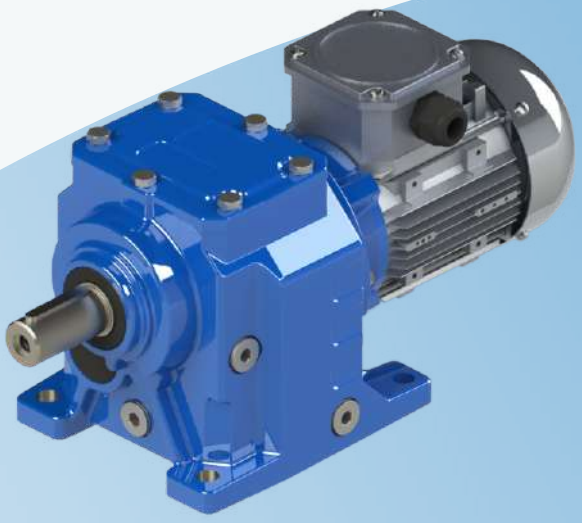
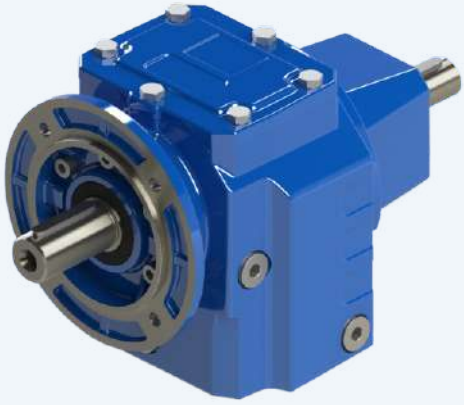
NRW®
DRIVE TECHNOLOGIES

A/F SERIE





Stirnradgetriebemotoren
Helical Geared Motors
Motoriduttori Coassiali
Motoréducteurs Coaxiaux
Motorreductores Coaxiales

DE EN IT FR ES

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Eine änderung in diesem Katalog der Technischen Werte sowie Daten und Maßen und Gewichte bleiben vorbehalten

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DE ZEICHEN

EN SYMBOLS

IT SIMBOLOGIA

FR SYMBOLES

ES SIMBOLOGIA

Zeichen

P	=	Leistung in	(kW)
M	=	Drehmoment in	(Nm)
n	=	Drehzahl in	(rpm)
i	=	Übersetzung	
F	=	Kraft in	(N)
m	=	Masse in	(kg)
f_B	=	Betriebsfaktor	

1	=	Antriebswelle
2	=	Abtriebswelle
R	=	Radial
A	=	Axial
s	=	Statisch
d	=	Dynamisch
max	=	Maximal
min	=	Minimal

Symbols

P	=	Power	(kW)
M	=	Torque	(Nm)
n	=	Speed	(rpm)
i	=	Reduction ratio	
F	=	Load	(N)
m	=	Weight	(kg)
f_B	=	Service factor	

1	=	Input shaft
2	=	Output shaft
R	=	Radial
A	=	Axial
s	=	Static
d	=	Dynamic
max	=	Maximum
min	=	Minimum

Simbologia

P	=	Potenza	(kW)
M	=	Momento torcente	(Nm)
n	=	Numero giri	(giri / 1')
i	=	Rapporto di riduzione	
F	=	Forza	(N)
m	=	Peso	(kg)
f_B	=	Fattore di servizio	

1	=	Albero ingresso
2	=	Albero uscita
R	=	Radiale
A	=	Assiale
s	=	Statico
d	=	Dinamico
max	=	Massimo
min	=	Minimo

Symboles

P	=	Puissance	(kW)
M	=	Moment de torsion	(Nm)
n	=	Nombre de tours	(tours/min)
i	=	Rapport de réduction	
F	=	Force	(N)
m	=	Poids	(kg)
f_B	=	Facteur de service	

1	=	Arbre d'entrée
2	=	Arbre de sortie
R	=	Radial
A	=	Axial
s	=	Statique
d	=	Dynamique
max	=	Maximum
min	=	Minimum

Simbologia

P	=	Potencia	(kW)
M	=	Momento torsor	(Nm)
n	=	Número de revoluciónes	(rpm)
i	=	Relación de reducción	
F	=	Fuerza	(N)
m	=	Peso	(kg)
f_B	=	Factor de servicio	

1	=	Eje de entrada
2	=	Eje de salida
R	=	Radial
A	=	Axial
s	=	Estàtico
d	=	Dinámico
max	=	Máximo
min	=	Mínimo

DE TECHNISCHE INFORMATIONEN

Für die korrekte Auswahl eines Getriebes oder eines. Getriebemotors müssen einige grundsätzliche Daten bekannt sein.

A. Die Antriebsdrehzahl am Getriebeeingang (n1) und die gewünschte Abtriebsdrehzahl (n2).
Mit diesen beiden Werten kann das Übersetzungsverhältnis (i) des Getriebes mit der folgenden Formel ausgerechnet werden:

$$i = \frac{n1}{n2}$$

B. Das für die Anwendung erforderte Drehmoment (MH) Wenn diese Daten bekannt sind, kann mit der Auswahl des Getriebemotors oder des Getriebes fortgefahren werden.

Auswahl der Getriebe
Dieser Ratgeber führt in wenigen Schritten durch die Auswahl des geeignten Getriebes:

1. Den Betriebsfaktor (f_B) der Anwendung bestimmen. Dieser Parameter ist eine Funktion aus der Belastungsart der angetriebenen Maschine, der Anzahl der Anläufe pro Stunde und der Betriebsstundenzahl (siehe Absatz "Betriebsfaktor" S.8)

2. Die Eingangsleistung PH über das erforderliche Drehmoment MH, die Abtriebsdrehzahl n2 und den dynamischen Wirkungsgrads ermitteln.
Der Wert des dynamischen wirkungsgrads hängt von der Art des Getriebes und von der Anzahl der Übersetzungsstufen ab. Für die Stirnradgetriebe der Serie A/F gilt ein mittlerer Wert von 0,9 (ηd)
A/F..1 Übersetzungsstufen = 0,97
A/F..2 Übersetzungsstufen = 0,96
A/F..3 Übersetzungsstufen = 0,94

$$PH = \frac{MH \cdot n2}{9550 \cdot \eta d}$$

3. Eine genormte Leistung P1 aus der Tabelle der Getriebemotorenleistungen aussuchen, die höher ist als die erforderliche PH, sodass:

$$P1 \geq PH$$

4. Nach dem Ermitteln der geeigneten genormten Leistung den Getriebemotor auswählen, der die Abtriebsdrehzahl zur Verfügung stellt, die der gewünschten n2 am nächsten kommt und der einen gleich hohen oder größeren Betriebsfaktor f_B besitzt als durch die Anwendung gefordert.

In den Auswahltabellen der Getriebemotoren sind die Kombinationen mit 50Hz - Motoren mit 4 oder 6 Polen dargestellt. Für abweichende Antriebsgeschwindigteiten berücksichtigen Sie bitte die Daten aus den Getriebetabellen.

EN TECHNICAL INFORMATION

For correctly selecting a gear reducer or geared motor, several essential pieces of data are required:

A. The rotational input speed to the gear reducer (n1) and the rotational output speed (n2).
Through these two values it is possible to calculate the reduction ratio (i) of the gear reducer using the following formula:

$$i = \frac{n1}{n2}$$

B. The torque required by the application (MH) The geared motor or gear reducer can be once this data is known.

Geared motor selection
This guide indicates a brief sequence of steps for selecting a suitable product:

1. Determine the application's actual service factor (f_B) This parameter depends on the type of load of the powered machine, the number of starts per hour and the hours of operation (refer to the "Service factor" paragraph on page 8)

2. Calculate the input power PH using the required torque value MH, the speed n2 and dynamic efficiency value. The dynamic efficiency value depends on the type of gear reducer and on the number of gear reduction stages. A/F-range helical gear reducers have an average value equal to: (ηd)
A/F..1 stages = 0,97
A/F..2 stages = 0,96
A/F..3 stages = 0,94

$$PH = \frac{MH \cdot n2}{9550 \cdot \eta d}$$

3. Consult the geared motor performance tables and indentify a normalised power value P1 exceeding the required power PH, such that:

$$P1 \geq PH$$

4. Once the suitable normalised power has been identified, select the geared motor capable of generating the rotational speed closest to the desired n2 value and with service factor f_B greater or equal to that required by the application.

In the geared motor selection tables the combinations include 4-pole and 6-pole motors powered at 50Hz; for different drive speeds refer to the nominal data provided for the gear reducers.

IT INFORMAZIONI TECNICHE

Per la corretta selezione di un riduttore o di un motoriduttore occorre disporre de alcuni dati fondamentali quali:

A. La velocitá angoleare in entrata al riduttore (n1) e la velocitá angolare in uscita (n2).
Attraverso questi due valori é possibile calcolare il rapporto di riduzione (i) del riduttore attraverso la formula:

$$i = \frac{n1}{n2}$$

B. Il momento tocente richiesto dall' applicazione (MH). Noti questi dati, si può procedere nella selezione del motoriduttore o del riduttore.

Selezione dei motoriduttori
Questa guida conduce alla selezione del prodotto attraverso pochi passi:

1. Deteminare il fattore di servizio effettivo dell'applicazione (f_B). Questo parametro é funzione del tipo di carico della macchina azionata, del numero di azionamenti per ora e del numero di ore di funzionamento (vedi paragrafo "Fattore di servizio" pag. 9).

2. Ricavare la potenza in entrata PH mediante il momento torcente richiesto MH, la velocitá n2 e il redimento dinamico.
Il valore di rendimento dinamico dipende dalla tipologia del riduttore e dal numero di stadi d'ingranaggi di riduzione. I riduttori coassiali della serie A/F presentano un valore medio pari a:(ηd)
A/F..1 stadi = 0,97
A/F..2 stadi = 0,96
A/F..3 stadi = 0,94

$$PH = \frac{MH \cdot n2}{9550 \cdot \eta d}$$

3. Consultare le tabelle delle prestazioni dei motoriduttori ricercando una potenza normalizzata P1 superiore a quella richiesta PH tale che:

$$P1 \geq PH$$

4. Individuata la potenza normalizzata idonea, selezionare dunque il motoriduttore in grado di sviluppare lavelocità angolare più vicina a quella n2 desiterata e con fattore di servizo f_B. maggiore o ugello richesto dall" aplicazione.

Nelle tabelle di selezione dei motoriduttori gli abbinamenti sono realizzati con motori 4,6 poli alimentati a 50Hz, per velocità di azionamento diverse riferirsi ai dati nominali forniti per i riduttori.

FR INFORMACION TECNICA

Pour choisir correctement un réducteur ou un motoréducteur, il est nécessaire de disposer de certaines données fondamentales telles que:

A. La vitesse angulaire en entrée du réducteur (n1) et la vitesse angulaire en sortie (n2).
Grâce à ces deux valeurs, il est possible de calculer le rapport de réduction (i) du réducteur en utilisant la formule:

$$i = \frac{n1}{n2}$$

B. Le moment de torsion requis par l'application (MH).
Une fois ces données, il est possible de procéder au choix du motoréducteur ou du réducteur.

Selection des motoréducteur
Ce guide permet de procéder à la sélection du produit en suivant quelques étapes:

1. Déterminer le facteur de service effectif de l'application (f_B). Ce paramétre dépend du nombre d'actionnements par heure et du nombre d' deuresde fonctionnement (voir paragraphe "Facteur de service" page 9).

2. Déterminer la puissance en entrée PH á l'aide du moment de tension requis MH de la vitesse n2 et du rendement dynamique.
La valeur du rendement dynamique dépend du type de réducteur et du nombre de trains d'engrenages de réduction. Les réducteurs coaxiaux de la série A/F présentent une valeur moyenne égale à: (ηd)
A/F..1 trains = 0,97
A/F..2 trains = 0,96
A/F..3 trains = 0,94

$$PH = \frac{MH \cdot n2}{9550 \cdot \eta d}$$

3. Consulter le tableau des performances des moto-réducteurs en recherchant une puissance normalisée P1 supérieure la puissance PH demandée telle que:

$$P1 \geq PH$$

4. Une fois identifiée la puissance normalisée adéquate, sélectionner le motoreducteur en mesure de développer la vitesse angulaire la plus proche de la vitesse n2 désirée et présentant un facteur de service f_B. supérieur ou égal á celui demandé par l'application.

Dans les tableux de sélection des motoréducteurs, les combinaisons sont réalisées avec des moteurs 4,6 póles alimentés á 50Hz. Pour des vitesses d'actionnement différentes, se référer aux données nominales fournis par les réducteurs

ES INFORMACIÓN TÉCNICO

Para la correcta selección de un reductor o de un motorreductor es necesario disponer de algunos datos fundamentales como:

A. La velocidad angular a la entrada del reductor (n1) y la velocidad angular a la salida (n2). A través de reducción (i) del reductor utilizando la fórmula:

$$i = \frac{n1}{n2}$$

B. El momento de torsión requrido por la aplición (MH).
Conocidos astos datos, se puede proceder a la selección del motorreductor o del reductor.

Selección de los motorreductores
Esta guìa conduce a la selección del producto a través de unos pocos pasos:

1. Determinar el factor de servicio efectivo de la aplicación (f_B). Este parámetro es función del tipo de carga de la máquina accionada, del número de accionamientos por hora y de la cantidad de horas de funcionamiento (ver el párrafo " Factor de servicio" pág. 9)

2. Obtener la potencia a la antrada PH utillizando el momento de torsión requerido MH, la velocidad n2 el rendimiento dinámico.
El valor del rendimiento dinámico depende del tipo de reuctor y del número de etapas de engranajes de reducción. Los reductores coaxiales de la serie A/F presentan un valor medio igual a:
A/F..1 trenes = 0,97
A/F..2 trenes = 0,96
A/F..3 trenes = 0,94

$$PH = \frac{MH \cdot n2}{9550 \cdot \eta d}$$

3. Consultar las tablas de las prestaciones de los motorreductores buscando una potencia normalizada P1 superior a la requerida PH tal que:

$$P1 \geq PH$$

4. Una vez identificada la potencia normalizada adecuada, seleccionar el motorreductor capaz de desarrollar la velocidad angular más cercana a la n2 deseada y con un factor de servicio f_B mayor o igual que el necessario para la aplicación

En las tables de selección de los motorreductores, las combinaciones se realizan con motores de 4,6 polos alimentados con 50Hz. Para velocidades de accionamiento diferentes, consultar los datos nominales suministrados para los reductores.

DE TECHNISCHE INFORMATIONEN

Auswahl der Getriebe

1. Den Betriebsfaktor (f_B) der Anwendung bestimmen (siehe Absatz "Betriebsfaktor" S.8).
2. Das benötigte Übersetzungsverhältnis i aus der erforderlichen Abtriebsdrehzahl n2 und der Antriebsdrehzahl n1 bestimmen.

$$i = \frac{n1}{n2}$$

3. Das Drehmoment MG für die Auswahl des Getriebes über das von der Anwendung erforderliche Drehmoment MH und den Betriebsfaktor f_B ermitteln:

$$MG = MH \cdot (f_B)$$

4. Das Getriebe mit dem Übersetzungsverhälnis aus der Tabelle der Getriebedaten auswählen, das dem bestimmten Übersetzungsverhältnis am nächsten kommt und über ein ausreichendes Nenndrehmoment M2 verfügt, sodass:

$$M2 \geq MG$$

Überprüfungen

Nach der Auswahl des Getriebes oder des Getriebemotors ist es ratsam die folgenden Überprüfungen durchzuführen:

A. Thermische Leistung

Die thermische Leistung des Getriebes muss gleich oder größer als die installierte mechanische Leistung sein oder als die von der Anwendung gemäß den im Abschnitt enthaltenen Angaben erforderte Leistung (siehe Abschnitt "thermische Leistung" S.12).

B. Maximales Drehmoment

Grundsätzlich darf das maximale Drehmoment (momentane Spitzenbelastung), das an das Getriebe angewendet werden kann, nicht mehr als 200% des Nenndrehmoments M_{amax} betragen.

C. Radiale Belastungen

Überprüfen Sie bitte dass die radialen Belastungen auf den Eingangs - und / oder Ausgangswellen die zugelassenen Katalogwerte nicht überschreiten.
Wenn diese größer sind, bitte die Getriebegröße anpassen oder die Auslegung für die externe Last anpassen.
In der Prüfphase bitte berücksichtigen, dass die im Katalog angegebenen Werte sich auf Lasten beziehen, die auf die Mittelachse des Wellenüberstands wirken.
Daher ist es notwendig mit den entsprechenden Formeln die zugelassene Last in der gewünschten Position zu bestimmen. Falls diese in einer davon abweichenden Position angebracht wird, siehe Absatz "Radiale Belastungen S. 20.

EN TECHNICAL INFORMATION

Gear reducer selection

1. Determine the application's service factor (f_B) (consult to the "Servico factor" paragraph on page 8).
2. Calculate the reduction ratio i from the requested output speed n2 and from the input speed n1.

$$i = \frac{n1}{n2}$$

3. Calculate the torque MG for selecting the gear reducer through the torque required by the application MH and the service factor s.f.:

$$MG = MH \cdot (f_B)$$

4. Consult the gear reducer performance tables and identify the gear reducer that - with a reduction ratio clossest to the calculated ratio - has a nominal torque M2 such that

$$M2 \geq MG$$

Checks

Once the gear reducer or geared motor has been selected, the following checks should be performed:

A. Thermal Power

The gear reducer's thermal power must be equal to or greater than the installed mechanical power, or the power required by the application according to the indications contained in the section (refer to the "Thermal power" paragraph on page 12).

B. Maximum Torque

Generally, the maximum torque (peak instantaneous load) that can be applied to the gear reducer must not exceed 200% of the nominal torque M_{amax}.

C. Radial Loas

Verify that the loads acting on the input and/or output shaft are within with the values indicated in the catalogue. If they exceed these values, increase the size of the gear reducer or modify the external load capacity.
During the checking phase, it is important to remember that the values indicated in the catalogue refer to loads acting on the mid-point of the shaft protrusion, therefore, if the load is applied to a different position, appropriate formulas must be used to calculate the admissible load in the desired position (refer to the "Radial loads" paragraph on page 20).

IT INFORMAZIONI TECNICHE

Selezione dei riduttori

1. Determinare il fattore di servizio dell'applicazione (f_B) (vedi paragrafo "Fattore di servizio" pag. 9)
2. Calcolare il rapporto di riduzione i dalla velocità in uscita n2 richiesta e dalla quella in entrata n1.

$$i = \frac{n1}{n2}$$

3. Ricavare il momento torcente MG per la selezione del riduttore attraverso la coppia richiesta dall'applicazione MH ed il fattore di servizio f.s.:

$$MG = MH \cdot (f_B)$$

4. Consultare le tabelle delle prestazioni dei riduttori cercando il riduttore che, col rapporto di riduzione più prossimo a quello calcolato, dispone di una coppia nominale M2 tale che:

$$M2 \geq MG$$

Verifiche

Esguita la selezione del riduttore o del motoriduttore è opportuno effettuare le seguenti verifiche:

A. Potenza Termica

La potenza termica del riduttore deve essere uguale o maggiore della potenza meccanica installata o della potenza richiesta dall' applicazione secondo le indicazioni contenute nella sezione (vedi paragrafo "Potenza termica" pag 13).

B. Coppia Massima

Generalmente la coppia massima (picco di cario istantaneo) che può essere applicata al riduttore non deve superare il 200% della coppia nominale M_{amax}.

C. Carichi radiali

Verificare che i carichi radiali agenti sugli alberi di entrata e/o di uscita rispettino i valori ammessi a catalogo. Se superiori, aumentare la grandezza del riduttore o modificare la supportazione del carico esterno.
Nella fase di verifica occorre tenere conto che i valori indicati a catalogo si riferiscono a carichi agenti sulla mezzeria della sporgenza dell'albero per cui, nel caso il carico sia applicato in posizione deversa è necessario determinare con le apposite formule il carico ammisibile nella posizione desiderata (vedi paragrafo "Carichi Radiali" pag 21).

FR INFORMACION TECNICA

Sélection des réducteurs

1. Déterminer le facteur de service de l'application (f_B) (voir paragraphe "Facteur de service"page 9).
2. Calculer le rapport de réduction (i) à partir de la vitesse n2 requise en sortie et de la vitesse en entrée n1

$$i = \frac{n1}{n2}$$

3. Déterminer le moment de torsion MG pour la sélection du reducteur à l'aide du couple MH requis par l'application et du facteur de service f.s.:

$$MG = MH \cdot (f_B)$$

4. Consulter les tableux des performances des réducteurs en recherchant le réducteur disposant du rapport de réduction le plus proche du rapport calculé et présentant un couple nominal M2 tel que:

$$M2 \geq MG$$

Vérifications

Une fois sélectionné le réducteur ou le motoréduc teur, il convient d'effectuer les vérifications suivantes:

A. Puissance Thermique

La puissance thermique doit être égale ou supérieure à la puissance mécanique installée, ou à la puissance requise par l'application, confarmément aux indications contenues dans la section (voir paragraphe " Puissance thermique" page 13).

B. Couple Maximal

Généralement, le couple maximal (pic de charg instantanée) pouvant être appliqué au réducteur, ne doit pas dépasser 200% du couple nominal M_{amax}.

C. Charges Radiales

Vérifier que les charges radiales agissant sur les arbres d'entrée et/ou de sortie repectent les valeurs admises dans le catalogue. Si elles sont supérieures, augmenter la taille du réducteur ou modifiler le palier de la charge extérieure.

Durant la phase de vérification, il est nécessaire de tenir compte du fait que les valeurs indiquées dans le catalogue se réfèrent à des charges agis sant sur la moitié de la partie s aillante de l'arbre; par conséquent, en cas d'application de la charge dans une position différente, il est nécessaire de déterminer la charge admissible dans la position désirée à l'aide des formules spéciales (voir paragraphe " Charges radiales" page 21).

ES INFORMACIÓN TÉCNICO

Selección de los reductores

1. Determinar el factor de servicio de la aplicación (f_B) (ver el párrafo "Factor de servicio" pág. 9).
2. Calcular la relación de reducción i entre la entre la velocidad de salida n2 requerida y la de entrada n1

$$i = \frac{n1}{n2}$$

3. Obtener el momento de torsión MG para seleccionar el reductor a través del par necesario para la apalicación MH y el factor de servicio f.s.:

$$MG = MH \cdot (f_B)$$

4. Consultar las tables de las prestaciones de los reductores buscandı el reductor que, con la relación de reducción más próxima a la calculada, disponga de un par nominal M2 tal que:

$$M2 \geq MG$$

Verificaciones

Una vez realiza la selección del reductor o del motorreductor es conveniente efectuar las siguientes verificaciones:

A Potencia Térmica

La potencia térmica del reductor debe ser mayor o igual que la potencia mecánica instalada o que la potencia requerida por la aplicación según las indicaciones contenidas en la sección (ver el párrafo"Potencia térmica" pág 13).

B Par Máximo

Generalmente el par máximo (pico de carga instantáneo) que se puede aplicar al reductor no debe superar el 200% del par nominal M_{amax}.

C Cargas Radiales

Verificar que las cargas radiales que actúan sobre los árboles de entrada y/o de salida respeten los valores admitidos según el catálogo. Si son mayores, aumentar el tamaño del reductor o modificar la capacidad de soportar la carga externa. En la fase de verificación, es necesario tener en cuenta que los valores indicados en el catálogo se refieren a carga esté aplicada en una posición diferente, es necesario determinar la carga admisible en la posición deseda con las fórmulas correspondientes (ver el párrafo "Cargas Radiales" pág. 21).

DE BETRIEBSFAKTOR

Der Betriebsfaktor (f_B) hängt von den Betriebsbedingungen ab, unter denen das Getriebe betrieben wird.
Die Parameter, die für eine korrekte Auswahl des Betriebsfaktors zu berücksichtigen sind, sind folgende:

- Belastungsart der angetriebenen Maschine: **U - M - H**
- Tägliche Betriebsdauer: **Std./Tag (Δ)**
- Anlauffrequenz: **Anl./Std. (*)**

LAST :	**U** - Gleichförmig	$m_{af} \leq 0.3$
	M - Mittlere Überlast	$m_{af} \leq 3$
	H - Hohe Überlast	$m_{af} \leq 10$

m_{af} = Je/Jm
- m_{af} Massenträgheitswert
- Je (kgm²) äußeres Trägheitsmoment reduziert auf die Motorwelle
- Jm (kgm²) Motor-Trägheitsmoment

Bei $m_{af} > 10$ bitte mit unserem Kundendienst Kontakt aufnehmen.

U- Schneckenförderer für Leichtmaterial, Gebläse, Montagebänder, Bandförderer für Leichtmaterial, kleine Rührwerke, Kleinlastenaufzüge, Kreiselpumpen, Hebebühnen, Reinigungsmaschinen, Abfüllmaschinen, Prüfmaschinen, Bandförderer.

M- Wickelmaschinen, Vorrichtungen zur Zuführung bei Holzbearbeitungsmaschinen, Lastaufzüge, Auswuchtmaschinen, Gewindeschneidmaschinen, mittlere Rührwerke und Mischer, Bandförderer für schwere Materialien, Winden, Schiebetore, Dünger Abkratzer, Verpackungsmaschinen, Betonmischmaschinen, Kranfahr - und Kranhubwerke, Fräsmaschinen, Biegemaschinen, Zahnradpumpen, Hubstapler, Drehtische.

H- Rührwerke für schwere Materialien, Scheren, Pressen, Schleudern, Winden und Aufzüge für schwere Materialien, Schleifmaschinen, Steinbrecher, Kettenbecherwerke, Bohrmaschinen, Hammermühlen, Exzenterpressen, Biegemaschinen, Drehtische, Scheuertrommeln, Vibrationsrüttler, Schneidemaschinen, Stanzen, Walzwerke, Zementmühlen.

EN SERVICE FACTOR

The service factor (f_B) depends on the operating conditions the reduction unit is subjected to.
The parameters that need to be taken into consideration to select the most adequate service factor correctly comprise:

- Type of load of the operated machine : **U - M - H**
- Length of daily operating time: **hours/day (Δ)**
- Start-up frequency: **starts/hour (*)**

TYPE OF LOAD:	**U** - Uniform	$m_{af} \leq 0.3$
	M - Moderate shocks	$m_{af} \leq 3$
	H - Heavy shocks	$m_{af} \leq 10$

m_{af} = Je/Jm
- m_{af} Factor of inertia
- Je (kgm²) moment of reduced external inertia at the drive - shaft
- Jm (kgm²) moment of inertia of motor

If $m_{af} > 10$ call our Technical Service.

U- Screw feeders for light materials, fans, assembly lines, conveyor belts for light materials, small mixers, lifts, cleaning machines, fillers, control machines.

M- Winding devices, woodworking machine feeders, goods lifts, balancers, threading machines, medium mixers, conveyor belts for heavy materials, winches, sliding doors, fertilizer scrapers, packing machines, concrete mixers, crane mechanisms, milling cutters, folding machines, gear pumps.

H- Mixers for heavy materials, shears, presses, centrifuges, rotating supports, winches and lifts for heavy materials, grinding lathes, stone mills, bucket elevators, drilling machines, hammer mills, cam presses, folding machines, turntables, tumbling barrels, vibrators, shredders.

IT FATTORE DI SERVIZIO

Il fattore di servizio (f_B) dipende dalle condizioni di funzionamento alle quali il riduttore è sottoposto.
I parametri che occorre considera re per una corretta selezione del fattore di servizio più adeguato sono:

- Tipo del carico della macchina azionata: **U - M - H**
- Durata di funzionamento giornaliero: **ore/giorno (Δ)**
- Frequenza di avviamento: **avv/ora (*)**

TIPO DEL CARICO:	**U** - Uniforme	$m_{af} \leq 0.3$
	M - Medio	$m_{af} \leq 3$
	H - Forte	$m_{af} \leq 10$

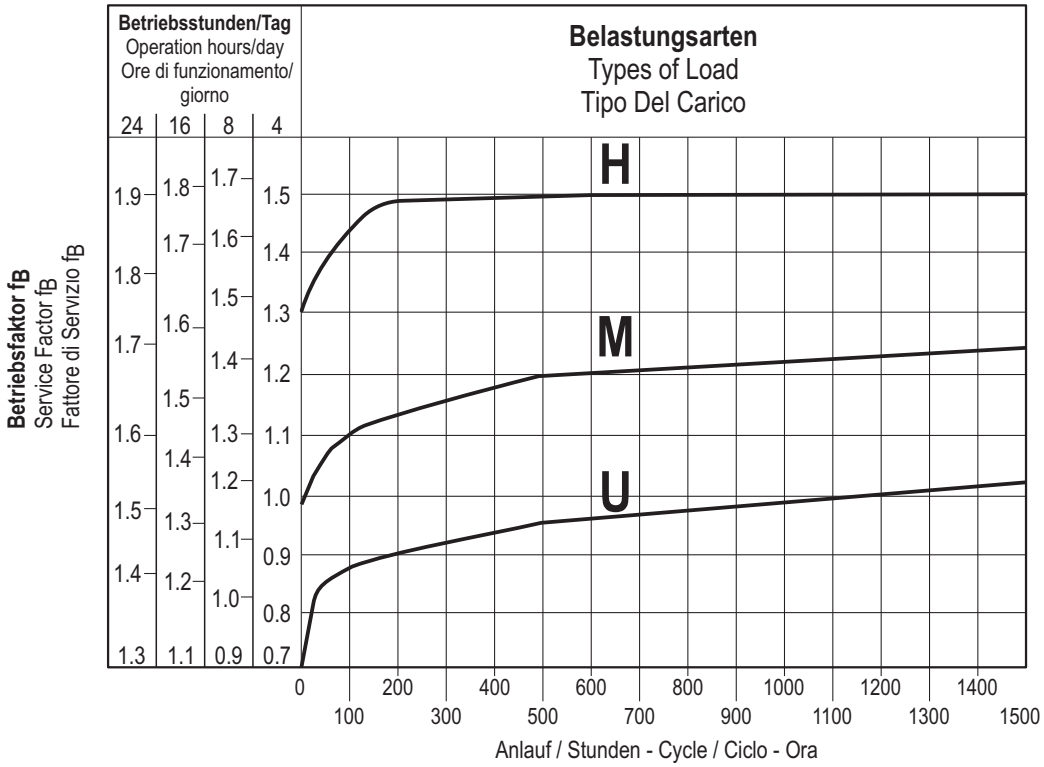
m_{af} = Je/Jm
- maf fattore d'inerzia
- Je (kgm²) momento d'inerzia esterno ridotto all'albero motore
- Jm (kgm²) momento d'inerzia motore

Se maf > 10 interpellare il ns. Servizio Tecnico.

U- Coclee per materiali leggeri, ventole, linee di montaggio, nastri trasportatori per materiali leggeri, piccoli agitatori, elevatori, macchine pulitrici, macchine riempitrici, macchine per il controllo,nastri trasportatori.

M- Dispositivi di avvolgimento, apparecchi per l'alimentazione delle macchine per il legno, montacarichi, equilibratrici, filettatrici, agitatori medi e mescolatori, nastri trasportatori per materiali pesanti, verricelli, porte scorrevoli, raschiatore di concime, macchine per l'imballaggio, betoniere, meccanismi per il movimento delle gru, frese, piegatrici, pompe a ingranaggi.

H- Agitatori per materiali pesanti, cesoie, presse, centrifughe, supporti rotanti, verricelli ed ascensori per materiali pesanti, torni per la rettifica, frantoi da pietre, elevatori a tazze, perforatrici, mulini martello, presse ad eccentrico, piegatrici, tavole rotanti, barilatrici, vibratori, trinciatrici.



FR FACTEUR DE SERVICE

Le facteur de service (f_B) est subordonné aux conditions de fonctionnement auxquelles le réducteur est soumis.
Les paramètres qu'il faut considérer pour un choix correct du facteur de service adéquat sont les suivants:

- Type de charge de la machine actionnée: U - M - H
- Durée de fonctionnement journalière: heures / jour (Δ)
- Fréquence de démarrage: dém / heure (*)

TYPE DE CHARGE:	**U** - Uniforme	$m_{af} \leq 0.3$
	M - Surcharge moyenne	$m_{af} \leq 3$
	H - Surcharge forte	$m_{af} \leq 10$

m_{af} = Je/Jm
- maf facteur d'inertie
- Je (kgm²) moment d'inertie extérieur ramené à l'arbre-moteur
- Jm (kgm²) moment d'inertie moteur

En cas de maf > 10, contacter notre S.ce Technique.

U- Vis d'Archimède pour matériaux légers, ventilateurs, lignes de montage,convoyeurs pour matériaux légers, petits agitateurs, élévateurs, machines à nettoyer, machines à remplir, machines pour le côntrole, convoyeurs.

M- Dispositifs d'enroulement, appareils pour l'alimentation des machines pour le bois, monte-charges, équilibreuses, taraudeuses, agitateurs moyens et mêlangeurs, convoyeurs pour matériaux lourds, treuils, portes coulissantes, racleurs d'engrais, machines à emballer, bétonnières, mécanismes pour le mouvement des grues, fraises, plieuses, pompes à engrenages.

H- Agitateurs pour matériaux lourds, cisailles, presses, centrifugeuses, supports rotatifs, treuils et ascenseurs pour matériaux lourds, tours pour la rectification, concasseurs de pierres, élévateurs à godets, perceuses, moulins à marteaux, presses à excentrique, plieuses, tables tournantes, polisseuses, vibrateurs, machines à hacher.

ES FACTOR DE SERVICIO

El factor de servicio (f_B) deende de las condiciónes de funcionamiento a las cuales está sometido el reductor.
Los parámetros que deben ser considerados para una correcta selección del factor de servicio más adecuado son:

- Tipo de carga de la máquina accionada: **U - M - H**
- Duración de funcionamiento diario: **horas/dia (Δ)**
- Frecuencia de arranques: **arr/hora (*)**

TIPO DE CARGA:	**U** - Uniforme	$m_{af} \leq 0.3$
	M - Sobrecarga media	$m_{af} \leq 3$
	H - Sobrecarga fuerte	$m_{af} \leq 10$

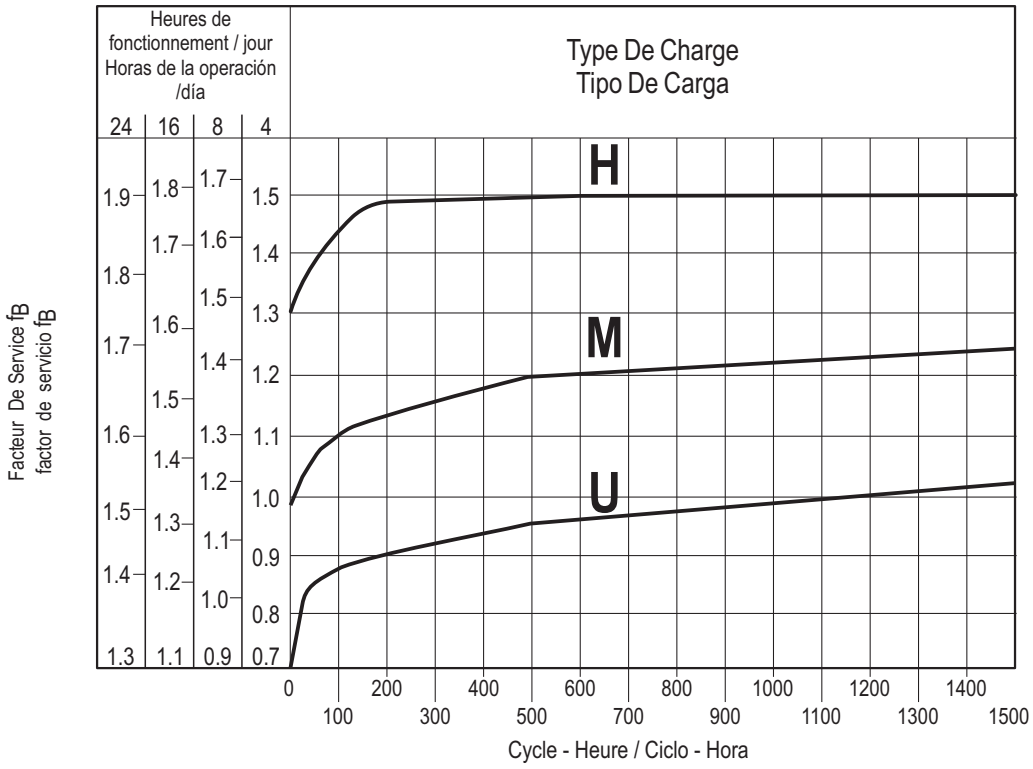
m_{af} = Je/Jm
- maf factor de inercia
- Je (kgm²) inercia externa reducida al eje motor
- Jm (kgm²) inercia motor

En caso de m_{af} > 10, ponerse en contacto con nuestro Servicio Técnico.

U- Tornillos de Arquímedes para materiales ligeros, ventiladores,líneas de montaje, cintas transportadoras para materiales ligeros, pequeños agitadores, elevadores, máquinas limpiadoras, máquinas llenadoras, máquinas comprobadoras, cintas trasportadoras.

M- Dispositivos de enrollado, alimentadores de las máquinas para la madera, montacargas, equilibradores, roscadoras, agitadores medios y mezcladores, cintas transportadoras para materiales pesados, cabrestantes, puertas corredizas, raspadores de abono, máquinas empaquetadoras, hormigoneras, mecanismos para el movimiento de las grúas, fresadoras, plegadoras, bombas de engranajes.

H- Agitadores para materiales pesados, cizallas, prensas, centrifugadoras, soportes rotativos, cabrestantes y elevadores para materiales pesados, tornos para la rectificación, molinos de piedras, elevadores de cangilones, perforadoras, moledores a percusión, prensas de excéntrica, plegadoras, mesas giratorias, pulidoras, vibradores, cortadoras.



DE KRITISCHE ANWENDUNGEN

Die im Katalog aufgeführten Leistungsdaten gelten für die Einbaulage M1 oder gleichwertig, wenn das Ritzel nicht völlig mit Öl geschmiert wird.
Für andere Einbaulagen und / oder besondere Antriebsdrehzahlen sind die Tafeln zu beachten, die verschiedene kritische Zustände für jede Getriebegröße darstellen. Darüber hinaus sind nachstehende Anwendungen zu beachten und eventuell sollte mit unserem Kundendienst Kontakt aufgenommen werden:

- Anwendungen mit sehr hohen Trägheitsmomenten.
- Anwendungen mit hohen dynamischen Beanspruchungen auf Getriebegehäuse.
- Einsatz bei Umgebungstemperaturen unter -5°C oder über 40°C.
- Nicht im Katalog vorgesehene Einbaulagen.
- Anwendungen, die bei Bruch des Getriebes für den Menschen gefährlich sein könnten.
- Einsatz als Übersetzungsgetriebe (Übersetzung ins Schnelle).
- Einsatz als Hebewinde.
- Einsatz unter einem Druck, der nicht dem normalem Luftdruck entspricht.
- Einsatz in Verbindung mit aggressiven chemischen Substanzen.
- Einsatz unter Salzwassereinwirkung.
- Einsatz unter radioaktiver Strahlung.

Anwendungen, bei denen das Eintauchen des Getriebes in Wasser vorgesehen ist (auch teilweise), sollen vermieden werden. Das max. zulässige Drehmoment (*) des Getriebes, darf nicht den zweifachen Wert des in der Leistungstabelle angegebenen nominalen Wert des Drehmomentes (f_B =1) übersteigen.
(*) Hierbei sind Überlasten gemeint, welche durch Anlaufen unter Volllast, Bremsungen, Stöße und weiter dynamische Ursachen, hervorgerufen werden.

EN CRITICAL APPLICATIONS

The performance given in the catalogue correspond to mounting position M1 or similar, ie. when the first stage is not entirely immersed in oil. For other mounting positions and/or particular input speeds, refer to the tables that highlight different critical situations for each size of reduction unit. It is also necessary to take due consideration of and carefully assess the following applications by calling our Technical Service:

- Applications with especially high inertia.
- Applications with high dynamic strain on the case of the reduction unit.
- In places with T° under -5°C or over 40°C
- Monting positions not envisaged in the catalogue.
- Use in services that could be hazardous for people if the reduction unit fails..
- As a speed increasing.
- Use as a lifting winch.
- Use in environments pressures other than atmospheric pressure.
- Use in chemically aggressive environments.
- Use in a salty environment
- Use in radioactive environments.

Avoid applications where even partial immersion of the reduction unit is required.
The maximum torque (*) that the gear reducer can support must not exceed two times the nominal torque (f_B=1) stated in the performance tables.
(*) intended for momentary overloads due to starting at full load,braking, shocks or other causes, particularly those that are dynamic.

IT APLLICAZIONI CRITICHE

Le prestazioni indicate a catalogo corrispondono alla posizione M1 o similari, quando cioè il primo stadio non è interamente immerso in olio. Per situazioni di piazzamento diverse e/o velocità di ingresso particolari attenersi alle tabelle che evidenziano situazioni critiche diverse per ciascuna taglia di riduttore. Occorre anche tenere nella giusta considerazione e valutare attentamente le seguenti applicazioni consultando il ns. Servizio Tecnico:

- Applicazioni con inerzie particolarmente elevate.
- Applicazioni con elevate sollecitazioni dinamiche sulla cassa del riduttore.
- Utilizzo in ambiente con T° inferiore a -5°C o superiore a 40°C
- Posizioni di piazzamento non previste a catalogo.
- Utilizzo in servizi che potrebbero risultare pericolosi per l'uomo in caso di rottura del riduttore.
- Utilizzo come moltiplicatore.
- Utilizzo come argano di sollevamento.
- Utilizzo in ambiente con pressione diversa da quella atmosferica.
- Utilizzo in ambiente con presenza di aggressivi chimici.
- Utilizzo in ambiente salmastro.
- Utilizzo in ambiente radioattivo.

Evitare applicazioni dove è prevista l'immersione, anche parziale, del riduttore. La coppia massima (*) sopportabile dal riduttore non deve superare ildoppio della coppia nominale (f_B =1) riportata nelle tabelle delle prestazioni.
(*)intesa come sovraccarico istantaneo dovuto a avviamenti a pieno carico, frenature, urti ed altre cause soprattutto dinamiche.

A/F	202	202 G	252 - 253	301-302-303	351-352-353	401-402-403	501-502-503	601-602-603	701-702-703	902-903
M4 : 1500 < n1 < 3000	P	P	-	-	-	-	-	-	P	P
n1 > 3000	X	X	P	P	P	P	P	P	X	X
M2	P	P	P	P	P	P	P	P	P	P

X Nicht empfohlene Anwendung
Application not recommended
Applicazione sconsigliata

P Anwendung überprüfen und/oder mit unserem Kundendienst Kontakt aufnehmen.
Check the application and/or call our technical service.
Verificare l'applicazione e/o contattare il ns. servizio tecnico.

FR APPLICATIONS CRITIQUES

Les performances indiquées sur le catalogue correspondent à la position M1 ou similaires, lorsque le premier train d'engrenage n'est pas entièrement immergé dans l'huile.
Pour les combinaisons d'assemblage différentes et/ou les vitesses d'entrée particulières, se conformer aux tableaux qui mettent en évidence les différentes situations critiques pour chaque taille de réducteur.
Il faut aussi prendre en considération et évaluer attentivement les applications suivantes, en consultant notre S.ce Technique:

- Applications avec inerties particulièrement élevées.
- Applications avec sollicitations dynamiques sur la carcasse du réducteur.
- Emploi en milieu avec température au - dessous de -5°C ou au-dessus de 40°C.
- Positions de montage non prévues sur le catalogue.
- Emploi en services qui pourraient être dangereux pour l'homme en cas de rupture du réducteur.
- Emploi comme multiplicateur.
- Emploi comme treuil, en cas de soulèvement.
- Emploi en milieu ayant une pression différente de celle atmosphérique.
- Emploi en milieu en présence d'agents chimiques aggressifs.
- Emploi en milieu saumâtre.
- Emploi en milieu radioactif.

Eviter les applications dans lesquelles l'immersion du réducteur, même si partielle, est prévue. Le couple maximum (*) supporté par le réducteur ne doit pas être supérieur au double du couple nominal (f_B=1) suivant notre table de prestation.
(*) Entendu comme surcouple instantané dû à démarrages en pleine charge, freinages, chocs et autres causes surtout dynamiques.

ES APLICACIÓNES CRITICAS

Las prestaciones indicadas en el catálogo corresponden a la posición M1 o similares, cuando el primer tren de engranajes no está completamente inmergido en el aceite.
Para posiciónes de montaje distintas y/o de velocidades particulares a la entrada, atenerse a las tablas que ponen en evidencia las distintas situaciónes criticas por cada tamaño de reductor. Además es necesario considerar y evaluar cuidadosamente las siguientes aplicaciónes, poniendose en contacto con nuestro Servicio técnico:

- Aplicaciónes con inercias particularmente elevadas.
- Aplicaciónes con esfuerzos dinámicos elevados sobre la carcasa del reductor.
- Utilización en ambiente con T° inferior a -5°C o superior a 40°C.
- Posiciónes en montaje no previstas en el catálogo.
- Utilización en servicios que, en caso de ruptura del reductor, podrían resultar peligrosos para el hombre.
- Utilización como multiplicador.
- Utilización como cabrestante de levantamiento.
- Utilización en ambiente con presión distinta de la atmosférica.
- Utilización en ambiente con presencia de agentes quimicos agresivos.
- Utilización en ambiente salino.
- Utilización en ambiente radioactivo.

Evitar aplicaciónes donde es prevista la inmersión, aún parcial, del reductor. El par maximo (*) soportable por el reductor no debe superar el doble del par nominal (f_B=1) indicado en la tabla de prestaciones.
(*) Entendida como sobrecarga instantanea debida a puestas en marcha a plena carga, frenados, impactos y otras causas sobretodo dinamicas.B

A/F	202	202 G	252 - 253	301-302-303	351-352-353	401-402-403	501-502-503	601-602-603	701-702-703	902-903
M4 : 1500 < n1 < 3000	P	P	-	-	-	-	-	-	P	P
n1 > 3000	X	X	P	P	P	P	P	P	X	X
M2	P	P	P	P	P	P	P	P	P	P

X Application non conseillée
Aplicación desaconsejada

P Verifier l'application et/ou contacter notre s.ce technique.
Controlar la aplicación y/o ponerse en contacto con nuestro servicio técnico.

DE THERMISCHE LESITUNG Pt [kW]

Die folgende Tabelle enthält die Werte der thermischen Nennleistung in kW unter den folgenden Referenzbedingungen:
- Montageposition M1
- Dauerbetrieb mit Eingangsgeschwindigkeit ≤1500rpm
- Umgebungstemperatur von 25°C
- Höhe über dem Meeresspiegel
- Geschwindigkeit der Luft im Getriebeinneren ≥1m/s
- Abwesenheit von radialen und/oder axialen externen Belastungen

EN THERMAL POWER Pt [kW]

The table below list the nominal thermal power values expressed in kW, in the following reference conditions:
- mounting position M1
- continuous operation at input speed ≤=1500 rpm
- ambient temperature 25°C
- sea level altitude
- air speed near the gear reducer ≥=1m/s
- absence of external radial and/or axial loads

IT POTENZA TERMICA Pt [kW]

La seguente tabella riporta i valori di potenza termica nominale espressa in kW nelle seguenti condizioni di riferimento:
- posizione di montaggio M1
- funzionamento continuo con velocità di entrata ≤=1500 rpm
- temperatura ambiente di 25°C
- altitudine pari al livello del mare
- velocità dell'intorno del riduttore ≥=1m/s
- assenza di carichi radiali e/o assiali esterni

Thermische Leistungen bei 1500 rpm / Thermal power values at 1500 rpm / Potenza termiche a 1500 rpm

Getriebe / Gear reducer / Riduttore	Pt [kW]
202	-
202 G	-
252 - 253	5.0
301	6.0
302 - 303	7.0
351	8.5
352 - 353	9.0
401	13.5
402 - 403	15.5
502 - 503	24.0
501	27.2
602 - 603	30.0
601	51.5
702 - 703	36.0
701	67.5
902 - 903	49.0

Durch die Anwendung einer die Pt nicht übersteigenden Leistung an das Getriebe wird eine ausreichende Schmierung und eine gute Funktionsweise des Getriebes gewährleistet.

Prüfung der Anwendung
Mit Ausnahme von durchgängigen Betriebszeiten unter zwei (2) Stunden und anschließenden Pausen, bei denen das Getriebe auf die Umgebungstemperatur abkühlt, ist es ratsam bei jeder Anwendung die thermische Grenze des Getriebes mit der folgenden Formel zu überprüfen:

P1<Pt*Fc*Fv*Fa

dabei ist :
- **P1 =** Eingangleistung des Getriebes 1400 rpm (Motor mit 4 Polen)
- **Pt =** Thermische Leistung unter Referenzbedingungen (siehe Tabelle oben)
- **Fc =** Korrekturfaktor für Umgebungstemperatur und Betrieb
- **Fv =** Korrekturfaktor für Belüftung
- **Fa =** Korrekturfaktor für Höhe über NN

Die Korrekturfaktoren beziehen sich auf Betriebsbedingungen, die von den Referenzbedingungen abweichen und werden in den folgenden ISO14179 Tabellen aufgeführt:

Applying a power level not exceeding Pt at the above montioned reference conditions guarantees the correct lubrication and efficiant operation of the gear reducer.

Application check
Except for continuous operating times below two (2) hours and successive pauses capable of bringing the gear reducer back to ambient temperature, for each application it is advisable to verify the gear reducer's thermal limit according to the following formula:

P1<Pt*Fc*Fv*Fa

where:
- **P1=** input power to the gear reducer at 1.400 rpm (4-pole motors)
- **Pt =** thermal power at reference conditions (see above table)
- **Fc =** ambient and operating temperature correction factor
- **Fv =** ventilation correction factor
- **Fa =** altitude correction factor

The correction factors refer to different operating conditions compared to the reference conditions, and are provided by following ISO 14179 tables:

Applicando al riduttore, nelle suddette condizioni di riferimento una potenza non superiore a Pt, risultano garantiti una corretta lubrificazione ed il buon funzionamento del riduttore.

Verifica della applicazione
Fatta eccezione per tempi di funzionamento continuo inferiori a due (2) ore e successive pause in grando di riportare il riduttore a temperatura ambiente, per ogni applicazione è consigliablie eseguire la verifica del limite termico del riduttore, secondo la seguente formula:

P1<Pt*Fc*Fv*Fa

dove:
- **P1 =** potenza in ingresso al riduttore a 1400 rpm (motori a 4 poli)
- **Pt =** potenza termica in condizioni di riferimento (vedi tabella sopra)
- **Fc =** fattore correttivo di temperatura ambiente e servizio
- **Fv =** fattore correttivo di aerazione
- **Fa =** fattore correttivo dell'altitudine

I fattori correttivi sono relativi a condizioni operative differenti da quelle di riferimento, e sono forniti dalle seguenti tabelle ISO14179:

FR PUISSANCE THERMIQUE Pt [kW]

Le tableau suivant présente les valeurs de puissance thermique nominale exprimées en kW dans les conditions de référence suivantes:
• position de montage M1
• fonctionnement continu avec vitesse d'entrée ≤= 1500tr/min
• température ambiante de 25°C
• altitude égale au niveau de la mer
• vitesse de l'air à proximité du réducteur ≥= 1m/s
• absence de charges radiales et/ou axiales externes

ES POTENCIA TÉRMICA Pt [kW]

La siguente tabla contiene los valores de potencia térmica nominal expresada en kW en las siguientes condiciones de referencia:
• posición de montaje M1
• funcionamiento continuo con velocidad de entrada ≤=1500rpm
• temperature ambiente de 25°C
• altura sobre el nivel del mar
• velocidad del aire en torno al reductor ≥=1m/s
• ausencia de cargas radiales y/o axiales externas

Puissances thermiques à 1500 rpm / Potencias térmicas a 1500 rpm	
Réducteur / Reductor	**Pt [kW]**
202	-
202 G	-
252 - 253	5.0
301	6.0
302 - 303	7.0
351	8.5
352 - 353	9.0
401	13.5
402 - 403	15.5
502 - 503	24.0
501	27.2
602 - 603	30.0
601	51.5
702 - 703	36.0
701	67.5
902 - 903	49.0

L'application au réducteur d'une puissance inférieure à la Pt, dans les conditions de référence indiquées ci-dessus, garantit une lubrification correcte et le bon fonclonnement du réducteur.

Vérification de l'aplication
À l'exception de périodes de fonctionnement continu inférieures à deux (2) heures et de pauses successives permettant au réducteur de redescendre à une température ambiante pour toute application, il est conseillé d'effectuer une vérification de la limite thermique du réducteur, selon la formule suivante

P1<Pt*Fc*Fv*Fa

où:
P1 = puissance d'entrée au réducteur à 1400tr/min (moteurs à 4 o-pôles)
Pt = puissance thermique dans les conditions de référence (voir tableau ci-dessus)
Fc = facteur de correction de temérature ambiante et de service
Fv = facteur de correction d'aération
Fa = facteur de correction de l'altitude

Les facteurs de correction correspondent à des conditions de fonctionnement différentes de celles de référence, et sont fournis par les tableux ISO14179 suivants:

En las condiciones de referencia mencionadas,aplicando al reductor una potencia no mayor que la Pt, se garantiza una correcta lubricación y el buen funcionamiento del reductor.

Controlar la aplicación
Salvo cuando los tiempos de funcionamiento continuo son menores que dos (2) horas y se producen pausas capaces de llevar el reductor a la temperatura ambiente, para cada aplicación es aconsejable realizar la verificación del límite térmico del reductor, según la siguiente fórmula:

P1<Pt*Fc*Fv*Fa

donde:
P1 = potencia a la entrada del reductor a 1400rpm (motores de 4 polos)
Pt = potencia térmica en condiciones de referencia (ver la tabla de arriba)
Fc = factor de correccion de la temperatura ambiente y servicio
Fv = factor de corrección de aireación
Fa = factor de corrección de la altitud

Los factores de corrección son relativos a condiciones operativas diferentes a las de referencia y se ancuentran en las siguientes tablas ISO14179:

DE THERMISCHE LEISTUNG Pt [kW]

EN THERMAL POWER Pt [kW]

IT POTENZA TERMICA Pt [kW]

Fc		Betriebszeit in % pro Stunde / Duty per hour of operation % / Servizio a carico ora di funzionamento %				
		100	80	70	40	20
Umgebung-stemperatur Ambient temperature Temperatura ambiente	10°C	1.15	1.21	1.32	1.55	2.07
	18°C	1.07	1.12	1.23	1.44	1.93
	25°C	1.00	1.05	1.15	1.35	1.80
	30°C	0.93	0.98	1.07	1.26	1.67
	40°C	0.83	0.87	0.95	1.12	1.49
	43°C	0.75	0.79	0.86	1.01	1.35
	50°C	0.67	0.70	0.77	0.90	1.21

Geschwindigkeit der Umgebungsluft / Ventilation correction factor / Velocità dell'aria ambientale	Fv
Stehende Luft (<0,5 m/s) / Stagnant air (<0,5 m/s) / Aria stagnante (<0,5 m/s)	0.75
Installation in gaschlossenen Räumen mit geringer Luftzirkulation / Indoor installation with slight ventilation / Installazione al chiuso con lieve aerazione	1
Installation in geschlossenen Räumen mit guter Luftzirkulation (>1,4 m/s) / Indoor İnstallation with good ventilation (>1,4 m/s) / Installazione al chiuso con aerazione (>1,4 m/s)	1.4
Installation im Freien (>3,7 m/s) / Outdoor installation (>3,7 m/s) / Installazione all'aperto (>3,7 m/s)	1.9

Höhe über NN / Altitude correction factor / Altitudine	Fa
0*	1
750	0.95
1500	0.90
2250	0.85
3000	0.81

*Meeresniveau

*Sea level

*Livello del mare

Im Fall eines Betriebs mit Eingangsgeschwindigkeiten über 2000 rpm oder bei Umgebungstemperaturen über 40°C wird empfohlen, den Kundendients zu kontaktieren.

In caso of operation at input speeds exceeding 2000 rpm, or ambient temperatures greater than 40°C it is advisable to contact out technical department.

In caso di funzionamento con velocità di ingresso maggiori di 2000 rpm, o temperature ambiente maggiori di 40°C è consigliabile contattare il ns servizio di assistenza.

FR PUISSANCE THERMIQUE Pt [kW]

ES POTENCIA TÉRMICA Pt [kW]

Fc		Facteur de marche par heure de fonctionnement % / Servicio con carga por hora de funcionamiento %				
		100	80	70	40	20
Température ambiante Temperatura ambiente	10°C	1.15	1.21	1.32	1.55	2.07
	18°C	1.07	1.12	1.23	1.44	1.93
	25°C	1.00	1.05	1.15	1.35	1.80
	30°C	0.93	0.98	1.07	1.26	1.67
	40°C	0.83	0.87	0.95	1.12	1.49
	43°C	0.75	0.79	0.86	1.01	1.35
	50°C	0.67	0.70	0.77	0.90	1.21

Vitesse de l'air ambiant / Velocidad del arie ambiental	Fv
Air stagnant (<0,5 m/s) / Aire estancado (<0,5 m/s)	0.75
Installation en intérieur avec une légère aération / Instalación cubierta con poca aireación	1
Installation en intérieur avec une aération correcte (>1,4 m/s) / Instalación cubierta con buena aireación (>1,4 m/s)	1.4
Installation en extérieur (>3,7 m/s) / Instalación al aire libre (>3,7 m/s)	1.9

Altitude / Altitud	Fa
0*	1
750	0.95
1500	0.90
2250	0.85
3000	0.81

*Niveau de la mer

*Nivel del mar

En cas de fonctionnement avec des vitesses d'entrée supérieures à 2000 tr/min ou en présence de températures ambiantes supérieures à 40°C, il est conseillé de contacter notre service d'assistance.

En el caso de funcionamiento con velocidades de entrada mayores que 2000 rpm o temperaturas ambiente mayores que 40°C es aconsejable llamar a nuestro servicio de asistencia técnica.

DE MONTAGE DES MOTORS AN DEN PAM-IEC FLANSCH B5

Bei Getrieben, welche ohne Motor geliefert werden, sind folgende Vorsichtsmaßnahmen zu beachten, um eine korrekte Montage des Elektromotors zu gewährleisten.

Übereinstimmung der Toleranzen von Welle und Motorflansch überprüfen.

Diese sollten mindestens DIN 42955 N entsprechen. Welle, Passung und Flanschfläche sind sorgfältig von Schmutz, Spänen oder Lackresten zu säubern.

Halbkupplung auf Motor (siehe Bild) einsetzen, andernfalls sind die korrekte Ausrichtung und die Toleranz der Paßfeder zu überprüfen. In jedem Fall sind solche Montageverfahren anzuwenden, die Schäden an den Motorlagern ausschließen.

Motor anbauen, wobei zuerst darauf geachtet werden muss, dass die Halbkupplung auf dem Motor und der elastische Zwischenring auf der Getriebehalbkupplung frei eingreifen können.

Keine Anpassung der Motorpaßfeder ist in diesem Fall erforderlich.

EN MOTOR MOUNTING WITH PAM FLANGE B5

When the unit is supplied w ithout motor, it is necessary to follow these recommendation to ensure the correct assembly of the electric motor.

Check that the tolerances for the motor shaft and flange correspond to the standard.

Carefully clean the shaft, spigot and surfaces of the flange removing traces of paint and dirt, and confirm the key is fitted correctly.

Fit the half coupling to the motor shaft (see picture) taking care to ensure the motor shaft and bearings are not damaged by avoiding excessive force and where necessary using assembly equipment.

Place the couplings elastic element on to the motor half coupling and position the motor up to the gear unit ensuring the coupling element is aligned with the driven half coupling.

Complete the assembly using the fixing bolts. Key-ways with tightened tolerances.

IT MONTAGGIO MOTORE SU FLANGE PAM-IEC B5

Quando il gruppo viene fornito senza motore occorre osservare le seguenti raccomandazioni per garantire un correcto montaggio del motore elettrico.

Controllare che le tolleranze dell'albero e della flangia motore siano corrispondenti almeno a una classe di qualità "normale".

Pulire accuratamente l'albero, il centraggio ed il piano della flangia da sporco o tracce di vernice.

Procedere al montaggio del semigiunto (vedi figura) sull'albero del motore elettrico che deve avvenire senza eccessiva forzatura, in caso diverso controllare la coretta posizione e la tolleranza della linguetta motore;

Procedere quindi al montaggio del motore completo di semigiunto fasando i denti di trascinamento del semigiunto lato motore con quelli dell'elemento elastico presente sul semigiunto fisso lato riduttore.

Non è previsto nessun adattamento della linguetta motore.

FR INSTALLATION MOTEUR SUR BRIDE PAM-IEC B5

Quand le groupe est fourni sans moteur, observez les recommandations suivantes pour garantir un montage correct du moteur électrique.

Contrôler que les tolérances de l'arbre et de la bride du moteur correspondent au moins à une classe de qualité "normale".

Nettoyer soigneusement l'arbre, le centrage et le plan de la bride des traces de saleté et de peinture.

Procéder au montage de demi - accouplement sur l'arbre moteur électrique sans forcer (voir image), dans le cas contraire, vérifier la position correcte et la tolérance de la clavette du moteur.

Utiliser, toutefois, des systémes appropriés qui garantissent un montage correct sans risquer de détériorer les roulements du moteur. Procéder de la même façon pour le montage du moteur avec le demiaccouplement coté moteur avec de l'élément élastique du demiaccouplement coté réducteur.

Rainures clavette moteur avec tolérances réduites.

ES MONTAJE DE MOTORES CON BRIDA B5

Sie al equipo se suministra sin motor es preciso observar las siguientes recomendaciones para garantizar un correcto montaje del motor eléctrico.

Verificar que la tolerancia del eje y de la brida motor se correspondan al menos a una clase de calidad "normal".

Limpiar cuidadosamente el eje, el centraje y el plano de asiento de restos de barniz o suciedad.

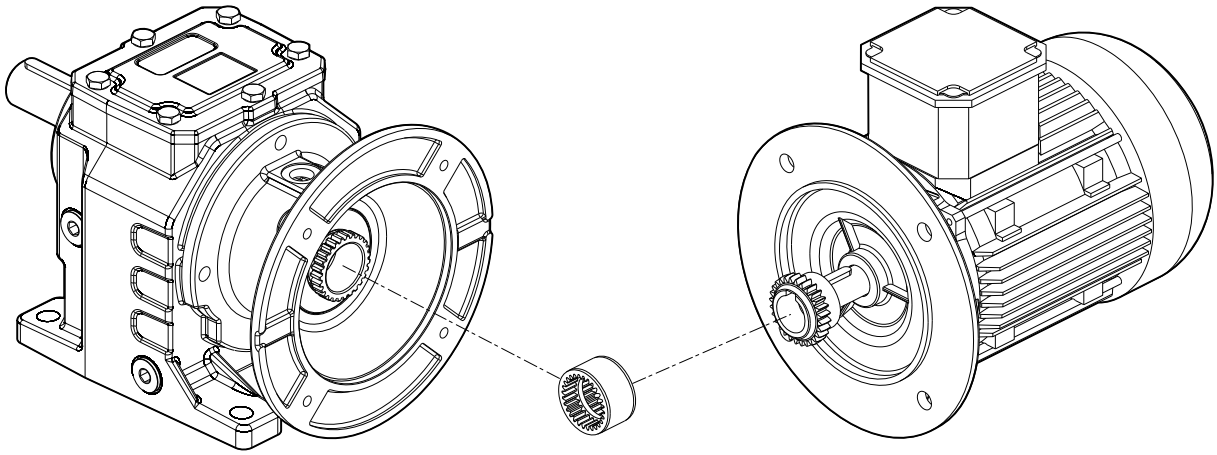
Proceder al montaje del semiacoplamiento en el eje del motor eléctrico sin excesiva fuerza, si no entra con suavidad verificar la correcta tolerancia de la chaveta del motor (ver imagen), utilizar en cualquier caso métodos de montaje que no dañen los rodamientos del motor.

Proceder a continuación al montaje del motor con el semiacoplamiento en el reductor, evitando la interferencia de los dientes del acoplamiento.

No se prevé ninguna adaptación de la chaveta del motor.

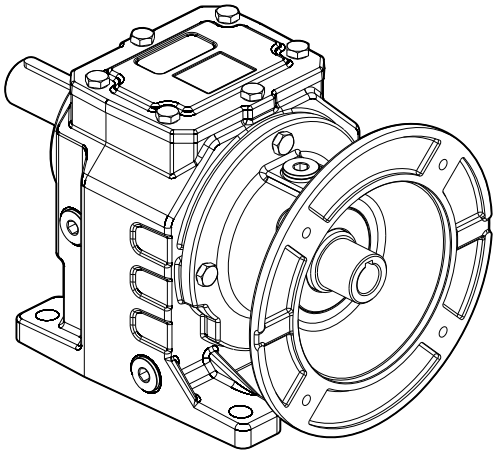
ELASTISCHE KUPPLUNG / FLEXIBLE JOINT / GIUNTO ELASTICO / ACCOUPL. ÉLASTİQUE / ACOPL.ELÁSTICO

A - F IEC



PAM BUCHSE / PAM SLEEVE / MANICOTTO PAM / MANCHON PAM / MANGUİTO PAM

A - F PAM



DE MONTAGE

Der korrekte Einbau des Getriebes in die entsprechende Vorrichtung der Applikation ist Voraussetzung, um einen einwandfreien und dauerhaften Betrieb zu gewährleisten. Vorallem die Oberflaechen der Zentrierungen/Aufnahme sind in einer Toleranz H8 zu fertigen, damit die einwandfreie Uebereinstimmung mit der Getriebeachse garantiert wird.
Für die Montage des Getriebes sind nachstehende Anweisungen zu beachten:

- Für im Freien betriebene Maschinen wird empfohlen, das Getriebe soweit wie möglich vor Witterungseinflüssen zu schützen sowie mit Rostschutzmittel zu behandeln. Die Dichtringe sind mit wasserabweisendem Fett zu versehen.
- Für die Befestigung sind die Schrauben zu verwenden, die in der Zeichnung / Teileliste des Modells vorgesehen sind. Dazu sind alle vorgesehenen Befestigungsbohrungen zu verwenden
- Der Anbau des Getriebes an Elektro oder Hydraulikmotor erfolgt normalerweise direkt über Flansche; vor allem, wenn eine außergewöhnliche Situation vorliegt, die nach erfolgtem Einbau Schäden verursachen könnte.
- Die Befestigung an der Maschine muss absolut stabil sein, um jegliche Vibrationen zu vermeiden.
- Vor der Montage des Getriebes an die Maschine ist die Abtriebswelle des Getriebes auf die richtige Drehrichtung zu prüfen.
- Nach besonders langer Einlagerung (4/6 Monate) ist zu überprüfen, ob die Wellendichtringe vom Schmiermittel des Getriebes vollständig benetzt wurden; Andernfalls ist ein Austausch anzuraten, da die Dichtlippe auf der Welle festkleben kann oder die zum einwandfreien Betrieb notwendige Elastizität nicht mehr vorhanden ist.
- Die Motorkühlung muss durch eine gute Belüftung durch den Lüfter gewährleistet werden. Bei Umgebungstemperaturen < -5°C oder > +40°C setzen Sie sich bitte mit dem Kundendienst in Verbindung.
- Zur Montage der unterschiedlichen Anbauteile (Riemenscheiben, Zahnräder, Kupplungen, Wellen usw.) auf den Hohl - oder Vollwellen sind die vorgesehenen Gewindebohrungen oder Aufziehvorrichtungen zu verwenden.
  Diese gewährleisten eine einwandfreie Montage, ohne die Lager oder die Außenteile des Getriebes zu beschädigen.
  Die in Berührung kommenden Passungen und Oberflächen der Wellen sind zu fetten/ölen, um ein Festfressen durch Passungsrost zu vermeiden.
- Bei Lackierung ist darauf zu achten, dass alle Gummiteile und fallweise die in den Entlüftungsdeckeln vorhandenen Bohrungen nicht überlackiert werden.
- Bei Getrieben mit Ölstopfen ist die zum Transport verwendete Verschlußschraubedurch durch die beigelegte Entlüftungsschraube zu ersetzen.
- Der Schmierölstand ist an der Füllstandanzeige zu überprüfen, sofern vorhanden.Der Antrieb ist stufenweise in Betrieb zu nehmen, wobei zunächst mit Teillast angefahren werden sollte.
- Sind unter dem Antrieb Geräteteile oder Materialien angeordnet, die durch geringe Mengen austretenden Öls beschädigt werden könnten, so ist eine geeignete Schutzvorrichtung vorzusehen.

