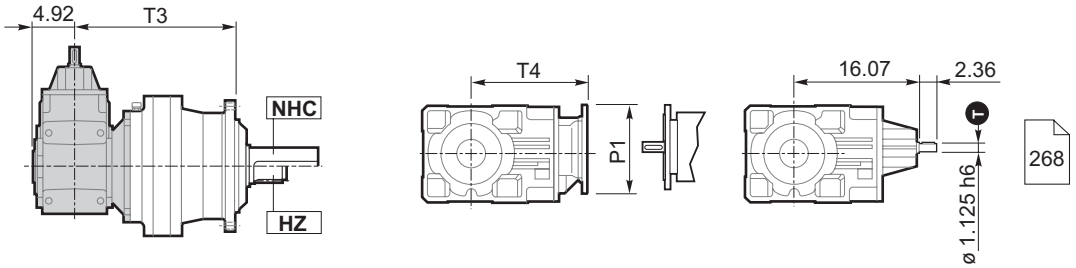
(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	3.000 h6	0 -0.00075

3/V 07L3



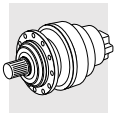
268

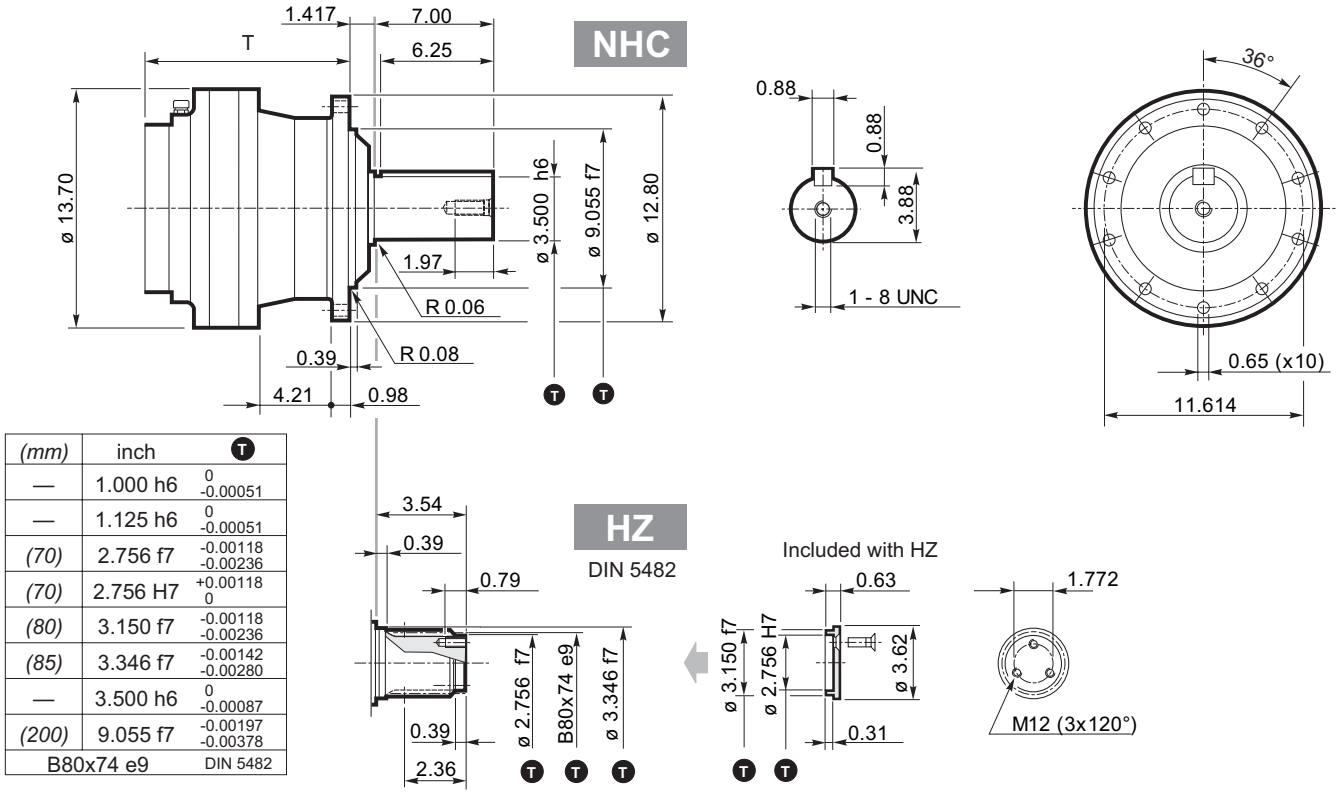
3/A 07L2



268

BONFIGLIOLI TRASMITAL





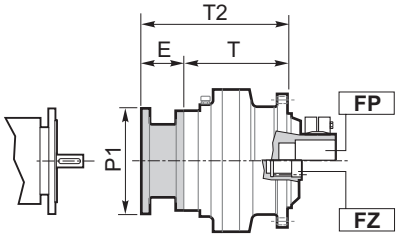
(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.125 h6	0 -0.00051
(70)	2.756 f7	-0.00118 -0.00236
(70)	2.756 H7	+0.00118 0
(80)	3.150 f7	-0.00118 -0.00236
(85)	3.346 f7	-0.00142 -0.00280
—	3.500 h6	0 -0.00087
(200)	9.055 f7	-0.00197 -0.00378
B80x74 e9		DIN 5482

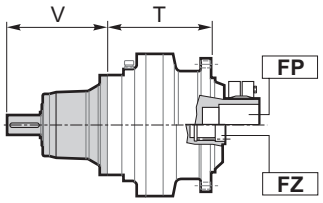
		307 L1	307 L2	307 L3	307 L4	307 R2	307 R3	307 R4
	T	8.27	11.77	14.33	16.42	12.95	15.39	17.95
	T1	—	—	—	—	8.86	5.51	4.80
	Lbs	231.5	258.0	273.4	282.2	341.8	302.1	304.3
NEMA Input								
	P1	E	T2					
N56C	9.84	4.51	—	—	18.84	20.93	—	10.02	9.31
N140TC	9.84	4.51	—	—	18.84	20.93	—	10.02	9.31
N180TC	8.82	5.22	—	—	19.55	21.63	—	10.73	10.02
N210TC	8.82	5.22	—	—	19.55	21.63	—	10.73	10.02
N250TC	8.82	5.22	—	—	19.55	21.63	—	10.73	10.02
N250TC	11.81	5.41	—	17.19	—	—	14.27	—	—
N280TC	11.81	6.28	—	—	20.61	22.70	—	11.79	11.08
N280TC	13.78	6.42	—	18.19	—	—	15.28	—	—
N320TC	13.78	7.97	16.91	—	—	—	—	—	—
N360TC	13.78	7.97	16.91	—	—	—	—	—	—

	3/V 07L3		3/A 07L2	
	T3			
	18.07		15.00	
Lbs	330.8		463.1	
	P1	T4	P1	T4
	—	—	—	—
	6.54	5.96	6.50	14.63
	9.02	6.67	9.00	15.37
	9.02	9.17	9.00	16.61
	—	—	13.78	19.41
	—	—	—	—
	—	—	13.78	19.61
	—	—	—	—
	—	—	—	—
	—	—	—	—

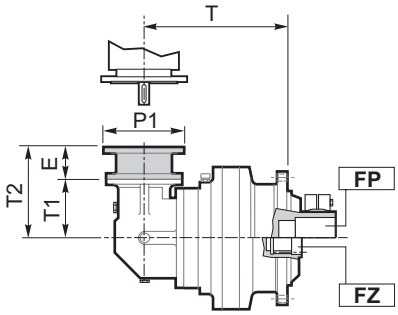
NEMA input | Solid input shaft

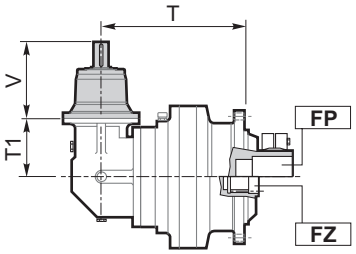
307L



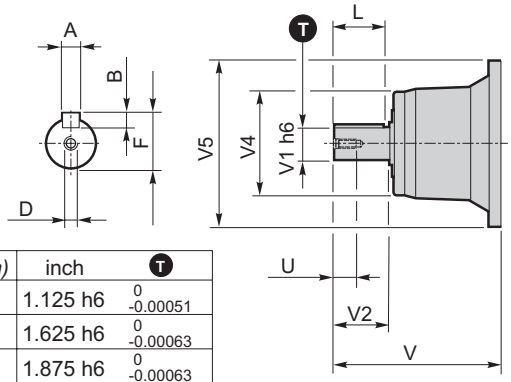


307R



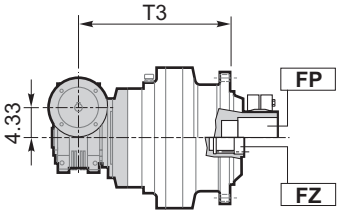


	307 L2 307 R2	307 L3, L4 307 R3, R4		307 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV07B
V	9.68	6.00	6.44	12.28
V1	1.875	1.125	1.625	3.000
V2	3.50	2.00	2.50	5.00
V4	6.10	4.72	4.72	7.87
V5	9.65	7.32	7.32	13.58
A	0.500	0.250	0.375	0.750
B	0.500	0.250	0.375	0.750
F	2.091	1.236	1.791	3.327
L	3.00	1.75	2.00	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	77.2

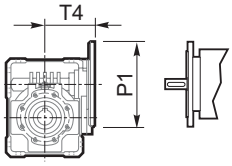


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	3.000 h6	0 -0.00075

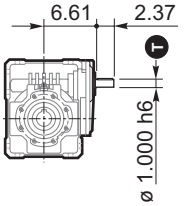
3/V 07L3



NEMA input

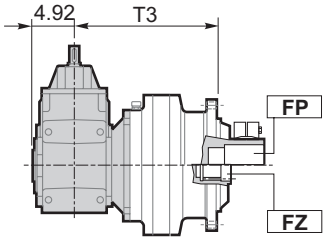


Solid input shaft

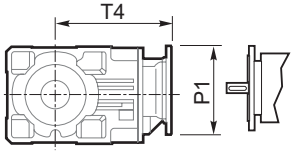


268

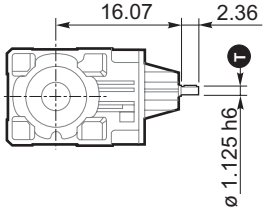
3/A 07L2



NEMA input

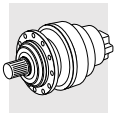


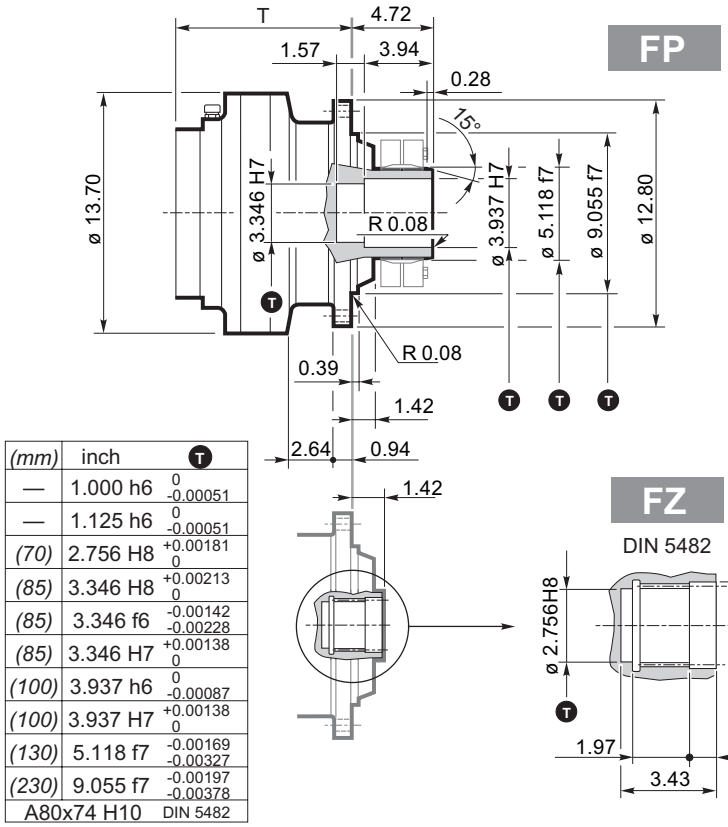
Solid input shaft

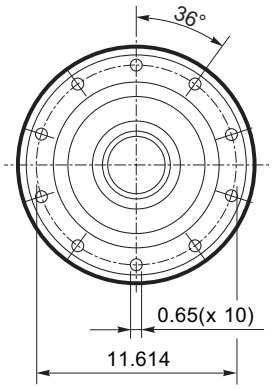


268

BONFIGLIOLI TRASMITAL

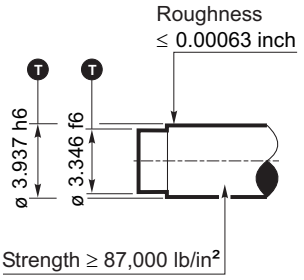


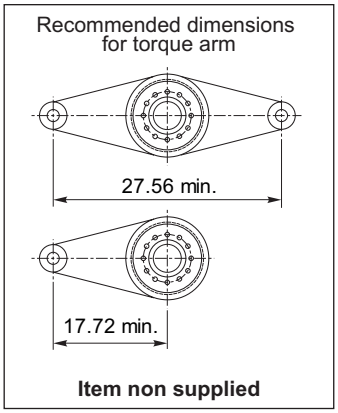




(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.125 h6	0 -0.00051
(70)	2.756 H8	+0.00181 0
(85)	3.346 H8	+0.00213 0
(85)	3.346 f6	-0.00142 -0.00228
(85)	3.346 H7	+0.00138 0
(100)	3.937 h6	0 -0.00087
(100)	3.937 H7	+0.00138 0
(130)	5.118 f7	-0.00169 -0.00327
(230)	9.055 f7	-0.00197 -0.00378
A80x74 H10	DIN 5482	

FP T_{2max} = 159,300 in.lbs

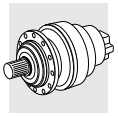




		307 L1	307 L2	307 L3	307 L4	307 R2	307 R3	307 R4
	T	6.50	10.00	12.56	14.65	11.18	13.62	16.18
	T1					8.86	5.51	4.80
Lbs		187.4	213.9	229.3	238.1	297.7	258.0	260.2

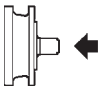
	3/V 07L3	3/A 07L2
	T3	
	16.30	13.23
Lbs	286.7	441.0

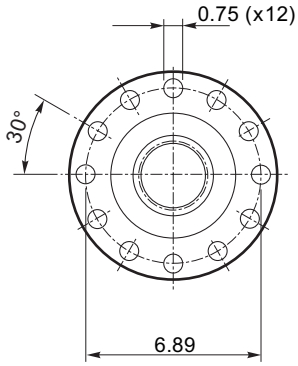
NEMA Input													
	P1	E	T2							P1	T4	P1	T4
N56C	9.84	4.51	—	—	17.07	19.15	—	10.02	9.31	—	—	—	—
N140TC	9.84	4.51	—	—	17.07	19.15	—	10.02	9.31	6.54	5.96	6.50	14.63
N180TC	8.82	5.22	—	—	17.78	19.86	—	10.73	10.02	9.02	6.67	9.00	15.37
N210TC	8.82	5.22	—	—	17.78	19.86	—	10.73	10.02	9.02	9.17	9.00	16.61
N250TC	8.82	5.22	—	—	17.78	19.86	—	10.73	10.02	—	—	13.78	19.41
N250TC	11.81	5.41	—	15.41	—	—	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	—	18.84	20.93	—	11.79	11.08	—	—	13.78	19.61
N280TC	13.78	6.42	—	16.42	—	—	15.28	—	—	—	—	—	—
N320TC	13.78	7.97	15.14	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	15.14	—	—	—	—	—	—	—	—	—	—



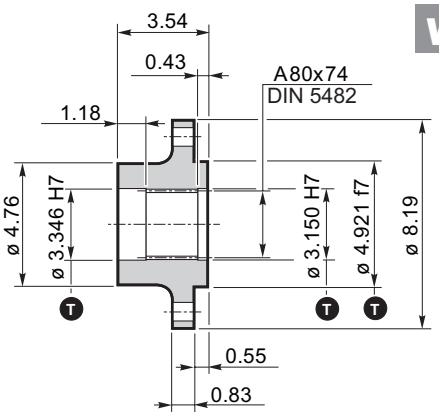
307

Flange



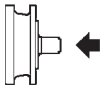


W0A

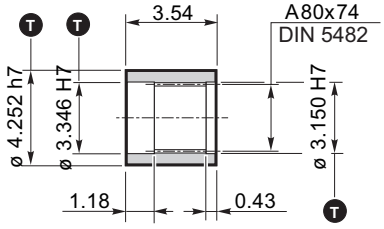


Material : Steel AISI 1040

Sleeve coupling

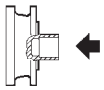


M0A



Material : Steel SAE 8620

Shrink disc



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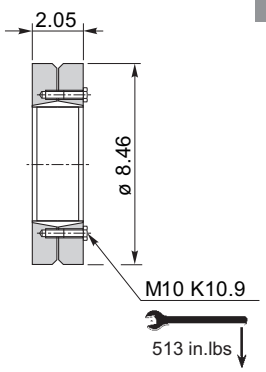
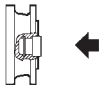
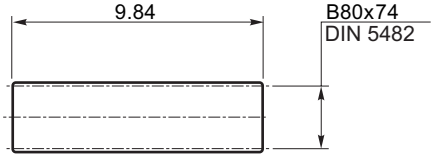


Splined bar

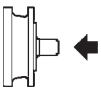


B0A

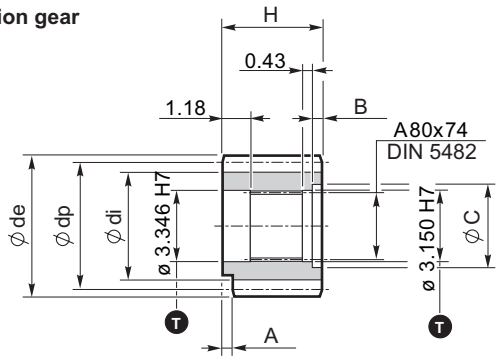


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PFG	8	16	0.500	128	117	149.5	90	0	0	0	□
PHC	10	12	0.450	120	104	145	90	0	0	0	□
PHE	10	14	0.320	140	121	162.5	116	13	26	95	□
PHF	10	15	0.150	150	130	171.5	107	20	17	100	□
PHG	10	16	0.500	160	145	186	90	0	0	0	■
PHH1	10	17	0	170	145	190	90	0	0	0	■
PHH2	10	17	0.500	170	154	198	90	0	0	0	■
PLD	12	13	0.500	156	138	192	102	0	12	95	□
PLE	12	14	0.500	168	150	199.2	90	0	0	0	□
PLI	12	18	0.500	216	198	249.6	107	7	17	95	□
PLT	12	26	0	312	282	336	90	10	0	0	■

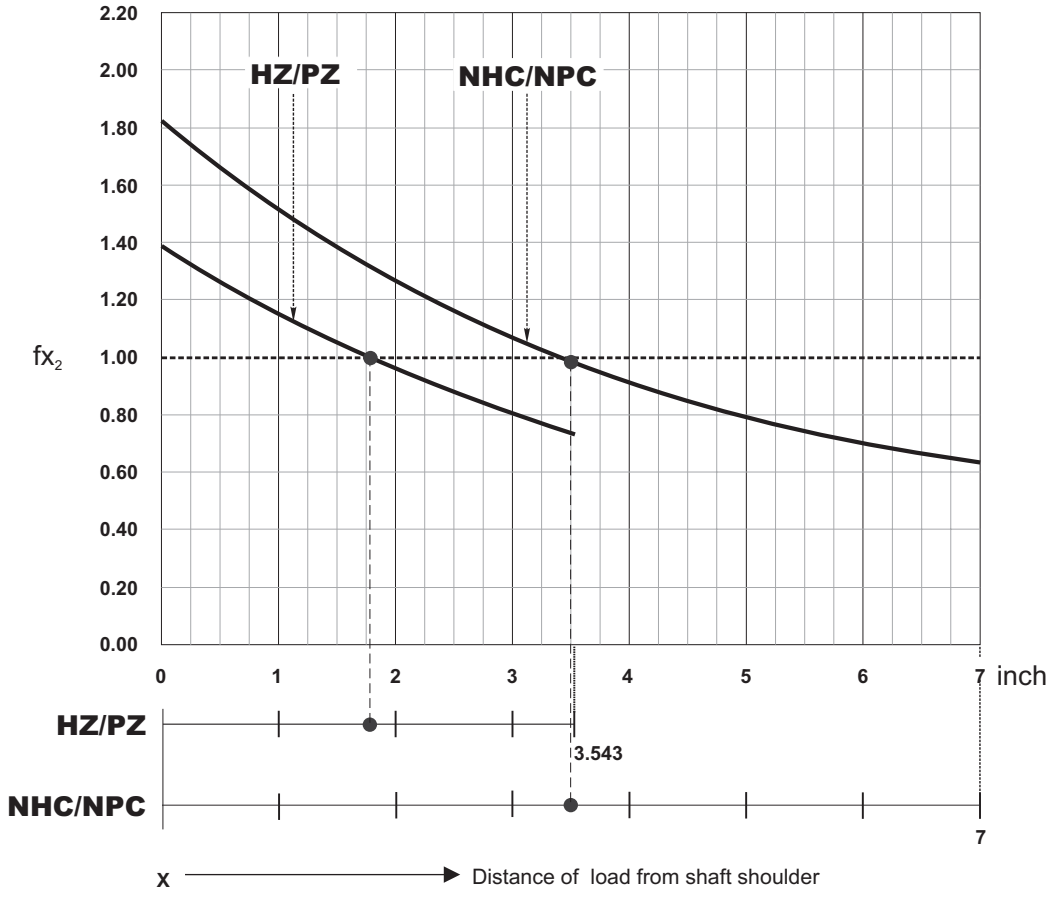
⚠ Dimensions of pinion gears are in mm

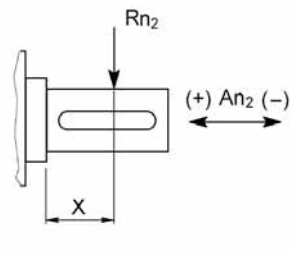
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch Ⓣ
(85)	3.346 H7 $^{+0.00138}_{0}$
(80)	3.150 H7 $^{+0.00138}_{0}$
(108)	4.252 h7 $^{0}_{-0.00138}$
(125)	4.921 f7 $^{-0.00169}_{-0.00327}$

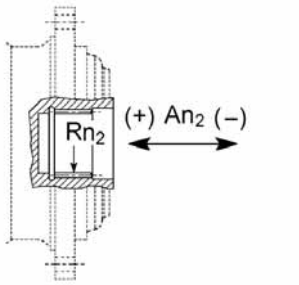
Load application factor for calculation of admissible overhung load on output shaft





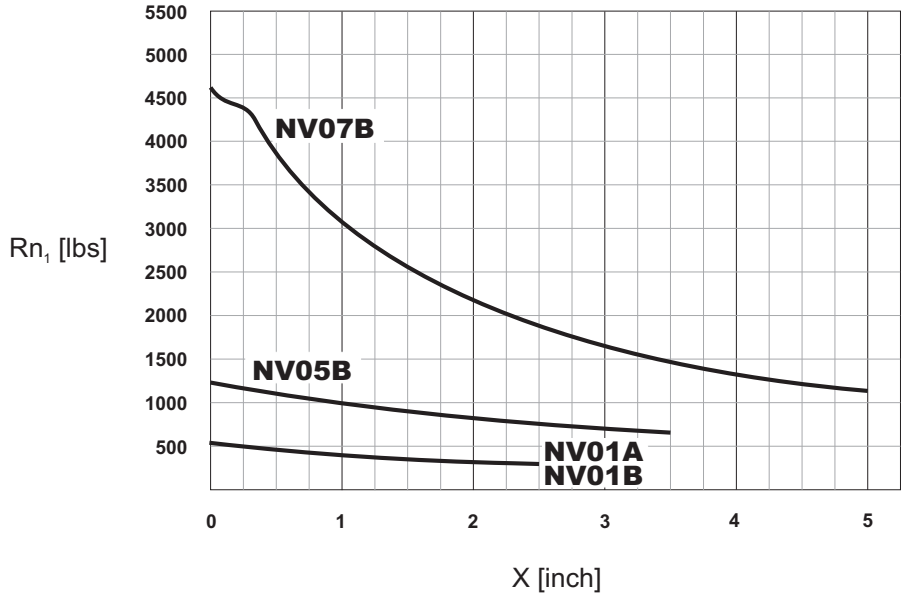
$R_{x2} = Rn_2 \cdot fx_2$

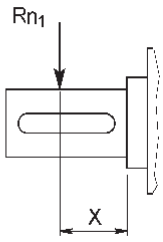
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).

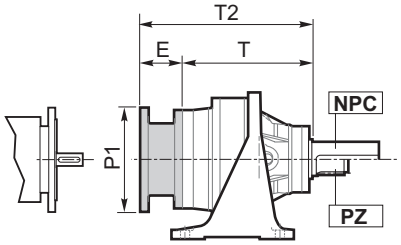


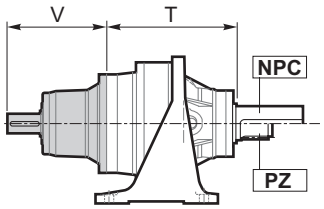


NEMA input

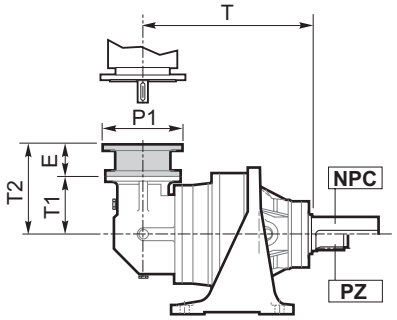
Solid input shaft

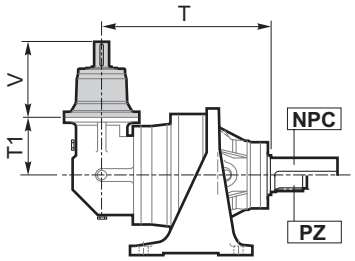
309L



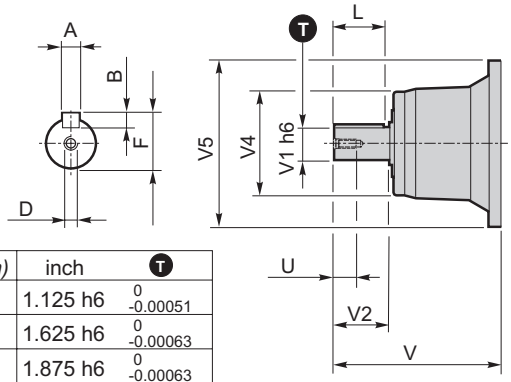


309R



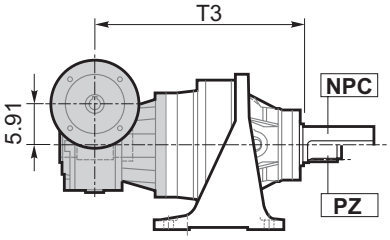


	309 L2 309 R2	309 L3, L4 309 R3, R4		309 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV07B
V	9.68	6.00	6.44	12.28
V1	1.875	1.125	1.625	3.000
V2	3.50	2.00	2.50	5.00
V4	6.10	4.72	4.72	7.87
V5	9.65	7.32	7.32	13.58
A	0.500	0.250	0.375	0.750
B	0.500	0.250	0.375	0.750
F	2.091	1.236	1.791	3.327
L	3.00	1.75	2.00	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	77.2

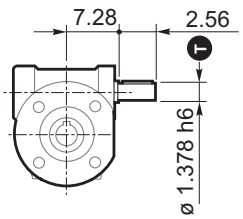


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	3.000 h6	0 -0.00075

3/V 09L3



Solid input shaft



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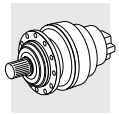
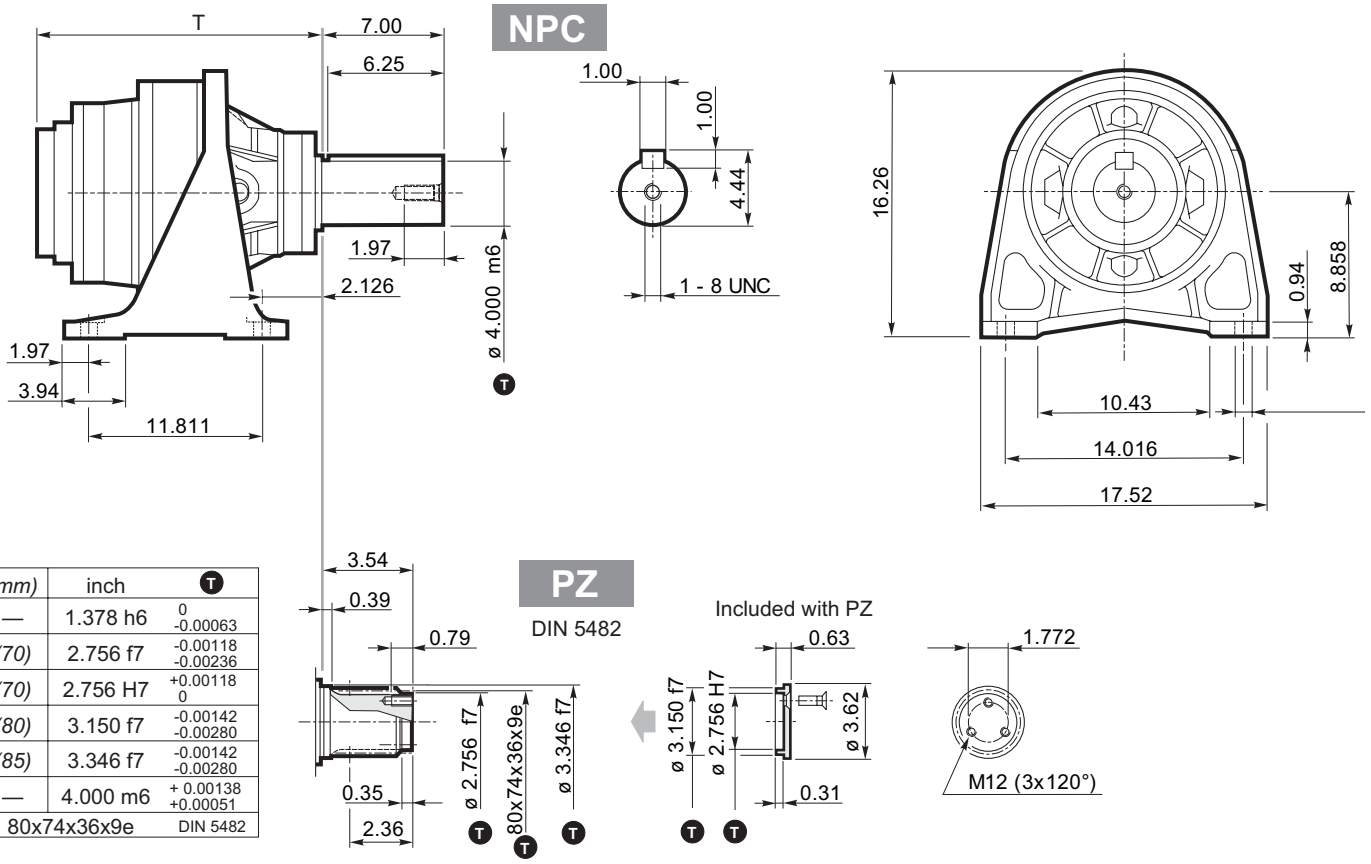




(mm)	inch	T
—	1.378 h6	0 -0.00063
(70)	2.756 f7	-0.00118 -0.00236
(70)	2.756 H7	+0.00118 0
(80)	3.150 f7	-0.00142 -0.00280
(85)	3.346 f7	-0.00142 -0.00280
—	4.000 m6	+ 0.00138 +0.00051
80x74x36x9e		DIN 5482

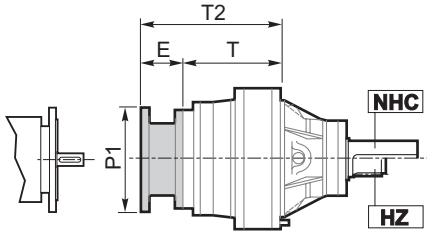
	309 L1	309 L2	309 L3	309 L4	309 R2	309 R3	309 R4
T	10.51	14.02	16.57	18.66	15.20	17.64	20.20
T1	—	—	—	—	8.86	5.51	4.80
Lbs	286.7	313.1	328.5	337.4	396.9	357.2	359.4

	3/V 09L3
	T3
	20.87
Lbs	445.4

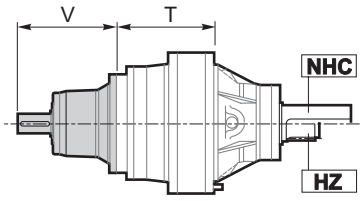
NEMA Input											
	P1	E	T2							P1	T4
N56C	9.84	4.51	—	—	21.08	23.17	—	10.02	9.31	—	—
N140TC	9.84	4.51	—	—	21.08	23.17	—	10.02	9.31	—	—
N180TC	8.82	5.22	—	—	21.79	23.88	—	10.73	10.02	—	—
N210TC	8.82	5.22	—	—	21.79	23.88	—	10.73	10.02	—	—
N250TC	8.82	5.22	—	—	21.79	23.88	—	10.73	10.02	—	—
N250TC	11.81	5.41	—	19.43	—	—	14.27	—	—	—	—
N280TC	11.81	6.28	—	—	22.85	24.94	—	11.79	11.08	—	—
N280TC	13.78	6.42	—	20.43	—	—	15.28	—	—	—	—
N320TC	15.75	8.64	19.15	—	—	—	—	—	—	—	—
N360TC	15.75	8.64	19.15	—	—	—	—	—	—	—	—

309L

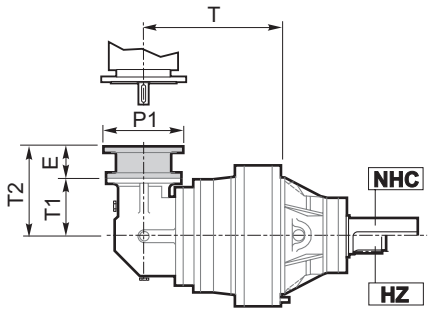
NEMA input

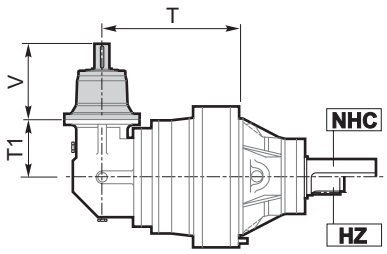


Solid input shaft

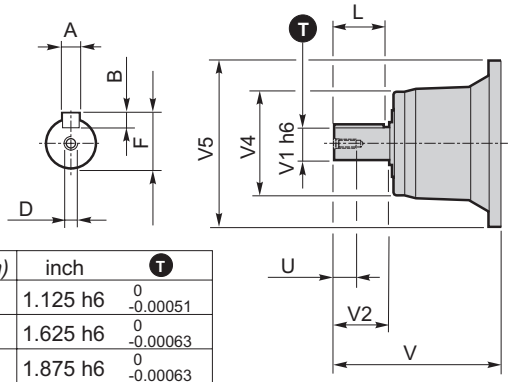


309R



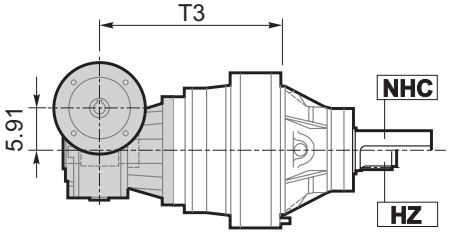


	309 L2 309 R2	309 L3, L4 309 R3, R4		309 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV07B
V	9.68	6.00	6.44	12.28
V1	1.875	1.125	1.625	3.000
V2	3.50	2.00	2.50	5.00
V4	6.10	4.72	4.72	7.87
V5	9.65	7.32	7.32	13.58
A	0.500	0.250	0.375	0.750
B	0.500	0.250	0.375	0.750
F	2.091	1.236	1.791	3.327
L	3.00	1.75	2.00	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	77.2

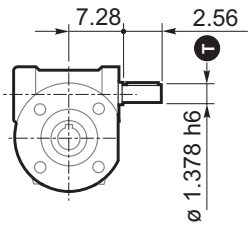


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	3.000 h6	0 -0.00075

3/V 09L3



Solid input shaft



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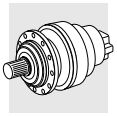
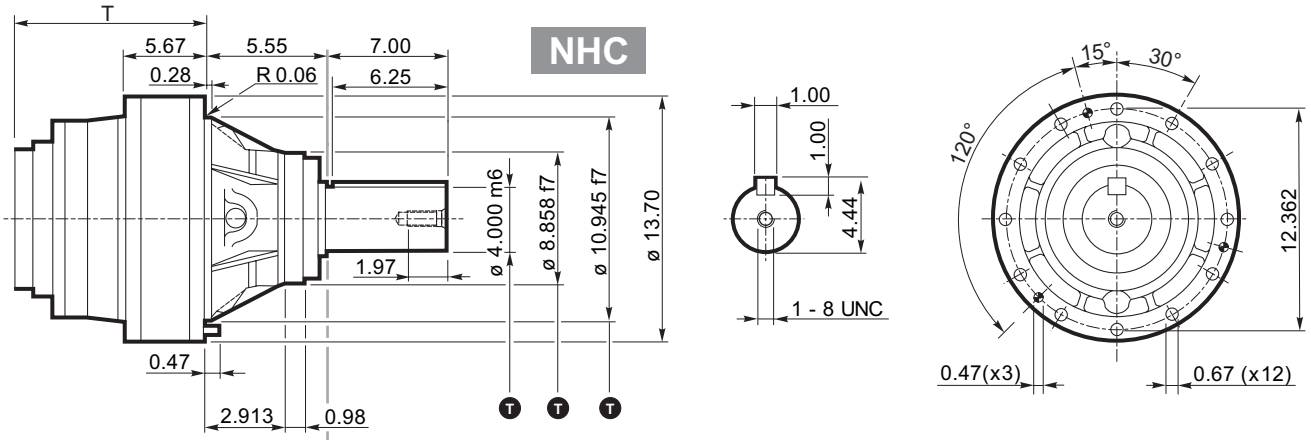
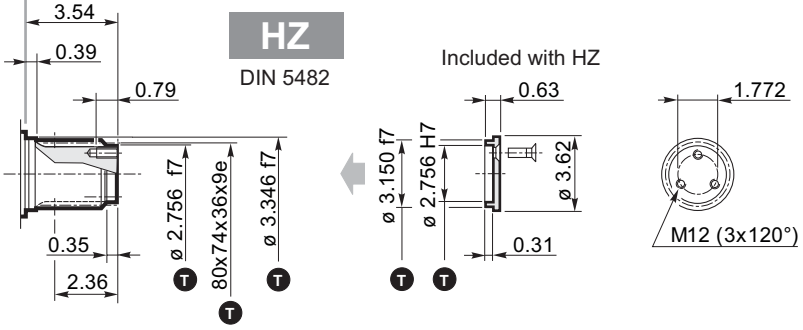




(mm)	inch	T
—	1.378 h6	0 -0.00063
(70)	2.756 f7	-0.00118 -0.00236
(70)	2.756 H7	+0.00118 0
(80)	3.150 f7	-0.00142 -0.00280
(85)	3.346 f7	-0.00142 -0.00280
—	4.000 m6	0.00138 -0.00051
(225)	8.858 f7	-0.00197 -0.00378
(277)	10.945 f7	-0.00220 -0.00425
80x74x36x9e		DIN 5482



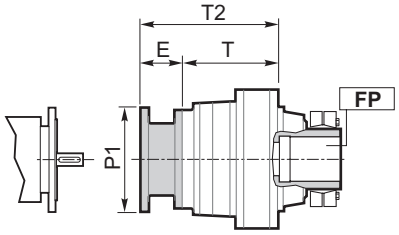
	309 L1	309 L2	309 L3	309 L4	309 R2	309 R3	309 R4
T	4.96	8.46	11.02	13.11	9.65	12.09	14.65
T1	—	—	—	—	8.86	5.51	4.80
Lbs	253.6	280.0	295.5	304.3	363.8	324.1	326.3

	3/V 09L3
	T3
	15.31
Lbs	412.3

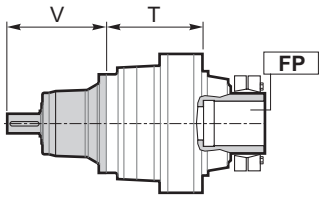
NEMA Input			T2							P1	T4
N56C	9.84	4.51	—	—	15.53	17.62	—	10.02	9.31	—	—
N140TC	9.84	4.51	—	—	15.53	17.62	—	10.02	9.31	—	—
N180TC	8.82	5.22	—	—	16.24	18.33	—	10.73	10.02	—	—
N210TC	8.82	5.22	—	—	16.24	18.33	—	10.73	10.02	—	—
N250TC	8.82	5.22	—	—	16.24	18.33	—	10.73	10.02	—	—
N250TC	11.81	5.41	—	13.88	—	—	14.27	—	—	—	—
N280TC	11.81	6.28	—	—	17.30	19.39	—	11.79	11.08	—	—
N280TC	13.78	6.42	—	14.88	—	—	15.28	—	—	—	—
N320TC	15.75	8.64	13.60	—	—	—	—	—	—	—	—
N360TC	15.75	8.64	13.60	—	—	—	—	—	—	—	—

309L

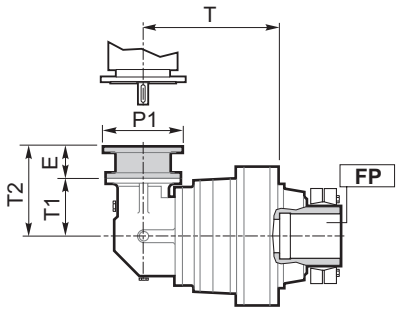
NEMA input

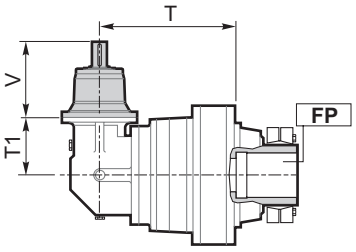


Solid input shaft

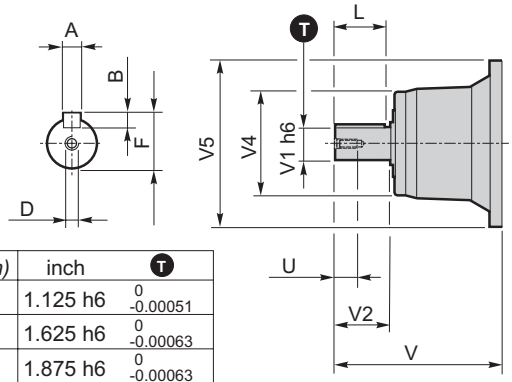


309R



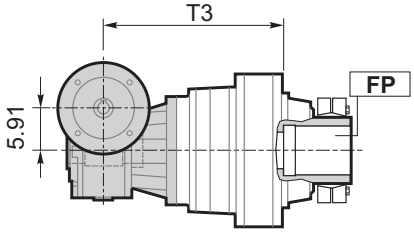


	309 L2 309 R2	309 L3, L4 309 R3, R4		309 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV07B
V	9.68	6.00	6.44	12.28
V1	1.875	1.125	1.625	3.000
V2	3.50	2.00	2.50	5.00
V4	6.10	4.72	4.72	7.87
V5	9.65	7.32	7.32	13.58
A	0.500	0.250	0.375	0.750
B	0.500	0.250	0.375	0.750
F	2.091	1.236	1.791	3.327
L	3.00	1.75	2.00	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	77.2

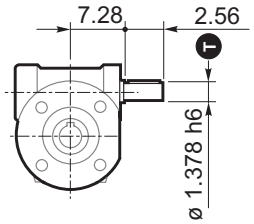


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	3.000 h6	0 -0.00075

3/V 09L3



Solid input shaft



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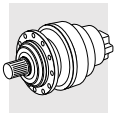
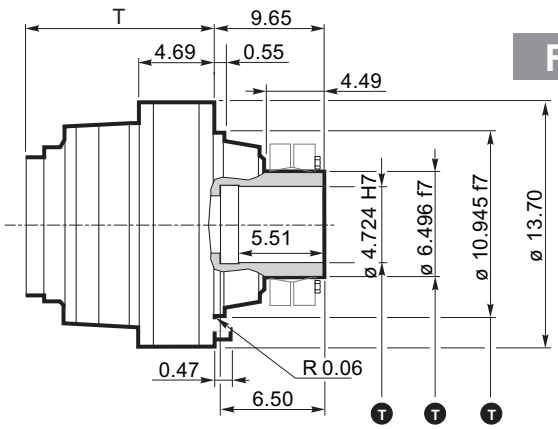
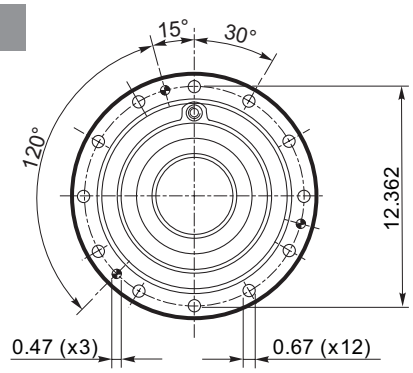
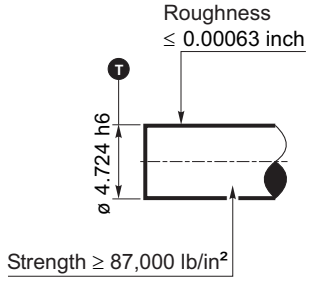