EN INSTALLATION

For the longest and most efficient service life, drives must be correctly mounted on the application structure. Therefore, all structure faces must be machined with H8 spigots so that they are flat and perpendicular to the drive axis.
To install the reduction unit it is necessary to note the following Recommendations:

- For outdoor installations, drives must be protected against bad weather, treated with anticorrosive agents and oil seals protected with water-repellent grease.
- To secure the drive, use the nuts and bolts shown under each technical drawing on the product technical sheets. Make sure to use all the fixing holes on the flanges.
- Drives are usually connected directly to what are mainly electric or hydraulic motors by means of flanges when there are particularly critical conditions that might cause damage after installation.
- The mounting on the machine must be stable to avoid any vibration.
- Before installing gearbox to your machine, please check rotation direction of output shaft is correct or not.
- Check the correct direction of rotation of the storage (4/6 months), if the oil seal is not immersed in the lubricant inside the unit, it is recommended to change it since the rubber could stick to the shaft or may even have lost the elasticity it needs to function properly.
- Ensure the motor cools correctly by assuring good passage of air from the fan side. In the case of ambient temperatures < -5°C or >+40°C call the Technical Service.
- The various parts (pulleys, gear wheels, couplings, shafts, etc.) must be mounted on the solid or hollow shafts using special threaded holes or other systems that anyhow ensure correct operation without risking damage to the bearings or external parts of the units. Lubricate the surfaces in contact to avoid seizure or oxidation.
- Painting must definitely not go over rubber parts and the holes on the breather plugs, if any.
- For units equipped with oil plugs, replace the closed plug used for shipping with the special breather plug.
- Check the correct level of the lubricant through the indicator, if there is one.Starting must take place gradually, without immediately applying the maximum load.
- When there are parts, objects or materials under the motor drive that can be damaged by even limited spillage of oil, special protection should be fitted.

IT INSTALLAZIONE

Per garantire un buon funzionamento de riduttori ed una miglior durata nel tempo è necessario un corretto accoppiamento alla struttura cui viene fissato il gruppo.
Pertanto le superfici di tale struttura dovranno essere lavorate con centraggi in H8 ed in modo da garantire un'ottima planarità e perpendicolarità con l'asse del riduttore. Per l'installazione del riduttore è consigliabile attenersi alle seguenti indicazioni:

- Per gruppi installati all'aperto si consiglia dove possibile, di proteggere i riduttori dalle intemperie, di trattarli con sistemi anticorrosivi e di proteggere i paraoli con grasso idrorepellente.
- Per il fissaggio del riduttore usare la bulloneria indicata sotto ogni disegno nelle schede tecniche di prodotto. Usare inoltre tutti i fori di fissaggio previsti sulle flange dei riduttori.
- L'abbinamento fra riduttori e motori, principalmente elettrici o idraulici, viene normalmente fatto mediante flangiatura diretta quando non si presentano particolari condizioni di criticità, che possono provocare danni dopo l'installazione.
- Il fissaggio sulla macchina deve essere stabile per evitare qualsiasi vibrazione.
- Verificare il correcto senso di rotazione dell'albero di uscita del riduttore prima del montaggio del gruppo sulla macchina.
- In caso di periodi particolarmente lunghi di stoccaggio (4/6 mesi) se l'anello di tenuta non è immerso nel lubrificante contenuto all'interno del gruppo si consiglia la sua sostituzione in quanto la gomma potrebbe essersi incollata all'albero o addirittura aver perso quelle caratteristiche di elasticità necessarie al corretto funzionamento.
- Garantire un corretto raffreddamento del motore assicurando un buon passaggio d'aria dal lato ventola.
  Nel caso di temperature ambiente <-5°C o >+40°C contattare il servizio Assistenza Tecnica.
- Il montaggio dei vari organi (pulegge, ruote dentate, giunti, alberi, ecc.) sugli alberi pieni o cavi deve essere eseguito utilizzando appositi fori filettati o altri sistemi che comunque garantiscano una corretta operazione senza rischiare il danneggiamento dei cusci netti o delle parti esterne dei gruppi.
- Lubrificare le superfici a contatto per evitare grippaggi o ossidazioni.
- La verniciatura non deve assolutamente interessare le parti in gomma e i fori esistenti sui tappi di sfiato, quando presenti.
- Per i gruppi provvisti di tappi per olio sostituire il tappo chiuso utilizzato per la spedizione con l'apposito tappo di sfiato.
- Controllare il correcto livello del lubrificante tramite, quando prevista, l'apposita spia. La messa in funzione deve avvenire in maniera graduale, evitando l'applicazione immediata del carico massimo.
- Quando sotto alla motorizzazione sono presenti organi, cose o materiali danneggiabili dall'eventuale fuoriuscita, anche limitata, di olio è opportuno prevedere un'apposita protezione.

FR INSTALLATION

Pour garantir le bon fonctionnement des réducteurs et leur durée de vie maximum, il est indispensable d'assurer un bon accouplement à la structure sur laquelle le groupe doit être fixé. Aussi, les surfaces de cette structure doivent être usinées par des centrages en H8 et de façon à garantir une planéité optimale et une perpendicularité par rapport à l'axe du réducteur. Pour l'installation du réducteur, il faut se conformer aux indications suivantes:

- Pour les groupes installés à ciel ouvert, il est conseillé, dans la mesure du possible, de mettre les réducteurs à l'abri des intempéries, de les traiter avec des produits anti-corrosion et de protéger les joints d'étanchéité à l'aide de la graisse hydrofuge.
- Pour effectuer la fixation du réducteur, utiliser les boulons indiqués sous chaque dessins de s fiches techniques du produit. En outre, utiliser tous les trous de fixation prévus sur les brides des réducteurs.
- L'assemblage des réducteurs aux moteurs principalement électriques ou hydrauliques, est généralement assuré par bridage direct en l'absence de conditions critiques particulières susceptibles d'endommager l'installation.
- La fixation sur la machine doit être stable pour éviter toute vibration.
- Avant le montage du groupe sur la machine, vérifier que le sens de rotation de l'arbre de sortie du réducteur soit correct.
- En cas de périodes de stockage particulièrement longues (4/6 mois), si la bague d'étanchéité n'est pas immergée dans le lubrifiant contenu à l'intérieur du groupe, on conseille son remplacement, car le caoutchouc pourrait être collè à l'arbre ou avoir perdu les caractéristiques d'élasticité nécessaires à un fonctionnement correct.
- Vérifier que le refroidissement du moteur soit suffisant, en assurant un bon passage d'air du côté ventilateur. En cas de températures ambiante < -5°C ou > +40°C, contacter le S.ce techniques.
- Le montage de différents organes (poulies, roues dentées, accouplements, arbres, etc.) sur les arbres pleins ou creux doit être effectué en utilisant les trous filetés ou d'autres systémes assurant de toute façon une opération correcte, sans risquer d'endommager les roulements ou les parties extérieures des groupes. Lubrifier les surfaces en contact, afin d'éviter le grippage ou l'oxydation.
- La peinture ne doit absolument pas toucher les parties en caoutchouc et, si présents, les trous sur les bouchons d'évent.
- Pour les groupes avec bouchons d'huile, remplacer le bouchon, utilisé l ors de l'expédition, par le bouchon d'évent.
- Côntroler, grâce au voyant (si prévu), que le niveau du lubrifiant correspond. La mise en marche doit s'effectuer d'une façon graduelle, en évitant l'application immédiate de la charge maximale.
- Si des organes, des choses ou des matériels pouvant être endommagés par l'éventuelle sortie d'huile, même si limitée, sont présents sous la motorisation, il faut prévoir une protection adéquate.

ES INSTALACIÓN

Para garantizar un buen funcionamiento de los reductores y una mayo duración se deberá realizar un correcto acoplamiento a la estructura en la que se fija el grupo. Por tanto las superficies de dicha estructura tendrán que estar bien planas y los ejes de los agujeros respetar una tolerancia H8, de este modo se podrá garantizar una óptima planaridad y perpendicularidad con el ejedel reductor. Para la instalación del reductor, atenerse a las siguientes indicaciónes:

- Para los grupos instalados al aire libre se aconseja, donde sea posible, proteger los reductores contra la intemperie, tratarlos con sistemas contra la corrosión y proteger los sellos de lubricación con grasa hidrófuga.
- Pour effectuer la fixation du réducteur, utiliser les boulons indiqués sous chaque dessins des fiches techniques du produit. En outre, utiliser tous les trous de fixation prévus sur les brides des réducteurs.
- El montaje entre los reductores y los motores, principalmente eléctricos o hidráulicos, generalmente se realiza con embridado directo siempre que no se presenten particulares condiciones críticas que podrían ocasionar daños después de la instalación.
- Para evitar las vibraciónes, la fijación sobre la máquina tiene que ser estable.
- Antes del montaje del grupo sobre la máquina, controlar que el sentido de rotación del eje de salida del reductor sea correcto.
- En caso de periodos de almacenamiento muy largos (4/6 meses), si el retén no está sumergido en el lubricante contenido en el grupo, se aconseja su reemplazo porque la goma podría estar pegada al eje o haber perdido las características de elasticidad necesarias para un funcionamiento correcto.
- Controlar que la refrigeración del motor sea suficiente, asegurando una correcta transferencia de aire del lado ventilador. En caso de temperatura ambiente de < -5°C o > +40°C, ponerse en contacto con el Servicio técnico.
- El montaje de distintos órganos (poleas, ruedas dentadas, acoplamientos, ejes, etc.) sobre los ejes llenos o huecos debe ser efectuado utilizando los agujeros roscados correspondientes u otros sistemas, asegurando de todas maneras una operación correcta sin correr el riesgo de dañar los cojinetes o las partes externas de los grupos.
- Lubricar las superficies en contacto para evitas los gripados olas oxidaciones.
- El barnizado no debe cubrir las partes de goma y los agujeros en los existentes tapónes - respiraderos. Para los grupos equipados de tapones de aceite, reemplazar el tapón cerrado, utilizado durante el transporte, por el tapón respiradero.
- Controlar, por medio del indicador (si previsto),que el nivel del lubricante corresponda. La puesta en marcha se debe producir de manera gradual evitando la aplicación súbita de la carga máxima.
- Si bajo el reductor hay mecanismos, cosas ó materiales que puedan dañarse por una eventual pérdida de aceite, deberá preverse una protección adecuada.

DE QUERBELASTUNGEN - TECHNISCHE BESCHREIBUNGEN

Der Wert der zulässigen Querbelastung (N) wird in den Tafeln über die Leistungen des betreffenden Getriebes aufgeführt und ist die Kraft, die auf die Mittellinie der Wellen unter ungünstigsten Bedingungen wie Anwendungswinkel und Drehrichtung einwirkt.
Die zulässigen Axialbelastungen betragen 1/5 der aufgeführten Querbelastungen, wenn diese gleichzeitig einwirken.
Die Tafeln über die Abtriebswellen geben den für die Lager bzw. das Gehäuse zulässigen Höchstwert an; dieser Wert darf nie überschritten werden.
Falls die im Katalog aufgeführten Grenzwerte doch überschritten werden sollten, setzen Sie sich bitte mit unserem Kundendienst in Verbindung und nennen Sie ihm alle Anwendungsdaten wie Belastungsrichtung, Drehrichtung der Welle, Anwendungsart.
Sofern die Anwendung mit einer beidseitigen Einleitung der Querkraft arbeitet, ist die Anwendung hinsichtlich der Einsatzbedingungen zu überprüfen. Hierzu kontaktieren Sie bitte unser technisches Büro.

Die Querbelastung (Querkraft) auf der Welle wird durch nachstehende Formel berechnet:

$$F_{RXL} = \frac{2000 \cdot M_2 \cdot fz}{do} \leq F_{R1} \text{ o } F_{r2}$$

F_{RXL} (N)
Resultierende Querkraft
M_2 (Nm)
Wellendrehmoment
do (mm)
Durchmesser des an der Welle montierten Antriebselements
F_R (N)
Max. zul. Querkraft F_{R1} - F_{R2} (siehe entspr. Tafel).

fz = 1,1 Zahnrad
1,4 Rad für Kette
1,7 Flanschscheibe
2,5 Flachriemenscheibe

Sofern die resultierende Querkraft nicht auf die Mitte der Welle bezogen ist, ist die effektive Kraft F_{R1-2} durch Formel zu berechnen:

$$F_{RX} = \frac{F_{R1-2} \bullet z}{(y + x)}$$

y, z = siehe Tafeln auf seite 22.
x = Abstand der Querkraft zur Wellenschulter.

EN RADIAL LOADS - TECHNICAL DESCRIPTIONS

The value of the admissible radial load (N) is given in the tables relating to the performance of the reduction unit at is sue. It is related to the load applied on the centre line of the shaft and in the most unfavourable conditions of angle of application and direction of rotation.
The maximum admissible axial loads are 1/5 of the value of the given radial load when are applied in combination with the radial load.
The tables relating to the output shafts give the maximum admissible value.
This value must never be exceeded since it relates to the strength of the case.
Particular conditions of radial load higher than the limits of the catalogue may occur. In this case, call our Technical Service and provide details on the application: direction of the load, direction of rotation of the shaft, type of service.
In case of double extension shafts with radial load applied on both ends, the max. admissible radial loads must be defined according to the specific running conditions, in this case call our Technical Service.

The radial load on the shaft is calculated with the following formula:

$$F_{RXL} = \frac{2000 \cdot M_2 \cdot fz}{do} \leq F_{R1} \text{ o } F_{r2}$$

F_{RXL} (N)
Resulting radial load
M_2 (Nm)
Torque on the shaft
do (mm)
Diameter of the transmission member mounted on the shaft
F_R (N)
Value of the maximum admitted radial load F_{R1} - F_{R2} (see relative tables).

fz = 1,1 Gear pinion
1,4 Chain wheel
1,7 V-pulley
2,5 Flat pulley

When the resulting radial load is not applied on the centre line of the shaft it is necessary to adjust the admissible radial load F_{R1-2} with the following formula:

$$F_{RX} = \frac{F_{R1-2} \bullet z}{(y + x)}$$

y, z = values given in the tables on page 22.
x = distance from the point of application of the load to the shaft shoulder.

IT CARICHI RADIALI - DESCRIZIONI TECNICHE

Il valore del carico radiale (N) ammissibile viene riportato nelle tabelle relative alle prestazioni del riduttore in same, ed è relativo al carico applicato sulla mezzeria dell'albero e nelle condizioni più sfavorevoli come angolo di applicazione e senso di rotazione.
I carichi assiali massimi ammissibili sono 1/5 del valore del carico radiale indicato quando sono applicati in combinazione col carico radiale stesso.
Nelle tabelle relative agli alberi di uscita viene indicato il valore massimo ammissibile, questo valore non deve mai essere superato in quanto è relativo alla resistenza della cassa. Possono essere verificate condizioni particolari di carico radiale superiori ai limiti di catalogo, in questo caso contattare il ns.
Servizio Tecnico e fornire tutti i dati applicativi: direzione del carico, senso di rotazione dell'albero, tipo di servizio.
Nel caso di alberi bisporgenti e cavi in cui è previsto l'applicazione di carichi radiali su entrambe le estremità, i carichi massimi ammissibili sono da definire in funzione delle condizioni di esercizio specifiche, in questo caso contattare il ns. Servizio Tecnico.

Il carico radiale sull'albero si calcola con la seguente formula:

$$F_{RXL} = \frac{2000 \cdot M_2 \cdot fz}{do} \leq F_{R1} \text{ o } F_{r2}$$

F_{RXL} (N)
Carico radiale risultante
M_2 (Nm)
Momento torcente sull'albero
do (mm)
Diametro dell'elemento di trasmissione montato sull'albero
F_R (N)
Valore di carico radiale massimo ammesso F_{R1} - F_{R2} (ved. tab.relative)

fz = 1,1 Pignone dentato
1,4 Ruota per catena
1,7 Puleggia a gola
2,5 Puleggia piana

Quando il carico radiale risultante non è applicato in mezzeria dell'albero occorre correggere il carico radiale ammissibile F_{R1-2} con la seguente formula:

$$F_{RX} = \frac{F_{R1-2} \bullet z}{(y + x)}$$

y, z = valori riportati nelle tabelle pag. 14
x = distanza del punto di applicazione del carico da spallamento albero.

FR CHARGES RADIALES - DESCRIPTIONS TECHNIQUES

La valeur de la charge radiale (N) admissible est indiquée dans les tableaux concernant les performances du réducteur examiné et correspond à la charge appliquée sur la ligne médiane de l'arbre, dans les conditions les plus défavorables au niveau de l'angle d'application et du sens de rotation.

Les charges axiales maximales admissibles sont 1/5 de la valeur de la charge radiale indiquée, au cas où elles seraient appliquées en combinaison avec la charge radiale même.

Les tableaux concernant les arbres de sortie indiquent la valeur maximale admissible, valeur qui ne doit jamais être dépassée car elle correspond à la résistance de la carcasse.

Des conditions particulières de charges radiales supérieures aux limites de catalogue peuvent être vériflées; dans ce cas, contacter notre S.ce T echnique en donnant toutes les données d'application: direction de la charge, sens de rotation de l'arbre, type de service.

Dans le cas d'arbre double avec une charge radiale appliquée aux deux extrémités, la charge radiale maxi admissible doit être définie selon les conditions de fonctionnement spécifiques, dans ce cas contacter notre service technique.

La charge radiale sur l'arbre doit être calculée selon la formule suivante:

$$F_{RXL} = \frac{2000 \cdot M_2 \cdot fz}{do} \leq F_{R1} \text{ o } F_{r2}$$

F_{RXL} (N)
Charge radiale résultante
M_2 (Nm)
Torque on the shaft
do (mm)
Diameter of the transmission member mounted on the shaft
F_R (N)
Valeur de charge radiale maximum admise F_{R1} - F_{R2} (voir table aux correspondants)

fz = 1,1 Pignon denté
1,4 Roue pour chaîne
1,7 Pouile à gorge
2,5 Pouile plate

Quand la charge radiale résultante n'est pas appliquée au milieu de l'arbre, il est nécessaire de corriger la charge radiale admissible F_{R1-2} avec la formule suivante:

$$F_{RX} = \frac{F_{R1-2} \bullet z}{(y + x)}$$

y, z = valeurs indiquées dans les tableaux à page 14.
x = distance entre le point d'application de la charge et l'épaule - ment de l'arbre.

ES CARGAS RADIALES - DESCRIPCIONES TECNICAS

El valor de carga radial (N) admisibile es indicado en las tablas relacionadas a las prestaciones del reductor examinado y se refiere a la carga aplicada sobre la línea de centro del eje y en las condiciónes más desfavorables como ángulo de aplicación y sentido de rotación.

Las cargas axiales máximas admisibles son 1/5 del valor de carga radial indicado, cuando están aplicadas en combinación con la carga radial misma.

En las tablas relacionadas a los ejes de salida se indica el valor máximo admisible; nunca se debe superar este valor, porque se refiere a la resistencia de la carcasa.

Podrían presentarse condiciónes particulares de carga radial superiores a los límites de catálogo; en este caso, ponerse en contacto con nuestro Servicio técnico e indicar todos los datos de la aplicación: dirección de carga, sentido de rotación del eje, tipo de servicio.

En caso de ejes dobles o huecos sobre los que se prevea la aplicación de cargas radiales sobre ambos extremos, las cargas máximas admisibles se deben definir en función de las características de la aplicación, en ese caso contactar a nuestro Servicio Técnico.

La carga radial sobre el eje se calcula con la siguiente fórmula:

$$F_{RXL} = \frac{2000 \cdot M_2 \cdot fz}{do} \leq F_{R1} \text{ o } F_{r2}$$

F_{RXL} (N)
Carga radial resultante
M_2 (Nm)
Par de torsión sobre el eje
do (mm)
Diamètre de l'élément de transmission monté sur l'arbre
F_R (N)
Valor de carga radial màximo admitido F_{R1} - F_{R2} (ver tablas corres-pondientes)

fz = 1,1 Piñon dentado
1,4 Piñon de cadena
1,7 Polea para correa trapezoidal
2,5 Polea plana

Cuando la carga radial resultante no se aplica sobre el centro del eje de salida, se debe corregir la carga radial admisible F_{R1-2} mediante la siguiente fórmula:

$$F_{RX} = \frac{F_{R1-2} \bullet z}{(y + x)}$$

y, z = valores indicados en las tablas pág. 14.
x = distancia desde el punto de aplicación de la carga hasta la base del eje.

DE QUERBELASTUNGEN - TECHNISCHE BESCHREIBUNGEN

Abtriebswellen
Sofern die radiale Querkraft nicht auf die Mitte der Welle bezogen ist, ist die effektive zulässige Kraft FRX durch folgende Formel zu berechnen:

EN RADIAL LOADS - TECHNICAL DESCRIPTIONS

Output Shafts
When the radial load is not on the centre line of the shaft, it is necessary to adjust the admissible radial load FRX with the following formula:

IT CARICHI RADIALI - DESCRIZIONI TECNICHE

Ejes de Salida
Si la carga radial resultante no se aplica sobre el centro del eje, corregir la carga radial admissible FRX mediante la siguiente fórmula:

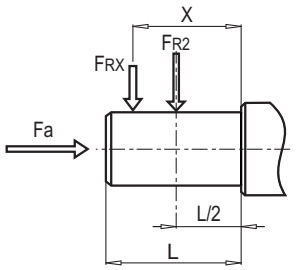
FR CHARGES RADIALES - DESCRIPTIONS TECHNIQUES

Arbres de Sortie
Quand la charge radiale n'est pas au milieu de l'arbre, il est nécessaire de corriger la charge radiale admissible FRX avec la formule suivante:

ES CARGAS RADIALES - DESCRIPCIONES TECNICAS

Alberi in Uscita
Con carico radiale risultante non in mezzeria dell'albero, correggere il carico radiale ammissibile FRX con la formula:

$$F_{RX} = \frac{F_{RX} \cdot z}{(y + x)} \text{ (N)}$$



A/F	301	351	401	501	601	701
z	89	98	115	151	210	232
y	79	73	85	111	155	177
F_R2 max (**)	1000	2500	3700	4000	5000	6000
Fa max (*)	5500	6500	7000	8500	11500	13500

A/F	202	202 G	252-253	302-303	352-353	402-403	502-503	602-603	702-703	902-903
z	86,5	103	120	138	169	195	238	281	331	367
y	66,5	83	96	108	134	155	188	221	261	282
F_R2 max(**)	2500	2800	5500	6600	8000	12000	18000	22000	30000	55000

(**FR2) Entspricht dem max. zulässigen Getriebewert; bitte beachten sie den max. Wert de Tabelle.
(**FR2) Max. admissible value of the reducer; verify max. admissible value on performance tables.
(**FR2) Valore massimo ammesso dal riduttore; verificare valore massimo ammesso su tabelle di prestazioni.
(**FR2) Valeur maximale admissible du réducteur; vérifier la valeur maxi admissible dans les tableaux de performances.
(**FR2) Valor máximo admisible por el reductor; verificar el valor máximo admisible en las tablas de preestaciones.

(*) Die Werte der maximal zulässigen Axialkräfte beziehen sich auf eine Drehrichtung bei verbautem Axiallager (auf Anfrage).
(*) Maximum axial load values admissible in only one direction with the use of a thrust bearing (on request).
(*) Valori di carico assiale massimo ammissibile in una sola direzione per versione con cuscinetto reggispinta (a richiesta).
(*) Valeurs de charge axiale maximum admissible dans une seule direction pour la version avec roulements coniques (sur demande).
(*) Valoes de la fuerza axial maxima admissible en un unico sentido con rodamiento axial (bajo demanda).

DE QUERBELASTUNGEN - TECHNISCHE BESCHREIBUNGEN

Antriebswellen
Sofern die radiale Querkraft nicht auf die Mitte der Welle bezogen ist, ist die effektive zulässige Kraft FRX durch folgende Formel zu berechnen:

EN RADIAL LOADS - TECHNICAL DESCRIPTIONS

Input Shafts
When the radial load is not on the centre line of the shaft, it is necessary to adjust the admissible radial load FRX with the following formula:

IT CARICHI RADIALI - DESCRIZIONI TECNICHE

Alberi in Entrata
Con carico radiale risultante non in mezzeria dell'albero, correggere il carico radiale ammissibile FRX con la formula:

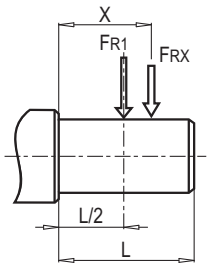
FR CHARGES RADIALES - DESCRIPTIONS TECHNIQUES

Arbres D'entree
Quand la charge radiale n'est pas au milieu de l'arbre, il est nécessaire de corriger la charge radiale admissible FRX avec la formule suivante:

ES CARGAS RADIALES - DESCRIPCIONES TECNICAS

Ejes de Entrada
Si la carga radial resultante no se aplica sobre el centro del eje, corregir la carga radial admissible FRX mediante la siguiente fórmula:

$$F_{RX} = \frac{F_{R1} \cdot z}{(y + x)} \quad (N)$$



A/F - W	301	351	401	501	601	701
z	105	105	105	137	175	175
y	80	80	80	108	135	135
F_R1 max (**)	1320	1800	2200	2500	3000	3000

A/F - W	202	202 G	252-253	302-303	352-353	402-403	502-503	602-603	702-703	902-903
z	-	-	105	105	105	137	137	175	175	225
y	-	-	80	80	80	108	108	135	135	170
F_R1 max (**)	-	-	2200	2200	2500	3600	3600	7200	7200	15000

(**FR1) Entspricht dem max. zulässigen Getriebewert; bitte beachten sie den max. Wert de Tabelle.
(**FR1) Max. admissible value of the reducer; verify max. admissible value on performance tables.
(**FR1) Valore massimo ammesso dal riduttore; verificare valore massimo ammesso su tabelle di prestazioni.
(**FR1) Valeur maximale admissible du réducteur; vérifier la valeur maxi admissible dans les tableaux de performances.
(**FR1) Valor máximo admisible por el reductor; verificar el valor máximo admisible en las tablas de preestaciones.

DE TRÄGHEITSMOMENTE

Die angegebenen Werte sind Richtwerte und beziehen sich auf Getriebe mit PAM Eingangsflansch.
Die angegebenen Werte beziehen sich jeweils auf das max. Massenträgheitsmoment.

EN MOMENTS OF INERTIA

Following values are indicative only and refer to gear reducers fitted with input PAM.
These values refer to maximum moment of inertia.

IT MOMENTI D'INERZIA

I seguenti valori sono s olo indicaviti. Sono riferiti a riduttori già predisposti con l'attacco motore PAM.
I valori in tabelle sono riferiti al massimo di quelli calcolati.

FR MOMENTS D'INERTIE

Les valeurs suivantes sont seulement indicatives et se rapportent à des réducteurs de vitesse équipés avec l' entrée PAM.
Ces valeurs sont relatives au moment d'inertie maximum.

ES MOMENTOS DE INERCIA

Los valores siguientes son sólo indicativos y se refieren a los reductores con PAM de entrada.
Estos valores están referidos al momento de inercia máximo.

A - F - AF	J*1E-4 [Kg*m2]
202	-
202 G	-
252 - 253	0,7
301	0,8
302 - 303	0,7
351	1,9
352 - 353	0,9
401	4,6
402 - 403	2,0
502 - 503	6,8
501	11,0
602 - 603	10,6
601	34,5
702 - 703	28,2
701	76,4
902 - 903	44,2

DE SCHMIERUNG

Bei in der Tafel nicht vorgesehenen Umgebungstemperaturen setzen Sie sich bitte mit unserem Kundendienst in Verbindung.
Bei Temperaturen unter -30°C oder über 60°C werden Dichtringe aus besonderen Elastomeren benötigt.
Bei Betrieb mit Temperaturen unter 0°C ist folgendes zu berücksichtigen:

1- Die Motoren müssen für den Betrieb mit der vorgesehenen niedrigen Raumtemperatur geeignet sein.
2- Die Leistung des Elektromotors muss so ausgelegt werden, dass die höheren benötigten Anlaufdrehmomente aufgebracht werden können.
3- Bei Getriebegehäusen aus Guß sind die Stoßbelastungen zu beachten, weil der Guß bei Temperaturen unter - 15°C verspröden könnte.
4- Bei Betriebsbeginn könnten Schmierungsprobleme infolge der hohen Ölviskosität auftreten, daher ist es sinnvoll, für einige Minuten einen Leerlauf auszuführen.

Je nach Umgebungsbedingungen und Betriebsart ist nach etwa 10.000 Betriebsstunden ein Ölwechsel durchzuführen.

EN LUBRICATION

In cases of ambient temperatures not envisaged in the table, call our Technical Service.
In the case of temperatures under -30°C or over 60°C it is necessary to use oil seals with special properties.

For operating ranges with temperatures under 0°C it is necessary to consider the following:

1- The motors need to be suitable for operation at the envisaged ambient temperature.
2- The power of the electric motor needs to be adequate for exceeding the higher starting torques required.
3- In case of cast - iron gear reducers, pay attention to impact loads since cast iron may have problems of fragility at temperatures under -15°C.
4- During the early stages of service, problems of lubrication may arise due to the high level of viscosity taken on by the oil and so it is wise to have a few minutes of rotation under no load.

The oil needs to be changed after approximately 10,000 hours. This period depends on the type of service and the environment where the reduction unit works.

IT LUBRIFICAZIONE

Nei casi con temperature ambiente non previste in tabella contattare il ns. Servizio Tecnico.
In caso di temperature inferiori a -30°C o superiori a 60°C occorre utilizzare anelli di tenuta con mescole speciali.
Per i campi di funzionamento con temperature inferiori a 0°C occorre considerare quanto segue:

1- I motori devono essere idonei al funzionamento con temperatura ambiente prevista.
2- La potenza del motore elettrico deve essere adeguata al superamento delle maggiori coppie di avviamento richieste.
3- Nel caso di riduttori con cassa in ghisa prestare attenzione ai carichi d'urto in quanto la ghisa può presentare problemi di fragi lità a temperature inferiori ai -15°C.
4- Durante le prime fasi di servizio possono insorgere problemi di lubrificazione cause l'elevata viscosità che assume l'olio e quindi è opportuno procedere ad alcuni minuti di rotazione a "vuoto".

Il cambio olio deve essere eseguito dopo circa 10.000 ore, questo periodo è in funzione del tipo di servizio e dell'ambiente in cui opera il riduttore.

FR LUBRIFICATION

En cas de températures ambiantes non prévues dans le tableau, contacter notre S.ce Technique.
En cas de température au-dessous de -30°C ou au-dessus de 60°C, il faut utiliser des bagues d'étanchéité avec mélanges spéciaux.
Pour les champs de fonctionnement avec température au-dessus de 0°C, il faut considérer ce qui suit:

1- Les moteurs doivent être aptes au fonctionnement à la température ambiante prévue.
2- La puissance du moteur électrique doit être au dépassement de la plupart des couples de démarrage demandés.
3- En cas de réducteurs avec carcasse en fonte, faire attention aux charges de choc, car la fonte peut présenter des problèmes de fragilité à températures au-dessous de -15°C.
4- Lors des premières phases de service, des problèmes de lubrification dus à la viscosité élevée, que l'huile assume, pourraient se vérifier; il faut donc procéder à une rotation "à vide" de quelques minutes.

Le changement d'huile doit être effectué après 10,000 heures environ; cette période est en fonction du type de service et du milieu dans lequel le réducteur travalle.

ES LUBRICACIÓN

En caso de temperaturas no previstas en la tabla, ponerse en contacto con nuestro Servicio técnico.
En caso de temperaturas inferioers a -30°C o superiores a 60°C, es necesario utilizar anillos de retén con mezclas especiales. Para los campos de funcionamiento con temperaturas inferiores a 0°C, es necesario cumplir con lo que sigue:

1- Los motores tienen que ser idóneos al funcionamiento con la temperatura ambiente prevista.
2- La potencia del motor eléctrico tiene que ser idónea para superar los mayores pares de arranque pedidos.
3- En caso de reductores con carcasa de fundición, cuidado con las cargas de choque porque la fundición puede presentar problemas de fragilidad con temperaturas inferiores a los -15°C.
4- Durante las primeras fases de servicio podrian surgir unos problemas de lubricación debidos a la elevada viscosidad del aceite y es por lo tanto oportuno efectuar una rotación en "vacío" por algunos minutos.

El cambio de aceite tiene que ser efectuado aproximadamente después de 10.000 horas; claramente, este periodo es en función del tipo de ambiente en el que trabaja el reductor.

DE SCHMIERUNG

EN LUBRICATION

IT LUBRIFICAZIONE

FR LUBRIFICATION

ES LUBRICACIÓN

	Mineralöl / Mineral Oil / Olio Minerale / Huile Minérale / Aceite Mineral						
	T°C ISO SAE...	ENI	SHELL	KLUBER	MOBIL	CASTROL	BP
A/F 301-701 A/F 202-902 A/F 253-903	(-5) / (+40) ISO VG220	BLASIA 220	OMALA OIL220	KLUBEROIL GEM 1-220N	MOBILGEAR 600 XP 220	ALPHA MAX 220	ENERGOL GR-XP220
	(-15) / (+25) ISO VG150	BLASIA 150	OMALA OIL150	KLUBEROIL GEM 1-150N	MOBILGEAR 600 XP 150	ALPHA MAX 150	ENERGOL GR-XP150

- Spezifische Schmierstoffangaben erfragen Sie bei NRW Drive Technologies.
- Specifications of lubricants recommended by NRW Drive Technologies.
- Specifiche dei lubrificanti consigliati da NRW Drive Technologies.
- Especificaciones de lubricante aconsejados por NRW Drive Technologies.
- Spécification des lubrifiants suivant NRW Drive Technologies.

- Für die Ölmengen siehe Seite 27.
- For the quantity of oil, please refer to the pages relating. (page 27)
- Per le quantità di olio si rimanda alle pagine relative. (pagina 27)
- Pour les quantités d'huile, voir pages concernant. (page 27)
- Para las cantidades de aceite, ver a las páginas. (página 27)

Spezialschmierstoffe / Special lubricants / Lubrificanti speciali / Lubrifiants spéciaux / Lubricantes especiales			
		*T°C	Synthetisches Öl / Synthetic oil / Olio sintetico / Huile synthétique /Aceite sintetico
Öle für niedrige Temperaturen Oils for low temperature Oli per basse temperature Huiles pour basse température Aceites para bajas temperaturas	ENI	(-25) - (+20)	BLASIA 150 S (ISO VG150)
	KLUBER	(-35) - (+10)	KLUBERSYNTH GH 6-80 (ISO VG68)
	MOBIL	(-40) - (+5)	SCH 624 (ISO VG32)
	KLUBER	(-40) - (+5)	KLUBERSYNTH GH 6-32 (ISO VG32)
Öle für niedrige Temperaturen - Lebensmittelsektor Oils for low temperature - Food sector Oli per basse temperature - Settore alimentare Huiles pour basse température - Secteur de l'alimentation Aceites para bajas temperaturas - Sector alimentario	KLUBER	(-30) - (+10)	KLUBERSYNTH UH1-6 100 (ISO VG100)
Öle für hohe Temperaturen / Oils for high temperature / Oli per alte temperature / Huiles pour haute température / Aceites de alta temperatura	KLUBER	(-10) - (+50)	KLUBERSYNTH GH 6-460 (ISO VG460)
	KLUBER	(-10) - (+70)	KLUBERSYNTH GH 6-680 (ISO VG680)
Öle für hohe Temperaturen - Lebensmittelsektor Oils for high temperature - Food sector Oli per alte temperature - Settore alimentare Huiles pour haute température - Secteur de l'alimentation Aceites de alta temperatura - Sector alimentario /	KLUBER	(-10) - (+50)	KLUBERSYNTH UH1-6 460 (ISO VG460)
Lebensmittelsektor / Food sector / Settore alimentare / Secteur de l'alimentation / Sector alimentario	KLUBER	(-15) - (+40)	KLUBERSYNTH UH1-6 220 (ISO VG220)

Falls spezielles Öl verwendet werden soll kontaktieren sie bitte unseren Kundendienst
If 'special' lubricant is required please contact for Technical Assistance
Per l'utilizzo di lubrificanti speciali, contattare l'assistenza tecnica
Si un Lubrifiant spécial est demandé, merci de contacter notre service technique.
Para el uso de lubricantes especiales contactar con la asistencia técnica

* Betriebsumgebungstemperatur
* Working ambient temperature
* Temperatura ambiente di funzionamento
* Température ambiante de fonctionnement
* Temperatura ambiente de funcionamiento

DE SCHMIERUNG

- Für die Getriebe der Serie A/F ist die Einbaulage anzugeben.
- Getriebe der Serie A/F mit 1 Übersetzungsstufe in den Baugrößen 30, 35, 40 und mit 2,3 Übersetzungsstufen in den Baugrößen 25, 30, 35, werden werksseitig mit Schmieröl befüllt. Sie bedürfen keinerlei Wartung und sind serienmäßig mit Ölstopfen ausgestattet.
- Die Getriebe der Serie A/F mit 1 Übersetzungsstufe in den Baugrößen 50, 60, 70 und mit 2,3 Übersetzungsstufen in den Baugrößen 40, 50, 60, 70, 90 werden werkseitig mit Schmieröl, sowie Ölstopfen ausgeliefert.

Die erforderliche Ölmenge und die Positionen der Ölschaugläsern entsprechen der werkseitig vorgeschlagenen Position. Vor der Inbetriebnahme sind die Verschlußstopfen, durch entsprechende Entlüftungsventile, gemäß der Einbaulage, auszutauschen.
Die angegebenen Ölmengen sind Richtwerte. Diese müssen je nach Einbaulage, über Ölschaugläser, Ölstandsbohrungen der Ölmessstäbe (je nach Typ) regelmässig überprüft werden. Ölstandsunterschiede können aus verschiedenen Einbaulagen resultieren.
Nach jeder Montage, sind alle Ölstände zwingend zu prüfen und gegebenenfalls anzupassen.

EN LUBRICATION

- For the reduction units A/F series it is always necessary to specify the mounting position.
- A/F 1 stage 30, 35, 40 and 2,3 stage 25, 30, 35, are supplied complate with lubricant, have no oil plugs and need no maintenance
- The gear reducer A/F series 1 stage 50, 60, 70 and 2,3 stage 40, 50, 60, 70, 90 are supplied complete with lubricant and are fitted with oil plugs to suit any mounting position included in the catalogue.

It is recommended, after installation, to replace the closed plug used for transportation with the supplied breather plug.
Lubricant quantities are only indicative, For correct filling always refer to the sight glass or the dipstick, when this is supplied.
Any oil level differences can be caused by constructive tolerances but also on the mounting position or the assembly scheme of the customer Therefore it is very important for the customer to check oil level and if necessary to add the necessary quantity.

IT LUBRIFICAZIONE

- Per i riduttori serie A/F occorre sempre specificare la posizione di piazzamento prevista.
- Serie A/F 1 stadio nelle grandezze 30,35,40 e serie A/F 2,3 stadi nelle grandezze 25,30,35 vengono forniti completi di lubrificante sono sprovvisti dei tappi olio e non hanno necessità di alcuna manutenzione
- I riduttori serie A/F a 1 stadio nelle grandezze 50,60,70 e a 40,50,60,70,90 vengano forniti completi di lubrificante a dei tappi olio necessari a garantire la corretta lubrificazione nella posizione si piazzamento richiesta.

Si raccomanda, effettuata l'instalazione, di sostituire il tappo chiuso utilizzato per il trasporto con il tappo di sfiato fornito a corredo.
Le quantità di olio in tabella sono solo indicative e per il corretto riempimento si dovrà fare riferimento al tappo o all'astina di livello, se presente.
Eventuali scostamenti di livello possono dipendere da tolleranze costruttive ma anche dal piazzamento del riduttore o dal piano di montaggio presso cliente. Per tale motivo è opportuno che il cliente verifichi e, se necessario, ristabilisca il livello a riduttore installato.

FR LUBRIFICATION

- Pour les réducteurs série A/F il faut toujours spécifier la position de montage.
- Série A/F à 1 train pour les grandeurs, 30,35,40 et série A/F 2,3 trains pour les grandeurs 25,30,35 sont fournis avec lubrifiant et sans bouchons et ne nécessitent, donc, aucun entretien.
- Les réducteurs série A/F à 1 train pour les grandeurs 50,60, 70 et à 2,3 trains pour les grandeurs 40,50,60,70,90 sont fournis avec tous les bouchons nécessaires pour garantir toutes les positions de montage prévues au catalogue.

On recommande, aprés l'installation, de changer le bouchon livré pour le transport contre celui fourni avec trou d'évent.
Les quantités d'huile indiquées en tableau sont seulement indicatives et pour un remplissage correct il faut faire référence au bouchon de niveau ou à la jauge à huile, si présents.
Toutes les différences de niveau d'huile peuvent être causées par des tolérances de constructions, ou par la position de montage, ou le schéma d'assemblage du client. Par conséquent il est trés important que le client vérifie le niveau d'huile et au besoin ajoute la quantité nécessaire.

ES LUBRICACIÓN

- Para los reductores serie A/F es necesario especificar siempre la posición de montaje.
- Serie A/F de 1tren en los tamaños, 30,35,40 y serie A/F de 2,3 trenes en los tamaños, 25,30,35 se suministran con lubricante, no disponen de tapón aceite y no necesitan ningún mantenimiento.
- Los reductores serie A/F de 1 tren en los tamaños 50,60,70 y de 2,3 trenes en los tamaños 40,50,60,70,90 se suministran con lubricante y disponen de tapones para todas las posiciones de montaje previstas en el catálogo.

Es necesario, una vez instalado el reductor en la máquina, sustituir el tapón cerrado, utilizado durante el transporte, por el tapón respiradero que se adjunta.
Las cantidades de lubricante en la tabla son indicativas y para un correcto llenado hay que tomar de referencia el centra del visor o del asta de nivel si están instaladas.

Eventuales diferencias del nivel de aceite pueden depender de tolarancias constructivas perotambién de la posición de montaje o del esquema de montaje del cliente. Por tanto es muy importante que el cliente compruebe el nivel de aceite y si es necesario agregue la cantidad adecuada.

A/F	301	351	401	501	601	701
M1	0.5	0.6	0.75	1.45	3.8	5.7
M2	0.35	0.45	0.45	1.5	3.2	4
M3	0.2	0.25	0.4	1.5	1.3	2.3
M4	0.5	0.65	0.9	1.5	2.7	6.5
M5-M6	0.35	0.45	0.6	1.5	2.6	4

- Ölmenge (Liter) ~
- Quantity of oil in litres ~
- Quantità olio in litri ~
- Quantité d'huile en litres ~
- Cantidad de aceite en litros ~

A/F	202	202 G	252 - 253	302 - 303	352 - 353	402 - 403	502 - 503	602 - 603	702 - 703	902 - 903
M1	0.16	0.30	0.8	1.2	1.5	3	5.7	10	16.7	29
M2	0.32	0.59	1.2	1.7	2	4.4	7.9	14.3	22.2	40
M3	0.21	0.42	1.1	1.3	1.8	3.6	6.2	11.2	16.9	28.5
M4	0.23	0.50	1.3	1.7	2.2	4.1	7.8	13.4	21.2	34.5
M5-M6	0.23	0.42	1	1.2	1.8	3.4	6.6	11	18.2	27.5

Anmerkung: M1 und M3 die montagepositionen werden in AF-M körpern geändert / **Note:** M1 and M3 mounting positions are changed in AF-M bodies / **Note:** Le posizioni di montaggio M1 e M3 vengono modificate negli corpo AF-M / **Notes:** Les positions de montage M1 et M3 sont modifiées dans les corps AF-M / **Notas:** Las posiciones de montaje M1 y M3 se cambian en cuerpos AF-M.

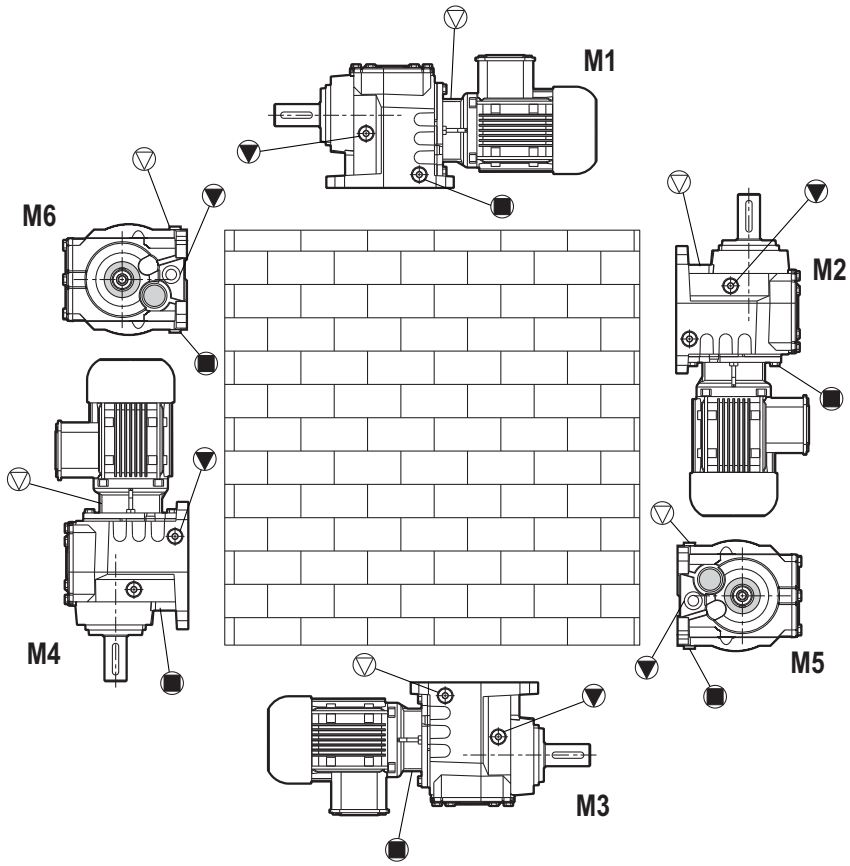
DE EINBAULAGE

EN MOUNTING POSITIONS

IT PIAZZAMENTO

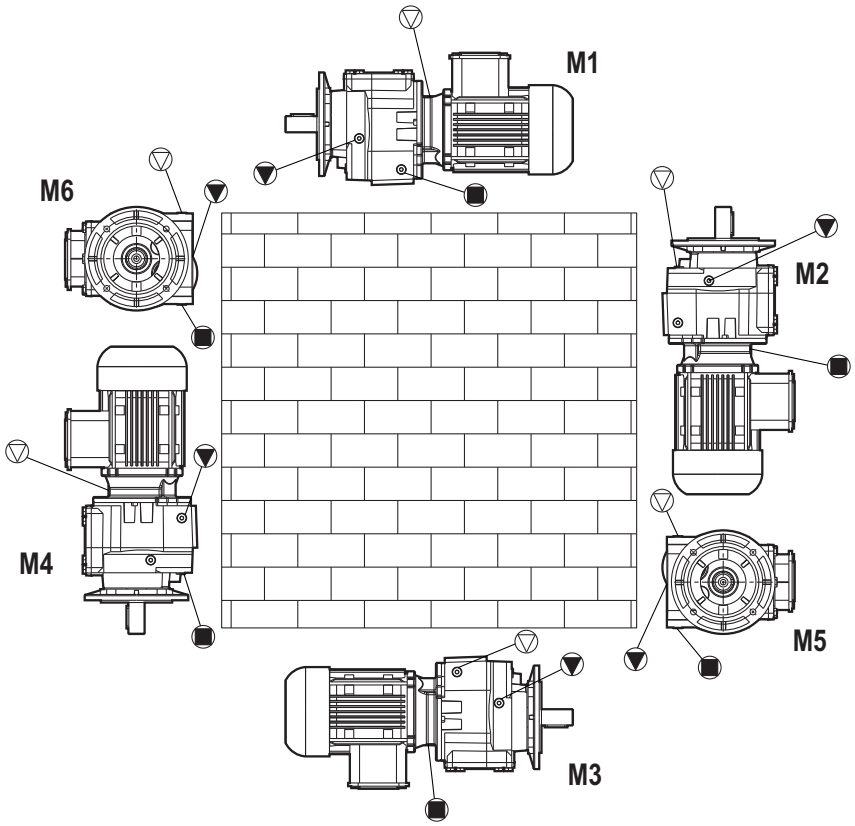
FR POS. DE MONTAGE

ES POS. DE MONTAJE



A...

202
202 G
252 - 253
302 - 303
352 - 353
402 - 403
502 - 503
602 - 603
702 - 703
902 - 903



F...	AF...
202	202
202 G	202 G
252 - 253	252 - 253
302 - 303	302 - 303
352 - 353	352 - 353
402 - 403	402 - 403
502 - 503	502 - 503
602 - 603	602 - 603
702 - 703	702 - 703
902 - 903	902 - 903

▽ Entlüftung / Vent plug / Tappo di sfiato / Évent / Ventilación

● Ölablass / Drain plug / Tappo di scarico dell'olio / Vidange d'huile / Vaciado de aceite

▼ Ölstand / Oil level / Tappo di livello dell'olio / Niveau d'huile / Nivel de aceite

DE EINBAULAGE

- Für die vertikalen Einbaulagen siehe seite 10-11.
- Falls nicht anders angegeben, sind M1 die Standardeinbaulagen.
- Für nicht angegebene einbaulagen setzen sie sich bitte mit unserem Kundendienst in verbindung.

EN MOUNTING POSITIONS

- For vertical positions, check with pages 10-11.
- Unless specified otherwise, the standard positions are M1.
- For positions not envisaged, it is necessary to call our Technical Service.

IT PIAZZAMENTO

- Per le posizioni di piazzamento verticali verificare quanto detto a pag. 10-11.
- Se non diversamente specificato le posizioni standard sono M1.
- Per le posizioni di piazzamento non previste occorre rivolgersi al ns. Servizio tecnico.

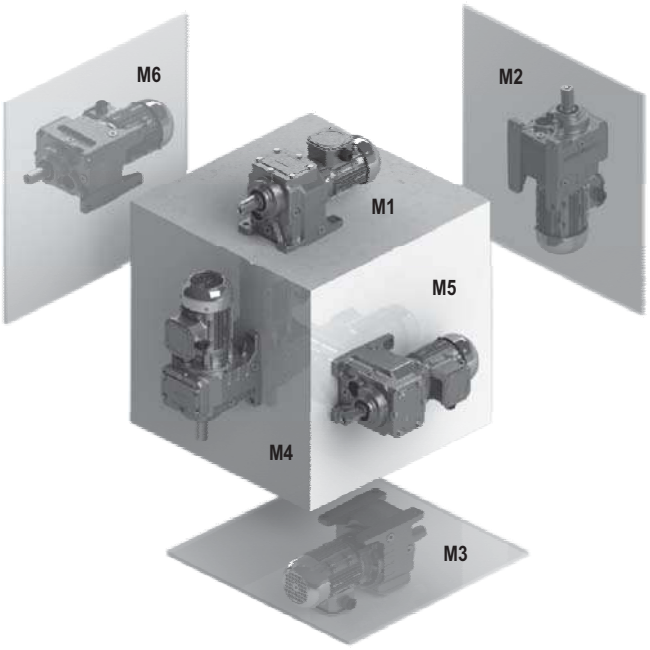
FR POS. DE MONTAGE

- Pour les positions de montage verticales, voir pages 10 et 11.
- Si non spécifié, les positions standard sont M1.
- Pour les positions de montage non prévues, contacter notre S.ce technique.

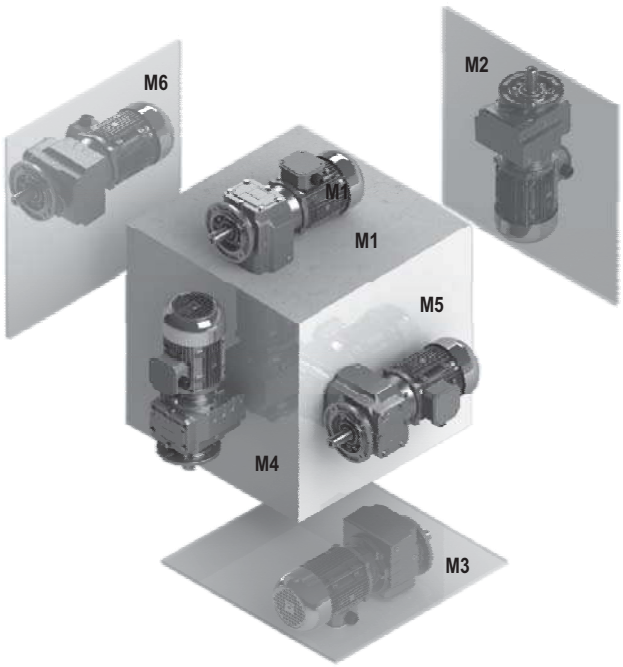
ES POS. DE MONTAJE

- Para las posiciónes de montaje verticales, ver las pàginas 10-11.
- Si non se especifica el contrario, las posiciónes estándar son M1.
- Para las posiciónes demontajenoprevistas, es necesario ponerse en contacto con nuestro Servicio técnico.

A301...701
A202...902
A253...903



F301...701
F202...902
F253...903



DE EINBAULAGE

- Im Falle von Sonderanforderungen ist bei Auftragserteilung die Lage des Klemmenkastens gemäß dem schema genau anzugeben.
- Sofern nichts gegenteiliges angegeben, wird der Schneckengetriebemotor mit Klemmkastenlage 1 geliefert.
- Falls nicht anders angegeben, sind M1 die Standardeinbaulagen.
- Für nicht angegebene Einbaulagen setzen sie sich bitte mit unserem Kundendienst in Verbindung.

EN MOUNTING POSITIONS

- In the case of specific requirements, when ordering, specify the position of the terminal box as shown in the diagram.
- Unless other wise specified, the gear reducer is supplied with terminal box in position 1.
- Unless specified otherwise, the standard positions are M1.
- For positions not envisaged, it is necessary to call our Technical Service.

IT PIAZZAMENTO

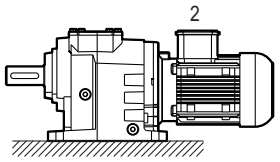
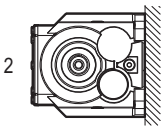
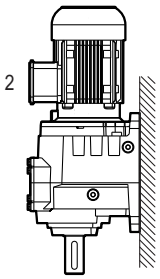
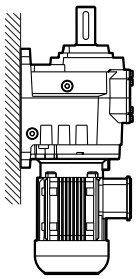
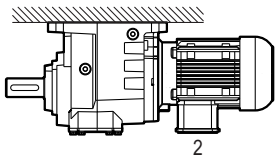
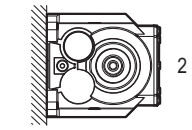
- Nel caso di particolari esigenze specificare in fase di ordine la posizione della morsetteria come da schema.
- Se non diversamente specificato, il gruppo viene fornito con morsettiera in pos.1.
-Se non diversamente specificato le posizioni standard sono M1.
- Per le posizioni di piazzamento non previste to call our Technical Service.

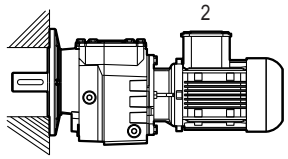
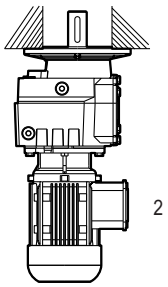
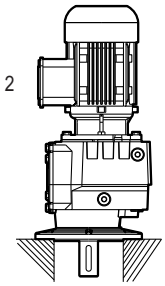
FR POS. DE MONTAGE

- En cas d'exigences particulières, spécifier, lors de la commande, la position du bornier comme d'après le schéma.
- Sauf indications contraires, le réducteur est fourni avec boîte à borne en position 1.
- Si non spécifié, les positions standard sont M1.
- Pour les positions de montage non prévues, contacter notre S.ce technique.

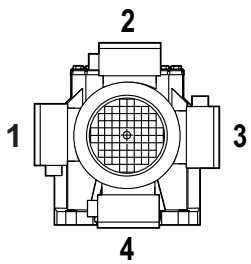
ES POS. DE MONTAJE

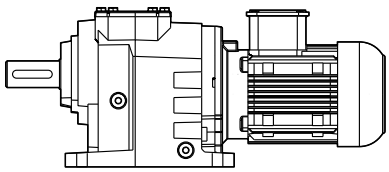
- En caso de exigencias particulares, detallar en el pedido, la posición de la caja de bornes según el esquema.
- Si non esta diferentemente especificado, el motorreductor se monta con la caja de bornes en posición 1.
- Si no se especifica el contrario, las posiciónes estándar son M1.
- Para las posiciones de montaje no previstas, es necesario ponerse en contacto con nuestro Servicio técnico.

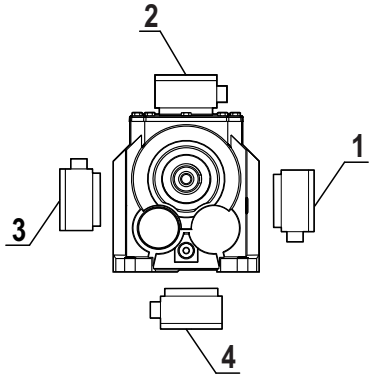
M1	M6	M4	M2
			
M3	**M5**		
			

M1	M2	M4
		

Klemmenkastenlage
Position of terminal box
Posizione morsettiera
Position du bornier
Posición caja de bornes







DE MODULARES BAUKASTENSYSTEM | EN MODULARITY | IT MODULARITA

FR MODULARITE | ES MODULARIDAD

Serie in Grauguss / Grey cast iron series / Serie aus GG. / Série en fonte grise / Serie en fundición gris

A / F...PAM 100

- Ausführungen zum Anbau von PAM - Motoren.
- Fitted for motor coupling version (PAM).
- Versione con predisposizione per attacco motore PAM.
- Version avec prédisposition pour moteur PAM.
- Versión motorreductor (PAM).

A / F...W

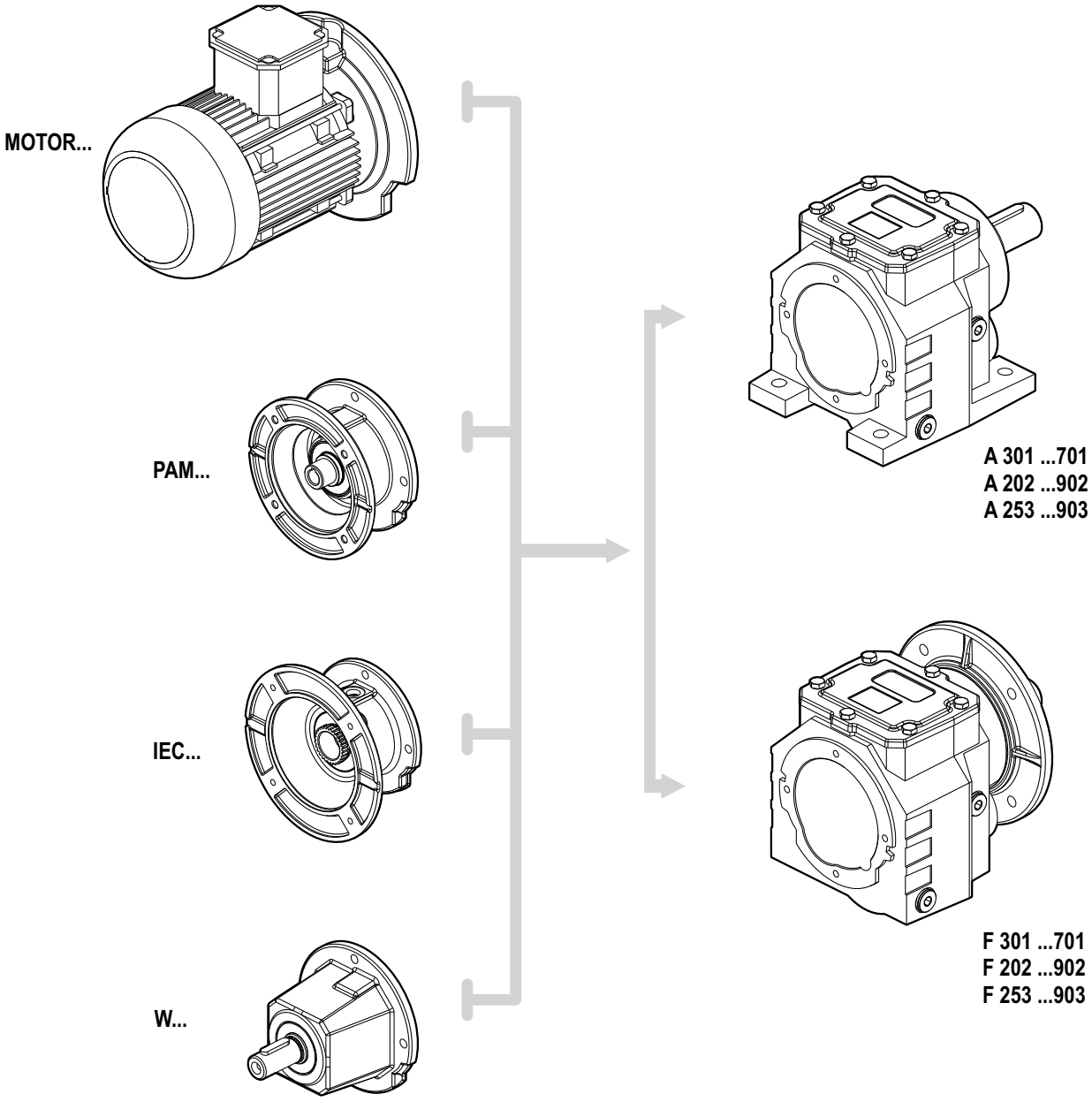
- Ausführungen mit Antriebsvollwelle.
- Input shaft versions.
- Versioni con albero maschio in ingresso.
- Version avec arbre en entrée.
- Versión con eje macho de entrada.

A / F...100L/4A

- Ausführungen mit Kompaktelektromotoren.
- Compact electric motor versions.
- Versioni con motore elettrico compatto.
- Version avec moteur électrique compact.
- Versión motorreductor compacto.

A / F...IEC 100

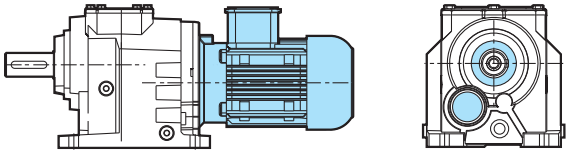
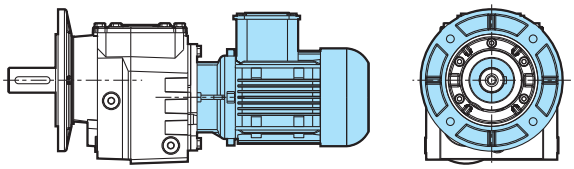
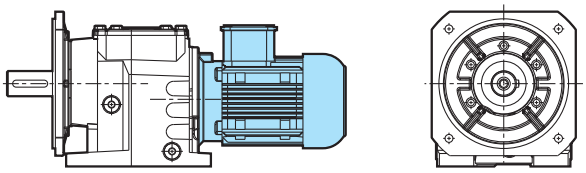
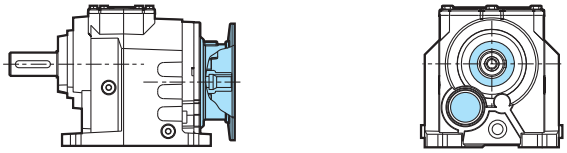
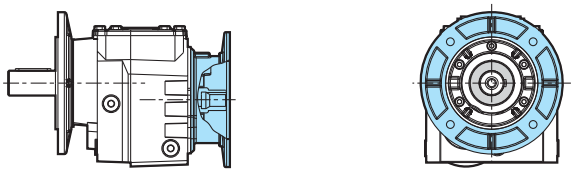
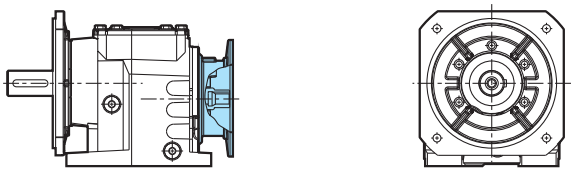
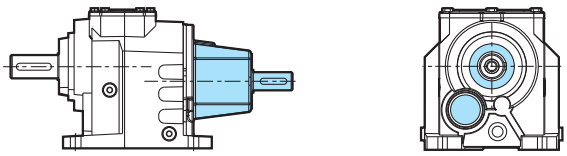
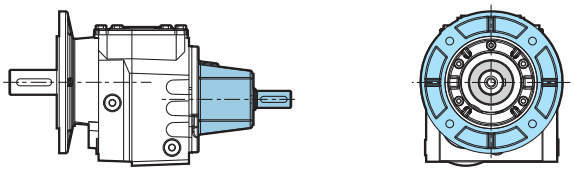
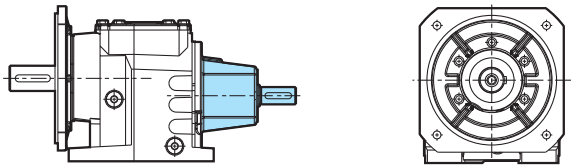
- Die Verbindung Motor Getriebe erfolgt über Kupplung.
- Fitted for motor mounting with flexible coupling.
- Predisposto per attacco motore con giuntu.
- Prédisposé pour montage moteur avec joint.
- Predispuesto para montaje motor con acoplamiento.