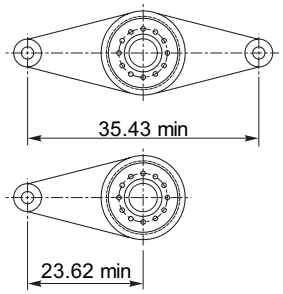


FP T_{2max} = 221,250 in.lbs



(mm)	inch	T
—	1.378 h6	0 -0.00063
(120)	4.724 H7	+0.00138 0
(120)	4.724 h6	0 -0.00087
(165)	6.496 f7	-0.00169 -0.00327
(278)	10.945 f7	-0.00220 -0.00425

Recommended dimensions for torque arm



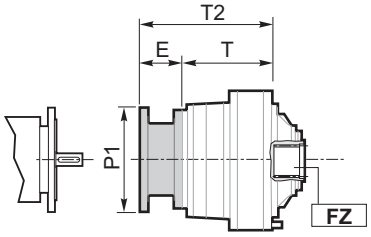
Item non supplied

		309 L1	309 L2	309 L3	309 L4	309 R2	309 R3	309 R4		3/V 09L3
	T	3.98	7.48	10.04	12.13	8.66	11.10	13.66		T3
	T1	—	—	—	—	8.86	5.51	4.80		14.33
	Lbs	220.5	247.0	262.4	271.2	330.8	291.1	293.3	Lbs	379.3

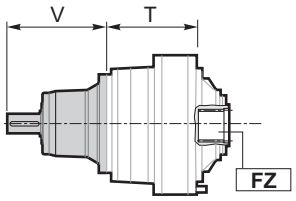
NEMA Input											
	P1	E	T2							P1	T4
N56C	9.84	4.51	—	—	14.55	16.63	—	10.02	9.31	—	—
N140TC	9.84	4.51	—	—	14.55	16.63	—	10.02	9.31	—	—
N180TC	8.82	5.22	—	—	15.26	17.34	—	10.73	10.02	—	—
N210TC	8.82	5.22	—	—	15.26	17.34	—	10.73	10.02	—	—
N250TC	8.82	5.22	—	—	15.26	17.34	—	10.73	10.02	—	—
N250TC	11.81	5.41	—	12.89	—	—	14.27	—	—	—	—
N280TC	11.81	6.28	—	—	16.32	18.41	—	11.79	11.08	—	—
N280TC	13.78	6.42	—	13.90	—	—	15.28	—	—	—	—
N320TC	15.75	8.64	12.62	—	—	—	—	—	—	—	—
N360TC	15.75	8.64	12.62	—	—	—	—	—	—	—	—

309L

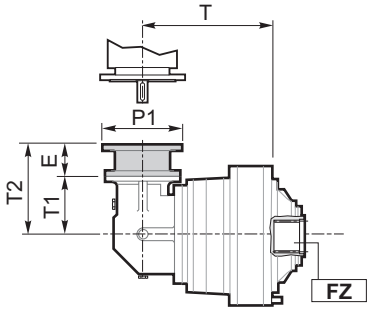
NEMA input

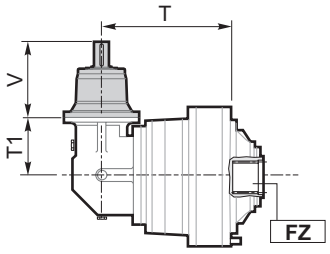


Solid input shaft



309R





	309 L2 309 R2	309 L3, L4 309 R3, R4		309 L1
	Solid input shaft			
	NV05B	NV01A	NV01B	NV07B
V	9.68	6.00	6.44	12.28
V1	1.875	1.125	1.625	3.000
V2	3.50	2.00	2.50	5.00
V4	6.10	4.72	4.72	7.87
V5	9.65	7.32	7.32	13.58
A	0.500	0.250	0.375	0.750
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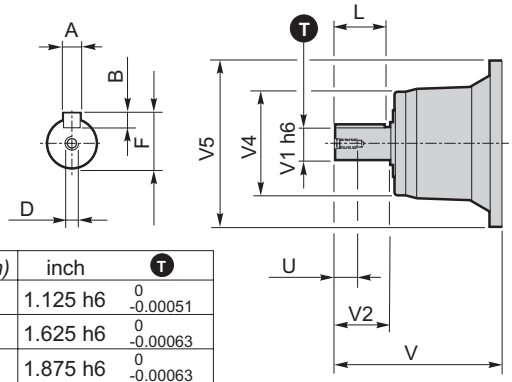
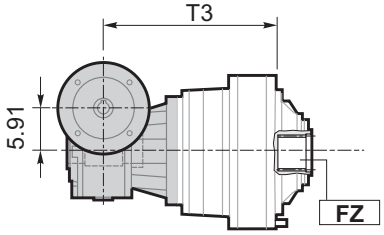
F	2.091	1.236	1.791	3.327
L	3.00	1.75	2.00	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65
Lbs	33.1	13.2	15.4	77.2

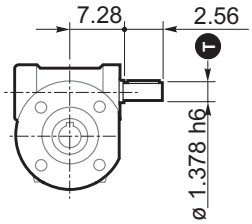


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	3.000 h6	0 -0.00075

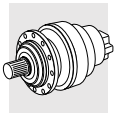
3/V 09L3



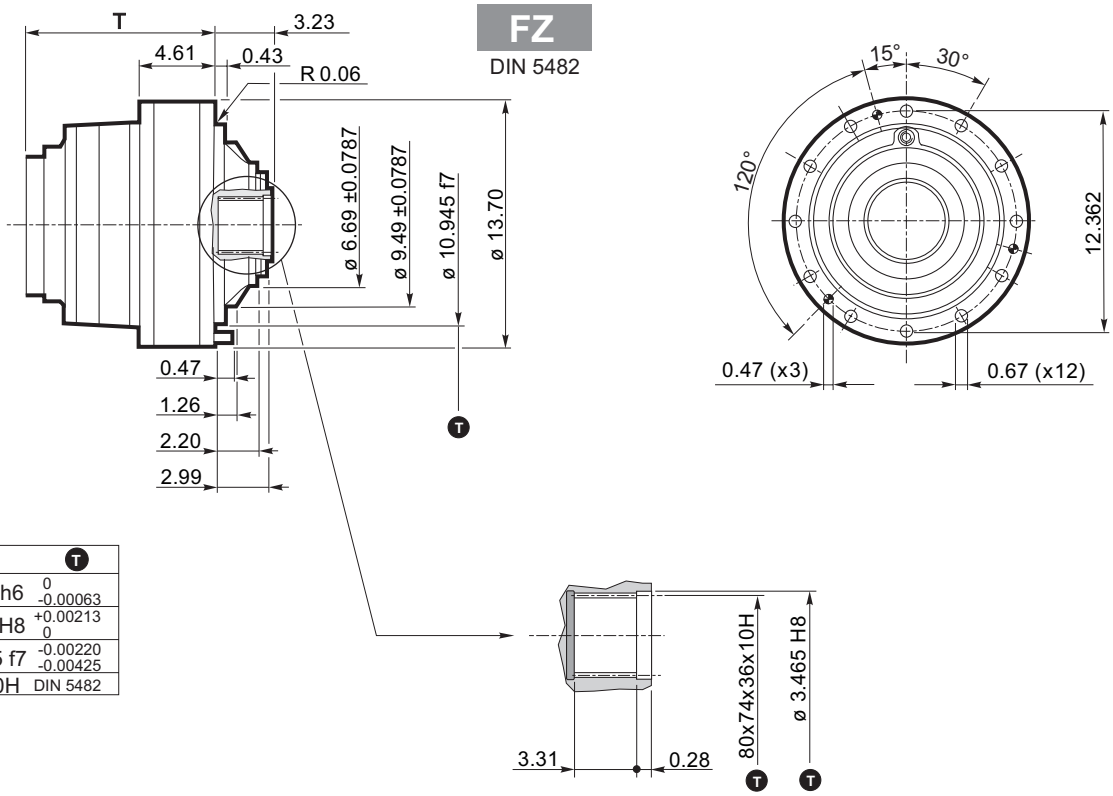
Solid input shaft



268



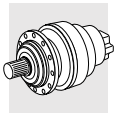
FZ
DIN 5482



(mm)	inch	T
—	1.378 h6	0 -0.00063
(85)	3.346 H8	+0.00213 0
(278)	10.945 f7	-0.00220 -0.00425
80x74x3610H	DIN 5482	

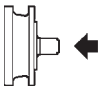
	309 L1	309 L2	309 L3	309 L4	309 R2	309 R3	309 R4	3/V 09L3
T	3.90	7.40	9.96	12.05	8.58	11.02	13.58	T3
T1	—	—	—	—	8.86	5.51	4.80	14.25
Lbs	209.5	235.9	251.4	260.2	319.7	280.0	282.2	Lbs 368.2

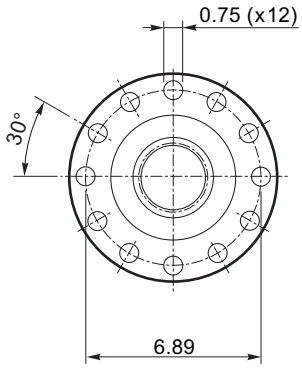
NEMA Input											
	P1	E	T2							P1	T4
N56C	9.84	4.51	—	—	21.08	23.17	—	10.02	9.31	—	—
N140TC	9.84	4.51	—	—	21.08	23.17	—	10.02	9.31	—	—
N180TC	8.82	5.22	—	—	15.18	17.26	—	10.73	10.02	—	—
N210TC	8.82	5.22	—	—	15.18	17.26	—	10.73	10.02	—	—
N250TC	8.82	5.22	—	—	15.18	17.26	—	10.73	10.02	—	—
N250TC	11.81	5.41	—	12.81	—	—	14.27	—	—	—	—
N280TC	11.81	6.28	—	—	22.85	24.94	—	11.79	11.08	—	—
N280TC	13.78	6.42	—	20.43	—	—	15.28	—	—	—	—
N320TC	15.75	8.64	19.15	—	—	—	—	—	—	—	—
N360TC	15.75	8.64	19.15	—	—	—	—	—	—	—	—



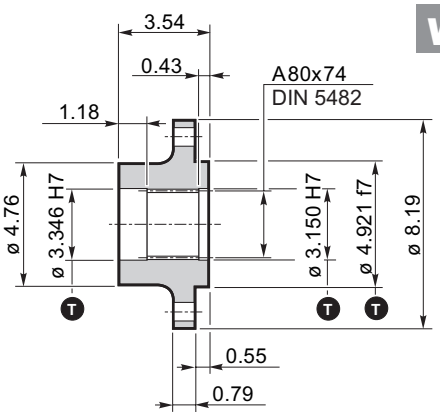
309

Flange



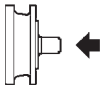


W0A

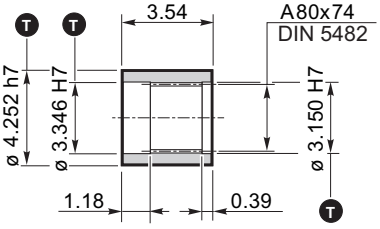


Material : Steel AISI 1040

Sleeve coupling

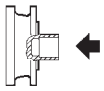


M0A

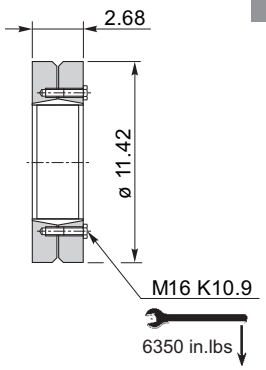


Material : Steel SAE 8620

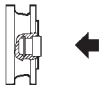
Shrink disc



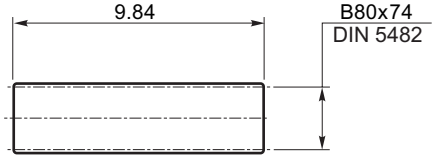
G0A



Splined bar

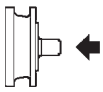


B0A

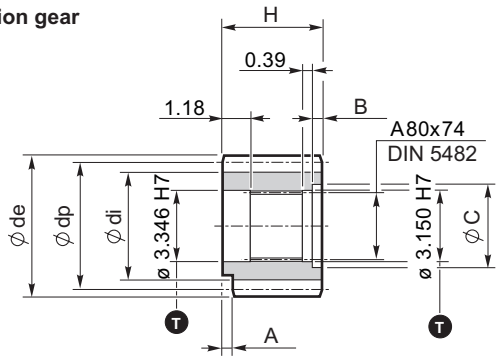


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PFG	8	16	0.500	128	117	149.5	90	0	0	0	□
PHC	10	12	0.450	120	104	145	90	0	0	0	□
PHE	10	14	0.320	140	121	162.5	116	13	26	95	□
PHF	10	15	0.150	150	130	171.5	107	20	17	100	□
PHG	10	16	0.500	160	145	186	90	0	0	0	■
PHH1	10	17	0	170	145	190	90	0	0	0	■
PHH2	10	17	0.500	170	154	198	90	0	0	0	■
PLD	12	13	0.500	156	138	192	102	0	12	95	□
PLE	12	14	0.500	168	150	199.2	90	0	0	0	□
PLI	12	18	0.500	216	198	249.6	107	7	17	95	□
PLT	12	26	0	312	282	336	90	10	0	0	■

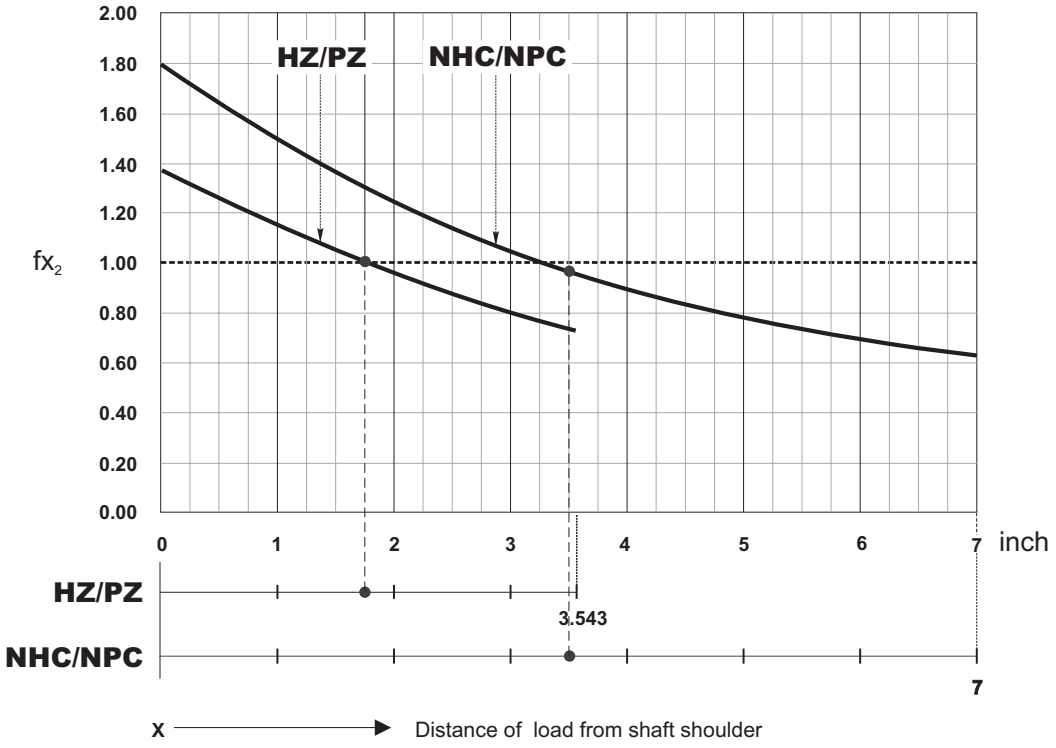
⚠ Dimensions of pinion gears are in mm

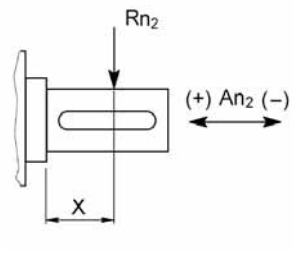
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch Ⓣ
(85)	3.346 H7 $^{+0.00138}_{0}$
(80)	3.150 H7 $^{+0.00138}_{0}$
(108)	4.252 h7 $^{0}_{-0.00138}$
(125)	4.921 f7 $^{-0.00169}_{-0.00327}$

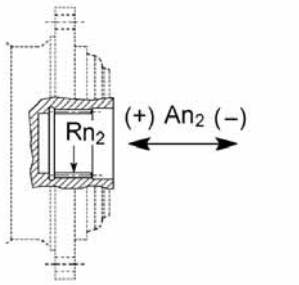
Load application factor for calculation of admissible overhung load on output shaft





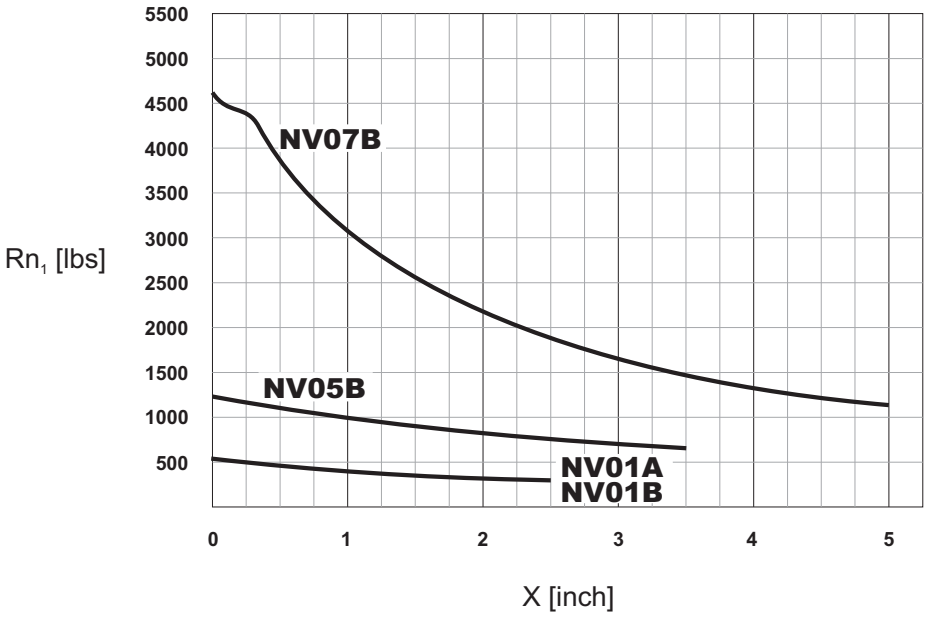
$R_{x2} = Rn_2 \cdot fx_2$

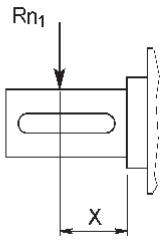
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

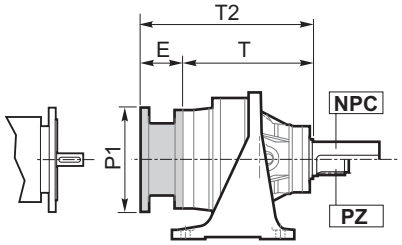
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



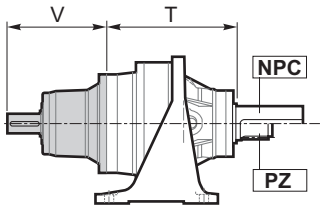


310L

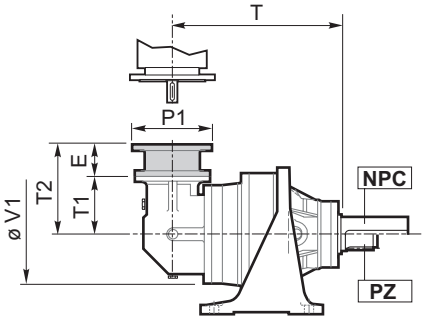
NEMA input

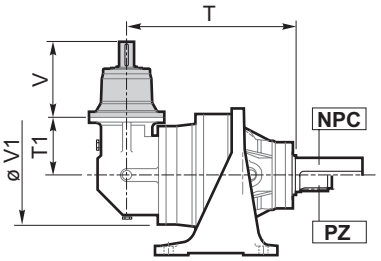


Solid input shaft

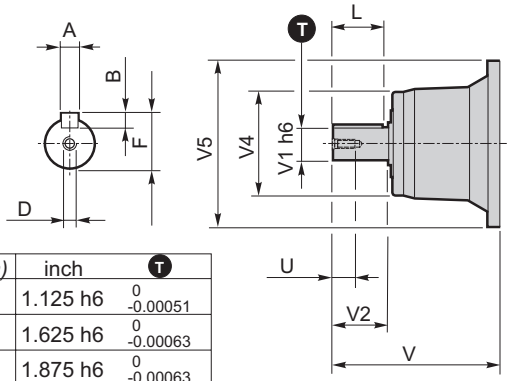


310R



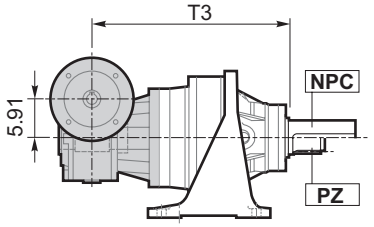


	310 L3 310 R2(A)	310 L4 310 R3, R4		310 L2 310 R2(B)	310 L1
	Solid input shaft				
	NV05B	NV01A	NV01B	NV06B	NV010B
V	9.68	6.00	6.44	12.70	14.72
V1	1.875	1.125	1.625	2.375	3.000
V2	3.50	2.00	2.50	4.75	5.00
V4	6.10	4.72	4.72	6.10	7.87
V5	9.65	7.32	7.32	11.50	15.75
A	0.500	0.250	0.375	0.625	0.750
B	0.500	0.250	0.375	0.625	0.750
F	2.091	1.236	1.791	2.646	3.327
L	3.00	1.75	2.00	4.25	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	110.3

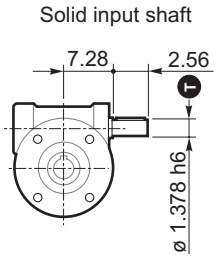


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 10L3

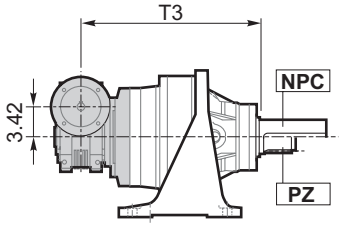


Solid input shaft

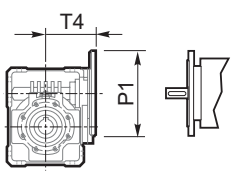


268

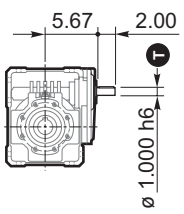
3/V 10L4



NEMA input

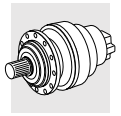


Solid input shaft

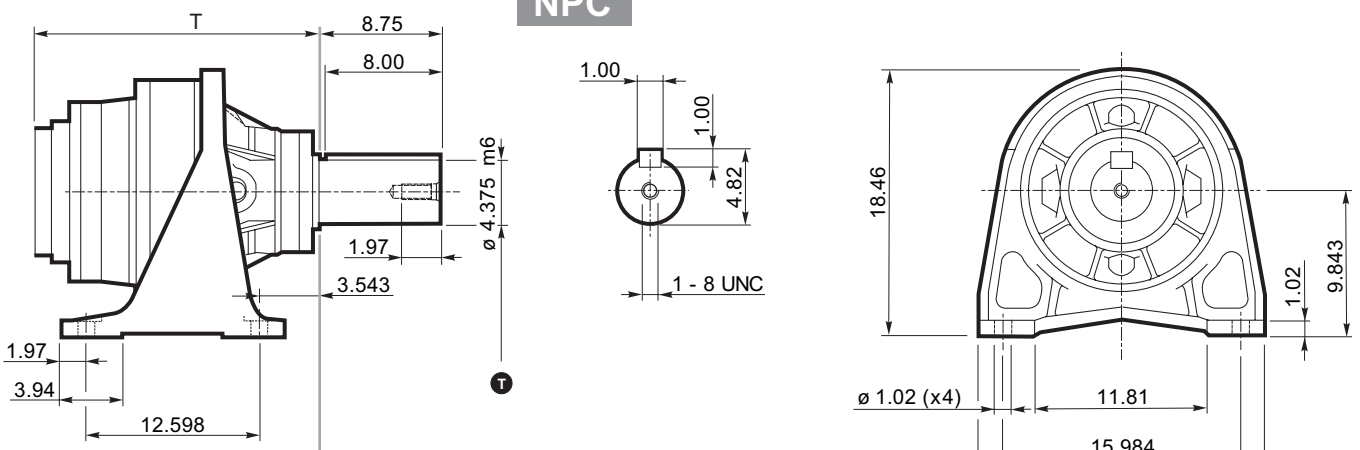


268

BONFIGLIOLI TRASMITAL



NPC

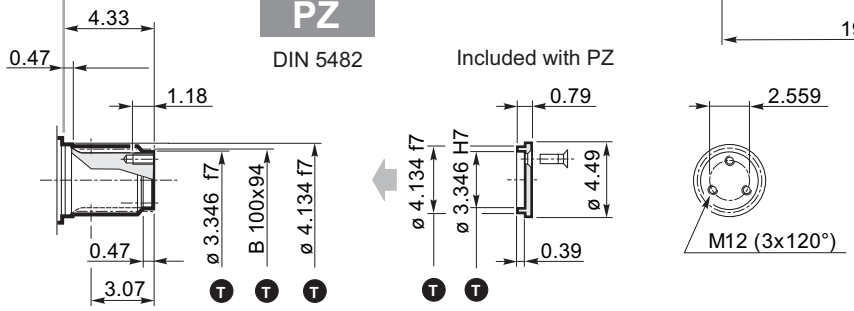


(mm)	inch	Ⓣ
—	1.000 h6	0 -0.00051
—	1.378 h6	0 -0.00063
(85)	3.346 f7	-0.00142 -0.00280
(85)	3.346 H7	+0.00138 0
(105)	4.134 f7	-0.00118 -0.00236
—	4.375 m6	-0.00142 -0.00280
B 100x94		DIN 5482

PZ

DIN 5482

Included with PZ

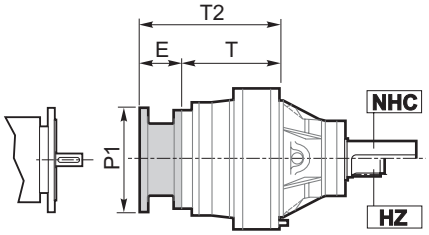


		310 L1	310 L2	310 L3	310 L4	310 R2(A)	310 R2(B)	310 R3	310 R4
	T	11.34	16.69	19.25	21.34	18.31	19.09	22.09	22.87
	T1	—	—	—	—	12.99	13.58	5.51	5.51
	V1	—	—	—	—	13.58	15.75	9.61	9.61
	Lbs	341.8	407.9	427.8	436.6	573.3	617.4	460.8	471.9
NEMA Input									
	P1	E	T2						
N56C	9.84	4.51	—	—	—	25.85	—	—	10.02	10.02
N140TC	9.84	4.51	—	—	—	25.85	—	—	10.02	10.02
N180TC	8.82	5.22	—	—	—	26.56	—	—	10.73	10.73
N210TC	8.82	5.22	—	—	—	26.56	—	—	10.73	10.73
N250TC	8.82	5.22	—	—	—	26.56	—	—	10.73	10.73
N250TC	11.81	5.41	—	—	24.67	—	18.41	—	—	—
N280TC	11.81	6.28	—	—	—	27.62	—	—	11.79	11.79
N280TC	13.78	6.42	—	—	25.67	—	19.41	—	—	—
N320TC	13.78	7.97	—	24.67	—	—	—	21.56	—	—
N320TC	13.78	11.44	22.78	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	24.67	—	—	—	21.56	—	—
N360TC	13.78	11.44	22.78	—	—	—	—	—	—	—

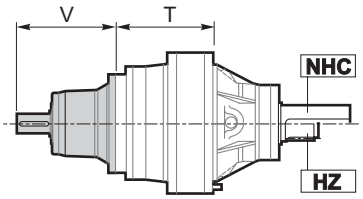
	3/V 10L3	3/V 10L4
	T3	
	23.94	24.96
Lbs	540.2	463.1
	P1 T4	P1 T4
N56C	— —	6.54 4.74
N140TC	— —	6.54 4.74
N180TC	— —	9.02 5.45
N210TC	— —	— —
N250TC	— —	— —
N250TC	— —	— —
N280TC	— —	— —
N280TC	— —	— —
N320TC	— —	— —
N320TC	— —	— —
N360TC	— —	— —
N360TC	— —	— —

310L

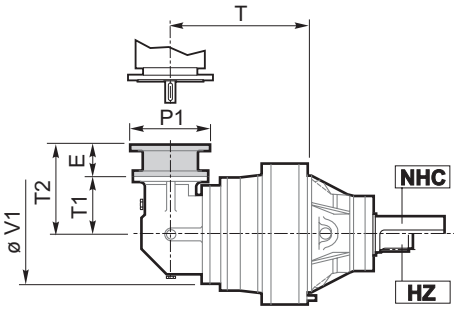
NEMA input

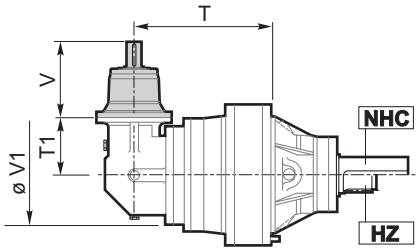


Solid input shaft

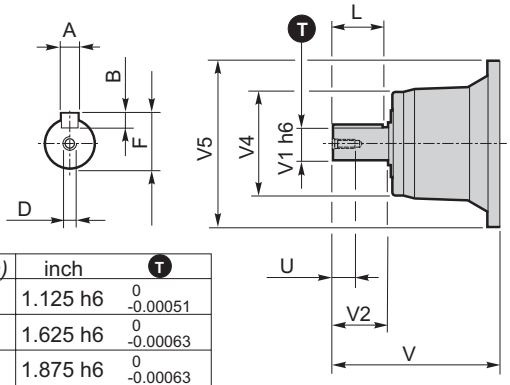


310R



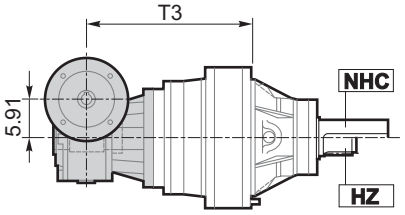


	310 L3 310 R2(A)	310 L4 310 R3, R4		310 L2 310 R2 (B)	310 L1
	Solid input shaft				
	NV05B	NV01A	NV01B	NV06B	NV010B
V	9.68	6.00	6.44	12.70	14.72
V1	1.875	1.125	1.625	2.375	3.000
V2	3.50	2.00	2.50	4.75	5.00
V4	6.10	4.72	4.72	6.10	7.87
V5	9.65	7.32	7.32	11.50	15.75
A	0.500	0.250	0.375	0.625	0.750
B	0.500	0.250	0.375	0.625	0.750
F	2.091	1.236	1.791	2.646	3.327
L	3.00	1.75	2.00	4.25	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	110.3

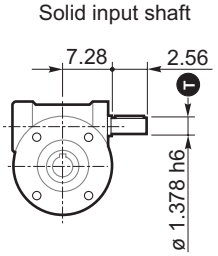


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 10L3

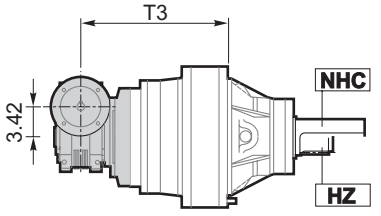


Solid input shaft

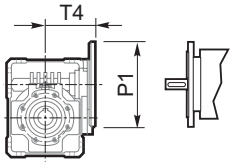


268

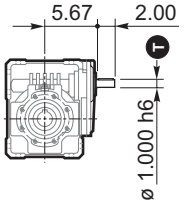
3/V 10L4



NEMA input



Solid input shaft



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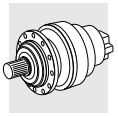
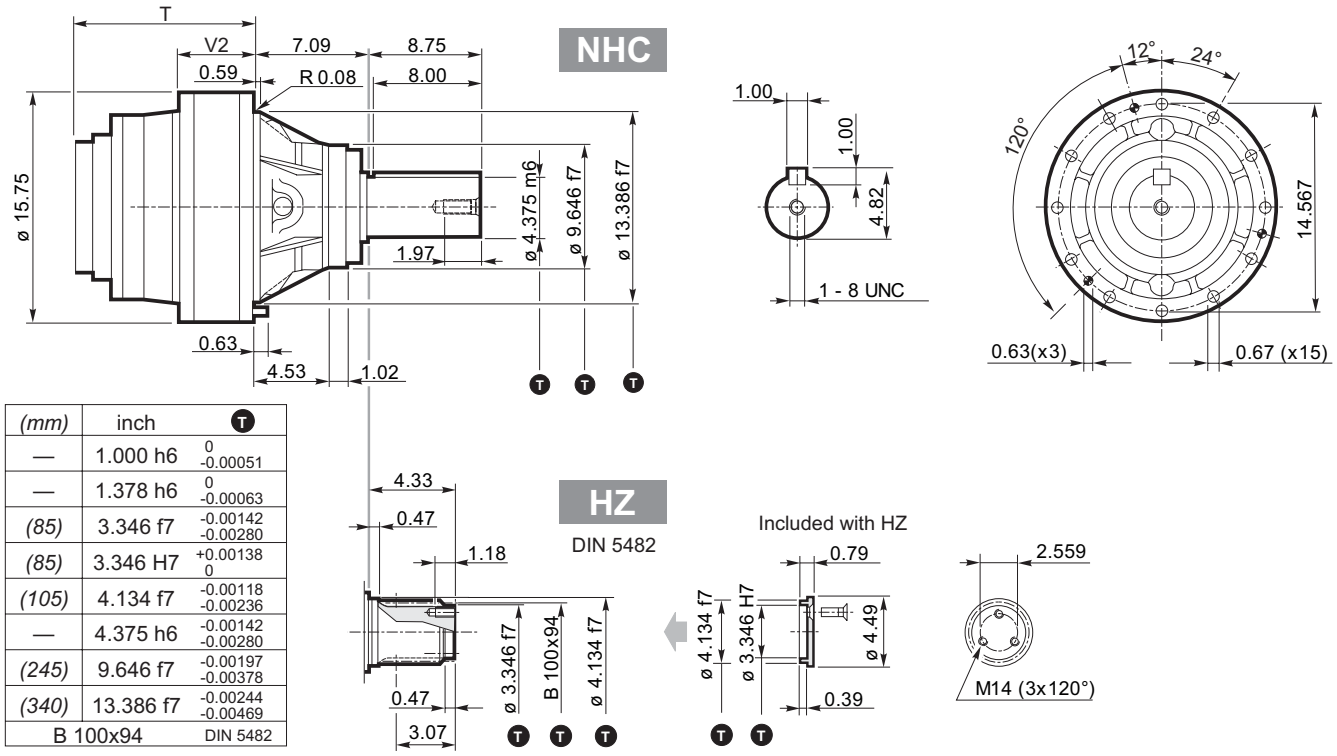
BONFIGLIOLI TRASMITAL





(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.378 h6	0 -0.00063
(85)	3.346 f7	-0.00142 -0.00280
(85)	3.346 H7	+0.00138 0
(105)	4.134 f7	-0.00118 -0.00236
—	4.375 h6	-0.00142 -0.00280
(245)	9.646 f7	-0.00197 -0.00378
(340)	13.386 f7	-0.00244 -0.00469
B 100x94		DIN 5482

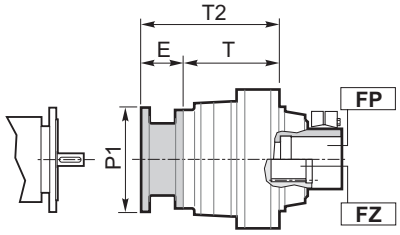
	310 L1	310 L2	310 L3	310 L4	310 R2(A)	310 R2(B)	310 R3	310 R4
T	4.25	9.61	12.17	14.25	11.22	12.01	15.00	15.79
T1	—	—	—	—	12.99	13.58	5.51	5.51
V1	—	—	—	—	13.58	15.75	9.61	9.61
V2	5.12	5.12	5.12	5.12	7.01	7.80	5.12	5.12
Lbs	297.7	363.8	383.7	392.5	529.2	573.3	416.7	427.8

	3/V 10L3	3/V 10L4
	T3	
	16.85	17.87
Lbs	496.1	419.0

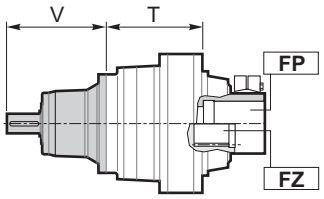
NEMA Input														
	P1	E	T2								P1	T4	P1	T4
N56C	9.84	4.51	—	—	—	18.76	—	—	10.02	10.02	—	—	6.54	4.74
N140TC	9.84	4.51	—	—	—	18.76	—	—	10.02	10.02	—	—	6.54	4.74
N180TC	8.82	5.22	—	—	—	19.47	—	—	10.73	10.73	—	—	9.02	5.45
N210TC	8.82	5.22	—	—	—	19.47	—	—	10.73	10.73	—	—	—	—
N250TC	8.82	5.22	—	—	—	19.47	—	—	10.73	10.73	—	—	—	—
N250TC	11.81	5.41	—	—	17.58	—	18.41	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	—	—	20.53	—	—	11.79	11.79	—	—	—	—
N280TC	13.78	6.42	—	—	18.58	—	19.41	—	—	—	—	—	—	—
N320TC	13.78	7.97	—	17.58	—	—	—	21.56	—	—	—	—	—	—
N320TC	13.78	11.44	15.69	—	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	17.58	—	—	—	21.56	—	—	—	—	—	—
N360TC	13.78	11.44	15.69	—	—	—	—	—	—	—	—	—	—	—

310L

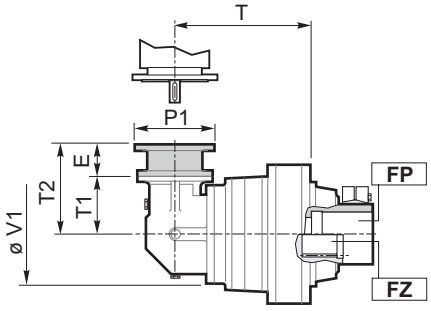
NEMA input

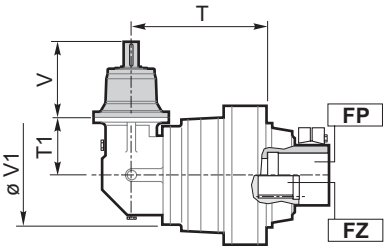


Solid input shaft

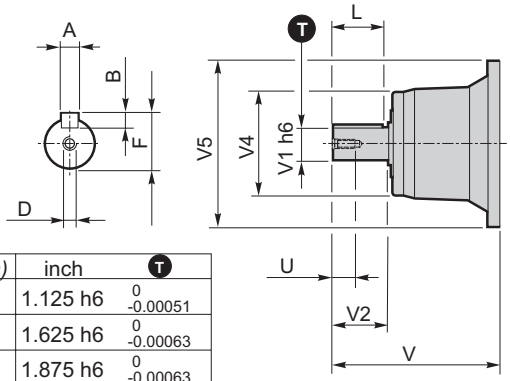


310R



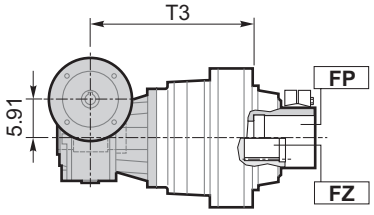


	310 L3 310 R2(A)	310 L4 310 R3, R4		310 L2 310 R2 (B)	310 L1
	Solid input shaft				
	NV05B	NV01A	NV01B	NV06B	NV010B
V	9.68	6.00	6.44	12.70	14.72
V1	1.875	1.125	1.625	2.375	3.000
V2	3.50	2.00	2.50	4.75	5.00
V4	6.10	4.72	4.72	6.10	7.87
V5	9.65	7.32	7.32	11.50	15.75
A	0.500	0.250	0.375	0.625	0.750
B	0.500	0.250	0.375	0.625	0.750
F	2.091	1.236	1.791	2.646	3.327
L	3.00	1.75	2.00	4.25	4.37
D	5/8 - 11UNC	3/8 - 16UNC	1/2 - 13UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	0.87	1.10	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	110.3

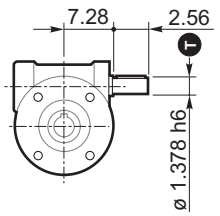


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 10L3

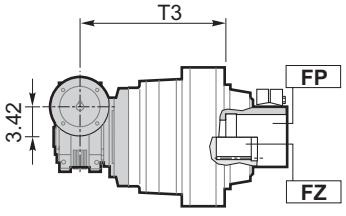


Solid input shaft

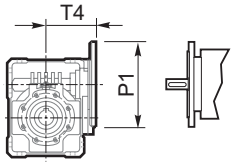


268

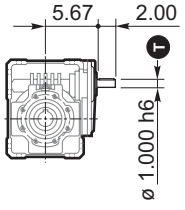
3/V 10L4



NEMA input



Solid input shaft



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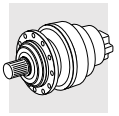
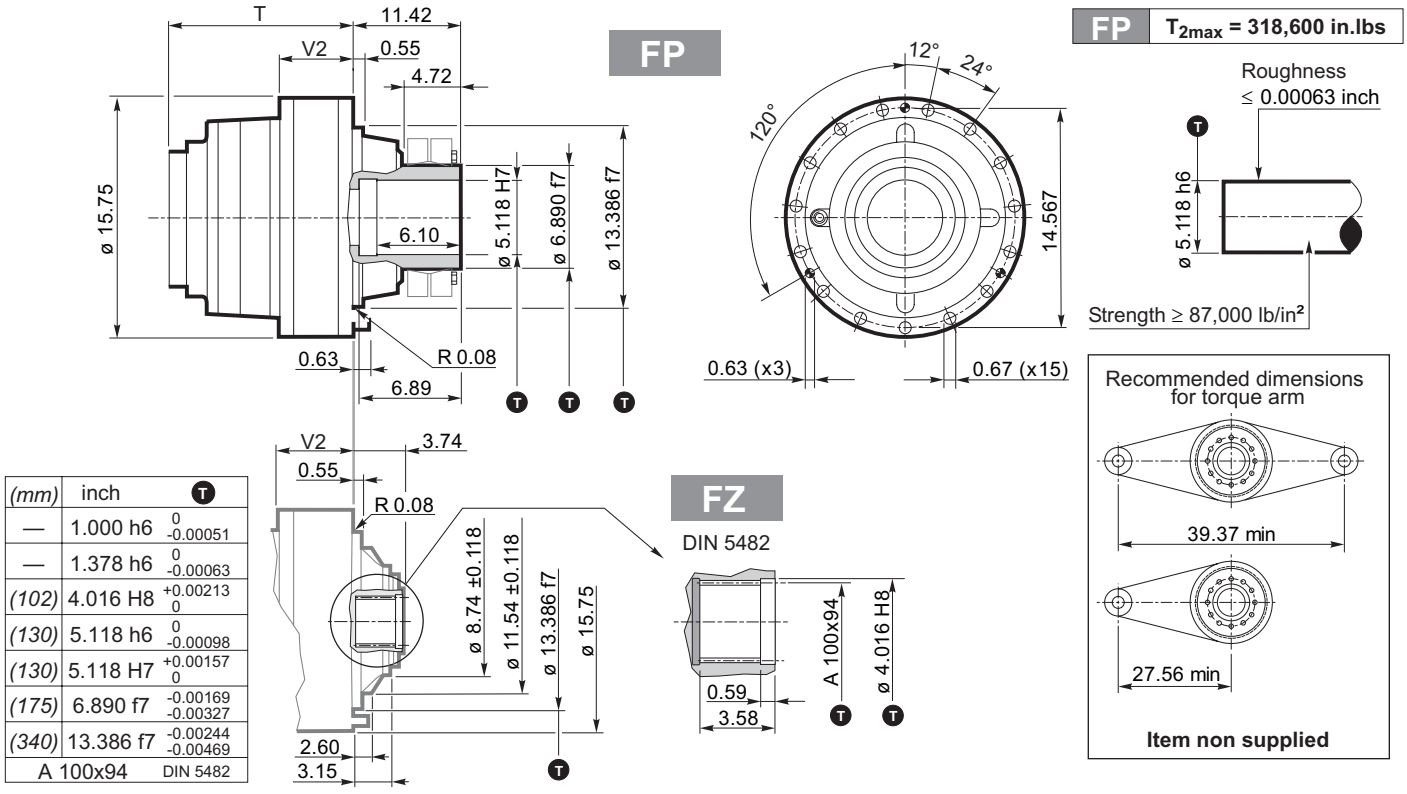
BONFIGLIOLI TRASMITAL





(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.378 h6	0 -0.00063
(102)	4.016 H8	+0.00213 0
(130)	5.118 h6	0 -0.00098
(130)	5.118 H7	+0.00157 0
(175)	6.890 f7	-0.00169 -0.00327
(340)	13.386 f7	-0.00244 -0.00469
A 100x94		DIN 5482