DE PRODUKTE | EN PRODUCTS | IT PRODOTTI

FR PRODUITS | ES PRODUCTOS

202 - 202 G - 252, 253 - 301, 302, 303 - 351, 352, 353 - 401, 402, 403 - 501, 502, 503 - 601, 602, 603 - 701, 702, 703 - 902, 903

	**A... / MOTOR** **Fußbefestigung** Foot mounting Fissaggio piede Fixation à pattes Fijación por patas
	**F... / MOTOR** **Flanschbefestigung** Flange mounting Fissaggio flangia Fixation à bride Fijación por brida
	**AF... / MOTOR** **Fuß-Flanschbefestigung** Foot-flange mounting Fissaggio piede-flangia Fixation à paaes et bride Fijación patas-brida
	**A... / PAM** **Fußbefestigung** Foot mounting Fissaggio piede Fixation à pattes Fijación por patas
	**F... / PAM** **Flanschbefestigung** Flange mounting Fissaggio flangia Fixation à bride Fijación por brida
	**AF... / PAM** **Fuß-Flanschbefestigung** Foot-flange mounting Fissaggio piede-flangia Fixation à paaes et bride Fijación patas-brida
	**A... / W** **Fußbefestigung** Foot mounting Fissaggio piede Fixation à pattes Fijación por patas
	**F... / W** **Flanschbefestigung** Flange mounting Fissaggio flangia Fixation à bride Fijación por brida
	**AF... / W** **Fuß-Flanschbefestigung** Foot-flange mounting Fissaggio piede-flangia Fixation à paaes et bride Fijación patas-brida

DE BEISPIEL BESTELLBESCHREIBUNG | EN EXAMPLE FOR ORDERING | IT ESEMPIO DI ORDINAZIONE

FR EXEMPLE DE COMMANDE | ES EJEMPLO ORDEN DE COMPRA

A **603** **160.90** **F** **- 100L / 4B**

Typ / Type / Tipo / Type / Tipo

- **A** **Fußbefestigung** — Foot mounting, Fissaggio piede, Fixation à pattes, Fijación por patas
- **F** **Flanschbefestigung** — Flange mounting, Fissaggio flangia, Fixation à bride, Fijación por brida
- **AF** **Fuß-Flanschbefestigung** — Foot-flange mounting, Fissaggio piede-flangia, Fixation à paaes et bride, Fijación patas-brida

İges: Verkleinerungsfaktor
İges: Reduction Ratio
İges: Rapporto di riduzione
İges: Rapport de réduction
İges: Relación de reducción

39 - 107

60
Gehäusegröße
Case Width
Larghezza di cassa
Largeur de Caisse
Anchura de cajas

1 - 2 - 3
Übersetzungsstufen
Stage
Stadi
Trains
Trenes

..1	..2 - ..3
30	20
35	25
40	30
50	35
60	40
70	50
	60
	70
	90

Abtriebsflansch
Output Flange
Flangia di Uscita
Bride de Sortie
Brida de Salida

FA | FB | FC | FD

IEC

56
63
71
80
90
100
112
132
160
180
200
225

PAM (B5/B14)

56
63
71
80
90
100
112
132
160
180
200
225

W

Mit Motor / With Motor
A motore / À moteur
Con motor

Gehäusegröße
Case Width
Larghezza di cassa
Largeur de Caisse
Anchura de cajas

63 M
71 M
80 M
90 S/L
100 L
112 M
132 S/M
160 M/L
180 M/L
200 L
225 S/M

Anzahl der Pole
Number of Poles
Numero dei poli
Nombre des Pôles
Numero de los polos

2
4
6
4 - 2
8 - 2
2 - 12

Sonstige Polkombinationen auf Wunsch
Other pole combinations on request
Richiesta della combinazione dell'altro polo
Demande de la combination de l'autre pôle
Demanda de la combinación del otro polo

Motorauswahl
Motor Options
Opzioni di motore
Options de moteur
Opciones de motor

BRE
RG
SR
HL
TF
TW
WU
EF
ZF
DF
IG
KK/FK
B

34

DE BEZEICHNUNG | EN DESIGNATION | IT DESIGNAZIONE

FR DÉSIGNATION | ES DESIGNACIÓN

A / F

A / F	Kompakter Stirnradgetriebemotor (mit Motor geliefert) Compact geared motor with helical gears (supplied complete with motor) Motoriduttore ad ingranaggi cilindrici compatto (fornito completo di motore) Motoréducteur à engrenages cylindriques compact (livré avec moteur) Motorreductor de engrenajes cilíndricos compacto (motor y reductor compacto)		
252	Baugröße 25 - 2 Übersetzungsstufen - Ausführung in Grauguss Size 25, 2 reduction stages, cast iron series Grandezza 25, 2 stadi di riduzione, serie in ghisa Grandeur 25, 2 trains d'engrenages, série en fonte Tamaño 25, 2 trenes de engranajes, gama de fundición		
FA - FB FC - FD	Abtriebsflansch Output flange Flangia di uscita Bride de sortie Brida de salida		
44.7	Übersetzungsverhältnis Reduction ratio Rapporto di riduzione Rapport de réduction Relación de reducción		
M1	Einbaulage Mounting position Posizione di piazzamento Position de montage Posición de montaje		
Abmessungen Antriebsseitig / Input dimensions / Dimensioni di entrata / Dimensions d'entrée / Dimensiones de entrada			
PAM	Für Motoranbau vorbereitet Fitted for motor coupling Predisposto per attacco motore Prédisposé pour montage moteur standard Predispuesto para motaje motor		
160	Motorflansch - Durchmesser Motor flange diameter Diametro flangia motore Diamètre bride moteur Diámetro brida motor	**14**	Motorwellen - Durchmesser Drive - shaft diameter Diametro albero motore Diamètre arbre moteur Diàmetro eje motor
Abmessungen abtriebsseitig / Output dimensions / Dimensioni di uscita / Dimensions de sortie / Dimensiones de salida			
200	Durchmesser Abtriebsflansch Output flange diameter Diametro flangia uscita Diamètre de la bride de sortie Diámetro brida de salida	**25**	Durchmesser abtriebswelle Output shaft diameter Diametro albero uscita Diamètre de l'arbre de sortie Diámetro eje de salida

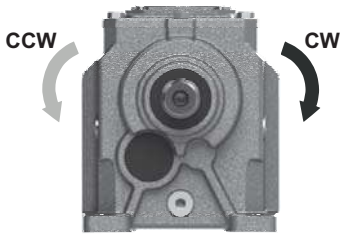
DE NOMENKLATUR | EN NOMENCLATURE | IT NOMENCLATURA

FR NOMENCLATURE | ES NOMENCLATURA

Eingabeoptionen Input Options Opzioni di ingresso Options d'entrée Opciones de entrada	**W** = **Ausführungen mit antriebsvollwelle /** Input shaft versions / Versioni con albero maschio in ingresso / Version avec arbre en entrée / Versión con eje macho de entrada. **IEC** = **Die Verbindung Motor Getriebe erfolgt über Kupplung /** Fitted for motor mounting with flexible coupling. / Predisposto per attacco motore con giunto. / Prédisposé pour montage moteur avec joint. / Predispuesto para montaje motor con acoplamiento. **PAM** = **Für Motoranbau vorbereitet /** Fitted for motor coupling / Predisposto per attacco motore / Prédisposé pour montage moteur standard / Predispuesto para motaje motor **T** = **Turbokupplung /** Turbo coupling / Turbogiunto / Coupleur hydraulique / Turboacoplador
Motor Motor Motore Moteur Motor	**Drehstrommotor Motorgröße 63 - 225 /** Three phase motor Motor size 63 - 225 / Motori trifase, Grandezze 63 - 225 / Motore thriphasé, taille moteur 63 - 225 / Motores trifásicos, Tamaño de carcasas 63 - 225
Anzahl der Pole Number of Poles Numero dei poli Nombre des Pôles Numero de los polos	**2** = **2 Pole /** 2 Poles / 2 Poli / 2 Pôles / 2 Polos **4** = **4 Pole /** 4 Poles / 4 Poli / 4 Pôles / 4 Polos **6** = **6 Pole /** 6 Poles / 6 Poli / 6 Pôles / 6 Polos **Sonstige Polkombinationen auf Wunsch** / Other pole combinations on request / Richiesta della combinazione dell'altro polo / Demande de la combination de l'autre pôle / Demanda de la combinación del otro polo
Motorauswahl Motor Options Opzioni di motore Options de moteur Opciones de motor	**BRE** = **Mit Bremsen /** With brake / Freno / avec frein / Freno **EF** = **Separate Lüfter, Einphasig /** Separate fan, single phase / Ventilatore separato, monofase / Ventilateur séparé, une phase / Ventilador por separado de una sola fase **ZF** = **Separate Lüfter, Zweiphasig /** Separate fan, double phase / Ventilatore separato, doppia fase Ventilateur séparé, double-phase / Ventilador por separado, de doble fase **DF** = **Separate Lüfter, Drei-Phasen /** Separate fan, three phase / Ventilatore separato, trifase / Ventilateur séparé, trois phases / Ventilador por separado, tres de fase **IG** = **Mit Encoder /** With encoder / Con encoder / avec codeur / con codificador **KK/FK** = **Mit Kupplung /** With clutches / Con frizioni / embrayage / embrague **SR** = **Staubsichere Bremse /** Brake dust - proof / Freno a prova di polvere / Frein à l'épreuve de la poussière / De frenos a prueba de polvo **TF** = **Thermistor /** Thermistor / Termistore / Thermistance / Termistor **RG** = **Gegen Korrosion geschützte Bremse /** Brake corrosion - protected / Freno resistente alla corrosione / Frein à la corrosion protégées / Freno protegida contra la corrosión **WU** = **Sanftanlauf-Rotor /** Soft start rotor / Soft start rotore / Démarrage en douceur du rotor Soft desde el rotor **B** = **Rücklaufsperre /** Backstop / Bloccato contro il ritorno / Verrouillé contre le retour Bloqueado en contra de devolución **TW** = **Temperatursicherung /** Thermal trip / Un sensibile al calore / A sensible à la chaleur / Un sensible al calor **HL** = **Handbremsmotoren /** Brake motor with hand release / Motore autofrenante mano / Moteur de frein à main / motores freno manuales

DE ZUBEHÖR
EN ACCESSORIES
IT ACCESSORI
FR ACCESSOIRES
ES ACCESORIOS

1-3 Übersetzungsstufen / 1-3 Stage /
1-3 Stadi / 1-3 Trains / 1-3 Trenes



Ausgangseite / Output side /
Lato uscita / Côté sortie / Lado de salida

2 Übersetzungsstufen / 2 Stage /
2 Stadi / 2 Trains / 2 Trenes

Ausgangseite / Output side /
Lato uscita / Côté sortie / Lado de salida

Rücklaufsperre
Das Getriebe ist mit Rücklaufsperre auf der Antriebswelle erhältlich. Die Rücklaufsperre verhindert die Rotation in die falsche Drehrichtung. Entsprechend der Größe ist sie im Antriebsflansch oder dem Motor integriert. Wichtig ist die Angabe der gewünschten Abtriebsdrehrichtung.

Backstop device
The gear reducer can be supplied with backstop device on input shaft. Backstop device allows output shaft rotation in only one sense of direction; according to the size, it is available in the input flange or in the motor with the same dimensions. It is important to specify the required sense of direction on the order.

Dispositivo antiretro
Il riduttore può essere fornito munito di dispositivo antiretro sull'asse veloce. L'antiretro permette la rotazione degli alberi in un solo senso, a seconda della grandezza è disponibile nella flangia PAM oppure nel motore, senza ingombri aggiuntivi. E' molto importante, in fase di ordine, specificare il senso di rotazione richiesto.

Système antidévireur
Le réducteur de vitesse peut être fourni avec le dispositif anti-retour sur l'axe d'entrée. Le dispositif anti retour permet la rotation des arbres de sortie dans un seul sens; selon la taille, il est disponible dans la bride d'entrée ou dans le moteur avec les mêmes dimensions. Il est important de spécifier le sens de la direction demandé sur l'ordre.

Dispositivo antirretorno
El reductor puede suministrarse con un dispositivo antirretorno en el eje veloz. El antirrettorno permite la rotación de los ejes en un solo sentido, según el tamaño está disponible en la brida PAM o en el motor, sin incremento de dimensiones. Es muy importante especificar en el pedido el sentido de rotación requerido.

Motor	063	071	080	090	100 - 112	132	160	180	200	225
Größe Size Grandezza Taille Tamaño	140x11	160x14	200x19	200x24	250x28	300x38	350x42	350x48	400x55	450x60
202	B5/B14	B5/B14								
202 G	B5/B14	B5/B14	B5/B14	B5/B14						
252		B5/B14	B5/B14	B5/B14	B5/B14					
253	B5/B14	B5/B14	B5/B14	B5/B14						
301		B5/B14	B5/B14	B5/B14						
302		B5/B14	B5/B14	B5/B14	B5/B14					
303	B5/B14	B5/B14	B5/B14	B5/B14						
351		B5/B14	B5/B14	B5/B14	B5/B14					
352		B5/B14	B5/B14	B5/B14	B5/B14					
353	B5/B14	B5/B14	B5/B14	B5/B14						
401			B5/B14	B5/B14	B5/B14					
402			B5/B14	B5/B14	B5/B14	B5/B14				
403		B5/B14	B5/B14	B5/B14	B5/B14					
501			B5/B14	B5/B14	B5/B14	B5/B14				
502			B5/B14	B5/B14	B5/B14	B5/B14	B5			
503			B5/B14	B5/B14	B5/B14	B5/B14				
601					B5/B14	B5/B14	B5	B5		
602					B5/B14	B5/B14	B5	B5		
603				B5/B14	B5/B14	B5/B14	B5			
701						B5/B14	B5	B5	B5	
702						B5/B14	B5	B5	B5	
703					B5/B14	B5/B14	B5	B5	B5	
902							B5	B5	B5	B5
903						B5/B14	B5	B5	B5	

Auswahltabellen der Getriebemotoren

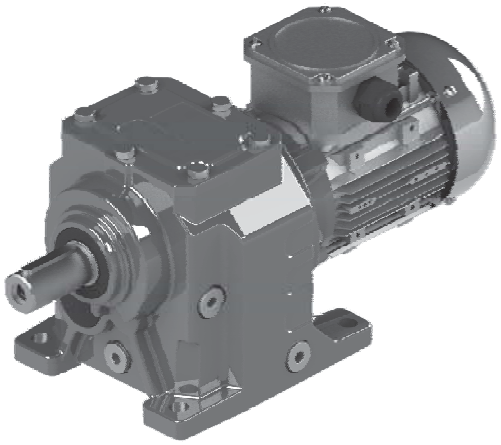
Selection Tables of Gearedmotors

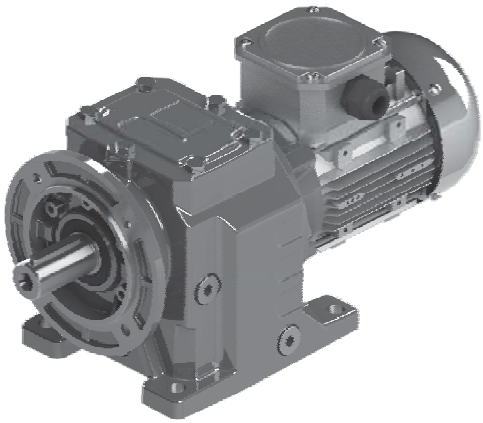
Tabelle di selezione dei motoriduttori

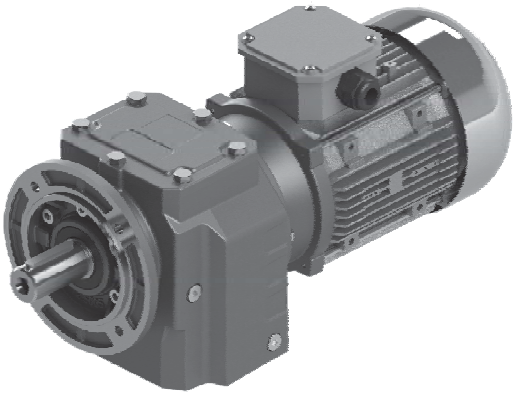
Tables de Gearedmotors de sélection

Tablas de selección de gearedmotors

A/F







A/F 301 ... 701
A/F 202 ... 902
A/F 253 ... 903

DE TECHNISCHE BESCHREIBUNGEN

EN TECHNICAL DESCRIPTIONS

IT DESCRIZIONI TECNICHE

FR DESCRIPTIONS TECHNIQUES

ES DESCRIPCIONES TECNICAS

Aufbau der Leistungstafeln für Getriebemotor
Notify about performance tables for Geared motor.
Notificare sulle tabelle di performance per i motoriduttori
Aviser sur les tableux de performance pour le motoréducteur
Notificar sobre la tabla de performance para los motoreductores.

1.10 kW →

Getriebe Motorleistung
Gear unit motor power
Potenza motore riduttore
Potencia del motor del reductor
Réducteur puissance du moteur

Motornennleistung
Rated motor power
Potenza nominale del motore
Puissance nominale du moteur
Potencia nominal del motor

Servicefaktor
Service factor
Factor de servicio
Fattore di servizio
Facteur de service

Verkleinerungsfaktor
Reduction ratio
Rapporto di riduzione
Rapport de réduction
Relación de reducción

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_{R2} [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.10	6.3	1559	1.2	222.59	18.0			
	7.2	1365	1.3	194.86	18.0			
	7.9	1253	1.4	178.98	18.0			
	8.7	1136	1.6	162.21	18.0			
	9.1	1082	1.7	154.52	18.0	**A503 - 90S/4A** **F503 - 90S/4A**	60	130
	9.9	994	1.8	142.00	18.0			
	11.3	870	2.1	124.25	18.0			
	12.5	789	2.3	112.61	18.0			
	14.4	685	2.6	97.80	18.0			

Abtriebsdrehzahl
Output speed
Vitesse de sortie
Velocità di uscita
Velocidad de salida

Abtriebsdrehmoment
Output torque
Coppia di uscita
Par de salida
Couple de sortie

Zulässige Radialkraft
Permissible radial force
Force radiale admissible
Fuerza radial admisible
Forza radiale ammessa

Getriebe Motortyp
Gear unit motor type
Réducteur type de moteur
Reductor tipo de motor
Riduttore tipo di motore

Zeichnungsseite
Drawing page
Pagina di disegno
Page de dessin
Pagina de diseño

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.09	3.7	221	0.9	245.76	5.5	**A253 - 63M/6** **F253 - 63M/6**	15	114
	4.6	177	1.1	197.21	5.5			
	5.0	160	1.2	178.56	5.5			
	6.3	129	1.6	143.29	5.5			
	7.3	111	1.8	123.58	5.5			
	8.3	97	2.1	108.02	5.5			
	9.1	89	2.2	99.17	5.5			
	12.0	67	3.0	74.76	5.5			
	13.5	60	3.3	66.56	5.5			
0.12	21.5	53	0.9	63.59	2.5	**A202 - 63M/4A** **F202 - 63M/4A**	7	110
	24.8	46	1.1	55.03	2.5			
	27.8	41	1.1	49.05	2.5			
	32.3	35	1.4	42.20	2.5			
	37.4	31	1.8	36.45	2.5			
	42.1	27	2.0	32.41	2.5			
	49.2	23	2.3	27.75	2.5			
	55.1	21	2.6	24.78	2.5			
	61.3	19	2.9	22.26	2.5			
	63.9	18	3.1	21.36	2.5			
	71.0	16	3.4	19.23	2.5			
	78.6	15	3.8	17.37	2.5			
	86.7	13	4.2	15.75	2.5			
	94.7	12	4.2	14.42	2.5			
	103.2	11	4.2	13.23	2.5			
	118.5	10	5.2	11.52	2.5			
	136.1	8	6.5	10.03	2.5			
	152.9	7	7.3	8.93	2.5			
	170.0	7	8.2	8.03	2.5			
	189.3	6	9.1	7.21	2.5			
	208.4	5	9.6	6.55	2.5			
	228.3	5	11.0	5.98	2.5			
	248.6	5	11.9	5.49	2.5			
	256.1	4	12.3	5.33	2.5			
	285.0	4	13.2	4.79	2.5			
	318.2	4	13.9	4.29	2.5			
	350.0	3	13.7	3.90	2.5			
	383.4	3	16.1	3.56	2.5			
	418.7	3	16.8	3.26	2.5			
	459.6	2	16.9	2.97	2.5			
	482.3	2	16.8	2.83	2.5			
	535.3	2	17.1	2.55	2.5			
	590.9	2	16.8	2.31	2.5			
	643.9	2	16.8	2.12	2.5			
	16.8	68	1.2	81.41	2.8	**A 202 G - 63M/4A** **F 202 G - 63M/4A**	9	112
	19.5	59	1.2	70.05	2.8			
	21.9	52	1.2	62.38	2.8			
	25.3	45	1.9	54.05	2.8			
	29.4	39	2.2	46.41	2.8			
	33.0	35	2.4	41.38	2.8			
	35.3	33	2.6	38.72	2.8			
	39.5	29	3.0	34.55	2.8			
	5.6	194	1.0	245.76	5.5	**A253 - 63M/4A** **F253 - 63M/4A**	15	114
	6.9	156	1.3	197.21	5.5			
	7.6	141	1.4	178.56	5.5			
	9.5	113	1.8	143.29	5.5			
	11.0	98	2.1	123.58	5.5			
	12.6	85	2.3	108.02	5.5			
	13.8	78	2.6	99.17	5.5			
	18.3	59	3.4	74.76	5.5			
	20.5	53	3.8	66.56	5.5			
	4.8	222	0.9	178.56	5.5	**A253 - 63M/6B** **F253 - 63M/6B**	15	114
	6.0	178	1.1	143.29	5.5			
	7.0	154	1.3	123.58	5.5			
	8.0	135	1.5	108.02	5.5			
	8.7	124	1.6	99.17	5.5			
	11.6	93	2.1	74.76	5.5			
	13.0	83	2.4	66.56	5.5			
	16.2	67	3.0	53.41	5.5			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.12	4.8	223	1.3	282.17	6.6	**A303 - 63M/4A** **F303 - 63M/4A**	18	118
	6.0	180	1.7	227.56	6.6			
	6.7	162	1.9	205.01	6.6			
	8.3	130	2.3	165.33	6.6			
	9.6	112	2.7	141.89	6.6			
	10.9	99	3.0	125.65	6.6			
	11.9	90	3.3	114.42	6.6			
	3.1	351	0.9	282.17	6.6	**A303 - 63M/6B** **F303 - 63M/6B**	18	118
	3.8	283	1.1	227.56	6.6			
	4.2	255	1.2	205.01	6.6			
	5.2	206	1.5	165.33	6.6			
	6.1	177	1.7	141.89	6.6			
	6.9	156	1.9	125.65	6.6			
	7.6	142	2.1	114.42	6.6			
	9.9	108	2.8	86.96	6.6			
	11.3	95	3.2	76.42	6.6			
	5.1	212	2.4	268.00	8.0	**A353 - 63M/4A** **F353 - 63M/4A**	23	122
	6.3	171	2.9	216.67	8.0			
	7.0	154	3.3	194.72	8.0			
	3.2	334	1.5	268.00	8.0	**A353 - 63M/6B** **F353 - 63M/6B**	23	122
	4.0	270	1.9	216.67	8.0			
	4.4	242	2.1	194.72	8.0			
	5.5	196	2.6	157.42	8.0			
	6.4	168	3.0	134.76	8.0			
	7.9	136	3.7	108.95	8.0			
0.15	6.3	214	0.9	143.29	5.5	**A 253 - 63M/6C** **F 253 - 63M/6C**	15	114
	7.3	185	1.1	123.58	5.5			
	8.3	162	1.2	108.02	5.5			
	9.1	148	1.3	99.17	5.5			
	12.0	112	1.8	74.76	5.5			
	13.5	100	2.0	66.56	5.5			
	16.9	80	2.5	53.41	5.5			
	4.0	340	0.9	227.56	6.6	**A 303 - 63M/6C** **F 303 - 63M/6C**	18	118
	4.4	307	1.0	205.01	6.6			
	5.4	247	1.2	165.33	6.6			
	6.3	212	1.4	141.89	6.6			
	7.2	188	1.6	125.65	6.6			
	7.9	171	1.8	114.42	6.6			
	10.3	130	2.3	86.96	6.6			
	11.8	114	2.6	76.42	6.6			
	14.6	92	3.3	61.63	6.6			
	3.4	401	1.2	268.00	8.0	**A 353 - 63M/6C** **F 353 - 63M/6C**	23	122
	4.2	324	1.5	216.67	8.0			
	4.6	291	1.7	194.72	8.0			
	5.7	236	2.1	157.42	8.0			
	6.7	202	2.5	134.76	8.0			
	8.3	163	3.1	108.95	8.0			
	9.9	135	3.7	90.51	8.0			
0.18	32.7	53	1.0	42.20	2.5	**A202 - 63M/4B** **F202 - 63M/4B**	8	110
	37.9	45	1.2	36.45	2.5			
	42.6	40	1.4	32.41	2.5			
	49.7	35	1.6	27.75	2.5			
	55.7	31	1.8	24.78	2.5			
	62.0	28	2.0	22.26	2.5			
	64.6	27	2.1	21.36	2.5			
	71.8	24	2.3	19.23	2.5			
	79.4	22	2.5	17.37	2.5			
	87.6	20	2.8	15.75	2.5			
	95.7	18	2.8	14.42	2.5			
	104.3	16	2.9	13.23	2.5			
	119.8	14	3.5	11.52	2.5			
	137.6	12	4.4	10.03	2.5			
	154.5	11	4.9	8.93	2.5			
	171.9	10	5.5	8.03	2.5			
	191.4	9	6.1	7.21	2.5			
	210.7	8	6.5	6.55	2.5			
	230.8	7	7.4	5.98	2.5			
	251.4	7	8.0	5.49	2.5			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.18	258.9 288.1 321.7 353.8 387.6 423.3 464.6 487.6 541.2 597.4 650.9	7 6 5 5 4 4 4 4 3 3 3	8.3 8.9 9.4 9.3 10.8 11.2 11.4 11.2 11.6 11.3 11.4	5.33 4.79 4.29 3.90 3.56 3.26 2.97 2.83 2.55 2.31 2.12	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	**A202 - 63M/4B** **F202 - 63M/4B**	8	110
	17.0 19.7 22.1 25.5 29.7 33.3 35.6 39.9 44.5 49.9 55.6	101 87 78 67 58 52 48 43 39 34 31	0.8 0.8 0.8 1.3 1.5 1.6 1.8 2.0 2.4 2.7 3.0	81.41 70.05 62.38 54.05 46.41 41.38 38.72 34.55 31.03 27.66 24.83	2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8	**A 202 G - 63M/4B** **F 202 G - 63M/4B**	9	112
	18.8 21.4 23.4 27.0 29.9	88 77 71 61 55	2.3 2.6 2.8 3.3 3.6	47.93 42.00 38.46 33.38 30.15	5.5 5.5 5.5 5.5 5.5	**A252 - 71M/6A** **F252 - 71M/6A**	19	114
	11.4 14.2 15.7 19.5 22.7 25.9 28.2 37.5	142 114 103 83 71 62 57 43	1.1 1.4 1.5 1.9 2.2 2.5 2.7 3.6	245.76 197.21 178.56 143.29 123.58 108.02 99.17 74.76	5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	**A253 - 63M/2A** **F253 - 63M/2A**	15	114
	7.7 9.6 11.2 12.8 13.9 18.5 20.7 25.8	209 168 145 126 116 88 78 63	1.0 1.2 1.4 1.6 1.7 2.3 2.6 3.2	178.56 143.29 123.58 108.02 99.17 74.76 66.56 53.41	5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	**A253 - 63M/4B** **F253 - 63M/4B**	15	114
	7.3 8.3 9.1 12.0 13.5 16.9	222 194 178 134 120 96	0.9 1.0 1.1 1.5 1.7 2.1	123.58 108.02 99.17 74.76 66.56 53.41	5.5 5.5 5.5 5.5 5.5 5.5	**A253 - 71M/6A** **F253 - 71M/6A**	19	114
	101.4 115.7	16 14	3.3 3.5	8.88 7.78	1.0 1.0	**A301 - 71M/6A** **F301 - 71M/6A**	18	116
	16.4 18.7 20.3	101 88 81	2.8 3.2 3.4	55.03 48.22 44.38	6.6 6.6 6.6	**A302 - 71M/6A** **F302 - 71M/6A**	22	118
	9.9 12.3 13.7 16.9 19.7 22.3 24.5	163 131 118 95 82 73 66	1.4 1.7 1.9 2.4 2.7 3.1 3.4	282.17 227.56 205.01 165.33 141.89 125.65 114.42	6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A303 - 63M/2A** **F303 - 63M/2A**	18	118

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.18	4.9	330	0.9	282.17	6.6	**A303 - 63M/4B** **F303 - 63M/4B**	18	118
	6.1	266	1.1	227.56	6.6			
	6.7	240	1.2	205.01	6.6			
	8.3	194	1.5	165.33	6.6			
	9.7	166	1.8	141.89	6.6			
	11.0	147	2.0	125.65	6.6			
	12.1	134	2.2	114.42	6.6			
	15.9	102	2.9	86.96	6.6			
	18.1	89	3.4	76.42	6.6			
	5.4	297	1.0	165.33	6.6	**A303 - 71M/6A** **F303 - 71M/6A**	22	118
	6.3	255	1.2	141.89	6.6			
	7.2	226	1.3	125.65	6.6			
	7.9	205	1.5	114.42	6.6			
	10.3	156	1.9	86.96	6.6			
	11.8	137	2.2	76.42	6.6			
	14.6	111	2.7	61.63	6.6			
	10.4	155	2.4	268.00	8.0	**A353 - 63M/2A** **F353 - 63M/2A**	23	122
	12.9	125	3.0	216.67	8.0			
	14.4	112	3.3	194.72	8.0			
	5.1	314	1.6	268.00	8.0	**A353 - 63M/4B** **F353 - 63M/4B**	23	122
	6.4	254	2.0	216.67	8.0			
	7.1	228	2.2	194.72	8.0			
	8.8	184	2.7	157.42	8.0			
	10.2	158	3.2	134.76	8.0			
	12.7	128	3.9	108.95	8.0			
	3.4	481	1.0	268.00	8.0	**A353 - 71M/6A** **F353 - 71M/6A**	27	122
	4.2	389	1.3	216.67	8.0			
	4.6	350	1.4	194.72	8.0			
	5.7	283	1.8	157.42	8.0			
	6.7	242	2.1	134.76	8.0			
	8.3	196	2.6	108.95	8.0			
	9.9	163	3.1	90.51	8.0			
	12.4	130	3.8	72.58	8.0			
	3.4	481	1.8	267.75	12.0	**A 403 - 71M/6A** **F 403 - 71M/6A**	37	126
	3.8	421	2.0	234.50	12.0			
	4.2	386	2.2	215.01	12.0			
	4.8	334	2.5	186.14	12.0			
	5.3	306	2.8	170.55	12.0			
	6.0	268	3.2	149.47	12.0			
	6.6	243	3.5	135.37	12.0			
0.22	9.8	202	1.0	143.29	5.5	**A253 - 63M/4D** **F253 - 63M/4D**	16	114
	11.3	174	1.1	123.58	5.5			
	13.0	152	1.3	108.02	5.5			
	14.1	140	1.4	99.17	5.5			
	18.7	105	1.9	74.76	5.5			
	21.0	94	2.1	66.56	5.5			
	26.2	75	2.7	53.41	5.5			
	6.2	321	0.9	227.56	6.6	**A303 - 63M/4D** **F303 - 63M/4D**	19	118
	6.8	289	1.0	205.01	6.6			
	8.5	233	1.3	165.33	6.6			
	9.9	200	1.5	141.89	6.6			
	11.1	177	1.7	125.65	6.6			
	12.2	161	1.9	114.42	6.6			
	16.1	123	2.4	86.96	6.6			
	18.3	108	2.8	76.42	6.6			
	22.7	87	3.5	61.63	6.6			
	5.2	378	1.3	268.00	8.0	**A353 - 63M/4D** **F353 - 63M/4D**	24	122
	6.5	306	1.6	216.67	8.0			
	7.2	275	1.8	194.72	8.0			
	8.9	222	2.3	157.42	8.0			
	10.4	190	2.6	134.76	8.0			
	12.8	154	3.3	108.95	8.0			
	15.5	128	3.9	90.51	8.0			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.25	260.8 290.2 324.0 356.4 390.4 426.4 468.0 491.2 545.1 601.7 655.7	9 8 7 7 6 6 5 5 4 4 4	6.0 6.4 6.8 6.7 7.8 8.2 8.2 8.2 8.3 8.2 8.2	5.33 4.79 4.29 3.90 3.56 3.26 2.97 2.83 2.55 2.31 2.12	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	**A202 - 71M/4A** **F202 - 71M/4A**	8	110
	50.1 56.1 62.4 65.1 72.3 80.0 88.3 96.4 105.1 120.7 138.6 155.7 173.1 192.8 212.2 232.4 253.2	48 43 38 37 33 30 27 25 23 20 17 15 14 12 11 10 9	1.1 1.3 1.4 1.5 1.7 1.8 2.0 2.1 2.1 2.5 3.2 3.6 4.0 4.4 4.7 5.4 5.8	27.75 24.78 22.26 21.36 19.23 17.37 15.75 14.42 13.23 11.52 10.03 8.93 8.03 7.21 6.55 5.98 5.49	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	**A202 - 71M/4A** **F202 - 71M/4A**	8	110
	25.7 30.0 33.6 35.9 40.2 44.8 50.3 56.0 61.9 68.3 74.6	93 80 71 67 59 53 48 43 39 35 32	0.9 1.1 1.2 1.3 1.4 1.7 1.9 2.2 2.4 2.4 2.6	54.05 46.41 41.38 38.72 34.55 31.03 27.66 24.83 22.44 20.35 18.63	2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8	**A 202 G - 71M/4A** **F 202 G - 71M/4A**	11	112
	29.0 33.1 36.1 41.6	79 69 63 55	2.5 2.9 3.2 3.6	47.93 42.00 38.46 33.38	5.5 5.5 5.5 5.5	**A252 - 71M/4A** **F252 - 71M/4A**	18	114
	19.0 21.7 23.7 27.3 30.2 34.0 37.6 39.5	121 106 97 84 76 67 61 58	1.7 1.9 2.1 2.4 2.6 3.0 3.3 3.4	47.93 42.00 38.46 33.38 30.15 26.79 24.19 23.04	5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	**A252 - 71M/6B** **F252 - 71M/6B**	23	114
	15.7 19.5 22.7 25.9 28.2 37.5 42.1 52.4	143 115 99 87 79 60 53 43	1.1 1.4 1.6 1.8 2.0 2.6 2.9 3.6	178.56 143.29 123.58 108.02 99.17 74.76 66.56 53.41	5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	**A253 - 63M/2B** **F253 - 63M/2B**	16	114
	11.2 12.9 14.0 18.6 20.9 26.0	200 174 160 121 107 86	1.0 1.1 1.2 1.7 1.9 2.3	123.58 108.02 99.17 74.76 66.56 53.41	5.5 5.5 5.5 5.5 5.5 5.5	**A/F 253 - 63M/4C** **A/F 253 - 71M/4A**	18	114

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.25	12.2 13.7 17.0	184 164 132	1.1 1.2 1.5	74.76 66.56 53.41	5.5 5.5 5.5	**A253 - 71M/6B** **F253 - 71M/6B**	23	114
	156.6 178.7	15 13	3.7 3.9	8.88 7.78	1.0 1.0	**A301 - 71M/4A** **F301 - 71M/4A**	14	116
	102.5 117.0 147.2 163.0 179.2	23 20 16 14 13	2.4 2.5 3.2 3.5 3.5	8.88 7.78 6.18 5.58 5.08	1.0 1.0 1.0 1.0 1.0	**A301 - 71M/6B** **F301 - 71M/6B**	19	116
	25.3 28.8 31.3	91 80 73	3.1 3.5 3.8	55.03 48.22 44.38	6.6 6.6 6.6	**A302 - 71M/4A** **F302 - 71M/4A**	21	118
	16.5 18.9 20.5 23.7 26.3 29.4	139 121 112 97 87 78	2.0 2.3 2.5 2.9 3.2 3.6	55.03 48.22 44.38 38.33 34.62 30.91	6.6 6.6 6.6 6.6 6.6 6.6	**A302 - 71M/6B** **F302 - 71M/6B**	26	118
	9.9 12.3 13.7 16.9 19.7 22.3 24.5 32.2 36.6	226 182 164 133 114 101 92 70 61	1.0 1.3 1.4 1.7 2.0 2.3 2.5 3.3 3.8	282.17 227.56 205.01 165.33 141.89 125.65 114.42 86.96 76.42	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A303 - 63M/2B** **F303 - 63M/2B**	19	118
	6.8 8.4 9.8 11.1 12.1 16.0 18.2 22.6	331 267 229 203 185 140 123 100	0.9 1.1 1.3 1.5 1.6 2.1 2.4 3.0	205.01 165.33 141.89 125.65 114.42 86.96 76.42 61.63	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A/F 303 - 63M/4C** **A/F 303 - 71M/4A**	21	118
	7.2 8.0 10.5 11.9 14.8	310 282 214 188 152	1.0 1.1 1.4 1.6 2.0	125.65 114.42 86.96 76.42 61.63	6.6 6.6 6.6 6.6 6.6	**A303 - 71M/6B** **F303 - 71M/6B**	26	118
	16.0	143	3.4	56.95	8.0	**A352 - 71M/6B** **F352 - 71M/6B**	31	122
	10.4 12.9 14.4 17.8 20.8	215 174 156 126 108	1.8 2.2 2.5 3.1 3.6	268.00 216.67 194.72 157.42 134.76	8.0 8.0 8.0 8.0 8.0	**A353 - 63M/2B** **F353 - 63M/2B**	24	122
	5.2 6.4 7.1 8.8 10.3 12.8 15.4	433 350 314 254 218 176 146	1.2 1.4 1.6 2.0 2.3 2.8 3.4	268.00 216.67 194.72 157.42 134.76 108.95 90.51	8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A/F 353 - 63M/4C** **A/F 353 - 71M/4A**	26	122
	4.2 4.7 5.8 6.8 8.4 10.1 12.5 15.5	534 480 388 332 269 223 179 145	0.9 1.0 1.3 1.5 1.9 2.2 2.8 3.5	216.67 194.72 157.42 134.76 108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A353 - 71M/6B** **F353 - 71M/6B**	31	122

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.25	5.2	432	2.0	267.75	12.0	**A403 - 71M/4A** **F403 - 71M/4A**	36	126
	5.9	379	2.2	234.50	12.0			
	6.5	347	2.4	215.01	12.0			
	7.5	301	2.8	186.14	12.0			
	8.2	275	3.1	170.55	12.0			
	9.3	241	3.5	149.47	12.0			
	10.3	219	3.9	135.37	12.0			
	3.4	660	1.3	267.75	12.0	**A403 - 71M/6B** **F403 - 71M/6B**	41	126
	3.9	578	1.5	234.50	12.0			
	4.2	530	1.6	215.01	12.0			
	4.9	459	1.9	186.14	12.0			
	5.3	421	2.0	170.55	12.0			
	6.1	369	2.3	149.47	12.0			
	6.7	334	2.5	135.37	12.0			
	7.7	291	2.9	118.13	12.0			
	9.6	234	3.6	94.86	12.0			
0.37	50.1	71	0.8	27.75	2.5	**A202 - 71M/4B** **F202 - 71M/4B**	9	110
	56.1	63	0.9	24.78	2.5			
	62.4	57	1.0	22.26	2.5			
	65.1	54	1.0	21.36	2.5			
	72.3	49	1.1	19.23	2.5			
	80.0	44	1.2	17.37	2.5			
	88.3	40	1.4	15.75	2.5			
	96.4	37	1.4	14.42	2.5			
	105.1	34	1.4	13.23	2.5			
	120.7	29	1.7	11.52	2.5			
	138.6	25	2.2	10.03	2.5			
	155.7	23	2.4	8.93	2.5			
	173.1	20	2.7	8.03	2.5			
	192.8	18	3.0	7.21	2.5			
	212.2	17	3.2	6.55	2.5			
	232.4	15	3.6	5.98	2.5			
	253.2	14	3.9	5.49	2.5			
	260.8	14	4.1	5.33	2.5			
	290.2	12	4.4	4.79	2.5			
	324.0	11	4.6	4.29	2.5			
	356.4	10	4.5	3.90	2.5			
	390.4	9	5.3	3.56	2.5			
	426.4	8	5.6	3.26	2.5			
	468.0	8	5.6	2.97	2.5			
	491.2	7	5.6	2.83	2.5			
	545.1	6	5.7	2.55	2.5			
	601.7	6	5.6	2.31	2.5			
	655.7	5	5.6	2.12	2.5			
	35.9	98	0.9	38.72	2.8	**A 202 G - 71M/4B** **F 202 G - 71M/4B**	11	112
	40.2	88	1.0	34.55	2.8			
	44.8	79	1.2	31.03	2.8			
	50.3	70	1.3	27.66	2.8			
	56.0	63	1.5	24.83	2.8			
	61.9	57	1.6	22.44	2.8			
	68.3	52	1.6	20.35	2.8			
	74.6	47	1.8	18.63	2.8			
	88.3	40	2.1	15.74	2.8			
	102.5	34	2.5	13.56	2.8			
	115.0	31	2.8	12.09	2.8			
	121.8	29	2.9	11.41	2.8			
	128.1	28	3.1	10.85	2.8			
	58.4	56	2.7	47.93	5.5	**A252 - 71M/2A** **F252 - 71M/2A**	18	114
	66.7	51	2.9	42.00	5.5			
	72.8	47	3.2	38.46	5.5			
	83.9	40	3.7	33.38	5.5			
	29.0	117	1.7	47.93	5.5	**A252 - 71M/4B** **F252 - 71M/4B**	20	114
	33.1	102	2.0	42.00	5.5			
	36.1	94	2.1	38.46	5.5			
	41.6	81	2.5	33.38	5.5			
	46.1	74	2.7	30.15	5.5			
	51.9	65	3.1	26.79	5.5			
	57.5	59	3.4	24.19	5.5			
	60.3	56	3.6	23.04	5.5			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.37	19.2 21.9 23.9 27.6 30.5 34.3 38.0 39.9 45.6 49.8 54.0 61.7 66.0 76.9 89.1	177 155 142 123 111 99 89 85 74 68 63 55 51 44 38	1.1 1.3 1.4 1.6 1.8 2.0 2.2 2.4 2.7 2.9 3.0 3.1 3.3 3.3 3.7	47.93 42.00 38.46 33.38 30.15 26.79 24.19 23.04 20.19 18.49 17.05 14.91 13.94 11.97 10.32	5.5 5.5 5.5 5.5 5.3 5.0 4.8 4.7 4.4 4.2 4.1 4.1 3.9 3.9 3.7	**A/F 252 - 71M/6** **A/F 252 - 80M/6A**	21	114
	22.7 25.9 28.2 37.5 42.1 52.4	147 128 118 89 79 63	1.1 1.2 1.3 1.8 2.0 2.5	123.58 108.02 99.17 74.76 66.56 53.41	5.5 5.5 5.5 5.5 5.5 5.5	**A/F 253 - 63M/2D** **A/F 253 - 71M/2A**	18	114
	18.6 20.9 26.0	179 159 128	1.1 1.3 1.6	74.76 66.56 53.41	5.5 5.5 5.5	**A253 - 71M/4B** **F253 - 71M/4B**	20	114
	17.2	193	1.0	53.41	5.5	**A/F 253 - 71M/6** **A/F 253 - 80M/6A**	21	114
	315.7	11	3.9	8.87	1.0	**A301 - 71M/2A** **F301 - 71M/2A**	14	116
	156.7 178.7 224.9 249.0 273.8	22 19 15 14 13	2.5 2.6 3.3 3.6 3.6	8.87 7.78 6.18 5.58 5.08	1.0 1.0 1.0 1.0 1.0	**A301 - 71M/4B** **F301 - 71M/4B**	17	116
	103.7 118.3 148.9 164.8 181.2 215.6 252.3 291.3 333.1 355.1 451.3	33 29 23 21 19 16 14 12 10 10 8	1.7 1.7 2.2 2.4 2.4 2.8 3.3 3.4 2.9 3.1 3.3	8.87 7.78 6.18 5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.9	**A301 - 80M/6A** **F301 - 80M/6A**	17	116
	50.9 58.1	63 55	3.4 3.8	55.03 48.22	6.6 6.6	**A302 - 71M/2A** **F302 - 71M/2A**	21	118
	25.3 28.8 31.3 36.3 40.2 45.0	134 118 108 94 84 75	2.1 2.4 2.6 3.0 3.3 3.7	55.03 48.22 44.38 38.33 34.62 30.91	6.6 6.6 6.6 6.6 6.6 6.6	**A302 - 71M/4B** **F302 - 71M/4B**	24	118
	16.7 19.1 20.7 24.0 26.6 29.8 33.0 34.8 39.2 43.1 47.7	203 178 164 141 128 114 103 98 87 79 71	1.4 1.6 1.7 2.0 2.2 2.5 2.7 2.7 3.0 3.2 3.5	55.03 48.22 44.38 38.33 34.62 30.91 27.92 26.45 23.49 21.33 19.29	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.3 6.1 5.8	**A/F 302 - 71M/6** **A/F 302 - 80M/6A**	24	118

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.37	16.9 19.7 22.3 24.5 32.2 36.6 45.4	188 161 143 130 99 87 70	1.2 1.4 1.6 1.7 2.3 2.6 3.2	165.33 141.89 125.65 114.42 86.96 76.42 61.63	6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A/F 303 - 63M/2D** **A/F 303 - 71M/2A**	21	118
	11.1 12.1 16.0 18.2 22.6	300 273 208 183 147	1.0 1.1 1.4 1.6 2.0	125.65 114.42 86.96 76.42 61.63	6.6 6.6 6.6 6.6 6.6	**A303 - 71M/4B** **F303 - 71M/4B**	23	118
	10.6 12.0 14.9	314 276 223	1.0 1.1 1.3	86.96 76.42 61.63	6.6 6.6 6.6	**A/F 303 - 71M/6** **A/F 303 - 80M/6A**	24	118
	109.8 125.5	31 27	3.2 3.7	8.38 7.33	2.5 2.5	**A/F 351 - 71M/6** **A/F 351 - 80M/6A**	18	120
	24.4	139	3.5	56.95	8.0	**A352 - 71M/4B** **F352 - 71M/4B**	28	122
	16.2 18.4 20.0 23.2	210 184 170 146	2.3 2.7 2.9 3.4	56.95 49.88 46.04 39.59	8.0 8.0 8.0 8.0	**A/F 352 - 71M/6** **A/F 352 - 80M/6A**	29	122
	10.4 12.9 14.4 17.8 20.8 25.7 30.9	304 246 221 179 153 124 103	1.2 1.5 1.7 2.1 2.5 3.0 3.6	268.00 216.67 194.72 157.42 134.76 108.95 90.51	8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A/F 353 - 63M/2D** **A/F 353 - 71M/2A**	26	122
	6.4 7.1 8.8 10.3 12.8 15.4 19.2 23.7	518 465 376 322 260 216 173 140	1.0 1.1 1.3 1.6 1.9 2.3 2.9 3.6	216.67 194.72 157.42 134.76 108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A353 - 71M/4B** **F353 - 71M/4B**	28	122
	6.8 8.4 10.2 12.7 15.7	487 393 327 262 212	1.0 1.3 1.5 1.9 2.4	134.76 108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0 8.0	**A/F 353 - 71M/6** **A/F 353 - 80M/6A**	29	122
	10.4 11.9 13.0 15.0 16.4 18.7	306 266 244 211 194 170	2.1 2.4 2.6 3.0 3.3 3.8	267.75 234.50 215.01 186.14 170.55 149.47	12.0 12.0 12.0 12.0 12.0 12.0	**A403 - 71M/2A** **F403 - 71M/2A**	36	126
	5.2 5.9 6.5 7.5 8.2 9.3 10.3 11.8 14.7	640 560 514 445 408 357 323 282 227	1.3 1.5 1.7 1.9 2.1 2.4 2.6 3.0 3.7	267.75 234.50 215.01 186.14 170.55 149.47 135.37 118.13 94.86	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A403 - 71M/4B** **F403 - 71M/4B**	38	126

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.37	3.9	847	1.0	234.50	12.0	**A/F 403 - 71M/6** **A/F 403 - 80M/6A**	40	126
	4.3	776	1.1	215.01	12.0			
	4.9	672	1.3	186.14	12.0			
	5.4	616	1.4	170.55	12.0			
	6.2	540	1.6	149.47	12.0			
	6.8	489	1.7	135.37	12.0			
	7.8	426	2.0	118.13	12.0			
	9.7	342	2.5	94.86	12.0			
	10.7	310	2.7	85.91	12.0			
	4.1	804	2.2	222.59	18.0	**A503 - 80M/6A** **F503 - 80M/6A**	57	130
	4.7	704	2.6	194.86	18.0			
	5.1	646	2.8	178.98	18.0			
	5.7	586	3.1	162.21	18.0			
	6.0	558	3.2	154.52	18.0			
	6.5	513	3.5	142.00	18.0			
0.55	80.6	65	0.8	17.37	2.5	**A202 - 71M/4C** **F202 - 71M/4C**	10	110
	88.9	59	0.9	15.75	2.5			
	97.1	54	0.9	14.42	2.5			
	105.8	50	0.9	13.23	2.5			
	121.5	43	1.2	11.52	2.5			
	139.6	38	1.5	10.03	2.5			
	156.8	34	1.6	8.93	2.5			
	174.3	30	1.8	8.03	2.5			
	194.2	27	2.0	7.21	2.5			
	213.7	25	2.2	6.55	2.5			
	234.1	22	2.5	5.98	2.5			
	255.0	21	2.7	5.49	2.5			
	262.7	20	2.8	5.33	2.5			
	292.3	18	2.9	4.79	2.5			
	326.3	16	3.1	4.29	2.5			
	359.0	15	3.1	3.90	2.5			
	393.3	13	3.6	3.56	2.5			
	429.4	12	3.8	3.26	2.5			
	471.4	11	3.8	2.97	2.5			
	494.7	11	3.7	2.83	2.5			
	549.0	10	3.8	2.55	2.5			
	606.1	9	3.7	2.31	2.5			
	660.4	8	3.8	2.12	2.5			
	50.6	104	0.9	27.66	2.8	**A 202 G - 80M/4A** **F 202 G - 80M/4A**	13	112
	56.4	93	1.0	24.83	2.8			
	62.4	84	1.1	22.44	2.8			
	68.8	76	1.1	20.35	2.8			
	75.1	70	1.2	18.63	2.8			
	88.9	59	1.4	15.74	2.8			
	103.2	51	1.7	13.56	2.8			
	115.8	45	1.9	12.09	2.8			
	122.7	43	2.0	11.41	2.8			
	129.0	41	2.1	10.85	2.8			
	142.7	37	2.3	9.81	2.8			
	160.0	33	2.7	8.75	2.8			
	179.3	29	2.8	7.81	2.8			
	58.8	82	1.8	47.93	5.5	**A252 - 71M/2B** **F252 - 71M/2B**	20	114
	67.1	72	2.1	42.00	5.5			
	73.3	66	2.3	38.46	5.5			
	84.5	57	2.6	33.38	5.5			
	93.5	52	2.9	30.15	5.5			
	105.3	46	3.3	26.79	5.5			
	116.6	41	3.6	24.19	5.5			
	122.4	39	3.8	23.04	5.5			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.55	29.2 33.3 36.4 41.9 46.4 52.3 57.9 60.8 69.3 75.7 82.1 93.9 100.4 117.0 135.7	173 151 139 120 109 96 87 83 73 67 61 54 50 43 37	1.2 1.3 1.4 1.7 1.8 2.1 2.3 2.4 2.8 3.0 3.1 3.2 3.4 3.4 3.8	47.93 42.00 38.46 33.38 30.15 26.79 24.19 23.04 20.19 18.49 17.05 14.91 13.94 11.97 10.32	5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.4	**A/F 252 - 71M/4C** **A/F 252 - 80M/4A**	20	114
	23.7 27.6 30.5 34.3 38.0 39.9 45.6 49.8 54.0 61.7 66.0 76.9 89.1 102.0 116.0 144.7 191.7	213 183 165 147 133 126 111 101 93 82 76 66 57 49 43 35 26	0.9 1.1 1.2 1.4 1.5 1.6 1.8 2.0 2.0 2.1 2.2 2.2 2.5 2.6 2.9 3.0 3.6	38.46 33.38 30.15 26.79 24.19 23.04 20.19 18.49 17.05 14.91 13.94 11.97 10.32 9.02 7.93 6.36 4.80	5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.4 5.2 5.0 4.7 4.4	**A252 - 80M/6B** **F252 - 80M/6B**	22	114
	37.7 42.4 52.8	125 112 90	1.2 1.3 1.7	74.76 66.56 53.41	5.5 5.5 5.5	**A253 - 71M/2B** **F253 - 71M/2B**	20	114
	26.2	192	1.0	53.41	5.5	**A/F 253 - 71M/4C** **A/F 253 - 80M/4A**	20	114
	317.9 362.5 456.3 505.4 555.1	16 14 11 10 9	2.7 2.8 3.5 3.8 3.8	8.87 7.78 6.18 5.58 5.08	1.0 1.0 1.0 1.0 1.0	**A301 - 71M/2B** **F301 - 71M/2B**	16	116
	157.8 179.9 226.5 250.9 275.6 327.9 383.6 443.0 507.2 540.5 686.3	32 28 22 20 18 16 13 11 10 9 7	1.7 1.8 2.2 2.5 2.4 2.9 3.4 3.5 3.0 3.2 3.4	8.87 7.78 6.18 5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.9 0.9 0.9	**A/F 301 - 71M/4C** **A/F 301 - 80M/4A**	16	116
	103.7 118.3 148.9 164.9 181.1 215.5 252.1 291.1 333.3 355.2 451.0 625.9	49 43 34 31 28 24 20 17 15 14 11 8	1.1 1.2 1.5 1.6 1.6 1.9 2.2 2.3 2.0 2.1 2.2 3.1	8.87 7.78 6.18 5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04 1.47	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.9 0.8	**A301 - 80M/6B** **F301 - 80M/6B**	18	116

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.55	51.2 58.5 63.5 73.6 81.5 91.2	94 83 76 66 59 53	2.2 2.5 2.8 3.2 3.5 4.0	55.03 48.22 44.38 38.33 34.62 30.91	6.6 6.6 6.6 6.6 6.6 6.6	**A302 - 71M/2B** **F302 - 71M/2B**	23	118
	25.4 29.0 31.5 36.5 40.4 45.3 50.1 52.9 59.6 65.6 72.6	198 174 160 138 125 111 101 95 85 77 69	1.4 1.6 1.8 2.0 2.2 2.5 2.8 2.7 3.1 3.3 3.6	55.03 48.22 44.38 38.33 34.62 30.91 27.92 26.45 23.49 21.33 19.29	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A/F 302 - 71M/4C** **A/F 302 - 80M/4A**	23	118
	16.7 19.1 20.7 24.0 26.6 29.8 33.0 34.8 39.2 43.1 47.7 56.8 66.6 76.7	302 264 243 210 190 169 153 145 129 117 106 89 76 66	0.9 1.1 1.2 1.3 1.5 1.7 1.8 1.8 2.0 2.1 2.4 2.8 3.3 3.8	55.03 48.22 44.38 38.33 34.62 30.91 27.92 26.45 23.49 21.33 19.29 16.21 13.81 12.00	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A302 - 80M/6B** **F302 - 80M/6B**	25	118
	22.4 24.6 32.4 36.9 45.8	211 192 146 128 103	1.1 1.2 1.5 1.8 2.2	125.65 114.42 86.96 76.42 61.63	6.6 6.6 6.6 6.6 6.6	**A303 - 71M/2B** **F303 - 71M/2B**	23	118
	12.2	404	0.7	114.42	6.6	**A303 - 71M/4C** **F303 - 71M/4C**	23	118
	16.1 18.3 22.7	307 270 217	1.0 1.1 1.4	86.96 76.42 61.63	6.6 6.6 6.6	**A/F 303 - 71M/4C** **A/F 303 - 80M/4A**	23	118
	14.9	331	0.9	61.63	6.6	**A303 - 80M/6B** **F303 - 80M/6B**	23	118
	164.7 188.1	31 27	3.2 3.7	8.50 7.44	2.5 2.5	**A/F 351 - 71M/4C** **A/F 351 - 80M/4A**	18	120
	108.2 123.6 155.7 172.5 189.8	47 41 33 30 27	2.1 2.4 3.1 3.4 3.5	8.50 7.44 5.91 5.33 4.85	2.5 2.5 2.5 2.5 2.5	**A351 - 80M/6B** **F351 - 80M/6B**	20	120
	49.5	100	3.8	56.95	8.0	**A352 - 71M/2B** **F352 - 71M/2B**	28	122
	24.6 28.1 30.4 35.4	201 176 162 140	2.4 2.8 3.0 3.5	56.95 49.88 46.04 39.59	8.0 8.0 8.0 8.0	**A/F 352 - 71M/4C** **A/F 352 - 80M/4A**	28	122
	16.2 18.4 20.0 23.2 27.5 28.7 31.8 34.6 36.6	312 273 252 217 184 175 158 146 138	1.6 1.8 1.9 2.3 2.7 2.8 3.1 3.4 3.4	56.95 49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A352 - 80M/6B** **F352 - 80M/6B**	30	122

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.55	13.0 14.5 17.9 20.9 25.9 31.2 38.9 48.1	363 326 264 226 183 152 122 98	1.0 1.1 1.4 1.7 2.1 2.5 3.1 3.8	216.67 194.72 157.42 134.76 108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A353 - 71M/2B** **F353 - 71M/2B**	30	122
	8.9	555	0.9	157.42	8.0	**A353 - 71M/4C** **F353 - 71M/4C**	30	122
	10.4 12.8 15.5 19.3 23.9	475 384 319 256 207	1.1 1.3 1.6 2.0 2.4	134.76 108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0 8.0	**A/F 353 - 71M/4C** **A/F 353 - 80M/4A**	30	122
	10.2 12.7 15.7	486 390 315	1.0 1.3 1.6	90.51 72.58 58.68	8.0 8.0 8.0	**A353 - 80M/6B** **F353 - 80M/6B**	30	122
	111.5	46	3.7	8.25	3.7	**A401 - 80M/6B** **F401 - 80M/6B**	20	124
	20.3 23.2	249 218	3.4 3.9	45.38 39.72	12.0 12.0	**A402 - 80M/6B** **F402 - 80M/6B**	41	126
	10.5 12.0 13.1 15.1 16.5 18.9 20.8 23.9 29.7	449 393 360 312 286 251 227 198 159	1.4 1.6 1.8 2.0 2.2 2.5 2.8 3.2 4.0	267.75 234.50 215.01 186.14 170.55 149.47 135.37 118.13 94.86	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A403 - 71M/2B** **F403 - 71M/2B**	38	126
	5.2 6.0 6.5 7.5 8.2 9.4 10.3 11.9 14.8 16.3	944 827 758 656 601 527 477 417 335 303	0.9 1.0 1.1 1.3 1.4 1.6 1.8 2.0 2.5 2.8	267.75 234.50 215.01 186.14 170.55 149.47 135.37 118.13 94.86 85.91	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A/F 403 - 71M/4C** **A/F 403 - 80M/4A**	38	126
	5.4 6.2 6.8 7.8 9.7 10.7	915 802 726 634 509 461	0.9 1.1 1.2 1.3 1.7 1.8	170.55 149.47 135.37 118.13 94.86 85.91	12.0 12.0 12.0 12.0 12.0 12.0	**A403 - 80M/6B** **F403 - 80M/6B**	41	126
	6.3 7.2 7.8 8.6 9.1 9.9	785 687 631 572 545 501	2.3 2.6 2.9 3.1 3.3 3.6	222.59 194.86 178.98 162.21 154.52 142.00	18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 80M/4A** **F503 - 80M/4A**	55	130
	4.1 4.7 5.1 5.7 6.0 6.5 7.4 8.2 9.4 10.8	1195 1046 961 871 829 762 667 604 525 458	1.5 1.7 1.9 2.1 2.2 2.4 2.7 3.0 3.4 3.9	222.59 194.86 178.98 162.21 154.52 142.00 124.25 112.61 97.80 85.33	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 80M/6B** **F503 - 80M/6B**	58	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.75	62.4	115	0.8	22.44	2.8	**A 202 G - 80M/4B** **F 202 G - 80M/4B**	14	112
	68.8	104	0.8	20.35	2.8			
	75.1	95	0.9	18.63	2.8			
	88.9	81	1.1	15.74	2.8			
	103.2	69	1.2	13.56	2.8			
	115.8	62	1.4	12.09	2.8			
	122.7	58	1.5	11.41	2.8			
	129.0	56	1.5	10.85	2.8			
	142.7	50	1.7	9.81	2.8			
	160.0	45	2.0	8.75	2.8			
	179.3	40	2.1	7.81	2.8			
	198.9	36	2.3	7.04	2.8			
	218.4	33	2.5	6.41	2.8			
	243.9	29	2.6	5.74	2.8			
	271.3	26	3.1	5.16	2.8			
	302.4	24	3.0	4.63	2.8			
	334.1	21	3.0	4.19	2.8			
	367.5	19	3.0	3.81	2.8			
	407.0	18	3.1	3.44	2.8			
	432.1	17	3.3	3.24	2.8			
	474.6	15	3.3	2.95	2.8			
	510.9	14	3.3	2.74	2.8			
	557.8	13	3.3	2.51	2.8			
	606.1	12	3.6	2.31	2.8			
	59.3	111	1.3	47.93	5.5	**A/F 252 - 71M/2C** **A/F 252 - 80M/2A**	20	114
	67.6	97	1.5	42.00	5.5			
	73.8	89	1.7	38.46	5.5			
	85.1	77	1.9	33.38	5.5			
	94.2	70	2.1	30.15	5.5			
	106.0	62	2.4	26.79	5.5			
	117.4	56	2.7	24.19	5.5			
	123.3	53	2.8	23.04	5.5			
	140.6	47	3.2	20.19	5.4			
	153.6	43	3.5	18.49	5.5			
	166.5	40	3.6	17.05	5.5			
	190.4	35	3.7	14.91	5.5			
	203.8	32	3.9	13.94	5.5			
	237.3	28	3.9	11.97	5.3			
	33.3	206	1.0	42.00	5.5	**A252 - 80M/4B** **F252 - 80M/4B**	21	114
	36.4	189	1.1	38.46	5.5			
	41.9	164	1.2	33.38	5.5			
	46.4	148	1.4	30.15	5.5			
	52.3	132	1.5	26.79	5.5			
	57.9	119	1.7	24.19	5.5			
	60.8	113	1.8	23.04	5.5			
	69.3	99	2.0	20.19	5.4			
	75.7	91	2.2	18.49	5.5			
	82.1	84	2.3	17.05	5.5			
	93.9	73	2.3	14.91	5.5			
	100.4	68	2.5	13.94	5.5			
	117.0	59	2.5	11.97	5.3			
	135.7	51	2.8	10.32	5.2			
	155.2	44	2.9	9.02	5.0			
	176.5	39	3.2	7.93	4.9			
	220.0	31	3.4	6.36	4.6			
	30.7	224	0.9	30.15	5.5	**A/F 252 - 80C/6** **A/F 252 - 90S/6A**	21	114
	34.5	199	1.0	26.79	5.5			
	38.2	180	1.1	24.19	5.5			
	40.1	171	1.2	23.04	5.5			
	45.8	150	1.3	20.19	5.5			
	50.0	137	1.5	18.49	5.5			
	54.2	127	1.5	17.05	5.5			
	62.0	111	1.5	14.91	5.5			
	66.4	104	1.6	13.94	5.5			
	77.3	89	1.6	11.97	5.3			
	89.7	77	1.8	10.32	5.2			
	102.5	67	1.9	9.02	5.0			
	116.6	59	2.1	7.93	4.9			
	145.3	47	2.2	6.36	4.6			
	192.8	36	2.7	4.80	4.3			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.75	53.2	121	1.2	53.41	5.5	**A/F 253 - 71M/2C A/F 253 - 80M/2A**	20	114
	320.2 365.0 459.5 509.0 559.1 665.1 778.7 899.3 1028.3 1096.1 1393.2	21 18 15 13 12 10 9 7 7 6 5	2.0 2.0 2.6 2.8 2.8 3.3 3.9 4.0 3.4 3.7 3.9	8.87 7.78 6.18 5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.9 0.9 0.8	**A/F 301 - 71M/2C A/F 301 - 80M/2A**	16	116
	157.8 179.9 226.5 250.9 275.6 327.9 383.9 443.3 506.9 540.4 686.8 953.2	44 39 31 28 25 21 18 16 14 13 10 7	1.2 1.3 1.6 1.8 1.8 2.1 2.5 2.6 2.2 2.3 2.5 3.4	8.87 7.78 6.18 5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04 1.47	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.9 0.9 0.8 0.8	**A301 - 80M/4B F301 - 80M/4B**	17	116
	118.9 149.6 165.7 182.2 216.8 253.6 292.9 334.9 357.0 453.8 629.8	58 46 42 38 32 27 24 21 19 15 11	0.9 1.1 1.2 1.2 1.4 1.6 1.7 1.4 1.5 1.6 2.3	7.78 6.18 5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04 1.47	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.9 0.8	**A/F 301 - 80C/6 A/F 301 - 90S/6A**	20	116
	51.6 58.9 64.0 74.1 82.0 91.9 101.7 107.4 120.9 133.1	128 112 103 89 80 72 65 61 55 49	1.6 1.9 2.0 2.4 2.6 2.9 3.2 3.2 3.6 3.8	55.03 48.22 44.38 38.33 34.62 30.91 27.92 26.45 23.49 21.33	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A/F 302 - 71M/2C A/F 302 - 80M/2A**	23	118
	25.4 29.0 31.5 36.5 40.4 45.3 50.1 52.9 59.6 65.6 72.6 86.3 101.4	270 237 218 188 170 152 137 130 115 105 95 80 68	1.0 1.2 1.3 1.5 1.6 1.8 2.0 2.0 2.3 2.4 2.6 3.1 3.7	55.03 48.22 44.38 38.33 34.62 30.91 27.92 26.45 23.49 21.33 19.29 16.21 13.81	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6	**A302 - 80M/4B F302 - 80M/4B**	24	118

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.75	24.1 26.7 29.9 33.1 35.0 39.4 43.4 47.9 57.1 67.0 77.1 88.1 101.6 126.0 165.7	285 257 230 208 197 175 159 143 121 103 89 78 68 55 41	1.0 1.1 1.2 1.3 1.3 1.5 1.6 1.7 2.1 2.4 2.8 3.1 3.1 2.9 3.9	38.33 34.62 30.91 27.92 26.45 23.49 21.33 19.29 16.21 13.81 12.00 10.50 9.11 7.34 5.58	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.2 5.7	**A/F 302 - 80C/6** **A/F 302 - 90S/6A**	27	118
	32.7 37.2 46.1	206 181 146	1.1 1.3 1.6	86.96 76.42 61.63	6.6 6.6 6.6	**A/F 303 - 71M/2C** **A/F 303 - 80M/2A**	23	118
	22.7	296	1.0	61.63	6.6	**A303 - 80M/4B** **F303 - 80M/4B**	24	118
	334.1	21	3.8	8.50	2.5	**A/F 351 - 71M/2C** **A/F 351 - 80M/2A**	18	120
	164.7 188.1 236.9 262.5	42 37 29 26	2.4 2.7 3.4 3.8	8.50 7.44 5.91 5.33	2.5 2.5 2.5 2.5	**A351 - 80M/4B** **F351 - 80M/4B**	19	120
	108.8 124.3 156.5 173.4 190.9 227.5 246.7 287.1 353.2 426.9	64 56 44 40 36 31 28 24 20 16	1.6 1.8 2.3 2.5 2.6 2.9 3.2 3.3 3.6 3.7	8.50 7.44 5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.3 2.2	**A/F 351 - 80C/6** **A/F 351 - 90S/6A**	22	120
	49.9 56.9 61.7 71.7	132 116 107 92	2.8 3.2 3.4 4.0	56.95 49.88 46.04 39.59	8.0 8.0 8.0 8.0	**A/F 352 - 71M/2C** **A/F 352 - 80M/2A**	28	122
	24.6 28.1 30.4 35.4 41.8 43.7 48.5 52.6 55.7	280 245 226 194 165 157 142 131 123	1.8 2.0 2.2 2.5 3.0 3.1 3.5 3.8 3.8	56.95 49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A352 - 80M/4B** **F352 - 80M/4B**	29	122
	16.2 18.5 20.1 23.4 27.6 28.9 32.0 34.8 36.8 42.0 45.5 50.5 54.8	423 371 342 294 249 238 215 198 187 164 151 136 125	1.2 1.3 1.4 1.7 2.0 2.1 2.3 2.5 2.5 2.9 3.0 3.4 3.6	56.95 49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A/F 352 - 80C/6** **A/F 352 - 90S/6A**	32	122
	18.0	357	1.0	157.42	8.0	**A353 - 71M/2C** **F353 - 71M/2C**	28	122

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.75	21.1 26.1 31.4 39.1 48.4	306 247 205 165 133	1.2 1.5 1.8 2.3 2.8	134.76 108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0 8.0	**A/F 353 - 80C/6** **A/F 353 - 90S/6A**	32	122
	12.8 15.5 19.3 23.9	524 435 349 282	1.0 1.1 1.4 1.8	108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0	**A353 - 80M/4B** **F353 - 80M/4B**	29	122
	12.7 15.8	528 427	0.9 1.2	72.58 58.68	8.0 8.0	**A/F 353 - 80C/6** **A/F 353 - 90S/6A**	32	122
	112.1 128.1 161.5	62 54 43	2.7 3.1 4.0	8.25 7.22 5.73	3.7 3.7 3.7	**A/F 401 - 80C/6** **A/F 401 - 90S/6A**	22	124
	30.9	223	3.8	45.38	12.0	**A402 - 80M/4B** **F402 - 80M/4B**	40	126
	20.4 23.3 25.4 29.4 32.0	337 295 271 234 215	2.5 2.9 3.1 3.6 4.0	45.38 39.72 36.44 31.50 28.89	12.0 12.0 12.0 12.0 12.0	**A/F 402 - 80C/6** **A/F 402 - 90S/6A**	43	126
	10.6	608	1.0	267.75	12.0	**A403 - 71M/2C** **F403 - 71M/2C**	38	126
	12.1 13.2 15.3 16.7 19.0 21.0 24.0 29.9 33.1	533 488 423 387 339 307 268 215 195	1.2 1.3 1.5 1.6 1.9 2.1 2.4 3.0 3.3	234.67 215.21 186.14 170.55 149.47 135.37 118.13 94.86 85.91	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A/F 403 - 71M/2C** **A/F 403 - 80M/2A**	38	126
	7.5 8.2 9.4 10.3 11.9 14.8 16.3	895 820 719 651 568 456 413	0.9 1.0 1.2 1.3 1.5 1.9 2.1	186.14 170.55 149.47 135.37 118.13 94.86 85.91	12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A403 - 80M/4B** **F403 - 80M/4B**	40	126
	7.8 9.8 10.8	860 690 625	1.0 1.2 1.4	118.13 94.86 85.91	12.0 12.0 12.0	**A/F 403 - 80C/6** **A/F 403 - 90S/6A**	43	126
	13.6 16.9 18.6	497 399 361	1.7 2.1 2.4	68.25 54.81 49.64	12.0 12.0 12.0	**A403 - 90S/6A** **F403 - 90S/6A**	43	126
	12.8 14.6 15.9 17.5 18.4	505 442 406 368 351	2.7 3.1 3.3 3.7 3.8	222.59 194.86 178.98 162.21 154.52	18.0 18.0 18.0 18.0 18.0	**A503 - 80M/2A** **F503 - 80M/2A**	57	130
	6.3 7.2 7.8 8.6 9.1 9.9 11.3 12.4 14.3	1070 937 861 780 743 683 598 542 470	1.7 1.9 2.1 2.3 2.4 2.6 3.0 3.3 3.8	222.59 194.86 178.98 162.21 154.52 142.00 124.25 112.61 97.80	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 80M/4B** **F503 - 80M/4B**	57	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.75	4.2	1620	1.1	222.59	18.0	**A/F 503 - 80C/6** **A/F 503 - 90S/6A**	60	130
	4.7	1418	1.3	194.86	18.0			
	5.2	1303	1.4	178.98	18.0			
	5.7	1181	1.5	162.21	18.0			
	6.0	1125	1.6	154.52	18.0			
	6.5	1034	1.7	142.00	18.0			
	7.4	904	2.0	124.25	18.0			
	8.2	820	2.2	112.61	18.0			
	9.5	712	2.5	97.80	18.0			
	10.8	621	2.9	85.33	18.0			
	11.8	572	3.1	78.64	18.0			
	13.0	519	3.5	71.27	18.0			
	16.5	409	3.9	56.21	18.0			
	3.8	1766	2.0	242.67	22.0	**A603 - 90S/6A** **F603 - 90S/6A**	88	134
	4.3	1569	2.2	215.56	22.0			
	4.8	1414	2.5	194.31	22.0			
	5.1	1318	2.7	181.13	22.0			
	5.7	1171	3.0	160.90	22.0			
	6.4	1045	3.3	143.57	22.0			
0.92	42.2	200	1.0	33.38	5.5	**A252 - 80M/4** **F252 - 80M/4**	21	114
	46.8	180	1.1	30.15	5.5			
	52.6	160	1.2	26.79	5.4			
	58.3	145	1.4	24.19	5.4			
	61.2	138	1.5	23.04	5.3			
	69.8	121	1.7	20.19	5.2			
	76.3	111	1.8	18.49	5.1			
	94.6	89	1.9	14.91	4.9			
	101.1	83	2.0	13.94	4.9			
	117.8	72	2.0	11.97	4.7			
	136.7	62	2.3	10.32	4.5			
	156.3	54	2.4	9.02	4.4			
	177.8	47	2.6	7.93	4.2			
	221.5	38	2.8	6.36	4.0			
	293.9	29	3.3	4.80	3.7			
	159.0	54	1.0	8.87	1.0	**A301 - 80M/4** **F301 - 80M/4**	17	116
	181.2	47	1.1	7.78	1.0			
	228.1	37	1.3	6.18	1.0			
	252.7	34	1.5	5.58	1.0			
	277.6	31	1.5	5.08	0.9			
	330.2	26	1.7	4.27	0.9			
	386.3	22	2.0	3.65	0.9			
	446.2	19	2.1	3.16	0.8			
	510.9	17	1.8	2.76	0.8			
	544.4	16	1.9	2.59	0.8			
	691.2	12	2.0	2.04	0.7			
	959.2	9	2.8	1.47	0.7			
	29.2	288	1.0	48.22	6.6	**A302 - 80M/4** **F302 - 80M/4**	24	118
	31.8	265	1.1	44.38	6.6			
	36.8	229	1.2	38.33	6.6			
	40.7	207	1.4	34.62	6.6			
	45.6	185	1.5	30.91	6.6			
	50.5	167	1.7	27.92	6.6			
	53.3	158	1.6	26.45	6.6			
	60.0	141	1.9	23.49	6.6			
	66.1	128	2.0	21.33	6.6			
	73.1	115	2.2	19.29	6.6			
	87.0	97	2.6	16.21	6.6			
	102.1	83	3.0	13.81	6.4			
	117.5	72	3.5	12.00	6.2			
	134.3	63	3.8	10.50	5.9			
	154.8	54	3.9	9.11	5.7			
	192.0	44	3.6	7.34	5.4			
	165.9	51	1.9	8.50	2.5	**A351 - 80M/4** **F351 - 80M/4**	19	120
	189.5	45	2.2	7.44	2.5			
	238.6	36	2.8	5.91	2.5			
	264.4	32	3.1	5.33	2.5			
	291.0	29	3.2	4.85	2.5			
	346.7	25	3.7	4.07	2.3			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
0.92	24.8 28.3 30.6 35.6 42.1 44.1 48.8 53.0 56.1 64.0 69.4	341 298 275 237 200 191 173 159 150 132 122	1.4 1.6 1.8 2.1 2.4 2.6 2.8 3.1 3.1 3.6 3.8	56.95 49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A352 - 80M/4** **F352 - 80M/4**	29	122
	15.6 19.4 24.0	530 425 344	0.9 1.2 1.5	90.51 72.58 58.68	8.0 8.0 8.0	**A353 - 80M/4** **F353 - 80M/4**	29	122
	170.9 195.2	53 46	3.2 3.7	8.25 7.22	3.7 3.7	**A401 - 80M/4** **F401 - 80M/4**	29	124
	31.1 35.5 38.7	295 258 237	2.9 3.3 3.4	45.38 39.72 36.44	12.0 12.0 12.0	**A402 - 80M/4** **F402 - 80M/4**	29	126
	9.4 10.4 11.9 14.9 16.4	875 793 692 556 503	1.0 1.1 1.2 1.5 1.7	149.47 135.37 118.13 94.86 85.91	12.0 12.0 12.0 12.0 12.0	**A403 - 80M/4** **F403 - 80M/4**	40	126
	6.3 7.2 7.9 8.7 9.1 9.9 11.3 12.5 14.4 16.5 17.9	1304 1141 1048 950 905 941 824 746 648 566 521	1.4 1.6 1.7 1.9 2.0 1.9 2.2 2.4 2.8 3.2 3.5	222.59 194.86 178.98 162.21 154.52 142.00 124.25 112.61 97.80 85.33 78.64	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 80M/4** **F503 - 80M/4**	57	130
1.10	123.6 143.7 161.1 180.5 200.3 220.0 245.6 273.3 304.5 336.5 370.1 409.9 435.2 478.0 514.6 561.8 610.4	85 73 65 58 52 48 43 38 34 31 28 26 24 22 20 19 17	1.0 1.2 1.3 1.4 1.6 1.7 1.8 2.2 2.1 2.1 2.1 2.1 2.2 2.3 2.3 2.3 2.5	11.41 9.81 8.75 7.81 7.04 6.41 5.74 5.16 4.63 4.19 3.81 3.44 3.24 2.95 2.74 2.51 2.31	2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8	**A 202 G - 90S/4A** **F 202 G - 90S/4A**	17	112
	67.9 74.1 85.4 94.5 106.4 117.8 123.7 141.1 154.1 167.1 191.1 204.5 238.1 276.3 315.9 359.3 447.8	142 130 113 102 91 82 78 68 63 58 51 47 41 35 31 27 22	1.1 1.2 1.3 1.5 1.7 1.8 1.9 2.2 2.4 2.5 2.5 2.7 2.7 3.0 3.2 3.5 3.6	42.00 38.46 33.38 30.15 26.79 24.19 23.04 20.19 18.49 17.05 14.91 13.94 11.97 10.32 9.02 7.93 6.36	5.0 5.0 4.9 4.8 4.7 4.6 4.5 4.4 4.3 4.2 4.1 4.0 3.9 3.7 3.6 3.5 3.3	**A252 - 80M/2B** **F252 - 80M/2B**	21	114

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.10	46.8	216	0.9	30.15	5.1	A/F 252 - 80M/4C A/F 252 - 90S/4A	24	114
	52.6	192	1.0	26.79	5.1			
	58.3	173	1.2	24.19	5.1			
	61.2	165	1.2	23.04	5.0			
	69.8	144	1.4	20.19	5.0			
	76.3	132	1.5	18.49	4.9			
	82.7	122	1.6	17.05	4.8			
	94.6	107	1.6	14.91	4.7			
	101.1	100	1.7	13.94	4.7			
	117.8	86	1.7	11.97	4.5			
	136.6	74	1.9	10.32	4.4			
	156.3	65	2.0	9.02	4.3			
	177.8	57	2.2	7.93	4.2			
	221.5	46	2.3	6.36	3.9			
	293.9	34	2.8	4.80	3.7			
	46.3	220	0.9	20.19	5.1	A252 - 90L/6B F252 - 90L/6B	28	114
	50.6	201	1.0	18.49	5.1			
	54.8	186	1.0	17.05	5.1			
	62.7	163	1.0	14.91	5.0			
	67.1	152	1.1	13.94	5.0			
	78.1	130	1.1	11.97	4.9			
	90.6	112	1.2	10.32	4.8			
	103.6	98	1.3	9.02	4.7			
	117.9	86	1.4	7.93	4.6			
	146.9	69	1.5	6.36	4.4			
	194.9	52	1.8	4.80	4.1			
	321.1	31	1.3	8.88	0.9	A301 - 80M/2B F301 - 80M/2B	17	116
	366.3	27	1.4	7.78	0.9			
	461.2	21	1.8	6.18	0.9			
	510.8	19	1.9	5.58	0.8			
	561.0	18	1.9	5.08	0.8			
	667.4	15	2.3	4.27	0.8			
	780.8	13	2.7	3.65	0.8			
	901.9	11	2.7	3.16	0.7			
	1032.6	10	2.4	2.76	0.7			
	1100.4	9	2.5	2.59	0.7			
	1397.1	7	2.7	2.04	0.6			
	1938.8	5	3.7	1.47	0.5			
	181.2	56	0.9	7.78	1.0	A/F 301 - 80M/4C A/F 301 - 90S/4A	20	116
	228.2	45	1.1	6.18	1.0			
	252.7	40	1.2	5.58	1.0			
	277.6	37	1.2	5.08	1.0			
	330.2	31	1.5	4.27	0.9			
	386.3	26	1.7	3.65	0.9			
	446.2	23	1.8	3.16	0.9			
	510.9	20	1.5	2.76	0.8			
	544.4	19	1.6	2.59	0.8			
	691.2	15	1.7	2.04	0.8			
	959.2	11	2.4	1.47	0.7			
	219.0	47	1.0	4.27	1.0	A301 - 90L/6B F301 - 90L/6B	24	116
	256.2	40	1.1	3.65	1.0			
	295.9	34	1.2	3.16	1.0			
	338.8	30	1.0	2.76	0.9			
	361.0	28	1.1	2.59	0.9			
	458.3	22	1.1	2.04	0.9			
	636.1	16	1.6	1.47	0.8			
	51.8	187	1.1	55.03	6.6	A302 - 80M/2B F302 - 80M/2B	24	118
	59.1	164	1.3	48.22	6.6			
	64.2	150	1.4	44.38	6.6			
	74.4	130	1.6	38.33	6.6			
	82.3	117	1.8	34.62	6.6			
	92.2	105	2.0	30.91	6.6			
	102.1	95	2.2	27.92	6.6			
	107.7	90	2.2	26.45	6.6			
	121.3	80	2.4	23.49	6.6			
	133.6	72	2.6	21.33	6.6			
	147.7	65	2.9	19.29	6.6			
	175.8	55	3.4	16.21	6.5			
	206.4	47	4.0	13.81	6.3			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.10	36.8 40.7 45.6 50.5 53.3 60.0 66.1 73.1 87.0 102.1 117.5 134.3 154.8 192.0	274 248 221 200 189 168 153 138 116 99 86 75 65 53	1.0 1.1 1.3 1.4 1.4 1.5 1.6 1.8 2.2 2.5 2.9 3.2 3.2 3.0	38.33 34.62 30.91 27.92 26.45 23.49 21.33 19.29 16.21 13.81 12.00 10.50 9.11 7.34	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.5 6.3 6.1 5.8 5.6 5.3	**A/F 302 - 80M/4C** **A/F 302 - 90S/4A**	27	118
	33.5 35.3 39.8 43.8 48.5 57.7 67.7 77.9 89.1 102.7 127.3 167.5	301 285 253 230 208 175 149 129 113 98 79 60	0.9 0.9 1.0 1.1 1.2 1.4 1.7 1.9 2.1 2.1 2.0 2.7	27.92 26.45 23.49 21.33 19.29 16.21 13.81 12.00 10.50 9.11 7.34 5.58	6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.6 6.5 6.3 6.0 5.5	**A302 - 90L/6B** **F302 - 90L/6B**	31	118
	46.2	204	1.1	61.63	6.6	**A303 - 80M/2B** **F303 - 80M/2B**	24	118
	335.3 382.8 482.3	29 26 20	2.5 2.9 3.7	8.50 7.44 5.91	2.5 2.5 2.5	**A351 - 80M/2B** **F351 - 80M/2B**	19	120
	165.9 189.4 238.6 264.4 291.0 346.7 376.0 437.6 538.4 650.8	61 54 43 39 35 29 27 23 19 16	1.6 1.9 2.3 2.6 2.7 3.1 3.3 3.4 3.7 3.8	8.50 7.44 5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.4 2.3 2.2	**A/F 351 - 80M/4C** **A/F 351 - 90S/4A**	22	120
	110.0 125.6 158.2 175.3 192.9 229.9 249.3 290.2 357.0 431.5 644.1 717.6	93 81 64 58 53 44 41 35 29 24 16 14	1.1 1.2 1.6 1.7 1.8 2.0 2.2 2.3 2.5 2.5 3.8 2.8	8.50 7.44 5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.45 1.30	2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.4 1.9 2.0	**A351 - 90L/6B** **F351 - 90L/6B**	26	120
	50.0 57.1 61.9 72.0 85.1 89.0 98.7	193 169 156 134 114 109 98	1.9 2.2 2.4 2.7 3.2 3.4 3.8	56.95 49.88 46.04 39.59 33.50 32.01 28.89	8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A352 - 80M/2B** **F352 - 80M/2B**	29	122

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.10	24.8 28.3 30.6 35.6 42.1 44.0 48.8 53.0 56.1 64.0 69.4 77.0 83.6	407 357 329 283 240 229 207 190 180 158 145 131 121	1.2 1.4 1.5 1.7 2.0 2.1 2.4 2.6 2.6 3.0 3.2 3.5 3.7	56.95 49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	**A/F 352 - 80M/4C** **A/F 352 - 90S/4A**	32	122
	18.7 20.3 23.6 27.9 29.2 32.4 35.2 37.2 42.4 46.0 51.1 55.4 64.4 79.7 95.9 107.1 132.5	538 497 427 361 345 312 287 271 238 219 197 182 157 127 105 94 76	0.9 1.0 1.1 1.4 1.4 1.6 1.7 1.7 2.0 2.1 2.3 2.5 2.7 3.1 3.5 3.6 3.8	49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75 8.73 7.06	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 7.6	**A352 - 90L/6B** **F352 - 90L/6B**	36	122
	26.2 31.5 39.3 48.6	361 300 241 195	1.0 1.2 1.6 1.9	108.95 90.51 72.58 58.68	8.0 8.0 8.0 8.0	**A353 - 80M/2B** **F353 - 80M/2B**	29	122
	19.4 24.0	508 411	1.0 1.2	72.58 58.68	8.0 8.0	**A/F 353 - 80M/4C** **A/F 353 - 90S/4A**	32	122
	170.9 195.2	60 52	2.9 3.3	8.25 7.22	3.7 3.7	**A/F 401 - 80M/4C** **A/F 401 - 90S/4A**	22	124
	113.3 129.5 163.3 181.0 199.3 237.7 257.9 300.5	90 79 62 56 51 43 40 34	1.9 2.2 2.7 3.0 3.1 3.5 3.8 3.8	8.25 7.22 5.73 5.17 4.69 3.93 3.63 3.11	3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7	**A401 - 90L/6B** **F401 - 90L/6B**	26	124
	62.8	161	4.1	45.38	12.0	**A402 - 80M/2B** **F402 - 80M/2B**	40	126
	31.1 35.5 38.7 44.8 48.8	325 284 261 225 207	2.6 3.0 3.1 3.8 3.9	45.38 39.72 36.44 31.50 28.89	12.0 12.0 12.0 12.0 12.0	**A/F 402 - 80M/4C** **A/F 402 - 90S/4A**	43	126
	20.6 23.5 25.7 29.7 32.4 37.0 40.8 46.9	489 428 393 340 312 273 247 215	1.7 2.0 2.0 2.5 2.6 3.1 3.4 4.0	45.38 39.72 36.44 31.50 28.89 25.30 22.91 19.94	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 90L/6B** **F402 - 90L/6B**	47	126

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.10	15.3 16.7 19.1 21.1 24.1 30.0 33.2	617 566 496 449 392 315 285	1.0 1.1 1.3 1.4 1.6 2.0 2.2	186.14 170.55 149.47 135.37 118.13 94.86 85.91	12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A403 - 80M/2B** **F403 - 80M/2B**	40	126
	11.9 14.9 16.4	827 664 602	1.0 1.3 1.4	118.13 94.86 85.91	12.0 12.0 12.0	**A/F 403 - 80M/4C** **A/F 403 - 90S/4A**	43	126
	10.9 13.7 17.1 18.8	907 721 579 524	0.9 1.2 1.5 1.6	85.91 68.25 54.81 49.64	12.0 12.0 12.0 12.0	**A403 - 90L/6B** **F403 - 90L/6B**	47	126
	20.7 25.7 28.4	478 384 348	1.8 2.2 2.4	68.25 54.81 49.64	12.0 12.0 12.0	**A403 - 90S/4A** **F403 - 90S/4A**	43	126
	109.3	93	3.8	8.56	4.0	**A501 - 90L/6B** **F501 - 90L/6B**	37	128
	19.2 21.6 23.8	526 467 423	3.0 3.4 3.8	48.77 43.32 39.21	18.0 18.0 18.0	**A502 - 90L/6B** **F502 - 90L/6B**	64	130
	12.8 14.6 15.9 17.6 18.4 20.1 22.9 25.3	738 646 594 538 513 471 412 374	1.8 2.1 2.3 2.5 2.6 2.9 3.3 3.6	222.59 194.86 178.98 162.21 154.52 142.00 124.25 112.61	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 80M/2B** **F503 - 80M/2B**	55	130
	6.3 7.2 7.9 8.7 9.1 9.9 11.3 12.5 14.4 16.5 17.9 19.8	1559 1365 1253 1136 1082 994 870 789 685 598 551 499	1.2 1.3 1.4 1.6 1.7 1.8 2.1 2.3 2.6 3.0 3.3 3.6	222.59 194.86 178.98 162.21 154.52 142.00 124.25 112.61 97.80 85.33 78.64 71.27	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A/F 503 - 80M/4C** **A/F 503 - 90S/4A**	60	130
	5.2 5.8 6.1 6.6 7.5 8.3 9.6 11.0 11.9 13.1 16.6	1890 1713 1632 1500 1312 1189 1033 901 831 753 594	1.0 1.1 1.1 1.2 1.4 1.5 1.7 2.0 2.2 2.4 2.7	178.98 162.21 154.52 142.00 124.25 112.61 97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 90L/6B** **F503 - 90L/6B**	64	130
	3.9 4.3 4.8 5.2 5.8 6.5	2563 2277 2052 1913 1699 1516	1.4 1.5 1.7 1.8 2.1 2.3	242.67 215.56 194.31 181.13 160.90 143.57	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 90L/6B** **F603 - 90L/6B**	92	134
	5.8 6.5 7.3 7.8 8.8 9.8	1699 1510 1361 1269 1127 1005	2.1 2.3 2.6 2.8 3.1 3.5	242.67 215.56 194.31 181.13 160.90 143.57	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 90S/4A** **F603 - 90S/4A**	88	134

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.50	144.8 162.3 181.8 201.7 221.5 247.4 275.2 306.7 338.9 372.7 412.8 438.3 481.4 518.2 565.7 614.7	99 88 79 71 65 58 52 47 42 38 35 33 30 28 25 23	0.9 1.0 1.0 1.2 1.3 1.3 1.6 1.5 1.5 1.5 1.6 1.7 1.7 1.7 1.7 1.8	9.81 8.75 7.81 7.04 6.41 5.74 5.16 4.63 4.19 3.81 3.44 3.24 2.95 2.74 2.51 2.31	2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8	**A 202 G - 90L/4A** **F 202 G - 90L/4A**	19	112
	91.1 104.2 118.5 147.7 195.9	151 132 116 93 70	0.9 1.0 1.1 1.1 1.4	10.32 9.02 7.93 6.36 4.80	4.4 4.3 4.2 4.1 3.9	**A252 - 100L/6A** **F252 - 100L/6A**	33	114
	94.9 106.8 118.2 124.1 141.6 154.7 167.7 191.8 205.2 239.0 277.2 317.0 360.6 449.4 596.1	139 123 111 106 93 85 79 69 64 55 48 42 37 29 22	1.1 1.2 1.3 1.4 1.6 1.8 1.8 1.9 2.0 2.0 2.2 2.3 2.6 2.7 3.2	30.15 26.79 24.19 23.04 20.19 18.49 17.05 14.91 13.94 11.97 10.32 9.02 7.93 6.36 4.80	4.4 4.3 4.3 4.2 4.2 4.1 4.0 3.9 3.9 3.7 3.6 3.5 3.4 3.2 3.0	**A/F 252 - 80M/2C** **A/F 252 - 90S/2A**	22	114
	70.3 76.8 83.3 95.2 101.9 118.6 137.6 157.4 179.1 223.3 295.8	196 179 165 144 135 116 100 87 77 62 46	1.0 1.1 1.2 1.2 1.3 1.3 1.4 1.5 1.6 1.7 2.0	20.19 18.49 17.05 14.91 13.94 11.97 10.32 9.02 7.93 6.36 4.80	4.4 4.4 4.4 4.3 4.3 4.2 4.1 4.0 3.9 3.8 3.5	**A252 - 90L/4A** **F252 - 90L/4A**	26	114
	322.3	42	1.0	8.88	0.8	**A301 - 80M/2C** **F301 - 80M/2C**	17	116
	367.7 462.6 512.2 563.3 670.3 784.2 905.7 1035.5 1103.9 1403.0 1947.2	37 29 26 24 20 17 15 13 12 10 7	1.0 1.3 1.4 1.4 1.7 2.0 2.0 1.7 1.8 2.0 2.7	7.78 6.18 5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04 1.47	0.9 0.8 0.8 0.8 0.8 0.7 0.7 0.7 0.7 0.6 0.6	**A/F 301 - 80M/2C** **A/F 301 - 90S/2A**	18	116
	254.5 279.5 332.6 389.0 449.4 514.5 548.3 696.1 966.0	55 50 42 36 31 27 25 20 14	0.9 0.9 1.1 1.3 1.3 1.1 1.2 1.3 1.7	5.58 5.08 4.27 3.65 3.16 2.76 2.59 2.04 1.47	0.9 0.9 0.9 0.9 0.8 0.8 0,8 0.8 0.7	**A301 - 90L/4A** **F301 - 90L/4A**	22	116

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.50	58.0 68.1 78.3 89.6 103.2 128.0 168.4	237 202 176 154 133 107 82	1.1 1.2 1.4 1.6 1.6 1.5 2.0	16.21 13.81 12.00 10.50 9.11 7.34 5.58	6.2 6.0 5.8 5.6 5.4 5.2 4.8	**A302 - 100L/6A** **F302 - 100L/6A**	36	118
	59.3	222	0.9	48.22	6.6	**A302 - 80M/2C** **F302 - 80M/2C**	24	118
	74.6 82.6 92.5 102.4 108.1 121.8 134.1 148.3 176.4 207.1 238.3 272.5 314.1 389.4	177 160 142 129 122 108 98 89 75 64 55 48 42 34	1.2 1.3 1.5 1.6 1.6 1.8 1.9 2.1 2.5 2.9 3.4 3.7 3.8 3.5	38.33 34.62 30.91 27.92 26.45 23.49 21.33 19.29 16.21 13.81 12.00 10.50 9.11 7.34	6.4 6.3 6.2 6.0 6.0 5.8 5.7 5.5 5.3 5.1 4.9 4.7 4.5 4.3	**A/F 302 - 80M/2C** **A/F 302 - 90S/2A**	25	118
	45.9 50.9 53.7 60.5 66.6 73.6 87.6 102.8 118.3 135.3 155.9 193.4 254.4	299 270 256 227 207 187 157 134 116 102 88 71 54	0.9 1.0 1.0 1.1 1.2 1.3 1.6 1.9 2.2 2.4 2.4 2.2 3.0	30.91 27.92 26.45 23.49 21.33 19.29 16.21 13.81 12.00 10.50 9.11 7.34 5.58	6.6 6.6 6.6 6.6 6.5 6.4 6.2 6.0 5.8 5.6 5.4 5.2 4.8	**A302 - 90L/4A** **F302 - 90L/4A**	29	118
	159.1 176.3 194.0 231.1 250.7 291.7 358.9 433.8 647.6 721.4	87 79 72 60 55 48 39 32 21 19	1.1 1.3 1.3 1.5 1.6 1.7 1.8 1.9 2.8 2.1	5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.45 1.30	2.5 2.5 2.5 2.5 2.5 2.5 2.4 2.3 2.0 2.0	**A351 - 100L/6A** **F351 - 100L/6A**	31	120
	336.5 384.4 483.9 536.6 589.7 703.3 762.7 887.6	40 35 28 25 23 19 18 15	1.9 2.1 2.7 3.0 3.1 3.5 3.8 4.0	8.50 7.44 5.91 5.33 4.85 4.07 3.75 3.22	2.5 2.4 2.3 2.2 2.1 2.0 2.0 1.7	**A/F 351 - 80M/2C** **A/F 351 - 90S/2A**	20	120
	167.1 190.9 240.3 266.4 292.8 349.2 378.7 440.7 542.2 655.4 1089.8	83 73 58 52 47 40 37 32 26 21 13	1.2 1.4 1.7 1.9 2.0 2.3 2.5 2.5 2.7 2.8 3.1	8.50 7.44 5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.30	2.5 2.5 2.5 2.5 2.5 2.5 2.4 2.3 2.2 2.1 1.8	**A351 - 90L/4A** **F351 - 90L/4A**	24	120

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.50	29.4 32.5 35.4 37.4 42.7 46.3 51.4 55.7 64.8 80.1 96.4 107.7 133.2 160.3	468 423 389 368 322 297 268 247 212 172 143 128 103 86	1.0 1.2 1.3 1.3 1.5 1.5 1.7 1.8 2.0 2.3 2.6 2.7 2.8 3.0	32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 7.8 7.4 7.0	**A352 - 100L/6A** **F352 - 100L/6A**	41	122
	50.2 57.3 62.1 72.2 85.4 89.4 99.0 107.6 113.8 129.8 140.8	262 230 212 182 154 147 133 123 116 102 94	1.4 1.6 1.7 2.0 2.4 2.5 2.8 3.0 3.0 3.5 3.7	56.95 49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31	8.0 8.0 8.0 8.0 8.0 8.0 8.0 7.8 7.7 7.4 7.3	**A/F 352 - 80M/2C** **A/F 352 - 90S/2A**	30	122
	28.5 30.8 35.9 42.4 44.4 49.2 53.4 56.5 64.5 69.9 77.6 84.1 97.8 121.0 145.6	483 446 383 324 310 280 258 243 213 197 177 163 141 114 94	1.0 1.1 1.3 1.5 1.6 1.8 1.9 1.9 2.2 2.3 2.6 2.8 3.1 3.4 3.9	49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 7.5 7.2	**A352 - 90L/4A** **F352 - 90L/4A**	34	122
	39.4 48.7	327 265	1.1 1.4	72.58 58.68	8.0 8.0	**A/F 353 - 80M/2C** **A/F 353 - 90S/2A**	30	122
	113.9 130.2 164.1 181.9 200.3 239.0 259.3 302.1 372.5 451.2	122 107 85 76 69 58 54 46 37 31	1.4 1.6 2.0 2.2 2.3 2.6 2.8 2.8 3.2 3.9	8.25 7.22 5.73 5.17 4.69 3.93 3.63 3.11 2.52 2.08	3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.4	**A401 - 100L/6A** **F401 - 100L/6A**	31	124
	346.7 396.0	39 34	3.3 3.7	8.25 7.22	3.7 3.6	**A/F 401 - 80M/2C** **A/F 401 - 90S/2A**	20	124
	172.1 196.6 247.9 274.8 302.6 361.0	81 71 56 51 46 38	2.1 2.4 3.0 3.4 3.5 3.9	8.25 7.22 5.73 5.17 4.69 3.93	3.7 3.7 3.7 3.7 3.7 3.7	**A401 - 90L/4A** **F401 - 90L/4A**	24	124

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.50	20.7 23.7 25.8 29.8 32.5 37.2 41.0 47.1 54.1 58.7 64.8 75.5 82.0	664 581 533 461 423 370 335 292 254 234 212 182 168	1.3 1.5 1.5 1.8 1.9 2.3 2.5 2.9 3.3 3.4 3.3 3.8 3.9	45.38 39.72 36.44 31.50 28.89 25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 100L/6A** **F402 - 100L/6A**	52	126
	63.0 72.0 78.5	209 183 168	3.0 3.5 3.6	45.38 39.72 36.44	12.0 12.0 12.0	**A/F 402 - 80M/2C** **A/F 402 - 90S/2A**	41	126
	31.3 35.8 39.0 45.1 49.2 56.1 62.0	439 385 353 305 280 245 222	1.9 2.2 2.3 2.8 2.9 3.5 3.8	45.38 39.72 36.44 31.50 28.89 25.30 22.91	12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 90L/4A** **F402 - 90L/4A**	45	126
	17.2 18.9	785 711	1.1 1.2	54.81 49.64	12.0 12.0	**A403 - 100L/6A** **F403 - 100L/6A**	52	126
	21.1	610	1.0	135.37	12.0	**A403 - 80M/2C** **F403 - 80M/2C**	40	126
	24.2 30.2 33.3	532 428 387	1.2 1.5 1.6	118.13 94.86 85.91	12.0 12.0 12.0	**A/F 403 - 80M/2C** **A/F 403 - 90S/2A**	41	126
	15.0 16.5 20.8 25.9 28.6	900 815 647 520 471	0.9 1.0 1.3 1.6 1.8	94.86 85.91 68.25 54.81 49.64	12.0 12.0 12.0 12.0 12.0	**A403 - 90L/4A** **F403 - 90L/4A**	45	126
	41.9 52.2 57.6	308 247 224	2.1 2.6 2.8	68.25 54.81 49.64	12.0 12.0 12.0	**A403 - 90S/2A** **F403 - 90S/2A**	41	126
	109.9 123.7 152.4	126 112 91	2.8 3.1 3.7	8.56 7.60 6.17	4.0 4.0 4.0	**A501 - 100L/6A** **F501 - 100L/6A**	42	128
	19.3 21.7 24.0 27.0 29.8 33.3	699 621 562 499 452 405	2.3 2.6 2.8 3.2 3.5 4.0	48.77 43.32 39.21 34.83 31.57 28.26	18.0 18.0 18.0 18.0 18.0 18.0	**A502 - 100L/6A** **F502 - 100L/6A**	69	130
	29.1 32.8	472 420	3.4 3.8	48.77 43.32	18.0 18.0	**A502 - 90L/4A** **F502 - 90L/4A**	62	130
	7.6 8.3 9.6 11.0 12.0 13.2 16.7	1780 1613 1401 1222 1127 1021 805	1.0 1.1 1.3 1.5 1.6 1.8 2.0	124.25 112.61 97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 100L/6A** **F503 - 100L/6A**	69	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.50	12.8	1003	1.3	222.59	18.0	**A/F 503 - 80M/2C** **A/F 503 - 90S/2A**	58	130
	14.7	878	1.5	194.86	18.0			
	16.0	807	1.7	178.98	18.0			
	17.6	731	1.8	162.21	18.0			
	18.5	697	1.9	154.52	18.0			
	20.1	640	2.1	142.00	18.0			
	23.0	560	2.4	124.25	18.0			
	25.4	508	2.7	112.61	18.0			
	29.2	441	3.1	97.80	18.0			
	33.5	385	3.5	85.33	18.0			
	36.4	355	3.8	78.64	18.0			
	7.3	1848	1.0	194.86	18.0	**A503 - 90L/4A** **F503 - 90L/4A**	62	130
	7.9	1697	1.1	178.98	18.0			
	8.8	1538	1.2	162.21	18.0			
	9.2	1465	1.2	154.52	18.0			
	10.0	1347	1.3	142.00	18.0			
	11.4	1178	1.5	124.25	18.0			
	12.6	1068	1.7	112.61	18.0			
	14.5	927	1.9	97.80	18.0			
	18.1	746	2.4	78.64	18.0			
	19.9	676	2.7	71.27	18.0			
	25.3	533	3.0	56.21	18.0			
	3.9	3476	1.0	242.67	22.0	**A603 - 100L/6A** **F603 - 100L/6A**	97	134
	4.4	3088	1.1	215.56	22.0			
	4.8	2783	1.3	194.31	22.0			
	5.2	2595	1.3	181.13	22.0			
	5.8	2305	1.5	160.90	22.0			
	6.5	2057	1.7	143.57	22.0			
	7.0	1923	1.8	134.25	22.0			
	7.8	1734	2.0	121.02	22.0			
	9.4	1436	2.4	100.21	22.0			
	10.0	1341	2.6	93.60	22.0			
	11.1	1209	2.9	84.37	22.0			
	11.8	1146	3.1	79.98	22.0			
	13.5	1001	3.5	69.87	22.0			
	5.9	2301	1.6	242.67	22.0	**A603 - 90L/4A** **F603 - 90L/4A**	90	134
	6.6	2044	1.7	215.56	22.0			
	7.3	1843	1.9	194.31	22.0			
	7.8	1718	2.0	181.13	22.0			
	8.8	1526	2.3	160.90	22.0			
	9.9	1361	2.6	143.57	22.0			
	11.8	1094	2.5	242.67	22.0	**A603 - 90S/2A** **F603 - 90S/2A**	86	134
	13.3	972	2.7	215.56	22.0			
	14.7	876	3.0	194.31	22.0			
	15.8	817	3.2	181.13	22.0			
	17.8	725	3.6	160.90	22.0			
	19.9	647	4.1	143.57	22.0			
	3.6	3727	1.3	260.15	30.0	**A703 - 100L/6A** **F703 - 100L/6A**	126	138
	4.1	3314	1.5	231.34	30.0			
	4.5	2976	1.7	207.78	30.0			
	5.0	2715	1.8	189.54	30.0			
	5.4	2480	2.0	173.11	30.0			
	6.0	2227	2.2	155.48	30.0			
	6.5	2076	2.4	144.94	30.0			
	7.3	1839	2.7	128.35	30.0			
	7.9	1701	2.9	118.75	30.0			
	8.7	1554	3.2	108.46	30.0			
	9.4	1438	3.5	100.38	30.0			
	10.4	1289	3.9	89.95	30.0			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.85	148.6 196.9	114 86	0.9 1.1	6.36 4.80	3.9 3.7	**A252 - 100L/6** **F252 - 100L/6**	37	114
	76.3 82.7 94.6 101.1 117.8 136.6 156.3 177.8 221.7 293.8	222 205 179 168 144 124 109 95 77 58	0.9 0.9 0.9 1.0 1.0 1.1 1.2 1.3 1.4 1.6	18.49 17.05 14.91 13.94 11.97 10.32 9.02 7.93 6.36 4.80	4.0 4.0 4.0 4.0 4.0 3.9 3.8 3.8 3.6 3.4	**A252 - 90L/4** **F252 - 90L/4**	26	114
	386.6 446.5 510.5 544.2 691.7 960.0	44 38 34 31 25 18	1.0 1.0 0.9 1.0 1.0 1.4	3.65 3.16 2.76 2.59 2.04 1.47	0.8 0.8 0.8 0.8 0.7 0.7	**A301 - 90L/4** **F301 - 90L/4**	22	116
	68.4 78.8 90.0 103.7 128.7 169.3	248 215 188 164 132 100	1.0 1.2 1.3 1.3 1.2 1.6	13.81 12.00 10.50 9.11 7.34 5.58	6.0 5.9 5.8 5.7 5.5 5.2	**A302 - 100L/6** **F302 - 100L/6**	40	118
	60.0 66.1 73.1 87.0 102.1 117.5 134.3 154.8 192.1 252.6	283 257 232 195 166 144 126 110 88 67	0.9 1.0 1.1 1.3 1.5 1.7 1.9 1.9 1.8 2.4	23.49 21.33 19.29 16.21 13.81 12.00 10.50 9.11 7.34 5.58	6.1 6.1 6.0 5.9 5.7 5.6 5.4 5.3 5.0 4.7	**A302 - 90L/4** **F302 - 90L/4**	29	118
	159.9 177.3 194.8 232.2 252.0 293.5 360.8 436.2 651.0 725.2	107 97 88 74 68 58 47 39 26 24	0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.5 2.3 1.7	5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.45 1.30	2.5 2.5 2.5 2.5 2.5 2.5 2.4 2.3 2.0 2.0	**A351 - 100L/6** **F351 - 100L/6**	35	120
	165.9 189.5 238.6 264.5 290.7 346.4 376.0 437.9 538.4 650.8 971.3 1082.1	103 90 72 65 59 49 46 39 32 26 18 16	1.0 1.1 1.4 1.5 1.6 1.8 2.0 2.0 2.2 2.3 3.4 2.5	8.50 7.44 5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.45 1.30	2.5 2.5 2.5 2.5 2.5 2.4 2.4 2.3 2.1 2.0 1.8 1.8	**A351 - 90L/4** **F351 - 90L/4**	24	120
	32.7 35.5 37.6 42.9 46.5 51.6 56.0 65.1 80.5 96.9 108.2 133.9 161.2	519 477 451 395 365 328 303 261 211 175 157 127 105	0.9 1.0 1.0 1.2 1.3 1.4 1.5 1.7 1.9 2.1 2.2 2.3 2.5	28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 7.8 7.6 7.2 6.9	**A352 - 100L/6** **F352 - 100L/6**	45	122

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.85	35.6 42.1 44.0 48.8 53.0 56.1 64.0 69.4 77.0 83.6 97.1 120.1 144.6 161.5 199.8 240.5	476 403 385 348 320 302 265 244 220 203 175 141 117 105 85 71	1.0 1.2 1.3 1.4 1.5 1.6 1.8 1.9 2.1 2.2 2.5 2.8 3.2 3.2 3.4 3.7	39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 7.7 7.4 7.0 6.8 6.4 6.1	**A352 - 90L/4** **F352 - 90L/4**	34	122
	114.5 130.8 165.0 182.9 201.4 240.3 260.7 303.8 374.4 453.6 720.0	150 131 104 94 85 71 66 56 46 38 24	1.1 1.3 1.6 1.8 1.9 2.1 2.3 2.3 2.6 3.2 3.4	8.25 7.22 5.73 5.17 4.69 3.93 3.63 3.11 2.52 2.08 1.31	3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.4 2.9	**A401 - 100L/6** **F401 - 100L/6**	35	124
	170.9 195.3 246.2 272.9 300.5 358.5 389.0 453.2 558.7	100 88 70 63 57 48 44 38 31	1.7 1.9 2.4 2.7 2.8 3.1 3.4 3.4 3.9	8.25 7.22 5.73 5.17 4.69 3.93 3.63 3.11 2.52	3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.4 3.1	**A401 - 90L/4** **F401 - 90L/4**	24	124
	20.8 23.8 25.9 30.0 32.7 37.4 41.3 47.4 54.4 59.0 65.2 75.9 82.5 102.7 113.4	814 713 654 565 518 454 411 358 312 287 260 223 206 165 150	1.0 1.2 1.2 1.5 1.5 1.9 2.1 2.4 2.7 2.8 2.7 3.1 3.2 3.6 4.0	45.38 39.72 36.44 31.50 28.89 25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46 9.20 8.33	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 100L/6** **F402 - 100L/6**	56	126
	31.1 35.5 38.7 44.8 48.8 55.7 61.5 70.7 81.2 97.2	546 478 438 379 348 304 276 240 209 174	1.6 1.8 1.8 2.2 2.3 2.8 3.1 3.5 4.0 4.0	45.38 39.72 36.44 31.50 28.89 25.30 22.91 19.94 17.37 14.50	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 90L/4** **F402 - 90L/4**	45	126
	28.4	585	1.5	49.64	12.0	**A403 - 100L/6** **F403 - 100L/6**	56	126
	20.7 25.7 28.4	804 646 585	1.1 1.3 1.5	68.25 54.81 49.64	12.0 12.0 12.0	**A403 - 90L/4** **F403 - 90L/4**	45	126

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
1.85	110.5 124.3 153.2 168.3 199.6	154 136 111 101 85	2.3 2.6 3.1 3.3 3.8	8.56 7.60 6.17 5.62 4.73	4.0 4.0 4.0 4.0 4.0	**A501 - 100L/6** **F501 - 100L/6**	46	128
	164.8 185.5	104 92	3.4 3.8	8.56 7.60	4.0 4.0	**A501 - 90L/4** **F501 - 90L/4**	35	128
	19.4 21.8 24.1 27.1 29.9 33.4 35.0 40.8	875 778 704 625 567 507 484 415	1.8 2.1 2.3 2.6 2.8 3.2 3.3 3.9	48.77 43.32 39.21 34.83 31.57 28.26 26.98 23.14	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A502 - 100L/6** **F502 - 100L/6**	73	130
	28.9 32.5 36.0 40.5	587 521 472 419	2.7 3.1 3.4 3.8	48.77 43.32 39.21 34.83	18.0 18.0 18.0 18.0	**A502 - 90L/4** **F502 - 90L/4**	62	130
	9.7 11.1 12.0 13.3 16.8	1719 1500 1382 1253 988	1.0 1.2 1.3 1.4 1.6	97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0	**A503 - 100L/6** **F503 - 100L/6**	73	130
	8.7 9.1 9.9 11.3 12.5 14.4 16.5 17.9 19.8 25.1	1911 1820 1673 1463 1326 1152 1005 926 839 662	0.9 1.0 1.1 1.2 1.4 1.6 1.8 1.9 2.1 2.4	162.21 154.52 142.00 124.25 112.61 97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 90L/4** **F503 - 90L/4**	62	130
	18.6 20.9	914 813	3.6 4.1	50.91 45.27	22.0 22.0	**A602 - 100L/6** **F602 - 100L/6**	101	134
	4.4 4.9 5.2 5.9 6.6 7.0 7.8 9.4 10.1 11.2 11.8 13.5	3788 3415 3183 2828 2523 2359 2127 1761 1645 1483 1406 1228	0.9 1.0 1.1 1.2 1.4 1.5 1.6 2.0 2.1 2.4 2.5 2.9	215.56 194.31 181.13 160.90 143.57 134.25 121.02 100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 100L/6** **F603 - 100L/6**	101	134
	5.8 6.5 7.3 7.8 8.8 9.8	2858 2539 2289 2133 1895 1691	1.3 1.4 1.5 1.6 1.8 2.1	242.67 215.56 194.31 181.13 160.90 143.57	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 90L/4** **F603 - 90L/4**	90	134
	3.6 4.1 4.5 5.0 5.5 6.1 6.5 7.4 8.0 8.7 9.4 10.5 11.3 12.8	4572 4066 3652 3331 3042 2732 2547 2256 2087 1906 1764 1581 1465 1295	1.1 1.2 1.4 1.5 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.2 3.4 3.9	260.15 231.34 207.78 189.54 173.11 155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 100L/6** **F703 - 100L/6**	131	138

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
2.20	136.7 156.3 177.8 221.7 293.8	148 129 113 91 69	0.9 1.0 1.1 1.2 1.4	10.32 9.02 7.93 6.36 4.80	3.6 3.6 3.6 3.5 3.3	**A252 - 100L/4A** **F252 - 100L/4A**	34	114
	141.6 154.7 167.7 191.8 205.2 239.0 277.2 317.0 360.6 449.4 596.1	136 125 115 101 94 81 70 61 54 43 32	1.1 1.2 1.2 1.3 1.4 1.3 1.5 1.6 1.7 1.8 2.2	20.19 18.49 17.05 14.91 13.94 11.97 10.32 9.02 7.93 6.36 4.80	3.7 3.7 3.6 3.6 3.6 3.5 3.4 3.3 3.2 3.1 2.9	**A252 - 90L/2A** **F252 - 90L/2A**	27	114
	670.3 784.2 905.7 1035.5 1103.9 1403.0 1947.2	29 25 22 19 18 14 10	1.1 1.3 1.4 1.2 1.3 1.3 1.8	4.27 3.65 3.16 2.76 2.59 2.04 1.47	0.7 0.7 0.7 0.6 0.6 0.6 0.6	**A301 - 90L/2A** **F301 - 90L/2A**	30	116
	73.1 87.0 102.1 117.5 134.3 154.8 192.1 252.7	276 232 198 172 150 130 105 80	0.9 1.1 1.3 1.5 1.6 1.6 1.5 2.0	19.29 16.21 13.81 12.00 10.50 9.11 7.34 5.58	5.6 5.6 5.5 5.3 5.2 5.1 4.9 4.6	**A302 - 100L/4A** **F302 - 100L/4A**	37	118
	169.3	119	1.3	5.58	5.0	**A302 - 112M/6A** **F302 - 112M/6A**	45	118
	102.4 108.1 121.7 134.1 148.2 176.4 207.1 238.3 272.5 314.1 389.4 512.4	189 179 159 144 130 110 93 81 71 62 50 38	1.1 1.1 1.2 1.3 1.4 1.7 2.0 2.3 2.5 2.6 2.4 3.2	27.92 26.45 23.49 21.33 19.29 16.21 13.81 12.00 10.50 9.11 7.34 5.58	5.5 5.5 5.4 5.3 5.2 5.0 4.8 4.7 4.5 4.4 4.1 3.9	**A302 - 90L/2A** **F302 - 90L/2A**	30	118
	238.6 264.5 290.7 346.4 376.0 437.9 538.2 649.8 972.4 1084.6	85 77 70 59 54 47 38 31 21 19	1.2 1.3 1.4 1.5 1.7 1.7 1.8 1.9 2.9 2.1	5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.45 1.30	2.5 2.5 2.4 2.3 2.3 2.2 2.1 2.0 1.8 1.7	**A351 - 100L/4A** **F351 - 100L/4A**	32	120
	252.0 293.3 360.8 436.2 651.0 725.2	81 69 56 47 31 28	1.1 1.2 1.2 1.3 1.9 1.4	3.75 3.22 2.62 2.17 1.45 1.30	2.5 2.4 2.3 2.2 2.0 1.9	**A351 - 112M/6A** **F351 - 112M/6A**	40	120

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
2.20	336.5 384.2 484.0 536.3 590.2 703.3 762.7 887.6 1092.0 1320.0 2194.9	59 51 41 37 33 28 26 22 18 15 9	1.3 1.5 1.8 2.0 2.1 2.4 2.6 2.7 2.9 3.0 3.3	8.50 7.44 5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.30	2.4 2.3 2.2 2.1 2.1 2.0 1.9 1.8 1.7 1.6 1.4	**A351 - 90L/2A** **F351 - 90L/2A**	25	120
	44.0 48.8 53.0 56.1 64.0 69.4 77.0 83.5 97.1 120.1 144.6 161.5 199.8 240.5	458 413 380 359 315 291 262 241 208 168 139 125 101 84	1.1 1.2 1.3 1.3 1.5 1.6 1.8 1.9 2.1 2.3 2.7 2.7 2.9 3.1	32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	8.0 8.0 8.0 8.0 8.0 8.0 7.9 7.8 7.5 7.2 6.9 6.7 6.3 6.0	**A352 - 100L/4A** **F352 - 100L/4A**	42	122
	51.6 56.0 65.1 80.5 96.9 108.2 133.9 161.2	391 360 310 250 208 186 151 125	1.2 1.2 1.4 1.6 1.8 1.8 1.9 2.1	18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	8.0 8.0 8.0 7.8 7.6 7.4 7.1 6.7	**A352 - 112M/6A** **F352 - 112M/6A**	50	122
	57.3 62.1 72.2 85.4 89.4 99.0 107.6 113.8 129.8 140.8 156.3 169.5 197.0 243.7	337 311 268 226 216 195 180 170 149 137 124 114 98 79	1.1 1.2 1.4 1.6 1.7 1.9 2.0 2.1 2.4 2.5 2.8 3.0 3.3 3.7	49.88 46.04 39.59 33.50 32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74	8.0 8.0 8.0 7.8 7.7 7.6 7.4 7.3 7.1 7.0 6.8 6.7 6.4 6.1	**A352 - 90L/2A** **F352 - 90L/2A**	35	122
	170.9 195.3 246.1 272.7 300.6 358.5 389.0 453.2 558.7 676.8	119 104 83 75 68 57 52 45 36 30	1.4 1.6 2.1 2.3 2.4 2.6 2.9 2.9 3.3 4.0	8.25 7.22 5.73 5.17 4.69 3.93 3.63 3.11 2.52 2.08	3.7 3.7 3.7 3.7 3.7 3.6 3.5 3.4 3.2 2.9	**A401 - 100L/4A** **F401 - 100L/4A**	32	124
	165.0 182.9 201.4 240.3 260.7 303.8 374.4 453.6 720.0	124 111 101 85 78 67 54 45 28	1.4 1.5 1.6 1.8 1.9 1.9 2.2 2.7 2.8	5.73 5.17 4.69 3.93 3.63 3.11 2.52 2.08 1.31	3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.4 3.0	**A401 - 112M/6A** **F401 - 112M/6A**	40	124

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
2.20	346.7 396.0 499.4 553.5 609.5	57 50 40 36 32	2.2 2.6 3.2 3.6 3.7	8.25 7.22 5.73 5.17 4.69	3.7 3.5 3.3 3.2 3.1	**A401 - 90L/2A** **F401 - 90L/2A**	25	124
	31.1 35.5 38.7 44.8 48.8 55.7 61.5 70.7 81.2 88.1 97.2 113.3 123.1	649 568 521 451 413 362 328 285 249 229 207 178 164	1.3 1.5 1.5 1.9 1.9 2.3 2.6 3.0 3.3 3.5 3.4 3.9 4.0	45.38 39.72 36.44 31.50 28.89 25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 100L/4A** **F402 - 100L/4A**	53	126
	30.0 32.7 37.4 41.3 47.4 54.4 59.0 65.2 75.9 82.5 102.7 113.4 130.9	672 617 540 489 426 371 342 309 266 245 196 178 154	1.3 1.3 1.6 1.7 2.0 2.2 2.3 2.3 2.6 2.7 3.1 3.4 3.6	31.50 28.89 25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46 9.20 8.33 7.22	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 112M/6A** **F402 - 112M/6A**	56	126
	63.0 72.0 78.5 90.8 99.0 113.1 124.8	307 268 246 213 195 171 155	2.1 2.4 2.4 3.0 3.1 3.7 4.1	45.38 39.72 36.44 31.50 28.89 25.30 22.91	12.0 12.0 12.0 12.0 12.0 12.0 12.0	**A402 - 90L/2A** **F402 - 90L/2A**	46	126
	25.7 28.4	768 695	1.1 1.2	54.81 49.64	12.0 12.0	**A403 - 100L/4A** **F403 - 100L/4A**	53	126
	33.3 41.9 52.2 57.6	568 451 362 328	1.1 1.4 1.8 1.9	85.91 68.25 54.81 49.64	12.0 12.0 12.0 12.0	**A403 - 90L/2A** **F403 - 90L/2A**	46	126
	164.8 185.5 228.6	124 110 89	2.8 3.2 3.8	8.56 7.60 6.17	4.0 4.0 4.0	**A501 - 100L/4A** **F501 - 100L/4A**	43	128
	110.5 124.3 153.2 168.3 199.6 232.8 250.1	185 164 133 121 102 88 81	1.9 2.1 2.6 2.7 3.1 3.7 3.8	8.56 7.60 6.17 5.62 4.73 4.06 3.78	4.0 4.0 4.0 4.0 4.0 4.0 4.0	**A501 - 112M/6A** **F501 - 112M/6A**	51	128
	28.9 32.5 36.0 40.5 44.7 49.9	698 620 561 498 452 404	2.3 2.6 2.9 3.2 3.5 4.0	48.77 43.32 39.21 34.83 31.57 28.26	18.0 18.0 18.0 18.0 18.0 18.0	**A502 - 100L/4A** **F502 - 100L/4A**	70	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
2.20	19.4 21.8 24.1 27.1 29.9 33.4 35.0 40.8 43.6 48.1 50.2	1041 925 837 743 674 603 576 494 463 420 401	1.5 1.7 1.9 2.2 2.4 2.7 2.8 3.2 3.5 3.8 3.7	48.77 43.32 39.21 34.83 31.57 28.26 26.98 23.14 21.69 19.66 18.81	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A502 - 112M/6A** **F502 - 112M/6A**	78	130
	58.6	330	3.6	48.77	18.0	**A502 - 90L/2A** **F502 - 90L/2A**	63	130
	11.3 12.5 14.4 16.5 17.9 19.8 25.1	1740 1577 1370 1195 1101 998 787	1.0 1.1 1.3 1.5 1.6 1.8 2.0	124.25 112.61 97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 100L/4A** **F503 - 100L/4A**	70	130
	13.3 16.8	1490 1175	1.2 1.4	71.27 56.21	18.0 18.0	**A503 - 112M/6A** **F503 - 112M/6A**	78	130
	14.7 16.0 17.6 18.5 20.1 23.0 25.4 29.2 33.5 36.4 40.1 50.9	1288 1183 1072 1022 939 821 745 647 564 520 471 372	1.0 1.1 1.3 1.3 1.4 1.6 1.8 2.1 2.4 2.6 2.9 3.2	194.86 178.98 162.21 154.52 142.00 124.25 112.61 97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 90L/2A** **F503 - 90L/2A**	63	130
	113.9 126.8	179 161	3.6 4.0	8.30 7.45	5.0 5.0	**A601 - 112M/6A** **F601 - 112M/6A**	63	132
	18.6 20.9 23.2 24.9	1087 966 871 811	3.0 3.4 3.8 3.5	50.91 45.27 40.81 38.00	22.0 22.0 22.0 22.0	**A602 - 112M/6A** **F602 - 112M/6A**	106	134
	5.8 6.5 7.3 7.8 8.8 9.8 10.5 11.7 14.1 15.1 16.7 17.6 20.2	3399 3019 2722 2537 2254 2011 1880 1695 1404 1311 1182 1120 979	1.1 1.2 1.3 1.4 1.6 1.7 1.9 2.1 2.5 2.7 3.0 3.1 3.6	242.67 215.56 194.31 181.13 160.90 143.57 134.25 121.02 100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 100L/4A** **F603 - 100L/4A**	98	134
	6.6 7.0 7.8 9.4 10.1 11.2 11.8 13.5	3000 2806 2529 2094 1956 1763 1672 1460	1.2 1.2 1.4 1.7 1.8 2.0 2.1 2.4	143.57 134.25 121.02 100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 112M/6A** **F603 - 112M/6A**	106	134
	11.8 13.3 14.7 15.8 17.8 19.9	1604 1425 1285 1198 1064 949	1.7 1.8 2.0 2.2 2.5 2.8	242.67 215.56 194.31 181.13 160.90 143.57	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 90L/2A** **F603 - 90L/2A**	91	134

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
2.20	5.4 6.1 6.8 7.4 8.1 9.1 9.7 11.0 11.9 13.0 14.0 15.7	3644 3240 2910 2655 2425 2178 2030 1798 1663 1519 1406 1260	1.4 1.5 1.7 1.9 2.1 2.3 2.5 2.8 3.0 3.3 3.6 4.0	260.15 231.34 207.78 189.54 173.11 155.48 144.94 128.35 118.75 108.46 100.38 89.95	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 100L/4A** **F703 - 100L/4A**	128	138
	4.5 5.0 5.5 6.1 6.5 7.4 8.0 8.7 9.4 10.5 11.3 12.8 14.0	4342 3961 3618 3249 3029 2682 2482 2267 2098 1880 1742 1540 1407	1.2 1.3 1.4 1.5 1.7 1.9 2.0 2.2 2.4 2.7 2.9 3.2 3.6	207.78 189.54 173.11 155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 112M/6A** **F703 - 112M/6A**	135	138
3.00	280.2 320.3 364.4 454.1 602.3	94 82 72 58 44	1.1 1.2 1.3 1.4 1.6	10.32 9.02 7.93 6.36 4.80	3.1 3.1 3.0 2.9 2.7	**A252 - 100L/2A** **F252 - 100L/2A**	34	114
	293.8	94	1.0	4.80	3.1	**A252 - 100L/4B** **F252 - 100L/4B**	37	114
	149.8 178.2 209.3 240.8 275.4 317.4 393.5 517.8	176 148 126 109 96 83 67 51	1.1 1.3 1.5 1.7 1.9 1.9 1.8 2.4	19.29 16.21 13.81 12.00 10.50 9.11 7.34 5.58	4.8 4.7 4.6 4.4 4.3 4.2 4.0 3.7	**A302 - 100L/2A** **F302 - 100L/2A**	37	118
	102.1 117.5 134.3 154.8 192.1 252.7	269 234 205 178 143 109	0.9 1.1 1.2 1.2 1.1 1.5	13.81 12.00 10.50 9.11 7.34 5.58	4.9 4.8 4.8 4.7 4.6 4.3	**A302 - 100L/4B** **F302 - 100L/4B**	40	118
	171.1	161	1.0	5.58	4.7	**A302 - 132S/6B** **F302 - 132S/6B**	61	118
	489.1 542.2 595.9 710.1 770.7 897.5 1103.1 1331.8 1993.1 2223.1	55 50 45 38 35 30 24 20 14 12	1.4 1.5 1.6 1.8 1.9 2.0 2.2 2.2 3.3 2.5	5.91 5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.45 1.30	2.1 2.0 2.0 1.9 1.9 1.8 1.7 1.6 1.4 1.4	**A351 - 100L/2A** **F351 - 100L/2A**	32	120
	264.5 290.7 346.4 376.0 437.9 538.2 649.8 972.4 1084.6	105 96 80 74 63 52 43 29 26	1.0 1.0 1.1 1.2 1.3 1.4 1.4 2.1 1.6	5.33 4.85 4.07 3.75 3.22 2.62 2.17 1.45 1.30	2.3 2.3 2.2 2.2 2.1 2.0 1.9 1.7 1.7	**A351 - 100L/4B** **F351 - 100L/4B**	35	120

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
3.00	364.6 440.8 657.9 732.9	76 63 42 38	0.9 1.0 1.4 1.1	2.62 2.17 1.45 1.30	2.2 2.1 1.9 1.9	**A351 - 112M/6** **F351 - 112M/6**	42	120
	90.3 100.0 108.7 115.0 131.2 142.3 157.9 171.3 199.1 246.2 296.4 331.0 409.5 492.9	292 263 243 229 201 185 167 154 132 107 89 80 64 53	1.3 1.4 1.5 1.5 1.8 1.9 2.1 2.2 2.4 2.7 3.1 3.2 3.4 3.6	32.01 28.89 26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	7.2 7.1 7.0 6.9 6.8 6.6 6.5 6.4 6.2 5.9 5.6 5.4 5.1 4.9	**A352 - 100L/2A** **F352 - 100L/2A**	42	122
	53.0 56.1 64.0 69.4 77.0 83.5 97.1 120.1 144.6 161.5 199.7 240.6	519 490 430 396 357 329 283 229 190 170 138 114	0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.7 1.9 2.0 2.1 2.3	26.59 25.13 22.03 20.31 18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	7.4 7.4 7.4 7.3 7.2 7.2 7.0 6.8 6.5 6.4 6.1 5.8	**A352 - 100L/4B** **F352 - 100L/4B**	45	122
	56.6 65.8 81.3 97.9 109.4 135.3 163.0	486 418 338 281 251 203 169	0.9 1.0 1.2 1.3 1.4 1.4 1.5	16.88 14.52 11.74 9.75 8.73 7.06 5.86	7.4 7.3 7.2 7.0 6.9 6.7 6.4	**A352 - 112M/6** **F352 - 112M/6**	52	122
	350.3 400.3 504.4 559.0 616.2 735.4 798.3 929.3 1146.8	77 67 53 48 44 37 34 29 23	1.7 1.9 2.4 2.6 2.7 3.1 3.3 3.4 3.8	8.25 7.22 5.73 5.17 4.69 3.93 3.62 3.11 2.52	3.6 3.4 3.2 3.1 3.0 2.9 2.8 2.7 2.5	**A401 - 100L/2A** **F401 - 100L/2A**	32	124
	170.9 195.3 246.1 272.7 300.6 358.8 389.5 453.4 559.5 676.8 1074.3	163 142 113 102 92 77 71 61 50 41 26	1.0 1.2 1.5 1.7 1.7 1.9 2.1 2.1 2.4 2.9 3.1	8.25 7.22 5.73 5.17 4.69 3.93 3.62 3.11 2.52 2.08 1.31	3.7 3.7 3.7 3.7 3.7 3.5 3.4 3.3 3.1 2.9 2.6	**A401 - 100L/4B** **F401 - 100L/4B**	35	124
	166.7 184.8 203.5 242.8 263.4 307.0 378.4 458.4 727.6	167 150 137 114 105 91 73 61 38	1.0 1.1 1.2 1.3 1.4 1.4 1.6 2.0 2.1	5.73 5.17 4.69 3.93 3.63 3.11 2.52 2.08 1.31	3.7 3.7 3.7 3.7 3.7 3.7 3.6 3.3 3.0	**A401 - 112M/6** **F401 - 112M/6**	41	124