FP T_{2max} = 318,600 in.lbs

Roughness
≤ 0.00063 inch

Strength ≥ 87,000 lb/in²

Recommended dimensions for torque arm

Item non supplied

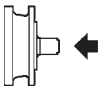
		310 L1	310 L2	310 L3	310 L4	310 R2(A)	310 R2(B)	310 R3	310 R4
	T	3.46	8.82	11.38	13.46	10.43	11.22	14.21	15.00
	T1	—	—	—	—	12.99	13.58	5.51	5.51
	V1	—	—	—	—	13.58	15.75	9.61	9.61
	V2	4.33	4.33	4.33	4.33	6.22	7.01	4.33	4.33
FP	Lbs	253.6	319.7	339.6	348.4	507.2	551.3	372.6	383.7
FZ	Lbs	242.6	308.7	328.5	337.4	485.1	529.2	361.6	372.6

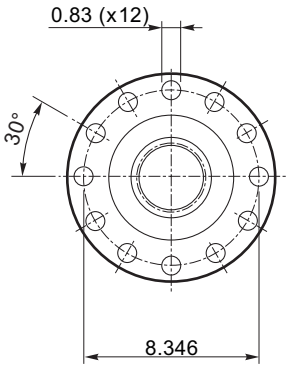
3/V 10L3	3/V 10L4
T3	
16.06	17.09
452.0	374.9
441.0	363.8

NEMA Input

	P1	E	T2								P1	T4	P1	T4
N56C	9.84	4.51	—	—	—	17.97	—	—	10.02	10.02	—	—	6.54	4.74
N140TC	9.84	4.51	—	—	—	17.97	—	—	10.02	10.02	—	—	6.54	4.74
N180TC	8.82	5.22	—	—	—	18.68	—	—	10.73	10.73	—	—	9.02	5.45
N210TC	8.82	5.22	—	—	—	18.68	—	—	10.73	10.73	—	—	—	—
N250TC	8.82	5.22	—	—	—	18.68	—	—	10.73	10.73	—	—	—	—
N250TC	11.81	5.41	—	—	16.79	—	18.41	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	—	—	19.74	—	—	11.79	11.79	—	—	—	—
N280TC	13.78	6.42	—	—	17.80	—	19.41	—	—	—	—	—	—	—
N320TC	13.78	7.97	—	16.79	—	—	—	21.56	—	—	—	—	—	—
N320TC	13.78	11.44	14.90	—	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	16.79	—	—	—	21.56	—	—	—	—	—	—
N360TC	13.78	11.44	14.90	—	—	—	—	—	—	—	—	—	—	—

Flange





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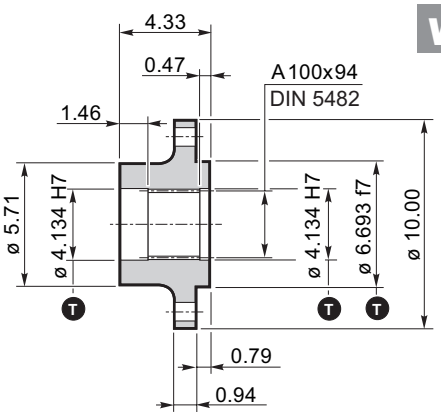
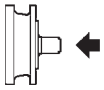


Material : Steel AISI 1040

Sleeve coupling



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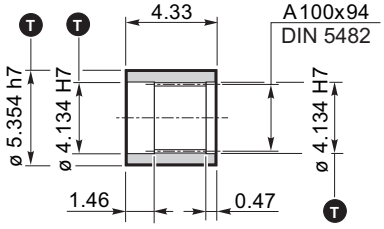
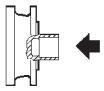


Material : Steel SAE 8620

Shrink disc



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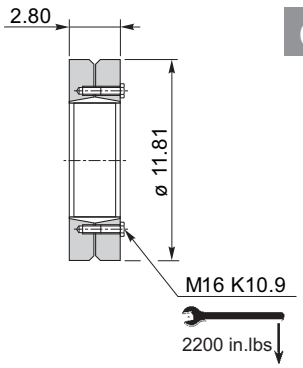
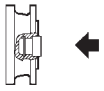


Splined bar



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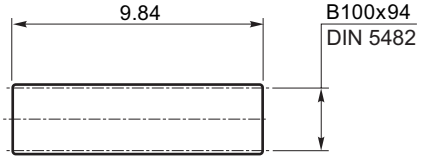
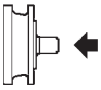
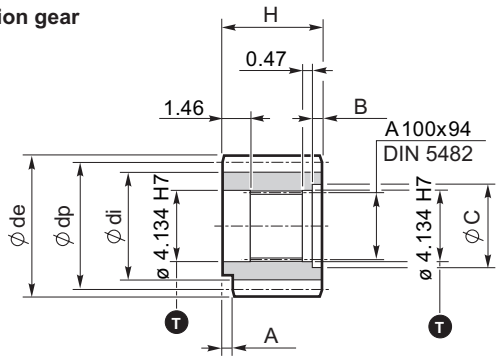


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PLQ	12	23	0	276	246	300	110	0	0	0	■
PPD	16	13	0.500	208	184	252.5	145	0	35	116	□
PPF	16	15	0.450	240	215	280	125	0	15	120	■

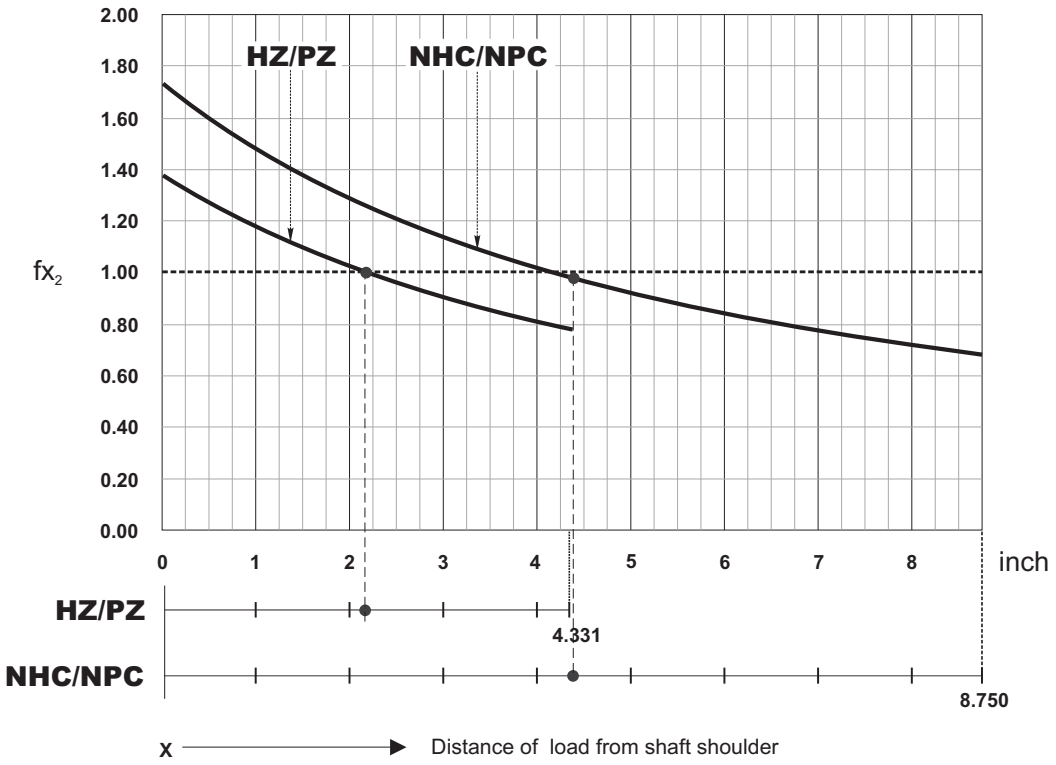
⚠ Dimensions of pinion gears are in mm

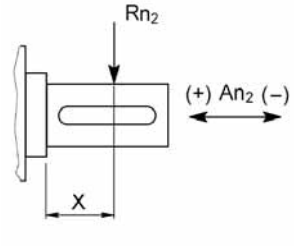
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch	T
(105)	4.134 H7	$^{+0.00138}_{0}$
(136)	5.354 h7	$^{0}_{-0.00157}$
(170)	6.693 f7	$^{-0.00169}_{-0.00327}$

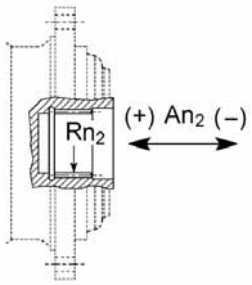
Load application factor for calculation of admissible overhung load on output shaft





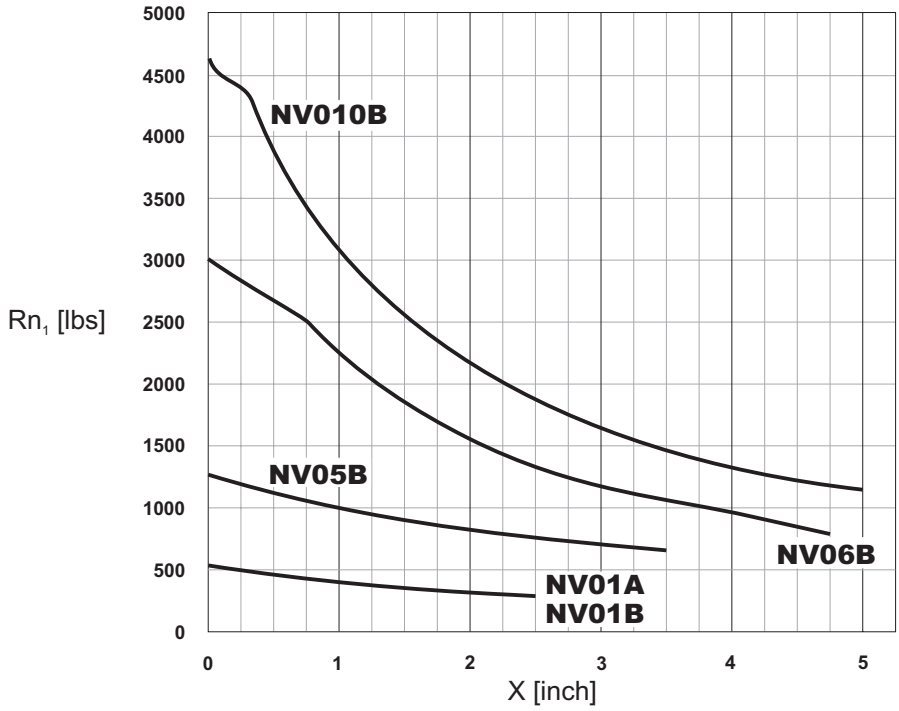
$R_{x2} = Rn_2 \cdot fx_2$

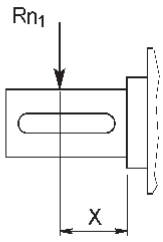
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

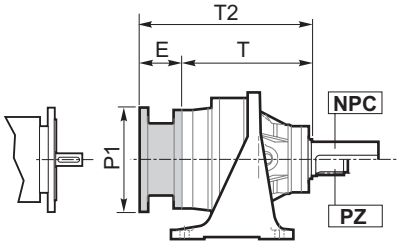
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



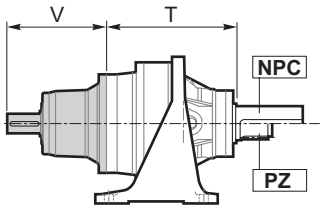


311L

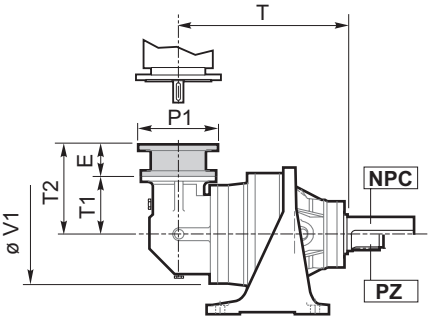
NEMA input

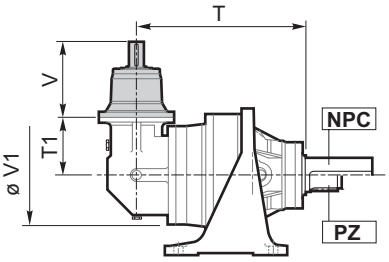


Solid input shaft

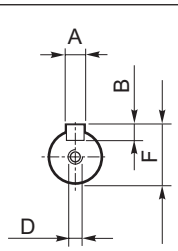


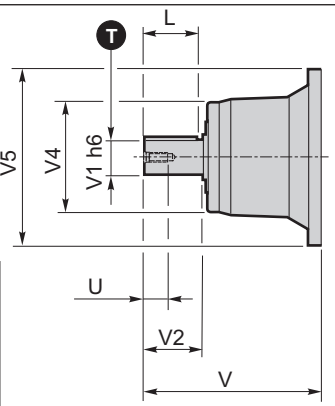
311R





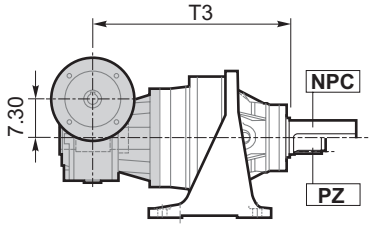
	311 L3 311 R2 (A) R3	311 L4 311 R4		311 R2 (B)(C)	311 L2	311 L1
	Solid input shaft					
	NV05B	NV01A	NV01B	NV06B	NV07B	NV011B
V	9.68	6.00	6.44	12.70	12.28	13.58
V1	1.875	1.125	1.625	2.375	3.000	3.000
V2	3.50	2.00	2.50	4.75	5.00	5.00
V4	6.10	4.72	4.72	6.10	7.87	7.87
V5	9.65	7.32	7.32	11.50	13.58	16.46
A	0.500	0.250	0.375	0.625	0.750	0.750
B	0.500	0.250	0.375	0.625	0.750	0.750
F	2.091	1.236	1.791	2.646	3.327	3.327
L	3.00	1.75	2.00	4.25	4.37	4.37
D	5/8 -11UNC	3/8 -16UNC	1/2 -13UNC	3/4 -10 UNC	3/4 -10 UNC	3/4 -10 UNC
U	1.42	0.87	1.10	1.65	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	77.2	121.3



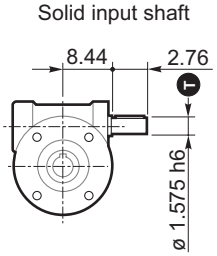


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 11L3

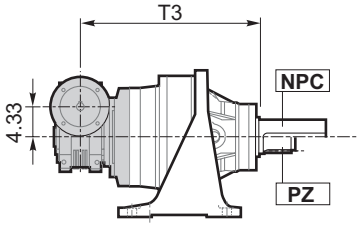


Solid input shaft

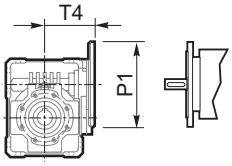


268

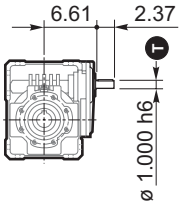
3/V 11L4



NEMA input

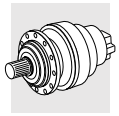


Solid input shaft



268

BONFIGLIOLI TRASMITAL



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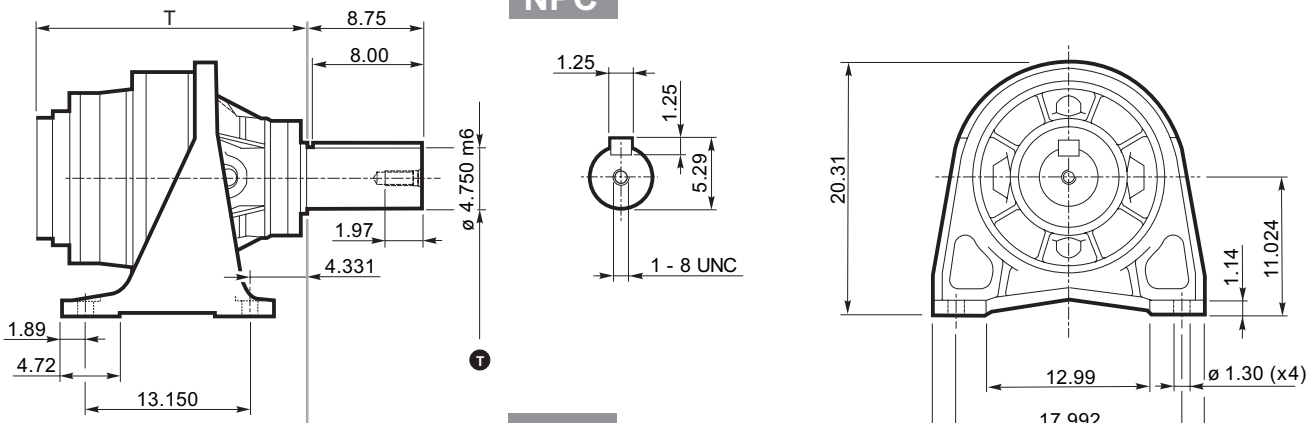
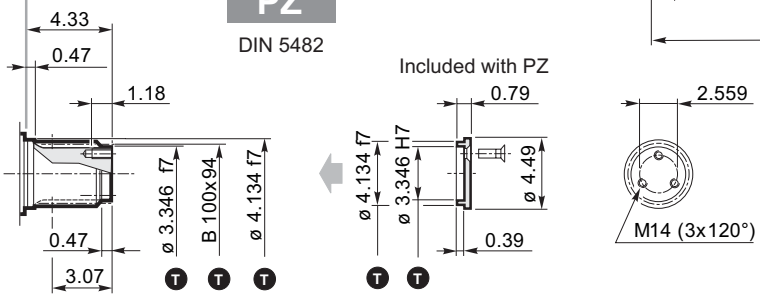


(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.575 h6	0 -0.00063
(85)	3.346 f7	-0.00142 -0.00280
(85)	3.346 H7	+0.00138 0
(105)	4.134 f7	-0.00118 -0.00236
—	4.750 m6	+0.00157 +0.00059
B 100x94		DIN 5482

PZ

DIN 5482



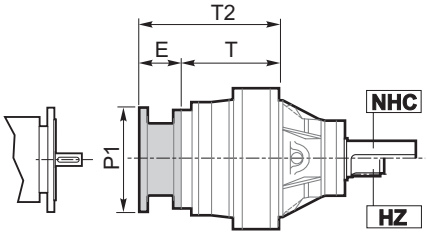
	311 L1	311 L2	311 L3	311 L4	311 R2(A)	311 R2(B)	311 R2(C)	311 R3	311 R4
T	12.80	18.03	21.54	24.09	21.65	21.65	21.65	22.72	25.16
T1	—	—	—	—	12.99	13.58	15.35	8.86	5.51
V1	—	—	—	—	15.35	15.75	18.90	14.76	9.61
Lbs	551.3	650.5	676.9	692.4	793.8	837.9	860.0	760.7	721.0

	3/V 11L3	3/V 11L4
	T3	
	25.94	27.83
Lbs	860.0	749.7

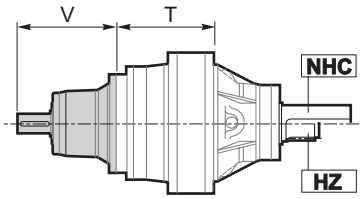
NEMA Input															
	P1	E	T2									P1	T4	P1	T4
N56C	9.84	4.51	—	—	—	28.60	—	—	—	13.37	10.02	—	—	—	—
N140TC	9.84	4.51	—	—	—	28.60	—	—	—	13.37	10.02	—	—	6.54	5.96
N180TC	8.82	5.22	—	—	—	29.31	—	—	—	14.07	10.73	—	—	9.02	6.67
N210TC	8.82	5.22	—	—	—	29.31	—	—	—	14.07	10.73	—	—	9.02	9.17
N250TC	8.82	5.22	—	—	—	29.31	—	—	—	14.07	10.73	—	—	—	—
N250TC	11.81	5.41	—	—	26.95	—	18.41	—	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	—	—	30.37	—	—	—	15.14	11.79	—	—	—	—
N280TC	13.78	6.42	—	—	27.95	—	19.41	—	—	—	—	—	—	—	—
N320TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N320TC	15.75	8.64	—	26.67	—	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N360TC	15.75	8.64	—	26.67	—	—	—	—	—	—	—	—	—	—	—
N400TC	17.48	11.26	24.06	—	—	—	—	—	—	—	—	—	—	—	—

311L

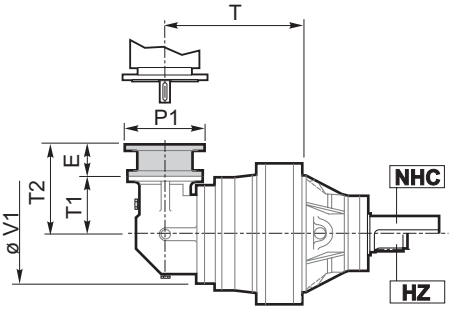
NEMA input

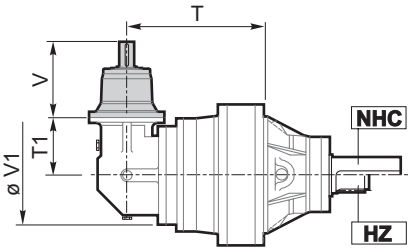


Solid input shaft

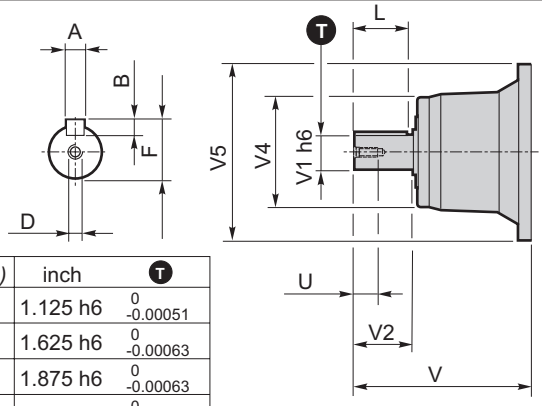


311R



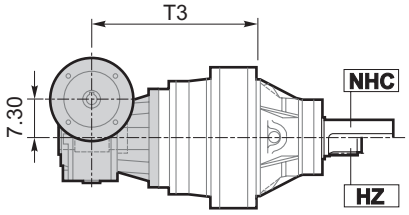


	311 L3 311 R2 (A) R3	311 L4 311 R4		311 R2 (B)(C)	311 L2	311 L1
	Solid input shaft					
	NV05B	NV01A	NV01B	NV06B	NV07B	NV011B
V	9.68	6.00	6.44	12.70	12.28	13.58
V1	1.875	1.125	1.625	2.375	3.000	3.000
V2	3.50	2.00	2.50	4.75	5.00	5.00
V4	6.10	4.72	4.72	6.10	7.87	7.87
V5	9.65	7.32	7.32	11.50	13.58	16.46
A	0.500	0.250	0.375	0.625	0.750	0.750
B	0.500	0.250	0.375	0.625	0.750	0.750
F	2.091	1.236	1.791	2.646	3.327	3.327
L	3.00	1.75	2.00	4.25	4.37	4.37
D	5/8 -11UNC	3/8 -16UNC	1/2 -13UNC	3/4 -10 UNC	3/4 -10 UNC	3/4 -10 UNC
U	1.42	0.87	1.10	1.65	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	77.2	121.3

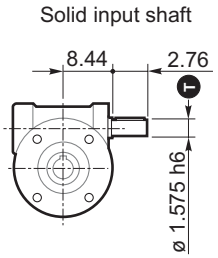


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 11L3

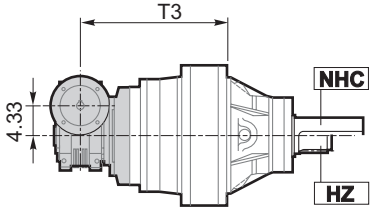


Solid input shaft

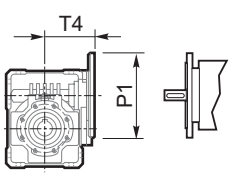


268

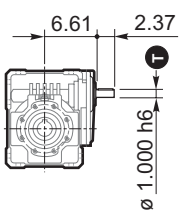
3/V 11L4



NEMA input

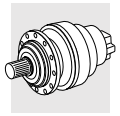


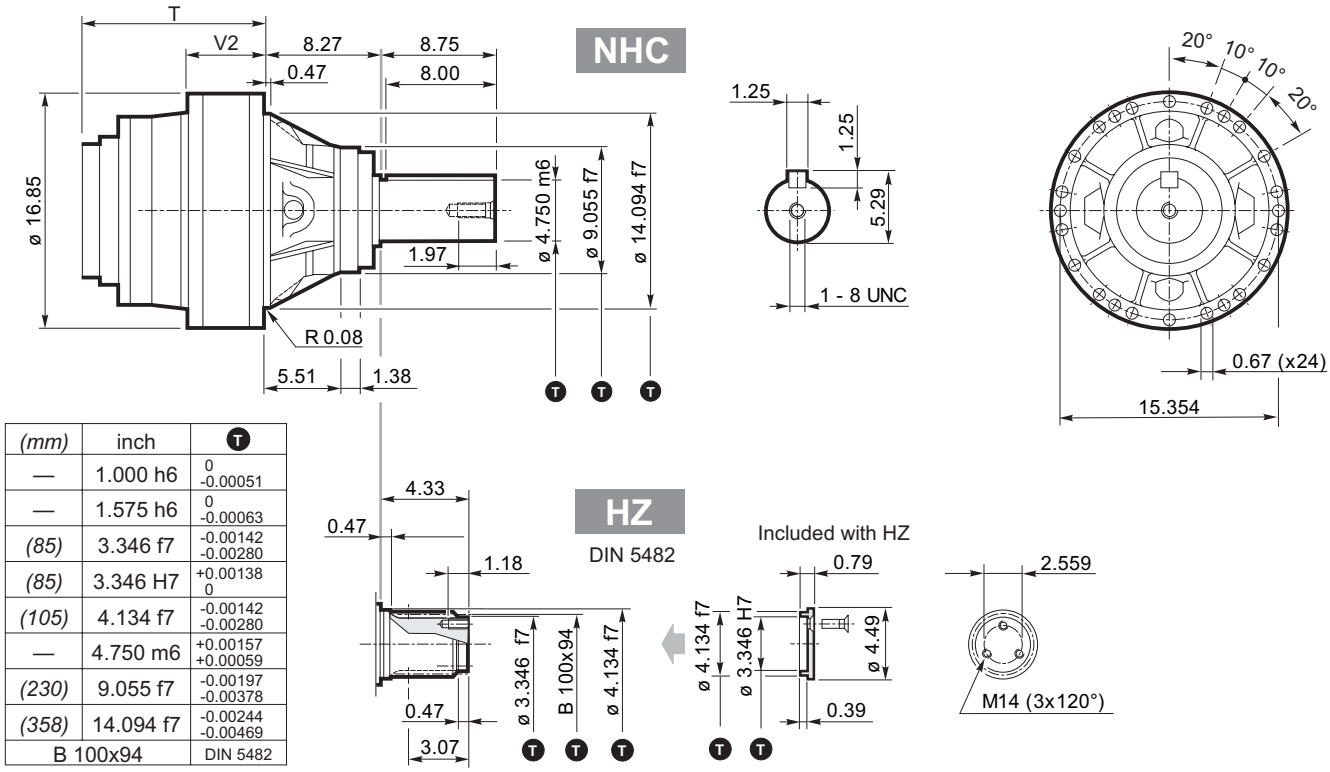
Solid input shaft



268

BONFIGLIOLI TRASMITAL





(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.575 h6	0 -0.00063
(85)	3.346 f7	-0.00142 -0.00280
(85)	3.346 H7	+0.00138 0
(105)	4.134 f7	-0.00142 -0.00280
—	4.750 m6	+0.00157 +0.00059
(230)	9.055 f7	-0.00197 -0.00378
(358)	14.094 f7	-0.00244 -0.00469
B 100x94		DIN 5482

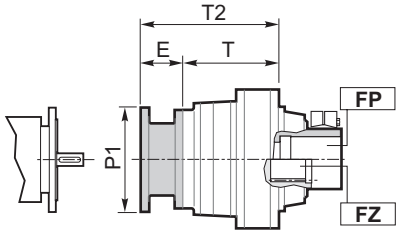
	311 L1	311 L2	311 L3	311 L4	311 R2(A)	311 R2(B)	311 R2(C)	311 R3	311 R4
T	4.53	9.76	13.27	15.83	13.39	13.39	13.39	14.45	16.89
T1	—	—	—	—	12.99	13.58	15.35	8.86	5.51
V1	—	—	—	—	15.35	15.75	18.90	14.76	9.61
V2	5.28	5.28	5.28	5.28	6.06	6.06	6.06	5.28	5.28
Lbs	396.9	496.1	522.6	538.0	683.6	705.6	606.4	606.4	566.7

	3/V 11L3	3/V 11L4
	T3	
	17.68	19.57
Lbs	705.6	595.4

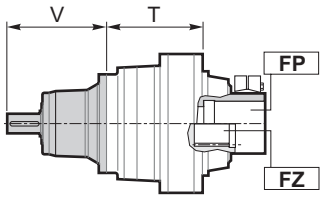
NEMA Input															
	P1	E	T2									P1	T4	P1	T4
N56C	9.84	4.51	—	—	—	20.33	—	—	—	13.37	10.02	—	—	—	—
N140TC	9.84	4.51	—	—	—	20.33	—	—	—	13.37	10.02	—	—	6.54	5.96
N180TC	8.82	5.22	—	—	—	21.04	—	—	—	14.07	10.73	—	—	9.02	6.67
N210TC	8.82	5.22	—	—	—	21.04	—	—	—	14.07	10.73	—	—	9.02	9.17
N250TC	8.82	5.22	—	—	—	21.04	—	—	—	14.07	10.73	—	—	—	—
N250TC	11.81	5.41	—	—	18.68	—	18.41	—	—	—	—	—	—	—	—
N280TC	11.81	6.28	—	—	—	22.11	—	—	—	15.14	11.79	—	—	—	—
N280TC	13.78	6.42	—	—	19.69	—	19.41	—	—	—	—	—	—	—	—
N320TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N320TC	15.75	8.64	—	18.41	—	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N360TC	15.75	8.64	—	18.41	—	—	—	—	—	—	—	—	—	—	—
N400TC	17.48	11.26	15.79	—	—	—	—	—	—	—	—	—	—	—	—

311L

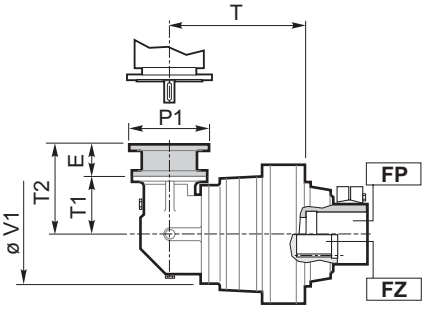
NEMA input

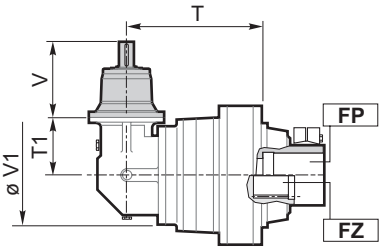


Solid input shaft

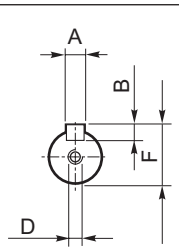


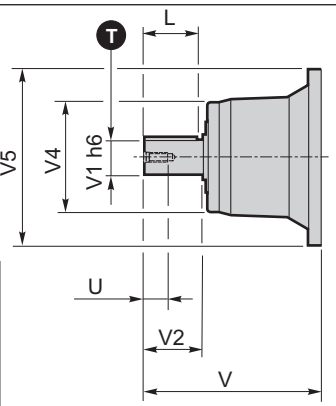
311R





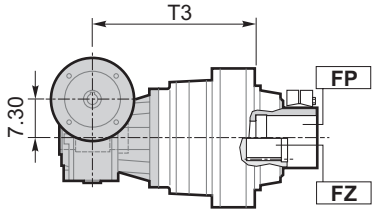
	311 L3 311 R2 (A) R3	311 L4 311 R4		311 R2 (B)(C)	311 L2	311 L1
	Solid input shaft					
	NV05B	NV01A	NV01B	NV06B	NV07B	NV011B
V	9.68	6.00	6.44	12.70	12.28	13.58
V1	1.875	1.125	1.625	2.375	3.000	3.000
V2	3.50	2.00	2.50	4.75	5.00	5.00
V4	6.10	4.72	4.72	6.10	7.87	7.87
V5	9.65	7.32	7.32	11.50	13.58	16.46
A	0.500	0.250	0.375	0.625	0.750	0.750
B	0.500	0.250	0.375	0.625	0.750	0.750
F	2.091	1.236	1.791	2.646	3.327	3.327
L	3.00	1.75	2.00	4.25	4.37	4.37
D	5/8 -11UNC	3/8 -16UNC	1/2 -13UNC	3/4 -10 UNC	3/4 -10 UNC	3/4 -10 UNC
U	1.42	0.87	1.10	1.65	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	77.2	121.3



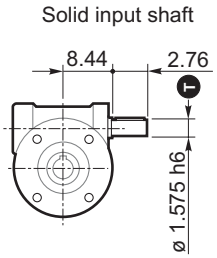


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 11L3



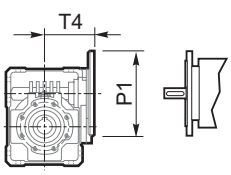
Solid input shaft



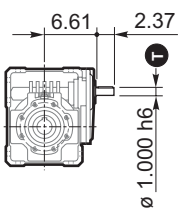
268

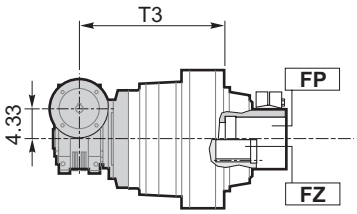
3/V 11L4

NEMA input



Solid input shaft





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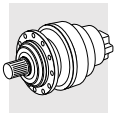
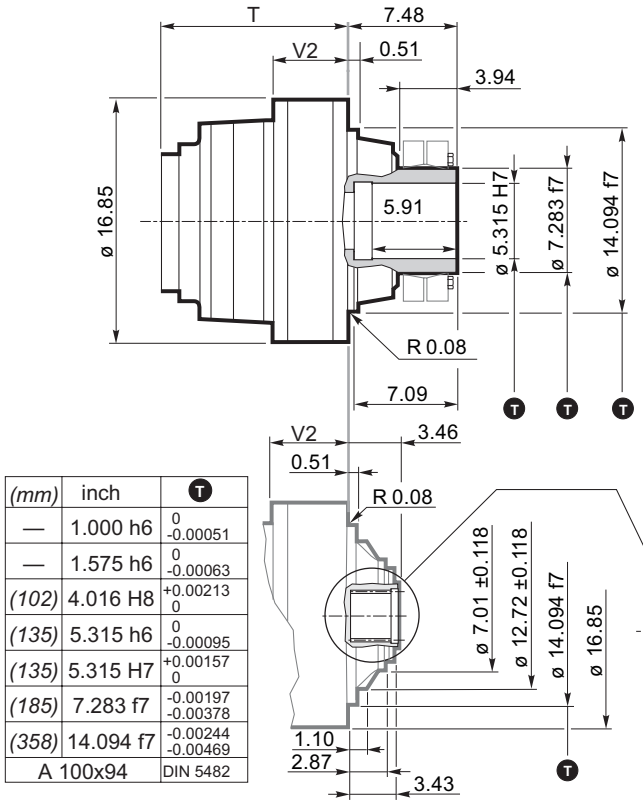
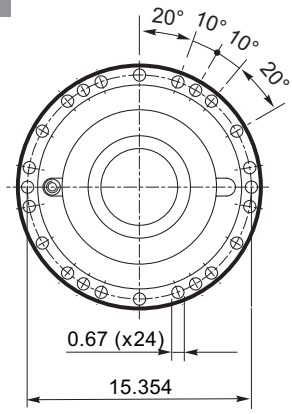


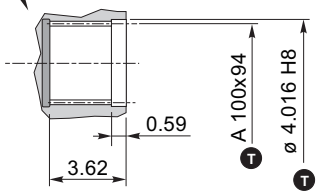


FP



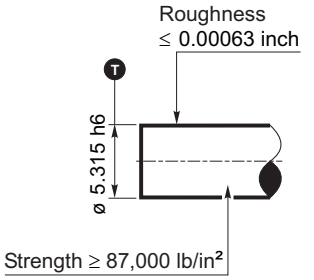
FZ

DIN 5482

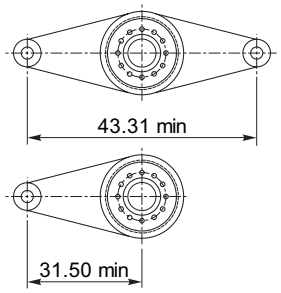


(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.575 h6	0 -0.00063
(102)	4.016 H8	+0.00213 0
(135)	5.315 h6	0 -0.00095
(135)	5.315 H7	+0.00157 0
(185)	7.283 f7	-0.00197 -0.00378
(358)	14.094 f7	-0.00244 -0.00469
A 100x94		DIN 5482

FP T_{2max} = 477,900 in.lbs



Recommended dimensions for torque arm



Item non supplied

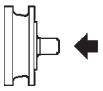
			311 L1	311 L2	311 L3	311 L4	311 R2(A)	311 R2(B)	311 R2(C)	311 R3	311 R4
		T	4.53	9.76	13.27	15.83	13.39	13.39	13.39	14.45	16.89
		T1	—	—	—	—	12.99	13.58	15.35	8.86	5.51
		V1	—	—	—	—	15.35	15.75	18.90	14.76	9.61
		V2	5.28	5.28	5.28	5.28	6.06	6.06	6.06	5.28	5.28
	FP	Lbs	374.9	474.1	500.5	516.0	617.4	661.5	683.6	584.3	544.6
	FZ		352.8	452.0	478.5	493.9	595.4	639.5	661.5	562.3	522.6

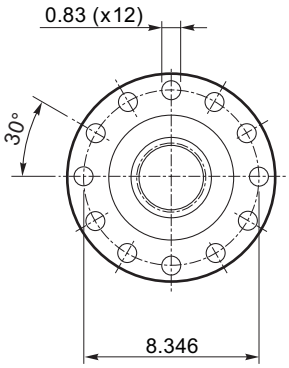
3/V 11L3	3/V 11L4
T3	
17.68	19.57
683.6	573.3
661.5	551.3

NEMA Input											
	P1	E	T2								
N56C	9.84	4.51	—	—	—	20.33	—	—	—	13.37	10.02
N140TC	9.84	4.51	—	—	—	20.33	—	—	—	13.37	10.02
N180TC	8.82	5.22	—	—	—	21.04	—	—	—	14.07	10.73
N210TC	8.82	5.22	—	—	—	21.04	—	—	—	14.07	10.73
N250TC	8.82	5.22	—	—	—	21.04	—	—	—	14.07	10.73
N250TC	11.81	5.41	—	—	18.68	—	18.41	—	—	—	—
N280TC	11.81	6.28	—	—	—	22.11	—	—	—	15.14	11.79
N280TC	13.78	6.42	—	—	19.69	—	19.41	—	—	—	—
N320TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—
N320TC	15.75	8.64	—	18.41	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—
N360TC	15.75	8.64	—	18.41	—	—	—	—	—	—	—
N400TC	17.48	11.26	15.79	—	—	—	—	—	—	—	—

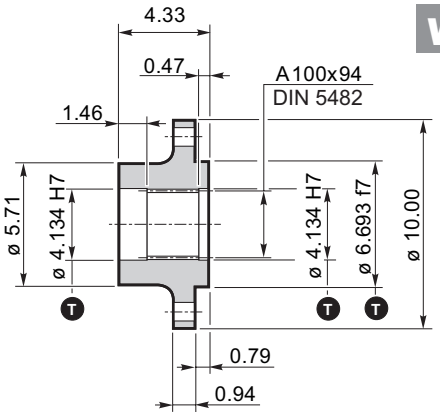
P1	T4	P1	T4
—	—	—	—
—	—	6.54	5.96
—	—	9.02	6.67
—	—	9.02	9.17
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

Flange



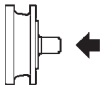


W0A

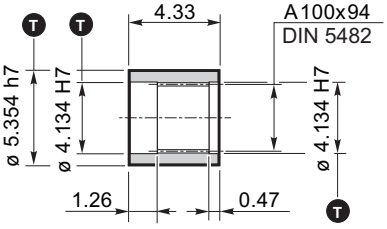


Material : Steel AISI 1040

Sleeve coupling

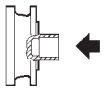


M0A



Material : Steel SAE 8620

Shrink disc



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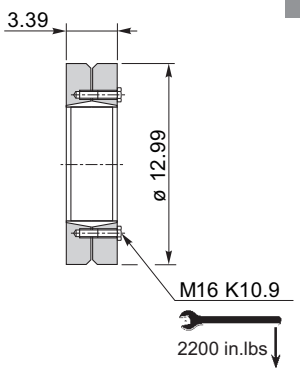
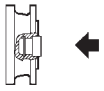


Splined bar



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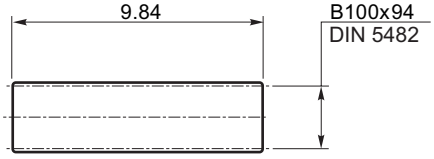
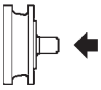
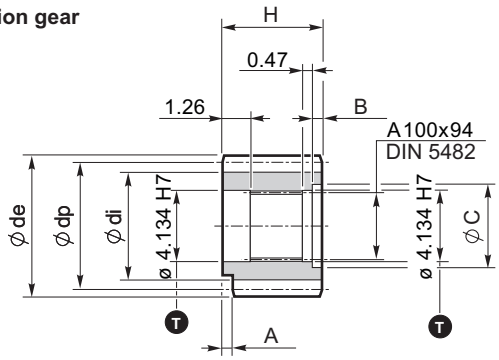


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PLQ	12	23	0	276	246	300	110	0	0	0	■
PPD	16	13	0.500	208	184	252.5	145	0	35	116	□
PPF	16	15	0.450	240	215	280	125	0	15	120	■

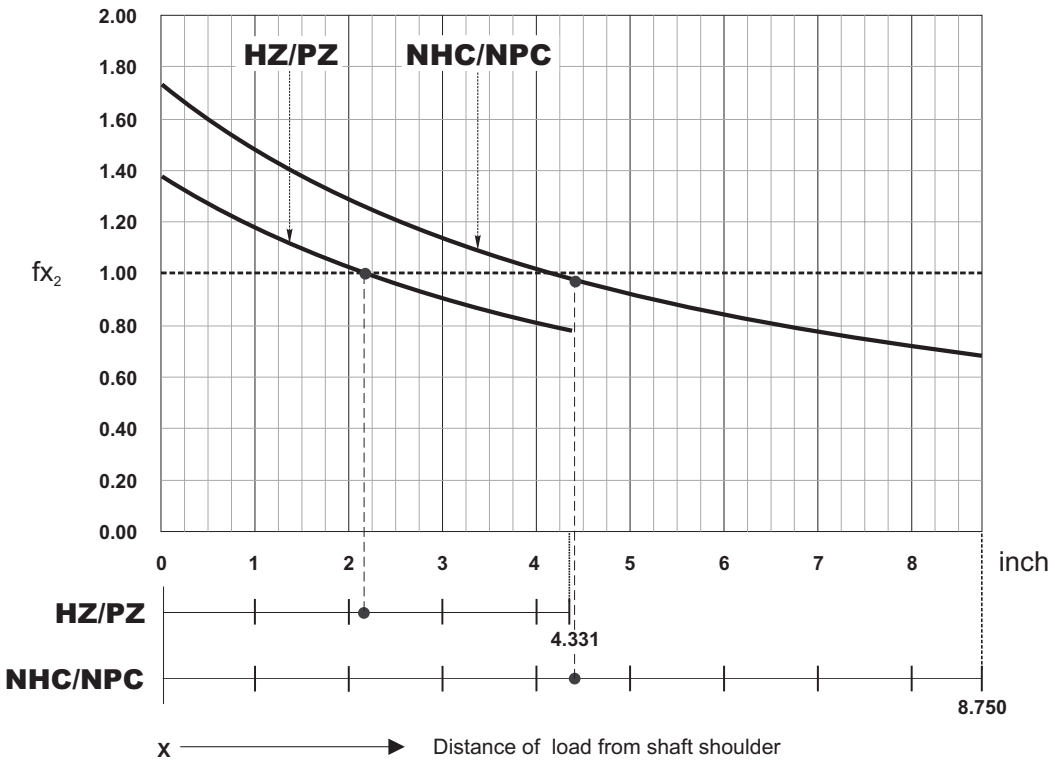
⚠ Dimensions of pinion gears are in mm

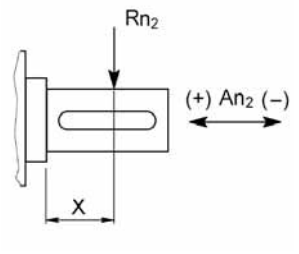
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch Ⓣ	
(105)	4.134 H7	$^{+0.00138}_{0}$
(136)	5.354 h7	$^{0}_{-0.00157}$
(170)	6.693 f7	$^{-0.00169}_{-0.00327}$

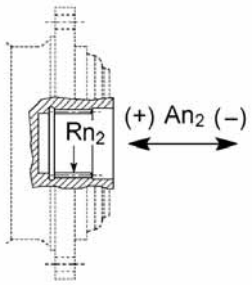
Load application factor for calculation of admissible overhung load on output shaft





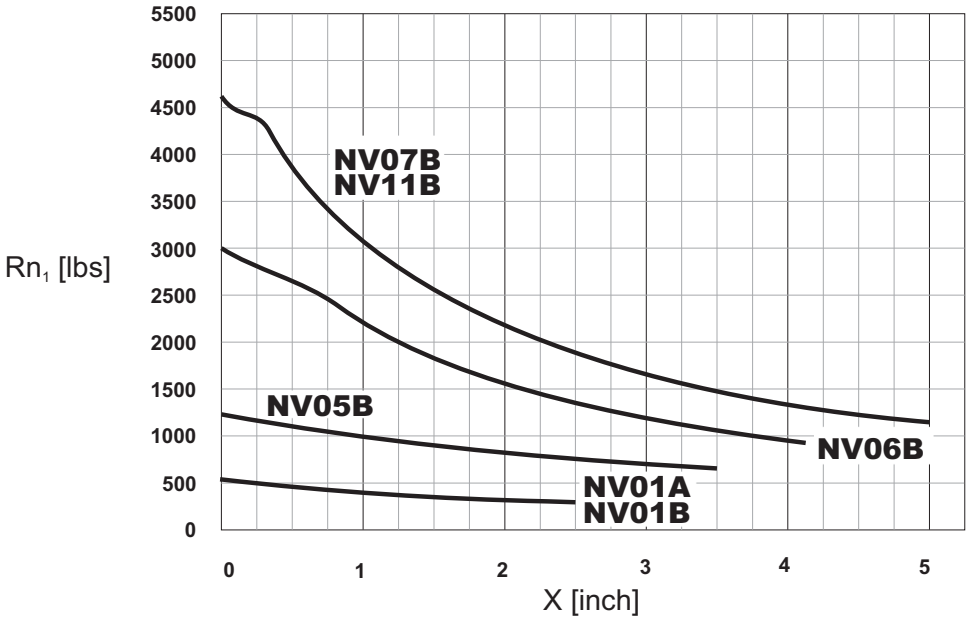
$R_{x2} = Rn_2 \cdot fx_2$

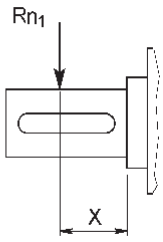
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

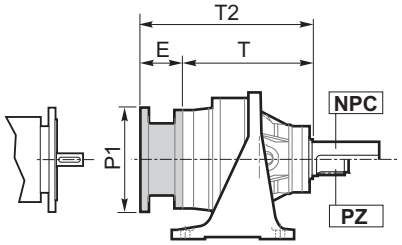
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



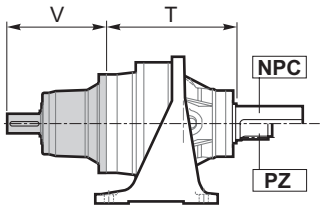


313L

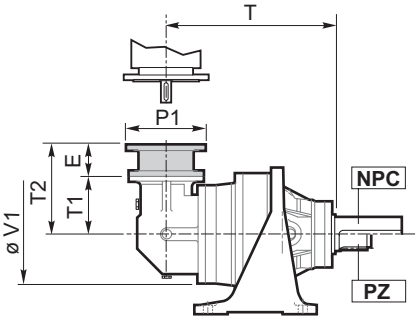
NEMA input

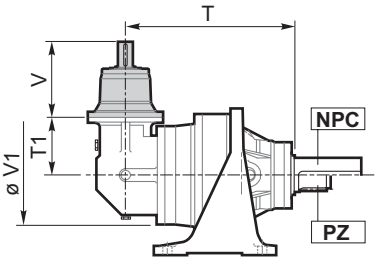


Solid input shaft

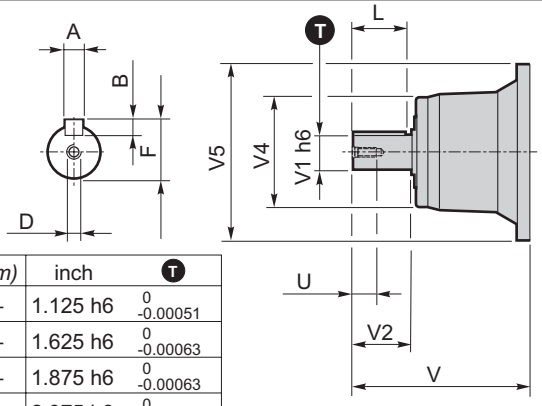


313R



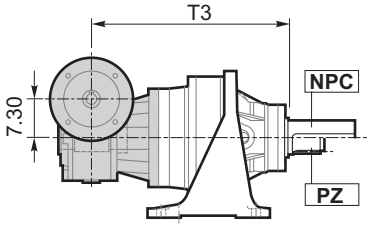


	313 L3 313 R2(A) 313 R3	313 L4 313 R4		313 R2(B) 313 R2(C)	313 L2	313 L1
	Solid input shaft					
	NV05B	NV01A	NV01B	NV06B	NV07B	NV11B
V	9.68	6.00	6.44	12.70	12.28	13.58
V1	1.875	1.125	1.625	2.375	3.000	3.000
V2	3.50	2.00	2.50	4.75	5.00	5.00
V4	6.10	4.72	4.72	6.10	7.87	7.87
V5	9.65	7.32	7.32	11.50	13.58	16.46
A	0.500	0.250	0.375	0.625	0.750	0.750
B	0.500	0.250	0.375	0.625	0.750	0.750
F	2.091	1.236	1.791	2.646	3.327	3.327
L	3.00	1.75	2.00	4.25	4.37	4.37
D	5/8 -11UNC	3/8 -16UNC	1/2 -13UNC	3/4 -10 UNC	3/4 -10 UNC	3/4 -10 UNC
U	1.42	0.87	1.10	1.65	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	77.2	121.3

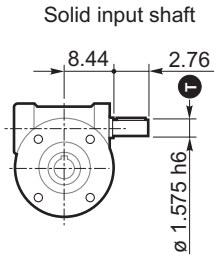


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 13L3

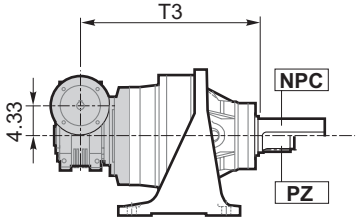


Solid input shaft

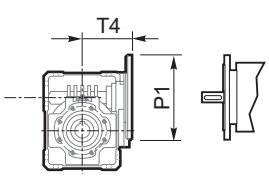


268

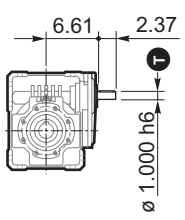
3/V 13L4



NEMA input

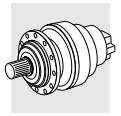


Solid input shaft

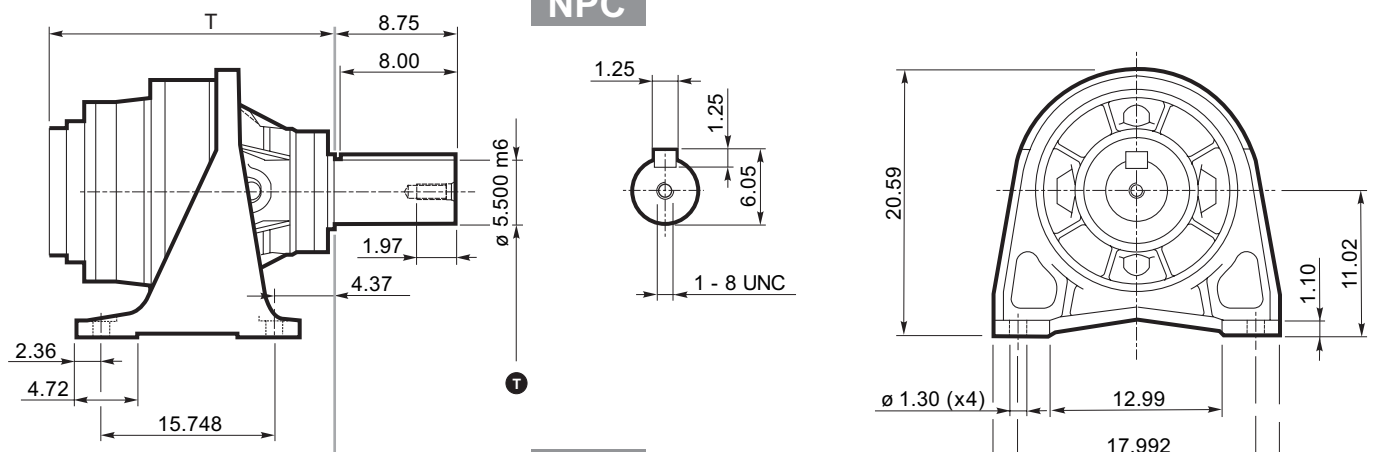


268

BONFIGLIOLI TRASMITAL



NPC

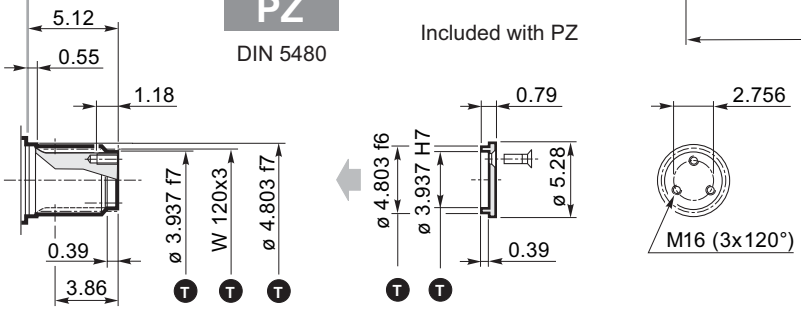


(mm)	inch	Ⓣ
—	1.000 h6	0 -0.00051
—	1.575 h6	0 -0.00063
(100)	3.937 f7	-0.00142 -0.00280
(100)	3.937 H7	+0.00138 0
(122)	4.803 f7	-0.00169 -0.00327
(122)	4.803 f6	-0.00169 -0.00268
—	5.500 m6	+0.00157 +0.00059
W 120x3		DIN 5482

PZ

DIN 5480

Included with PZ



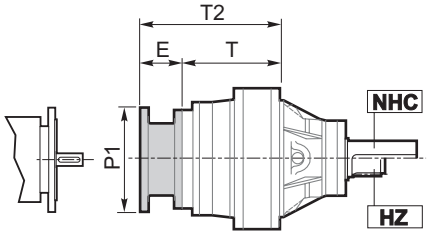
	313 L1	313 L2	313 L3	313 L4	313 R2(A)	313 R2(B)	313 R2(C)	313 R3	313 R4
T	15.00	20.91	24.41	26.97	24.06	24.06	24.06	25.59	28.03
T1	—	—	—	—	12.99	13.58	15.35	8.86	5.51
V1	—	—	—	—	15.35	15.75	18.90	13.58	9.61
Lbs	705.6	837.9	864.4	879.8	948.2	992.3	1014.3	948.2	908.5

	3/V 13L3	3/V 13L4
	T3	
	28.82	30.71
Lbs	1047	937.1

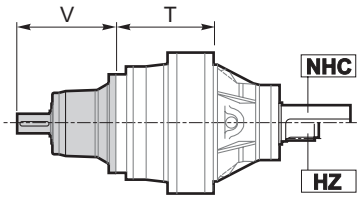
NEMA Input															
	P1	**E**	**T2**									**P1**	**T4**	**P1**	**T4**
N56C	9.84	4.51	—	—	—	31.48	—	—	—	—	10.02	—	—	—	—
N140TC	9.84	4.51	—	—	—	31.48	—	—	—	—	10.02	—	—	6.54	5.96
N180TC	8.82	5.22	—	—	—	32.19	—	—	—	—	10.73	—	—	9.02	6.67
N210TC	8.82	5.22	—	—	—	32.19	—	—	—	—	10.73	—	—	9.02	9.17
N250TC	8.82	5.22	—	—	—	32.19	—	—	—	—	10.73	—	—	—	—
N250TC	11.81	5.41	—	—	29.82	—	18.41	—	—	14.27	—	—	—	—	—
N280TC	11.81	6.28	—	—	—	33.25	—	—	—	15.14	11.79	—	—	—	—
N280TC	13.78	6.42	—	—	30.83	—	19.41	—	—	—	—	—	—	—	—
N320TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N320TC	15.75	8.64	—	29.55	—	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N360TC	15.75	8.64	—	29.55	—	—	—	—	—	—	—	—	—	—	—

313L

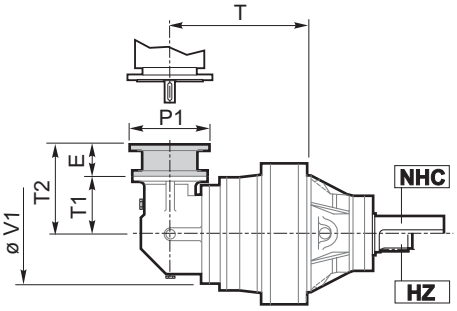
NEMA input

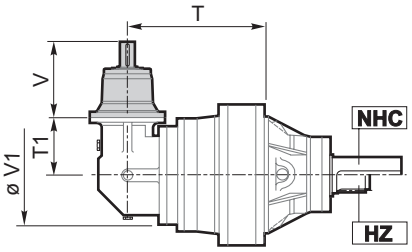


Solid input shaft

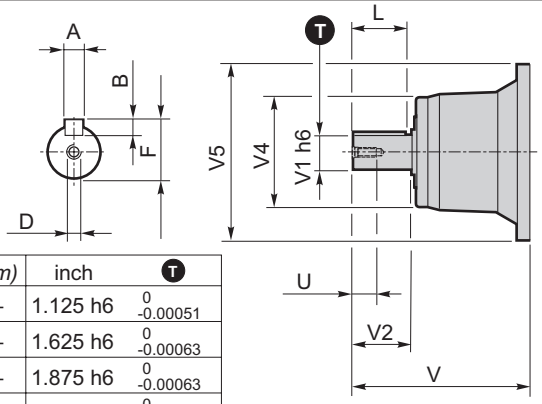


313R



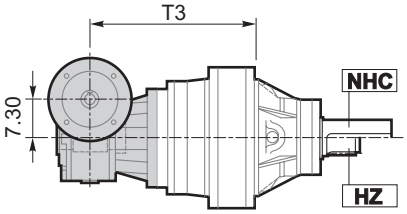


	313 L3 313 R2(A) 313 R3	313 L4 313 R4		313 R2(B) 313 R2(C)	313 L2	313 L1
	Solid input shaft					
	NV05B	NV01A	NV01B	NV06B	NV07B	NV11B
V	9.68	6.00	6.44	12.70	12.28	13.58
V1	1.875	1.125	1.625	2.375	3.000	3.000
V2	3.50	2.00	2.50	4.75	5.00	5.00
V4	6.10	4.72	4.72	6.10	7.87	7.87
V5	9.65	7.32	7.32	11.50	13.58	16.46
A	0.500	0.250	0.375	0.625	0.750	0.750
B	0.500	0.250	0.375	0.625	0.750	0.750
F	2.091	1.236	1.791	2.646	3.327	3.327
L	3.00	1.75	2.00	4.25	4.37	4.37
D	5/8 -11UNC	3/8 -16UNC	1/2 -13UNC	3/4 -10 UNC	3/4 -10 UNC	3/4 -10 UNC
U	1.42	0.87	1.10	1.65	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	77.2	121.3

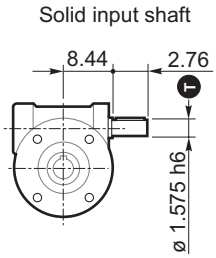


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 13L3

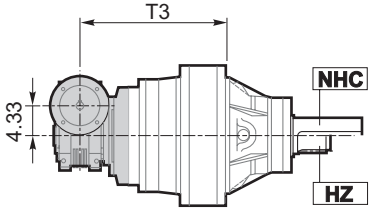


Solid input shaft

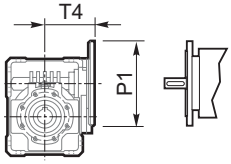


268

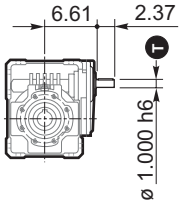
3/V 13L4



NEMA input



Solid input shaft



268

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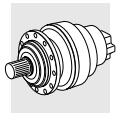
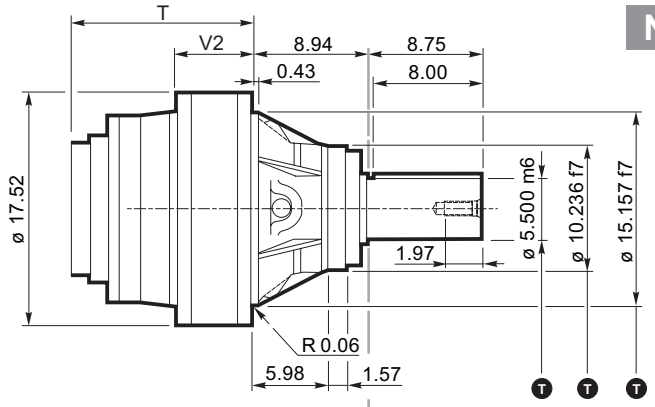
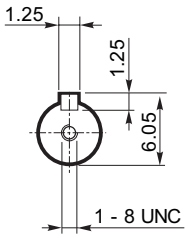
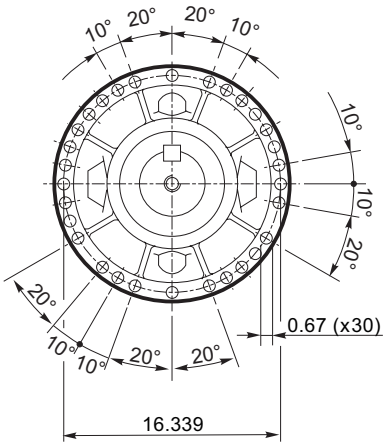




NHC



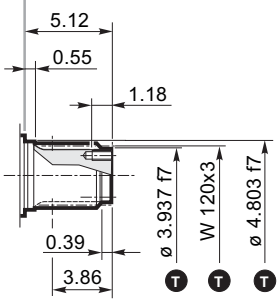


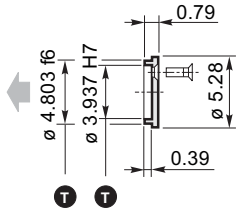
(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.575 h6	0 -0.00063
(100)	3.937 H7	+0.00138 0
(100)	3.937 f7	-0.00142 -0.00280
(122)	4.803 f6	-0.00169 -0.00268
—	5.500 m6	+0.00157 +0.00059
(260)	10.236 f7	-0.00220 -0.00425
(385)	15.157 f7	-0.00244 -0.00469
W 120x3		DIN 5480

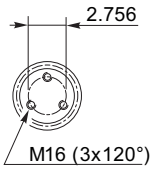
HZ

DIN 5480

Included with HZ







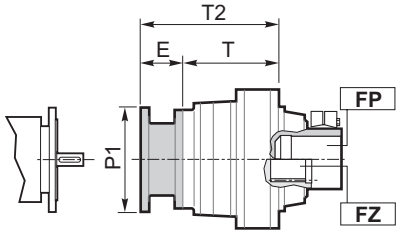
	313 L1	313 L2	313 L3	313 L4	313 R2(A)	313 R2(B)	313 R2(C)	313 R3	313 R4
T	6.06	11.97	15.47	18.03	15.12	15.12	15.12	16.65	19.09
T1	—	—	—	—	12.99	13.58	15.35	8.86	5.51
V1	—	—	—	—	15.35	15.75	18.90	13.58	9.61
V2	—	—	—	—	7.83	7.83	6.61	6.65	6.65
Lbs	507.2	639.5	665.9	681.3	749.7	793.8	815.9	749.7	710.0

3/V 13L3	3/V 13L4
T3	
19.88	21.77
848.9	738.7

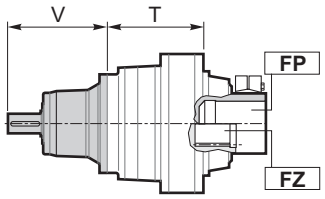
NEMA Input			T2									P1	T4	P1	T4
	P1	**E**													
N56C	9.84	4.51	—	—	—	22.54	—	—	—	—	10.02	—	—	—	—
N140TC	9.84	4.51	—	—	—	22.54	—	—	—	—	10.02	—	—	6.54	5.96
N180TC	8.82	5.22	—	—	—	23.25	—	—	—	—	10.73	—	—	9.02	6.67
N210TC	8.82	5.22	—	—	—	23.25	—	—	—	—	10.73	—	—	9.02	9.17
N250TC	8.82	5.22	—	—	—	23.25	—	—	—	—	10.73	—	—	—	—
N250TC	11.81	5.41	—	—	20.89	—	18.41	—	—	14.27	—	—	—	—	—
N280TC	11.81	6.28	—	—	—	24.31	—	—	—	15.14	11.79	—	—	—	—
N280TC	13.78	6.42	—	—	21.89	—	19.41	—	—	—	—	—	—	—	—
N320TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N320TC	15.75	8.64	—	20.61	—	—	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—	—	—	—	—
N360TC	15.75	8.64	—	20.61	—	—	—	—	—	—	—	—	—	—	—

313L

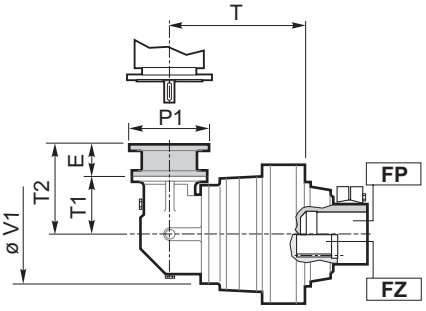
NEMA input

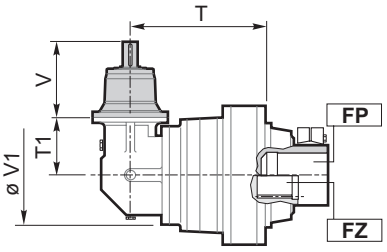


Solid input shaft

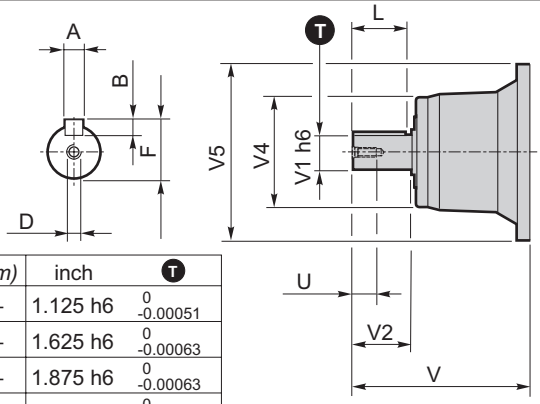


313R



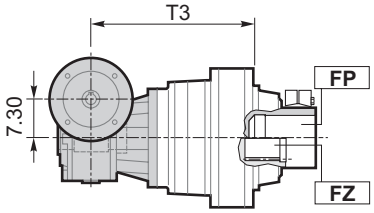


	313 L3 313 R2(A) 313 R3	313 L4 313 R4		313 R2(B) 313 R2(C)	313 L2	313 L1
	Solid input shaft					
	NV05B	NV01A	NV01B	NV06B	NV07B	NV11B
V	9.68	6.00	6.44	12.70	12.28	13.58
V1	1.875	1.125	1.625	2.375	3.000	3.000
V2	3.50	2.00	2.50	4.75	5.00	5.00
V4	6.10	4.72	4.72	6.10	7.87	7.87
V5	9.65	7.32	7.32	11.50	13.58	16.46
A	0.500	0.250	0.375	0.625	0.750	0.750
B	0.500	0.250	0.375	0.625	0.750	0.750
F	2.091	1.236	1.791	2.646	3.327	3.327
L	3.00	1.75	2.00	4.25	4.37	4.37
D	5/8 -11UNC	3/8 -16UNC	1/2 -13UNC	3/4 -10 UNC	3/4 -10 UNC	3/4 -10 UNC
U	1.42	0.87	1.10	1.65	1.65	1.65
Lbs	33.1	13.2	15.4	50.7	77.2	121.3

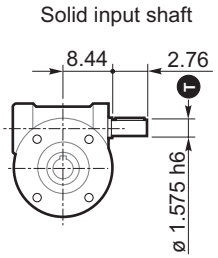


(mm)	inch	T
—	1.125 h6	0 -0.00051
—	1.625 h6	0 -0.00063
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 13L3

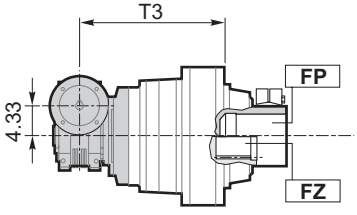


Solid input shaft

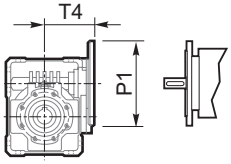


268

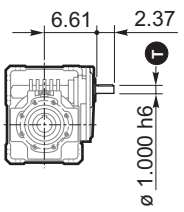
3/V 13L4



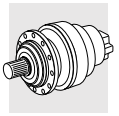
NEMA input

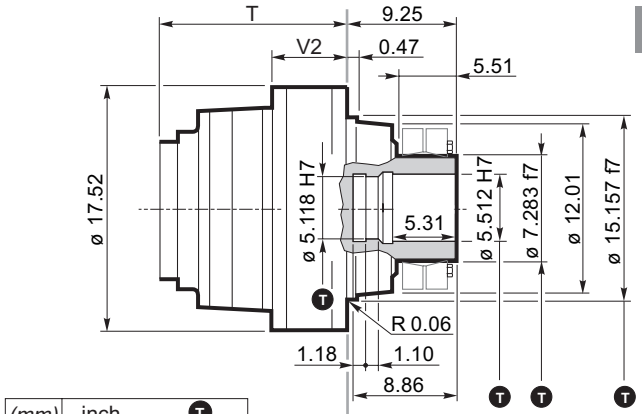


Solid input shaft

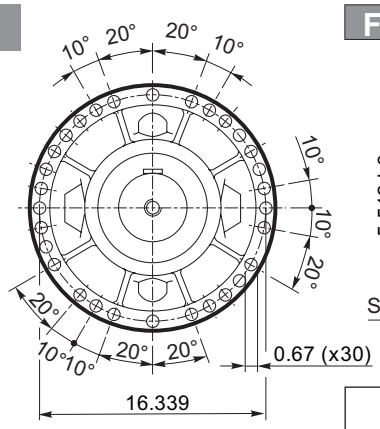


268

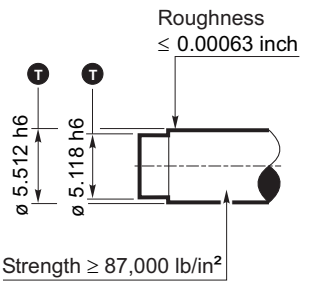




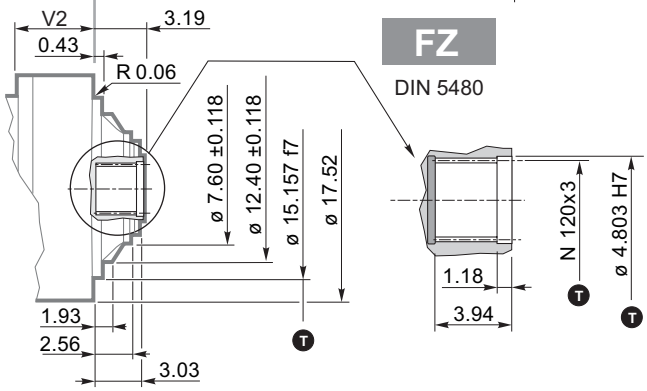
FP



FP T_{2max} = 584,100 in.lbs

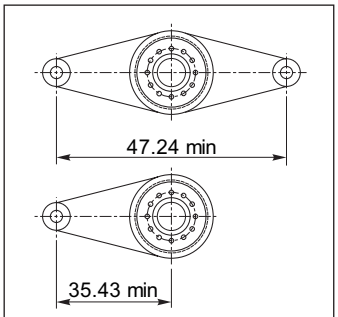


(mm)	inch	T
—	1.000 h6	0 -0.00051
—	1.575 h6	0 -0.00063
(122)	4.803 H7	+0.00157 0
(130)	5.118 h6	0 -0.00098
(130)	5.118 H7	+0.00157 0
(140)	5.512 H7	+0.00157 0
(140)	5.512 h6	0 -0.00098
(185)	7.283 f7	-0.00197 -0.00378
(385)	15.157 f7	-0.00244 -0.00469
N 120x3		DIN 5480



FZ

DIN 5480



Recommended dimensions for torque arm
Item non supplied

			313 L1	313 L2	313 L3	313 L4	313 R2(A)	313 R2(B)	313 R2(C)	313 R3	313 R4
		T	6.06	11.97	15.47	18.03	15.12	15.12	15.12	16.65	19.09
		T1	—	—	—	—	12.99	13.58	15.35	8.86	5.51
		V1	—	—	—	—	15.35	15.75	18.90	13.58	9.61
		V2	—	—	—	—	7.83	7.83	6.61	6.65	6.65
	FP	Lbs	441.0	617.4	643.9	659.3	727.7	771.8	793.8	727.7	688.0
	FZ	Lbs	441.0	573.3	599.8	615.2	683.6	727.7	749.7	683.6	643.9

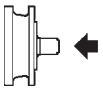
3/V 13L3	3/V 13L4
T3	
28.82	30.71
826.9	716.6
782.8	672.5

NEMA Input

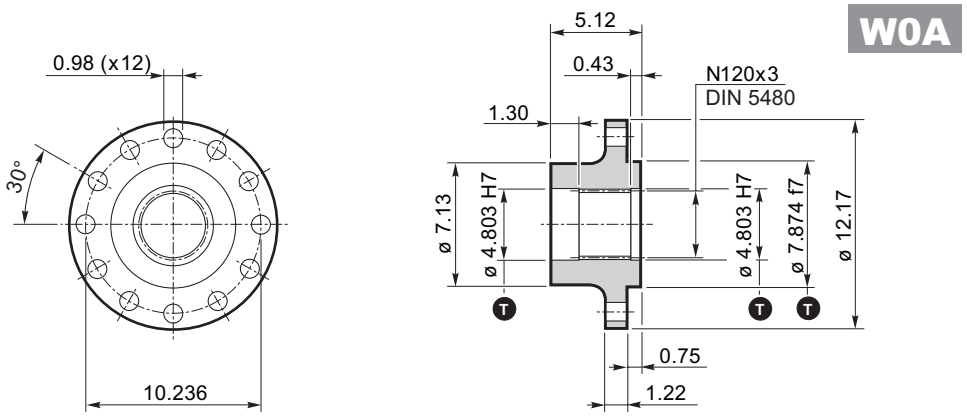
	P1	E	T2								
N56C	9.84	4.51	—	—	—	22.54	—	—	—	—	10.02
N140TC	9.84	4.51	—	—	—	22.54	—	—	—	—	10.02
N180TC	8.82	5.22	—	—	—	23.25	—	—	—	—	10.73
N210TC	8.82	5.22	—	—	—	23.25	—	—	—	—	10.73
N250TC	8.82	5.22	—	—	—	23.25	—	—	—	—	10.73
N250TC	11.81	5.41	—	—	20.89	—	18.41	—	—	14.27	—
N280TC	11.81	6.28	—	—	—	24.31	—	—	—	15.14	11.79
N280TC	13.78	6.42	—	—	21.89	—	19.41	—	—	—	—
N320TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—
N320TC	15.75	8.64	—	20.61	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	—	21.56	23.33	—	—
N360TC	15.75	8.64	—	20.61	—	—	—	—	—	—	—

P1	T4	P1	T4
—	—	—	—
—	—	6.54	5.96
—	—	9.02	6.67
—	—	9.02	9.17
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

Flange



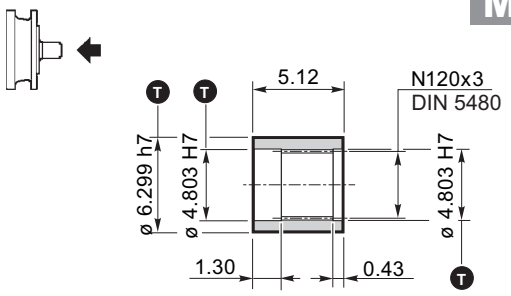
W0A



Material : Steel AISI 1040

Sleeve coupling

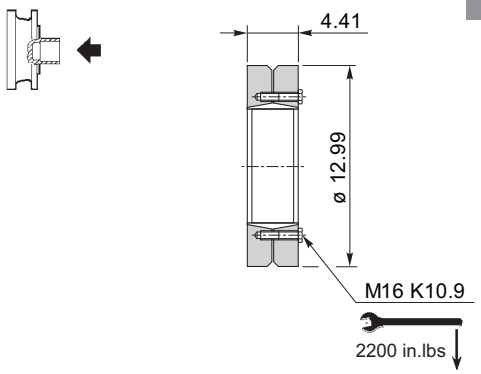
M0A



Material : Steel SAE 8620

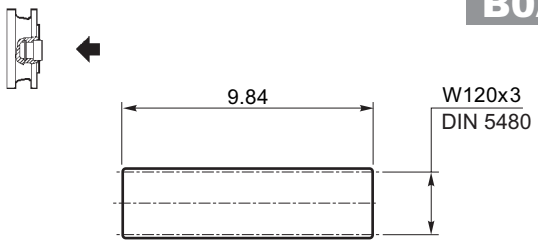
Shrink disc

G0A



Splined bar

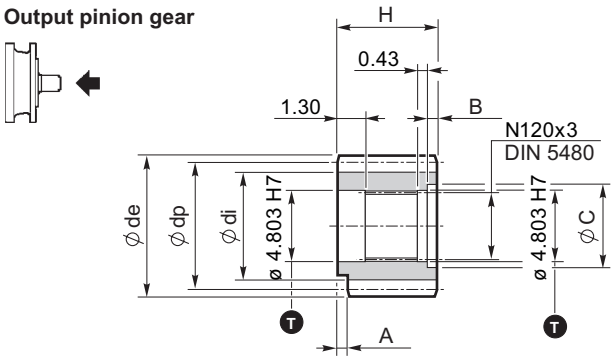
B0A



Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear

P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PPH	16	17	0.500	272	247	315	135	0	5	136	☐
PRI	18	18	0.333	324	294	365	140	0	10	140	☐

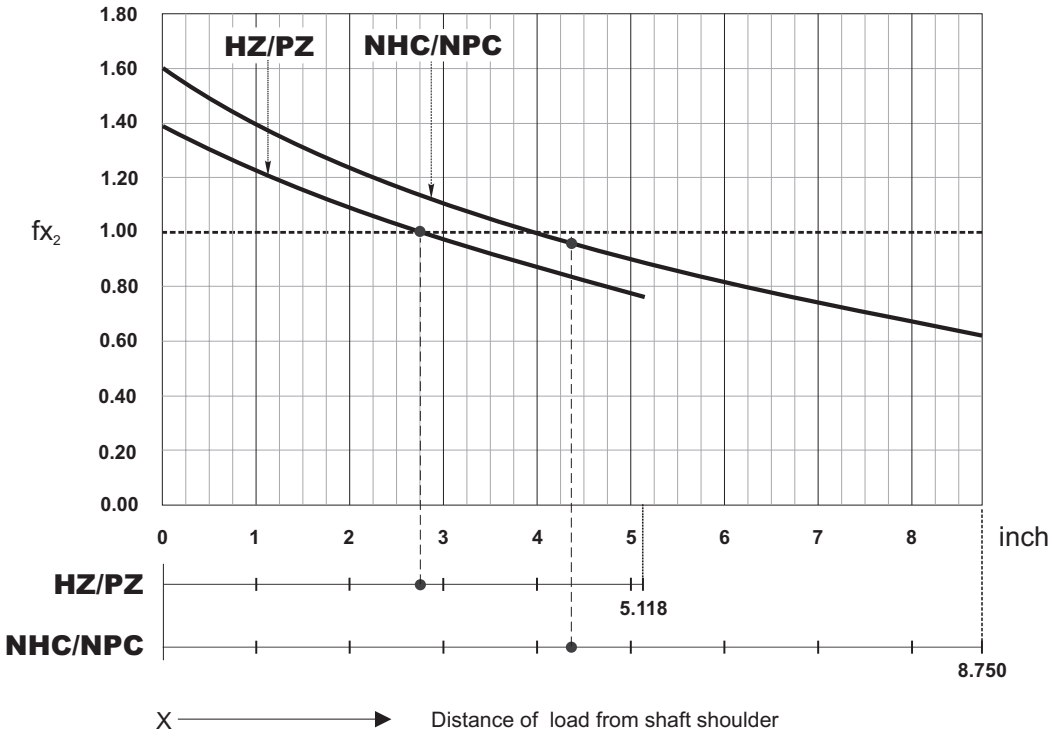
⚠ Dimensions of pinion gears are in mm

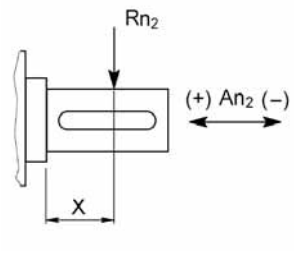
☆	Material
☐	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch	Ⓣ
(120)	4.724 f7	-0.00142 / -0.00280
(122)	4.803 H7	+0.00157 / 0
(160)	6.299 h7	0 / -0.00157

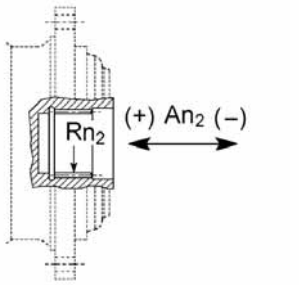
Load application factor for calculation of admissible overhung load on output shaft





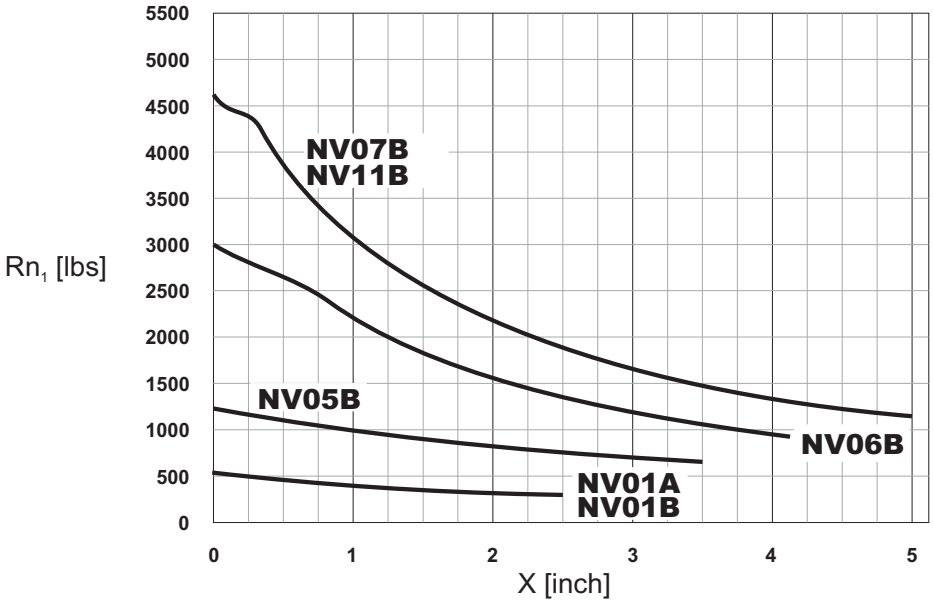
$R_{x2} = Rn_2 \cdot fx_2$

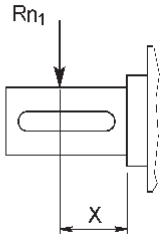
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).