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
3.00	63.7 72.8 79.3 91.7 100.0 114.2 126.1 144.9 166.4 180.5 199.3	414 362 332 287 263 231 209 182 158 146 132	1.5 1.8 1.8 2.2 2.3 2.8 3.1 3.5 3.9 4.1 4.0	45.38 39.72 36.44 31.50 28.89 25.30 22.91 19.94 17.37 16.01 14.50	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 11.7 11.4 11.1	**A402 - 100L/2A** **F402 - 100L/2A**	53	126
	31.1 35.5 38.7 44.8 48.8 55.7 61.5 70.7 81.2 88.1 97.2 113.3 123.1 153.2 169.2 195.3	885 775 711 614 564 494 447 389 339 312 283 243 224 179 163 141	1.0 1.1 1.1 1.4 1.4 1.7 1.9 2.2 2.4 2.6 2.5 2.9 2.9 3.3 3.7 3.9	45.38 39.72 36.44 31.50 28.89 25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46 9.20 8.33 7.22	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 11.8 11.5 11.1	**A402 - 100L/4B** **F402 - 100L/4B**	56	126
	30.3 33.1	907 832	0.9 1.0	31.50 28.89	12.0 12.0	**A402 - 112M/6** **F402 - 112M/6**	62	126
	37.8 41.7 47.9 55.0 59.6 65.9 76.7 83.3 103.8 114.6 132.3 164.7 181.9	729 660 574 500 461 418 358 330 265 240 208 167 151	1.2 1.3 1.5 1.7 1.7 1.7 2.0 2.0 2.3 2.5 2.6 3.3 3.3	25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46 9.20 8.33 7.22 5.80 5.25	12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 11.8 11.5	**A/F 402 - 112M/6** **A/F 402 - 132S/6B**	76	126
	52.7 58.2	489 443	1.3 1.4	54.81 49.64	12.0 12.0	**A403 - 100L/2A** **F403 - 100L/2A**	53	126
	337.6 380.3	80 71	3.3 3.7	8.56 7.60	4.0 4.0	**A501 - 100L/2A** **F501 - 100L/2A**	43	128
	164.7 185.5 228.6 251.1 297.9	169 150 122 111 93	2.1 2.3 2.8 3.0 3.4	8.56 7.60 6.17 5.62 4.73	4.0 4.0 4.0 4.0 4.0	**A501 - 100L/4B** **F501 - 100L/4B**	46	128
	111.6 125.7 154.9 170.1 201.8 235.3 252.8 289.4 369.7	249 221 179 163 138 118 110 96 75	1.4 1.6 1.9 2.0 2.3 2.7 2.8 3.2 3.7	8.56 7.60 6.17 5.62 4.73 4.06 3.78 3.30 2.58	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	**A/F 501 - 112M/6** **A/F 501 - 132S/6B**	66	128
	59.3 66.7 73.7 83.0	445 395 358 318	2.7 3.0 3.4 3.8	48.77 43.32 39.21 34.83	18.0 18.0 18.0 17.6	**A502 - 100L/2A** **F502 - 100L/2A**	70	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
3.00	28.9 32.5 36.0 40.5 44.7 49.9 52.3 60.9 65.0	951 845 765 679 616 551 526 451 423	1.7 1.9 2.1 2.4 2.6 2.9 3.0 3.5 3.8	48.77 43.32 39.21 34.83 31.57 28.26 26.98 23.14 21.69	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A502 - 100L/4B** **F502 - 100L/4B**	73	130
	19.6 22.0 24.4 27.4 30.3 33.8 35.4 41.3 44.0 48.6 50.8 56.6 63.1 69.7	1404 1248 1129 1003 909 814 777 666 625 566 542 486 436 395	1.1 1.3 1.4 1.6 1.8 2.0 2.1 2.4 2.6 2.8 2.8 3.1 3.4 3.5	48.77 43.32 39.21 34.83 31.57 28.26 26.98 23.14 21.69 19.66 18.81 16.86 15.13 13.71	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A/F 502 - 112M/6** **A/F 502 - 132S/6B**	93	130
	85.2 106.0 117.0 126.5	323 259 235 217	3.4 3.5 3.4 3.7	11.20 9.01 8.16 7.55	17.5 16.5 16.1 15.7	**A502 - 132S/6B** **F502 - 132S/6B**	93	130
	23.3 25.7 29.5 33.9 36.7 40.5 51.4	1109 1005 873 761 702 636 501	1.2 1.3 1.5 1.8 1.9 2.1 2.4	124.25 112.61 97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0 18.0 18.0	**A503 - 100L/2A** **F503 - 100L/2A**	70	130
	14.4 16.5 17.9 19.8 25.1	1868 1630 1502 1361 1074	1.0 1.1 1.2 1.3 1.5	97.80 85.33 78.64 71.27 56.21	18.0 18.0 18.0 18.0 18.0	**A503 - 100L/4B** **F503 - 100L/4B**	73	130
	17.0	1585	1.0	56.21	18.0	**A503 - 132S/6B** **F503 - 132S/6B**	93	130
	169.9	164	4.0	8.30	5.0	**A601 - 100L/4B** **F601 - 100L/4B**	58	132
	115.1 128.1 155.2 183.7	242 217 179 151	2.7 3.0 3.6 4.1	8.30 7.45 6.15 5.20	5.0 5.0 5.0 5.0	**A/F 601 - 112M/6** **A/F 601 - 132S/6B**	78	132
	27.7 31.1 37.1	993 883 741	3.3 3.7 3.8	50.91 45.27 38.00	22.0 22.0 22.0	**A602 - 100L/4B** **F602 - 100L/4B**	101	134
	18.8 21.1 23.4 25.1 28.3 31.5 33.7	1466 1304 1175 1094 973 874 817	2.3 2.5 2.8 2.6 3.3 3.7 4.0	50.91 45.27 40.81 38.00 33.79 30.35 28.36	22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A/F 602 - 112M/6** **A/F 602 - 132S/6B**	121	134

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
3.00	11.9 13.4 14.9 16.0 18.0 20.1 21.5 23.9 28.8 30.9 34.3 36.1	2165 1923 1734 1616 1436 1281 1198 1080 894 835 753 714	1.2 1.4 1.5 1.6 1.8 2.0 2.2 2.4 2.9 3.1 3.5 3.7	242.67 215.56 194.31 181.13 160.90 143.57 134.25 121.02 100.21 93.60 84.37 79.98	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 100L/2A** **F603 - 100L/2A**	98	134
	7.3 7.8 8.8 9.8 10.5 11.7 14.1 15.1 16.7 17.6 20.2	3711 3460 3073 2742 2564 2311 1914 1788 1611 1528 1334	0.9 1.0 1.1 1.3 1.4 1.5 1.8 2.0 2.2 2.3 2.6	194.31 181.13 160.90 143.57 134.25 121.02 100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 100L/4B** **F603 - 100L/4B**	101	134
	7.1 7.9	3786 3413	0.9 1.0	134.25 121.02	22.0 22.0	**A603 - 132S/6B** **F603 - 132S/6B**	121	134
	9.5 10.2 11.3 11.9 13.7	2826 2640 2379 2255 1970	1.2 1.3 1.5 1.6 1.8	100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0	**A/F 603 - 112M/6** **A/F 603 - 132S/6B**	121	134
	17.1	1572	2.2	55.75	22.0	**A603 - 132S/6B** **F603 - 132S/6B**	121	134
	21.4	1287	3.9	44.67	30.0	**A702 - 132S/6B** **F702 - 132S/6B**	151	138
	11.1 12.5 13.9 15.2 16.7 18.6 19.9 22.5 24.3 26.6	2321 2064 1854 1691 1545 1387 1293 1145 1060 968	1.6 1.8 2.0 2.2 2.4 2.7 2.9 3.3 3.5 3.9	260.15 231.34 207.78 189.54 173.11 155.48 144.94 128.35 118.75 108.46	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 100L/2A** **F703 - 100L/2A**	128	138
	5.4 6.1 6.8 7.4 8.1 9.1 9.7 11.0 11.9 13.0 14.0 15.7 16.9 19.1 20.9	4969 4419 3969 3620 3306 2970 2768 2451 2268 2072 1917 1718 1592 1408 1286	1.0 1.1 1.3 1.4 1.5 1.7 1.8 2.0 2.2 2.4 2.6 2.9 3.1 3.6 3.9	260.15 231.34 207.78 189.54 173.11 155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 100L/4B** **F703 - 100L/4B**	131	138
	5.0 5.5	5345 4882	0.9 1.0	189.54 173.11	30.0 30.0	**A703 - 112M/6** **F703 - 112M/6**	137	138

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
3.00	6.1 6.6 7.4 8.0 8.8 9.5 10.6 11.5 13.0 14.2	4385 4087 3620 3349 3058 2831 2537 2350 2078 1898	1.1 1.2 1.4 1.5 1.6 1.8 2.0 2.1 2.4 2.6	155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A/F 703 - 112M/6** **A/F 703 - 132S/6B**	151	138
	17.1 20.9	1572 1288	3.2 3.9	55.75 45.67	30.0 30.0	**A703 - 132S/6B** **F703 - 132S/6B**	151	138
	4.6 5.1 6.2 6.9 7.4 8.2 9.1 9.9 11.0 12.1 13.4	5802 5235 4345 3931 3620 3266 2944 2711 2437 2231 2013	1.4 1.5 1.8 2.0 2.2 2.4 2.7 3.0 3.3 3.6 4.0	205.73 185.64 154.07 139.41 128.36 115.83 104.41 96.13 86.43 79.13 71.40	55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0	**A903 - 132S/6B** **F903 - 132S/6B**	218	140
4.00	454.1 602.3	77 58	1.0 1.2	6.36 4.80	2.7 2.6	**A252 - 100L/2C** **F252 - 100L/2C**	36	114
	209.3 240.8 275.2 317.2 393.7	168 146 128 111 89	1.1 1.3 1.4 1.4 1.3	13.81 12.00 10.50 9.11 7.34	4.2 4.1 4.1 4.0 3.8	**A302 - 100L/2C** **F302 - 100L/2C**	38	118
	517.9	68	1.8	5.58	3.6	**A/F 302 - 100L/2C** **A/F 302 - 112M/2A**	45	118
	256.3	143	1.1	5.58	4.1	**A302 - 112M/4B** **F302 - 112M/4B**	47	118
	489.1 541.9 596.3 710.7	73 66 60 51	1.0 1.1 1.2 1.3	5.91 5.33 4.85 4.07	2.0 1.9 1.9 1.8	**A351 - 100L/2C** **F351 - 100L/2C**	33	120
	770.7 896.9 1103.1 1331.8 1993.1 2223.1	47 40 33 27 18 16	1.4 1.5 1.6 1.7 2.5 1.9	3.75 3.22 2.62 2.17 1.45 1.30	1.8 1.7 1.6 1.6 1.4 1.4	**A/F 351 - 100L/2C** **A/F 351 - 112M/2A**	40	120
	381.3 443.8 545.8 659.0 986.2 1100.0	97 83 68 56 38 34	0.9 1.0 1.0 1.1 1.6 1.2	3.75 3.22 2.62 2.17 1.45 1.30	2.0 2.0 1.9 1.8 1.7 1.6	**A351 - 112M/4B** **F351 - 112M/4B**	42	120
	100.0 108.7 115.0 131.2 142.3	351 323 306 268 247	1.0 1.1 1.2 1.3 1.4	28.89 26.59 25.13 22.03 20.31	6.2 6.3 6.4 6.4 6.5	**A352 - 100L/2C** **F352 - 100L/2C**	43	122
	157.9 171.2 199.0 246.2 296.4 331.0 409.3 493.2	223 205 177 143 119 106 86 71	1.6 1.6 1.8 2.0 2.3 2.4 2.5 2.7	18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	6.1 6.0 5.9 5.6 5.4 5.3 5.0 4.8	**A/F 352 - 100L/2C** **A/F 352 - 112M/2A**	50	122

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
4.00	78.1	469	1.0	18.30	6.5	A352 - 112M/4B F352 - 112M/4B	52	122
	84.7	433	1.0	16.88	6.4			
	98.5	372	1.2	14.52	6.4			
	121.8	301	1.3	11.74	6.3			
	146.7	250	1.5	9.75	6.1			
	163.8	224	1.5	8.73	6.0			
	202.5	181	1.6	7.06	5.8			
	244.0	150	1.7	5.86	5.6			
	350.3	103	1.2	8.25	3.5	A401 - 100L/2C F401 - 100L/2C	33	124
	400.2	90	1.4	7.22	3.4			
	504.4	71	1.8	5.73	3.2	A/F 401 - 100L/2C A/F 401 - 112M/2A	39	124
	559.0	64	2.0	5.17	3.1			
	616.2	58	2.1	4.69	3.0			
	735.4	49	2.3	3.93	2.8			
	798.3	45	2.5	3.62	2.8			
	929.3	39	2.5	3.11	2.7			
	1146.8	31	2.9	2.52	2.5			
	1389.4	26	3.5	2.08	2.4			
	2206.1	16	3.7	1.31	2.0			
	249.6	148	1.1	5.73	3.7	A401 - 112M/4B F401 - 112M/4B	42	124
	276.6	134	1.3	5.17	3.6			
	304.9	122	1.3	4.69	3.6			
	363.9	102	1.5	3.93	3.4			
	395.0	94	1.6	3.62	3.3			
	459.8	81	1.6	3.11	3.2			
	567.5	65	1.8	2.52	3.0			
	687.5	54	2.2	2.08	2.9			
	1091.6	34	2.4	1.31	2.5			
	63.7	552	1.2	45.38	12.0	A402 - 100L/2C F402 - 100L/2C	54	126
	72.8	483	1.3	39.72	12.0			
	79.3	443	1.4	36.44	12.0			
	91.7	383	1.7	31.50	12.0	A/F 402 - 100L/2C A/F 402 - 112M/2A	60	126
	100.0	351	1.7	28.89	12.0			
	114.2	308	2.1	25.30	12.0			
	126.1	279	2.3	22.91	12.0			
	144.9	242	2.6	19.94	11.7			
	166.4	211	2.9	17.37	11.3			
	180.5	195	3.1	16.01	11.1			
	199.3	176	3.0	14.50	10.8			
	232.3	151	3.5	12.44	10.4			
	252.2	139	3.5	11.46	10.2			
	314.1	112	4.0	9.20	9.6			
	45.4	808	1.1	31.50	12.0	A402 - 112M/4B F402 - 112M/4B	63	126
	49.5	741	1.1	28.89	12.0			
	56.5	649	1.3	25.30	12.0			
	62.4	588	1.4	22.91	12.0			
	71.7	511	1.7	19.94	12.0			
	82.3	445	1.9	17.37	12.0			
	89.3	411	1.9	16.01	12.0			
	98.6	372	1.9	14.50	12.0			
	115.0	319	2.2	12.44	12.0			
	124.8	294	2.2	11.46	12.0			
	155.4	236	2.5	9.20	11.5			
	171.6	214	2.8	8.33	11.2			
	198.1	185	3.0	7.22	10.8			
	246.7	149	3.7	5.80	10.2			
	272.4	135	3.7	5.25	9.9			
	41.9	875	1.0	22.91	12.0	A402 - 132M/6A F402 - 132M/6A	63	126
	48.2	762	1.1	19.94	12.0			
	55.3	664	1.3	17.37	12.0			
	60.0	612	1.3	16.01	12.0			
	66.2	554	1.3	14.50	12.0			
	77.1	475	1.5	12.44	12.0			
	83.8	438	1.5	11.46	12.0			
	104.3	351	1.7	9.20	12.0			
	115.2	318	1.9	8.33	12.0			
	133.0	276	2.0	7.22	12.0			
	165.6	221	2.5	5.80	11.4			
	182.9	201	2.5	5.25	11.1			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
4.00	58.2	591	1.1	49.64	3.1	**A403 - 100L/2C F403 - 100L/2C**	54	126
	337.6 380.3 468.6 514.7	106 94 77 70	2.5 2.8 3.3 3.5	8.56 7.60 6.17 5.62	4.0 3.9 3.7 3.6	**A/F 501 - 100L/2C A/F 501 - 112M/2A**	51	128
	167.1 188.2 231.9 254.7 302.1 352.3 378.5 433.3	222 197 160 146 123 105 98 86	1.6 1.8 2.1 2.3 2.6 3.0 3.2 3.6	8.56 7.60 6.17 5.62 4.73 4.06 3.78 3.30	4.0 4.0 4.0 4.0 4.0 4.0 3.9 3.8	**A501 - 112M/4B F501 - 112M/4B**	53	128
	112.2 126.3 155.7 171.0 202.8 236.5 254.1 290.9 371.6 488.4 658.8 724.9	330 293 238 217 183 157 146 127 100 76 56 51	1.1 1.2 1.4 1.5 1.8 2.0 2.1 2.4 2.8 3.0 3.9 3.9	8.56 7.60 6.17 5.62 4.73 4.06 3.78 3.30 2.58 1.97 1.46 1.32	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 3.9 3.7 4.0 4.0	**A501 - 132M/6A F501 - 132M/6A**	73	128
	59.3 66.7 73.7 83.0 91.5 102.3 107.1	593 527 477 424 384 344 328	2.0 2.3 2.5 2.8 3.1 3.5 3.7	48.77 43.32 39.21 34.83 31.57 28.26 26.98	18.0 18.0 17.7 17.1 16.7 16.2 16.0	**A/F 502 - 100L/2C A/F 502 - 112M/2A**	78	130
	29.3 33.0 36.5 41.1 45.3 50.6 53.0 61.8 65.9 72.7 76.0 84.8 94.5 104.3	1251 1111 1006 893 810 725 692 593 556 504 482 432 388 352	1.3 1.4 1.6 1.8 2.0 2.2 2.3 2.7 2.9 3.2 3.1 3.5 3.9 4.0	48.77 43.32 39.21 34.83 31.57 28.26 26.98 23.14 21.69 19.66 18.81 16.86 15.13 13.71	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 17.6 17.4 16.9 16.5 16.0	**A502 - 112M/4B F502 - 112M/4B**	80	130
	22.2 24.5 27.6 30.4 34.0 35.6 41.5 44.3 48.8 51.0 56.9 63.5 70.0 85.7 106.6 117.6 127.2 158.2 174.5	1655 1498 1331 1206 1080 1031 884 829 751 719 644 578 524 428 344 312 288 232 210	1.0 1.1 1.2 1.3 1.5 1.6 1.8 1.9 2.1 2.1 2.3 2.6 2.7 2.6 2.6 2.6 2.8 3.0 3.3	43.32 39.21 34.83 31.57 28.26 26.98 23.14 21.69 19.66 18.81 16.86 15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 18.0 17.9 17.0 16.1 15.7 15.4 14.5 14.1	**A502 - 132M/6A F502 - 132M/6A**	100	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
4.00	29.5 33.9 36.7	1163 1015 936	1.2 1.3 1.4	97.80 85.33 78.64	18.0 18.0 18.0	**A503 - 100L/2C** **F503 - 100L/2C**	71	130
	40.6 51.4	848 669	1.6 1.8	71.27 56.21	18.0 18.0	**A/F 503 - 100L/2C** **A/F 503 - 112M/2A**	78	130
	20.1 25.4	1790 1411	1.0 1.1	71.27 56.21	18.0 18.0	**A503 - 112M/4B** **F503 - 112M/4B**	80	130
	172.3 191.8 232.4	215 193 159	3.0 3.4 4.0	8.30 7.45 6.15	5.0 5.0 5.0	**A601 - 112M/4B** **F601 - 112M/4B**	65	132
	115.7 128.8 156.0 184.6 199.5 224.4	320 288 238 201 186 165	2.0 2.3 2.7 3.1 3.3 3.7	8.30 7.45 6.15 5.20 4.81 4.28	5.0 5.0 5.0 5.0 5.0 5.0	**A601 - 132M/6A** **F601 - 132M/6A**	85	132
	56.8	619	4.0	50.91	22.0	**A/F 602 - 100L/2C** **A/F 602 - 112M/2A**	106	134
	28.1 31.6 35.0 37.6 42.3 47.1	1306 1161 1047 975 867 778	2.5 2.8 3.2 2.9 3.7 4.1	50.91 45.27 40.81 38.00 33.79 30.35	22.0 22.0 22.0 22.0 22.0 22.0	**A602 - 112M/4B** **F602 - 112M/4B**	108	134
	18.9 21.2 23.5 25.3 28.4 31.6 33.8 37.5 40.6 45.3	1965 1747 1575 1467 1304 1171 1095 987 913 817	1.7 1.9 2.1 1.9 2.5 2.7 3.0 3.3 3.6 3.9	50.91 45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66 21.17	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A602 - 132M/6A** **F602 - 132M/6A**	128	134
	14.9 16.0 18.0	2312 2155 1914	1.1 1.2 1.4	194.31 181.13 160.90	22.0 22.0 22.0	**A603 - 100L/2C** **F603 - 100L/2C**	99	134
	20.1 21.5 23.9 28.8 30.9 34.3 36.1 41.4	1708 1597 1440 1192 1113 1004 951 831	1.5 1.6 1.8 2.2 2.4 2.6 2.8 3.2	143.57 134.25 121.02 100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A/F 603 - 100L/2C** **A/F 603 - 112M/2A**	106	134
	10.0 10.7 11.8 14.3 15.3 16.9 17.9 20.5	3605 3371 3039 2516 2350 2119 2008 1754	1.0 1.0 1.2 1.4 1.5 1.7 1.7 2.0	143.57 134.25 121.02 100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 112M/4B** **F603 - 112M/4B**	108	134
	9.6 10.3 11.4 12.0 13.7 17.2	3748 3501 3156 2992 2613 2085	0.9 1.0 1.1 1.2 1.3 1.7	100.21 93.60 84.37 79.98 69.87 55.75	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 132M/6A** **F603 - 132M/6A**	128	134
	123.1 151.6	301 244	3.3 3.7	7.80 6.33	6.0 6.0	**A701 - 132M/6A** **F701 - 132M/6A**	88	136
	21.5 26.2 28.7	1706 1398 1277	2.9 3.6 3.9	44.67 36.60 33.43	30.0 30.0 30.0	**A702 - 132M/6A** **F702 - 132M/6A**	158	138

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
4.00	11.1 12.5	3095 2752	1.2 1.4	260.15 231.34	30.0 30.0	**A703 - 100L/2C** **F703 - 100L/2C**	129	138
	13.9 15.2 16.7 18.6 19.9 22.5 24.3 26.6 28.8 32.1 34.7	2472 2255 2059 1850 1724 1527 1413 1290 1194 1070 992	1.5 1.7 1.8 2.0 2.2 2.5 2.7 2.9 3.1 3.5 3.8	207.78 189.54 173.11 155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A/F 703 - 100L/2C** **A/F 703 - 112M/2A**	135	138
	6.9 7.5 8.3 9.2 9.9 11.1 12.0 13.2 14.2 15.9 17.2 19.4 21.2	5217 4759 4347 3904 3640 3223 2982 2723 2521 2259 2093 1851 1690	1.0 1.1 1.2 1.3 1.4 1.6 1.7 1.8 2.0 2.2 2.4 2.7 3.0	207.78 189.54 173.11 155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 112M/4B** **F703 - 112M/4B**	137	138
	7.5 8.1 8.9 9.6 10.7 11.5 13.0 14.3 17.2 21.0	4888 4522 4130 3822 3425 3174 2806 2563 2123 1739	1.0 1.1 1.2 1.3 1.5 1.6 1.8 2.0 2.4 2.9	128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132M/6A** **F703 - 132M/6A**	158	138
	4.7 5.2 6.2 6.9 7.5 8.3 9.2 10.0 11.1 12.1 13.4 15.2 16.2 17.9	7834 7069 5867 5309 4888 4411 3976 3661 3291 3013 2719 2400 2257 2043	1.0 1.1 1.4 1.5 1.6 1.8 2.0 2.2 2.4 2.7 2.9 3.3 3.5 3.9	205.73 185.64 154.07 139.41 128.36 115.83 104.41 96.13 86.43 79.13 71.40 63.02 59.26 53.66	55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0	**A903 - 132M/6A** **F903 - 132M/6A**	235	140
4.80	259.0	170	0.9	5.58	3.8	**A302 - 112M/4** **F302 - 112M/4**	47	118
	995.4 1109.0	44 40	1.4 1.0	1.45 1.30	1.6 1.6	**A351 - 112M/4** **F351 - 112M/4**	42	120
	99.5 123.1 148.2 165.5 204.7 246.6	442 358 297 266 215 178	1.0 1.1 1.2 1.3 1.3 1.5	14.52 11.74 9.75 8.73 7.06 5.86	5.9 5.9 5.8 5.7 5.5 5.4	**A352 - 112M/4** **F352 - 112M/4**	52	122

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
4.80	252.2 279.5 308.1 367.7 399.2 464.6 573.4 694.7 1103.1	176 159 144 121 111 96 78 64 40	1.0 1.1 1.1 1.2 1.3 1.4 1.5 1.9 2.0	5.73 5.17 4.69 3.93 3.62 3.11 2.52 2.08 1.31	3.6 3.5 3.5 3.3 3.3 3.2 3.0 2.8 2.5	**A401 - 112M/4** **F401 - 112M/4**	42	124
	57.1 63.1 72.5 83.2 90.3 99.7 116.2 126.1 157.1 173.5 200.1 149.1 275.2	770 698 607 529 488 442 379 349 280 254 220 177 160	1.1 1.2 1.4 1.6 1.6 1.6 1.8 1.9 2.1 2.4 2.5 3.1 3.1	25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46 9.20 8.33 7.22 5.80 5.25	12.0 12.0 12.0 12.0 12.0 12.0 11.9 11.7 11.2 10.9 10.6 10.0 9.8	**A402 - 112M/4** **F402 - 112M/4**	63	126
	168.8 190.1 234.2 257.1 305.3 356.0 382.5 437.9 559.4	263 234 190 173 146 125 116 102 79	1.3 1.5 1.8 1.9 2.2 2.6 2.7 3.1 3.5	8.56 7.60 6.17 5.62 4.73 4.06 3.78 3.30 2.58	4.0 4.0 4.0 4.0 4.0 4.0 3.9 3.7 3.5	**A501 - 112M/4** **F501 - 112M/4**	53	128
	29.6 33.4 36.9 41.5 45.8 51.1 53.6 62.5 66.6 73.5 76.8 85.7 95.5 105.4	1485 1292 1169 1039 941 843 805 690 647 586 561 503 451 409	1.1 1.2 1.4 1.5 1.7 1.9 2.0 2.3 2.5 2.7 2.7 3.0 3.3 3.4	48.77 43.32 39.21 34.83 31.57 28.26 26.98 23.14 21.69 19.66 18.81 16.86 15.13 13.71	18.0 18.0 18.0 18.0 18.0 18.0 18.0 17.7 17.5 17.1 16.9 16.5 16.1 15.7	**A502 - 112M/4** **F502 - 112M/4**	80	130
	25.7	1676	1.0	56.21	18.0	**A503 - 112M/4** **F503 - 112M/4**	80	130
	174.1 193.8 234.8 277.9	255 229 189 160	2.5 2.8 3.4 3.9	8.30 7.45 6.15 5.20	5.0 5.0 5.0 5.0	**A601 - 112M/4** **F601 - 112M/4**	108	132
	28.4 31.9 35.4 38.0 42.8 47.6 50.9	1550 1379 1243 1157 1029 924 864	2.1 2.4 2.7 2.4 3.1 3.5 3.8	50.91 45.27 40.81 38.00 33.79 30.35 28.36	22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A602 - 112M/4** **F602 - 112M/4**	108	134
	11.9 14.4 15.4 17.1 18.1 20.7	3609 2988 2791 2516 2385 2084	1.0 1.2 1.3 1.4 1.5 1.7	121.02 100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 112M/4** **F603 - 112M/4**	108	134

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
4.80	8.3 9.3 10.0 11.3 12.2 13.3 14.4 16.1 17.3 19.6 21.5	5162 4636 4322 3827 3541 3234 2993 2682 2485 2198 2007	1.0 1.1 1.2 1.3 1.4 1.5 1.7 1.9 2.0 2.3 2.5	173.11 155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 112M/4** **F703 - 112M/4**	137	138
5.50	519.6	93	1.3	5.58	3.4	**A302 - 112M/2C** **F302 - 112M/2C**	45	118
	773.3 900.0 1107.3 1338.5 1997.8 2225.6	64 55 45 37 25 22	1.1 1.1 1.2 1.2 1.8 1.4	3.75 3.22 2.62 2.17 1.45 1.30	1.7 1.6 1.6 1.5 1.4 1.3	**A351 - 112M/2C** **F351 - 112M/2C**	43	120
	158.5 171.9 199.8 247.1 297.4 332.2 410.9 494.6	305 281 242 196 162 145 118 98	1.1 1.2 1.3 1.5 1.7 1.8 1.8 2.0	18.30 16.88 14.52 11.74 9.75 8.73 7.06 5.86	5.6 5.5 5.4 5.3 5.1 5.0 4.8 4.6	**A352 - 112M/2C** **F352 - 112M/2C**	50	122
	506.3 561.3 618.0 737.3 800.0 932.1 1149.1 1392.0 2209.5	98 88 80 67 62 53 43 35 22	1.3 1.4 1.5 1.7 1.8 1.8 2.1 2.5 2.7	5.73 5.17 4.69 3.93 3.63 3.11 2.52 2.08 1.31	3.0 3.0 2.9 2.8 2.7 2.6 2.4 2.3 2.0	**A401 - 112M/2C** **F401 - 112M/2C**	40	124
	92.1 100.4	525 481	1.2 1.2	31.50 28.89	12.0 12.0	**A402 - 112M/2C** **F402 - 112M/2C**	61	126
	114.6 126.6 145.4 167.0 181.1 200.0 233.1 253.1 315.2 348.1 401.7 552.4	422 382 332 289 267 242 207 191 153 139 120 87	1.5 1.7 1.9 2.2 2.2 2.2 2.5 2.6 2.9 3.2 3.4 4.3	25.30 22.91 19.94 17.37 16.01 14.50 12.44 11.46 9.20 8.33 7.22 5.25	11.7 11.5 11.2 10.9 10.7 10.4 10.0 9.9 9.3 9.1 8.7 8.2	**A/F 402 - 112M/2C** **A/F 402 - 132S/2A**	74	126
	60.0 77.2 83.8 104.3 115.2 133.0 165.5 182.9	841 653 602 483 438 379 305 276	1.0 1.1 1.1 1.2 1.4 1.5 1.8 1.8	16.01 12.44 11.46 9.20 8.33 7.22 5.80 5.25	12.0 12.0 12.0 11.8 11.6 11.3 10.9 10.6	**A402 - 132M/6B** **F402 - 132M/6B**	88	126

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
5.50	57.1	883	1.0	25.30	12.0	A402 - 132S/4C F402 - 132S/4C	79	126
	63.1	799	1.1	22.91	12.0			
	72.5	696	1.2	19.94	12.0			
	83.2	606	1.4	17.37	12.0			
	90.3	559	1.4	16.01	12.0			
	99.7	506	1.4	14.50	11.9			
	116.2	434	1.6	12.44	11.6			
	126.1	400	1.6	11.46	11.4			
	157.1	321	1.9	9.20	10.9			
	173.5	291	2.1	8.33	10.7			
	200.1	252	2.2	7.22	10.4			
	249.1	202	2.7	5.80	9.8			
	275.2	183	2.7	5.25	9.6			
	338.8	146	1.8	8.56	4.0	A/F 501 - 112M/2C A/F 501 - 132S/2A	64	128
	381.6	129	2.0	7.60	3.8			
	470.0	105	2.4	6.17	3.7			
	516.0	96	2.6	5.62	3.6			
	613.1	81	3.0	4.73	3.3			
	714.3	69	3.5	4.06	3.2			
	767.2	64	3.6	3.78	3.1			
	155.7	327	1.0	6.17	4.0	A501 - 132M/6B F501 - 132M/6B	78	128
	171.0	298	1.1	5.62	4.0			
	202.8	251	1.3	4.73	4.0			
	236.5	215	1.5	4.06	4.0			
	254.1	200	1.5	3.78	4.0			
	290.9	175	1.8	3.30	4.0			
	371.6	137	2.0	2.58	3.9			
	488.4	104	2.2	1.97	3.6			
	658.8	77	2.8	1.46	3.3			
	724.9	70	2.8	1.32	3.2			
	168.8	302	1.2	8.56	4.0	A501 - 132S/4C F501 - 132S/4C	69	128
	190.1	268	1.3	7.60	4.0			
	234.2	218	1.6	6.17	4.0			
	257.1	198	1.7	5.62	4.0			
	305.5	167	1.9	4.73	4.0			
	355.9	143	2.2	4.06	3.9			
	382.3	133	2.3	3.78	3.8			
	437.9	116	2.7	3.30	3.7			
	560.1	91	3.1	2.58	3.4			
	733.5	69	3.3	1.97	3.2			
	59.5	813	1.5	48.77	17.5	A/F 502 - 112M/2C A/F 502 - 132S/2A	91	130
	66.9	722	1.7	43.32	17.2			
	74.0	653	1.8	39.21	16.8			
	83.3	580	2.1	34.83	16.4			
	91.9	526	2.3	31.57	16.0			
	102.6	471	2.5	28.26	15.6			
	107.5	450	2.7	26.98	15.5			
	125.3	386	3.1	23.14	14.9			
	133.7	361	3.3	21.69	14.7			
	147.5	328	3.7	19.66	14.3			
	154.2	313	3.6	18.81	14.1			
	172.0	281	4.0	16.86	13.7			
	30.4	1658	1.0	31.57	18.0	A502 - 132M/6B F502 - 132M/6B	105	130
	34.0	1484	1.1	28.26	18.0			
	35.6	1417	1.1	26.98	18.0			
	41.5	1215	1.3	23.14	18.0			
	44.3	1139	1.4	21.69	18.0			
	48.8	1033	1.5	19.66	18.0			
	51.0	988	1.5	18.81	17.9			
	56.9	886	1.7	16.86	17.6			
	63.5	794	1.9	15.13	17.3			
	70.0	720	1.9	13.71	16.9			
	85.7	588	1.9	11.20	16.3			
	106.6	473	1.9	9.01	15.5			
	117.6	429	1.9	8.16	15.1			
	127.2	396	2.0	7.55	14.8			
	158.2	319	2.2	6.07	14.1			
	174.5	289	2.4	5.50	13.7			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
5.50	29.6 33.4 36.9 41.5 45.8 51.1 53.6 62.4 66.6 73.5 76.8 85.7 95.5 105.4 129.0 160.4 177.0 191.4 238.1 262.7	1702 1512 1368 1215 1102 986 941 807 757 686 656 588 528 478 391 314 285 263 212 192	0.9 1.1 1.2 1.3 1.5 1.6 1.7 2.0 2.1 2.3 2.3 2.5 2.8 2.9 2.8 2.9 2.8 3.0 3.3 3.6	48.77 43.32 39.21 34.83 31.57 28.26 26.98 23.14 21.69 19.66 18.81 16.86 15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	18.0 18.0 18.0 18.0 18.0 17.8 17.7 17.2 17.0 16.7 16.6 16.2 15.8 15.4 14.7 13.9 13.6 13.3 12.5 12.2	**A502 - 132S/4C** **F502 - 132S/4C**	96	130
	40.7 51.6	1162 916	1.2 1.3	71.27 56.21	18.0 18.0	**A503 - 112M/2C** **F503 - 112M/2C**	78	130
	349.4 389.0	141 127	3.4 3.8	8.30 7.45	5.0 4.9	**A/F 601 - 112M/2C** **A/F 601 - 132S/2A**	76	132
	115.7 128.8 156.0 184.6 199.5 224.4 263.0 297.5	440 396 327 276 255 227 194 171	1.5 1.6 2.0 2.2 2.4 2.7 3.1 3.5	8.30 7.45 6.15 5.20 4.81 4.28 3.65 3.23	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	**A601 - 132M/6B** **F601 - 132M/6B**	90	132
	174.1 193.8 234.8 277.9 300.3 337.8	293 263 217 183 170 151	2.2 2.5 2.9 3.4 3.7 4.0	8.30 7.45 6.15 5.20 4.81 4.28	5.0 5.0 5.0 5.0 5.0 5.0	**A601 - 132S/4C** **F601 - 132S/4C**	92	132
	57.0 64.1 71.1 76.3	848 754 680 633	2.9 3.3 3.6 3.3	50.91 45.27 40.81 38.00	22.0 22.0 22.0 22.0	**A/F 602 - 112M/2C** **A/F 602 - 132S/2A**	119	134
	18.9 21.2 23.5 25.3 28.4 31.6 33.8 37.5 40.6 45.3 49.0 54.5 60.5	2674 2378 2143 1996 1775 1594 1490 1343 1243 1112 1029 925 833	1.2 1.4 1.5 1.4 1.8 2.0 2.2 2.5 2.7 2.9 3.1 3.5 3.8	50.91 45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66 21.17 19.59 17.60 15.87	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A602 - 132M/6B** **F602 - 132M/6B**	133	134
	28.4 31.9 35.4 38.0 42.8 47.6 50.9 56.5 61.1	1777 1580 1424 1326 1179 1059 990 892 826	1.9 2.1 2.3 2.1 2.7 3.0 3.3 3.7 4.0	50.91 45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A602 - 132S/4C** **F602 - 132S/4C**	135	134
	20.2 21.6 24.0	2340 2188 1973	1.1 1.2 1.3	143.57 134.25 121.02	22.0 22.0 22.0	**A603 - 112M/2C** **F603 - 112M/2C**	106	134

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
5.50	28.9 31.0 34.4 36.3 41.5	1634 1526 1375 1304 1139	1.6 1.7 1.9 2.0 2.3	100.21 93.60 84.37 79.98 69.87	22.0 22.0 22.0 22.0 22.0	**A/F 603 - 112M/2C** **A/F 603 - 132S/2A**	119	134
	13.7 17.2	3593 2867	1.0 1.2	69.87 55.75	22.0 22.0	**A603 - 132M/6B** **F603 - 132M/6B**	133	134
	14.4 15.4 17.1 18.1 20.7 25.9	3424 3198 2883 2733 2387 1905	1.0 1.1 1.2 1.3 1.5 1.8	100.21 93.60 84.37 79.98 69.87 55.75	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 132S/4C** **F603 - 132S/4C**	135	134
	52.0	909	2.9	55.75	22.0	**A603 - 132S/2A** **F603 - 132S/2A**	119	134
	123.1 151.6 181.6 197.3 229.9	414 336 281 258 222	2.4 2.7 3.1 3.4 3.8	7.80 6.33 5.29 4.87 4.18	6.0 6.0 6.0 6.0 6.0	**A701 - 132M/6B** **F701 - 132M/6B**	93	136
	185.3 228.2	275 223	3.6 4.0	7.80 6.33	6.0 6.0	**A701 - 132S/4C** **F701 - 132S/4C**	84	136
	21.5 26.2 28.7 31.7 34.4 38.7	2346 1922 1756 1590 1464 1303	2.1 2.6 2.8 3.1 3.4 3.8	44.67 36.60 33.43 30.27 27.87 24.80	30.0 30.0 30.0 30.0 30.0 30.0	**A702 - 132M/6B** **F702 - 132M/6B**	163	138
	32.3 39.5	1559 1277	3.2 3.9	44.67 36.60	30.0 30.0	**A702 - 132S/4C** **F702 - 132S/4C**	154	138
	14.0 15.3 16.8	3387 3090 2822	1.1 1.2 1.3	207.78 189.54 173.11	30.0 30.0 30.0	**A703 - 112M/2C** **F703 - 112M/2C**	135	138
	18.7 20.0 22.6 24.4 26.7 28.9 32.2 34.8 39.3 43.1	2534 2363 2092 1936 1768 1636 1466 1359 1201 1097	1.5 1.6 1.8 1.9 2.1 2.3 2.6 2.8 3.1 3.4	155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A/F 703 - 112M/2C** **A/F 703 - 132S/2A**	149	138
	9.6 10.7 11.5 13.0 14.3 17.2 21.0	5218 4675 4332 3831 3499 2898 2374	1.0 1.1 1.2 1.3 1.4 1.7 2.1	100.38 89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132M/6B** **F703 - 132M/6B**	163	138
	9.3 10.0 11.3 12.2 13.3 14.4 16.1 17.3 19.6 21.5 25.9 31.6	5313 4952 4386 4058 3706 3430 3073 2848 2518 2300 1905 1561	0.9 1.0 1.1 1.2 1.3 1.5 1.6 1.8 2.0 2.2 2.6 3.2	155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132S/4C** **F703 - 132S/4C**	154	138
	52.0	949	3.9	55.75	30.0	**A703 - 132S/2A** **F703 - 132S/2A**	149	138

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
5.50	6.2	7966	1.0	154.07	55.0	**A903 - 132M/6B** **F903 - 132M/6B**	238	140
	6.9	7208	1.1	139.41	55.0			
	7.5	6637	1.2	128.36	55.0			
	8.3	5989	1.3	115.83	55.0			
	9.2	5398	1.5	104.41	55.0			
	10.0	4970	1.6	96.13	55.0			
	11.1	4469	1.8	86.43	55.0			
	12.1	4091	2.0	79.13	55.0			
	13.4	3692	2.2	71.40	55.0			
	15.2	3258	2.5	63.02	55.0			
	16.2	3064	2.6	59.26	55.0			
	17.9	2775	2.9	53.66	55.0			
	7.0	7029	1.1	205.73	55.0	**A903 - 132S/4C** **F903 - 132S/4C**	221	140
	7.8	6343	1.3	185.64	55.0			
	9.4	5264	1.5	154.07	55.0			
	10.4	4763	1.7	139.41	55.0			
	11.3	4386	1.8	128.36	55.0			
	12.5	3958	2.0	115.83	55.0			
	13.8	3568	2.2	104.41	55.0			
	15.0	3285	2.4	96.13	55.0			
	16.7	2953	2.7	86.43	55.0			
	18.3	2704	3.0	79.13	55.0			
	20.2	2440	3.3	71.40	55.0			
	22.9	2153	3.7	63.02	55.0			
	24.4	2025	4.0	59.26	55.0			
	14.1	3354	1.8	205.73	55.0	**A903 - 132S/2A** **F903 - 132S/2A**	216	140
	15.6	3026	2.0	185.64	55.0			
	18.8	2511	2.4	154.07	55.0			
	20.8	2273	2.6	139.41	55.0			
	22.6	2092	2.9	128.36	55.0			
	25.0	1888	3.2	115.83	55.0			
	27.8	1702	3.5	104.41	55.0			
	30.2	1567	3.8	96.13	55.0			
7.50	83.5	824	1.0	17.37	10.8	**A402 - 132M/4B** **F402 - 132M/4B**	90	126
	90.6	759	1.1	16.01	10.8			
	100.0	688	1.0	14.50	10.8			
	116.6	590	1.2	12.44	10.6			
	126.5	543	1.2	11.46	10.5			
	157.6	436	1.4	9.20	10.2			
	174.1	395	1.5	8.33	10.1			
	200.8	342	1.6	7.22	9.8			
	250.0	275	2.0	5.80	9.4			
	276.2	249	2.0	5.25	9.2			
	126.6	521	1.2	22.91	10.6	**A402 - 132S/2C** **F402 - 132S/2C**	81	126
	145.5	453	1.4	19.94	10.4			
	166.9	395	1.6	17.37	10.2			
	181.1	364	1.6	16.01	10.1			
	200.0	329	1.6	14.50	9.9			
	233.0	283	1.9	12.44	9.6			
	253.1	260	1.9	11.46	9.4			
	315.2	209	2.2	9.20	9.0			
	348.0	189	2.4	8.33	8.8			
	401.7	164	2.5	7.22	8.5			
	500.3	132	3.1	5.80	8.0			
	552.4	119	3.1	5.25	7.8			
	190.8	364	1.0	7.60	4.0	**A501 - 132M/4B** **F501 - 132M/4B**	80	128
	235.0	296	1.2	6.17	4.0			
	258.0	269	1.2	5.62	4.0			
	306.6	227	1.4	4.73	4.0			
	357.1	195	1.6	4.06	3.8			
	383.6	181	1.7	3.78	3.7			
	439.4	158	2.0	3.30	3.6			
	562.0	124	2.3	2.58	3.4			
	736.0	94	2.4	1.97	3.1			
	993.2	70	3.1	1.46	2.8			
	1098.5	63	3.2	1.32	2.8			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
7.50	338.8	199	1.3	8.56	3.9			
	381.6	176	1.5	7.60	3.7			
	470.0	143	1.8	6.17	3.5			
	516.0	130	1.9	5.62	3.4			
	613.1	110	2.2	4.73	3.3	**A501 - 132S/2C**		
	714.3	94	2.5	4.06	3.1	**F501 - 132S/2C**	71	128
	767.2	88	2.6	3.78	3.1			
	878.8	77	3.0	3.30	3.0			
	1124.0	60	3.5	2.58	2.8			
	1472.1	46	3.8	1.97	2.7			
	41.6	1652	1.0	34.83	16.3			
	45.9	1497	1.1	31.57	16.3			
	51.3	1340	1.2	28.26	16.2			
	53.7	1279	1.3	26.98	16.1			
	62.7	1097	1.5	23.14	15.9			
	66.9	1029	1.6	21.69	15.8			
	73.8	932	1.7	19.66	15.5			
	77.1	892	1.7	18.81	15.4	**A502 - 132M/4B**		
	86.0	800	1.9	16.86	15.2	**F502 - 132M/4B**	107	130
	95.8	717	2.1	15.13	14.9			
	105.8	650	2.2	13.71	14.6			
	129.5	531	2.1	11.20	14.0			
	160.9	427	2.1	9.01	13.4			
	177.7	387	2.1	8.16	13.1			
	192.1	358	2.2	7.55	12.8			
	238.9	288	2.4	6.07	12.1			
	263.6	261	2.7	5.50	12.1			
	59.5	1108	1.1	48.77	16.2			
	66.9	984	1.2	43.32	15.9			
	74.0	891	1.3	39.21	15.7			
	83.3	791	1.5	34.83	15.4			
	91.9	717	1.7	31.57	15.1			
	102.6	642	1.9	28.26	14.8			
	107.5	613	2.0	26.98	14.7			
	125.3	526	2.3	23.14	14.2			
	133.7	493	2.4	21.69	14.0	**A502 - 132S/2C**		
	147.5	447	2.7	19.66	13.7	**F502 - 132S/2C**	98	130
	154.2	427	2.6	18.81	13.6			
	172.0	383	2.9	16.86	13.2			
	191.7	344	3.3	15.13	12.9			
	211.6	311	3.4	13.71	12.6			
	258.8	255	3.2	11.20	11.9			
	321.9	205	3.3	9.01	11.3			
	355.2	186	3.2	8.16	11.0			
	384.2	172	3.5	7.55	10.7			
	477.8	138	3.8	6.07	10.1			
	41.5	1657	1.0	23.14	16.2			
	44.3	1554	1.0	21.69	16.2			
	48.8	1408	1.1	19.66	16.2			
	51.0	1347	1.1	18.81	16.1			
	56.9	1208	1.2	16.86	16.0			
	63.5	1083	1.4	15.13	15.9	**A502 - 160M/6B**		
	70.0	982	1.4	13.71	15.7	**F502 - 160M/6B**	139	130
	85.7	802	1.4	11.20	15.2			
	106.6	645	1.4	9.01	14.7			
	117.6	585	1.4	8.16	14.4			
	127.2	541	1.5	7.55	14.1			
	158.2	435	1.6	6.07	13.5			
	174.5	394	1.8	5.50	13.2			
	174.7	398	1.6	8.30	5.0			
	194.6	357	1.8	7.45	5.0			
	235.8	295	2.2	6.15	5.0			
	278.8	249	2.5	5.20	5.0	**A601 - 132M/4B**		
	301.3	231	2.7	4.81	5.0	**F601 - 132M/4B**	92	132
	339.0	205	3.0	4.28	5.0			
	397.3	175	3.4	3.65	4.8			
	449.3	155	3.9	3.23	4.7			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
7.50	349.4 389.0 471.3 557.7 602.6	193 173 143 121 112	2.5 2.8 3.4 3.9 4.2	8.30 7.45 6.15 5.20 4.81	5.0 4.9 4.6 4.4 4.5	**A601 - 132S/2C** **F601 - 132S/2C**	83	132
	115.7 128.8 156.0 184.6 199.5 224.4 263.0 297.5 392.7 480.0	601 539 445 376 348 310 264 234 177 145	1.1 1.2 1.4 1.6 1.8 2.0 2.3 2.6 3.1 3.1	8.30 7.45 6.15 5.20 4.81 4.28 3.65 3.23 2.44 2.00	5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 4.8 4.6	**A601 - 160M/6B** **F601 - 160M/6B**	92	132
	28.5 32.0 35.5 38.2 42.9 47.8 51.1 56.7 61.3 68.5 74.0 82.4	2414 2147 1935 1802 1602 1439 1345 1212 1122 1004 929 835	1.4 1.5 1.7 1.6 2.0 2.2 2.5 2.7 2.9 3.2 3.4 3.8	50.91 45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66 21.17 19.59 17.60	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	**A602 - 132M/4B** **F602 - 132M/4B**	135	134
	57.0 64.1 71.1 76.3 85.8 95.5 102.2	1157 1029 927 863 768 690 644	2.1 2.4 2.7 2.4 3.1 3.5 3.8	50.91 45.27 40.81 38.00 33.79 30.35 28.36	22.0 22.0 22.0 22.0 22.0 21.9 21.6	**A602 - 132S/2C** **F602 - 132S/2C**	126	134
	21.2 23.5 25.3 28.4 31.6 33.8 37.5 40.6 45.3 49.0 54.5 60.5 73.1 88.0 97.6	3243 2923 2722 2420 2174 2032 1831 1695 1516 1403 1261 1137 941 781 704	1.0 1.1 1.0 1.3 1.5 1.6 1.8 1.9 2.1 2.3 2.5 2.8 3.3 3.8 4.0	45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66 21.17 19.59 17.60 15.87 13.14 10.91 9.83	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 21.8	**A602 - 160M/6B** **F602 - 160M/6B**	169	134
	18.1 20.8 26.0	3714 3244 2589	0.9 1.1 1.4	79.98 69.87 55.75	22.0 22.0 22.0	**A603 - 132M/4B** **F603 - 132M/4B**	135	134
	28.9 31.0 34.4 36.3 41.5 52.0	2228 2081 1875 1778 1553 1239	1.2 1.3 1.4 1.5 1.7 2.1	100.21 93.60 84.37 79.98 69.87 55.75	22.0 22.0 22.0 22.0 22.0 22.0	**A603 - 132S/2C** **F603 - 132S/2C**	126	134
	185.9 228.9 274.3 297.9	374 303 253 233	2.7 3.0 3.5 3.7	7.80 6.33 5.29 4.87	6.0 6.0 6.0 6.0	**A701 - 132M/4B** **F701 - 132M/4B**	95	136

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
7.50	123.1 151.6 181.6 197.3 229.9 264.3 300.9 320.0	564 458 383 352 302 263 231 217	1.8 2.0 2.3 2.5 2.8 3.2 3.6 3.7	7.80 6.33 5.29 4.87 4.18 3.63 3.19 3.00	6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	**A701 - 160M/6B** **F701 - 160M/6B**	129	136
	32.5 39.6 43.4 47.9 52.0	2118 1736 1585 1436 1322	2.4 2.9 3.2 3.5 3.8	44.67 36.60 33.43 30.27 27.87	30.0 30.0 30.0 30.0 30.0	**A702 - 132M/4B** **F702 - 132M/4B**	165	138
	64.9	1015	3.7	44.67	30.0	**A702 - 132S/2C** **F702 - 132S/2C**	156	138
	21.5 26.2 28.7 31.7 34.4 38.7 42.0 46.0 49.0 55.9	3200 2621 2394 2168 1996 1776 1636 1494 1404 1231	1.6 1.9 2.1 2.3 2.5 2.8 3.1 3.3 3.6 3.9	44.67 36.60 33.43 30.27 27.87 24.80 22.84 20.86 19.60 17.18	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A702 - 160M/6B** **F702 - 160M/6B**	199	138
	13.4 14.4 16.1 17.4 19.7 21.5 26.0 31.7	5036 4661 4177 3870 3422 3125 2588 2121	1.0 1.1 1.2 1.3 1.5 1.6 1.9 2.4	108.46 100.38 89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132M/4B** **F703 - 132M/4B**	165	138
	18.7 20.0 22.6 24.4 26.7 28.9 32.2 34.8 39.3 43.1 52.0 63.5	3456 3222 2853 2640 2411 2231 2000 1853 1638 1496 1239 1015	1.1 1.2 1.3 1.4 1.6 1.7 1.9 2.0 2.3 2.5 3.0 3.7	155.48 144.94 128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132S/2C** **F703 - 132S/2C**	156	138
	13.0 14.3 17.2 21.0	5169 4721 3910 3203	1.0 1.1 1.3 1.6	73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0	**A703 - 160M/6B** **F703 - 160M/6B**	199	138
	22.6 25.0 30.2	3042 2745 2278	2.6 2.9 3.5	42.47 38.33 31.81	55.0 55.0 55.0	**A902 - 160M/6B** **F902 - 160M/6B**	266	140
	9.4 10.4 11.3 12.5 13.9 15.1 16.8 18.3 20.3 23.0 24.5 27.0	7154 6473 5960 5378 4848 4464 4013 3674 3315 2926 2751 2492	1.1 1.2 1.3 1.5 1.7 1.8 2.0 2.2 2.4 2.7 2.9 3.2	154.07 139.41 128.36 115.83 104.41 96.13 86.43 79.13 71.40 63.02 59.26 53.66	55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0	**A903 - 132M/4B** **F903 - 132M/4B**	227	140

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
7.50	14.1	4573	1.3	205.73	55.0	**A903 - 132S/2C** **F903 - 132S/2C**	223	140
	15.6	4126	1.5	185.64	55.0			
	18.8	3425	1.8	154.07	55.0			
	20.8	3099	1.9	139.41	55.0			
	22.6	2853	2.1	128.36	55.0			
	25.0	2575	2.3	115.83	55.0			
	27.8	2321	2.6	104.41	55.0			
	30.2	2137	2.8	96.13	55.0			
	33.6	1921	3.1	86.43	55.0			
	36.6	1759	3.4	79.13	55.0			
	40.6	1587	3.8	71.40	55.0			
	8.3	8210	1.0	115.83	55.0	**A903 - 160M/6B** **F903 - 160M/6B**	266	140
	9.2	7400	1.1	104.41	55.0			
	10.0	6813	1.2	96.13	55.0			
	11.1	6126	1.3	86.43	55.0			
	12.1	5608	1.4	79.13	55.0			
	13.4	5061	1.6	71.40	55.0			
	15.2	4467	1.8	63.02	55.0			
	16.2	4200	1.9	59.26	55.0			
	17.9	3803	2.1	53.66	55.0			
	19.8	3437	2.3	48.50	55.0			
9.20	181.1	446	1.3	16.01	9.6	**A402 - 132M/2** **F402 - 132M/2**	90	126
	200.0	404	1.3	14.50	9.4			
	233.0	347	1.5	12.44	9.2			
	253.1	319	1.5	11.46	9.1			
	315.2	256	1.8	9.20	8.7			
	348.0	232	1.9	8.33	8.5			
	401.7	201	2.1	7.22	8.2			
	500.3	162	2.6	5.80	7.8			
	552.4	146	2.6	5.25	7.6			
	116.5	724	1.0	12.44	9.8	**A402 - 132M/4** **F402 - 132M/4**	90	126
	126.5	667	1.0	11.46	9.8			
	157.6	535	1.1	9.20	9.6			
	174.1	485	1.2	8.33	9.5			
	200.8	420	1.3	7.22	9.3			
	250.0	337	1.6	5.80	9.0			
	276.2	305	1.6	5.25	8.8			
	339.0	244	1.1	8.56	3.8	**A501 - 132M/2** **F501 - 132M/2**	80	128
	381.6	216	1.2	7.60	3.7			
	470.3	176	1.5	6.17	3.4			
	516.4	160	1.5	5.62	3.3			
	612.7	135	1.8	4.73	3.2			
	714.5	116	2.1	4.06	3.1			
	767.6	108	2.2	3.78	3.0			
	878.8	94	2.5	3.30	2.9			
	1122.6	74	2.9	2.58	2.7			
	1475.4	56	3.1	1.97	2.6			
	1990.2	41	4.0	1.46	2.4			
	2189.8	38	4.0	1.32	2.3			
	235.0	363	0.9	6.17	4.0	**A501 - 132M/4** **F501 - 132M/4**	80	128
	258.0	330	1.0	5.62	4.0			
	306.6	278	1.2	4.73	3.8			
	357.1	239	1.3	4.06	3.7			
	383.6	222	1.4	3.78	3.6			
	439.4	194	1.6	3.30	3.5			
	562.0	152	1.8	2.58	3.3			
	736.0	116	2.0	1.97	3.1			
	993.2	86	2.6	1.46	2.8			
	1098.5	78	2.6	1.32	2.7			
	74.0	1093	1.1	39.21	14.7	**A502 - 132M/2** **F502 - 132M/2**	107	130
	83.3	971	1.2	34.83	14.6			
	91.9	880	1.4	31.57	14.4			
	102.6	788	1.5	28.26	14.1			
	107.5	752	1.6	26.98	14.0			
	125.3	645	1.9	23.14	13.7			
	133.7	605	2.0	21.69	13.5			
	147.5	548	2.2	19.66	13.3			
	154.2	524	2.1	18.81	13.1			
	172.0	470	2.4	16.86	12.8			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
9.20	191.7 211.6 258.8 321.9 355.2 384.2 477.8 527.2	422 382 312 251 228 210 169 153	2.7 2.7 2.6 2.7 2.6 2.9 3.1 3.4	15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	12.5 12.3 11.7 11.0 10.8 10.5 9.9 9.7	**A502 - 132M/2** **F502 - 132M/2**	107	130
	51.3 53.7 62.7 66.9 73.8 77.1 86.0 95.8 105.8 129.5 160.9 177.7 192.1 238.9 263.6	1644 1569 1346 1262 1144 1094 981 880 798 651 524 475 439 353 320	1.0 1.0 1.2 1.3 1.4 1.4 1.5 1.7 1.8 1.7 1.7 1.7 1.8 2.0 2.2	28.26 26.98 23.14 21.69 19.66 18.81 16.86 15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	14.8 14.8 14.7 14.7 14.6 14.5 14.3 14.1 13.9 13.5 12.9 12.7 12.4 11.8 11.6	**A502 - 132M/4** **F502 - 132M/4**	107	130
	349.4 389.3 471.5 557.7 602.9 677.9	236 212 175 148 137 122	2.1 2.3 2.7 3.1 3.4 3.8	8.30 7.45 6.15 5.20 4.81 4.28	5.0 4.8 4.6 4.3 4.2 4.0	**A601 - 132M/2** **F601 - 132M/2**	92	132
	174.7 194.6 235.8 278.8 301.5 339.0 397.3 449.3 593.2 725.0	488 438 361 306 283 251 215 190 144 118	1.3 1.5 1.8 2.0 2.2 2.4 2.8 3.2 3.8 3.8	8.30 7.45 6.15 5.20 4.81 4.28 3.65 3.23 2.44 2.00	5.0 5.0 5.0 5.0 5.0 5.0 4.8 4.6 4.3 4.2	**A601 - 132M/4** **F601 - 132M/4**	92	132
	57.0 64.1 71.1 76.3 85.8 95.6 102.3 113.4 122.6 137.0	1419 1262 1137 1059 942 846 790 713 660 590	1.7 2.0 2.2 2.0 2.5 2.8 3.1 3.5 3.8 4.1	50.91 45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66 21.17	22.0 22.0 22.0 22.0 21.8 21.3 21.0 20.5 20.1 19.6	**A602 - 132M/2** **F602 - 132M/2**	135	134
	28.5 32.0 35.5 38.2 42.9 47.8 51.1 56.7 61.3 68.5 74.0 82.4 91.4 110.4	2961 2633 2374 2210 1966 1765 1650 1487 1376 1232 1140 1024 923 764	1.1 1.3 1.4 1.3 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.1 3.5 4.1	50.91 45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66 21.17 19.59 17.60 15.87 13.14	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0 21.9 21.4 20.5	**A602 - 132M/4** **F602 - 132M/4**	135	134
	34.4 36.3 41.5 52.0	2301 2181 1905 1520	1.1 1.2 1.4 1.7	84.37 79.98 69.87 55.75	22.0 22.0 22.0 22.0	**A603 - 132M/2** **F603 - 132M/2**	135	134

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
9.20	26.0	3175	1.1	55.75	22.0	**A603 - 132M/4** **F603 - 132M/4**	135	134
	371.8 458.1	222 180	3.4 3.7	7.80 6.33	6.0 5.8	**A701 - 132M/2** **F701 - 132M/2**	95	136
	185.9 229.1 274.3 297.9 347.2 399.3	458 372 311 286 245 213	2.2 2.4 2.8 3.0 3.5 4.0	7.80 6.33 5.29 4.87 4.18 3.63	6.0 6.0 6.0 6.0 6.0 6.0	**A701 - 132M/4** **F701 - 132M/4**	95	136
	64.9 79.2 86.8	1245 1020 932	3.0 3.7 4.0	44.67 36.60 33.43	30.0 30.0 30.0	**A702 - 132M/2** **F702 - 132M/2**	165	138
	32.5 39.6 43.4 47.9 52.0 58.5 63.5	2598 2129 1945 1761 1621 1443 1328	1.9 2.3 2.6 2.8 3.1 3.5 3.8	44.67 36.60 33.43 30.27 27.87 24.80 22.84	30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A702 - 132M/4** **F702 - 132M/4**	165	138
	22.6 24.4 26.7 28.9 32.2 34.8 39.3 43.1 52.0 63.5	3500 3238 2957 2737 2453 2273 2010 1835 1520 1245	1.1 1.2 1.3 1.4 1.5 1.7 1.9 2.0 2.5 3.0	128.35 118.75 108.46 100.38 89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132M/2** **F703 - 132M/2**	165	138
	16.1 17.4 19.7 21.5 26.0 31.7	5123 4747 4198 3834 3175 2601	1.0 1.1 1.2 1.3 1.6 1.9	89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132M/4** **F703 - 132M/4**	165	138
	14.1 15.6 18.8 20.8 22.6 25.0 27.8 30.2 33.6 36.6 40.6 46.0 48.9 54.0	5610 5062 4201 3801 3500 3158 2847 2621 2357 2158 1947 1718 1616 1463	1.1 1.2 1.4 1.6 1.7 1.9 2.1 2.3 2.5 2.8 3.1 3.5 3.7 4.1	205.73 185.64 154.07 139.41 128.36 115.83 104.41 96.13 86.43 79.13 71.40 63.02 59.26 53.66	55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 54.4 53.5 52.1	**A903 - 132M/2** **F903 - 132M/2**	227	140
	10.4 11.3 12.5 13.9 15.1 16.8 18.3 20.3 23.0 24.5 27.0	7940 7311 6597 5947 5475 4923 4507 4067 3589 3375 3056	1.0 1.1 1.2 1.3 1.5 1.6 1.8 2.0 2.2 2.4 2.6	139.41 128.36 115.83 104.41 96.13 86.43 79.13 71.40 63.02 59.26 53.66	55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0	**A903 - 132M/4** **F903 - 132M/4**	227	140

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
11.0	315.2 348.0 401.7 500.3	307 278 241 193	1.5 1.6 1.7 2.1	9.20 8.33 7.22 5.80	8.4 8.2 7.6 7.5	**A402 - 132M/2A** **F402 - 132M/2A**	86	126
	174.0 200.9 250.1 276.2	580 502 403 365	1.0 1.1 1.4 1.4	8.33 7.22 5.80 5.25	8.9 8.8 8.6 8.5	**A402 - 132M/4C** **F402 - 132M/4C**	89	126
	470.3 516.4 612.7 714.5 767.6 878.8 1122.6 1475.4 1990.2 2189.8	210 191 161 138 129 112 88 67 50 45	1.2 1.3 1.5 1.7 1.8 2.1 2.4 2.6 3.3 3.3	6.17 5.62 4.73 4.06 3.78 3.30 2.58 1.97 1.46 1.32	3.4 3.3 3.2 3.1 3.0 2.9 2.7 2.5 2.3 2.2	**A501 - 132M/2A** **F501 - 132M/2A**	75	128
	306.3 357.2 383.8 439.4 561.3 737.7 995.1 1094.9	333 285 265 232 182 138 102 93	1.0 1.1 1.2 1.3 1.5 1.7 2.1 2.1	4.73 4.06 3.78 3.30 2.58 1.97 1.46 1.32	3.7 3.6 3.6 3.4 3.2 3.0 2.8 2.7	**A501 - 132M/4C** **F501 - 132M/4C**	78	128
	83.3 91.9 102.6 107.5 125.3 133.7 147.5 154.2 172.0 191.7 211.6 258.8 321.9 355.2 384.2 477.8 527.2	1161 1052 942 899 771 723 655 627 562 504 457 373 300 272 252 202 183	1.0 1.1 1.3 1.3 1.6 1.7 1.8 1.8 2.0 2.2 2.3 2.2 2.2 2.2 2.4 2.6 2.9	34.83 31.57 28.26 26.98 23.14 21.69 19.66 18.81 16.86 15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	13.7 13.6 13.4 13.3 13.1 13.0 12.8 12.7 12.4 12.1 11.9 11.4 10.8 10.6 10.3 9.8 9.5	**A502 - 132M/2A** **F502 - 132M/2A**	102	130
	62.7 66.9 73.8 77.1 86.0 95.8 105.8 129.5 160.9 177.7 192.1 238.9 263.6	1609 1509 1367 1308 1173 1052 954 779 627 568 525 422 383	1.0 1.1 1.2 1.1 1.3 1.4 1.5 1.4 1.4 1.4 1.5 1.7 1.8	23.14 21.69 19.66 18.81 16.86 15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	13.5 13.5 13.5 13.5 13.4 13.3 13.2 12.9 12.4 12.2 12.0 11.5 11.3	**A/F 502 - 132M/4C** **A/F 502 - 160M/4B**	139	130
	63.5 70.0 85.7 106.5 117.6 127.2 158.2 174.5	1589 1440 1177 947 857 793 638 578	0.9 1.0 0.9 1.0 0.9 1.0 1.1 1.2	15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	13.4 13.4 13.4 13.2 13.1 12.9 12.5 12.3	**A502 - 160L/6B** **F502 - 160L/6B**	152	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
11.0	349.4 389.3 471.5 557.7 602.9 677.6 794.5 898.6	283 254 209 177 164 146 124 110	1.7 1.9 2.3 2.6 2.8 3.1 3.6 4.1	8.30 7.45 6.15 5.20 4.81 4.28 3.65 3.23	4.9 4.8 4.6 4.3 4.2 4.0 3.9 3.9	**A601 - 132M/2A** **F601 - 132M/2A**	87	132
	174.7 194.6 235.8 278.8 301.5 338.8 397.3 449.3 593.2 725.0	583 524 432 365 338 301 257 227 172 141	1.1 1.2 1.5 1.7 1.8 2.0 2.3 2.6 3.2 3.2	8.30 7.45 6.15 5.20 4.81 4.28 3.65 3.23 2.44 2.00	5.0 5.0 5.0 5.0 5.0 4.9 4.7 4.6 4.2 4.0	**A/F 601 - 132M/4C** **A/F 601 - 160M/4B**	126	132
	156.0 184.6 199.5 224.4 263.0 297.5 392.7 480.0 693.3 756.9	653 552 511 454 387 343 259 212 147 135	1.0 1.1 1.2 1.3 1.5 1.8 2.1 2.1 3.1 3.0	6.15 5.20 4.81 4.28 3.65 3.23 2.44 2.00 1.38 1.27	5.0 5.0 5.0 5.0 5.0 5.0 4.7 4.5 4.0 3.9	**A601 - 160L/6B** **F601 - 160L/6B**	139	132
	57.0 64.1 71.1 76.3 85.8 95.5 102.2 113.4 122.6 137.0 148.0 164.7	1697 1509 1360 1266 1126 1011 945 852 789 706 653 587	1.5 1.6 1.8 1.7 2.1 2.4 2.6 2.9 3.1 3.4 3.7 4.1	50.91 45.27 40.81 38.00 33.79 30.35 28.36 25.57 23.66 21.17 19.59 17.60	22.0 22.0 21.8 21.5 21.1 20.6 20.3 19.9 19.6 19.1 18.7 18.3	**A602 - 132M/2A** **F602 - 132M/2A**	130	134
	38.2	2643	1.1	38.00	22.0	**A602 - 132M/4C** **F602 - 132M/4C**	169	134
	32.0 35.5 42.9 47.8 51.1 56.7 61.3 68.5 74.0 82.4 91.4 110.4 132.9 147.5	3149 2838 2350 2111 1972 1778 1646 1472 1362 1224 1104 914 759 684	1.0 1.2 1.4 1.5 1.7 1.9 2.0 2.2 2.3 2.6 2.9 3.4 4.0 4.1	45.27 40.81 33.79 30.35 28.36 25.57 23.66 21.17 19.59 17.60 15.87 13.14 10.91 9.83	22.0 22.0 22.0 22.0 22.0 22.0 22.0 21.7 21.4 21.1 20.7 19.9 19.1 18.7	**A/F 602 - 132M/4C** **A/F 602 - 160M/4B**	169	134