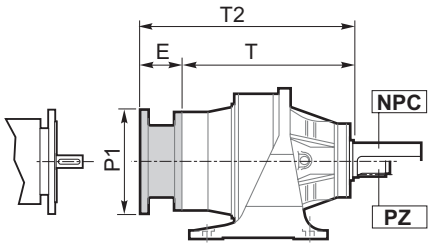


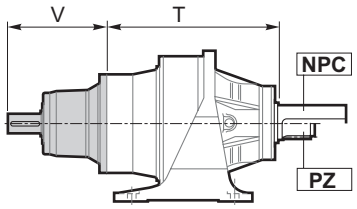


NEMA input

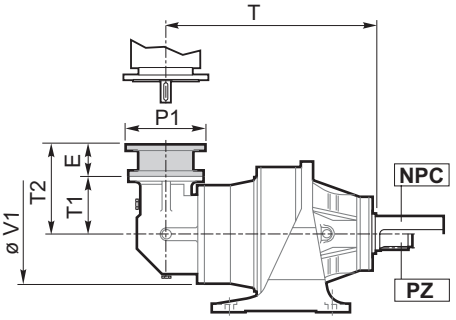
Solid input shaft

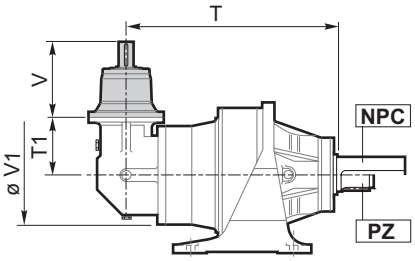
315L



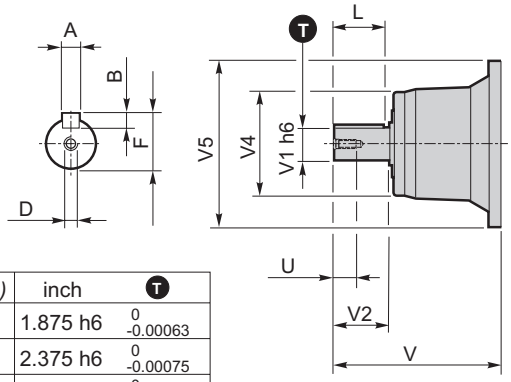


315R



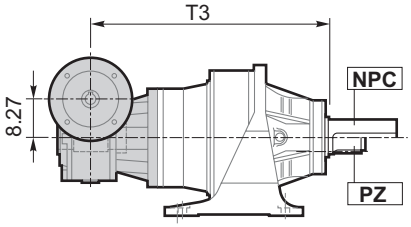


	315 L4 315 R3 (A) R4	315 R3(B) 315 R3(C)	315 L3	315 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

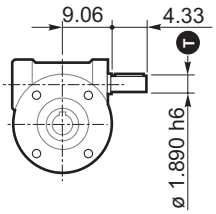


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 15L3

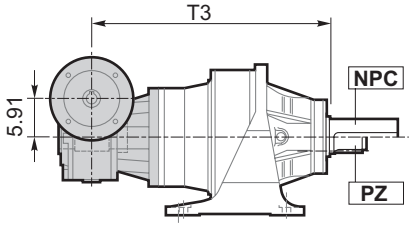


Solid input shaft

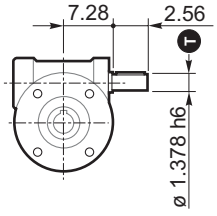


268

3/V 15L4

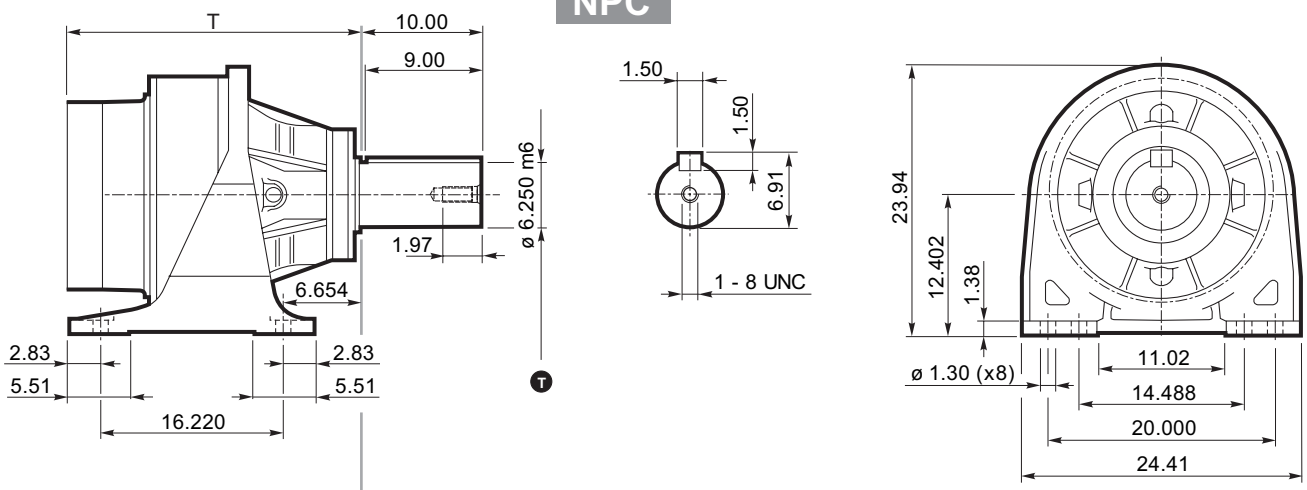


Solid input shaft



268

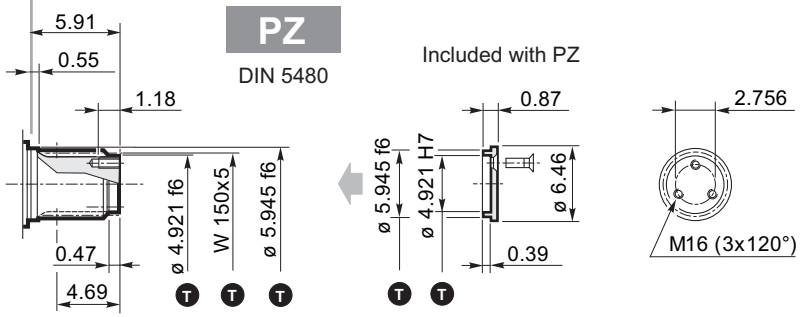
NPC



(mm)	inch	T
—	1.378 h6	0 -0.00063
—	1.890 h6	0 -0.00063
(125)	4.921 f6	-0.00169 -0.00268
(125)	4.921 H7	+0.00157 0
(151)	5.945 f6	-0.00169 -0.00268
—	6.250 m6	+0.00157 +0.00059
W 150x5		DIN 5480

PZ

DIN 5480

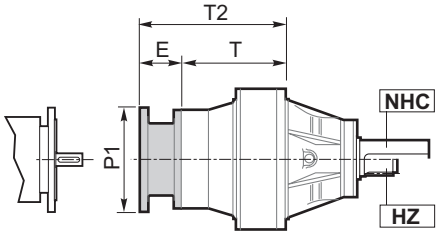


		315 L2	315 L3	315 L4	315 R3(A)	315 R3(B)	315 R3(C)	315 R4
	T	26.18	31.42	34.92	35.04	35.04	35.04	36.10
	T1	—	—	—	12.99	13.58	15.35	8.86
	V1	—	—	—	15.35	15.75	18.90	13.58
	Lbs	1290	1389	1416	1532	1588	1610	1499
NEMA Input								
	P1	E	T2						
N250TC	11.81	5.41	—	—	40.33	18.41	—	—	14.27
N280TC	13.78	6.42	—	—	41.34	19.41	—	—	15.28
N320TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	40.06	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	40.06	—	—	—	—	—
N400TC	17.48	11.26	37.44	—	—	—	—	—	—

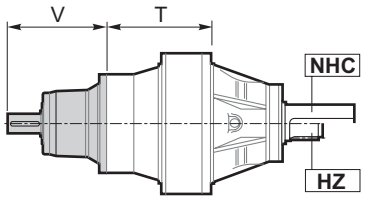
	3/V 15L3		3/V 15L4	
	T3			
	34.84		38.94	
Lbs	1764		1521	
	P1	T4	P1	T4
N250TC	—	—	—	—
N280TC	—	—	—	—
N320TC	—	—	—	—
N320TC	—	—	—	—
N360TC	—	—	—	—
N360TC	—	—	—	—
N400TC	—	—	—	—

315L

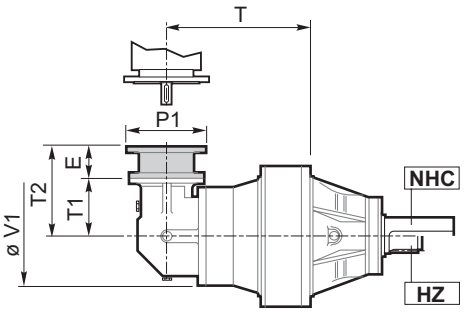
NEMA input

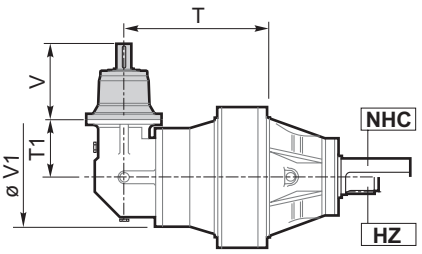


Solid input shaft

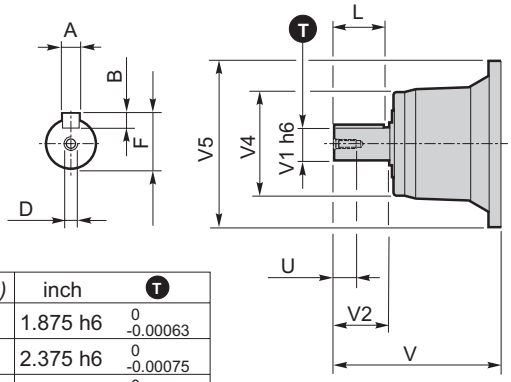


315R



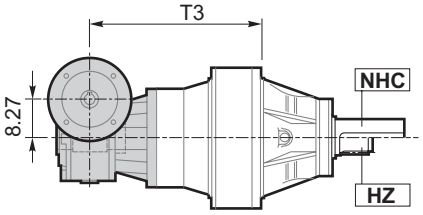


	315 L4 315 R3 (A) R4	315 R3(B) 315 R3(C)	315 L3	315 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

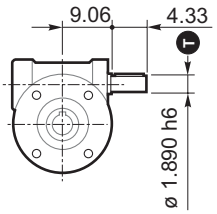


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 15L3

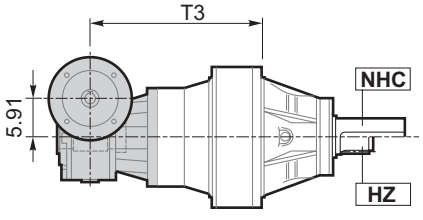


Solid input shaft

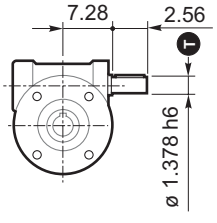


268

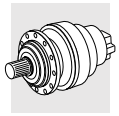
3/V 15L4



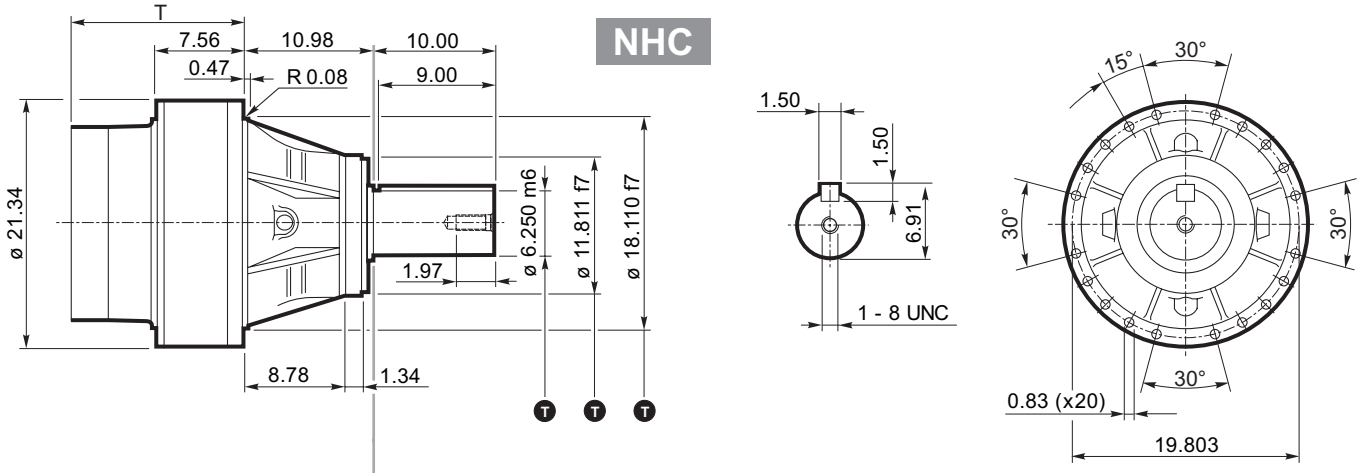
Solid input shaft



268



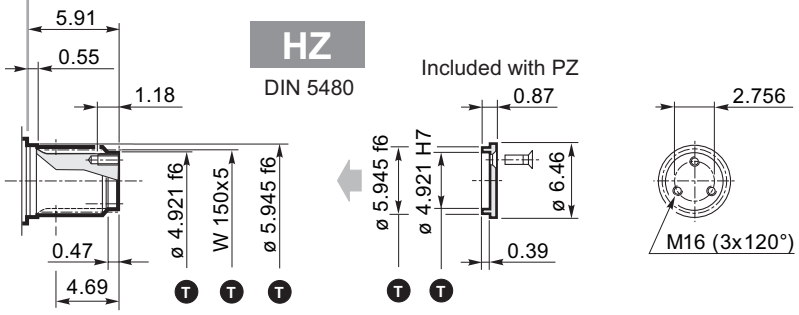
NHC



(mm)	inch	Ⓣ
—	1.378 h6	0 -0.00063
—	1.890 h6	0 -0.00063
(125)	4.921 f6	-0.00169 -0.00268
(125)	4.921 H7	+0.00157 0
(150)	5.906 f7	-0.00169 -0.00326
(151)	5.945 f6	-0.00169 -0.00268
—	6.250 m6	+0.00157 +0.00059
(300)	11.811 f7	-0.00220 -0.00425
(460)	18.110 f7	-0.00268 -0.00516
W 150x5		DIN 5480

HZ

DIN 5480

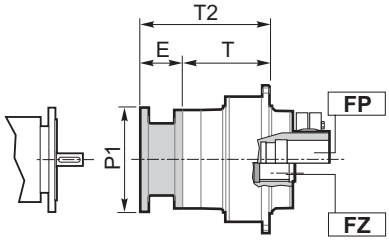


		315 L2	315 L3	315 L4	315 R3(A)	315 R3(B)	315 R3(C)	315 R4
	T	15.20	20.43	23.94	24.06	24.06	24.06	25.12
	T1	—	—	—	12.99	13.58	15.35	8.86
	V1	—	—	—	15.35	15.75	18.90	13.58
	Lbs	1003	1103	1129	1246	1301	1323	1213
NEMA Input								
	P1	**E**	**T2**					
N250TC	11.81	5.41	—	—	29.35	18.41	—	—	14.27
N280TC	13.78	6.42	—	—	30.35	19.41	—	—	15.28
N320TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	29.07	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	29.07	—	—	—	—	—
N400TC	17.48	11.26	26.46	—	—	—	—	—	—

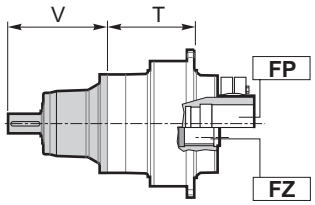
	3/V 15L3	3/V 15L4
	T3	
	23.86	27.95
Lbs	1477	1235
	P1	**T4**	**P1**	**T4**
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

315L

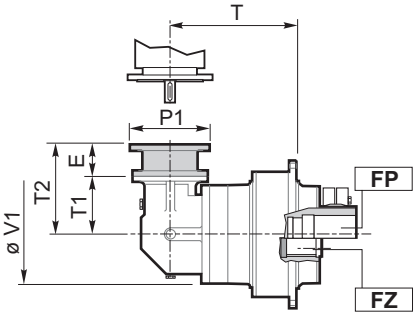
NEMA input

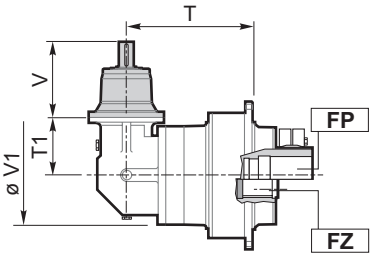


Solid input shaft

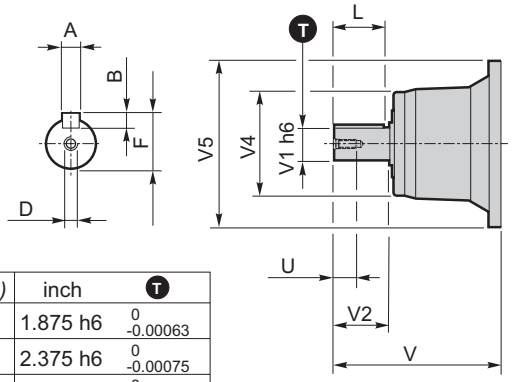


315R



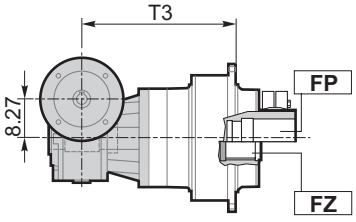


	315 L4 315 R3 (A) R4	315 R3(B) 315 R3(C)	315 L3	315 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

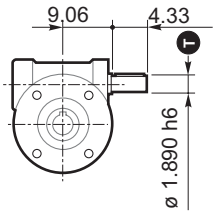


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 15L3

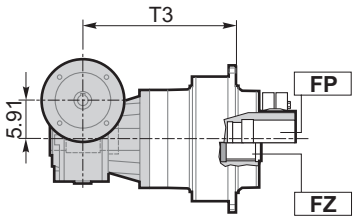


Solid input shaft

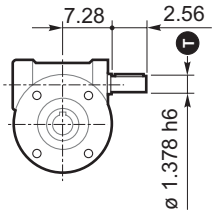


268

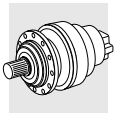
3/V 15L4



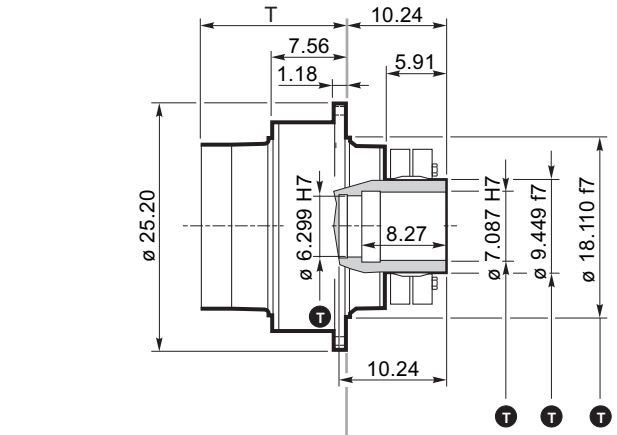
Solid input shaft



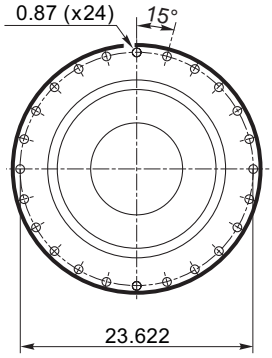
268

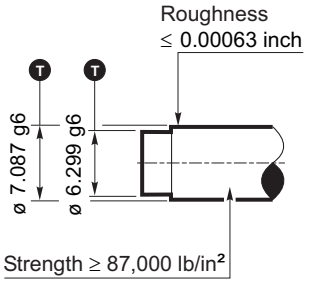


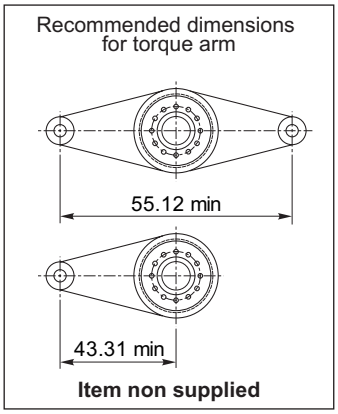
FP T_{2max} = 1,115,100 in.lbs



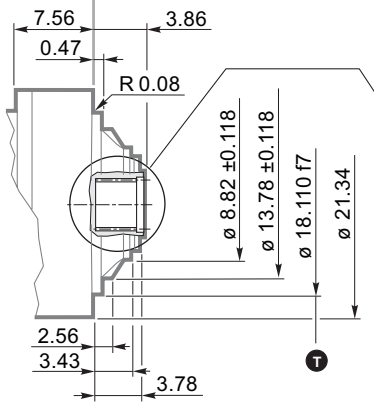
FP





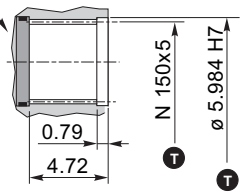


(mm)	inch	T
—	1.378h6	0 -0.00063
—	1.890 h6	0 -0.00063
(152)	5.984 H7	+0.00157 0
(160)	6.299 H7	+0.00157 0
(160)	6.299 g6	-0.00055 -0.00154
(180)	7.087 H7	+0.00157 0
(180)	7.087 g6	-0.00055 -0.00154
(240)	9.449 f7	-0.00197 -0.00378
(460)	18.110 f7	-0.00268 -0.00516
N 150x5		DIN 5480



FZ

DIN 5480



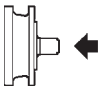
			315 L2	315 L3	315 L4	315 R3(A)	315 R3(B)	315 R3(C)	315 R4
		T	15.20	20.43	23.94	24.06	24.06	24.06	25.12
		T1	—	—	—	12.99	13.58	15.35	8.86
		V1	—	—	—	15.35	15.75	18.90	13.58
	FP	Lbs	915.1	1014	1041	1158	1213	1235	1125
	FZ	Lbs	804.8	904.1	930.5	1047	1103	1125	1014

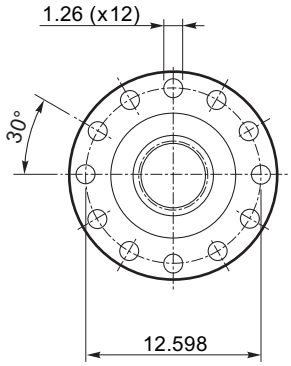
	3/V 15L3	3/V 15L4
	T3	
	23.86	27.95
Lbs	1378	1147
Lbs	1268	1036

NEMA Input									
	P1	E	T2						
N250TC	11.81	5.41	—	—	29.35	18.41	—	—	14.27
N280TC	13.78	6.42	—	—	30.35	19.41	—	—	15.28
N320TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	29.07	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	29.07	—	—	—	—	—
N400TC	17.48	11.26	26.46	—	—	—	—	—	—

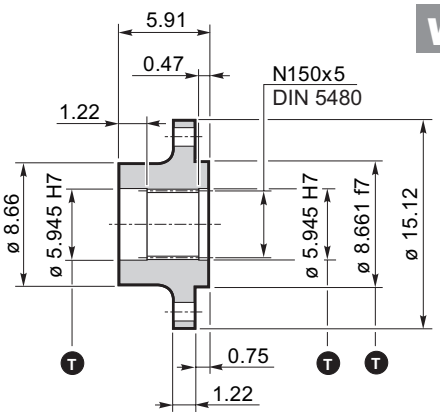
P1	T4	P1	T4
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

Flange



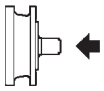


W0A

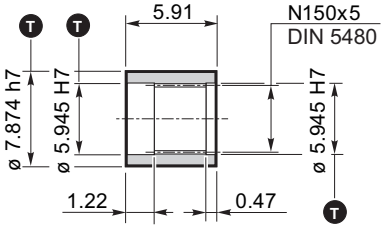


Material : Steel AISI 1040

Sleeve coupling

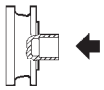


M0A

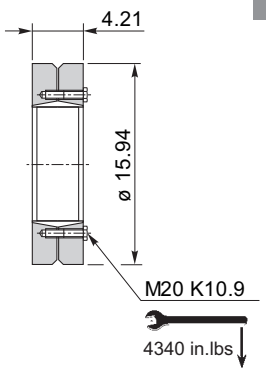


Material : Steel SAE 8620

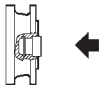
Shrink disc



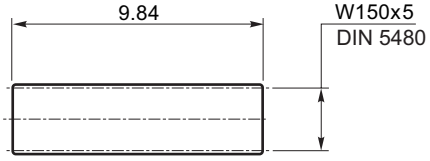
G0A



Splined bar

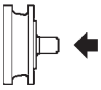


B0A

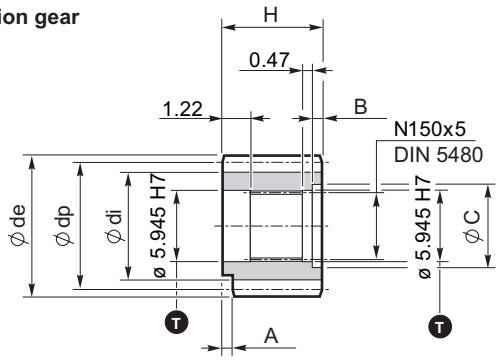


Case hardening steel SAE 4320
must be case hardened to 50-55 HRC

Output pinion gear



P...



Code	m	z	x	dp	di	de	H	A	B	C	☆
PRG1	18	16	0.500	288	261	342	160	0	10	166	■
PRG2	18	16	0.617	288	271	339	150	30	0	0	□

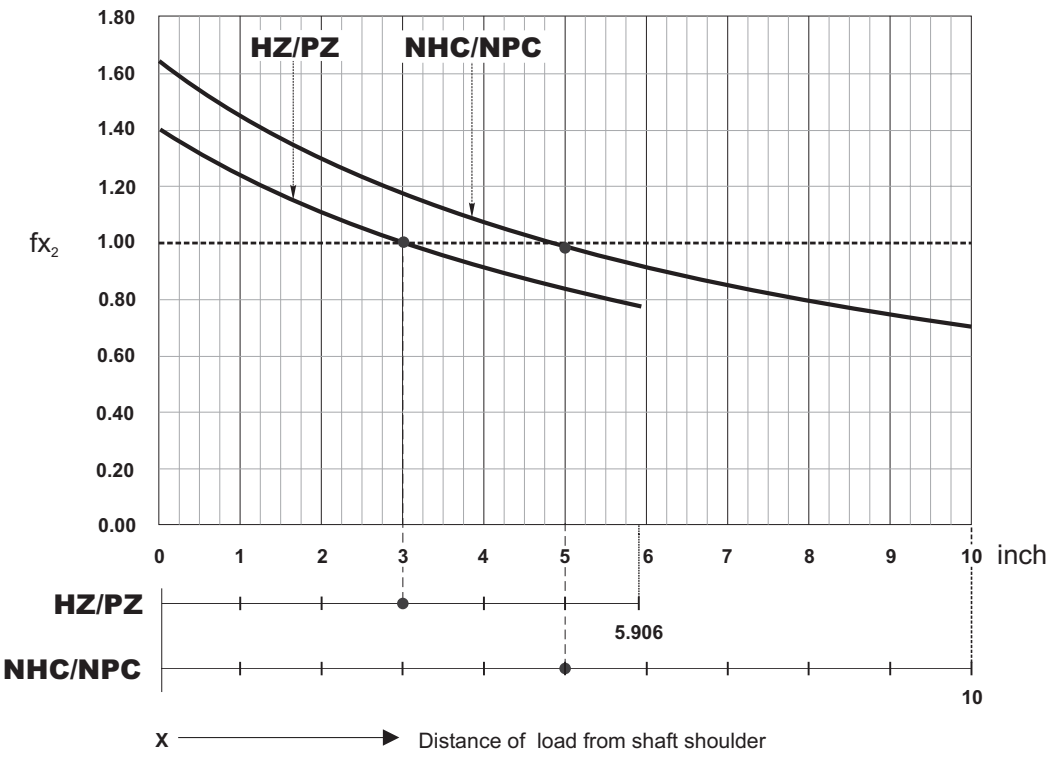
⚠ Dimensions of pinion gears are in mm

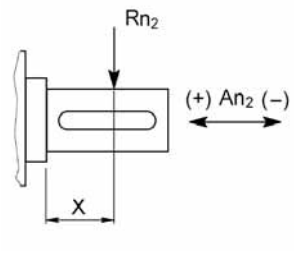
☆	Material
□	Steel AISI 9840 hardened and tempered
■	Steel SAE 4320 Case hardened

m = module
z = number of teeth
x = addendum modification
dp = generated pitch diameter
di = root diameter
de = outside diameter

(mm)	inch	Ⓣ
(151)	5.945 H7	-0.00055 / -0.00154
(200)	7.874 h7	0 / -0.00181
(220)	8.661 f7	-0.00197 / -0.00378

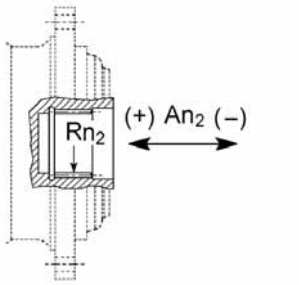
Load application factor for calculation of admissible overhung load on output shaft





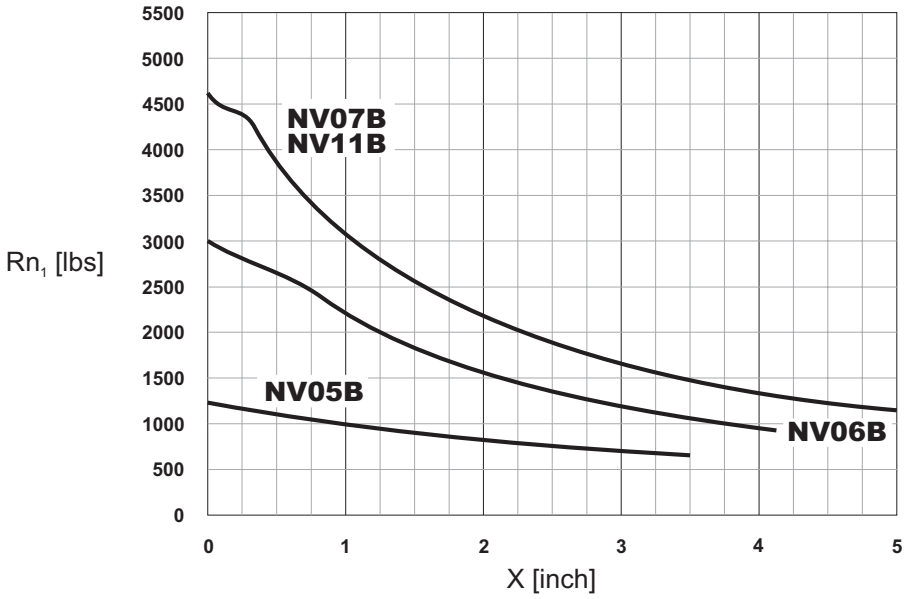
$R_{x2} = Rn_2 \cdot fx_2$

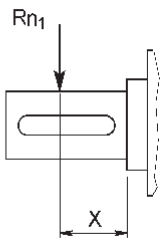
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

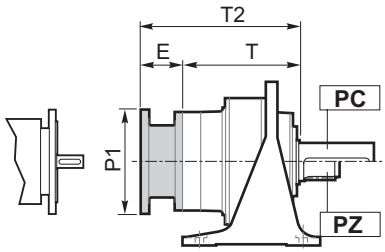
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



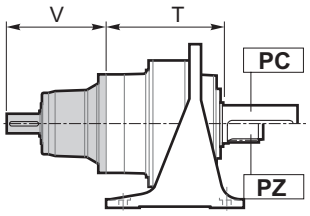


316L

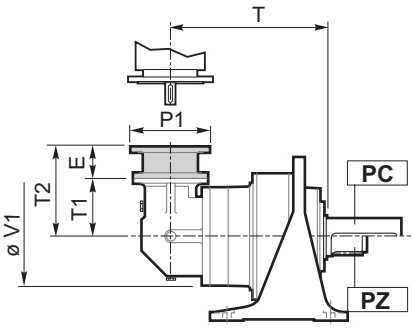
NEMA input

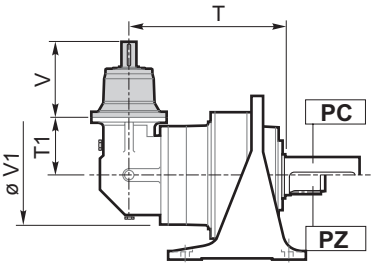


Solid input shaft

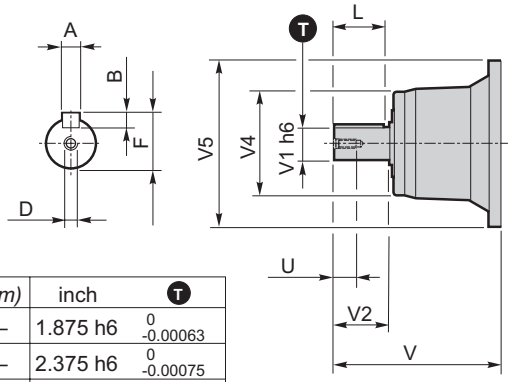


316R



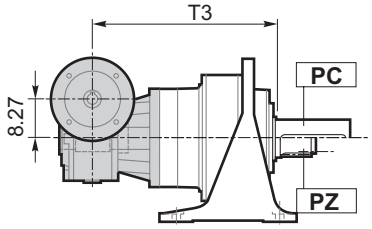


	316 L4 316 R4	316 R3(B) 316 R3(C)	316 L3	316 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV011B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

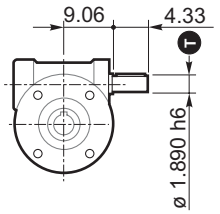


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 16L3

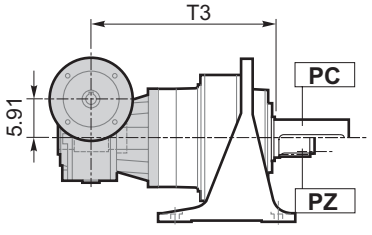


Solid input shaft

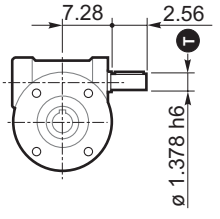


268

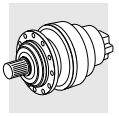
3/V 16L4



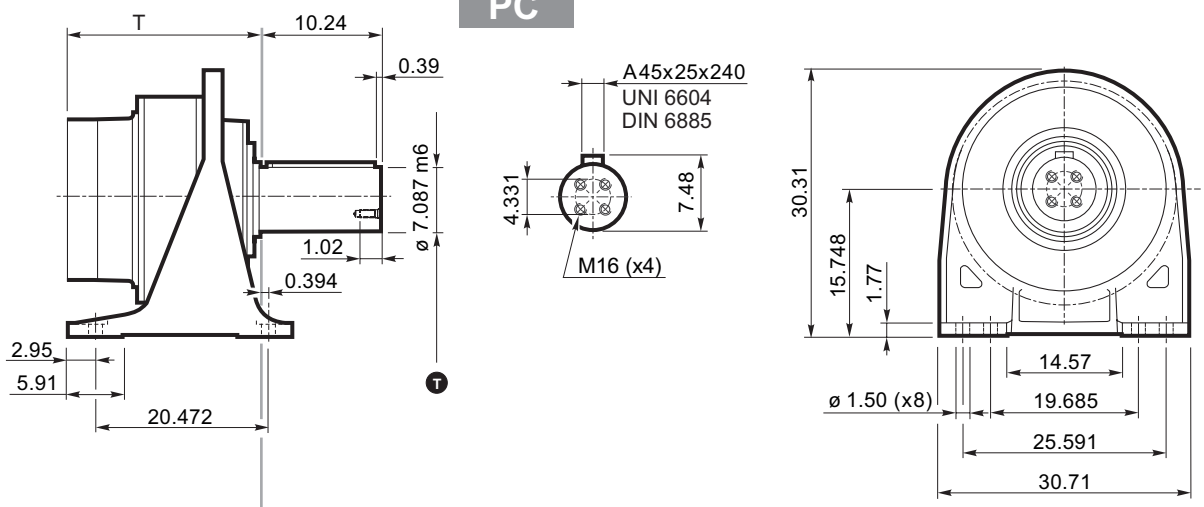
Solid input shaft



268



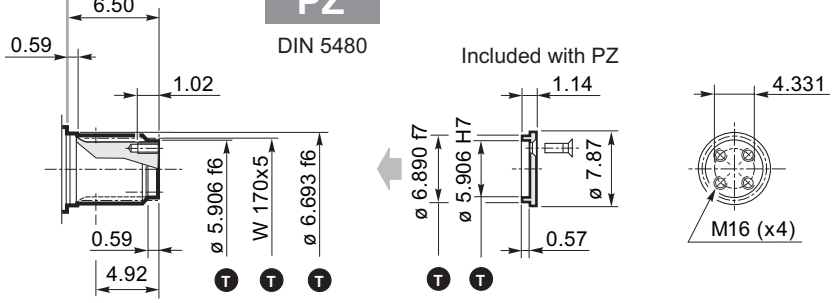
PC



(mm)	inch	Ⓣ
—	1.890 h6	0 -0.00063
—	1.378 h6	0 -0.00063
(180)	7.087 m6	-0.00055 -0.00154
(150)	5.906 f6	-0.00169 -0.00268
(170)	6.693 f6	-0.00169 -0.00268
(175)	6.890 f7	-0.00169 -0.00327
(150)	5.906 H7	+0.00157 0
W 170x5		DIN 5480

PZ

DIN 5480

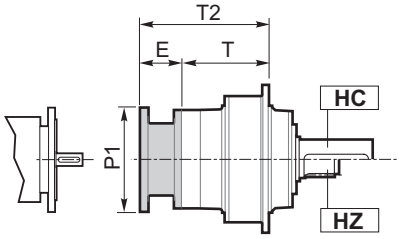


		316 L2	316 L3	316 L4	316 R3(B)	316 R3(C)	316 R4
	T	21.30	26.54	30.04	30.16	30.16	31.22
	T1	—	—	—	13.58	15.35	8.86
	V1	—	—	—	15.75	18.90	13.58
	Lbs	1742	1852	1896	2007	2029	1962
NEMA Input							
	P1	E	T2					
N250TC	11.81	5.41	—	—	35.45	—	—	14.27
N280TC	13.78	6.42	—	—	36.46	—	—	15.28
N320TC	13.78	7.97	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	35.18	—	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	35.18	—	—	—	—
N400TC	17.48	11.26	32.56	—	—	—	—	—

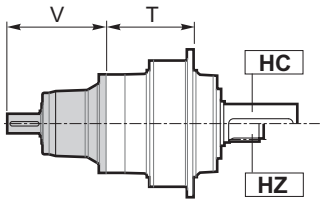
	3/V 16L3		3/V 16L4	
	T3			
	30.16		34.06	
Lbs	2183		1985	
	P1	T4	P1	T4
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

316L

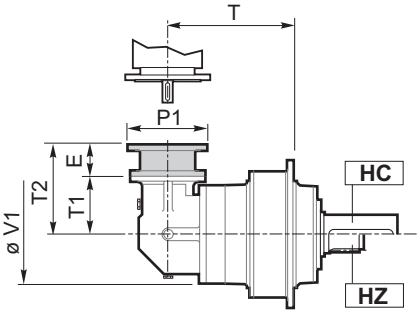
NEMA input

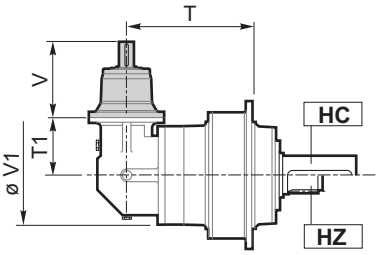


Solid input shaft

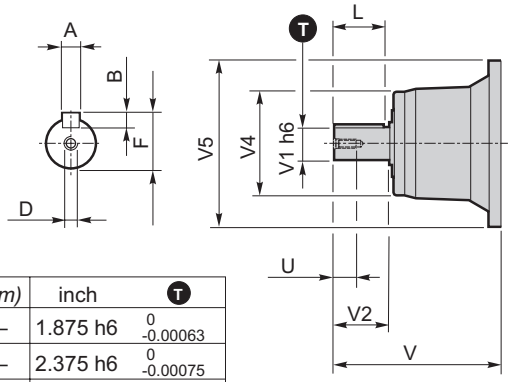


316R



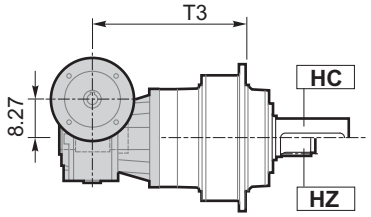


	316 L4 316 R4	316 R3(B) 316 R3(C)	316 L3	316 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV011B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

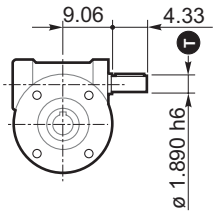


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 16L3

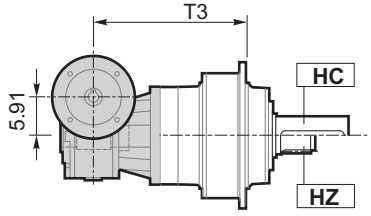


Solid input shaft

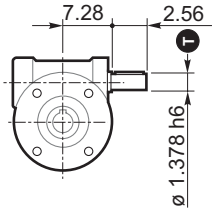


268

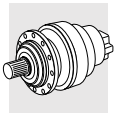
3/V 16L4



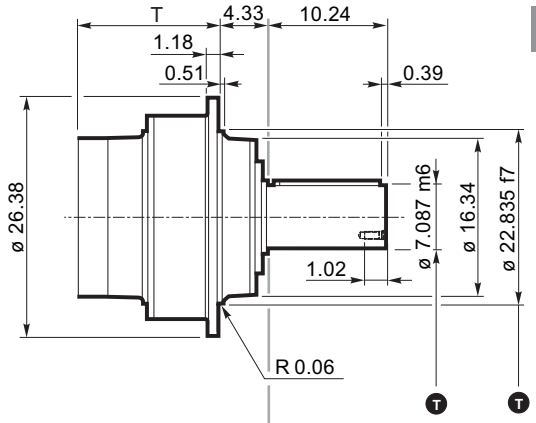
Solid input shaft

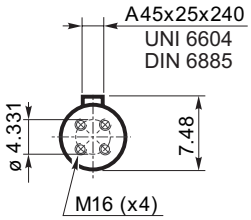


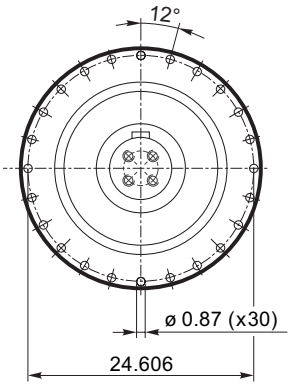
268



HC



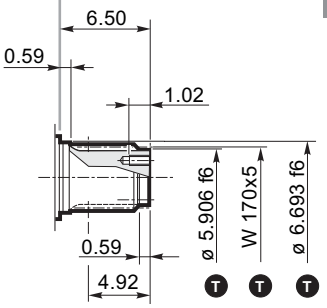


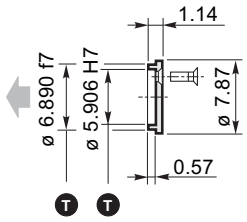


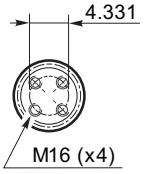
(mm)	inch	T
—	1.890 h6	0 -0.00063
—	1.378 h6	0 -0.00063
(180)	7.087 m6	-0.00055 -0.00154
(150)	5.906 f6	-0.00169 -0.00268
(170)	6.693 f6	-0.00169 -0.00268
(175)	6.890 f7	-0.00169 -0.00327
(150)	5.906 H7	+0.00157 0
(580)	22.835 f7	-0.00299 -0.00575
W 170x5		DIN 5480

HZ

DIN 5480 Included with HZ





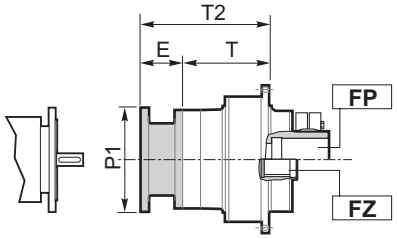


			316 L2	316 L3	316 L4	316 R3(B)	316 R3(C)	316 R4
		T	16.97	22.20	25.71	25.83	25.83	26.89
		T1	—	—	—	13.58	15.35	8.86
		V1	—	—	—	15.75	18.90	13.58
		Lbs	1301	1411	1455	1566	1588	1521
NEMA Input								
	P1	**E**	**T2**					
N250TC	11.81	5.41	—	—	31.12	—	—	14.27
N280TC	13.78	6.42	—	—	32.13	—	—	15.28
N320TC	13.78	7.97	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	30.85	—	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	30.85	—	—	—	—
N400TC	17.48	11.26	28.23	—	—	—	—	—

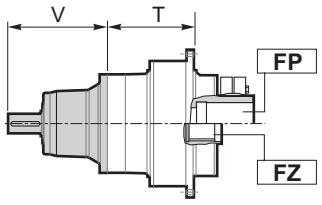
	3/V 16L3		3/V 16L4	
	T3			
	30.16		34.06	
Lbs	2183		1985	
	P1	**T4**	**P1**	**T4**
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

316L

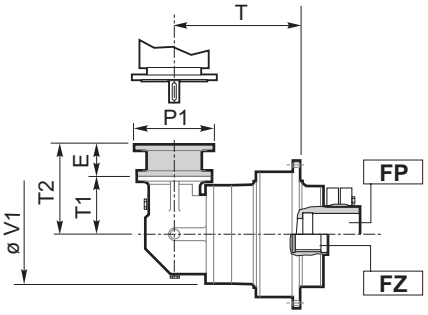
NEMA input

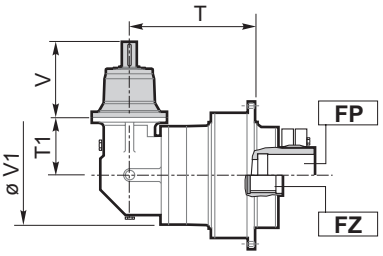


Solid input shaft

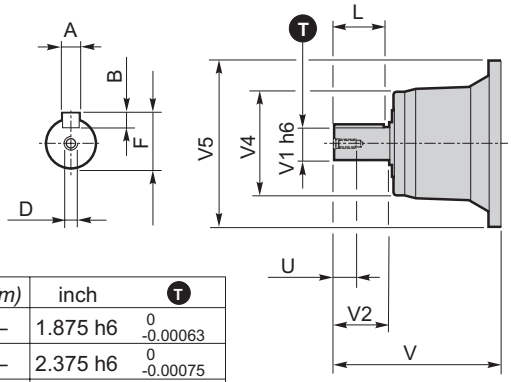


316R



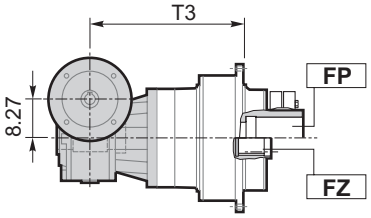


	316 L4 316 R4	316 R3(B) 316 R3(C)	316 L3	316 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV011B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

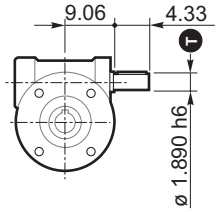


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 16L3

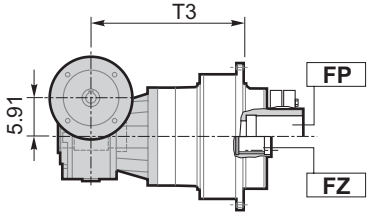


Solid input shaft

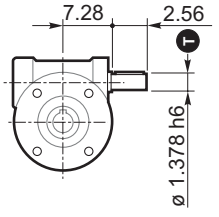


268

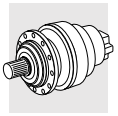
3/V 16L4



Solid input shaft

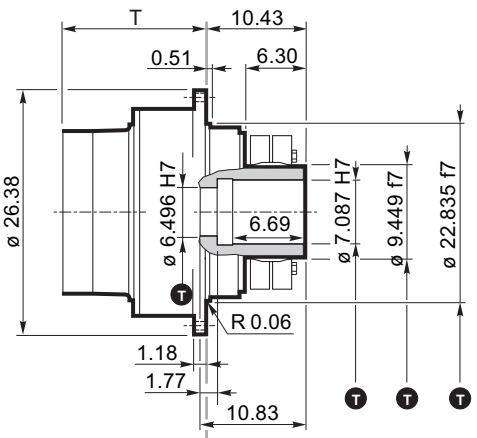


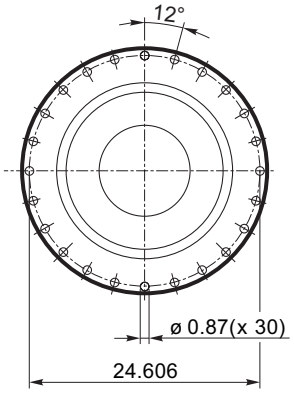
268

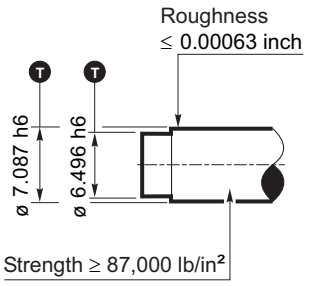


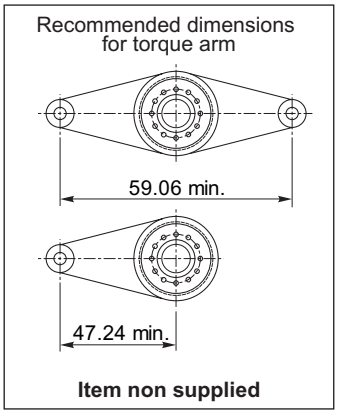
FP

FP T_{2max} = 1,433,700 in.lbs





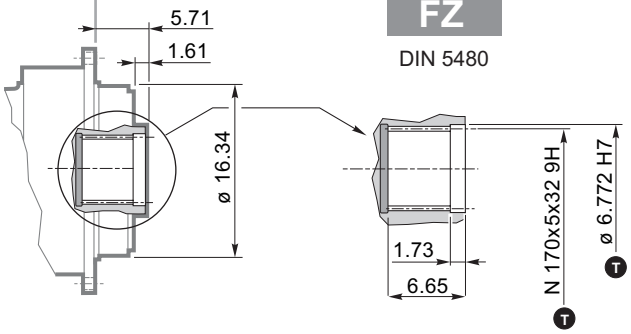




(mm)	inch	Ⓣ
—	1.378 h6	0 -0.00063
—	1.890 h6	0 -0.00063
(165)	6.496 h6	0 -0.00098
(165)	6.496 H7	+0.00157 0
(172)	6.772 H7	+0.00157 0
(180)	7.087 H7	+0.00157 0
(180)	7.087 h6	0 -0.00098
(240)	9.449 f7	-0.00197 -0.00378
(580)	22.835 f7	-0.00299 -0.00575
N 170x5x32 9H	DIN 5480	