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
11.0	31.6	3188	1.0	30.35	22.0	A602 - 160L/6B F602 - 160L/6B	182	134
	33.8	2980	1.1	28.36	22.0			
	37.5	2686	1.2	25.57	22.0			
	40.6	2486	1.3	23.66	22.0			
	45.3	2224	1.4	21.17	22.0			
	49.0	2058	1.6	19.59	22.0			
	54.5	1849	1.7	17.60	22.0			
	60.5	1667	1.9	15.87	22.0			
	73.1	1380	2.2	13.14	21.5			
	88.0	1146	2.6	10.91	20.9			
	97.6	1033	2.7	9.83	20.5			
	117.9	855	2.9	8.14	19.7			
	138.8	727	3.2	6.92	19.1			
	154.0	655	3.1	6.24	18.6			
	185.9	542	3.3	5.16	17.8			
	41.5	2278	1.2	69.87	22.0	A603 - 132M/2A F603 - 132M/2A	130	134
	52.0	1818	1.4	55.75	22.0			
	371.8	266	2.8	7.80	6.0	A701 - 132M/2A F701 - 132M/2A	90	136
	458.1	216	3.1	6.33	5.8			
	548.2	180	3.7	5.29	5.5			
	595.9	166	3.9	4.87	5.7			
	185.9	548	1.8	7.80	6.0	A/F 701 - 132M/4C A/F 701 - 160M/4B	128.5	136
	229.1	445	2.0	6.33	6.0			
	274.1	372	2.4	5.29	6.0			
	297.9	342	2.5	4.87	6.0			
	347.2	294	2.9	4.18	6.0			
	399.3	255	3.3	3.63	6.0			
	454.5	224	3.7	3.19	5.8			
	483.3	211	3.8	3.00	5.7			
	123.1	828	1.2	7.80	6.0	A701- 160L/6B F701 - 160L/6B	129	136
	151.6	672	1.3	6.33	6.0			
	181.6	561	1.6	5.29	6.0			
	197.3	517	1.7	4.87	6.0			
	229.9	443	1.9	4.18	6.0			
	264.3	385	2.2	3.63	6.0			
	300.9	339	2.4	3.19	6.0			
	320.0	318	2.5	3.00	6.0			
	381.0	267	3.0	2.52	6.0			
	471.9	216	3.5	2.03	5.7			
	522.1	195	3.6	1.84	5.9			
	64.9	1489	2.5	44.67	30.0	A702 - 132M/2A F702 - 132M/2A	160	138
	79.2	1220	3.1	36.60	30.0			
	86.7	1114	3.4	33.43	30.0			
	95.8	1009	3.7	30.27	30.0			
	104.0	929	4.0	27.87	30.0			
	32.5	3107	1.6	44.67	30.0	A/F 702 - 132M/4C A/F 702 - 160M/4B	199	138
	39.6	2546	2.0	36.60	30.0			
	43.4	2325	2.2	33.43	30.0			
	47.9	2105	2.4	30.27	30.0			
	52.0	1939	2.6	27.87	30.0			
	58.5	1725	2.9	24.80	30.0			
	63.5	1588	3.1	22.84	30.0			
	69.5	1451	3.4	20.86	30.0			
	74.0	1363	3.7	19.60	30.0			
	84.4	1195	4.0	17.18	30.0			
	21.5	4693	1.1	44.67	30.0	A702 - 160L/6B F702 - 160L/6B	199	138
	26.2	3845	1.3	36.60	30.0			
	28.7	3512	1.4	33.43	30.0			
	31.7	3180	1.6	30.27	30.0			
	34.4	2928	1.7	27.87	30.0			
	38.7	2605	1.9	24.80	30.0			
	42.0	2399	2.1	22.84	30.0			
	46.0	2191	2.3	20.86	30.0			
	49.0	2059	2.4	19.60	30.0			
	55.9	1805	2.7	17.18	30.0			
	68.2	1479	3.1	14.08	30.0			
	74.7	1351	3.3	12.86	30.0			
	91.2	1106	3.6	10.53	30.0			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
11.0	26.7 28.9 32.2 34.8 39.3 43.1 52.0 63.5	3536 3272 2933 2717 2403 2194 1817 1489	1.1 1.1 1.3 1.4 1.6 1.7 2.1 2.5	108.46 100.38 89.95 83.35 73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0	**A703 - 132M/2A** **F703 - 132M/2A**	160	138
	19.7 21.5 26.0 31.7	5019 4584 3797 3110	1.0 1.1 1.3 1.6	73.70 67.31 55.75 45.67	30.0 30.0 30.0 30.0	**A/F 703 - 132M/4C** **A/F 703 - 160M/4B**	199	138
	21.0	4798	1.0	45.67	30.0	**A703 - 160L/6B** **F703 - 160L/6B**	212	138
	22.6 25.0 30.2 36.4 40.3 48.6	4462 4026 3341 2771 2500 2075	1.8 2.0 2.4 2.9 3.2 3.9	42.47 38.33 31.81 26.38 23.80 19.75	55.0 55.0 55.0 55.0 55.0 52.8	**A902 - 160L/6B** **F902 - 160L/6B**	284	140
	34.1 37.8 45.6	2954 2666 2212	2.7 3.0 3.6	42.47 38.33 31.81	55.0 55.0 53.3	**A902 - 160M/4B** **F902 - 160M/4B**	266	140
	18.8 20.8 22.6 25.0 27.8 30.2 33.6 36.6 40.6 46.0 48.9 54.0	5023 4545 4185 3776 3404 3134 2818 2580 2328 2055 1932 1749	1.2 1.3 1.4 1.6 1.8 1.9 2.1 2.3 2.6 2.9 3.1 3.4	154.07 139.41 128.36 115.83 104.41 96.13 86.43 79.13 71.40 63.02 59.26 53.66	55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0	**A903 - 132M/2A** **F903 - 132M/2A**	237	140
	12.5 13.9 15.1 16.8 18.3 20.3 23.0 24.5 27.0	7888 7110 6547 5886 5389 4862 4292 4036 3654	1.0 1.1 1.2 1.4 1.5 1.6 1.9 2.0 2.2	115.83 104.41 96.13 86.43 79.13 71.40 63.02 59.26 53.66	55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55.0	**A/F 903 - 132M/4C** **A/F 903 - 160M/4B**	266	140
	12.1 13.4 15.2 16.2 17.9 19.8	8226 7422 6551 6160 5578 5042	1.0 1.1 1.2 1.3 1.4 1.6	79.13 71.40 63.02 59.26 53.66 48.50	55.0 55.0 55.0 55.0 55.0 55.0	**A903 - 160L/6B** **F903 - 160L/6B**	284	140
	29.9	3303	2.4	48.50	55.0	**A903 - 160M/4B** **F903 - 160M/4B**	266	140
15.0	86.0 95.8 105.8 129.5 160.9 177.7 192.1 238.9 263.6	1599 1435 1300 1062 855 774 716 576 522	0.9 1.0 1.1 1.0 1.1 1.0 1.1 1.2 1.3	16.86 15.13 13.71 11.20 9.01 8.16 7.55 6.07 5.50	11.4 11.6 11.6 11.6 11.4 11.3 11.2 10.8 10.6	**A502 - 160L/4A** **F502 - 160L/4A**	148	130

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
15.0	235.8 278.8 301.5 338.8 397.3 448.9 593.2 725.0 1047.2 1143.3	589 498 461 410 350 310 234 192 133 122	1.1 1.2 1.3 1.5 1.7 1.9 2.3 2.3 3.4 3.3	6.15 5.20 4.81 4.28 3.65 3.23 2.44 2.00 1.38 1.27	5.0 5.0 4.9 4.7 4.6 4.4 4.1 3.9 3.5 3.4	**A601 - 160L/4A** **F601 - 160L/4A**	135	132
	225.6 264.4 299.0 394.8 482.5 696.9 760.9	616 526 465 352 288 199 183	1.0 1.1 1.3 1.6 1.6 2.3 2.2	4.28 3.65 3.23 2.44 2.00 1.38 1.27	5.0 5.0 4.9 4.6 4.3 3.9 3.8	**A601 - 180L/6A** **F601 - 180L/6A**	167	132
	42.9 47.8 51.1 56.7 61.3 68.5 74.0 82.4 91.4 110.4 132.9 147.5 178.1 209.5 232.4 281.0	3205 2878 2690 2425 2244 2008 1858 1669 1505 1246 1035 932 772 656 592 489	1.0 1.1 1.2 1.4 1.5 1.6 1.7 1.9 2.1 2.5 2.9 3.0 3.2 3.5 3.4 3.7	33.79 30.35 28.36 25.57 23.66 21.17 19.59 17.60 15.87 13.14 10.91 9.83 8.14 6.92 6.24 5.16	19.4 19.6 19.6 19.7 19.7 19.6 19.5 19.3 19.1 18.6 18.0 17.7 17.0 16.5 16.1 15.4	**A602 - 160L/4A** **F602 - 160L/4A**	178	134
	40.8 45.6 49.3 54.8 60.8 73.4 88.5 98.2 118.6 139.5 154.6 187.0	3372 3017 2792 2508 2262 1873 1555 1401 1160 986 889 735	1.0 1.1 1.1 1.3 1.4 1.7 1.9 2.0 2.2 2.3 2.2 2.4	23.66 21.17 19.59 17.60 15.87 13.14 10.91 9.83 8.14 6.92 6.24 5.16	19.0 19.3 19.5 19.6 19.6 19.4 19.1 18.9 18.4 18.0 17.6 17.0	**A602 - 180L/6A** **F602 - 180L/6A**	210	134
	185.9 229.1 274.1 297.7 346.9 399.3 454.5 483.3 575.4 712.7 788.6	747 607 507 467 401 348 306 287 241 195 176	1.3 1.5 1.7 1.9 2.1 2.4 2.7 2.8 3.3 3.8 4.0	7.80 6.33 5.29 4.87 4.18 3.63 3.19 3.00 2.52 2.03 1.84	6.0 6.0 6.0 6.0 6.0 5.9 5.7 5.6 5.3 5.3 5.1	**A701 - 160L/4A** **F701 - 160L/4A**	138	136
	152.4 182.6 198.3 231.1 265.7 302.5 321.7 382.9 474.3 524.8 668.1 768.1	912 761 701 601 523 459 432 363 293 265 208 181	1.0 1.2 1.2 1.4 1.6 1.8 1.9 2.2 2.6 2.6 3.4 3.6	6.33 5.29 4.87 4.18 3.63 3.19 3.00 2.52 2.03 1.84 1.44 1.26	6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 5.6 5.5 5.1 5.2	**A701 - 180L/6A** **F701 - 180L/6A**	170	136

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
15.0	32.5	4237	1.2	44.67	30.0	**A702 - 160L/4A** **F702 - 160L/4A**	208	138
	39.6	3471	1.4	36.60	30.0			
	43.4	3171	1.6	33.43	30.0			
	47.9	2871	1.7	30.27	30.0			
	52.0	2643	1.9	27.87	30.0			
	58.5	2352	2.1	24.80	30.0			
	63.5	2166	2.3	22.84	30.0			
	69.5	1978	2.5	20.86	30.0			
	74.0	1859	2.7	19.60	30.0			
	84.4	1630	2.9	17.18	30.0			
	103.0	1335	3.4	14.08	29.8			
	112.8	1219	3.6	12.86	29.2			
	137.7	999	4.0	10.53	27.8			
	26.4	5216	1.0	36.60	30.0	**A702 - 180L/6A** **F702 - 180L/6A**	240	138
	28.9	4764	1.0	33.43	30.0			
	31.9	4314	1.2	30.27	30.0			
	34.6	3972	1.3	27.87	30.0			
	38.9	3535	1.4	24.80	30.0			
	42.3	3254	1.5	22.84	30.0			
	46.3	2972	1.7	20.86	30.0			
	49.2	2793	1.8	19.60	30.0			
	56.2	2449	2.0	17.18	30.0			
	68.6	2006	2.3	14.08	30.0			
	75.1	1832	2.4	12.86	30.0			
	91.6	1501	2.7	10.53	30.0			
	111.8	1230	3.1	8.63	29.5			
	122.5	1123	3.3	7.88	28.8			
	134.1	1025	3.5	7.20	28.2			
	163.7	840	3.8	5.90	26.8			
	179.2	767	3.9	5.38	26.2			
	26.0	5177	1.0	55.75	30.0	**A703 - 160L/4A** **F703 - 160L/4A**	208	138
	31.7	4241	1.2	45.67	30.0			
	34.1	4028	2.0	42.47	53.6	**A902 - 160L/4A** **F902 - 160L/4A**	284	140
	37.8	3635	2.2	38.33	52.6			
	45.6	3017	2.7	31.81	50.7			
	55.0	2502	3.2	26.38	48.7			
	60.9	2257	3.5	23.80	47.6			
	22.7	6052	1.3	42.47	55.0	**A902 - 180L/6A** **F902 - 180L/6A**	305	140
	25.2	5462	1.5	38.33	55.0			
	30.3	4533	1.8	31.81	54.8			
	36.6	3759	2.1	26.38	53.1			
	40.5	3392	2.4	23.80	52.2			
	48.9	2815	2.8	19.75	50.3			
	56.2	2448	3.2	17.18	48.8			
	62.3	2209	3.5	15.50	47.7			
	75.0	1833	4.0	12.86	45.7			
	16.8	8026	1.0	86.43	55.0	**A903 - 160L/4A** **F903 - 160L/4A**	284	140
	18.3	7348	1.1	79.13	55.0			
	20.3	6631	1.2	71.40	55.0			
	23.0	5852	1.4	63.02	55.0			
	24.5	5503	1.5	59.26	55.0			
	27.0	4983	1.6	53.66	55.0			
	29.9	4504	1.8	48.50	54.9			
	16.3	8269	1.0	59.26	55.0	**A903 - 180L/6A** **F903 - 180L/6A**	305	140
	18.0	7488	1.1	53.66	55.0			
	19.9	6768	1.2	48.50	55.0			
18.5	278.8	615	1.0	5.20	4.8	**A601 - 180M/4B** **F601 - 180M/4B**	171	132
	301.5	568	1.1	4.81	4.8			
	338.8	506	1.2	4.28	4.6			
	397.3	431	1.4	3.65	4.5			
	448.9	382	1.6	3.23	4.3			
	594.3	288	1.9	2.44	4.0			
	725.0	236	1.9	2.00	3.8			
	1050.7	163	2.8	1.38	3.5			
	1141.7	150	2.7	1.27	3.4			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
18.5	51.1 56.7 61.3 68.5 74.0 82.4 91.4 110.4 132.9 147.5 178.1 209.5 232.4 281.0	3317 2991 2768 2476 2291 2059 1856 1537 1276 1150 952 809 730 604	1.0 1.1 1.2 1.3 1.4 1.6 1.7 2.0 2.4 2.4 2.6 2.8 2.7 3.0	28.36 25.57 23.66 21.17 19.59 17.60 15.87 13.14 10.91 9.83 8.14 6.92 6.24 5.16	17.1 17.4 17.6 17.7 17.7 17.7 17.7 17.4 17.1 16.8 16.3 15.8 15.5 14.9	**A602 - 180M/4B** **F602 - 180M/4B**	214	134
	185.9 229.1 274.1 297.7 346.9 399.4 454.5 483.3 575.4 712.7 788.6	922 748 625 576 494 429 377 355 298 240 217	1.1 1.2 1.4 1.5 1.7 2.0 2.2 2.3 2.7 3.1 3.2	7.80 6.33 5.29 4.87 4.18 3.63 3.19 3.00 2.52 2.03 1.84	6.0 6.0 6.0 6.0 6.0 5.9 5.6 5.5 5.3 4.9 4.8	**A701 - 180M/4B** **F701 - 180M/4B**	174	136
	199.3 232.3 267.1 304.0 323.3 384.9 476.8 527.5 671.5 772.0	860 738 642 564 530 445 359 325 255 222	1.0 1.2 1.3 1.5 1.5 1.8 2.1 2.2 2.7 2.9	4.87 4.18 3.63 3.19 3.00 2.52 2.03 1.84 1.44 1.26	6.0 6.0 6.0 6.0 6.0 5.9 5.6 5.4 5.0 4.8	**A701 - 200L/6B** **F701 - 200L/6B**	219	136
	32.5 39.6 43.4 47.9 52.0 58.5 63.5 69.5 74.0 84.4 103.0 112.8 137.7 168.0 184.0	5225 4281 3910 3541 3260 2901 2672 2440 2293 2010 1647 1504 1232 1009 922	1.0 1.2 1.3 1.4 1.5 1.7 1.9 2.0 2.2 2.4 2.8 2.9 3.2 3.8 4.0	44.67 36.60 33.43 30.27 27.87 24.80 22.84 20.86 19.60 17.18 14.08 12.86 10.53 8.63 7.88	30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 28.8 28.3 27.0 25.8 25.2	**A702 - 180M/4B** **F702 - 180M/4B**	244	138
	34.8 42.5 46.5 49.5 56.5 68.9 75.4 92.1 112.4 123.1 134.7 164.4 180.3	4873 3994 3647 3427 3004 2462 2249 1841 1509 1378 1259 1032 941	1.0 1.3 1.4 1.5 1.6 1.9 2.0 2.2 2.5 2.7 2.9 3.1 3.2	27.87 22.84 20.86 19.60 17.18 14.08 12.86 10.53 8.63 7.88 7.20 5.90 5.38	30.0 30.0 30.0 30.0 30.0 30.0 30.0 29.6 28.5 27.9 27.4 26.1 25.6	**A702 - 200L/6B** **F702 - 200L/6B**	289	138
	31.7	5231	1.0	45.67	30.0	**A703 - 180M/4B** **F703 - 180M/4B**	244	138

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
18.5	34.1 37.8 45.6 55.0 60.9 73.4 84.4	4968 4483 3721 3085 2784 2310 2009	1.6 1.8 2.2 2.6 2.9 3.5 3.9	42.47 38.33 31.81 26.38 23.80 19.75 17.18	50.6 49.9 48.5 46.9 46.0 44.2 42.8	**A902 - 180M/4B** **F902 - 180M/4B**	309	140
	22.8 25.3 30.5 36.8 40.8 49.1 56.5 62.6 75.4 94.4 104.6 126.0 140.8	7427 6701 5562 4612 4162 3454 3004 2710 2249 1797 1622 1346 1205	1.1 1.2 1.4 1.7 1.9 2.3 2.6 2.9 3.2 4.0 4.0 3.9 4.2	42.47 38.33 31.81 26.38 23.80 19.75 17.18 15.50 12.86 10.28 9.28 7.70 6.89	52.1 51.9 51.3 50.3 49.6 48.1 46.9 46.0 44.3 42.1 41.1 39.2 38.2	**A902 - 200L/6B** **F902 - 200L/6B**	360	140
	20.3 23.0 24.5 27.0 29.9	8178 7218 6787 6146 5555	1.0 1.1 1.2 1.3 1.4	71.40 63.02 59.26 53.66 48.50	52.9 52.7 52.6 52.2 51.7	**A903 - 180M/4B** **F903 - 180M/4B**	309	140
22.0	398.6 450.8 596.3 727.5 1054.3 1145.7	511 452 342 280 193 178	1.2 1.3 1.6 1.6 2.3 2.2	3.65 3.23 2.44 2.00 1.38 1.27	4.4 4.2 4.0 3.8 3.4 3.3	**A601 - 180L/4B** **F601 - 180L/4B**	179	132
	61.5 68.7 74.3 82.7 91.7 110.7 133.4 148.0 178.7 210.3 233.2 282.0	3280 2935 2716 2440 2200 1822 1512 1363 1128 959 865 715	1.0 1.1 1.2 1.3 1.5 1.7 2.0 2.1 2.2 2.4 2.3 2.5	23.66 21.17 19.59 17.60 15.87 13.14 10.91 9.83 8.14 6.92 6.24 5.16	15.5 15.8 16.0 16.2 16.3 16.3 16.1 16.0 15.6 15.2 15.0 14.5	**A602 - 180L/4B** **F602 - 180L/4B**	222	134
	229.9 275.0 298.8 348.1 400.8 456.1 485.0 577.4 716.7 790.8 1007.3 1158.1	887 741 682 585 508 447 420 353 284 258 202 176	1.0 1.2 1.3 1.5 1.7 1.8 1.9 2.3 2.6 2.7 3.5 3.7	6.33 5.29 4.87 4.18 3.63 3.19 3.00 2.52 2.03 1.84 1.44 1.26	6.0 6.0 6.0 6.0 5.8 5.6 5.5 5.2 4.9 4.8 4.4 4.2	**A701 - 180L/4B** **F701 - 180L/4B**	182	136
	232.3 267.1 304.0 323.3 384.9 476.8 527.5 671.5 772.0	877 763 670 630 529 427 386 303 264	1.0 1.1 1.2 1.3 1.5 1.8 1.8 2.3 2.5	4.18 3.63 3.19 3.00 2.52 2.03 1.84 1.44 1.26	6.0 6.0 6.0 6.0 5.8 5.5 5.3 5.0 4.8	**A701 - 200L/6C** **F701 - 200L/6C**	229	136

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
22.0	39.8	5074	1.0	36.60	30.0	**A702 - 180L/4B** **F702 - 180L/4B**	252	138
	43.5	4634	1.1	33.43	30.0			
	48.1	4196	1.2	30.27	30.0			
	52.2	3863	1.3	27.87	30.0			
	58.7	3438	1.5	24.80	29.9			
	63.7	3166	1.6	22.84	29.7			
	69.8	2892	1.7	20.86	29.4			
	74.2	2717	1.8	19.60	29.2			
	84.7	2382	2.0	17.18	28.7			
	103.3	1952	2.4	14.08	27.8			
	113.1	1783	2.5	12.86	27.3			
	138.2	1460	2.7	10.53	26.3			
	168.6	1196	3.2	8.63	25.2			
	184.6	1092	3.4	7.88	24.7			
	202.1	998	3.6	7.20	24.1			
	246.6	818	3.9	5.90	23.0			
	270.4	746	4.0	5.38	22.4			
	42.5	4749	1.1	22.84	30.0	**A702 - 200L/6C** **F702 - 200L/6C**	299	138
	46.5	4338	1.2	20.86	30.0			
	49.5	4076	1.2	19.60	30.0			
	56.5	3572	1.3	17.18	30.0			
	68.9	2928	1.6	14.08	29.5			
	75.4	2674	1.6	12.86	29.2			
	92.1	2190	1.8	10.53	28.4			
	112.4	1794	2.1	8.63	27.5			
	123.1	1639	2.3	7.88	27.0			
	134.7	1497	2.4	7.20	26.5			
	164.4	1227	2.6	5.90	25.5			
	180.3	1119	2.7	5.38	25.0			
	34.3	5888	1.4	42.47	47.7	**A902 - 180L/4B** **F902 - 180L/4B**	317	140
	38.0	5313	1.5	38.33	47.3			
	45.7	4410	1.8	31.81	46.3			
	55.2	3657	2.2	26.38	45.1			
	61.1	3299	2.4	23.80	44.3			
	73.7	2738	2.9	19.75	42.8			
	84.7	2381	3.3	17.18	41.6			
	93.9	2149	3.6	15.50	40.7			
	113.1	1783	4.1	12.86	39.1			
	25.3	7970	1.0	38.33	47.3	**A902 - 200L/6C** **F902 - 200L/6C**	370	140
	30.5	6614	1.2	31.81	46.3			
	36.8	5485	1.5	26.38	45.1			
	40.8	4949	1.6	23.80	44.3			
	49.1	4107	1.9	19.75	46.0			
	56.5	3572	2.2	17.18	45.1			
	62.6	3223	2.4	15.50	44.3			
	75.4	2675	2.7	12.86	42.9			
	94.4	2137	3.4	10.28	41.0			
	104.6	1929	3.4	9.28	40.1			
	126.0	1601	3.3	7.70	38.4			
	140.8	1433	3.5	6.89	37.4			
	156.0	1293	3.8	6.22	36.5			
	23.1	8554	0.9	63.02	48.5	**A903 - 180L/4B** **F903 - 180L/4B**	317	140
	24.6	8044	1.0	59.26	48.6			
	27.1	7284	1.1	53.66	48.6			
	30.0	6583	1.2	48.50	48.4			
30.0	299.8	927	0.9	4.87	6.0	**A701 - 200L/4C** **F701 - 200L/4C**	240	136
	349.3	796	1.1	4.18	5.8			
	402.2	691	1.2	3.63	5.6			
	457.7	607	1.4	3.19	5.4			
	486.7	571	1.4	3.00	5.3			
	579.4	480	1.7	2.52	5.1			
	719.2	386	1.9	2.03	4.8			
	793.5	350	2.0	1.84	4.7			
	1013.9	274	2.6	1.44	4.3			
	1158.7	240	2.7	1.26	4.2			

P_1 [kW]	n_2 [Min^{-1}]	M_2 [Nm]	f_B	i_{ges}	F_R [kN]	Typ / Type / Tipo / Type / Tipo	Kg ~	mm
30.0	52.4	5250	1.0	27.87	25.5	**A702 - 200L/4C** **F702 - 200L/4C**	310	138
	63.9	4303	1.2	22.84	25.9			
	70.0	3930	1.3	20.86	26.0			
	74.5	3692	1.4	19.60	26.0			
	85.0	3236	1.5	17.18	25.8			
	103.7	2652	1.7	14.08	25.5			
	113.5	2423	1.8	12.86	25.2			
	138.7	1984	2.0	10.53	24.5			
	169.2	1626	2.3	8.63	23.7			
	185.3	1484	2.5	7.88	23.3			
	202.8	1356	2.7	7.20	22.9			
	247.5	1111	2.9	5.90	22.0			
	271.4	1014	3.0	5.38	21.5			
	34.4	8001	1.0	42.47	40.9	**A902 - 200L/4C** **F902 - 200L/4C**	381	140
	38.1	7221	1.1	38.33	41.2			
	45.9	5992	1.3	31.81	41.3			
	55.3	4970	1.6	26.38	40.9			
	61.3	4484	1.8	23.80	40.5			
	73.9	3721	2.2	19.75	39.7			
	85.0	3236	2.4	17.18	38.9			
	94.2	2920	2.7	15.50	38.3			
	113.5	2423	3.0	12.86	37.0			
	142.0	1936	3.7	10.28	35.4			
	157.4	1747	3.7	9.28	34.6			
	189.7	1450	3.7	7.70	33.1			
	211.9	1298	3.9	6.89	32.3			
	234.8	1171	4.2	6.22	31.5			
37.0	45.9	7391	1.1	31.81	36.8	**A902 - 225S/4A** **F902 - 225S/4A**	431	140
	55.3	6129	1.3	26.38	37.2			
	61.3	5530	1.4	23.80	37.2			
	73.9	4589	1.7	19.75	36.9			
	85.0	3992	2.0	17.18	36.5			
	94.2	3601	2.2	15.50	36.1			
	113.5	2988	2.4	12.86	35.2			
	142.0	2388	3.0	10.28	33.9			
	157.3	2156	3.0	9.28	33.3			
	189.6	1789	3.0	7.70	32.1			
	211.9	1601	3.1	6.89	31.3			
	234.7	1445	3.4	6.22	30.6			
	282.9	1199	3.8	5.16	29.3			
45.0	55.3	7454	1.1	26.38	33.0	**A902 - 225M/4C** **F902 - 225M/4C**	468	140
	61.3	6725	1.2	23.80	33.4			
	73.9	5581	1.4	19.75	33.8			
	85.0	4855	1.6	17.18	33.8			
	94.2	4380	1.8	15.50	33.6			
	113.5	3634	2.0	12.86	33.2			
	142.0	2905	2.5	10.28	32.3			
	157.3	2622	2.5	9.28	31.8			
	189.6	2176	2.4	7.70	30.8			
	211.9	1947	2.6	6.89	30.2			
	234.7	1758	2.8	6.22	29.6			
	282.9	1458	3.2	5.16	28.5			

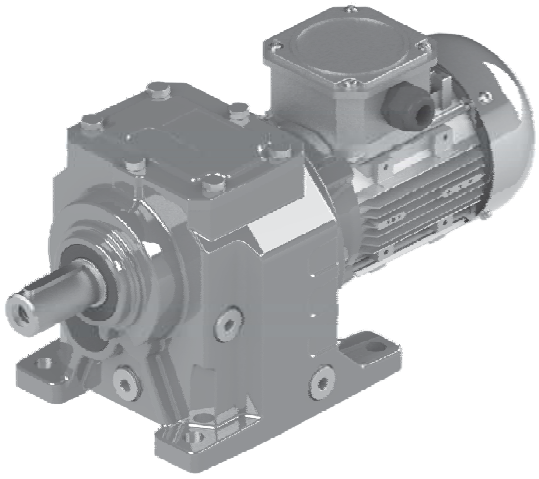
Maßtabellen

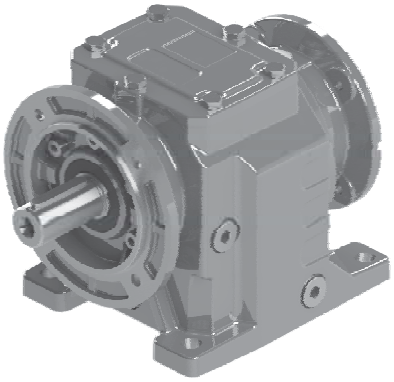
Dimension Tables

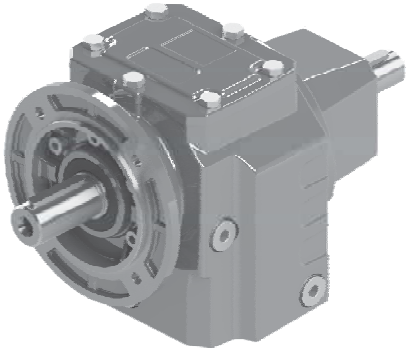
Dimensione Tabelle

Tables De Dımension

Tablas De Dımensiones



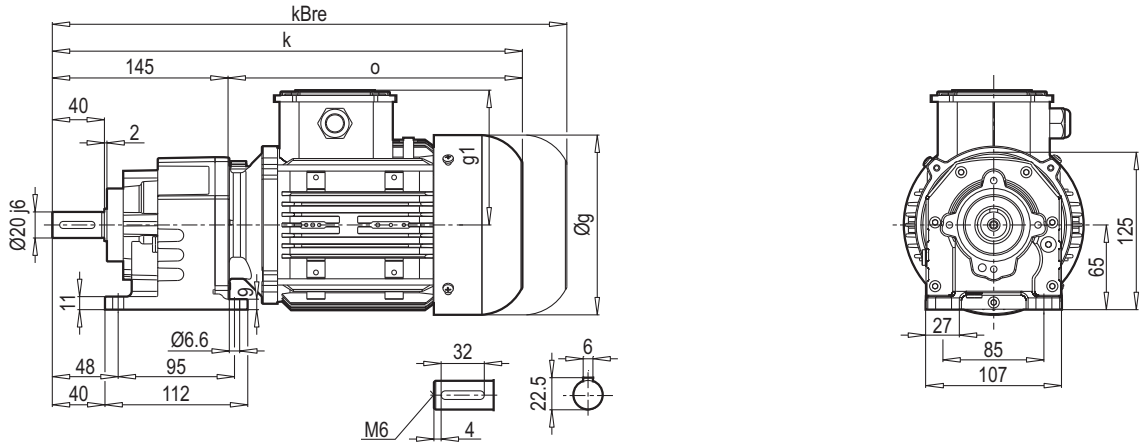




A/F 301 ... 701
A/F 202 ... 902
A/F 253 ... 903

A/F

A 202



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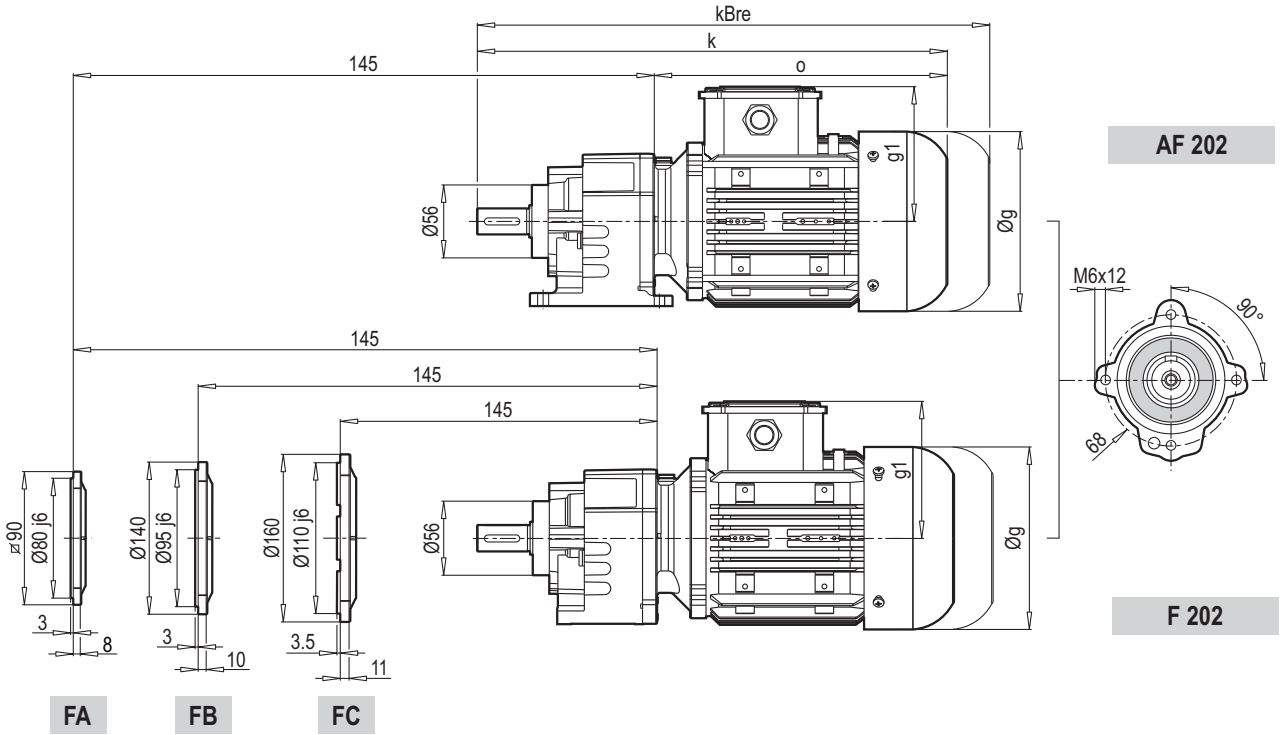
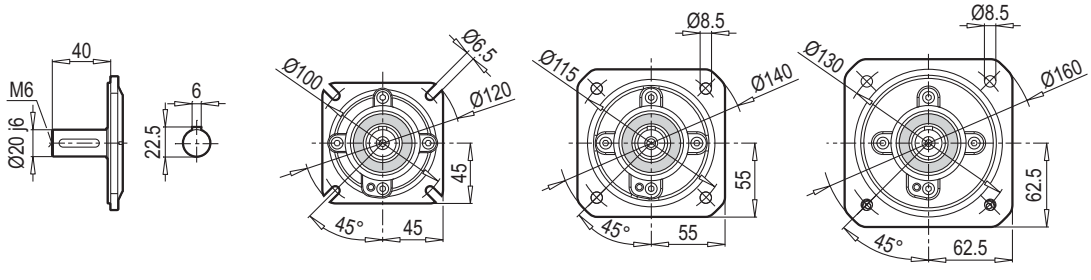


F 202

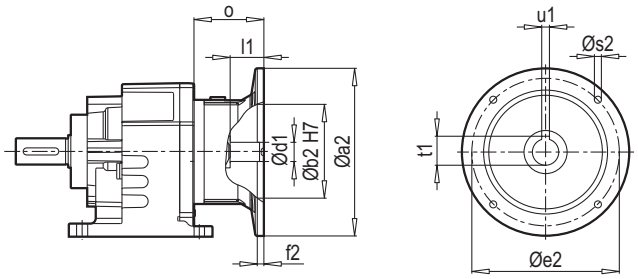
FA **FB** **FC**



(A/F 202 - F202) **FA** (F202) **FB** (F202) **FC**

	63 M	71 M						
g	124	140						
g1	111	119						
k	342	368						
kBre	394	428						
o	197	223						

A 202 PAM B5/B14



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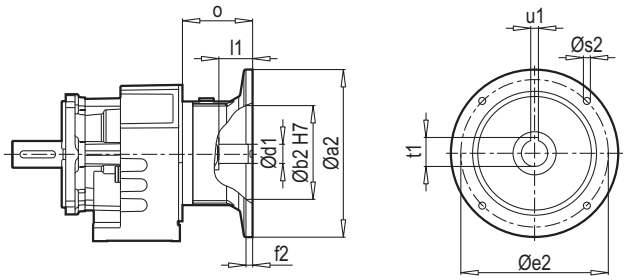

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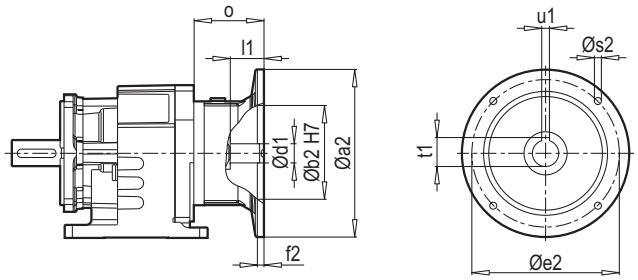


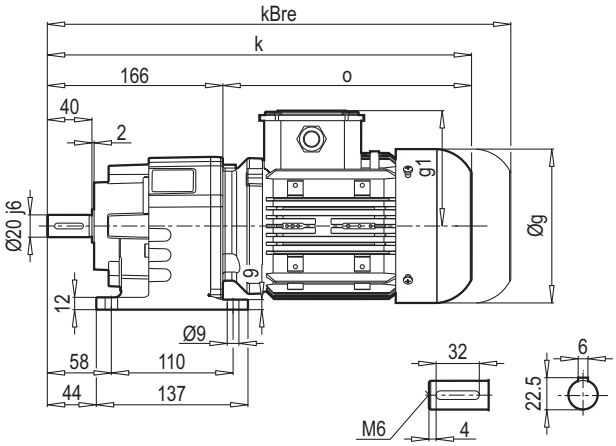
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 202	56	120	80	100	3.5	M6	9	20	10.2	3	29.5
	63	140	95	115	3.5	M8	11	23	12.8	4	59.5

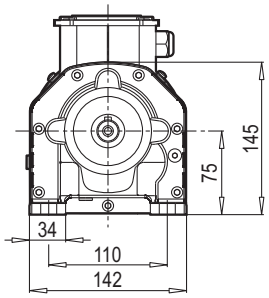
~ Kg	
PAM B5	A/F 202
56	5
63	5

Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 202	56	80	50	65	3	6	9	20	10.4	3	32.5
	63	90	60	75	2.5	6	11	23	12.8	4	59.5
	71	105	70	85	2.5	7	14	30	16.3	5	59.5

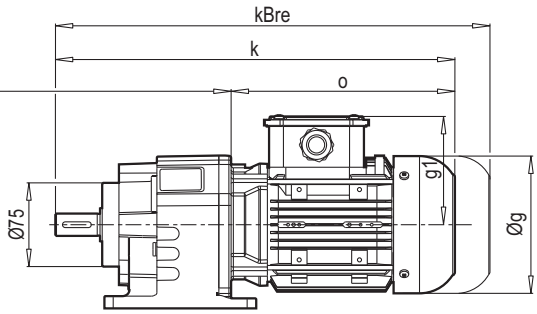
~ Kg	
PAM B14	A/F 202
56	4
63	4
71	5

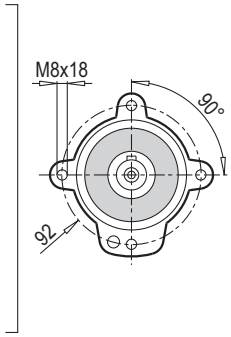
A 202 G

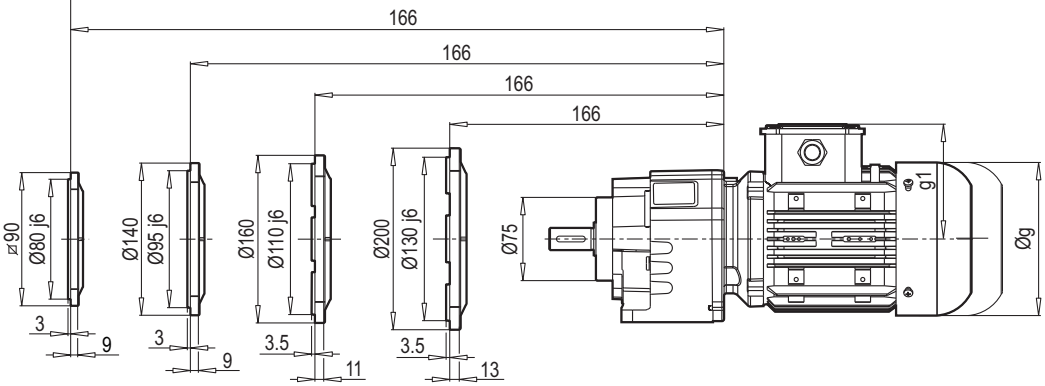




AF 202 G

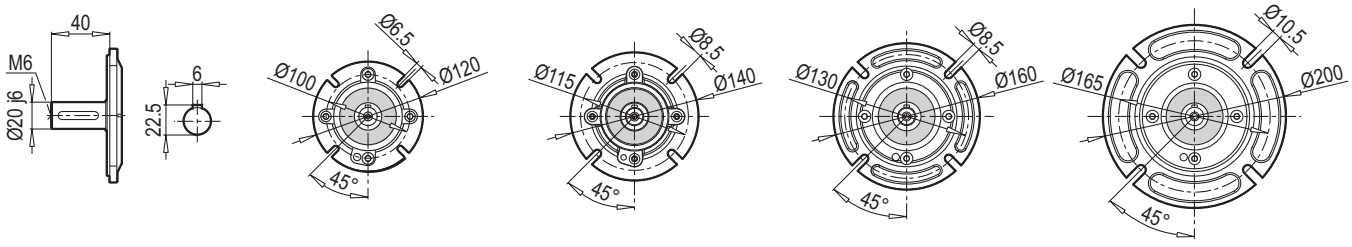






F 202 G

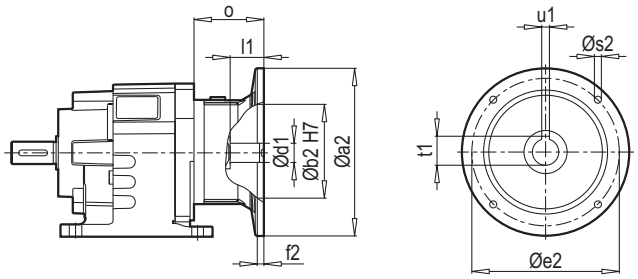
FA FB FC FD



FA FB FC FD

	63 M	71 M	80 M	90 S	90 L			
g	124	140	159	193	193			
g1	111	119	127	151	151			
k	378	407	433	479	499			
kBre	430	467	495	552	572			
o	212	241	267	313	333			

A 202 G PAM B5/B14



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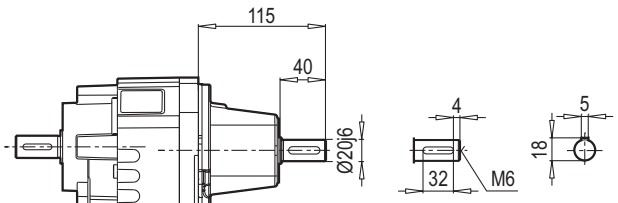

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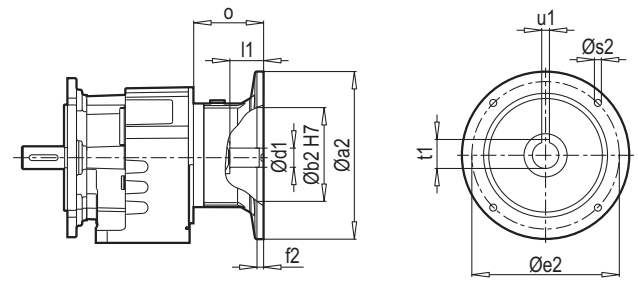

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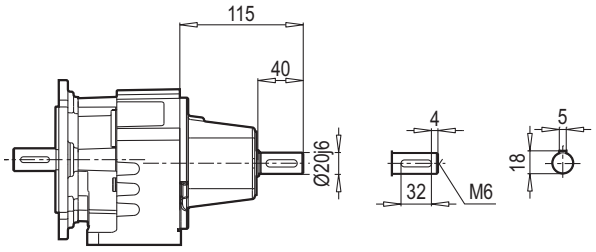

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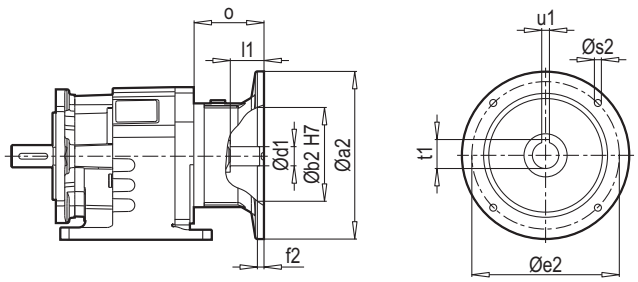
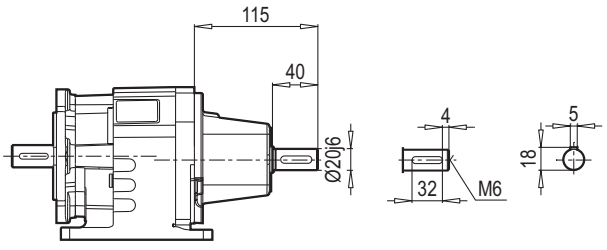


AF 202 G W



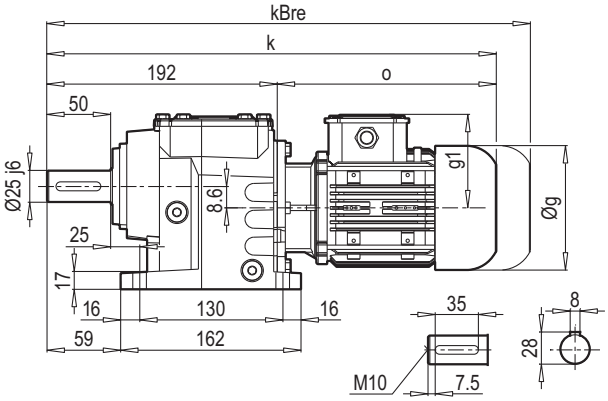
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 202 G	56	120	80	100	3.5	M6	9	20	10.2	3	29.5
	63	140	95	115	3.5	M8	11	23	12.8	4	74.5
	71	160	110	130	4	M8	14	30	16.3	5	74.5
	80	200	130	165	4	M10	19	40	21.8	6	74.5
	90	200	130	165	4	M10	24	50	27.3	8	87.5

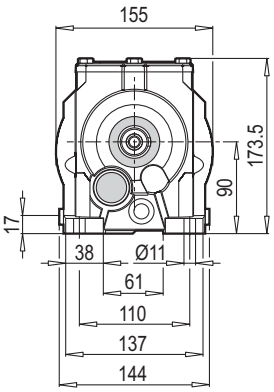
~ Kg	
PAM B5	A/F 202 G
56	8
63	8
71	8
80	8
90	8

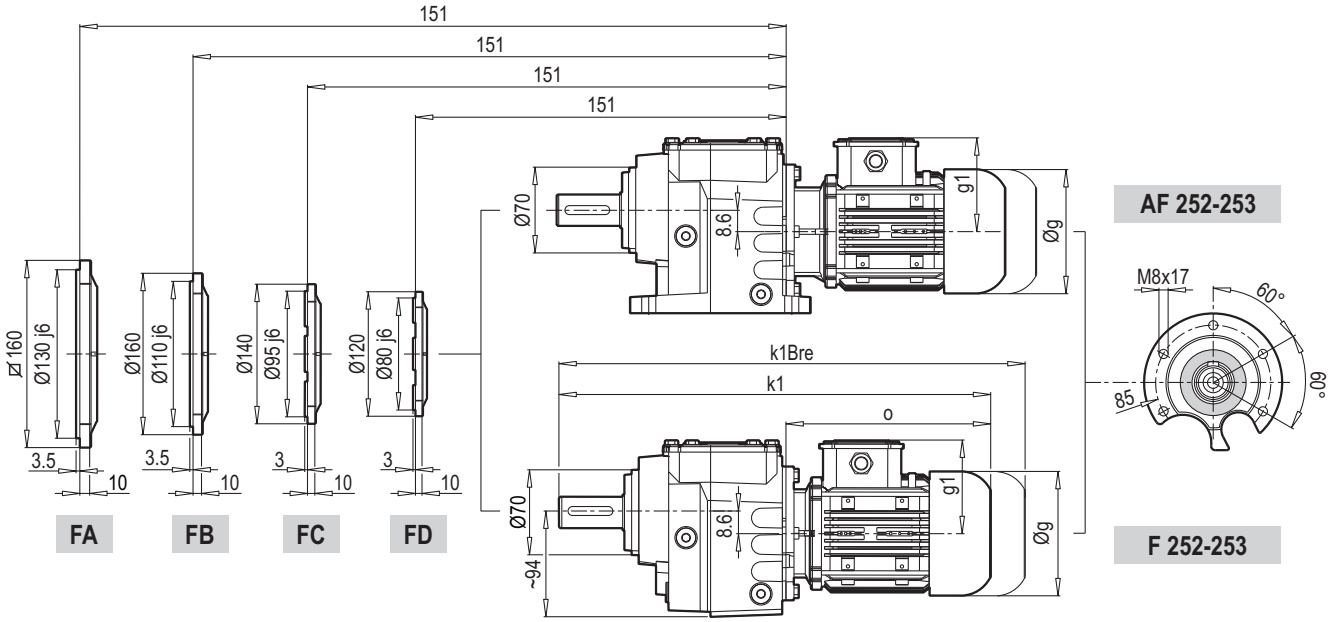
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 202 G	56	80	50	65	3	6	9	20	10.4	3	32.5
	63	90	60	75	2.5	6	11	23	12.8	4	74.5
	71	105	70	85	2.5	7	14	30	16.3	5	74.5
	80	120	80	100	3	7	19	40	21.8	6	74.5
	90	140	95	115	3	9	24	50	27.3	8	87.5

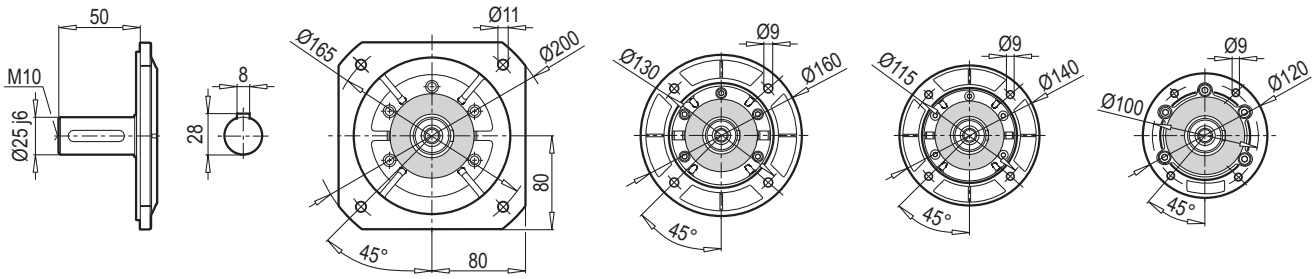
~ Kg	
PAM B14	A/F 202 G
56	6
63	6
71	7
80	8
90	8

A 252-253



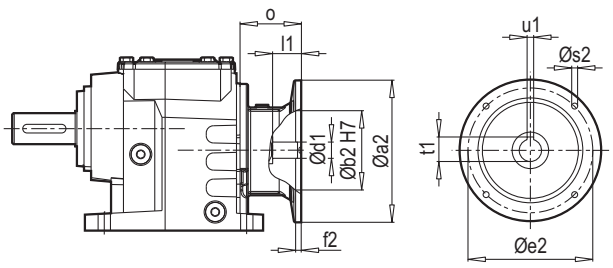




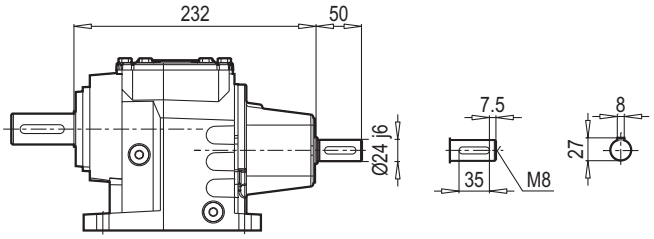


	63 M	71 M	80 M	90 S	90 L	100 L	112 M	
g	124	140	159	193	193	217	232	
g1	111	119	127	151	151	160	168	
k	404	433	459	505	525	526	585	
kBre	456	493	521	578	598	607	665	
o	212	241	267	313	333	334	393	
k1	413	442	468	514	534	535	594	
k1Bre	465	502	590	587	607	616	674	

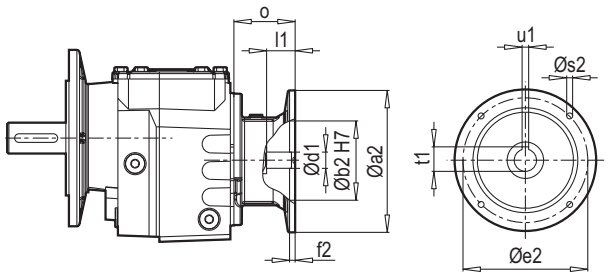
A 252-253 PAM B5/B14



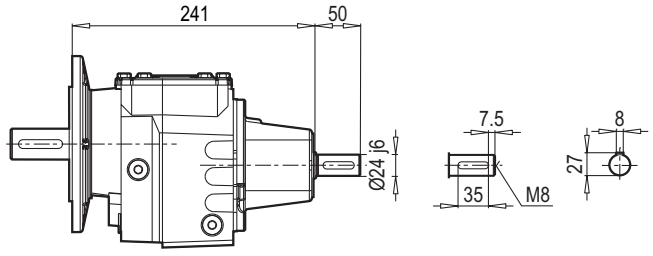
A 252-253 W



F 252-253 PAM B5/B14

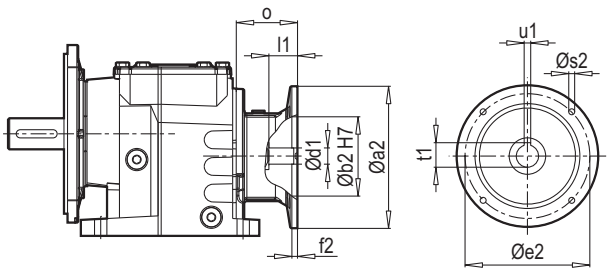


F 252-253 W

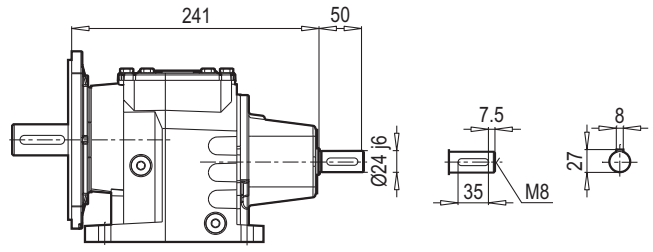


W ~ Kg	
A/F 252 - 253	14

AF 252-253 PAM B5/B14



AF 252-253 W



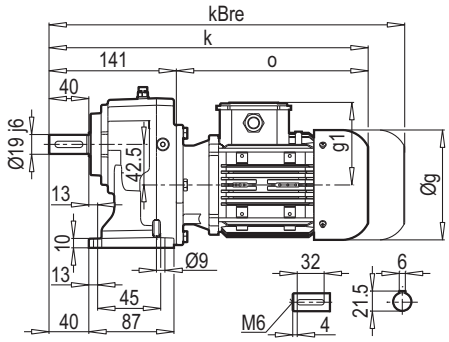
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 252 A/F 253	63	140	95	115	4.5	M8	11	25	12.8	4	57
	71	160	110	130	5	M8	14	32	16.3	5	69
	80	200	130	165	5	M10	19	42	21.8	6	90
	90	200	130	165	5	M10	24	52	27.3	8	90
	100	250	180	215	5.5	M12	28	62	31.3	8	105
	112	250	180	215	5.5	M12	28	62	31.3	8	105

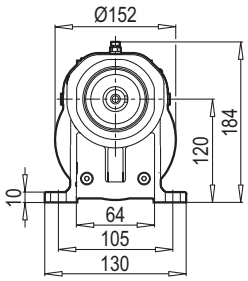
~ Kg	
PAM B5	A/F 252 - 253
63	12
71	13
80	14
90	14
100	18
112	18

Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 252 A/F 253	63	90	60	75	2.5	6	11	25	12.8	4	57
	71	105	70	85	2.5	7	14	32	16.3	5	69
	80	120	80	100	3	7	19	42	21.8	6	90
	90	140	95	115	3	9	24	52	27.3	8	90
	100	160	110	130	3.5	9	28	62	31.3	8	105
	112	160	110	130	3.5	9	28	62	31.3	8	105

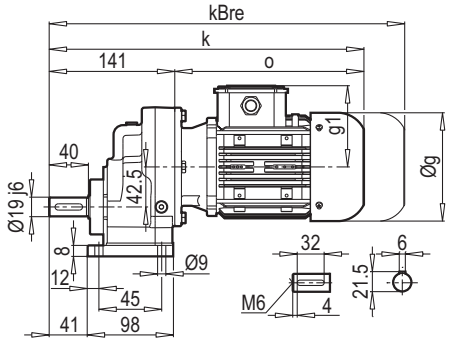
~ Kg	
PAM B14	A/F 252 - 253
63	11
71	12
80	13
90	13
100	14
112	14

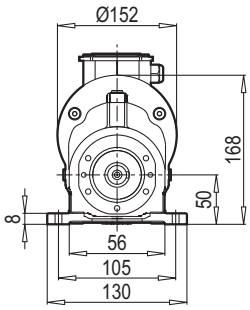
A 301

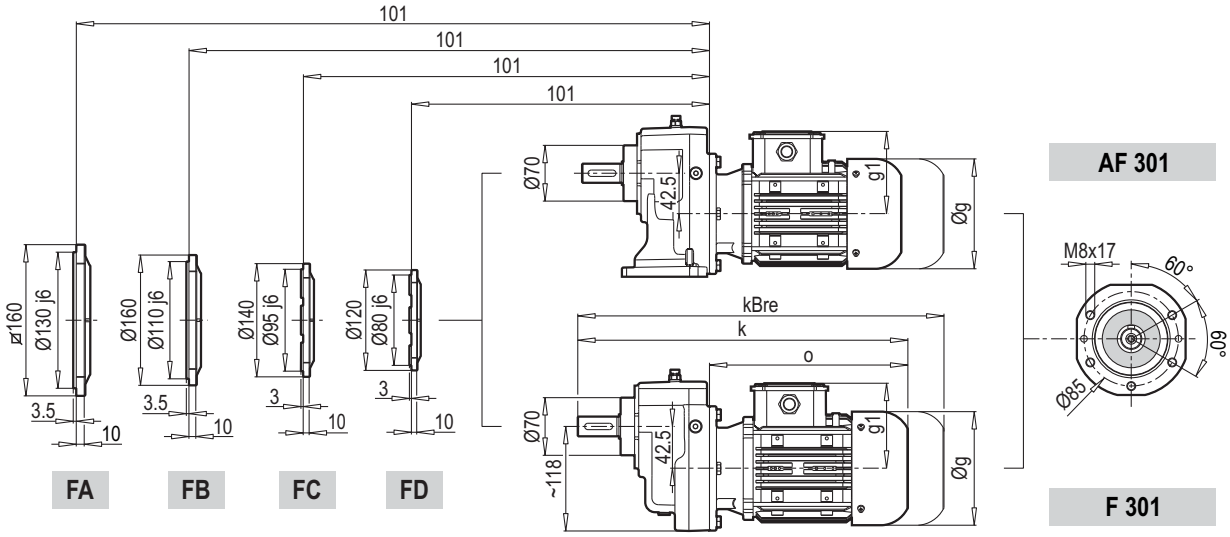


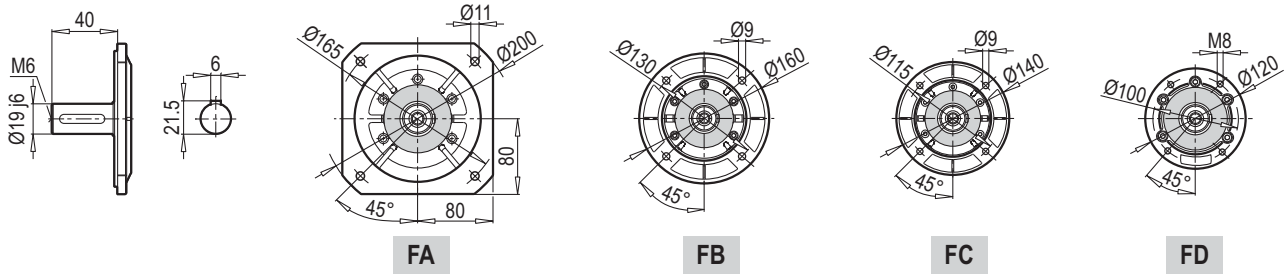


AF-M 301



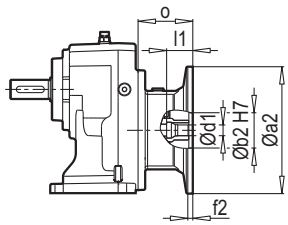


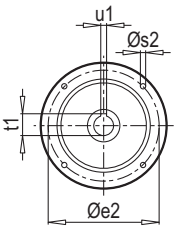




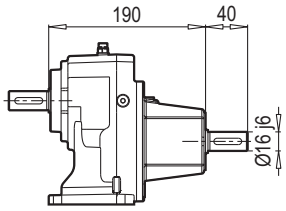
	71 M	80 M	90 S	90 L				
g	140	159	193	193				
g1	119	127	151	151				
k	382	408	454	474				
kBre	442	470	527	547				
o	241	267	313	333				

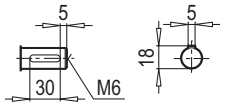
A 301 PAM B5/B14



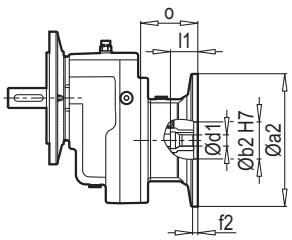


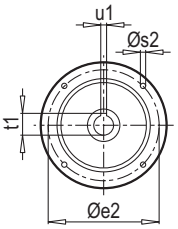
A 301 W



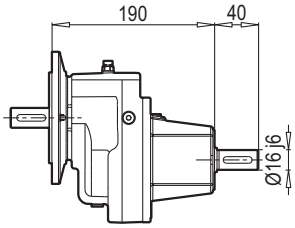


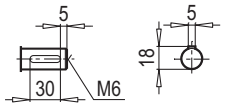
F 301 PAM B5/B14





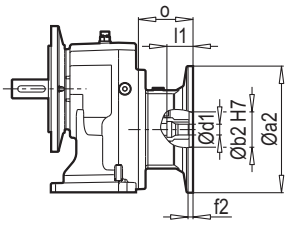
F 301 W

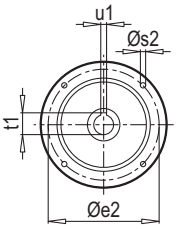




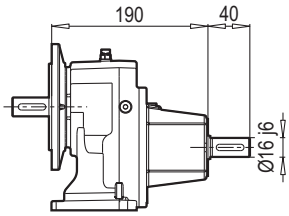
W ~ kg	
A/F 301	10

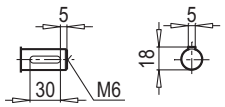
AF 301 PAM B5/B14



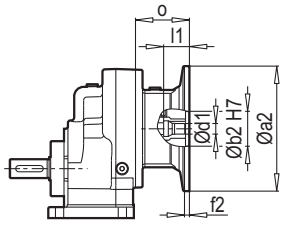


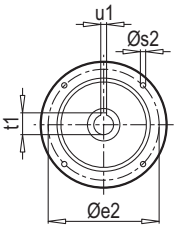
AF 301 W



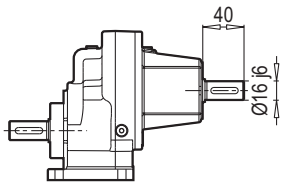


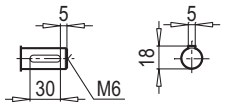
AF-M 301 PAM B5/B14





AF-M 301 W





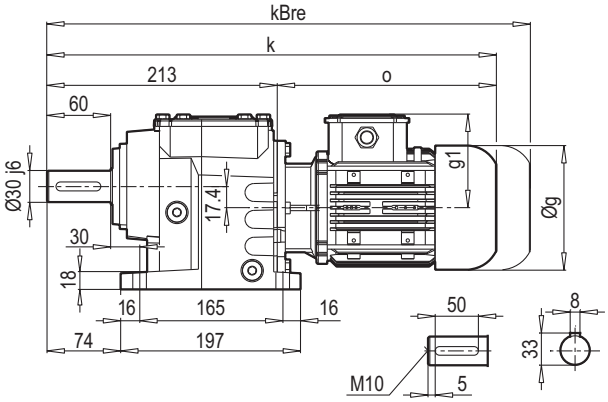
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 301	71	160	110	130	5	M8	14	32	16.3	5	69
	80	200	130	165	5	M10	19	42	21.8	6	90
	90	200	130	165	5	M10	24	52	27.3	8	90