FZ

DIN 5480

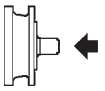


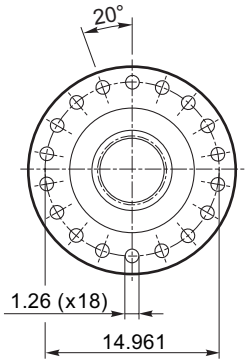
			316 L2	316 L3	316 L4	316 R3(B)	316 R3(C)	316 R4
		T	16.97	22.20	25.71	25.83	25.83	26.89
		T1	—	—	—	13.58	15.35	8.86
		V1	—	—	—	15.75	18.90	13.58
	FP	Lbs	1191	1301	1345	1455	1477	1411
	FZ		1147	1257	1301	1411	1433	1367
NEMA Input								
	P1	E	T2					
N250TC	11.81	5.41	—	—	31.12	—	—	14.27
N280TC	13.78	6.42	—	—	32.13	—	—	15.28
N320TC	13.78	7.97	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	30.85	—	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	30.85	—	—	—	—
N400TC	17.48	11.26	28.23	—	—	—	—	—

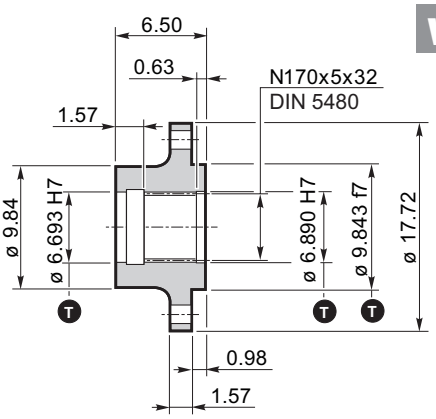
	3/V 16L3		3/V 16L4	
	T3			
	30.16		34.06	
Lbs	1632		1433	
	1588		1389	
	P1	T4	P1	T4
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

Flange

W0A



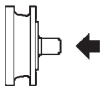


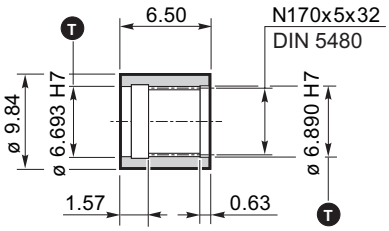


Material : Steel AISI 1040

Sleeve coupling

M0A

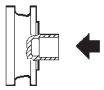


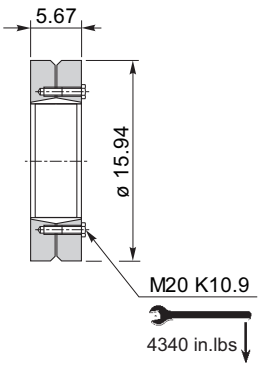


Material : Steel SAE 8620

Shrink disc

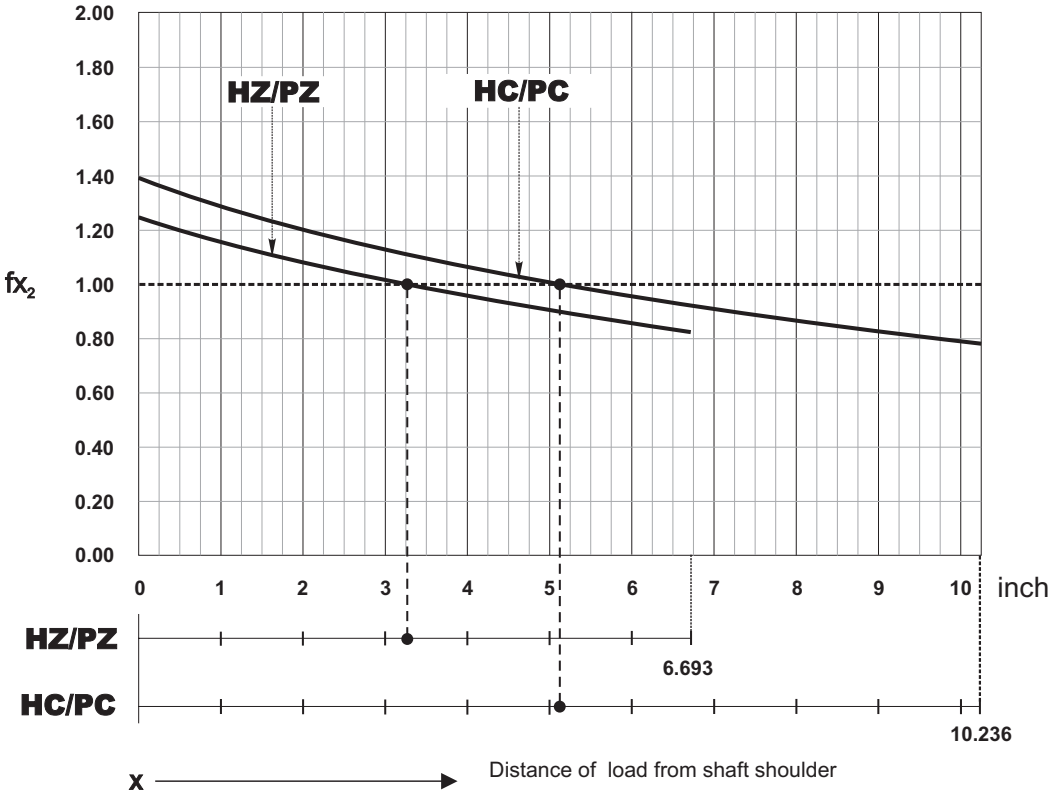
G0A

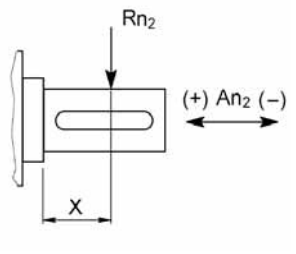




(mm)	inch	T
(170)	6.693 H7	+0.00157 0
(175)	6.890 H7	+0.00157 0
(250)	9.843 f7	-0.00197 0.00378

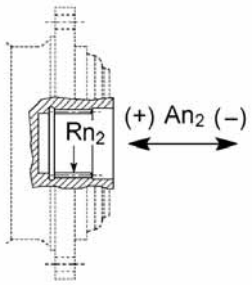
Load application factor for calculation of admissible overhung load on output shaft





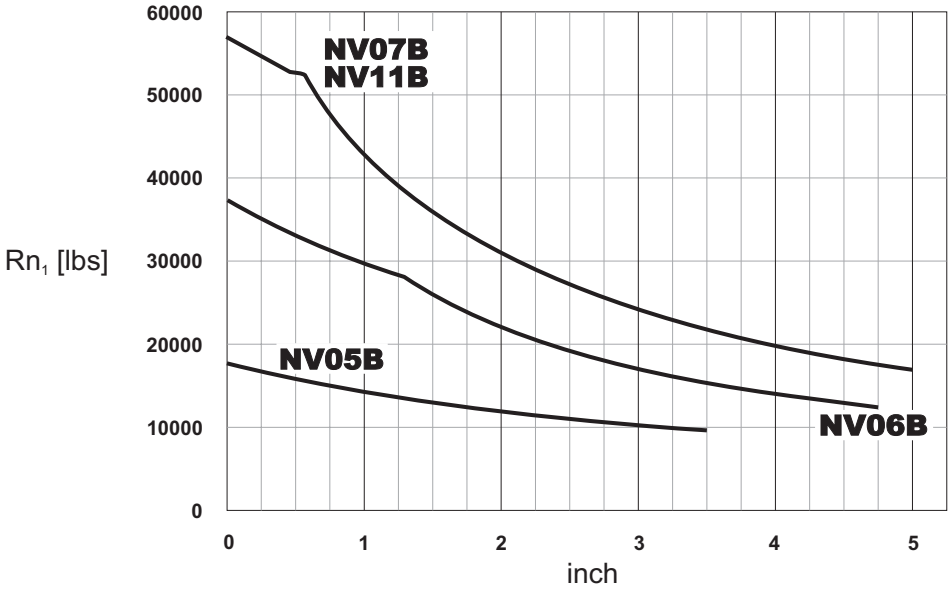
$R_{x2} = Rn_2 \cdot fx_2$

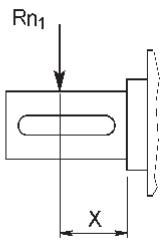
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

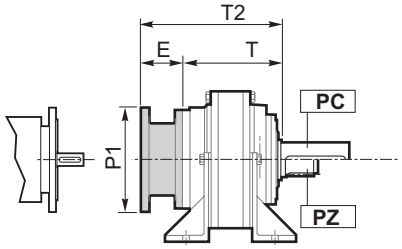
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



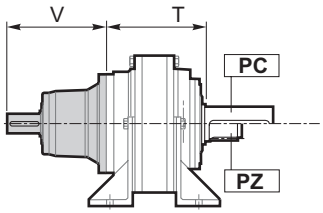


317L

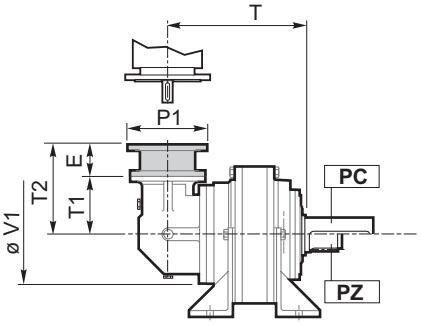
NEMA input

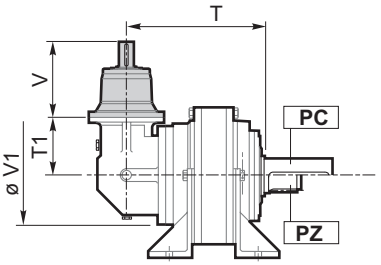


Solid input shaft

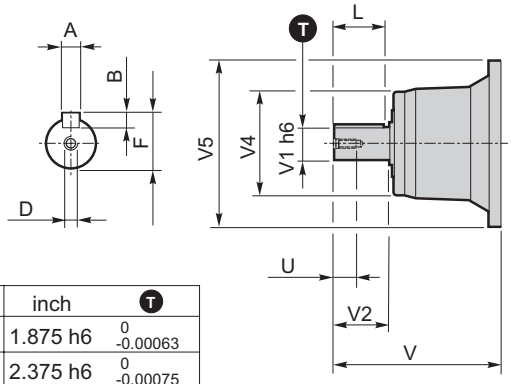


317R



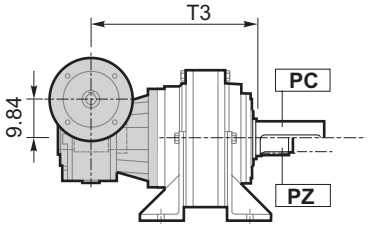


	317 L4 317 R3 (A) 317 R4	317 R3(B) 317 R3(C)	317 L3	317 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.39
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	17.52
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

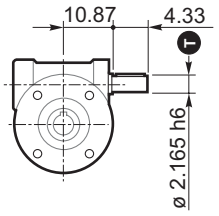


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 17L3

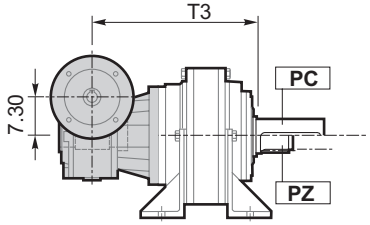


Solid input shaft

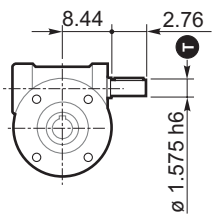


268

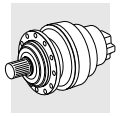
3/V 17L4



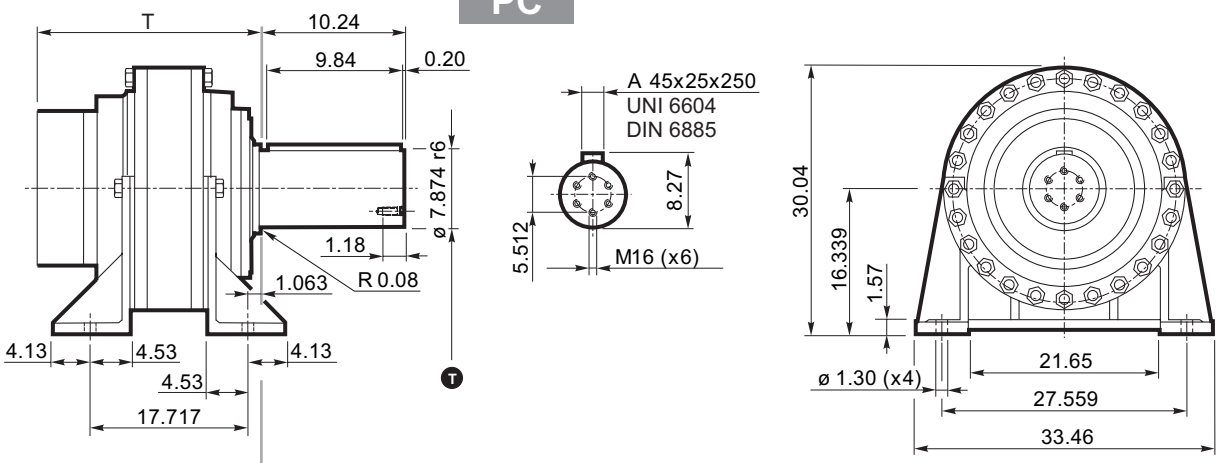
Solid input shaft



268



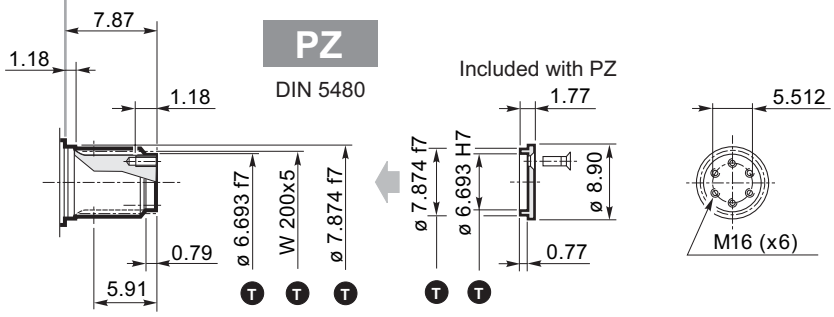
PC



(mm)	inch	T
—	1.575 h6	0 -0.00063
—	2.165 h6	0 -0.00063
(170)	6.693 f7	-0.00169 -0.00327
(170)	6.693 H7	+0.00157 0
(200)	7.874 r6	+0.00417 +0.00303
(200)	7.874 f7	-0.00197 -0.00378
W 200x5		DIN 5480

PZ

DIN 5480

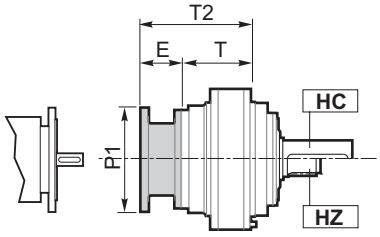


		317 L2	317 L3	317 L4	317 R3(A)	317 R3(B)	317 R3(C)	317 R4
	T	24.57	30.47	33.94	33.58	33.58	33.58	35.12
	T1	—	—	—	12.99	13.58	15.35	8.86
	V1	—	—	—	15.35	15.75	18.90	13.58
	Lbs	2381	2514	2540	2624	2668	2690	2624
NEMA Input								
	P1	E	T2					
N250TC	11.81	5.41	—	—	39.35	18.41	—	—	14.27
N280TC	13.78	6.42	—	—	40.35	19.41	—	—	15.28
N320TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	39.11	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	39.11	—	—	—	—	—

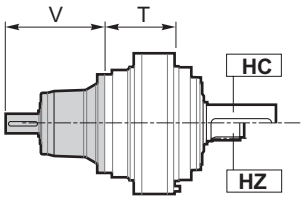
	3/V 17L3	3/V 17L4
	T3	
	35.20	38.39
Lbs	3087	2756
	P1	T4	P1	T4
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—
	—	—	—	—

317L

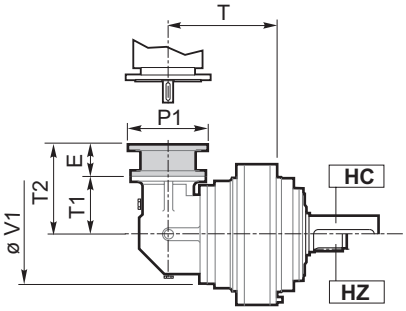
NEMA input

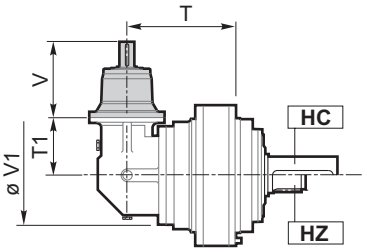


Solid input shaft

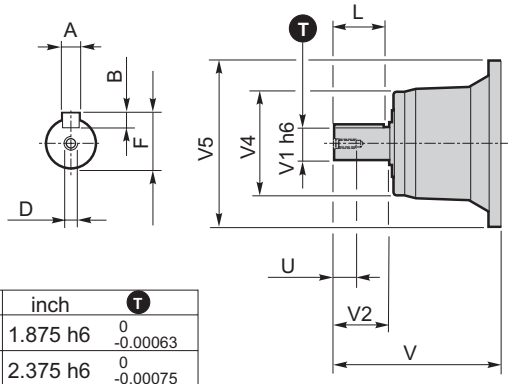


317R



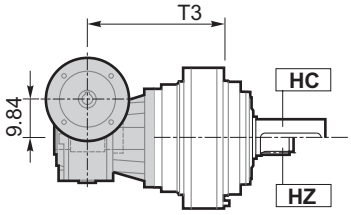


	317 L4 317 R3 (A) 317 R4	317 R3(B) 317 R3(C)	317 L3	317 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.39
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	17.52
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

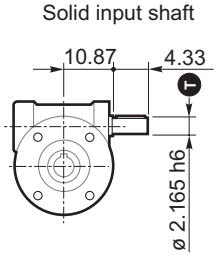


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 17L3

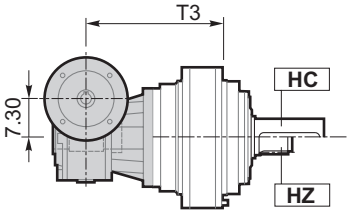


Solid input shaft

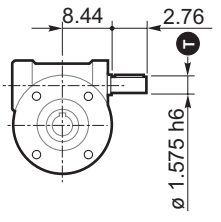


268

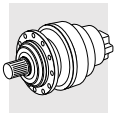
3/V 17L4



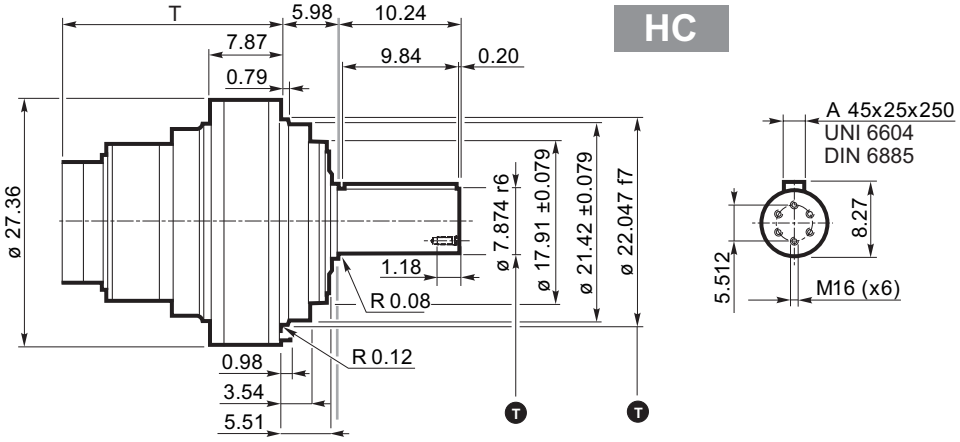
Solid input shaft

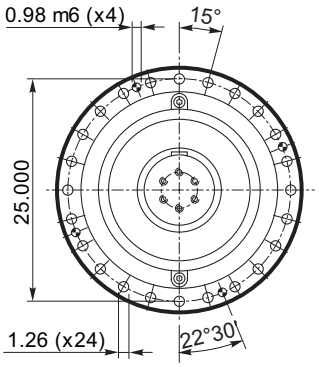


268



HC



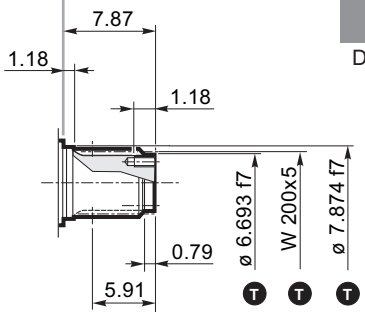


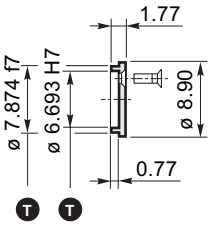
(mm)	inch	T
—	1.575 h6	0 -0.00063
—	2.165 h6	0 -0.00063
(150)	5.906 f7	-0.00169 -0.00326
(170)	6.693 f7	-0.00169 -0.00327
(170)	6.693 H7	+0.00157 0
(200)	7.874 r6	+0.00417 +0.00303
(200)	7.874 f7	-0.00197 -0.00378
(560)	22.047 f7	-0.00299 -0.00575
W 200x5		DIN 5480

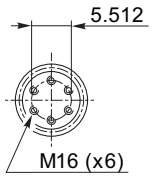
HZ

DIN 5480

Included with HZ







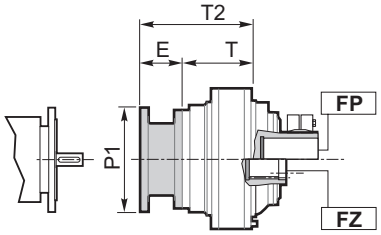
	317 L2	317 L3	317 L4	317 R3(A)	317 R3(B)	317 R3(C)	317 R4
T	18.70	24.49	27.95	27.60	27.60	27.60	29.13
T1	—	—	—	12.99	13.58	15.35	8.86
V1	—	—	—	15.35	15.75	18.90	13.58
Lbs	2051	2183	2205	2293	2337	2359	2293

	3/V 17L3	3/V 17L4
	T3	
	29.33	32.40
Lbs	2756	2403

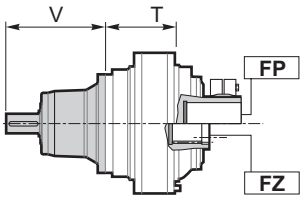
NEMA Input												
	P1	E	T2							P1	T4	P1	T4
N250TC	11.81	5.41	—	—	33.37	18.41	—	—	14.27	—	—	—	—
N280TC	13.78	6.42	—	—	34.37	19.41	—	—	15.28	—	—	—	—
N320TC	13.78	7.97	—	—	—	—	21.56	23.33	—	—	—	—	—
N320TC	15.75	8.64	—	33.13	—	—	—	—	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	21.56	23.33	—	—	—	—	—
N360TC	15.75	8.64	—	33.13	—	—	—	—	—	—	—	—	—

317L

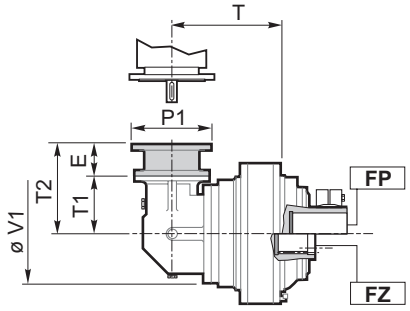
NEMA input

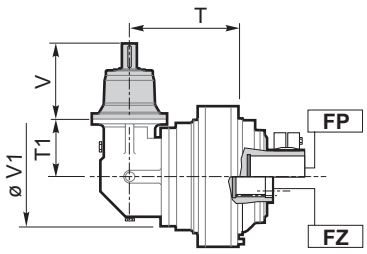


Solid input shaft

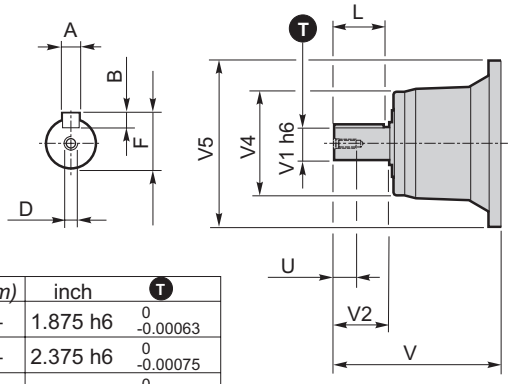


317R



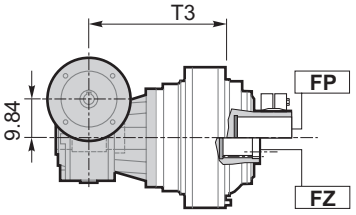


	317 L4 317 R3 (A) 317 R4	317 R3(B) 317 R3(C)	317 L3	317 L2
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.39
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	17.52
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

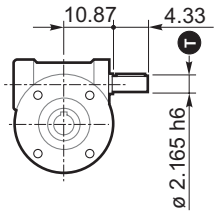


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 17L3

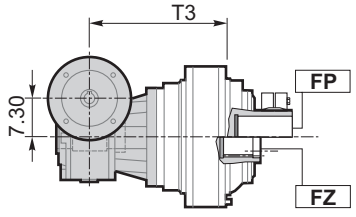


Solid input shaft

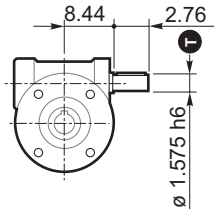


268

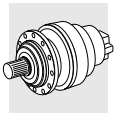
3/V 17L4



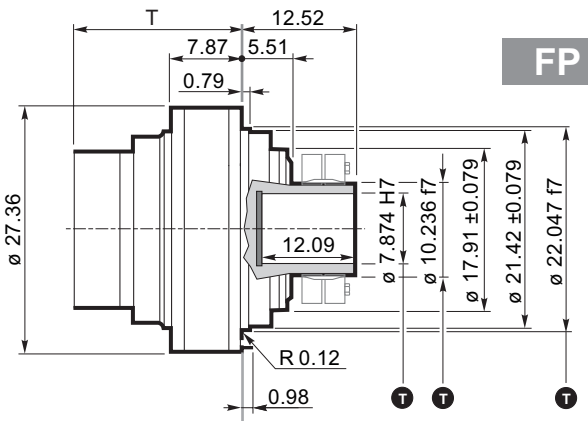
Solid input shaft

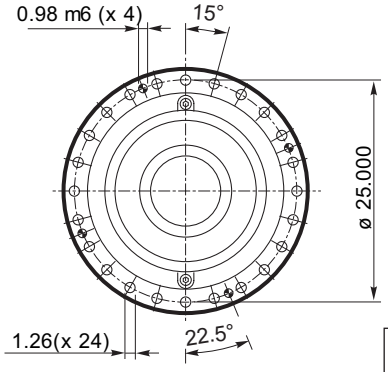


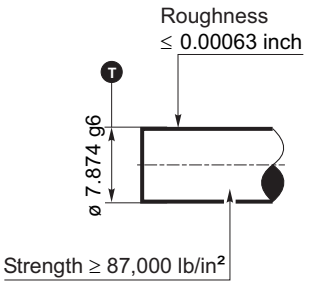
268

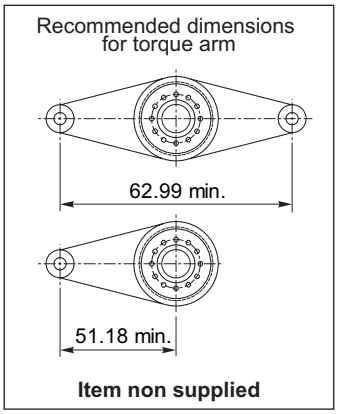


FP T_{2max} = 1,911,600 in.lbs

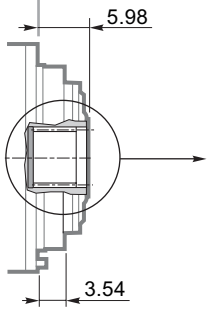






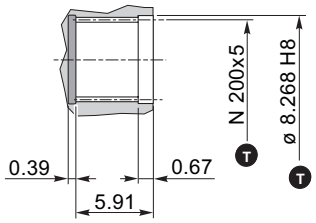


(mm)	inch	Ⓣ
—	1.575 h6	0 / -0.00063
—	2.165 h6	0 / -0.00063
(200)	7.874 g6	-0.00059 / -0.00173
(200)	7.874 H7	+0.00181 / 0
(210)	8.268 H8	+0.00000 / 0
(260)	10.236 f7	-0.00220 / -0.00425
(560)	22.047 f7	-0.00299 / -0.00575
N 200x5		DIN 5480



FZ

DIN 5480



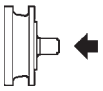
			317 L2	317 L3	317 L4	317 R3(A)	317 R3(B)	317 R3(C)	317 R4
	T		18.70	24.49	27.95	27.60	27.60	27.60	29.13
	T1		—	—	—	12.99	13.58	15.35	8.86
	V1		—	—	—	15.35	15.75	18.90	13.58
FP		Lbs	2051	2183	2205	2293	2337	2359	2293
FZ			1940	2073	2099	2183	2227	2249	2183

	3/V 17L3	3/V 17L4
	T3	
	29.33	32.40
Lbs	2756	2403
	2646	2293

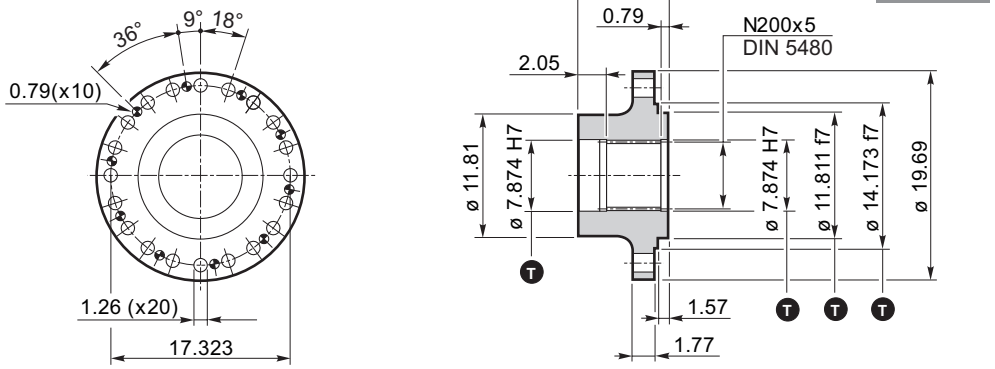
NEMA Input									
	P1	E	T2						
N250TC	11.81	5.41	—	—	33.37	18.41	—	—	14.27
N280TC	13.78	6.42	—	—	34.37	19.41	—	—	15.28
N320TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N320TC	15.75	8.64	—	33.13	—	—	—	—	—
N360TC	13.78	7.97	—	—	—	—	21.56	23.33	—
N360TC	15.75	8.64	—	33.13	—	—	—	—	—

P1	T4	P1	T4
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

Flange

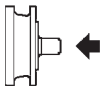


W0A

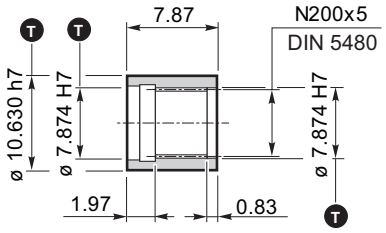


Material : Steel AISI 1040

Sleeve coupling

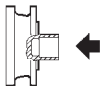


M0A

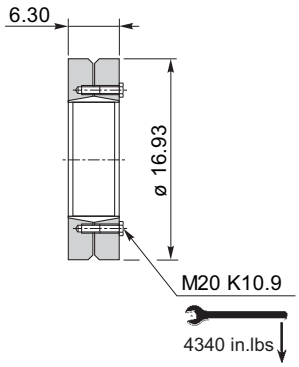


Material : Steel SAE 8620

hrink disc

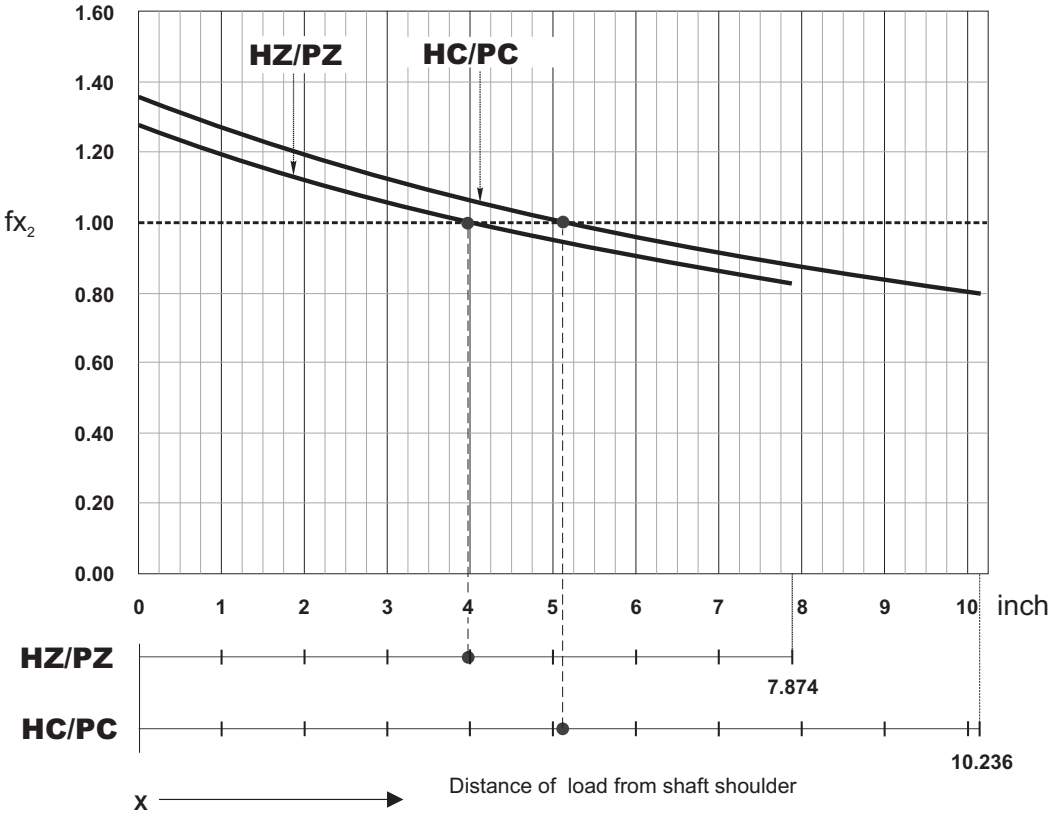


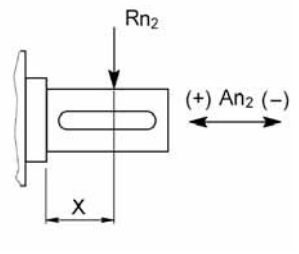
G0A



(mm)	inch	T
(200)	7.874 H7	+0.00181 0
(270)	10.630 h7	0 -0.00205
(300)	11.811 f7	-0.00220 -0.00425
(360)	14.173 f7	-0.00244 -0.00469

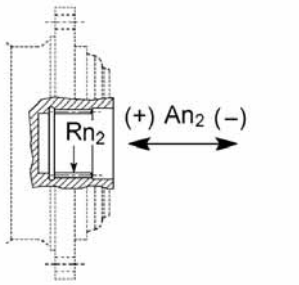
Load application factor for calculation of admissible overhung load on output shaft





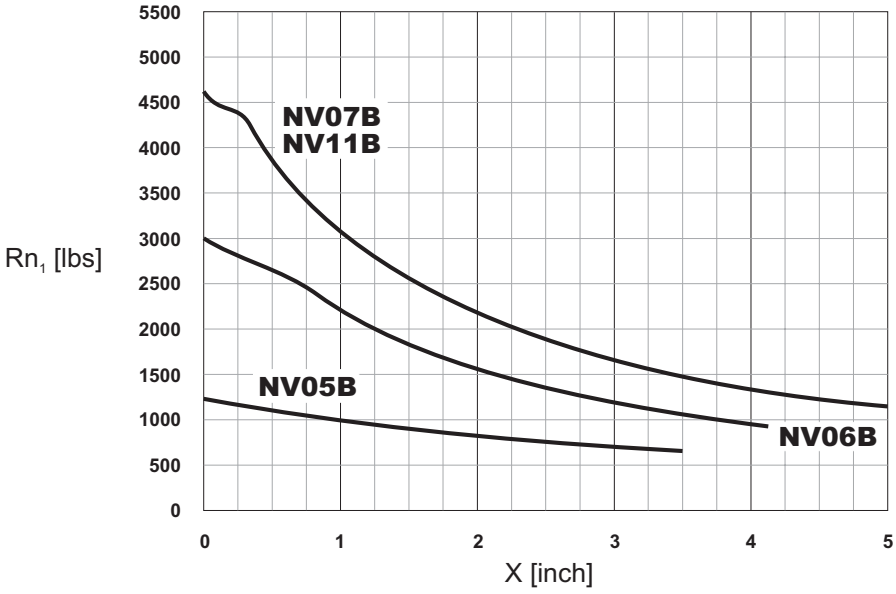
$R_{x2} = Rn_2 \cdot fx_2$

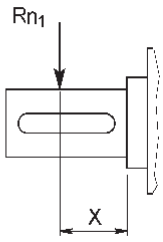
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

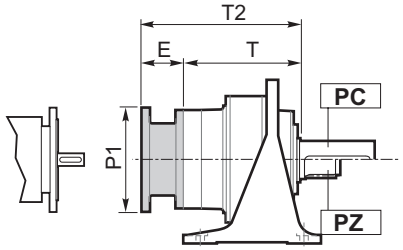
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



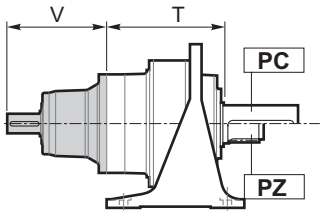


318L

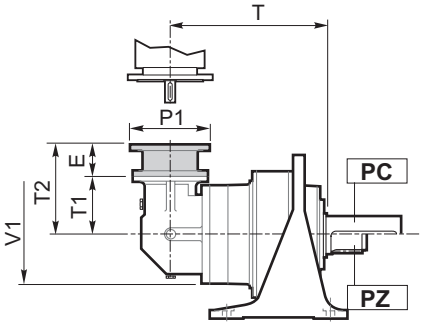
NEMA input

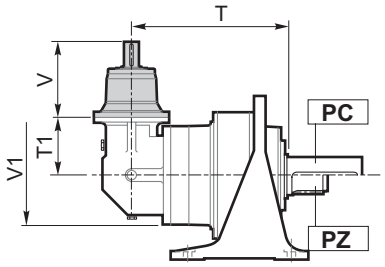


Solid input shaft

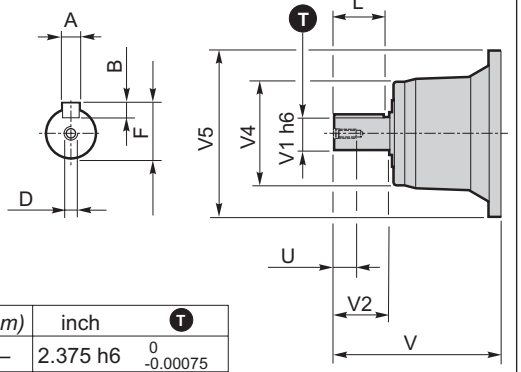


318R



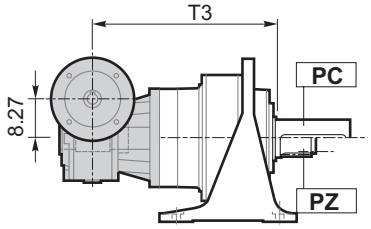


	318 R4(B) 318 R4(C)	318L4	318 L3
	Solid input shaft		
	NV06B	NV07B	NV11B
V	12.70	12.28	13.58
V1	2.375	3.000	3.000
V2	4.75	5.00	5.00
V4	6.10	7.87	7.87
V5	11.50	13.58	16.46
A	0.625	0.750	0.750
B	0.625	0.750	0.750
F	2.646	3.327	3.327
L	4.25	4.37	4.37
D	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.65	1.65	1.65
Lbs	50.7	77.2	121.3

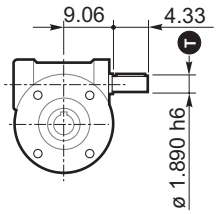


(mm)	inch	T
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

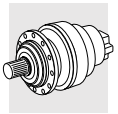
3/V 18L4



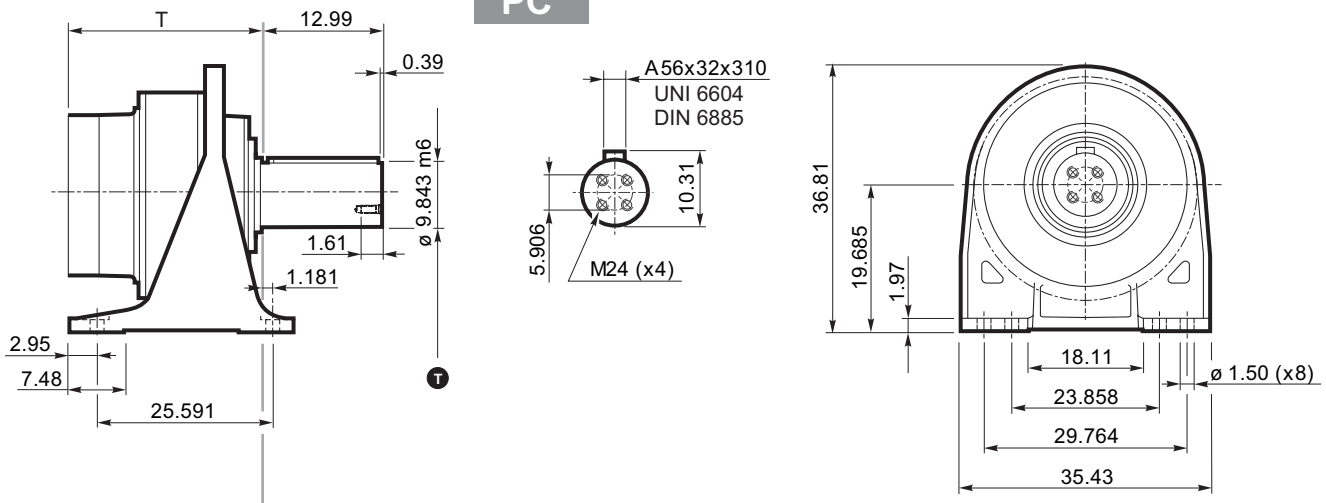
Solid input shaft



268



PC

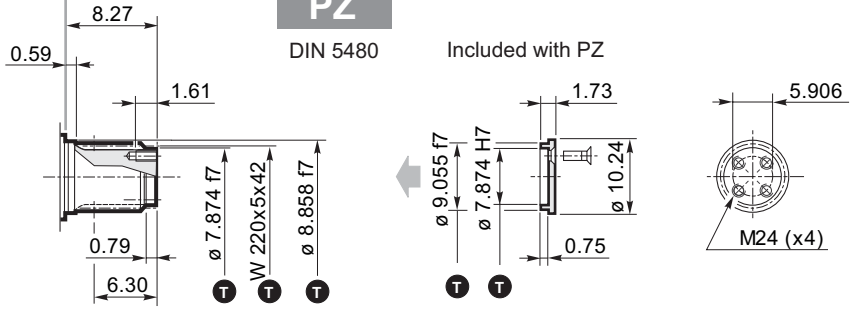


(mm)	inch	Ⓣ
—	1.890 h6	0 -0.00063
(200)	7.874 f7	-0.00197 -0.00378
(200)	7.874 H7	+0.00181 0
(225)	8.858 f7	-0.00197 -0.00378
(230)	9.055 f7	0.00197 -0.00378
(250)	9.843 m6	+0.00181 +0.00067
W 220x5x42		DIN 5480

PZ

DIN 5480

Included with PZ

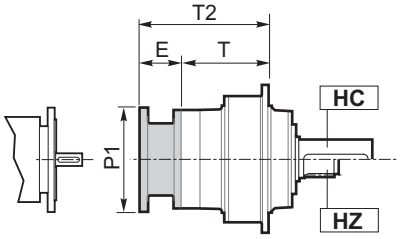


		318 L2	318 L3	318 L4	318 R4(B)	318 R4(C)
	T	26.65	35.00	38.19	43.90	43.90
	T1	—	—	—	13.58	15.35
	V1	—	—	—	15.75	18.90
	Lbs	3308	3528	3638	3793	3815
NEMA Input						
	P1	**E**	**T2**				
N320TC	13.78	7.97	—	—	—	21.56	23.33
N320TC	15.75	8.64	—	—	46.83	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33
N360TC	15.75	8.64	—	—	46.83	—	—
N400TC	17.48	11.26	—	46.26	—	—	—

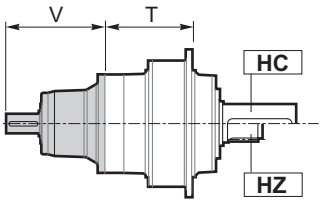
	3/V 18L4	
	T3	
	43.86	
Lbs	3991	
	P1	T4
N320TC	—	—
N320TC	—	—
N360TC	—	—
N360TC	—	—
N400TC	—	—

318L

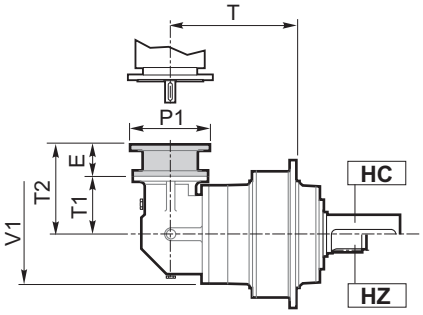
NEMA input

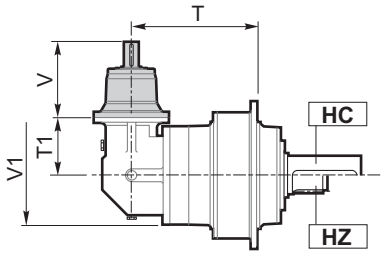


Solid input shaft

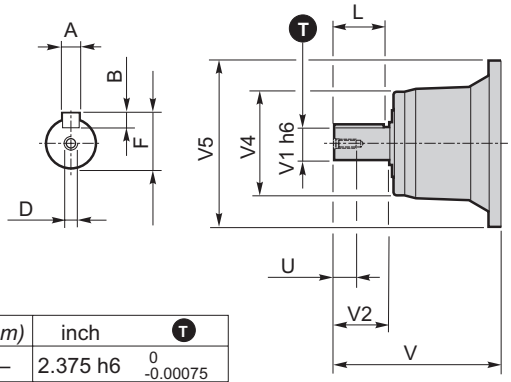


318R



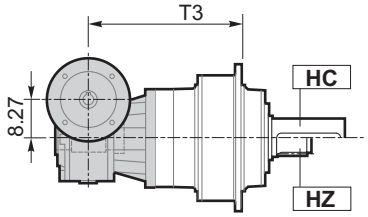


	318 R4(B) 318 R4(C)	318L4	318 L3
	Solid input shaft		
	NV06B	NV07B	NV11B
V	12.70	12.28	13.58
V1	2.375	3.000	3.000
V2	4.75	5.00	5.00
V4	6.10	7.87	7.87
V5	11.50	13.58	16.46
A	0.625	0.750	0.750
B	0.625	0.750	0.750
F	2.646	3.327	3.327
L	4.25	4.37	4.37
D	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.65	1.65	1.65
Lbs	50.7	77.2	121.3

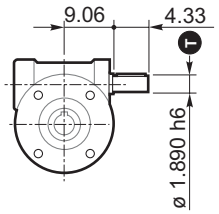


(mm)	inch	T
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

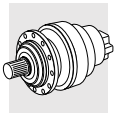
3/V 18L4



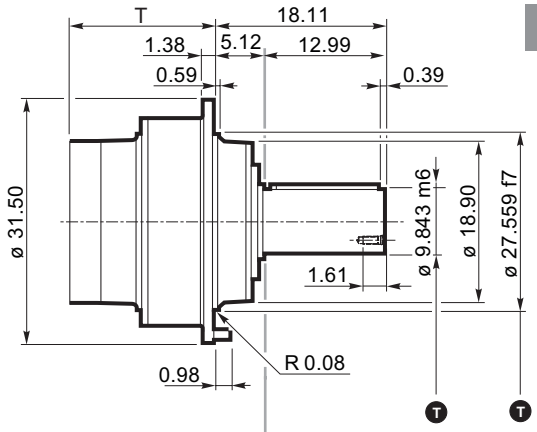
Solid input shaft

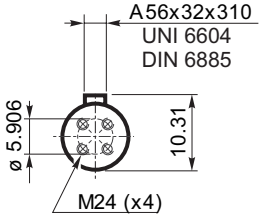


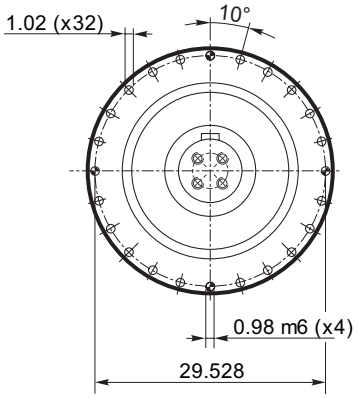
268



HC



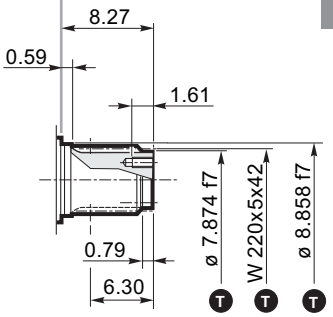




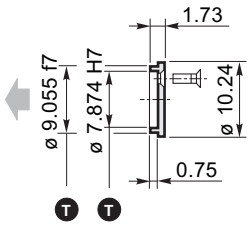
(mm)	inch	Ⓣ
—	1.890 h6	0 -0.00063
(200)	7.874 f7	-0.00197 -0.00378
(200)	7.874 H7	+0.00181 0
(225)	8.858 f7	-0.00197 -0.00378
(230)	9.055 f7	0.00197 -0.00378
(250)	9.843 m6	+0.00181 +0.00067
(700)	27.559 f7	-0.00315 -0.00630
W 220x5x42		DIN 5480

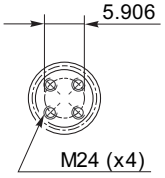
HZ

DIN 5480



Included with HZ





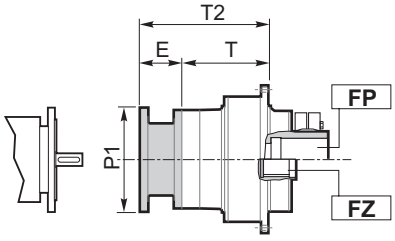
	318 L2	318 L3	318 L4	318 R4(B)	318 R4(C)
T	21.54	29.88	33.07	38.78	38.78
T1	—	—	—	13.58	15.35
V1	—	—	—	15.75	18.90
Lbs	2646	2867	2977	3131	3153

3/V 18L4
T3
38.74
Lbs 3330

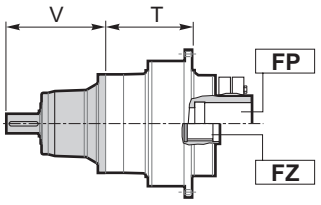
NEMA Input									
	P1	**E**	**T2**					**P1**	**T4**
N320TC	13.78	7.97	—	—	—	21.56	23.33	—	—
N320TC	15.75	8.64	—	—	41.71	—	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33	—	—
N360TC	15.75	8.64	—	—	41.71	—	—	—	—
N400TC	17.48	11.26	—	41.14	—	—	—	—	—

318L

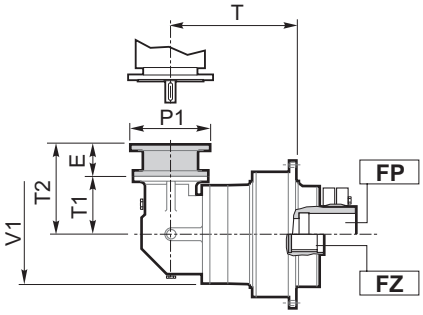
NEMA input

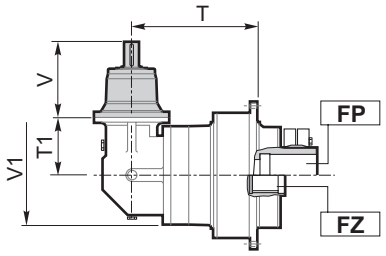


Solid input shaft

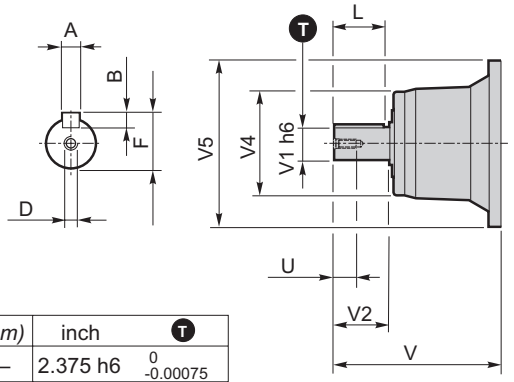


318R



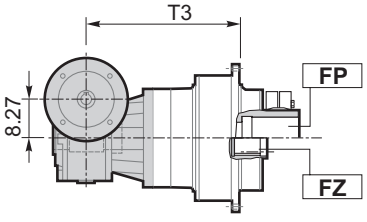


	318 R4(B) 318 R4(C)	318L4	318 L3
	Solid input shaft		
	NV06B	NV07B	NV11B
V	12.70	12.28	13.58
V1	2.375	3.000	3.000
V2	4.75	5.00	5.00
V4	6.10	7.87	7.87
V5	11.50	13.58	16.46
A	0.625	0.750	0.750
B	0.625	0.750	0.750
F	2.646	3.327	3.327
L	4.25	4.37	4.37
D	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.65	1.65	1.65
Lbs	50.7	77.2	121.3

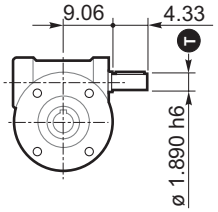


(mm)	inch	T
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

3/V 18L4



Solid input shaft



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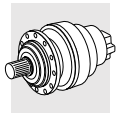
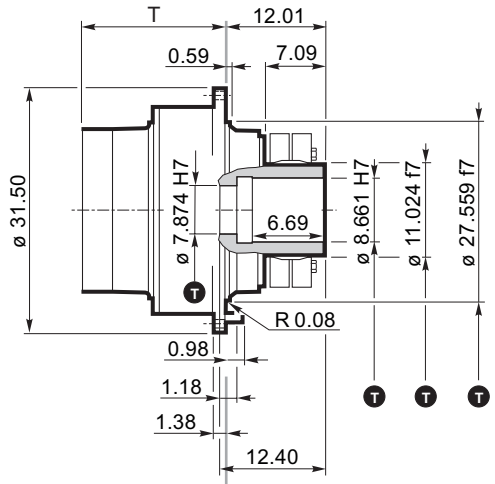
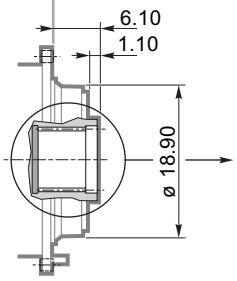
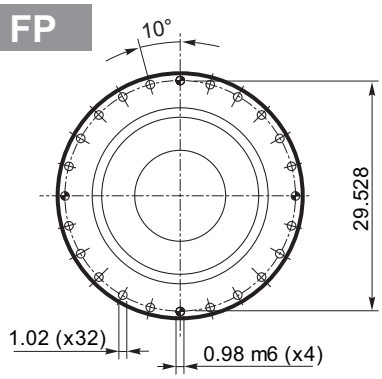




(mm)	inch	T
—	1.890 h6	0 -0.00063
(200)	7.874 h6	0 -0.00114
(200)	7.874 H7	+0.00181 0
(220)	8.661 h6	0 -0.00114
(227)	8.937 H7	+0.00181 0
(280)	11.024 f7	-0.00220 -0.00425
(700)	27.559 f7	-0.00315 -0.00630
W 220x5x42 H9		DIN 5480

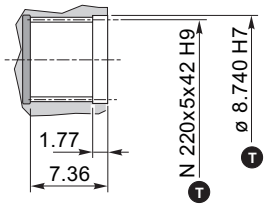


FP

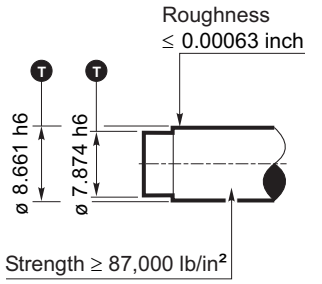


FZ

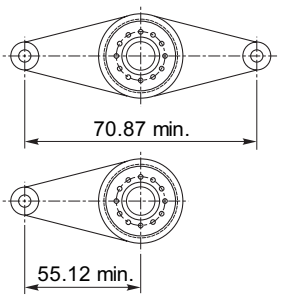
DIN 5480



FP T_{2max} = 2,655,000 in.lbs



Recommended dimensions for torque arm

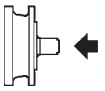


Item non supplied

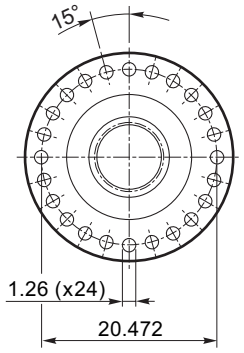
			318 L2	318 L3	318 L4	318 R4(B)	318 R4(C)
		T	21.54	29.88	33.07	38.78	38.78
		T1	—	—	—	13.58	15.35
		V1	—	—	—	15.75	18.90
	FP	Lbs	2381	2602	2712	2867	2889
	FZ		2315	2536	2646	2800	2822
NEMA Input							
	P1	E	T2				
N320TC	13.78	7.97	—	—	—	21.56	23.33
N320TC	15.75	8.64	—	—	41.71	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33
N360TC	15.75	8.64	—	—	41.71	—	—
N400TC	17.48	11.26	—	41.14	—	—	—

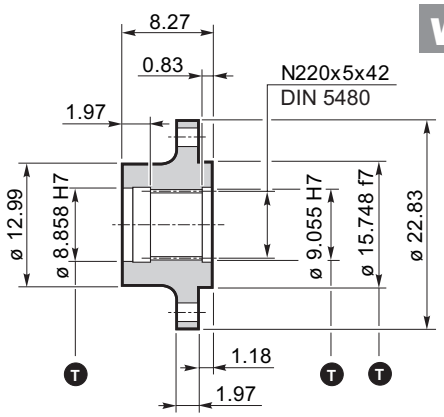
3/V 18L4	
T3	
38.74	
Lbs 3065	
2999	
P1	T4
—	—
—	—
—	—
—	—
—	—

Flange



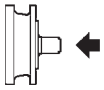
W0A



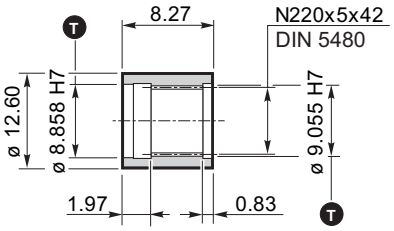


Material : Steel AISI 1040

Sleeve coupling

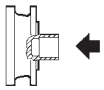


M0A

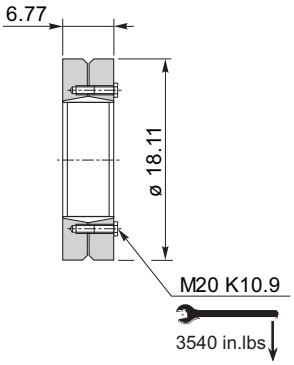


Material : Steel SAE 8620

Shrink disc

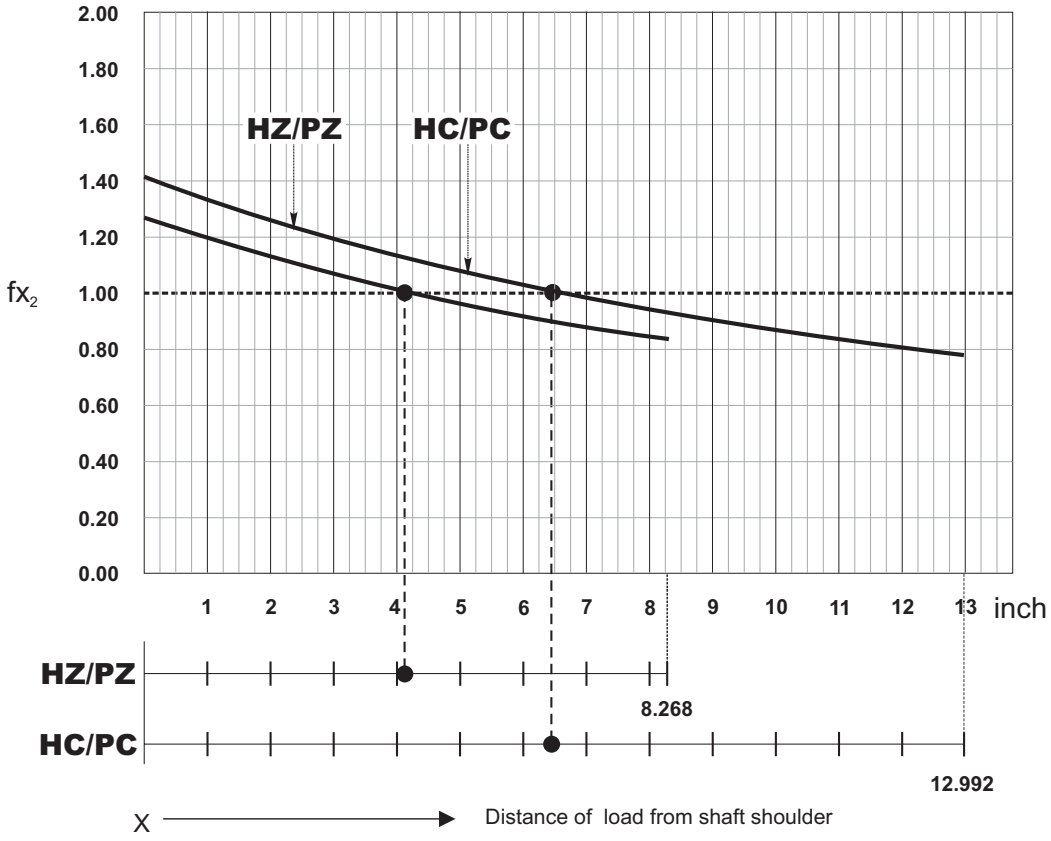


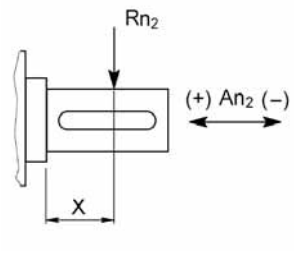
G0A



(mm)	inch	
(225)	8.858 H7	+0.00181 0
(230)	9.055 H7	-0.00220 -0.00425
(400)	15.748 f7	-0.00244 -0.00469

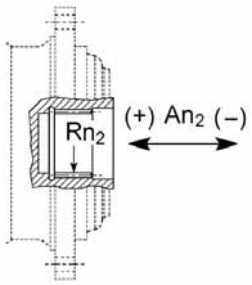
Load application factor for calculation of admissible overhung load on output shaft





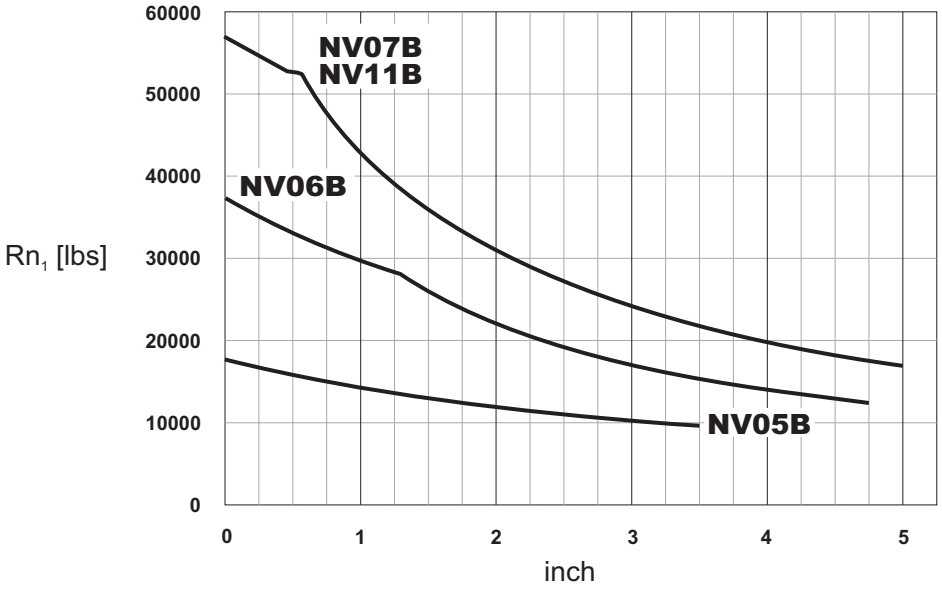
$R_{x2} = Rn_2 \cdot fx_2$

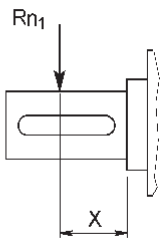
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

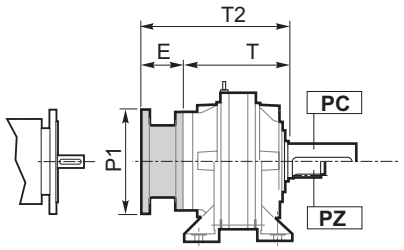
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



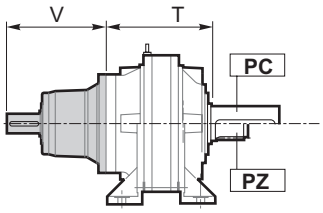


319L

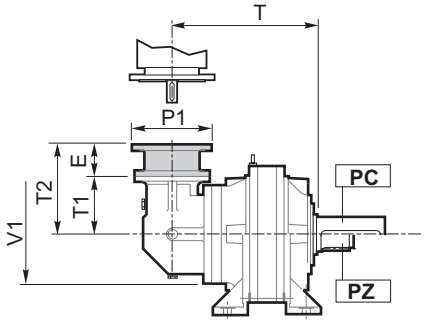
NEMA input

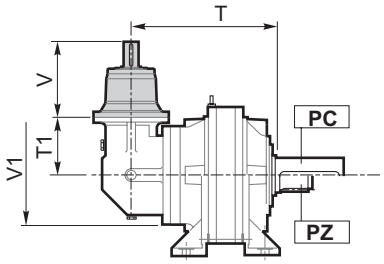


Solid input shaft

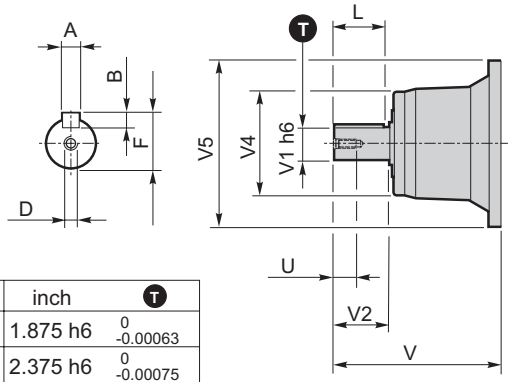


319R



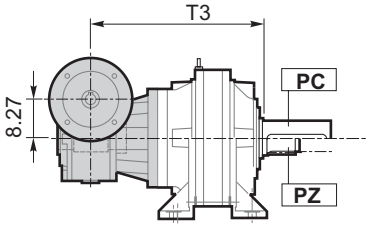


	319 R4 (A)	319 R4(B) 319 R4(C)	319 L4	319 L3
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

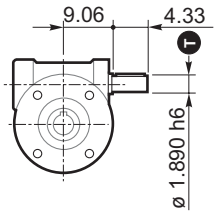


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

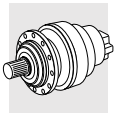
3/V 19L4



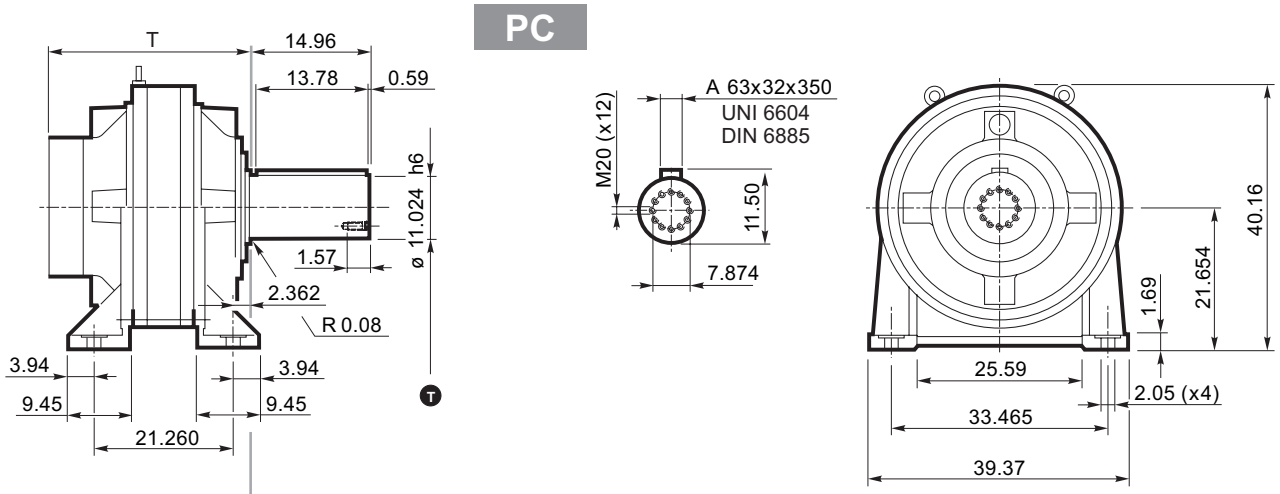
Solid input shaft



268



PC

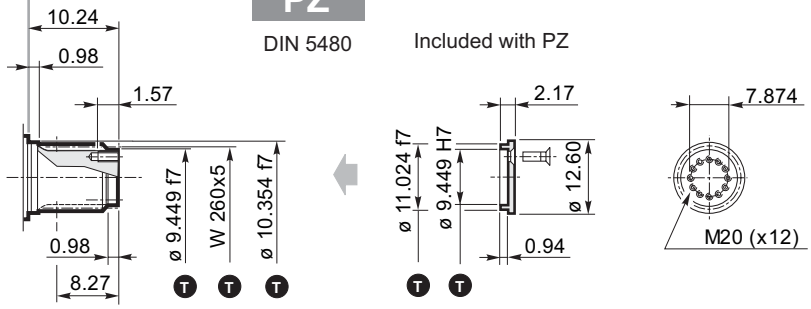


(mm)	inch	Ⓣ
—	1.890 h6	0 -0.00063
(240)	9.449 f7	-0.00197 -0.00378
(240)	9.449 H7	+0.00181 0
(263)	10.354 f7	-0.00220 -0.00425
(280)	11.024 f7	-0.00220 -0.00425
(280)	11.024 h6	0 -0.00126
W 260x5		DIN 5480

PZ

DIN 5480

Included with PZ

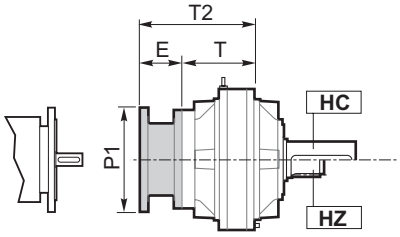


		319 L3	319 L4	319 R4(A)	319 R4(B)	319 R4(C)
	T	38.98	44.21	47.44	47.44	47.44
	T1	—	—	12.99	13.58	15.35
	V1	—	—	15.35	15.75	18.90
	Lbs	5369	5468	5612	5645	5689
NEMA Input						
	P1	**E**	**T2**			
N250TC	11.81	5.41	—	—	18.41	—	—
N280TC	13.78	6.42	—	—	19.41	—	—
N320TC	13.78	7.97	—	—	—	21.56	23.33
N320TC	15.75	8.64	—	52.85	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33
N360TC	15.75	8.64	—	52.85	—	—	—
N400TC	17.48	11.26	50.24	—	—	—	—

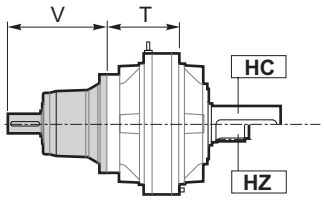
	3/V 19L4	
	T3	
	47.64	
Lbs	5843	
	P1	T4
N250TC	—	—
N280TC	—	—
N320TC	—	—
N320TC	—	—
N360TC	—	—
N360TC	—	—
N400TC	—	—

319L

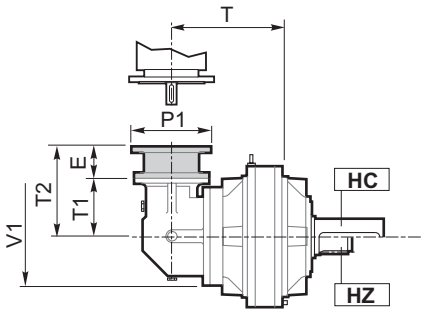
NEMA input

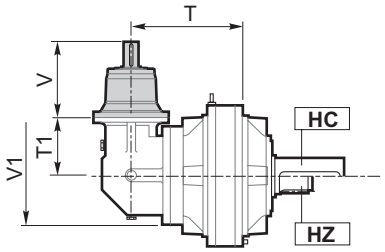


Solid input shaft

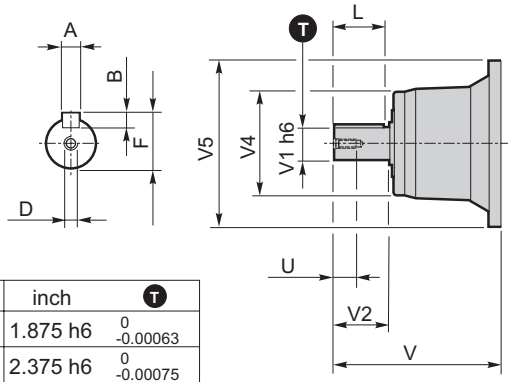


319R



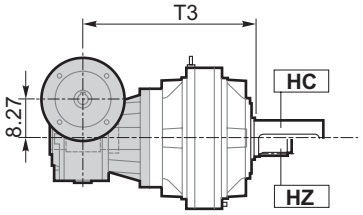


	319 R4 (A)	319 R4(B) 319 R4(C)	319 L4	319 L3
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

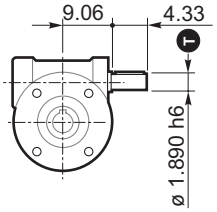


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

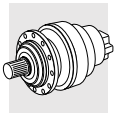
3/V 19L4

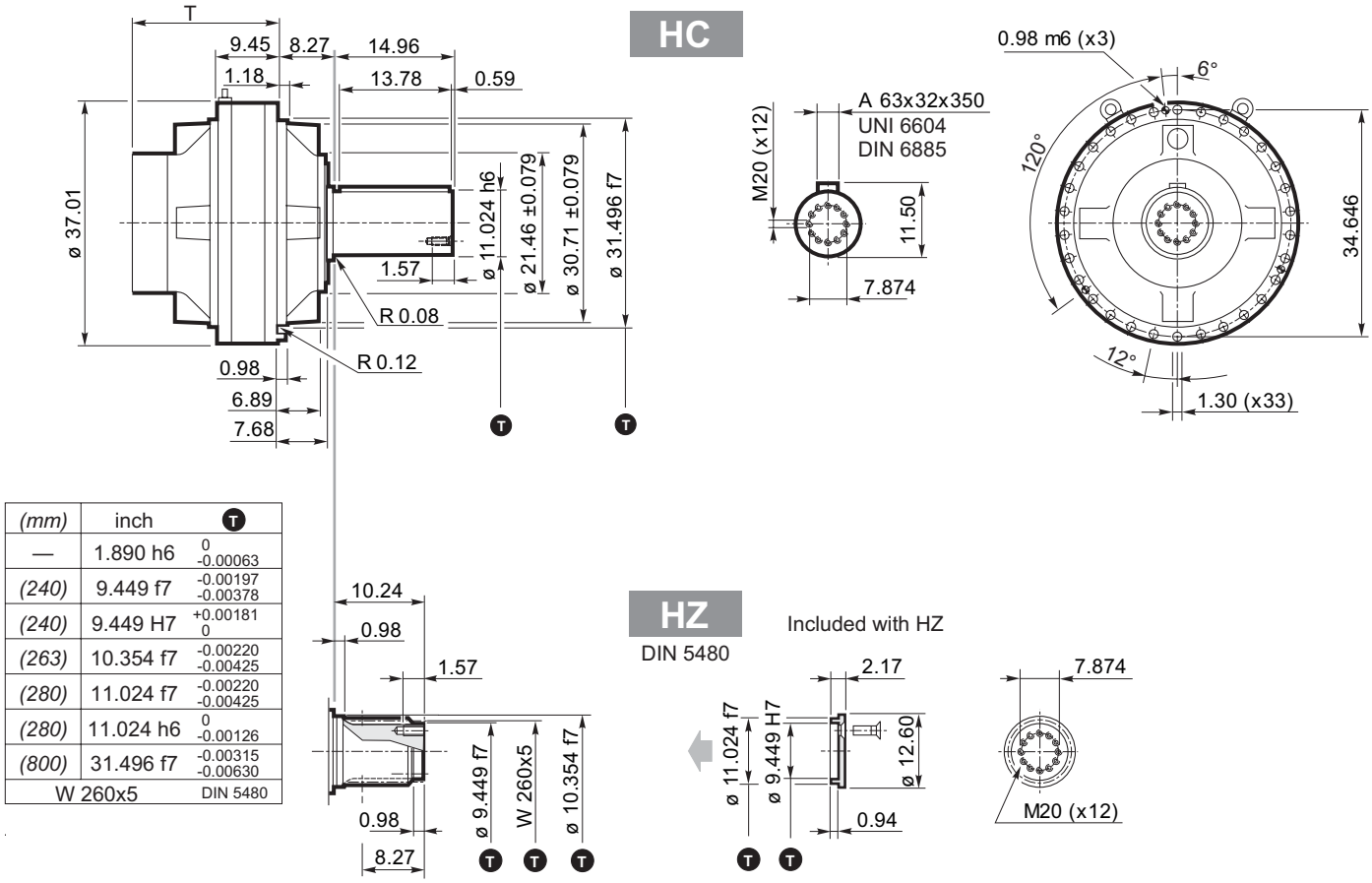


Solid input shaft



268





(mm)	inch	T
—	1.890 h6	0 -0.00063
(240)	9.449 f7	-0.00197 -0.00378
(240)	9.449 H7	+0.00181 0
(263)	10.354 f7	-0.00220 -0.00425
(280)	11.024 f7	-0.00220 -0.00425
(280)	11.024 h6	0 -0.00126
(800)	31.496 f7	-0.00315 -0.00630
W 260x5		DIN 5480

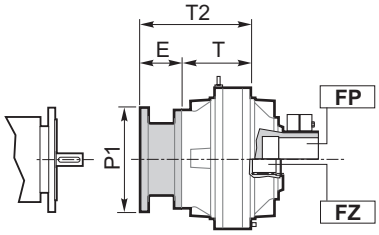
	319 L3	319 L4	319 R4(A)	319 R4(B)	319 R4(C)
T	30.71	35.94	39.57	39.57	39.57
T1	—	—	12.99	13.58	15.35
V1	—	—	15.35	15.75	18.90
Lbs	4708	4807	4950	4983	5027

NEMA Input								
	P1	E	T2					
N250TC	11.81	5.41	—	—	18.41	—	—	
N280TC	13.78	6.42	—	—	19.41	—	—	
N320TC	13.78	7.97	—	—	—	21.56	23.33	
N320TC	15.75	8.64	—	44.59	—	—	—	
N360TC	13.78	7.97	—	—	—	21.56	23.33	
N360TC	15.75	8.64	—	44.59	—	—	—	
N400TC	17.48	11.26	41.97	—	—	—	—	

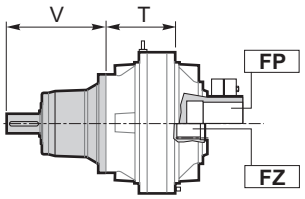
	3/V 19L4	
	T3	
	39.37	
Lbs	5182	
	P1	T4
	—	—
	—	—
	—	—
	—	—
	—	—
	—	—
	—	—

319L

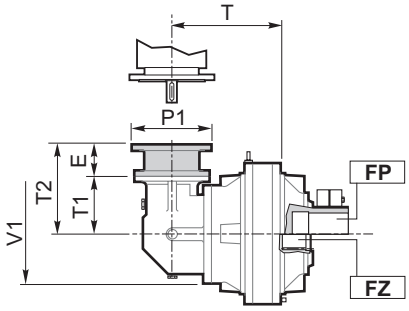
NEMA input

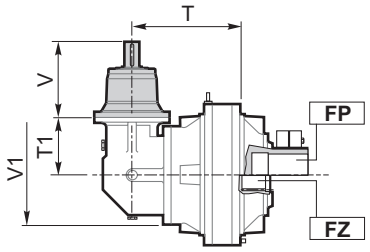


Solid input shaft

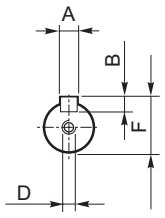


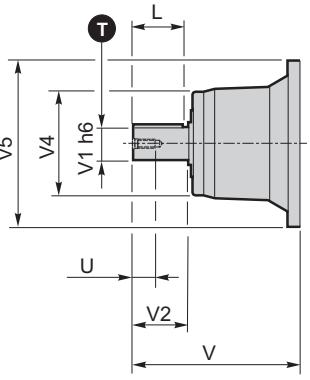
319R





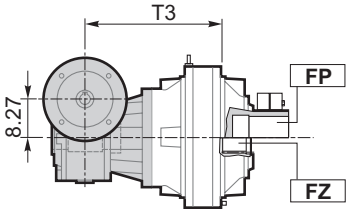
	319 R4 (A)	319 R4(B) 319 R4(C)	319 L4	319 L3
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3



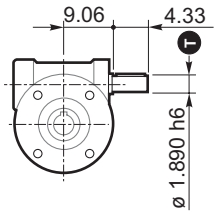


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

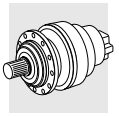
3/V 19L4



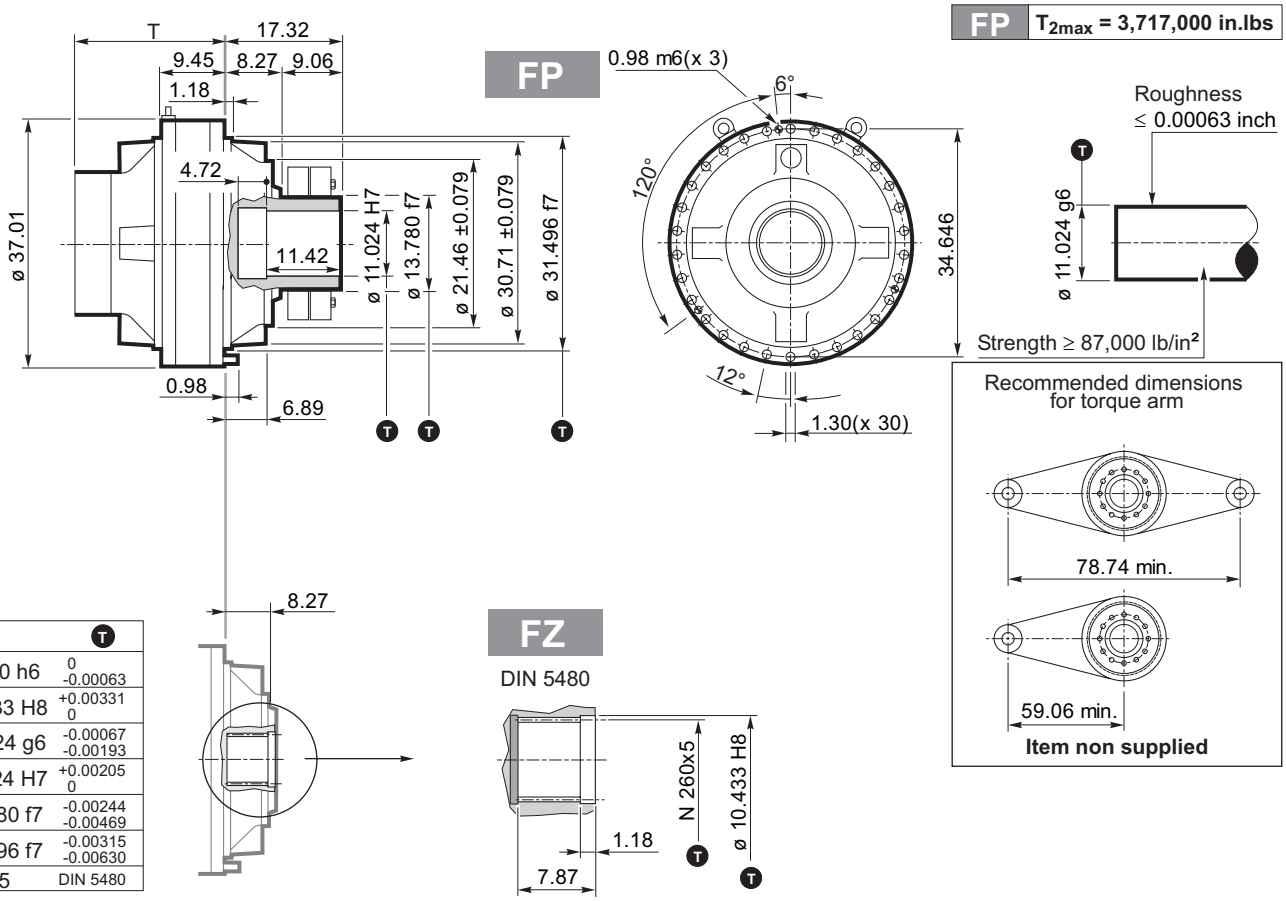
Solid input shaft



268



FP T_{2max} = 3,717,000 in.lbs



(mm)	inch	T
—	1.890 h6	0 -0.00063
(265)	10.433 H8	+0.00331 0
(280)	11.024 g6	-0.00067 -0.00193
(280)	11.024 H7	+0.00205 0
(350)	13.780 f7	-0.00244 -0.00469
(800)	31.496 f7	-0.00315 -0.00630
N 260x5		DIN 5480

	319 L3	319 L4	319 R4(A)	319 R4(B)	319 R4(C)
T	30.71	35.94	39.57	39.57	39.57
T1	—	—	12.99	13.58	15.35
V1	—	—	15.35	15.75	18.90
Lbs	4487	4586	4730	4763	4807

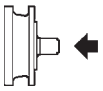
	3/V 19L4
T3	39.37
Lbs	4961

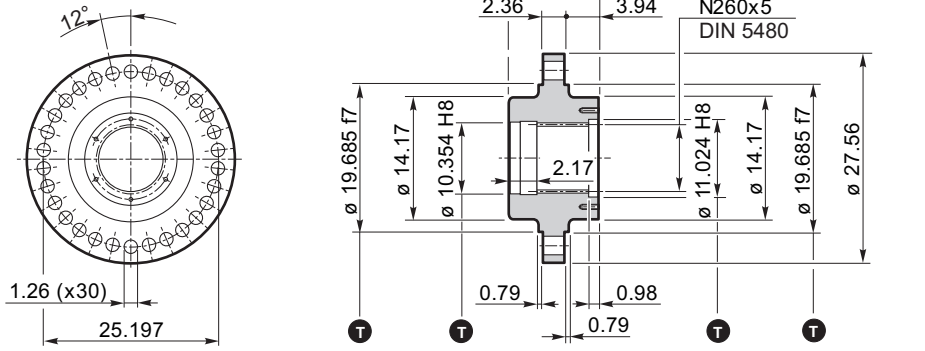
NEMA Input							
	P1	E	T2				
N250TC	11.81	5.41	—	—	18.41	—	—
N280TC	13.78	6.42	—	—	19.41	—	—
N320TC	13.78	7.97	—	—	—	21.56	23.33
N320TC	15.75	8.64	—	44.59	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33
N360TC	15.75	8.64	—	44.59	—	—	—
N400TC	17.48	11.26	41.97	—	—	—	—

P1	T4
—	—
—	—
—	—
—	—
—	—
—	—
—	—

Flange

W0A

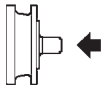


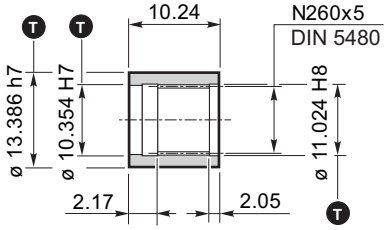


Material : Steel AISI 1040

Sleeve coupling

M0A

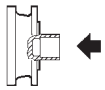


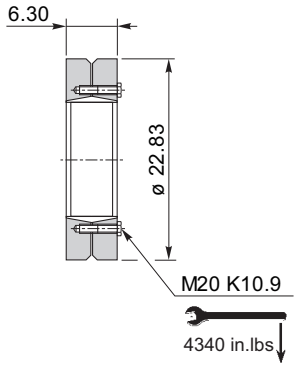


Material : Steel SAE 8620

Shrink disc

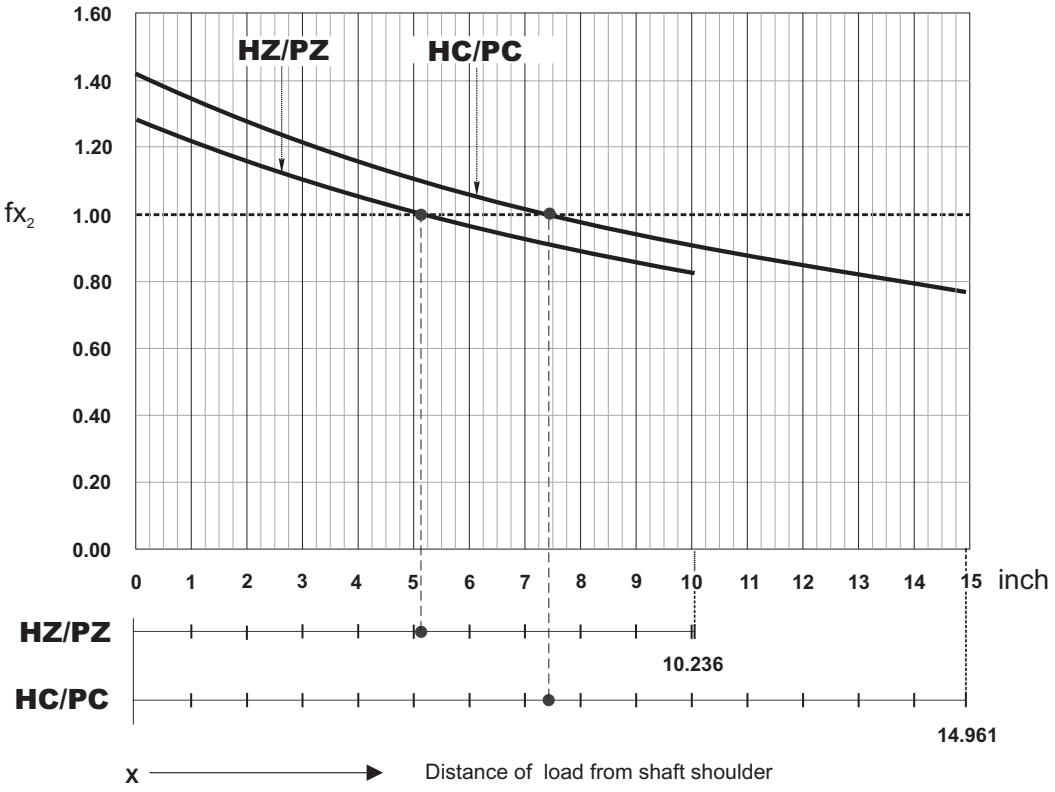
G0A

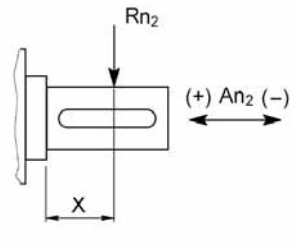




(mm)	inch	T
(253)	10.354 H7	+0.00205 0
(253)	10.354 H8	+0.00331 0
(280)	11.024 H8	+0.00331 0
(340)	13.386 h7	0 -0.00224
(500)	19.685 f7	-0.00286 -0.00516