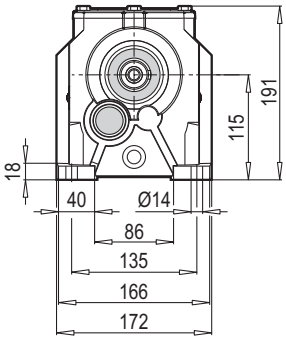
~ kg	
PAM B5	A/F 301
71	6
80	6.5
90	6.5

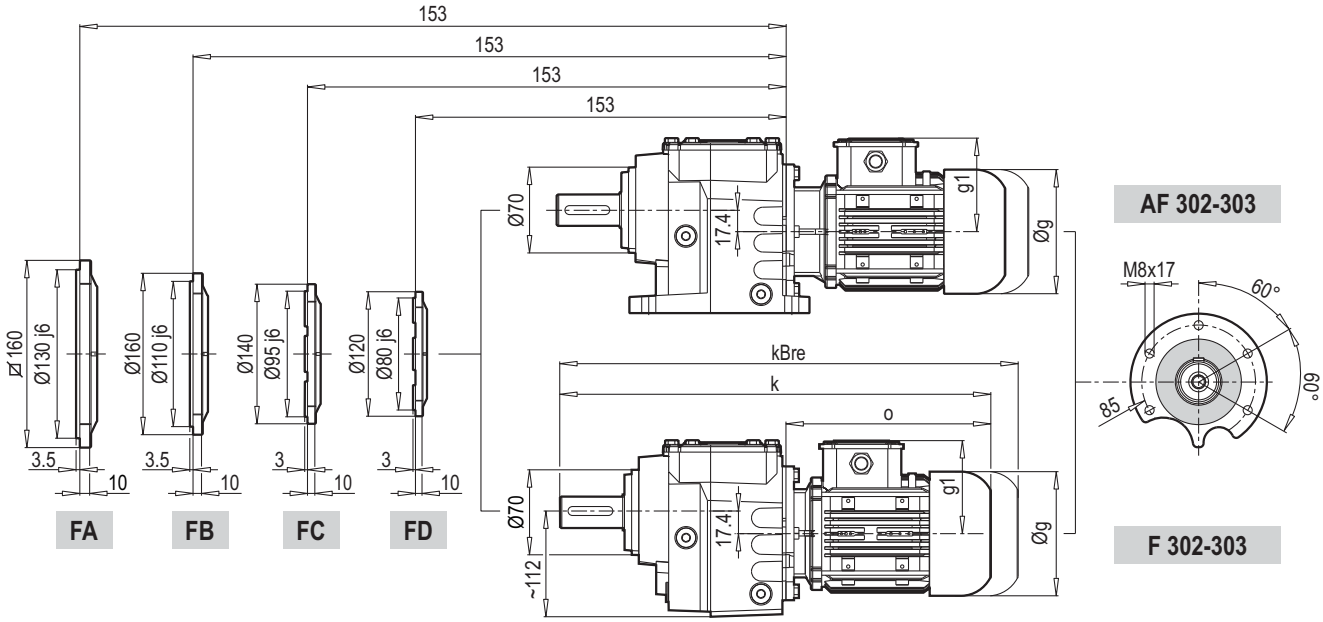
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 301	63	90	60	75	2.5	6	11	32	16.3	5	69
	71	105	70	85	2.5	7	14	42	21.8	6	90
	80	120	80	100	3	7	19	52	27.3	8	90

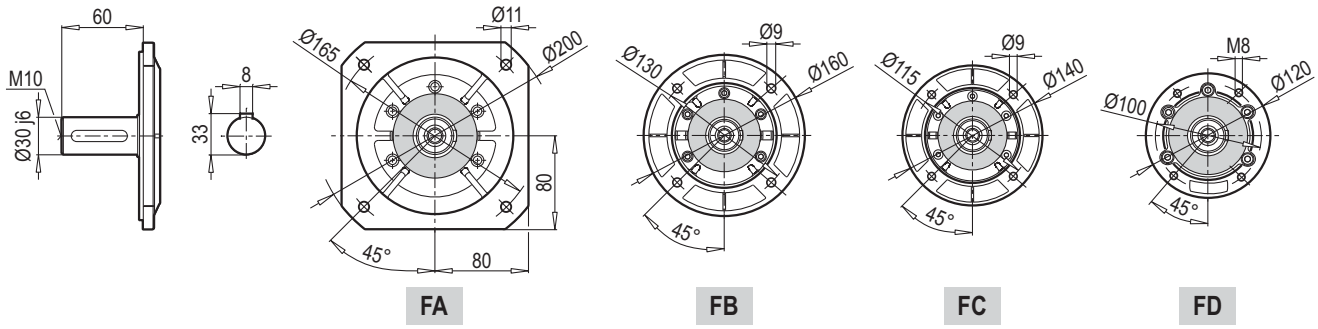
~ kg	
PAM B14	A/F 301
63	5
71	5.5
80	5.5

A 302-303



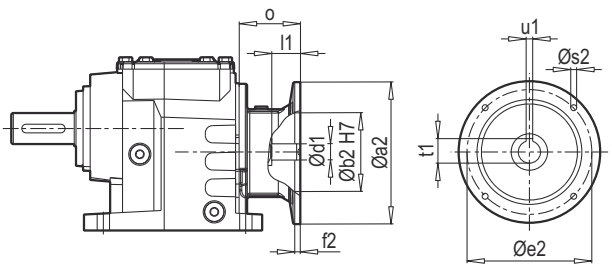




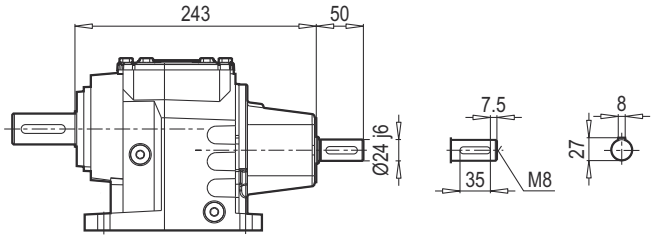


	63 M	71 M	80 M	90 S	90 L	100 L	112 M	
g	124	140	159	193	193	217	232	
g1	111	119	127	151	151	160	168	
k	425	454	480	526	546	547	606	
kBre	477	514	542	599	619	628	686	
o	212	241	267	313	333	334	393	

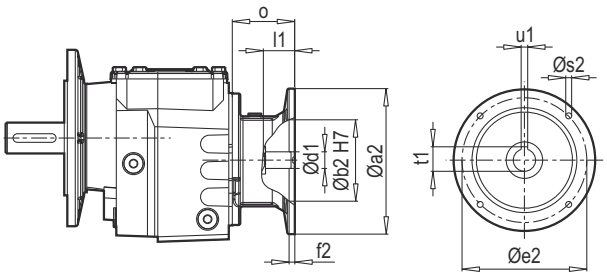
A 302-303 PAM B5/B14



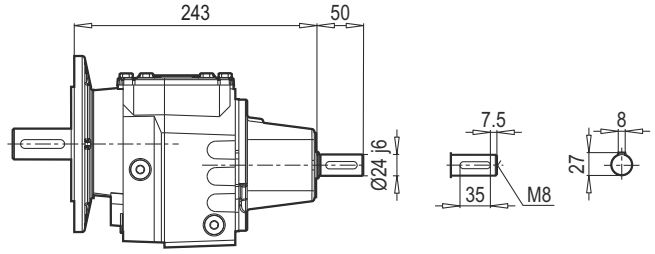
A 302-303 W



F 302-303 PAM B5/B14

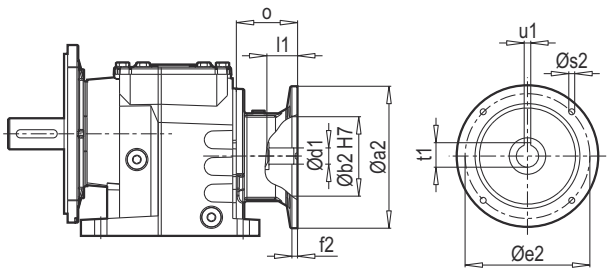


F 302-303 W

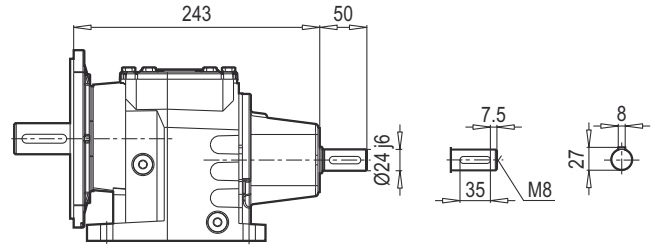


W ~ Kg	
A/F 302-303	17

AF 302-303 PAM B5/B14



AF 302-303 W



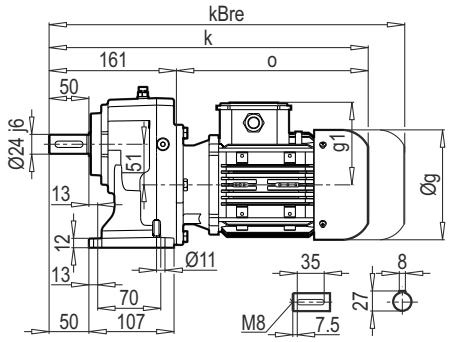
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 302 A/F 303	63	140	95	115	4.5	M8	11	25	12.8	4	57
	71	160	110	130	5	M8	14	32	16.3	5	69
	80	200	130	165	5	M10	19	42	21.8	6	90
	90	200	130	165	5	M10	24	52	27.3	8	90
	100	250	180	215	5.5	M12	28	62	31.3	8	105
	112	250	180	215	5.5	M12	28	62	31.3	8	105

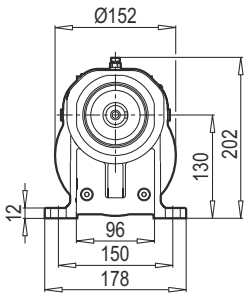
~ Kg	
PAM B5	A/F 302-303
63	15
71	16
80	17
90	17
100	21
112	21

Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 302 A/F 303	63	90	60	75	2.5	6	11	25	12.8	4	57
	71	105	70	85	2.5	7	14	32	16.3	5	69
	80	120	80	100	3	7	19	42	21.8	6	90
	90	140	95	115	3	9	24	52	27.3	8	90
	100	160	110	130	3.5	9	28	62	31.3	8	105
	112	160	110	130	3.5	9	28	62	31.3	8	105

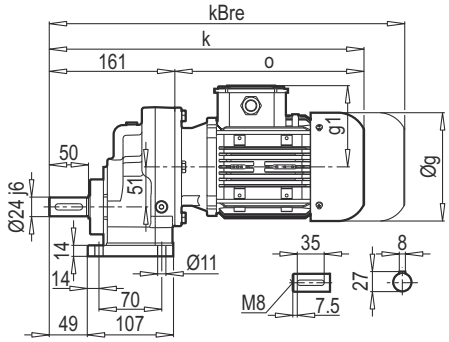
~ Kg	
PAM B14	A/F 302-303
63	14
71	15
80	16
90	16
100	17
112	17

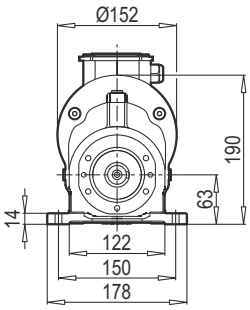
A 351

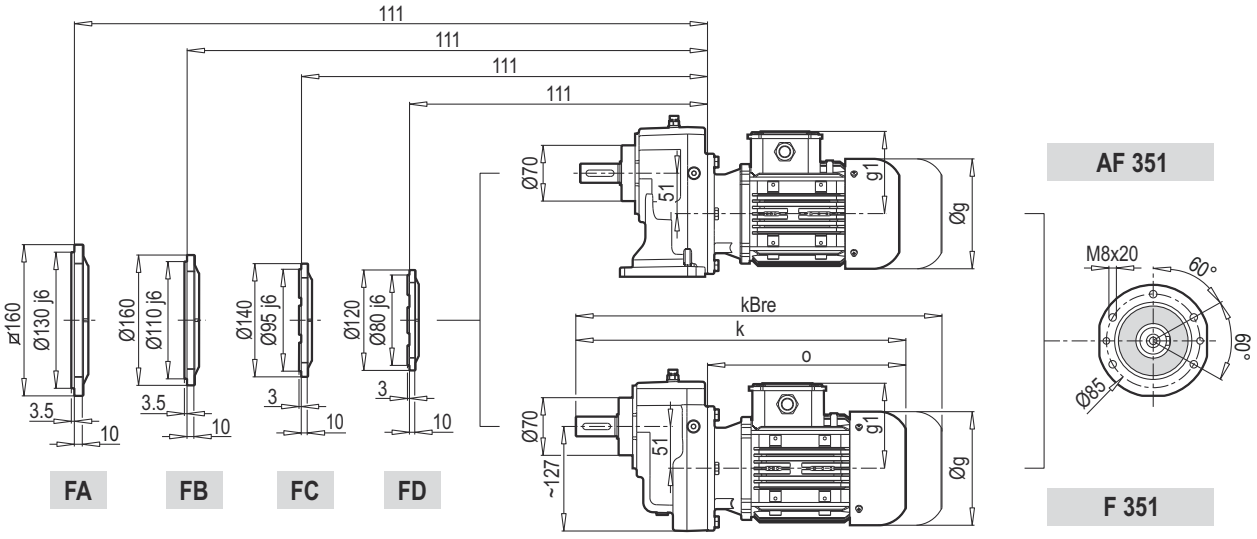


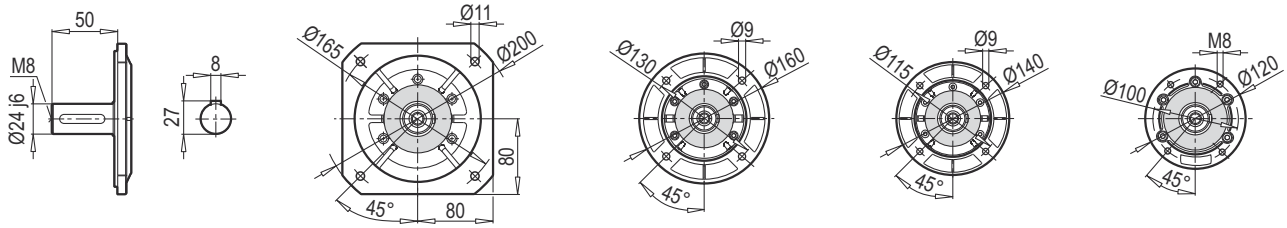


AF-M 351





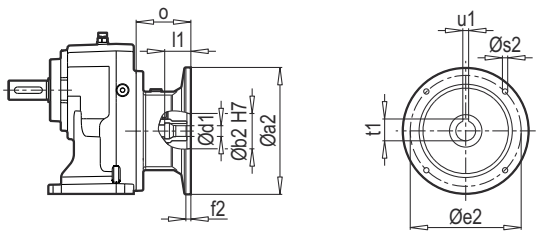




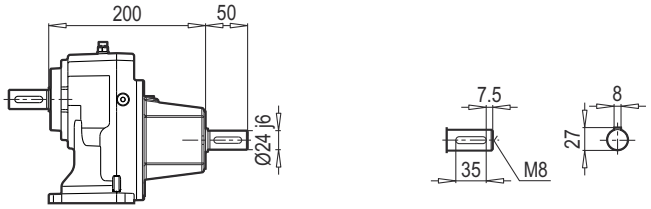
FA FB FC FD

	71 M	80 M	90 S	90 L	100 L	112 M		
g	140	159	193	193	217	232		
g1	119	127	151	151	160	168		
k	402	428	474	494	495	554		
kBre	462	490	547	567	576	634		
o	241	267	313	333	334	393		

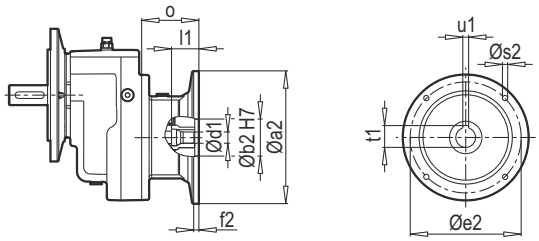
A 351 PAM B5/B14



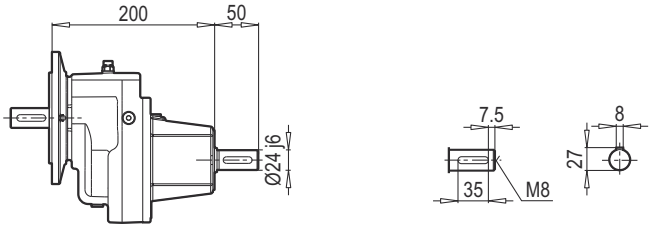
A 351 W



F 351 PAM B5/B14

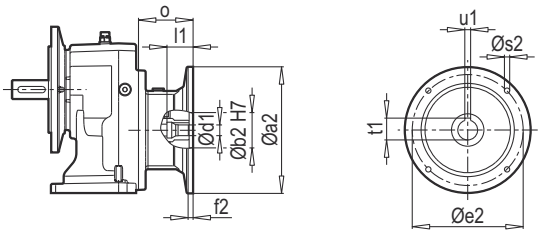


F 351 W

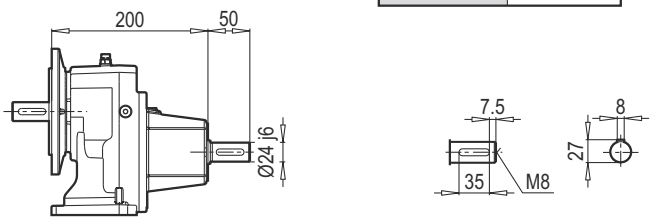


W ~ Kg	
A/F 351	12

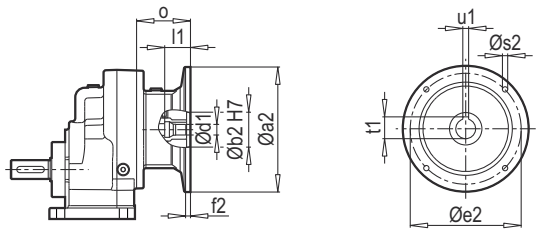
AF 351 PAM B5/B14



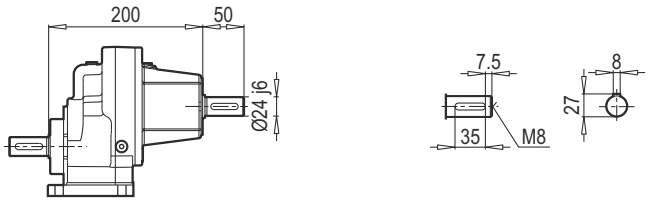
AF 351 W



AF-M 351 PAM B5/B14



AF-M 351 W



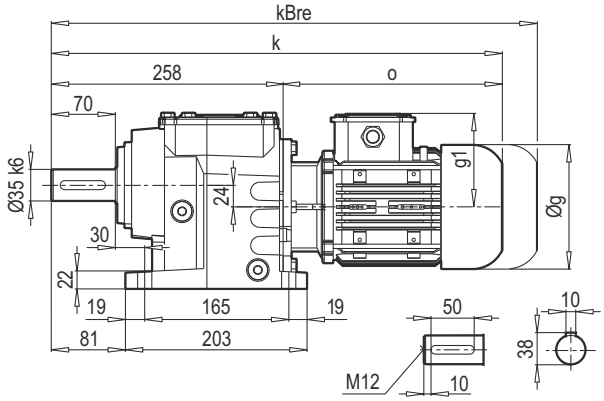
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 351	71	160	110	130	5	M8	14	32	16.3	5	69
	80	200	130	165	5	M10	19	42	21.8	6	90
	90	200	130	165	5	M10	24	52	27.3	8	90
	100	250	180	215	5.5	M12	28	62	31.3	8	105
	112	250	180	215	5.5	M12	28	62	31.3	8	105

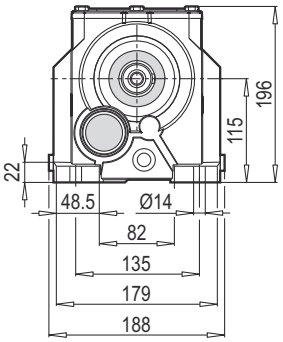
~ Kg	
PAM B5	A/F 351
71	8
80	8.5
90	8.5
100	13
112	13

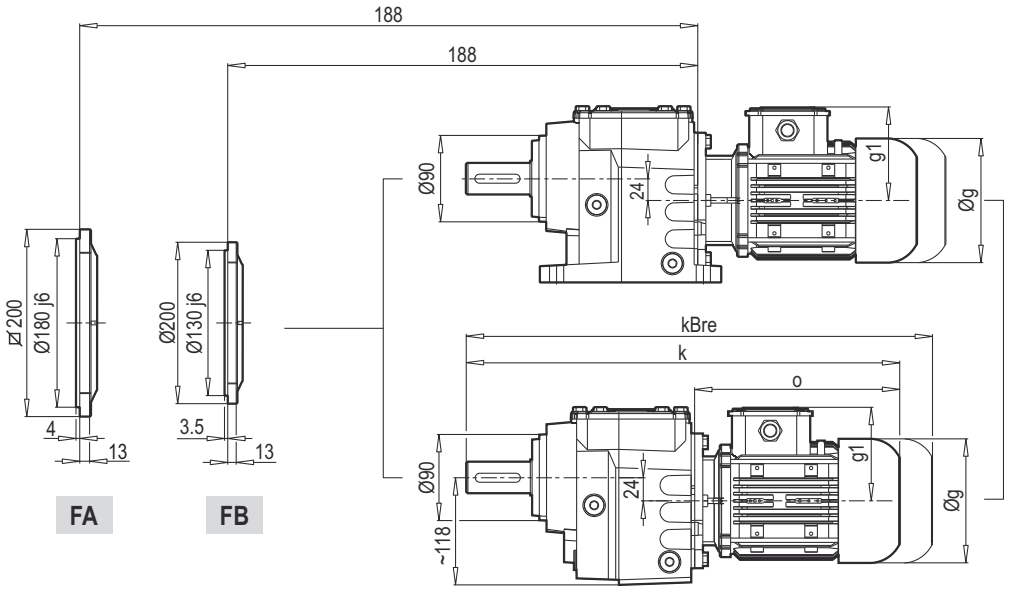
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 351	71	105	70	85	2.5	7	14	32	16.3	5	69
	80	120	80	100	3	7	19	42	21.8	6	90
	90	140	95	115	3	9	24	52	27.3	8	90
	100	160	110	130	3.5	9	28	62	31.3	8	105
	112	160	110	130	3.5	9	28	62	31.3	8	105

~ Kg	
PAM B14	A/F 351
71	7
80	7.5
90	7.5
100	9.5
112	9.5

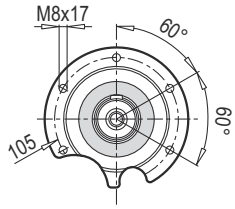
A 352-353



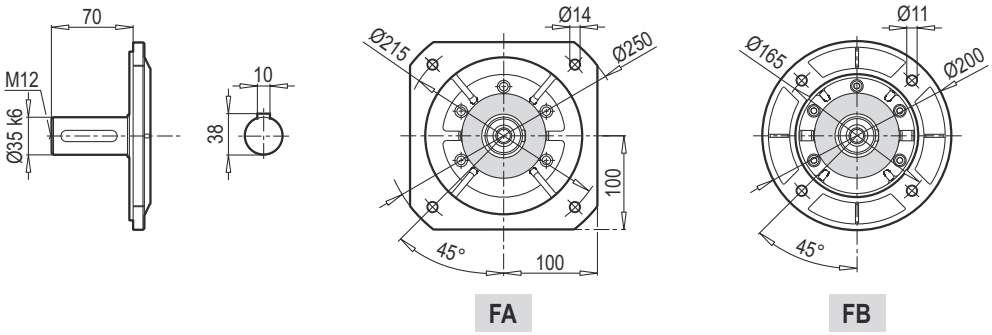




AF 352-353

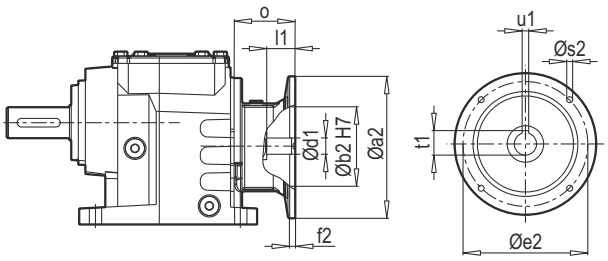


F 352-353

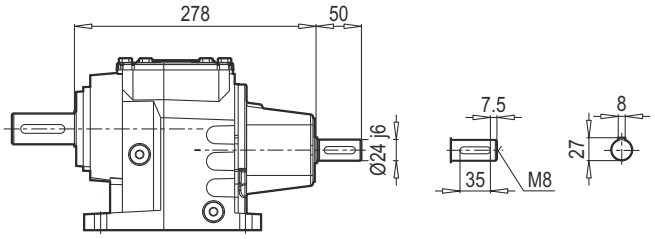


	63 M	71 M	80 M	90 S	90 L	100 L	112 M	
g	124	140	159	193	193	217	232	
g1	111	119	127	151	151	160	168	
k	470	499	525	571	591	592	651	
kBre	522	559	587	644	664	673	731	
o	212	241	267	313	333	334	393	

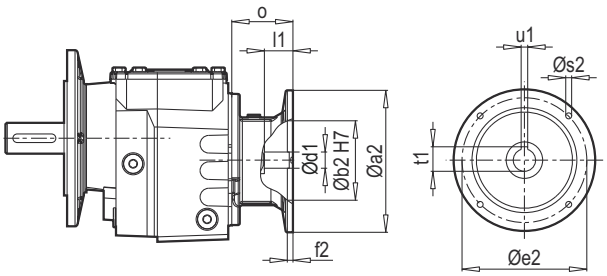
A 352-353 PAM B5/B14



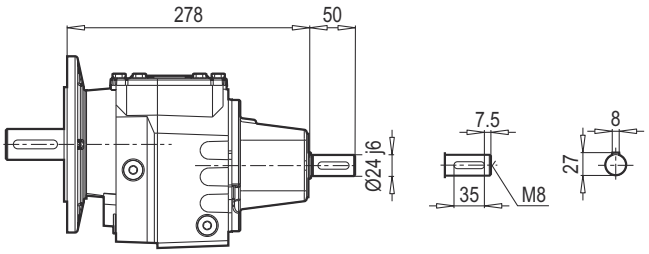
A 352-353 W



F 352-353 PAM B5/B14

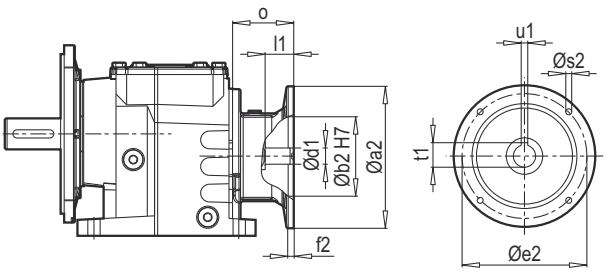


F 352-353 W

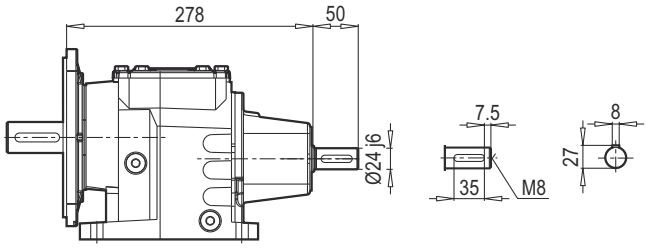


W ~ kg	
A/F 352-353	22

AF 352-353 PAM B5/B14



AF 352-353 W



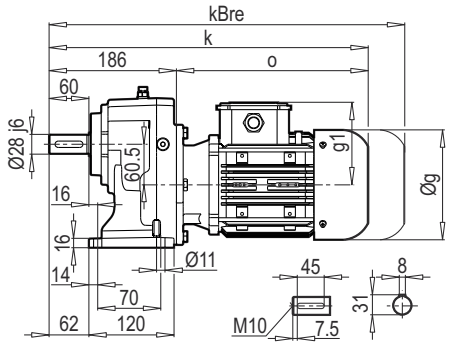
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 352 A/F 353	63	140	95	115	4.5	M8	11	25	12.8	4	57
	71	160	110	130	5	M8	14	32	16.3	5	69
	80	200	130	165	5	M10	19	42	21.8	6	90
	90	200	130	165	5	M10	24	52	27.3	8	90
	100	250	180	215	5.5	M12	28	62	31.3	8	105
	112	250	180	215	5.5	M12	28	62	31.3	8	105

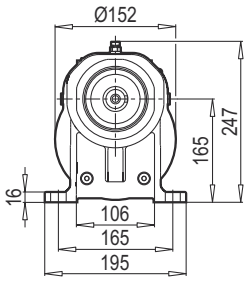
~ kg	
PAM B5	A/F 352-353
63	20
71	21
80	22
90	22
100	26
112	26

Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 352 A/F 353	63	90	60	75	2.5	6	11	25	12.8	4	57
	71	105	70	85	2.5	7	14	32	16.3	5	69
	80	120	80	100	3	7	19	42	21.8	6	90
	90	140	95	115	3	9	24	52	27.3	8	90
	100	160	110	130	3.5	9	28	62	31.3	8	105
	112	160	110	130	3.5	9	28	62	31.3	8	105

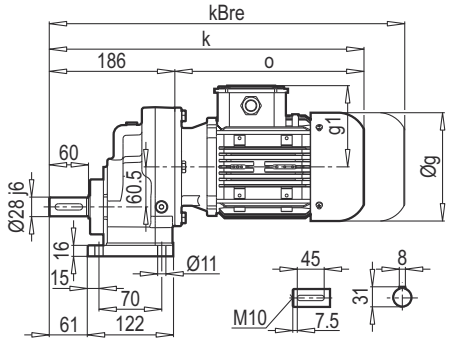
~ kg	
PAM B14	A/F 352-353
63	19
71	20
80	21
90	21
100	23
112	23

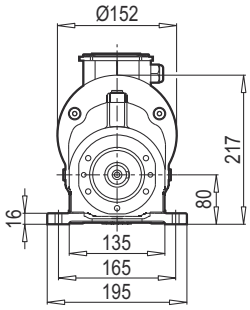
A 401



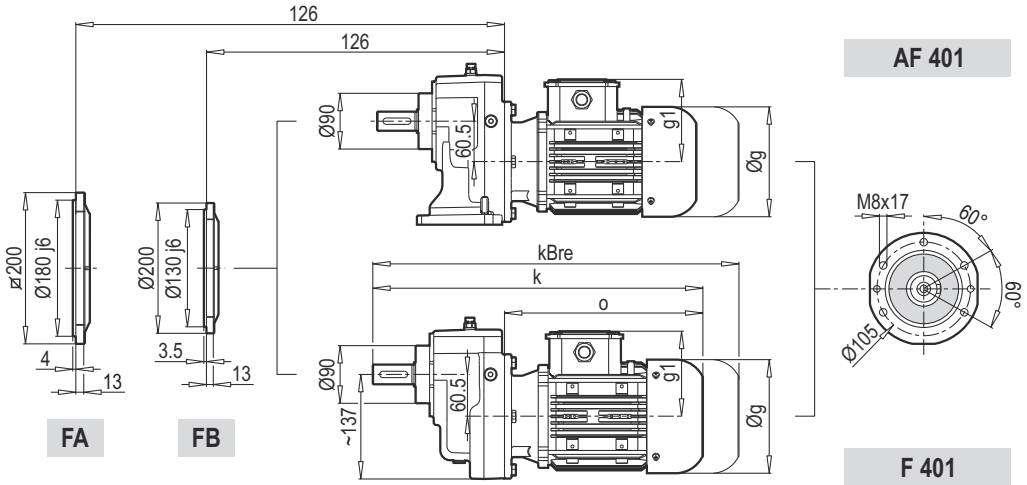


AF-M 401



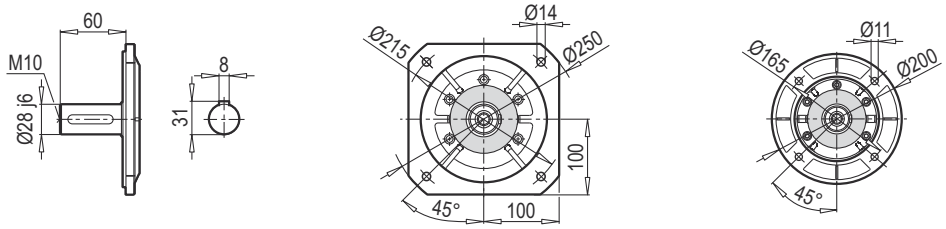


AF 401



FA FB

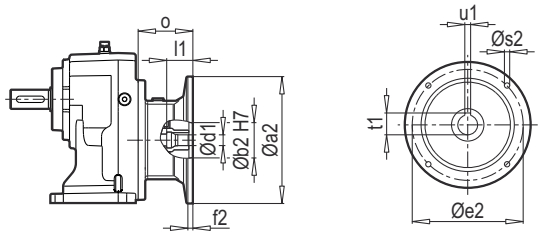
F 401



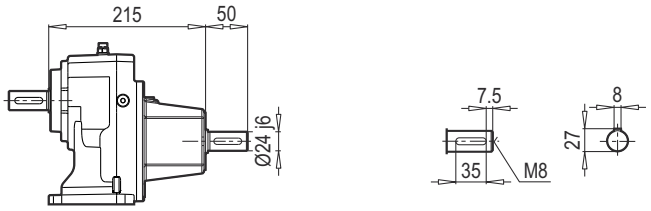
FA FB

	80 M	90 S	90 L	100 L	112 M			
g	159	193	193	217	232			
g1	127	151	151	160	168			
k	453	499	519	520	579			
kBre	515	572	592	601	659			
o	267	313	333	334	393			

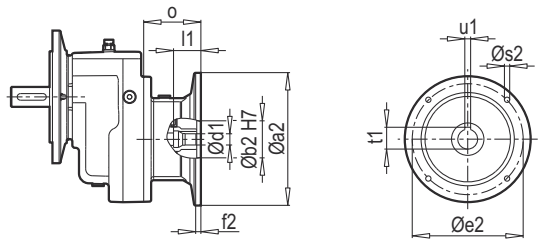
A 401 PAM B5/B14



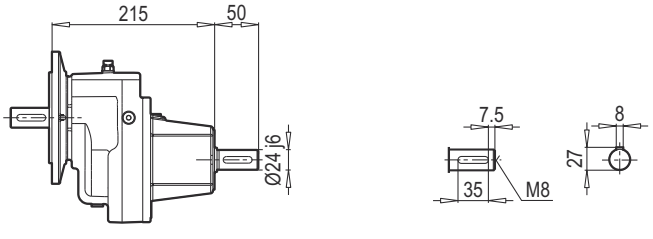
A 401 W



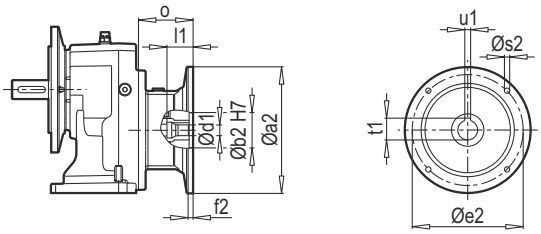
F 401 PAM B5/B14



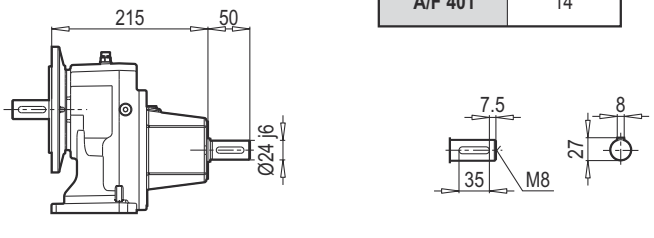
F 401 W



AF 401 PAM B5/B14

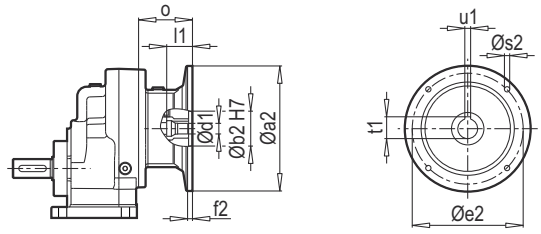


AF 401 W

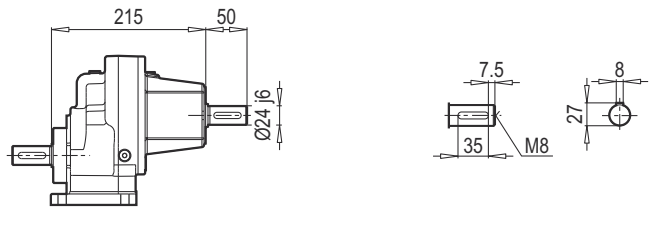


W ~ Kg	
A/F 401	14

AF-M 401 PAM B5/B14



AF-M 401 W



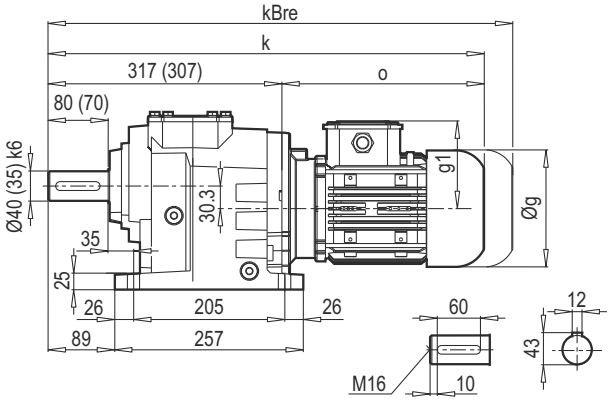
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 401	80	200	130	165	5	M10	19	42	21.8	6	90
	90	200	130	165	5	M10	24	52	27.3	8	90
	100	250	180	215	5.5	M12	28	62	31.3	8	105
	112	250	180	215	5.5	M12	28	62	31.3	8	105

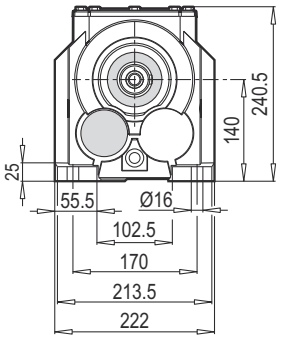
~ Kg	
PAM B5	A/F 401
80	11
90	11
100	15.5
112	15.5

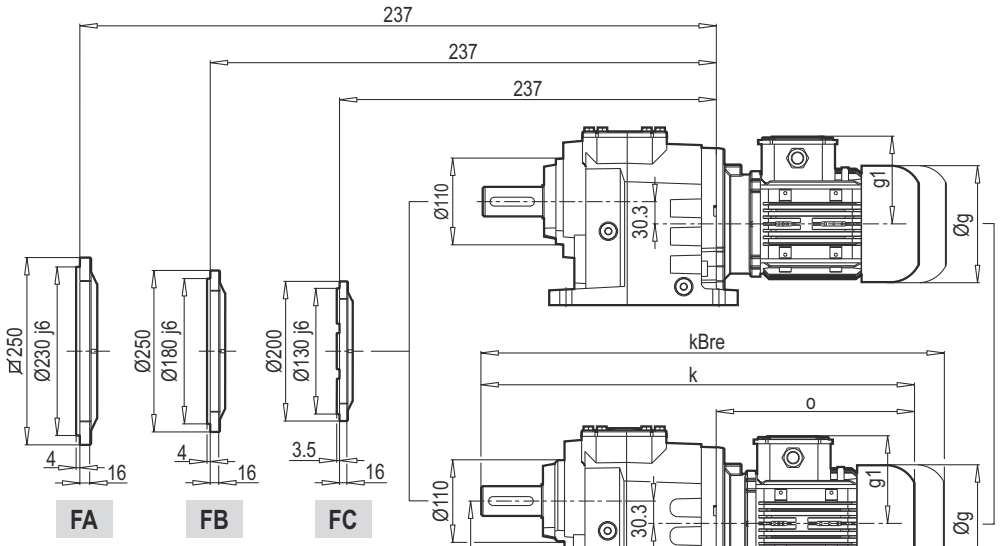
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 401	80	120	80	100	3	7	19	42	21.8	6	90
	90	140	95	115	3	9	24	52	27.3	8	90
	100	160	110	130	3.5	9	28	62	31.3	8	105
	112	160	110	130	3.5	9	28	62	31.3	8	105

~ Kg	
PAM B14	A/F 401
80	10
90	10
100	12
112	12

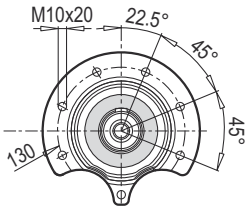
A 402-403



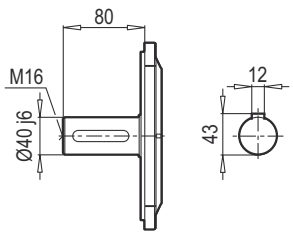


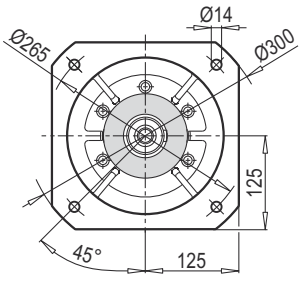


AF 402-403

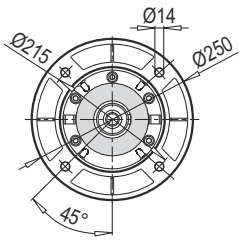


F 402-403

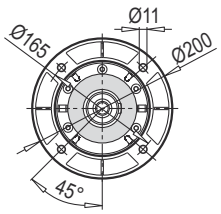




FA



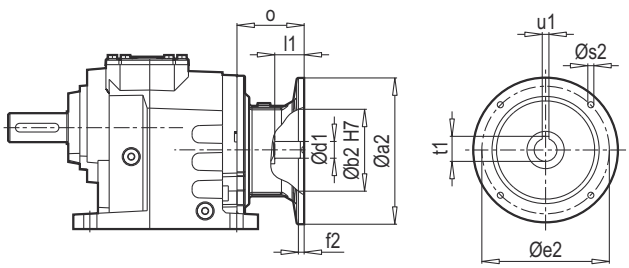
FB



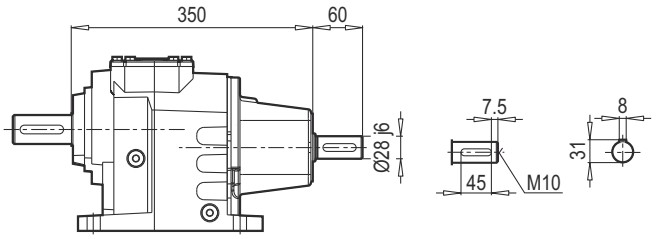
FC

	71 M	80 M	90 S	90 L	100 L	112 M	132 S	132 M
g	140	159	193	193	217	232	279	279
g1	119	127	151	151	160	168	182	182
k	538 (528)	564 (554)	610 (600)	630 (620)	653 (643)	706 (696)	713 (703)	748 (738)
kBre	598 (588)	626 (616)	683 (673)	703 (693)	734 (724)	786 (776)	821 (811)	889 (879)
o	221	247	293	313	336	389	396	431

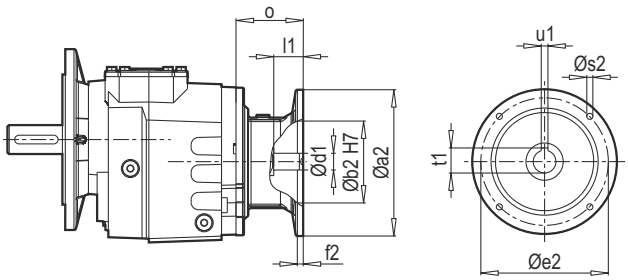
A 402-403 PAM B5/B14



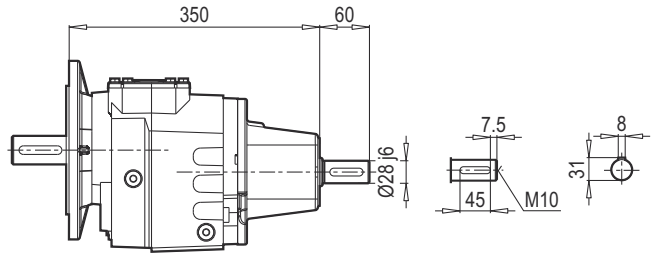
A 402-403 W



F 402-403 PAM B5/B14

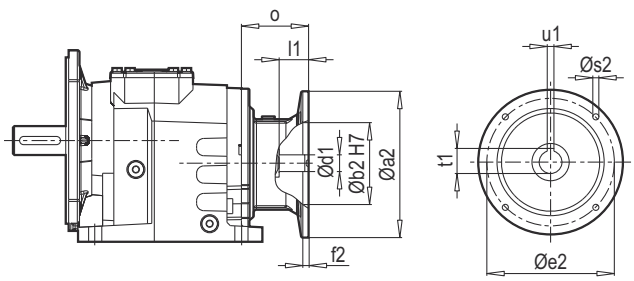


F 402-403 W

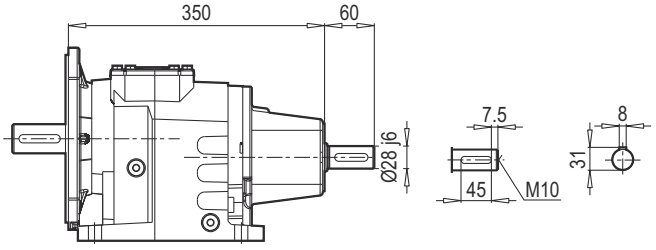


W ~ kg	
A/F 402-403	37

AF 402-403 PAM B5/B14



AF 402-403 W



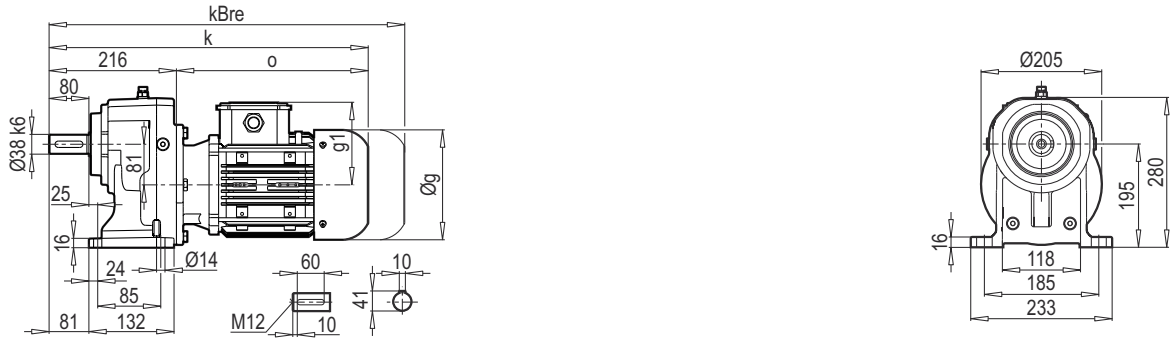
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 402 A/F 403	71	160	110	130	5	M8	14	32	16.3	5	49
	80	200	130	165	5	M10	19	42	21.8	6	70
	90	200	130	165	5	M10	24	52	27.3	8	70
	100	250	180	215	5.5	M12	28	62	31.3	8	85
	112	250	180	215	5.5	M12	28	62	31.3	8	85
	132	300	230	265	5.5	M12	38	82	41.3	10	110

~ kg	
PAM B5	A/F 402-403
71	32
80	35
90	35
100	37
112	37
132	41

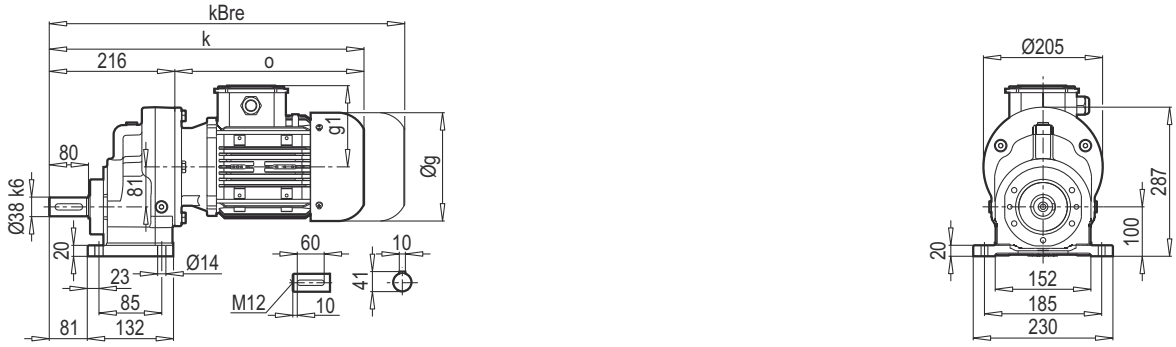
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 402 A/F 403	71	105	70	85	2.5	7	14	32	16.3	5	49
	80	120	80	100	3	7	19	42	21.8	6	70
	90	140	95	115	3	9	24	52	27.3	8	70
	100	160	110	130	3.5	9	28	62	31.3	8	85
	112	160	110	130	3.5	9	28	62	31.3	8	85
	132	200	130	165	3.5	11	38	82	41.3	10	110

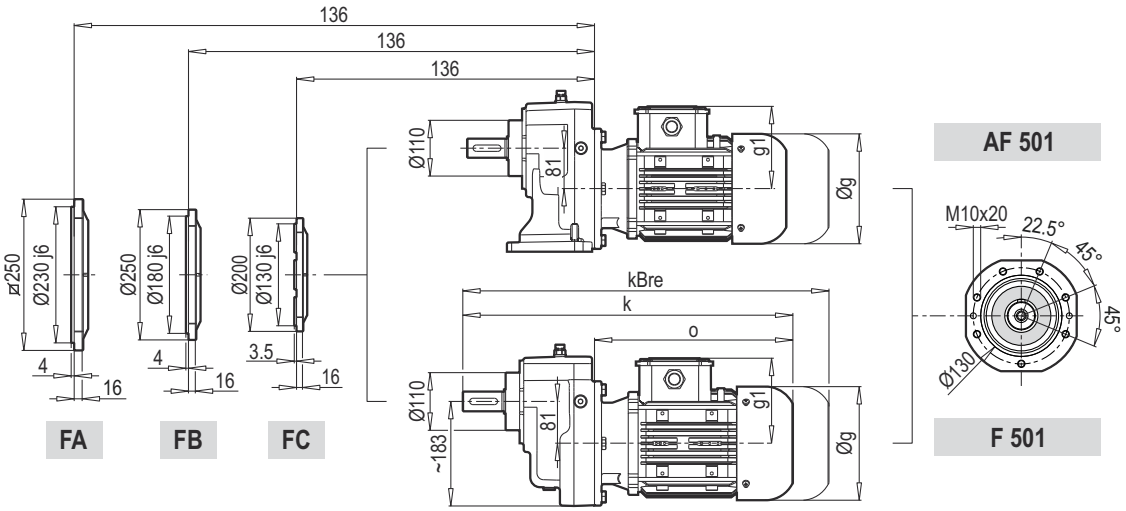
~ kg	
PAM B14	A/F 402-403
71	30
80	31
90	31
100	32
112	32
132	38

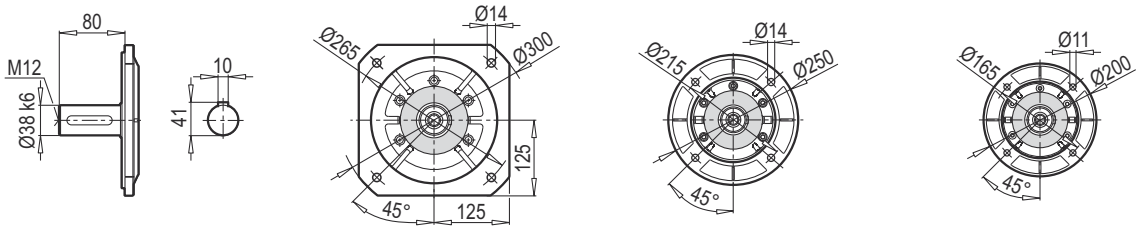
A 501



AF-M 501

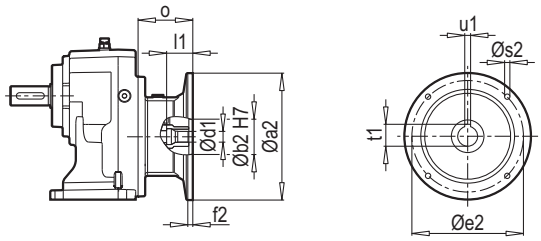




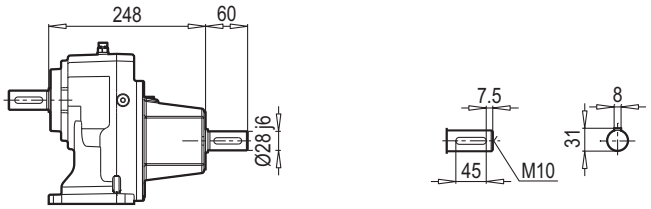


	80 M	90 S	90 L	100 L	112 M	132 S	132 M	
g	159	193	193	217	232	279	279	
g1	127	151	151	160	168	182	182	
k	463	509	529	552	605	612	647	
kBre	525	582	602	633	685	720	788	
o	247	293	313	336	389	396	431	

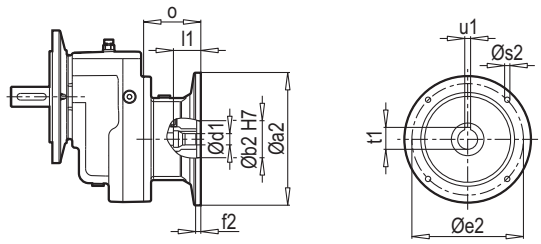
A 501 PAM B5/B14



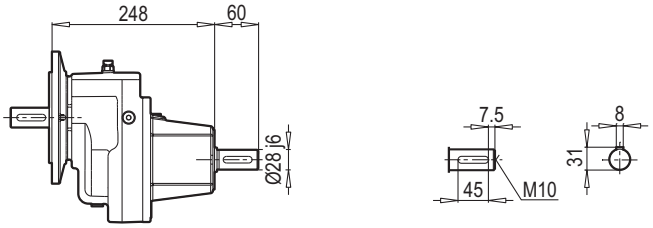
A 501 W



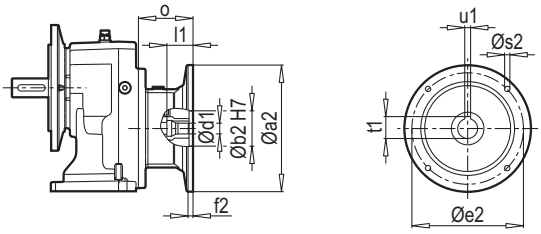
F 501 PAM B5/B14



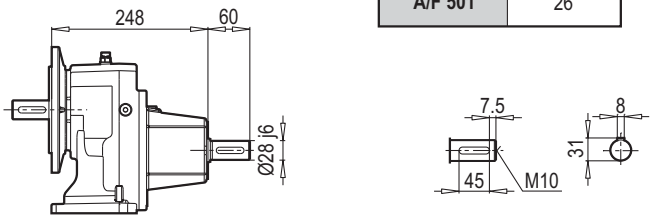
F 501 W



AF 501 PAM B5/B14

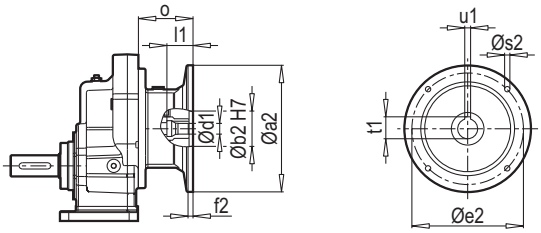


AF 501 W

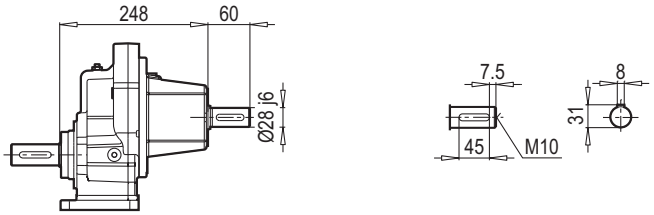


W ~ kg	
A/F 501	26

AF-M 501 PAM B5/B14



AF-M 501 W



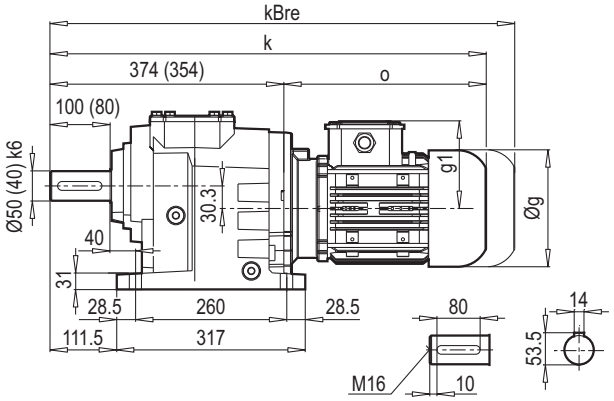
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 501	80	200	130	165	5	M10	19	42	21.8	6	70
	90	200	130	165	5	M10	24	52	27.3	8	70
	100	250	180	215	5.5	M12	28	62	31.3	8	85
	112	250	180	215	5.5	M12	28	62	31.3	8	85
	132	300	230	265	5.5	M12	38	82	41.3	10	110

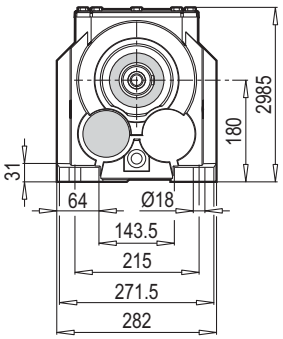
~ kg	
PAM B5	A/F 501
80	22
90	22
100	25
112	25
132	27

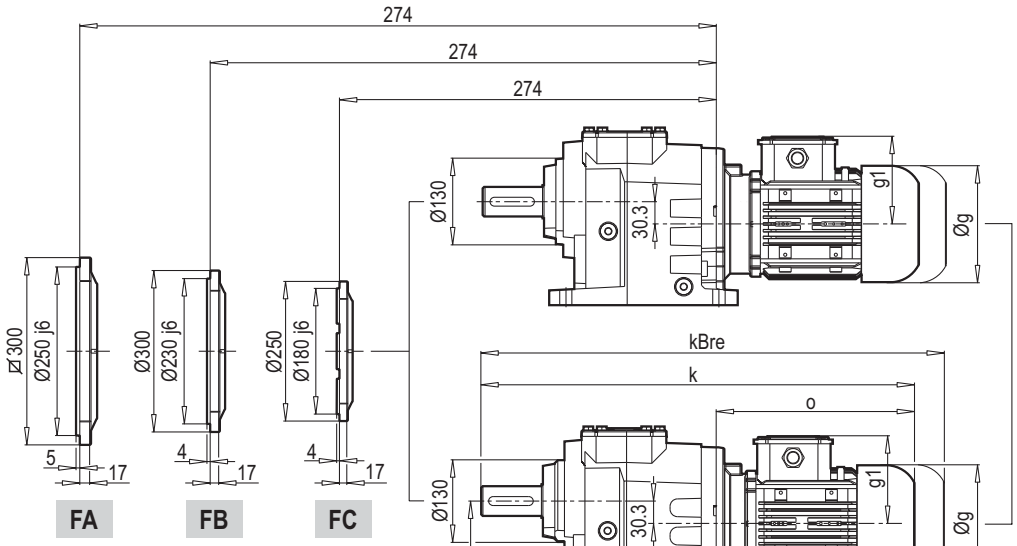
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 501	80	120	80	100	3	7	19	42	21.8	6	70
	90	140	95	115	3	9	24	52	27.3	8	70
	100	160	110	130	3.5	9	28	62	31.3	8	85
	112	160	110	130	3.5	9	28	62	31.3	8	85
	132	200	130	165	3.5	11	38	82	41.3	10	110

~ kg	
PAM B14	A/F 501
80	18.5
90	18.5
100	21
112	21
132	24

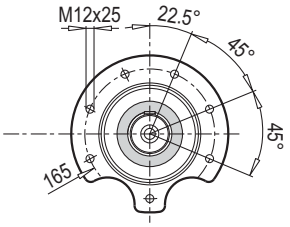
A 502-503



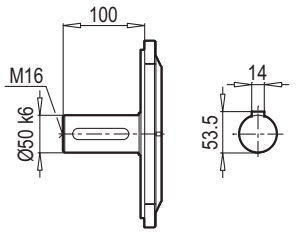


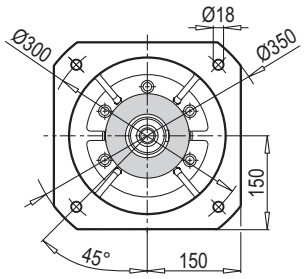


AF 502-503



F 502-503





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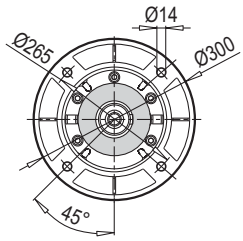
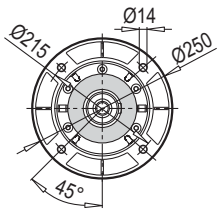


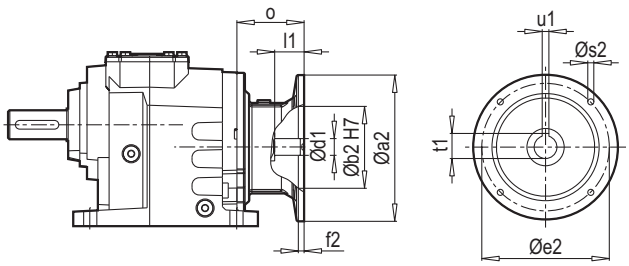
FB



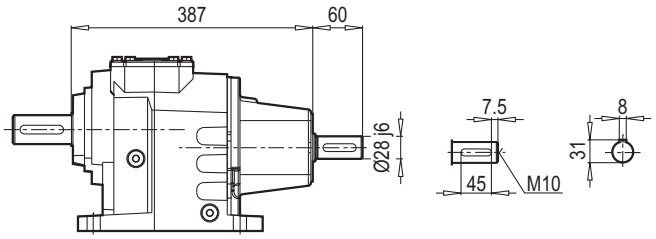
FC

	80 M	90 S	90 L	100 L	112 M	132 S	132 M	160 M/L
g	159	193	193	217	232	279	279	323
g1	127	151	151	160	168	182	182	200
k	621 (601)	667 (647)	687 (667)	710 (690)	763 (743)	770 (750)	805 (785)	892 (872)
kBre	683 (663)	740 (720)	760 (740)	791 (771)	843 (823)	878 (858)	946 (926)	1044 (1024)
o	247	293	313	336	389	396	431	518

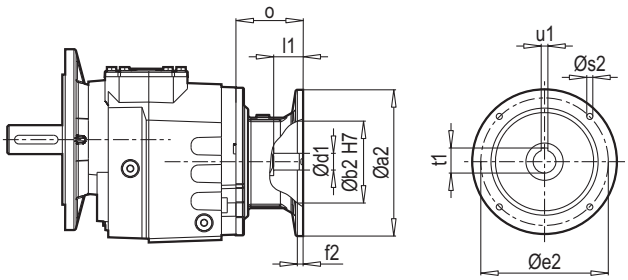
A 502-503 PAM B5/B14



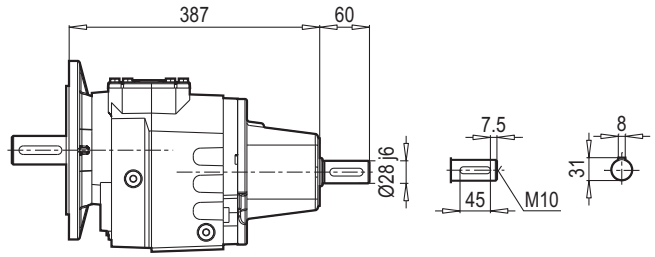
A 502-503 W



F 502-503 PAM B5/B14

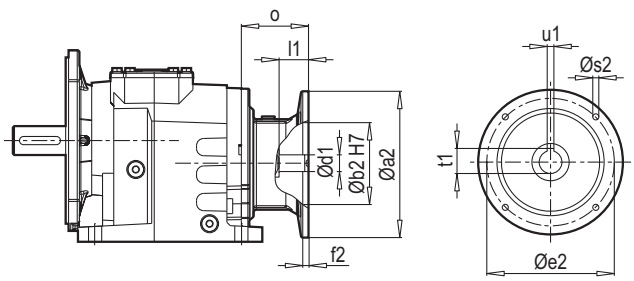


F 502-503 W

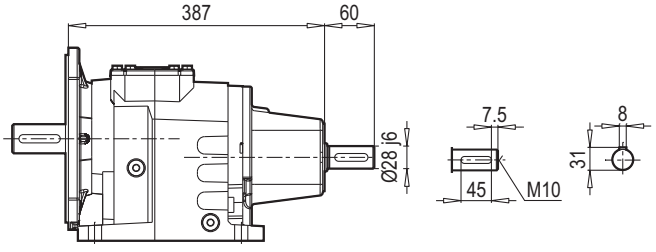


W ~ kg	
A/F 502-503	54

AF 502-503 PAM B5/B14



AF 502-503 W



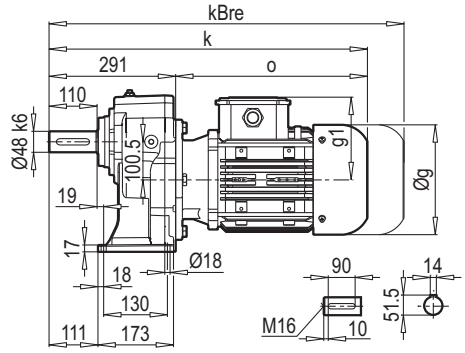
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 502 A/F 503	80	200	130	165	5	M10	19	42	21.8	6	70
	90	200	130	165	5	M10	24	52	27.3	8	70
	100	250	180	215	5.5	M12	28	62	31.3	8	85
	112	250	180	215	5.5	M12	28	62	31.3	8	85
	132	300	230	265	5.5	M12	38	82	41.3	10	110
	160	350	250	300	7	M16	42	112	45.3	12	158

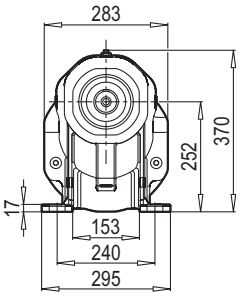
~ kg	
PAM B5	A/F 502-503
80	52
90	52
100	54
112	54
132	58
160	65

Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 502 A/F 503	80	120	80	100	3	7	19	42	21.8	6	70
	90	140	95	115	3	9	24	52	27.3	8	70
	100	160	110	130	3.5	9	28	62	31.3	8	85
	112	160	110	130	3.5	9	28	62	31.3	8	85
	132	200	130	165	3.5	11	38	82	41.3	10	110