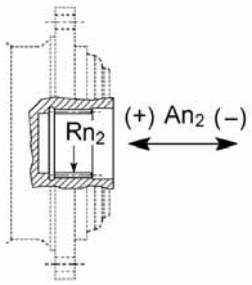
Load application factor for calculation of admissible overhung load on output shaft





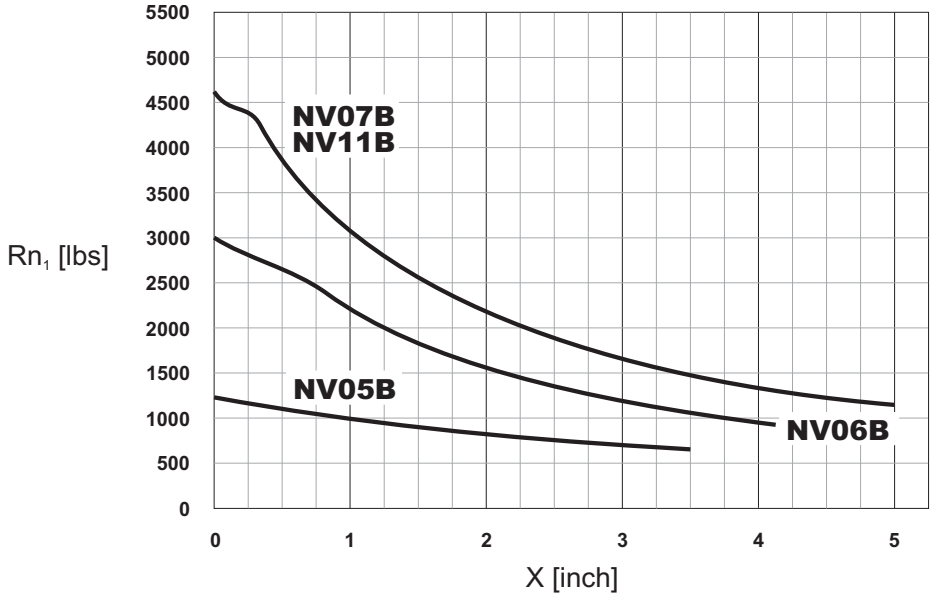
$R_{x2} = Rn_2 \cdot fx_2$

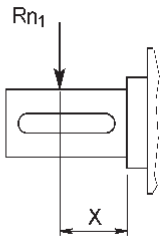
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69



$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

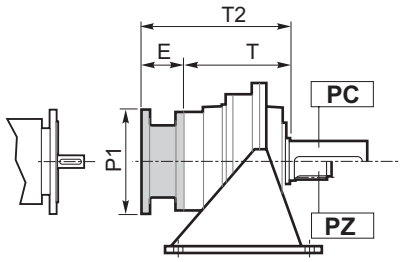
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



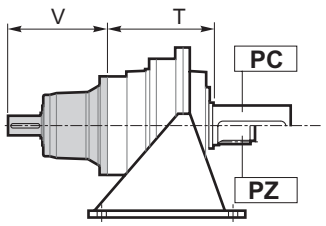


321L

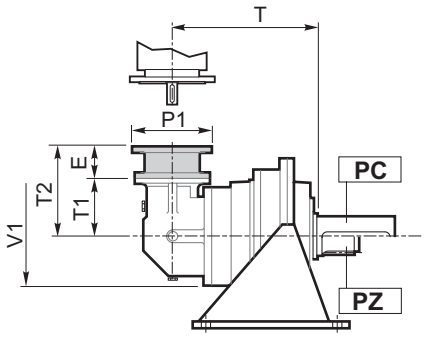
NEMA input

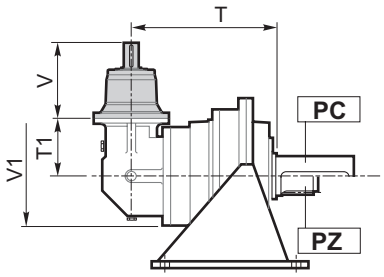


Solid input shaft

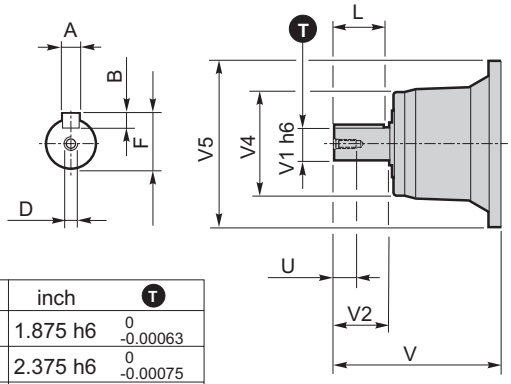


321R



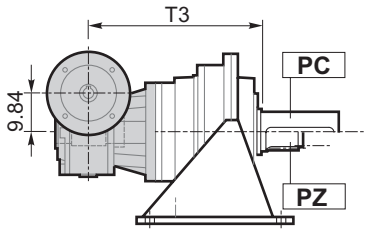


	321 R4(A)	321 R4(B) 321 R4(C)	321 L4	321 L3
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

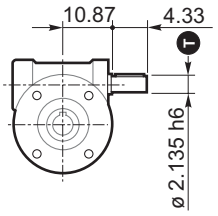


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

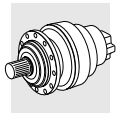
3/V 21L4



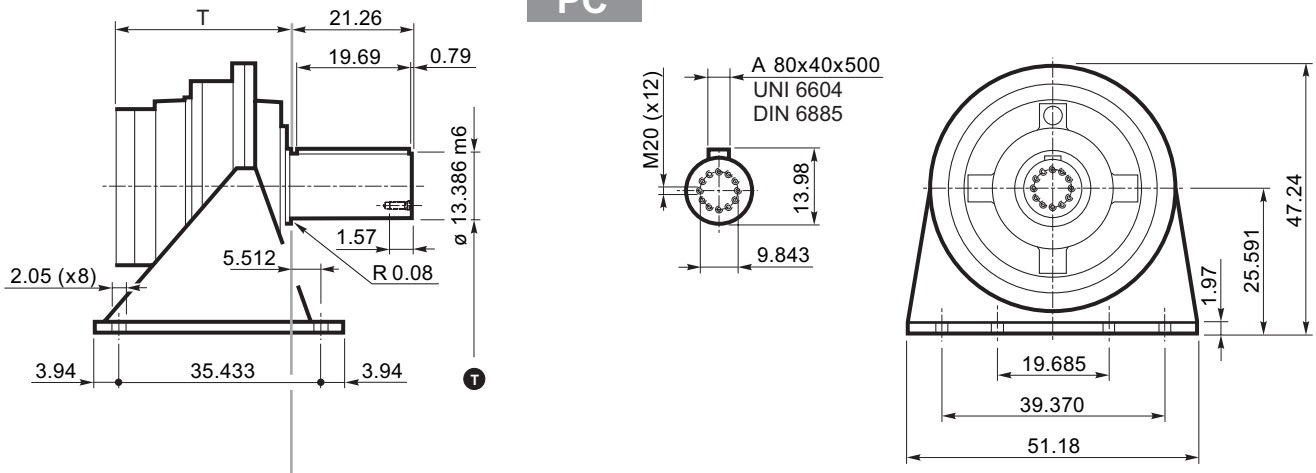
Solid input shaft



268

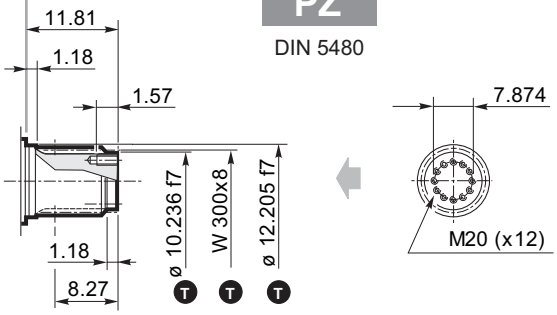


PC



PZ

DIN 5480



(mm)	inch	T
—	2.135 h6	0 -0.00075
(260)	10.236 f7	-0.00220 -0.00425
(310)	12.205 f7	-0.00220 -0.00425
(340)	13.386 m6	-0.00224 -0.00083
W 300x8		DIN 5480

	321 L3	321 L4	321 R4(A)	321 R4(B)	321 R4(C)
T	43.46	49.33	52.52	52.52	52.52
T1	—	—	12.99	13.58	15.35
V1	—	—	15.35	15.75	18.90
Lbs	6880	7012	7122	7166	7188

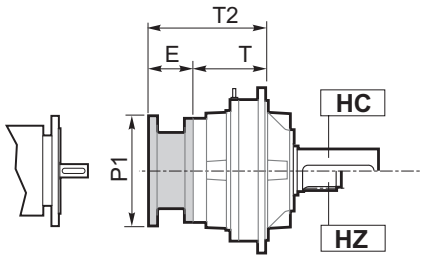
	3/V 21L4
T3	
	54.09
Lbs	7563

NEMA Input							
	P1	E	T2				
N250TC	11.81	5.41	—	—	18.41	—	—
N280TC	13.78	6.42	—	—	19.41	—	—
N320TC	13.78	7.97	—	—	—	21.56	23.33
N320TC	15.75	8.64	—	57.97	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33
N360TC	15.75	8.64	—	57.97	—	—	—

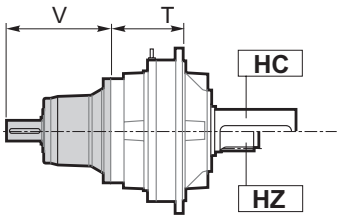
P1	T4
—	—
—	—
—	—
—	—
—	—
—	—

321L

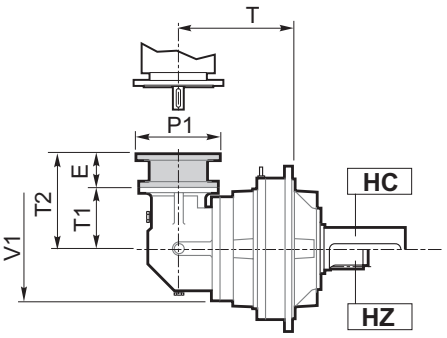
NEMA input

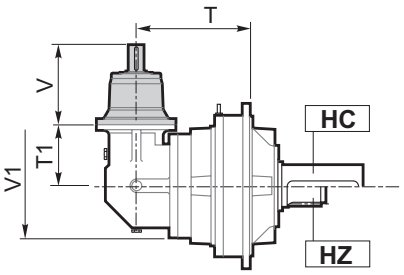


Solid input shaft

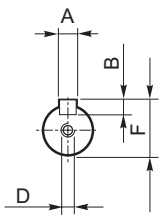


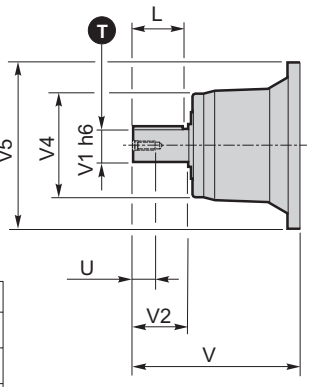
321R





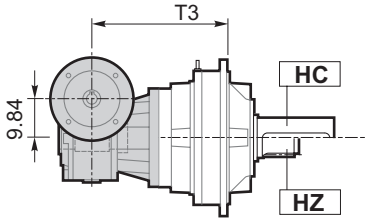
	321 R4(A)	321 R4(B) 321 R4(C)	321 L4	321 L3
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3



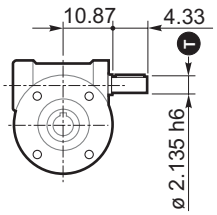


(mm)	inch	T
—	1.875 h6	0 -0.00063
—	2.375 h6	0 -0.00075
—	3.000 h6	0 -0.00075

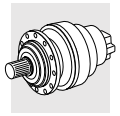
3/V 21L4

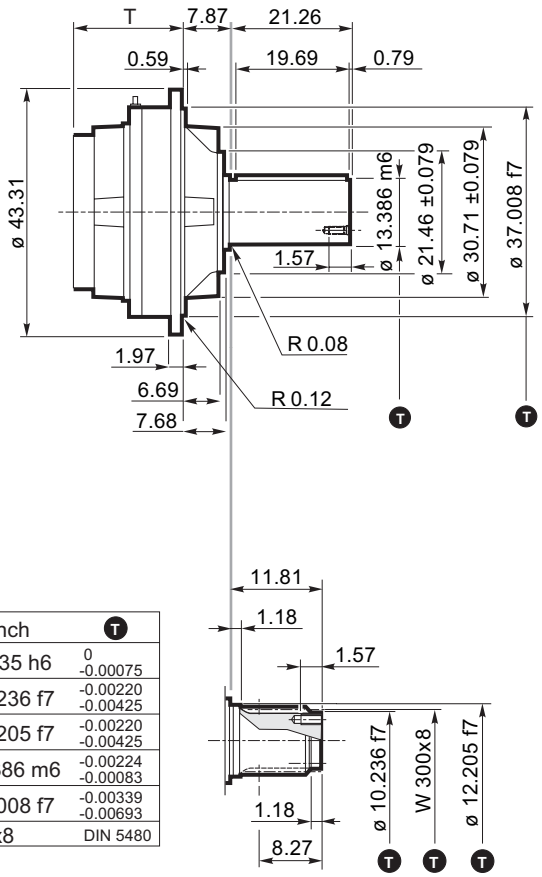


Solid input shaft

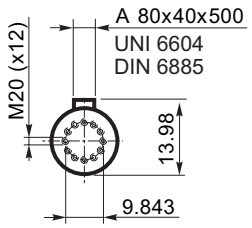


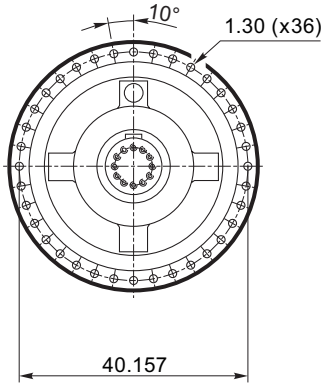
268





HC

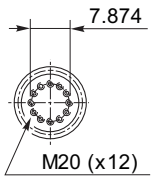




(mm)	inch	T
—	2.135 h6	0 -0.00075
(260)	10.236 f7	-0.00220 -0.00425
(310)	12.205 f7	-0.00220 -0.00425
(340)	13.386 m6	-0.00224 -0.00083
(940)	37.008 f7	-0.00339 -0.00693
W 300x8		DIN 5480

HZ

DIN 5480

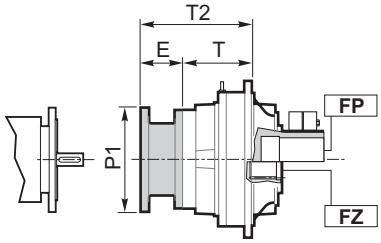


		321 L3	321 L4	321 R4(A)	321 R4(B)	321 R4(C)
	T	35.59	41.46	44.65	44.65	44.65
	T1	—	—	12.99	13.58	15.35
	V1	—	—	15.35	15.75	18.90
	Lbs	6218	6350	6461	6505	6527
NEMA Input						
	P1	**E**	**T2**			
N250TC	11.81	5.41	—	—	18.41	—	—
N280TC	13.78	6.42	—	—	19.41	—	—
N320TC	13.78	7.97	—	—	—	21.56	23.33
N320TC	15.75	8.64	—	50.10	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33
N360TC	15.75	8.64	—	50.10	—	—	—

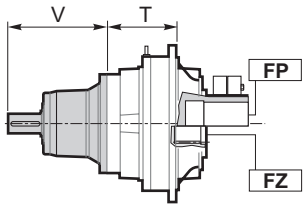
3/V 21L4	
T3	
46.22	
Lbs 6902	
P1	**T4**
—	—
—	—
—	—
—	—
—	—
—	—

321L

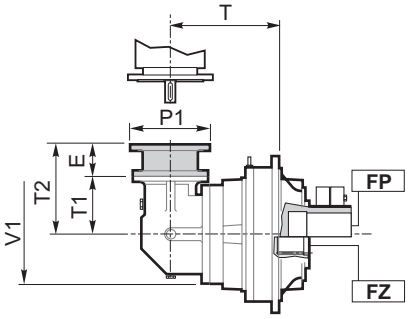
NEMA input

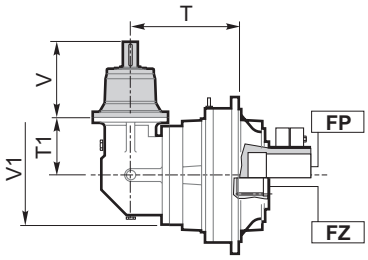


Solid input shaft

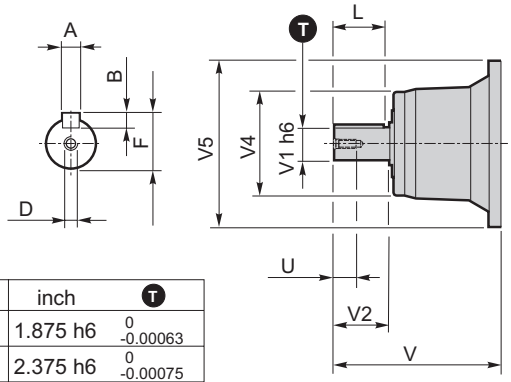


321R



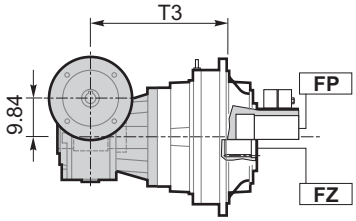


	321 R4(A)	321 R4(B) 321 R4(C)	321 L4	321 L3
	Solid input shaft			
	NV05B	NV06B	NV07B	NV11B
V	9.68	12.70	12.28	13.58
V1	1.875	2.375	3.000	3.000
V2	3.50	4.75	5.00	5.00
V4	6.10	6.10	7.87	7.87
V5	9.65	11.50	13.58	16.46
A	0.500	0.625	0.750	0.750
B	0.500	0.625	0.750	0.750
F	2.091	2.646	3.327	3.327
L	3.00	4.25	4.37	4.37
D	5/8 - 11UNC	3/4 - 10 UNC	3/4 - 10 UNC	3/4 - 10 UNC
U	1.42	1.65	1.65	1.65
Lbs	33.1	50.7	77.2	121.3

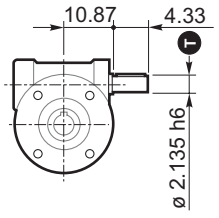


(mm)	inch Ⓣ
—	1.875 h6 $^{0}_{-0.00063}$
—	2.375 h6 $^{0}_{-0.00075}$
—	3.000 h6 $^{0}_{-0.00075}$

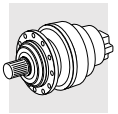
3/V 21L4



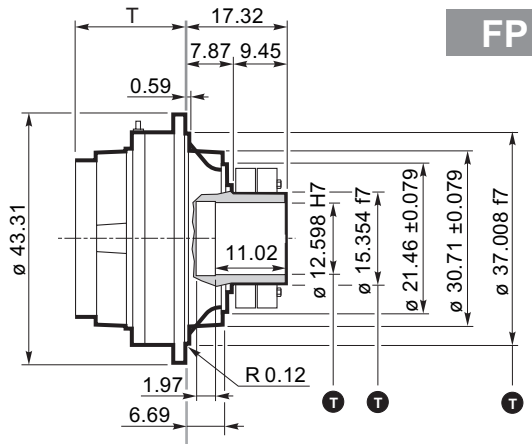
Solid input shaft

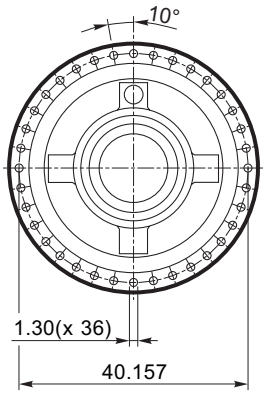


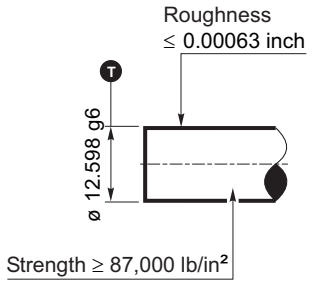
268

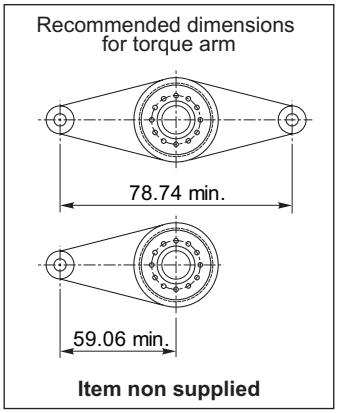


FP T_{2max} = 3,717,000 in.lbs

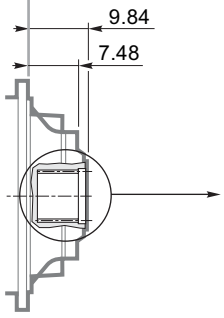


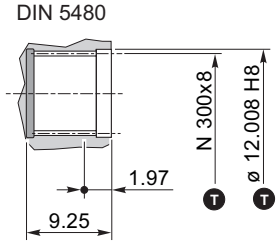






(mm)	inch	Ⓣ
—	2.135h6	0 -0.00075
(320)	12.598 g6	+0.00000 0
(305)	12.008 H8	+0.00331 0
(320)	12.598 H7	+0.00224 0
(390)	15.354 f7	-0.00244 -0.00469
(940)	37.008 f7	-0.00339 -0.00693
N 300x8		DIN 5480

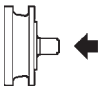




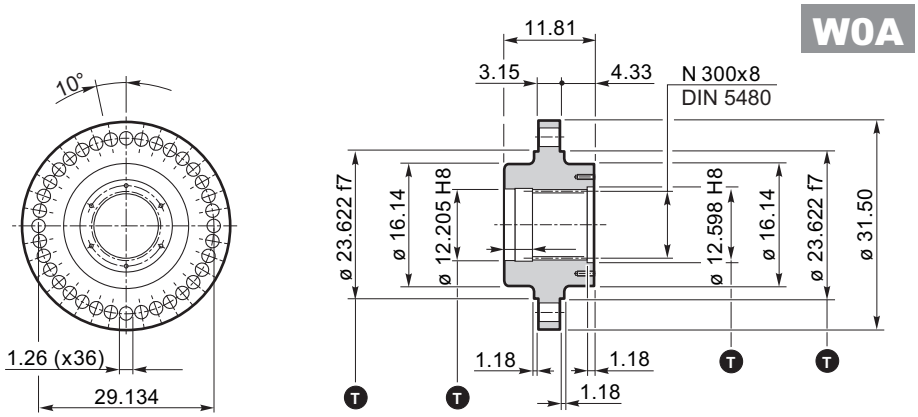
			321 L3	321 L4	321 R4(A)	321 R4(B)	321 R4(C)
		T	35.59	41.46	44.65	44.65	44.65
		T1	—	—	12.99	13.58	15.35
		V1	—	—	15.35	15.75	18.90
		Lbs	5998	6130	6240	6284	6306
NEMA Input							
	P1	E	T2				
N250TC	11.81	5.41	—	—	18.41	—	—
N280TC	13.78	6.42	—	—	19.41	—	—
N320TC	13.78	7.97	—	—	—	21.56	23.33
N320TC	15.75	8.64	—	50.10	—	—	—
N360TC	13.78	7.97	—	—	—	21.56	23.33
N360TC	15.75	8.64	—	50.10	—	—	—

3/V 21L4	
T3	
46.22	
Lbs	6681
P1	T4
—	—
—	—
—	—
—	—
—	—
—	—

Flange

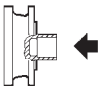


W0A

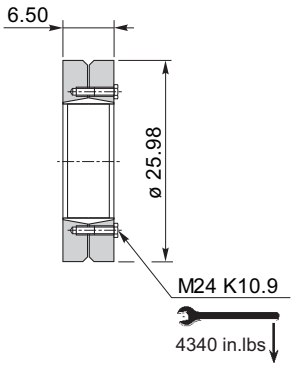


Material : Steel AISI 1040

Shrink disc

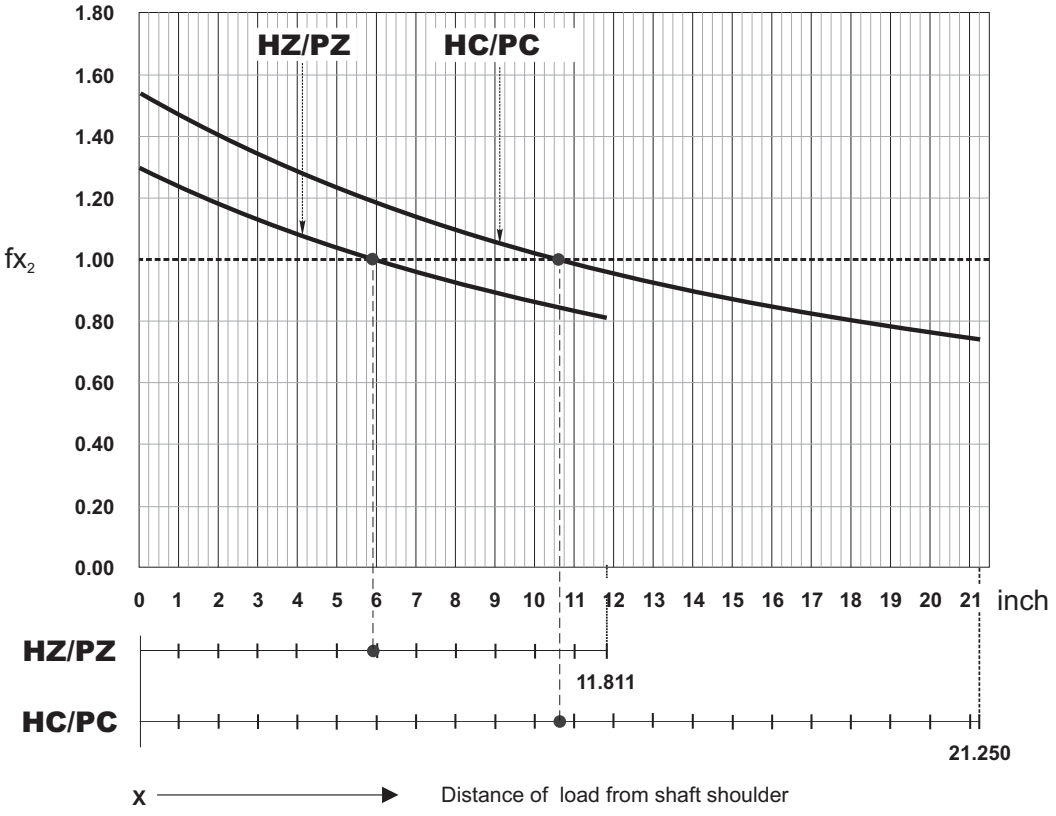


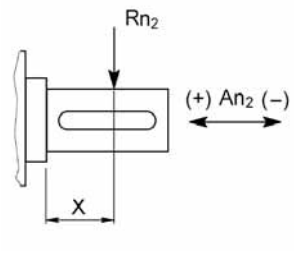
G0A



(mm)	inch	T
(310)	12.205 H8	+0.00000 0
(320)	12.598 H8	+0.00350 0
(600)	23.622 f7	-0.00299 -0.00575

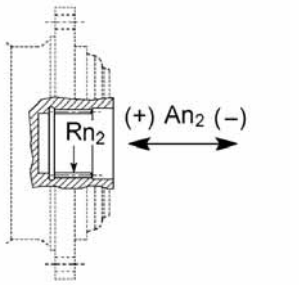
Load application factor for calculation of admissible overhung load on output shaft





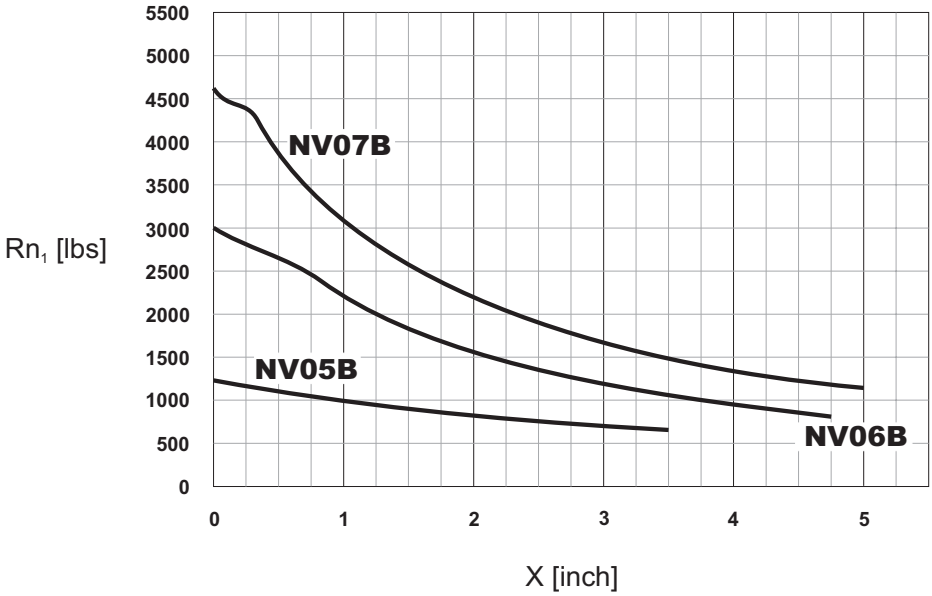
$R_{x2} = Rn_2 \cdot fx_2$

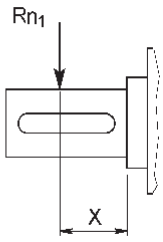
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
HZ/PZ	0.74	0.59
NHC/NPC	0.86	0.69

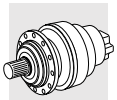


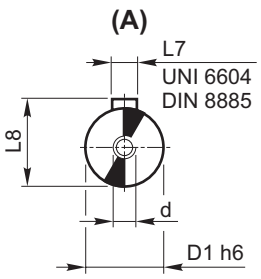
$An_2 (\pm) = Rn_2 \cdot fa_2(\pm)$		
	fa_2 (+)	**fa_2 (-)**
FZ	1.04	1.04

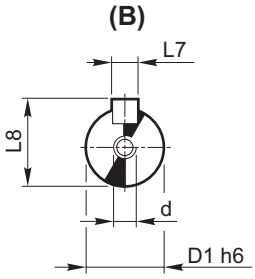
Permitted overhung load on input shaft
(based on input speed n_1= 1000 rpm and theoretical lifetime Lh= 5000 hours).
For different operating conditions refer to Par. 12 (c_2).



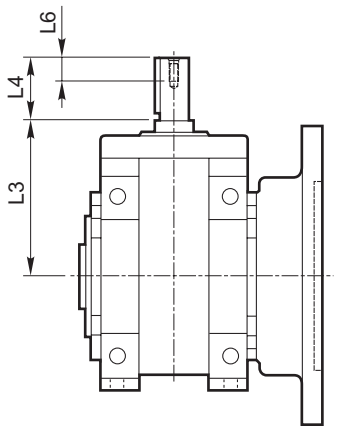






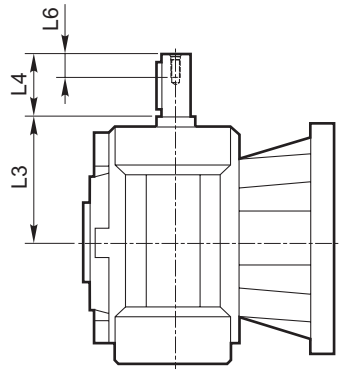


3/V



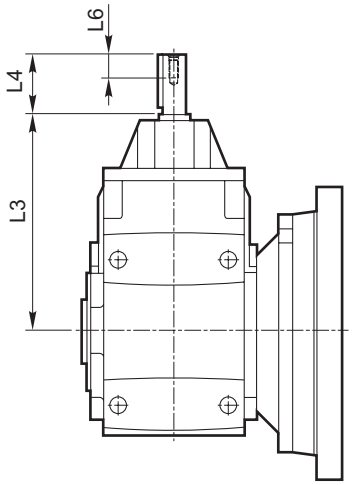
	D1 h6	L3	L4	L7	L8	dxL6 (mm)
3/V 03L3	0.750	4.35	1.56	0.188 (B)	0.832	M6x16
3/V 05L3	0.750	5.04	1.56	0.188 (B)	0.832	M6x16
3/V 06L3	1.000	5.67	2.00	0.250 (B)	1.109	M8x19
3/V 07L3	1.000	6.61	2.37	0.250 (B)	1.109	M8x19
3/V 10L4	1.000	5.67	2.00	0.250 (B)	1.109	M8x19
3/V 11L4	1.000	6.61	2.37	0.250 (B)	1.109	M8x19
3/V 13L4	1.000	6.61	2.37	0.250 (B)	1.109	M8x19

3/V



	D1 h6	L3	L4	L7	L8	dxL6 (mm)
3/V 00L3	0.625	2.57	1.56	0.188 (B)	0.705	—
3/V 01L3	0.625	2.57	1.56	0.188 (B)	0.705	—
3/V 09L3	1.378	7.28	2.56	0.394 (A)	1.496	M8x20
3/V 10L3	1.378	7.28	2.56	0.394 (A)	1.496	M8x20
3/V 11L3	1.575	8.44	2.76	0.472 (A)	1.693	M8x20
3/V 13L3	1.575	8.44	2.76	0.472 (A)	1.693	M8x20
3/V 15L3	1.890	9.06	4.33	0.551 (A)	2.028	M16x40
3/V 15L4	1.378	7.28	2.56	0.394 (A)	1.496	M8x20
3/V 16L3	1.890	9.06	4.33	0.551 (A)	2.028	M16x40
3/V 16L4	1.378	7.28	2.56	0.394 (A)	1.496	M8x20
3/V 17L3	2.165	10.87	4.33	0.630 (A)	2.323	M16x40
3/V 17L4	1.575	8.44	2.76	0.472 (A)	1.693	M8x20
3/V 18L4	1.890	9.06	4.33	0.551 (A)	2.028	M16x40
3/V 19L4	1.890	9.06	4.33	0.551 (A)	2.028	M16x40

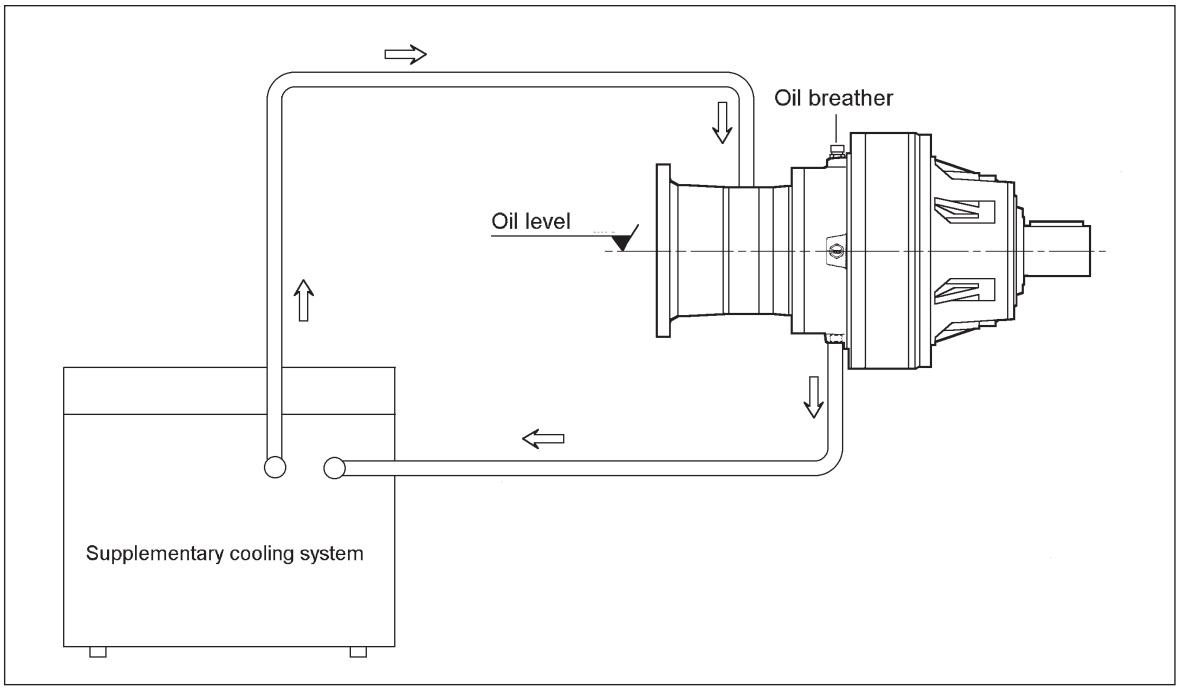
3/A



	D1 h6	L3	L4	L7	L8	dxL6 (mm)
3/A 00L2	0.625	7.07	1.57	0.188 (B)	0.710	M6x16
3/A 01L2	0.750	9.30	1.57	0.188 (B)	0.830	M6x16
3/A 03L2	0.750	9.97	1.57	0.188 (B)	0.830	M6x16
3/A 05L2	1.000	11.89	1.97	0.250 (B)	1.110	M8x19
3/A 06L2	1.000	13.92	1.97	0.250 (B)	1.110	M8x19
3/A 07L2	1.125	16.07	2.36	0.250 (B)	1.230	M10x22

26.0 - SUPPLEMENTARY COOLING SYSTEMS

Should the transmitted mechanical power be greater than the thermal capacity the unit is rated for, supplementary cooling systems can be specified.



Indipendent cooling systems are made up of an air-oil heat exchanger, a motor pump, a filter and an electric system that incorporates a thermostatic sensor that protects the electric motor.
Cooling units are particularly quite in operation.

Technical data

		CR1	CR2	CR3
Absorbed power	[HP]	0.25	0.63	1
Oil flow rate	[l/min]	9	25	40
Air flow rate	[m3/h]	600	1000	3000
Noise level at 1m	[dB(A)]	67	71	76
Weight	[lbs]	28	40	63

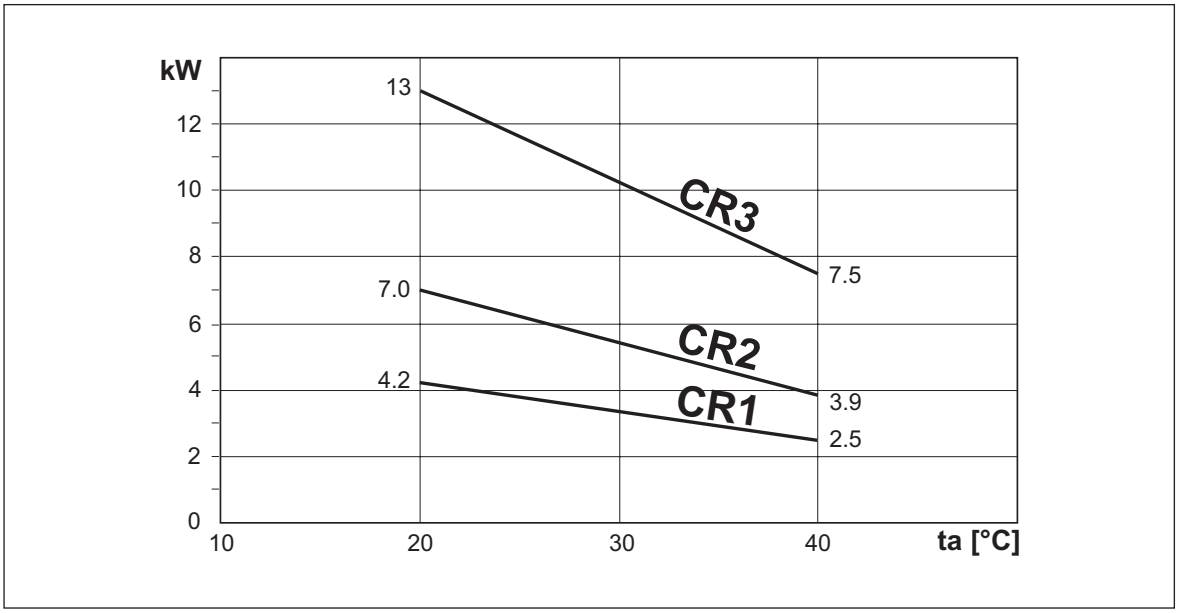
Selection criteria

If the mechanical power « P » is greater than the thermal rating « Pt », the heating to be dissipated [P_s] can be calculated through the following equation:

$$P_S = 0.1 \times (P_{r1} - Pt) \quad (26)$$

Select cooling system size in chart (D01) according to ambient temperature « ta » (20° - 40°C).
Check that the cooling system you have selected will fit the gearbox (see table D02).
If this is not the case, contact our sales organization.

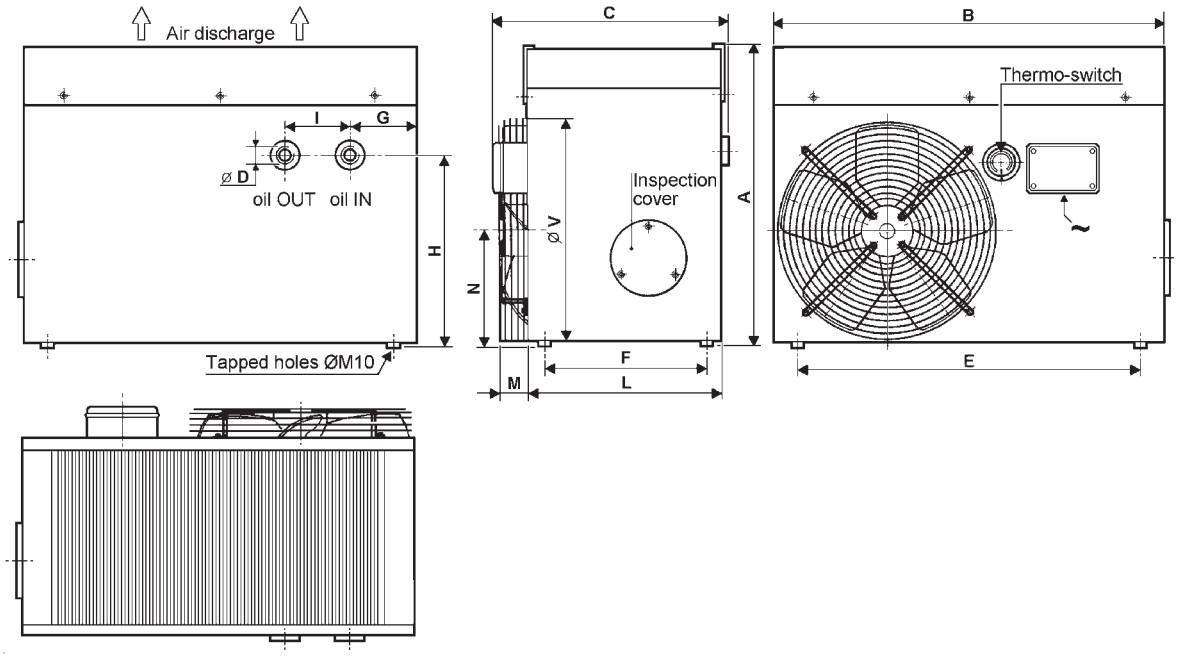
(D01)



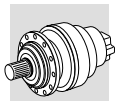
(D02)

Gearbox	L1	L2	L3	L4	R2	R3	R4
306	CR1	CR1	—	—	—	—	—
307	CR1	CR1	—	—	CR1	—	—
309	CR1	CR1	CR1	—	CR1	—	—
310	CR2	CR1	CR1	—	—	CR1	—
311	CR2	CR1	CR1	—	CR1	CR1	—
313	CR2	CR1	CR1	—	CR1	CR1	—
315	CR3	CR2	CR1	—	CR1	CR1	—
317	CR3	CR2	CR2	CR1	—	—	—
319	CR3	CR2	CR2	CR1	—	—	—
321	CR3	CR2	CR2	CR2	—	—	—

Dimensions



	A	B	C	D	E	F	G	H	I	L	M	N	V
CR1	410	490	310	1/2" G	415	190	90	263	80	245	10	158	250
CR2	463	600	365	3/4“ G	530	250	100	296	100	300	45	181	300
CR3	575	760	465	IN = 1" G OUT = 3/4" G	690	350	100	408	100	400	45	228	400



R2

KEY FEATURES

- Rugged ductile cast iron housing
- Heavy duty taper roller bearings for high overhung load capacity
- O-Ring sealing on gearcase
- Splined Connections
- Magnetic Drain Plugs
- Run Tested, Air Pressure Tested
- Modular Design for Quick Delivery, Flexibility
- High Efficiency/Low Noise
- Worldwide Availability