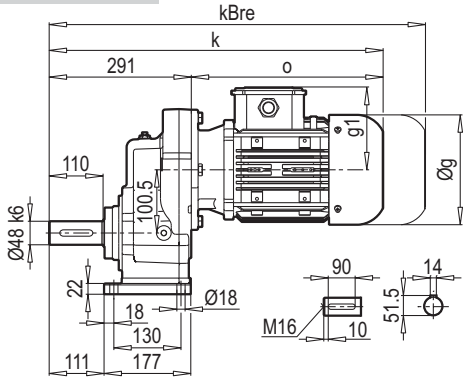
~ kg	
PAM B14	A/F 502-503
80	48
90	48
100	50
112	50
132	55

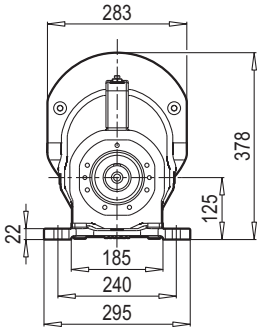
A 601

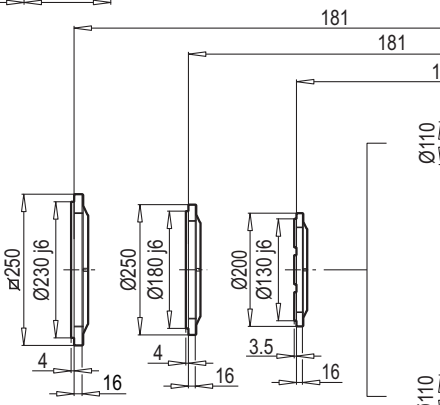


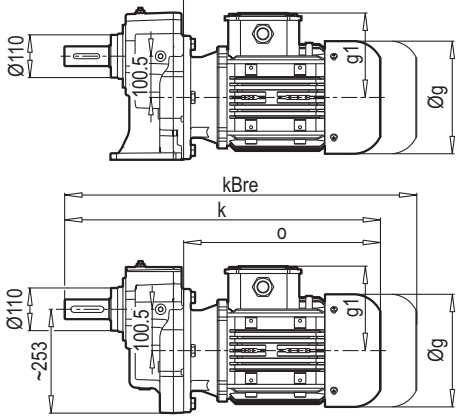


AF-M 601

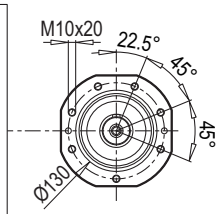




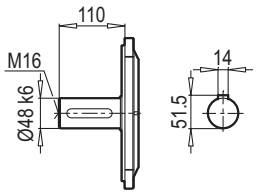


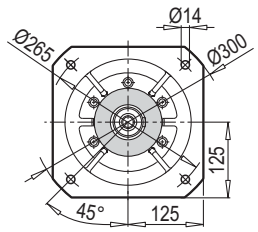


AF 601

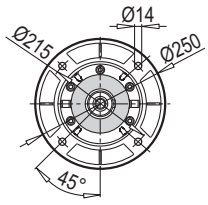


F 601

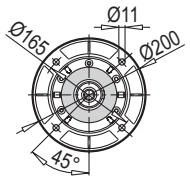




FA



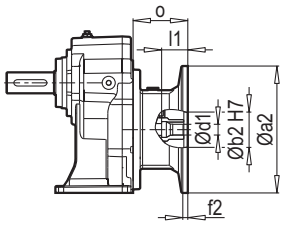
FB

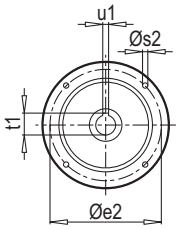


FC

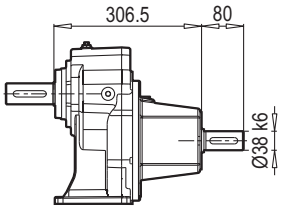
	100 L	112 M	132 S	132 M	160 M/L	180 M/L		
g	217	232	279	279	323	370		
g1	160	168	182	182	200	248		
k	617	671	677	712	799	864		
kBre	698	751	785	853	951	1026		
o	326	380	386	421	508	573		

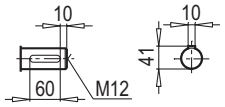
A 601 PAM B5/B14



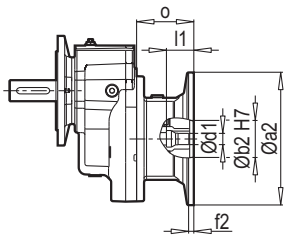


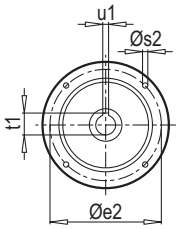
A 601 W



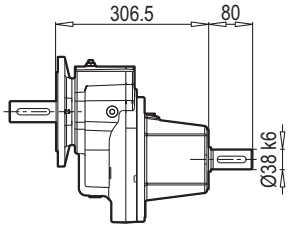


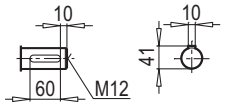
F 601 PAM B5/B14



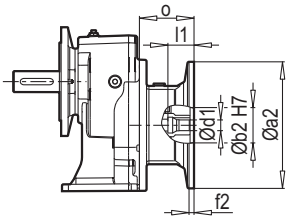


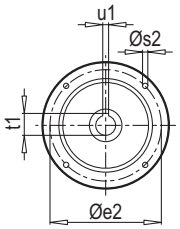
F 601 W



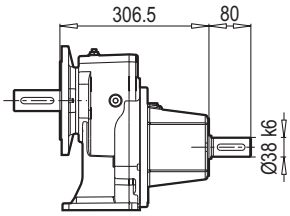


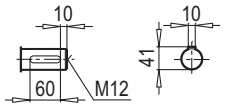
AF 601 PAM B5/B14





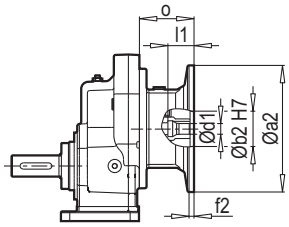
AF 601 W

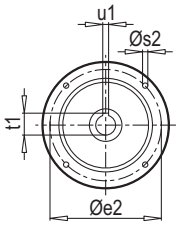




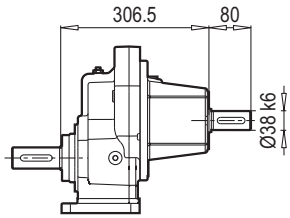
W ~ kg	
A/F 601	45

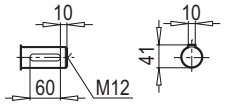
AF-M 601 PAM B5/B14





AF-M 601 W





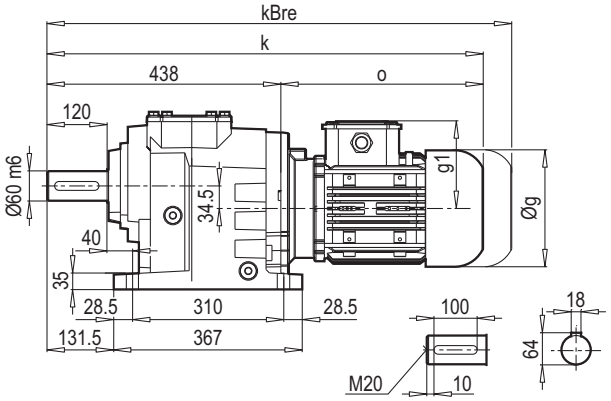
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 601	100	250	180	215	5.5	M12	28	62	31.3	8	76
	112	250	180	215	5.5	M12	28	62	31.3	8	76
	132	300	230	265	5.5	M12	38	82	41.3	10	101
	160	350	250	300	7	M16	42	112	45.3	12	148
	180	350	250	300	7	M16	48	112	51.8	14	148

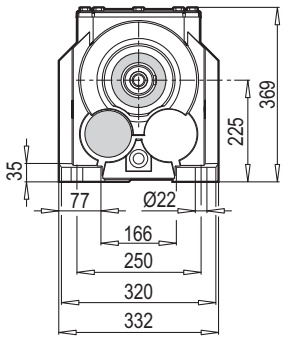
~ kg	
PAM B5	A/F 601
100	37
112	37
132	40
160	47
180	47

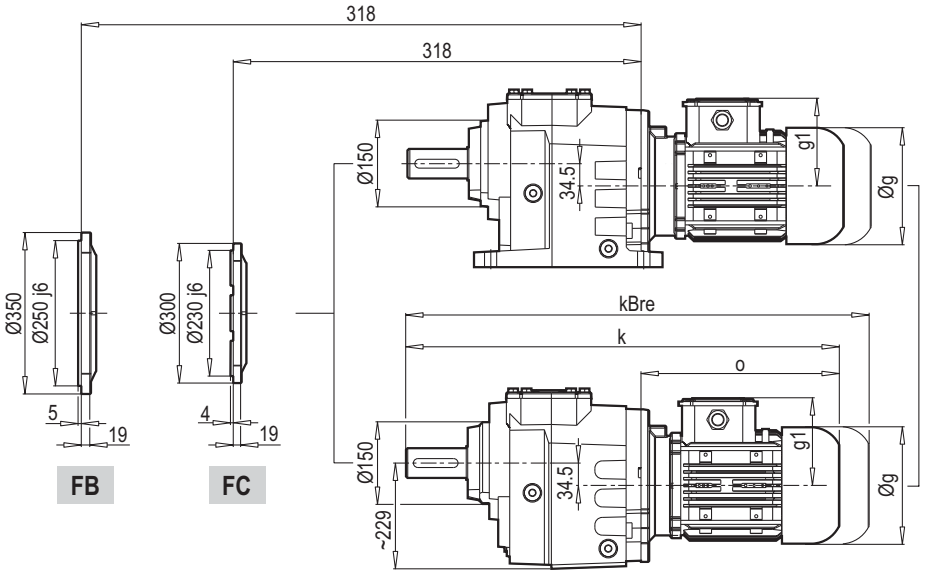
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 601	100	160	110	130	3.5	9	28	62	31.3	8	76
	112	160	110	130	3.5	9	28	62	31.3	8	76
	132	200	130	165	3.5	11	38	82	41.3	10	101

~ kg	
PAM B14	A/F 601
100	34.5
112	34.5
132	38

A 602 - 603

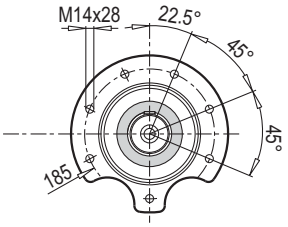




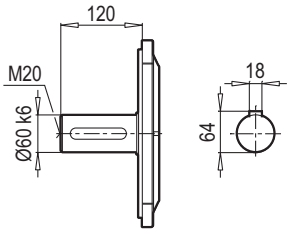


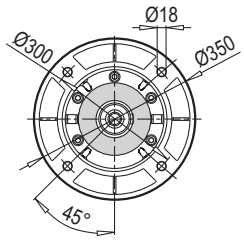
FB FC

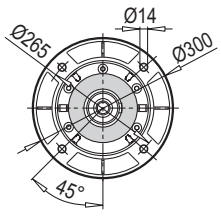
AF 602 - 603



F 602 - 603



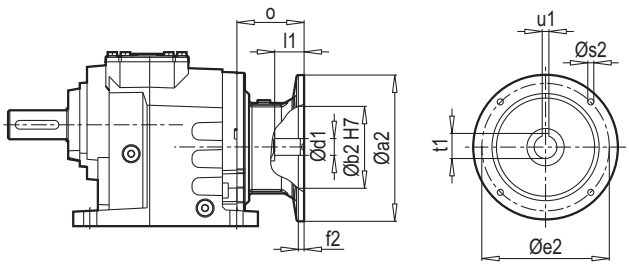




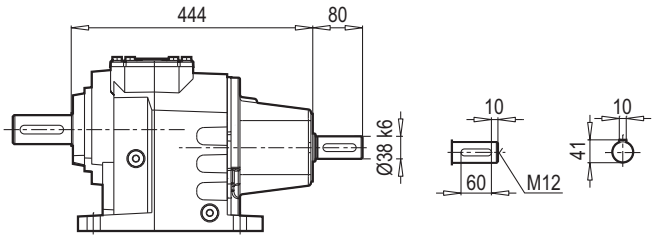
FB FC

	90 L	100 L	112 M	132 S	132 M	160 M/L	180 M/L	
g	193	217	232	279	279	323	370	
g1	151	160	168	182	182	200	248	
k	741	764	818	824	859	946	1011	
kBre	814	845	898	932	1000	1098	1173	
o	303	326	380	386	421	508	573	

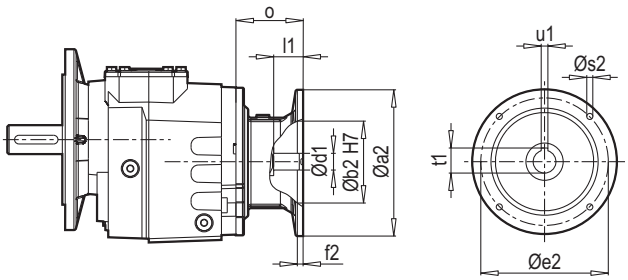
A 602-603 PAM B5/B14



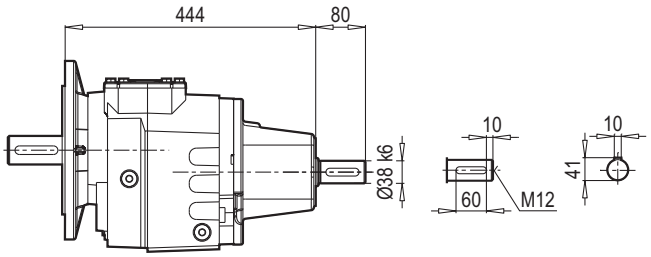
A 602-603 W



F 602-603 PAM B5/B14

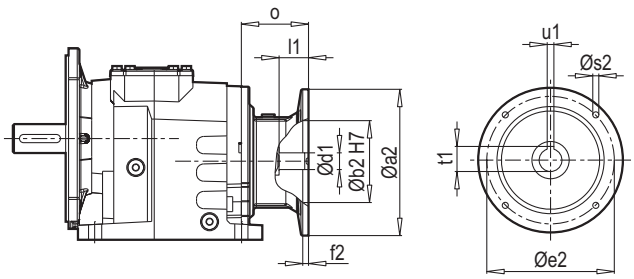


F 602-603 W

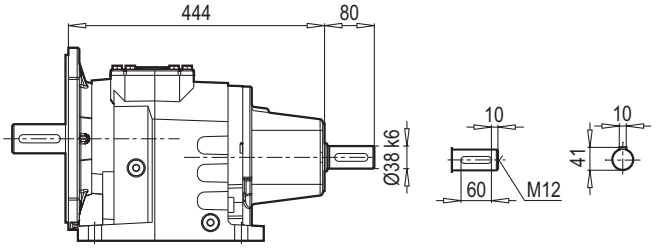


W ~ kg	
A/F 602-603	90

AF 602-603 PAM B5/B14



AF 602-603 W



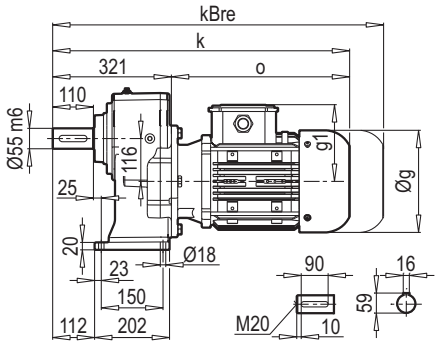
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 602 A/F 603	90	200	130	165	5	M10	24	52	27.3	8	61
	100	250	180	215	5.5	M12	28	62	31.3	8	76
	112	250	180	215	5.5	M12	28	62	31.3	8	76
	132	300	230	265	5.5	M12	38	82	41.3	10	101
	160	350	250	300	7	M16	42	112	45.3	12	148
	180	350	250	300	7	M16	48	112	51.8	14	148

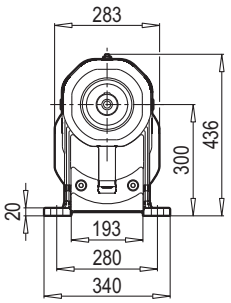
~ kg	
PAM B5	A/F 602-603
90	81
100	85
112	85
132	88
160	94
180	94

Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 602 A/F 603	90	140	95	115	3	9	24	52	27.3	8	61
	100	160	110	130	3.5	9	28	62	31.3	8	76
	112	160	110	130	3.5	9	28	62	31.3	8	76
	132	200	130	165	3.5	11	38	82	41.3	10	101

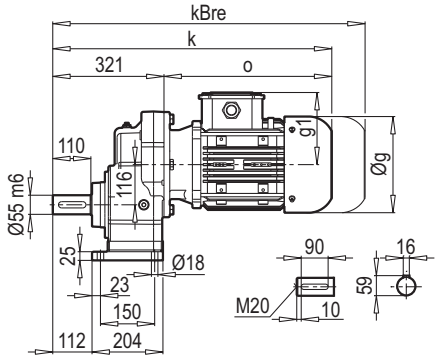
~ kg	
PAM B14	A/F 602-603
90	78
100	80
112	80
132	86

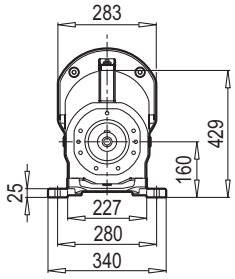
A 701

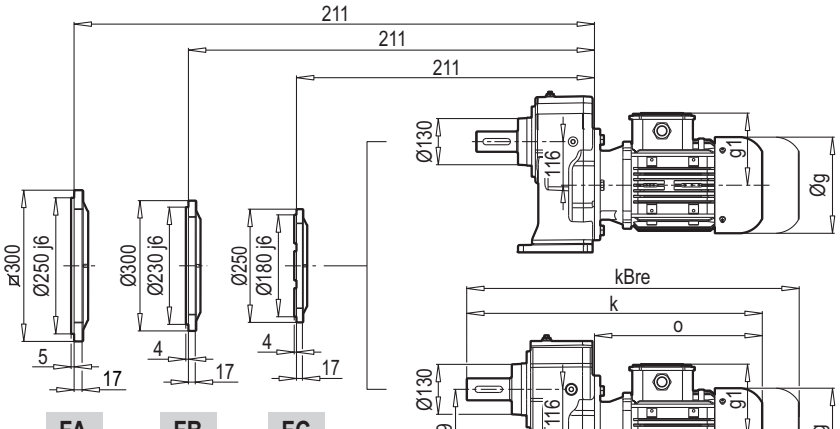




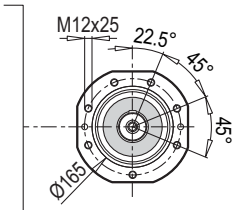
AF-M 701



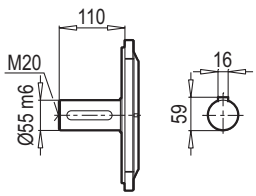


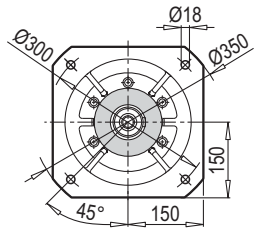


AF 701

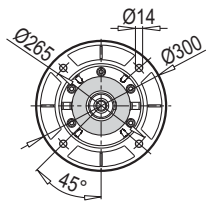


F 701

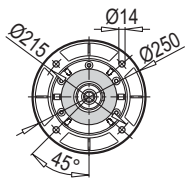




FA



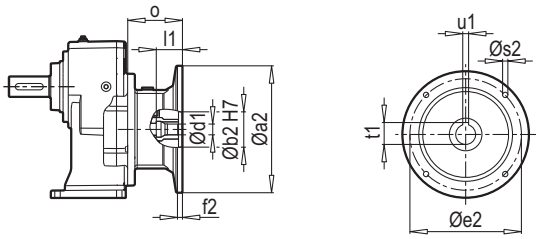
FB



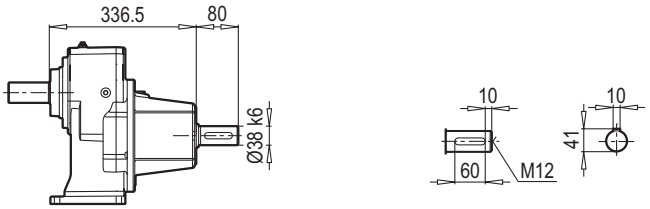
FC

	132 S	132 M	160 M/L	180 M/L	200 L			
g	279	279	323	370	415			
g1	182	182	200	248	260			
k	707	742	829	894	931			
kBre	815	883	981	1056	1078			
o	386	421	508	573	610			

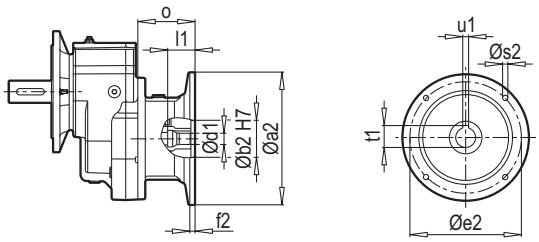
A 701 PAM B5/B14



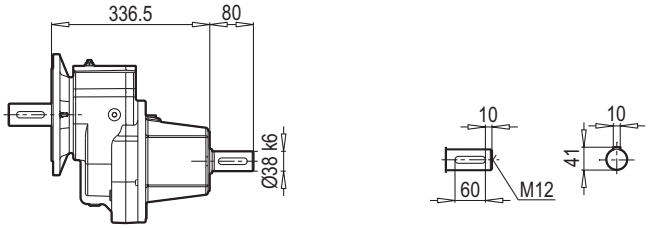
A 701 W



F 701 PAM B5/B14

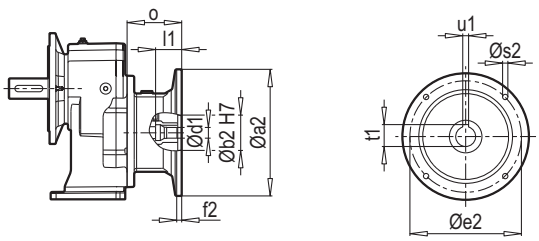


F 701 W

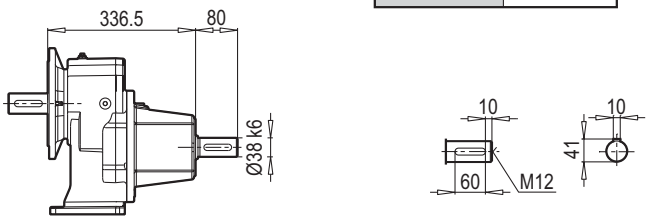


W ~ Kg	
A/F 701	49

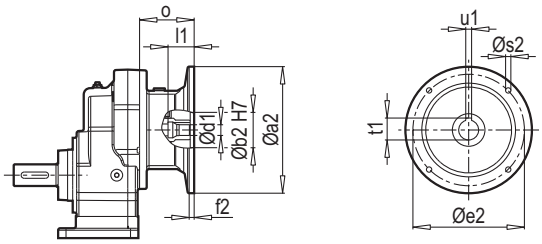
AF 701 PAM B5/B14



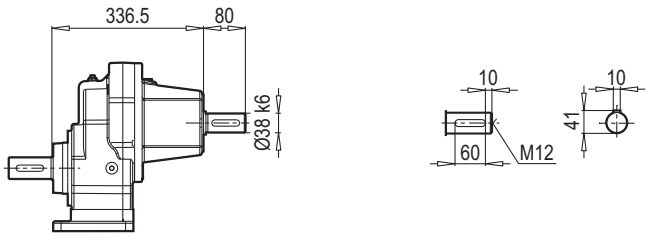
AF 701 W



AF-M 701 PAM B5/B14



AF-M 701 W



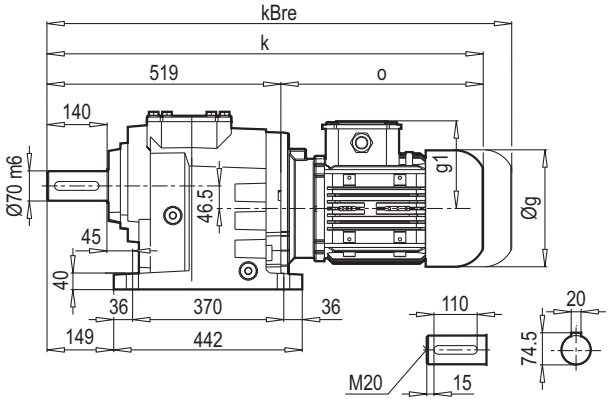
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 701	132	300	230	265	5.5	M12	38	82	41.3	10	101
	160	350	250	300	7	M16	42	112	45.3	12	148
	180	350	250	300	7	M16	48	112	51.8	14	148
	200	400	300	350	7	M16	55	112	59.3	16	185

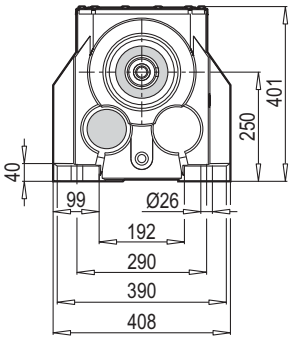
~ Kg	
PAM B5	A/F 701
132	43
160	50
180	50
200	65

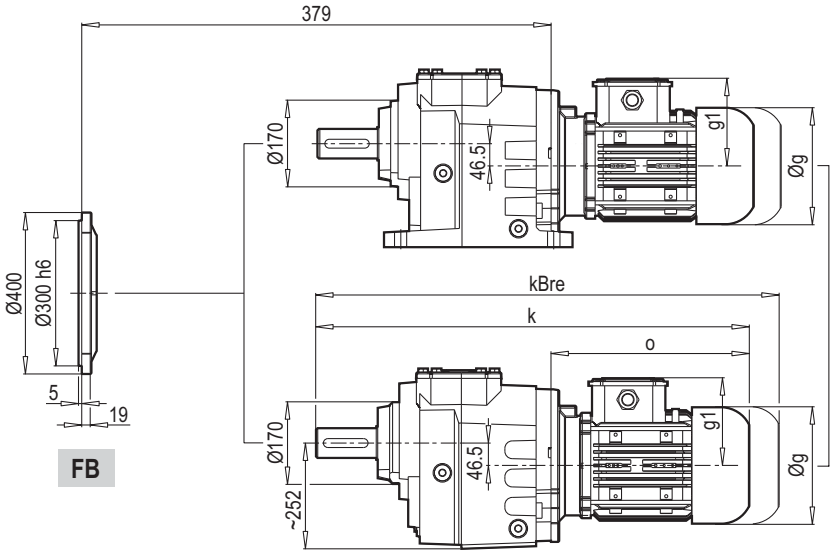
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 701	132	200	130	165	3.5	11	38	82	41.3	10	101

~ Kg	
PAM B14	A/F 701
132	41

A 702 - 703

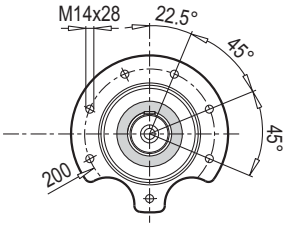




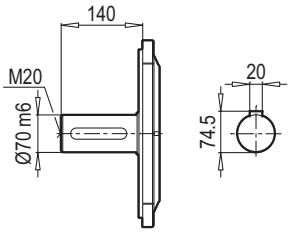


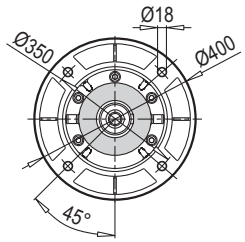
FB

AF 702 - 703



F 702 - 703

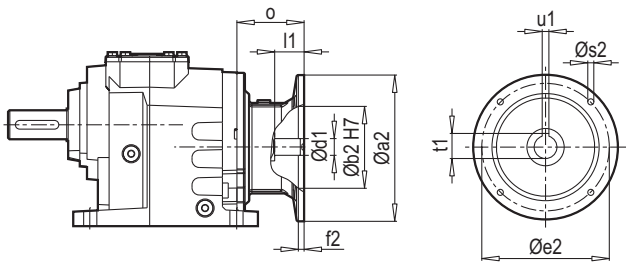




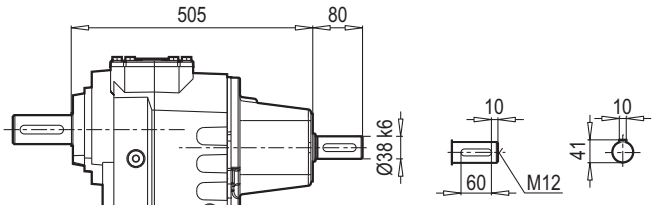
FB

	100 L	112 M	132 S	132 M	160 M/L	180 M/L	200 L	
g	217	232	279	279	323	370	415	
g1	160	168	182	182	200	248	260	
k	845	899	905	940	1027	1092	1129	
kBre	926	979	1013	1081	1179	1254	1276	
o	326	380	386	421	508	573	610	

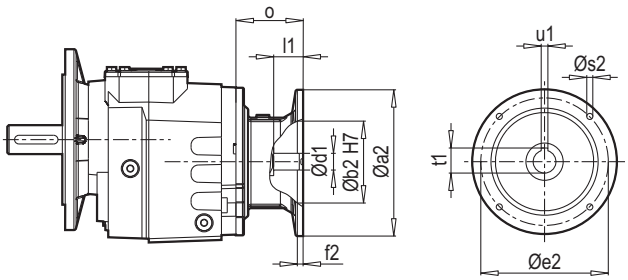
A 702-703 PAM B5/B14



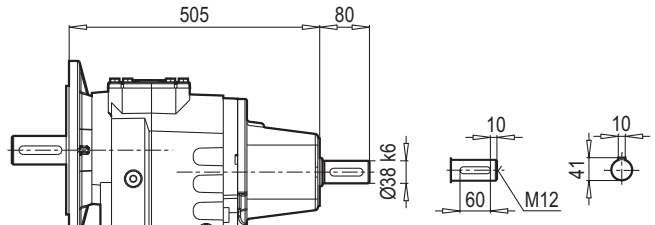
A 702-703 W



F 702-703 PAM B5/B14

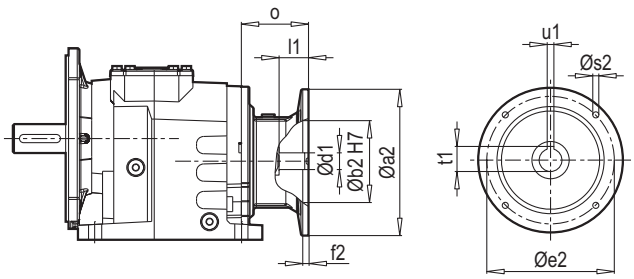


F 702-703 W

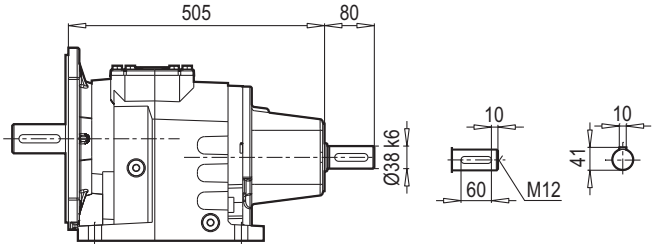


W ~ kg	
A/F 702-703	119

AF 702-703 PAM B5/B14



AF 702-703 W



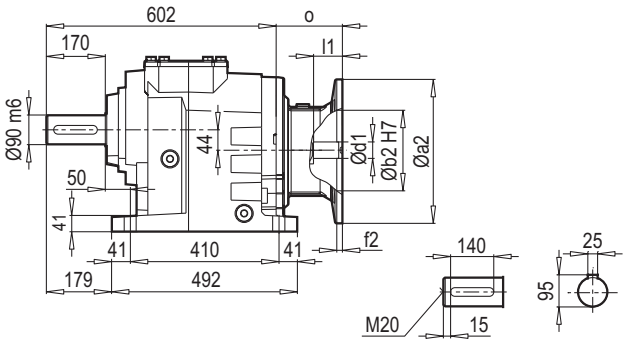
Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 702 A/F 703	100	250	180	215	5.5	M12	28	62	31.3	8	76
	112	250	180	215	5.5	M12	28	62	31.3	8	76
	132	300	230	265	5.5	M12	38	82	41.3	10	101
	160	350	250	300	7	M16	42	112	45.3	12	148
	180	350	250	300	7	M16	48	112	51.8	14	148
	200	400	300	350	7	M16	55	112	59.3	16	185

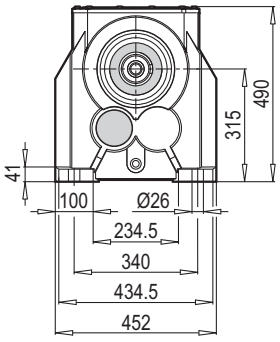
~ kg	
PAM B5	A/F 702-703
100	114
112	114
132	117
160	123
180	123
200	139

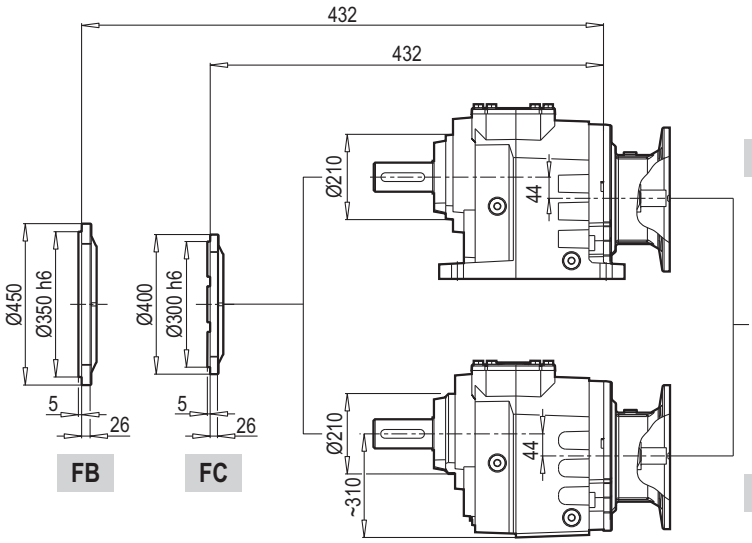
Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 702 A/F 703	100	160	110	130	3.5	9	28	62	31.3	8	76
	112	160	110	130	3.5	9	28	62	31.3	8	76
	132	200	130	165	3.5	11	38	82	41.3	10	101

~ kg	
PAM B14	A/F 702-703
100	109
112	109
132	115

A 902 - 903

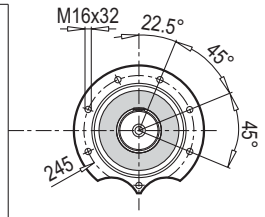




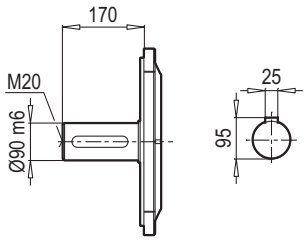


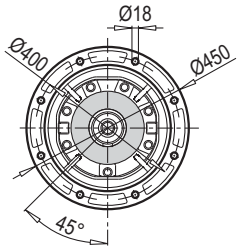
FB **FC**

AF 902 - 903

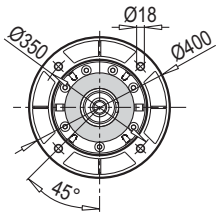


F 902 - 903





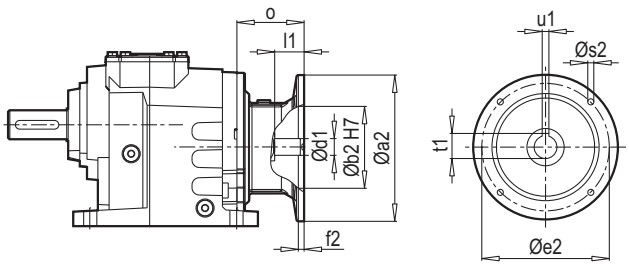
FB



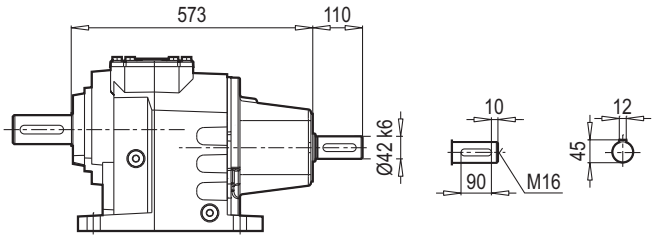
FC

	132	160	180	200	225			
a2	300	350	350	400	450			
b2	230	250	250	300	350			
d1	38	42	48	55	60			
f2	5.5	7	7	7	7			
L	82	112	112	112	142			
u1	10	12	14	16	18			
t1	41.3	45.3	51.8	59.3	64.4			
o	76	124	124	161	161			

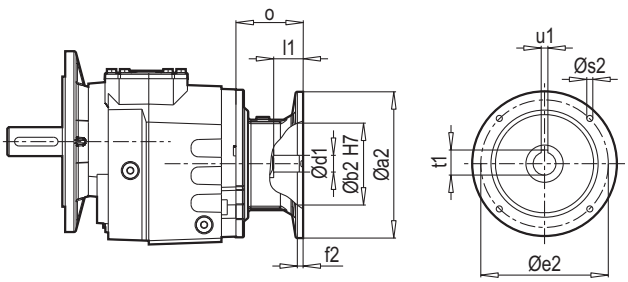
A 902-903 PAM B5/B14



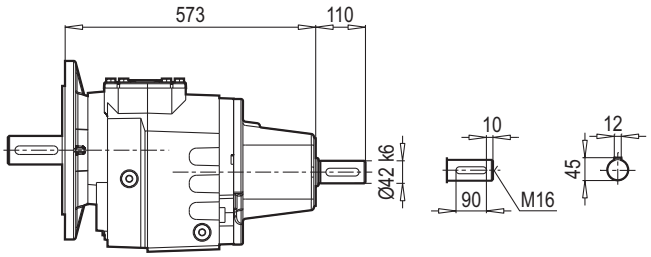
A 902-903 W



F 902-903 PAM B5/B14

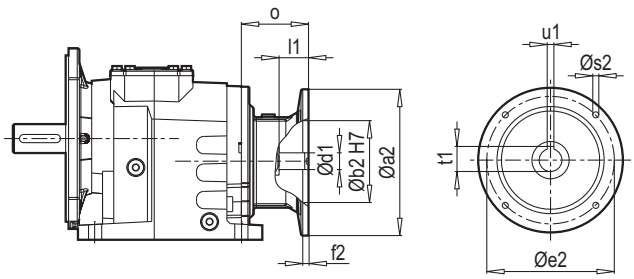


F 902-903 W

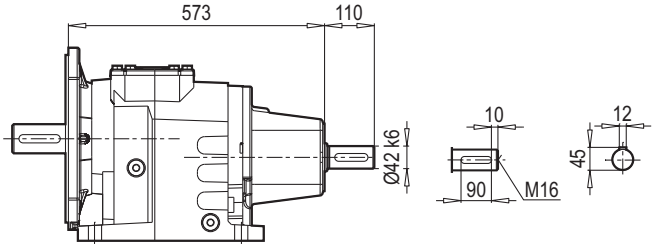


W ~ kg	
A/F 902-903	195

AF 902-903 PAM B5/B14



AF 902-903 W



Typ / Type / Tipo Type / Tipo	PAM B5	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 902 A/F 903	132	300	230	265	5.5	M12	38	82	41.3	10	76
	160	350	250	300	7	M16	42	112	45.3	12	124
	180	350	250	300	7	M16	48	112	51.8	14	124
	200	400	300	350	7	M16	55	112	59.3	16	161
	225	450	350	400	7	M16	60	142	64.4	18	161

~ kg	
PAM B5	A/F 902-903
132	182
160	190
180	190
200	205
225	208

Typ / Type / Tipo Type / Tipo	PAM B14	Øa2	Øb2	Øe2	f2	Øs2	Ød1	l1	t1	u1	o
A/F 903	132	200	130	165	3.5	11	38	82	41.3	10	76

~ kg	
PAM B14	A/F 903
132	175

Auswahltabellen von
W - PAM - IEC Adaptern

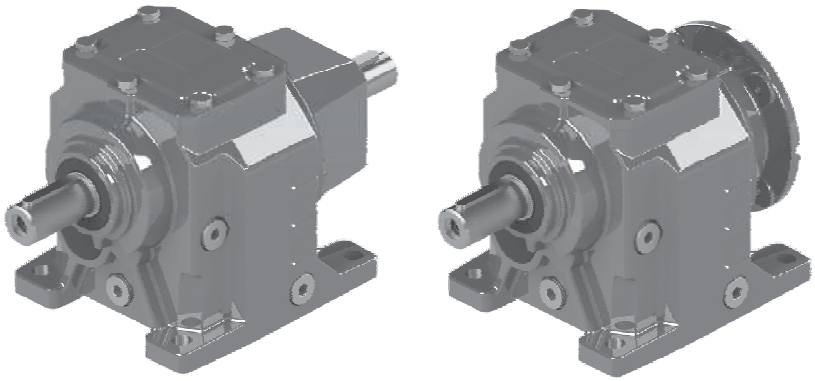
Selection Tables
of W - PAM - IEC Adapters

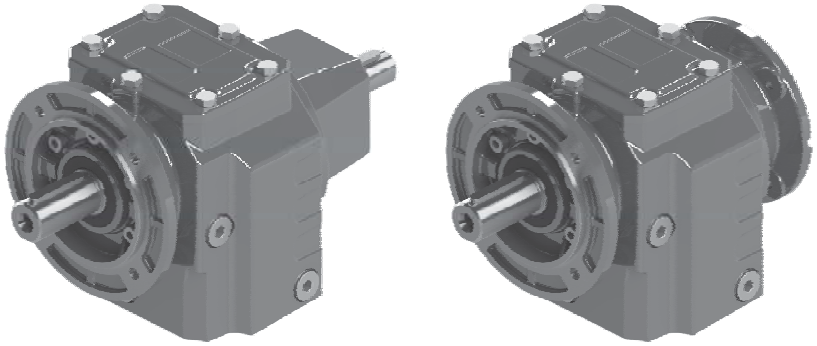
Tabella si Selezione di
W - PAM - IEC Adattatore

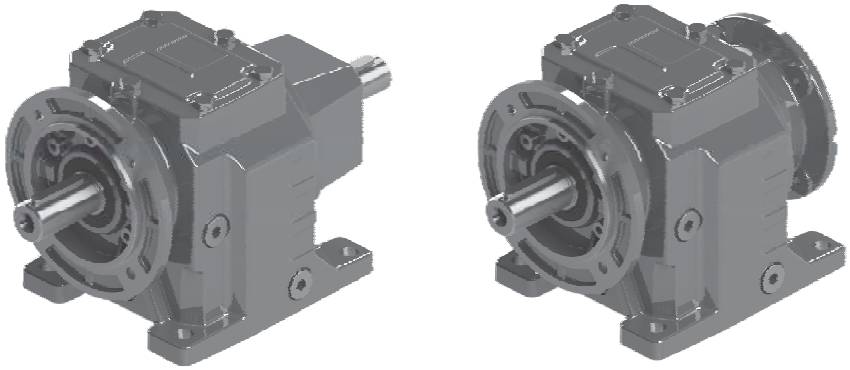
Tableau de Sélection du
W - PAM - IEC Adaptateur

Tabla de Selección de
W - PAM - IEC Adaptador

A/F







A/F 301 ... 701
A/F 202 ... 902
A/F 253 ... 903

Der Aufbau der Leistungstabellen für W - IEC und PAM-Adapter
Notify about performance tables for W and IEC adapter type
Struttura delle tabelle delle prestazioni degli adattatori W – IEC e PAM
La structure de la table de performance pour W - Adaptateur IEC et PAM
Estructura de Tablas de Rendimiento para Adaptador de W – IEC ve PAM

A 253
F 253 → **Getriebemotortyp /**
Gear unit motor type / Tipo del motore con ingranaggi /
Type du moteur à engenages / Tipo del motor con engranaje

Betriebsfaktor f_B kann aus den Motorauswahlseiten entnommen werden, da für die IEC montierten Getriebe die Motor Körpergröße und IEC Körpergröße die gleichen sind.
Service factor f_B could be seen from selection of geared motor tables. Because this value is same for geared motor and geared motor with IEC adapters.
Peri riduttori a montaggio IEC con grandezza del corpo motore uguale alla grandezza del corpo motore IEC il fattore di Servizio puo' essere rilevato dalle scelte di motori f_B.
Facteur de service f_B peut être prise à partir de la page de sélection de moteur, pour réducteurs IEC montée dont moteur taille du corps et IEC taille du corps sont les mêmes.
Factor de servicio para reductores con IEC montado, y con mismo tamaño de cuerpo de IEC y el cuerpo de motor, se puede encontrar en paginas de elección f_B motor.

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B → 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A253	245.76	5.7	200	0.12	1.4	5.5	63	71						
F253	197.21	7.1	200	0.15	1.4	5.5	63	71						
	178.56	7.8	200	0.16	1.4	5.5	63	71						
	143.29	9.8	200	0.20	1.4	5.5	63	71						
	123.58	11.3	200	0.24	1.3	5.5	63	71	80	90				
	108.02	13.0	200	0.27	1.3	5.5	63	71						
	100.12	14.0	200	0.29	1.3	5.5	63	71	80	90				
	74.76	18.7	200	0.39	1.3	5.5	63	71	80	90				
	66.56	21.0	200	0.44	1.3	5.5	63	71	80	90				
	53.41	26.2	200	0.55	1.3	5.5	63	71	80	90				

Verkleinerungsfaktor
Reduction ratio
Rapporto di riduzione
Rapport de réduction
Relación de de reducción

Abtriebsdrehzahl
Output speed
Velocità di uscita
Vitesse de sortie
Velocidad de salida

Abtriebsdrehmoment
Output torque
Momento di uscita
Moment de sortie
Momento de salida

Bei der Berechnung der maximalen Antriebskraft von Typ W werden keine kursiv Werte übernommen. f_B mit P_{1max} = 1.
P_{1max} value which is *non-italic* is calculated when service factor f_B is equal to one.
Nel calcolo della forza motrice massima tipo W sono stati presi valori non in corsivo. P_{1max} e f_B =1
Bien que la force maximale de conduite de type W est calculé, les valeurs italiques ne sont pas prises. f_B avec P_{1max} = 1
Los valores no cursivos fueron tomados al calcular la fuerza motriz tipo W. P_{1max} con f_B = 1

Zülässige max. radialkraft (Antrieb)
Max. Permissible radial force (Input)
Máx. Forza radiale ammessa (Entrata)
Max. Force radiale admissible (Entree)
Max. Fuerza radial admissible (Entrada)

Zülässige max. radialkraft (Abtrieb)
Max. Permissible radial force (Output)
Máx. Forza radiale ammessa (Uscita)
Max. Force radiale admissible (Sortie)
Max. Fuerza radial admissible (Salida)

IEC Motorgrößen und IEC-Standard-Ausgänge gemäß DIN 50347.
According to DIN EN 50347 IEC motor sizes.
Le grandezze dei motori IEC e le uscite standard IEC sono conformi a DIN 50347.
Tailles de moteurs IEC et les sorties standards IEC est selon la norme DIN 50347.
Tamaño de motores de IEC y salidas estandares de IEC son conformes a DIN 50347.

Bedruckte Bereiche zeigen, dass der IEC - Adapter für die IEC Motorgröße und den Verkleinerungsfaktor anwendbar ist.
This area which is colorless is shown IEC adapter is applicable forthis IEC motor size and reduction ratio.
Gli spazi con cifre degli adattatori IEC, indicano che la grandezza delmotore IEC é conforme al rapporto di trasmissione.
Zones numériques indiquent que l'adaptateur IEC est adapté pour IEC taille du moteur et taux de change.
Áreas con números indican que es adaptador de IEC, es conforme a tamaño del motor IEC y al ratio de cambios.

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A202 **F202** **W** mm 111 + **PAM - IEC** mm 111	63.59	22.0	50	0.12	-	2.5	56	63	71					
	55.03	25.4	50	0.13	-	2.5	56	63	71					
	49.05	28.5	46	0.14	-	2.5	56	63	71					
	42.20	33.2	50	0.17	-	2.5	56	63	71					
	36.45	38.4	54	0.22	-	2.5	56	63	71					
	32.41	43.2	55	0.25	-	2.5	56	63	71					
	27.75	50.5	54	0.29	-	2.5	56	63	71					
	24.78	56.5	55	0.33	-	2.5	56	63	71					
	22.26	62.9	55	0.36	-	2.5	56	63	71					
	21.36	65.5	55	0.38	-	2.5	56	63	71					
	19.23	72.8	55	0.42	-	2.5	56	63	71					
	17.37	80.6	55	0.46	-	2.5	56	63	71					
	15.75	88.9	55	0.51	-	2.5	56	63	71					
	14.42	97.1	51	0.52	-	2.5	56	63	71					
	13.23	105.8	47	0.52	-	2.5	56	63	71					
	11.52	121.5	50	*0.55*	-	2.5	56	63	71					
	10.03	139.6	55	*0.55*	-	2.5	56	63	71					
	8.93	156.8	55	*0.55*	-	2.5	56	63	71					
	8.03	174.3	55	*0.55*	-	2.5	56	63	71					
	7.21	194.2	55	*0.55*	-	2.5	56	63	71					
	6.55	213.7	53	*0.55*	-	2.5	56	63	71					
	5.98	234.1	55	*0.55*	-	2.5	56	63	71					
	5.49	255.0	55	*0.55*	-	2.5	56	63	71					
	5.33	262.7	55	*0.55*	-	2.5	56	63	71					
	4.79	292.3	53	*0.55*	-	2.5	56	63	71					
	4.29	326.3	50	*0.55*	-	2.5	56	63	71					
	3.90	359.0	45	*0.55*	-	2.5	56	63	71					
	3.56	393.3	48	*0.55*	-	2.5	56	63	71					
	3.26	429.4	47	*0.55*	-	2.5	56	63	71					
	2.97	471.4	46	*0.55*	-	2.5	56	63	71					
	2.83	494.7	45	*0.55*	-	2.5	56	63	71					
	2.55	549.0	41	*0.55*	-	2.5	56	63	71					
	2.31	606.1	39	*0.55*	-	2.5	56	63	71					
	2.12	660.4	36	*0.55*	-	2.5	56	63	71					

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A 202 G **F 202 G** **W** mm 113 + **PAM - IEC** mm 113	81.41	17.2	83	0.15	1.2	2.8	56	63	71	80	90			
	70.05	20.0	72	0.15	1.2	2.8	56	63	71	80	90			
	62.38	22.4	64	0.15	1.2	2.8	56	63	71	80	90			
	54.05	25.9	85	0.23	1.2	2.8	56	63	71	80	90			
	46.41	30.2	85	0.27	1.2	2.8	56	63	71	80	90			
	41.38	33.8	85	0.30	1.2	2.8	56	63	71	80	90			
	38.72	36.2	85	0.32	1.2	2.8	56	63	71	80	90			
	34.55	40.5	86	0.36	1.2	2.8	56	63	71	80	90			
	31.03	45.1	92	0.43	1.2	2.8	56	63	71	80	90			
	27.66	50.6	92	0.49	1.2	2.8	56	63	71	80	90			
	24.83	56.4	92	0.54	1.2	2.8	56	63	71	80	90			
	22.44	62.4	92	0.60	1.2	2.8	56	63	71	80	90			
	20.35	68.8	85	0.61	1.2	2.8	56	63	71	80	90			
	18.63	75.1	84	0.66	1.2	2.8	56	63	71	80	90			
	15.74	88.9	85	0.79	1.2	2.8	56	63	71	80	90			
	13.56	103.2	85	0.92	1.2	2.8	56	63	71	80	90			
	12.09	115.8	87	1.05	1.2	2.8	56	63	71	80	90			
	11.41	122.7	85	1.09	1.2	2.8	56	63	71	80	90			
	10.85	129.0	86	1.16	1.2	2.8	56	63	71	80	90			
	9.81	142.7	85	1.27	1.2	2.8	56	63	71	80	90			
	8.75	160.0	88	1.47	1.2	2.8	56	63	71	80	90			
	7.81	179.3	82	*1.50*	1.2	2.8	56	63	71	80	90			
	7.04	198.9	82	*1.50*	1.2	2.8	56	63	71	80	90			
	6.41	218.4	82	*1.50*	1.2	2.8	56	63	71	80	90			
	5.74	243.9	77	*1.50*	1.2	2.8	56	63	71	80	90			
	5.16	271.3	83	*1.50*	1.2	2.8	56	63	71	80	90			
	4.63	302.4	72	*1.50*	1.2	2.8	56	63	71	80	90			
	4.19	334.1	65	*1.50*	1.2	2.8	56	63	71	80	90			
	3.81	367.5	59	*1.50*	1.2	2.8	56	63	71	80	90			
	3.44	407.0	54	*1.50*	1.2	2.8	56	63	71	80	90			
	3.24	432.1	54	*1.50*	1.2	2.8	56	63	71	80	90			
	2.95	474.6	50	*1.50*	1.2	2.8	56	63	71	80	90			
	2.74	510.9	46	*1.50*	1.2	2.8	56	63	71	80	90			
	2.51	557.8	43	*1.50*	1.2	2.8	56	63	71	80	90			
	2.31	606.1	43	*1.50*	1.2	2.8	56	63	71	80	90			

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A253	245.76	5.7	200	0.12	1.4	5.5	63	71						
F253	197.21	7.1	200	0.15	1.4	5.5	63	71						
W	178.56	7.8	200	0.16	1.4	5.5	63	71						
mm	143.29	9.8	200	0.20	1.4	5.5	63	71						
115	123.58	11.3	200	0.24	1.3	5.5	63	71	80	90				
+	108.02	13.0	200	0.27	1.3	5.5	63	71						
PAM - IEC	99.17	14.1	200	0.30	1.3	5.5	63	71	80	90				
mm	74.76	18.7	200	0.39	1.3	5.5	63	71	80	90				
115	66.56	21.0	200	0.44	1.3	5.5	63	71	80	90				
	53.41	26.2	200	0.55	1.3	5.5	63	71	80	90				
A252	47.93	29.2	200	0.61	1.3	5.5	71	80	90					
F252	42.00	33.3	200	0.70	1.2	5.5	71	80	90					
W	38.46	36.4	200	0.76	1.2	5.5	71	80	90					
mm	33.38	41.9	200	0.88	1.2	5.5	71	80	90					
115	30.15	46.4	200	0.97	1.2	5.3	71	80	90					
+	26.79	52.3	200	1.09	1.1	5.0	71	80	90					
PAM - IEC	24.19	57.9	200	1.21	1.1	4.8	71	80	90					
mm	23.04	60.8	200	1.27	1.1	4.7	71	80	90	100	112			
115	20.19	69.3	200	1.45	1.1	4.4	71	80	90					
	18.49	75.7	200	1.59	1.0	4.2	71	80	90	100	112			
	17.05	82.1	190	1.63	1.0	4.1	71	80	90	100	112			
	14.91	93.9	170	1.67	1.0	4.1	71	80	90	100	112			
	13.94	100.4	170	1.79	1.0	3.9	71	80	90	100	112			
	11.97	117.0	145	1.78	1.0	3.9	71	80	90	100	112			
	10.32	135.7	140	1.99	0.9	3.7	71	80	90	100	112			
	9.02	155.2	130	2.11	0.9	3.6	71	80	90	100	112			
	7.93	176.5	125	2.31	0.8	3.4	71	80	90	100	112			
	6.36	220.0	105	2.42	0.8	3.3	71	80	90	100	112			
	4.80	291.8	95	2.90	0.7	3.0	71	80	90	100	112			

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A303	282.17	5.0	300	0.16	1.4	6.6	63	71						
F303	227.56	6.2	300	0.19	1.4	6.6	63	71						
W	205.01	6.8	300	0.21	1.4	6.6	63	71						
mm	165.33	8.5	300	0.27	1.4	6.6	63	71						
119	141.89	9.9	300	0.31	1.4	6.6	63	71	80	90				
+	125.65	11.1	300	0.35	1.3	6.6	63	71						
PAM - IEC	114.42	12.2	300	0.38	1.3	6.6	63	71	80	90				
mm	86.96	16.1	300	0.51	1.3	6.6	63	71	80	90				
119	76.42	18.3	300	0.58	1.3	6.6	63	71	80	90				
	61.63	22.7	300	0.71	1.3	6.6	63	71	80	90				
A302	55.03	25.4	280	0.75	1.3	6.6	71	80	90					
F302	48.22	29.0	280	0.85	1.2	6.6	71	80	90					
W	44.38	31.5	280	0.93	1.2	6.6	71	80	90					
mm	38.33	36.5	280	1.07	1.2	6.6	71	80	90					
119	34.62	40.4	280	1.19	1.2	6.6	71	80	90					
+	30.91	45.3	280	1.33	1.1	6.6	71	80	90					
PAM - IEC	27.92	50.1	280	1.47	1.1	6.6	71	80	90					
mm	26.45	52.9	260	1.44	1.1	6.6	71	80	90	100	112			
119	23.49	59.6	260	1.62	1.0	6.3	71	80	90					
	21.33	65.6	250	1.72	1.0	6.1	71	80	90	100	112			
	19.29	72.6	250	1.90	1.0	5.8	71	80	90	100	112			
	16.21	86.3	250	2.26	0.9	5.4	71	80	90	100	112			
	13.81	101.4	250	2.65	0.8	5.0	71	80	90	100	112			
	12.00	116.7	250	3.05	0.7	4.7	71	80	90	100	112			
	10.50	133.4	240	3.35	0.6	4.5	71	80	90	100	112			
	9.11	153.7	210	3.38	0.6	4.4	71	80	90	100	112			
	7.34	190.6	160	3.19	0.7	4.4	71	80	90	100	112			
	5.58	250.8	160	4.20	0.4	3.9	71	80	90	100	112			
A301	8.88	157.7	55	0.91	1.2	1.0	71	80	90					
F301	7.78	180.0	50	0.94	1.2	1.0	71	80	90					
W	6.18	226.5	50	1.19	1.2	0.9	71	80	90					
mm	5.58	250.7	50	1.31	1.2	0.9	71	80	90					
117	5.08	275.8	45	1.30	1.2	0.9	71	80	90					
+	4.27	328.1	45	1.55	1.1	0.8	71	80	90					
PAM - IEC	3.65	383.9	45	1.81	1.1	0.8	71	80	90					
mm	3.16	443.3	40	1.86	1.1	0.7	71	80	90					
117	2.76	506.9	30	1.59	1.1	0.7	71	80	90					
	2.59	540.4	30	1.70	1.1	0.7	71	80	90					
	2.04	686.8	25	1.80	1.1	0.7	71	80	90					
	1.47	953.2	25	2.50	1.0	0.6	71	80	90					

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A353 F353 W mm 123 + PAM - IEC mm 123	268.00	5.2	500	0.27	1.4	8.0	63	71						
	216.67	6.5	500	0.34	1.3	8.0	63	71						
	194.72	7.2	500	0.38	1.3	8.0	63	71						
	157.42	8.9	500	0.47	1.3	8.0	63	71						
	134.76	10.4	500	0.54	1.3	8.0	63	71	80	90				
	108.95	12.9	500	0.67	1.3	8.0	63	71	80	90				
	90.51	15.5	500	0.81	1.3	8.0	63	71	80	90				
	72.58	19.3	500	1.01	1.2	8.0	63	71	80	90				
	58.68	23.9	500	1.25	1.2	8.0	63	71	80	90				
A352 F352 W mm 123 + PAM - IEC mm 123	56.95	24.6	490	1.26	1.2	8.0	71	80	90					
	49.88	28.1	490	1.44	1.1	8.0	71	80	90					
	46.04	30.4	490	1.56	1.1	8.0	71	80	90					
	39.59	35.4	490	1.81	1.1	8.0	71	80	90	100	112			
	33.50	41.8	490	2.14	1.0	8.0	71	80	90					
	32.01	43.7	490	2.24	1.0	8.0	71	80	90	100	112			
	28.89	48.5	490	2.49	1.0	7.9	71	80	90	100	112			
	26.59	52.6	490	2.70	0.9	7.6	71	80	90	100	112			
	25.13	55.7	470	2.74	0.9	7.5	71	80	90	100	112			
	22.03	63.6	470	3.13	0.9	7.1	71	80	90	100	112			
	20.31	68.9	460	3.32	0.8	6.9	71	80	90	100	112			
	18.30	76.5	460	3.68	0.8	6.5	71	80	90	100	112			
	16.88	83.0	450	3.91	0.7	6.3	71	80	90	100	112			
	14.52	96.4	430	4.34	0.6	6.0		80	90	100	112			
	11.74	119.3	390	4.87	0.6	5.7		80	90	100	112			
	9.75	143.6	370	5.56	0.4	5.3		80	90	100	112			
	8.73	160.4	340	5.71	0.4	5.2		80	90	100	112			
	7.06	198.4	290	6.02	0.3	5.1		80	90	100	112			
	5.86	238.8	260	6.50	0.3	4.8		80	90	100	112			
A351 F351 W mm 121 + PAM - IEC mm 121	8.50	164.7	100	1.72	1.2	2.5	71	80	90					
	7.44	188.1	100	1.97	1.1	2.5	71	80	90					
	5.91	236.9	100	2.48	1.1	2.3	71	80	90	100	112			
	5.33	262.5	100	2.75	1.0	2.2	71	80	90	100	112			
	4.85	288.9	95	2.87	1.0	2.2	71	80	90	100	112			
	4.07	344.3	90	3.24	1.0	2.0	71	80	90	100	112			
	3.75	373.3	90	3.52	1.0	2.0	71	80	90	100	112			
	3.22	434.5	80	3.64	0.9	1.9	71	80	90	100	112			
	2.62	534.5	70	3.92	0.9	1.8	71	80	90	100	112			
	2.17	646.2	60	4.06	0.9	1.7		80	90	100	112			
	1.45	964.4	60	6.06	0.6	1.5		80	90	100	112			
	1.30	1074.4	40	4.50	0.8	1.5		80	90	100	112			

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A403	267.75	5.2	850	0.47	2.8	12.0	71	80	90					
F403	234.50	6.0	850	0.53	2.8	12.0	71	80	90					
W	215.01	6.5	850	0.58	2.8	12.0	71	80	90					
mm	186.14	7.5	850	0.67	2.7	12.0	71	80	90	100	112			
127	170.55	8.2	850	0.73	2.7	12.0	71	80	90					
+	149.47	9.4	850	0.83	2.7	12.0	71	80	90	100	112			
PAM - IEC	135.37	10.3	850	0.92	2.7	12.0	71	80	90	100	112			
mm	118.13	11.9	850	1.05	2.7	12.0	71	80	90	100	112			
127	94.86	14.8	850	1.31	2.7	12.0	71	80	90	100	112			
	85.91	16.3	850	1.45	2.6	12.0	71	80	90	100	112			
	68.25	20.5	850	1.83	2.6	12.0		80	90	100	112			
	54.81	25.5	850	2.27	2.5	12.0		80	90	100	112			
	49.64	28.2	850	2.51	2.5	12.0		80	90	100	112			
A402	45.38	30.9	850	2.75	2.4	12.0	80	90	100	112				
F402	39.72	35.2	850	3.14	2.4	12.0	80	90	100	112				
W	36.44	38.4	800	3.22	2.4	12.0	80	90	100	112				
mm	31.50	44.4	850	3.96	2.3	12.0	80	90	100	112	132			
127	28.89	48.5	800	4.06	2.3	12.0	80	90	100	112				
+	25.30	55.3	850	4.93	2.1	12.0	80	90	100	112	132			
PAM - IEC	22.91	61.1	850	5.44	2.1	12.0	80	90	100	112	132			
mm	19.94	70.2	850	6.25	1.9	11.7	80	90	100	112	132			
127	17.37	80.6	830	7.00	1.8	11.1	80	90	100	112	132			
	16.01	87.4	800	7.33	1.8	10.8	80	90	100	112	132			
	14.50	96.6	700	7.08	1.8	10.9	80	90	100	112	132			
	12.44	112.5	700	8.25	1.7	10.2	80	90	100	112	132			
	11.46	122.2	650	8.32	1.7	10.1	80	90	100	112	132			
	9.20	152.2	600	9.56	1.5	9.4	80	90	100	112	132			
	8.33	168.0	600	10.55	1.3	9.0	80	90	100	112	132			
	7.22	193.9	550	11.17	1.3	8.7	80	90	100	112	132			
	5.80	241.5	550	13.91	0.9	7.9	80	90	100	112	132			
	5.25	266.7	500	13.96	0.9	7.8	80	90	100	112	132			
A401	8.25	169.7	170	3.02	2.7	3.7	80	90	100	112				
F401	7.22	193.8	170	3.45	2.6	3.7	80	90	100	112				
W	5.73	244.4	170	4.35	2.5	3.4	80	90	100	112				
mm	5.17	271.0	170	4.82	2.5	3.2	80	90	100	112				
125	4.69	298.4	160	5.00	2.5	3.1	80	90	100	112				
+	3.93	355.9	150	5.59	2.4	3.0	80	90	100	112				
PAM - IEC	3.63	386.2	150	6.07	2.4	2.9	80	90	100	112				
mm	3.11	450.0	130	6.13	2.4	2.8	80	90	100	112				
125	2.52	554.7	120	6.97	2.3	2.6	80	90	100	112				
	2.08	672.0	120	8.44	2.1	2.4	80	90	100	112				
	1.31	1066.7	80	8.94	2.1	2.2	80	90	100	112				

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A503 F503 W mm 131 + PAM - IEC mm 131	222.59	6.3	1800	1.19	2.9	18.0	80	90	90					
	194.86	7.2	1800	1.35	2.9	18.0	80	90	90					
	178.98	7.8	1800	1.47	2.8	18.0	80	90	90					
	162.21	8.6	1800	1.63	2.8	18.0	80	90	90					
	154.52	9.1	1800	1.71	2.8	18.0	80	90	90	100	112	132		
	142.00	9.9	1800	1.86	2.8	18.0	80	90	90	100	112			
	124.25	11.3	1800	2.12	2.8	18.0	80	90	90	100	112	132		
	112.61	12.4	1800	2.34	2.7	18.0	80	90	90	100	112	132		
	97.80	14.3	1800	2.70	2.7	18.0	80	90	90	100	112	132		
	85.33	16.4	1800	3.09	2.7	18.0	80	90	90	100	112	132		
	78.64	17.8	1800	3.36	2.6	18.0	80	90	90	100	112	132		
	71.27	19.6	1800	3.70	2.6	18.0	80	90	90	100	112	132		
	56.21	24.9	1600	4.17	2.5	18.0	80	90	90	100	112	132		
A502 F502 W mm 131 + PAM - IEC mm 131	48.77	28.7	1600	4.81	2.4	18.0	80	90	100	112	132			
	43.32	32.3	1600	5.41	2.4	18.0	80	90	100	112	132			
	39.21	35.7	1600	5.98	2.3	17.7	80	90	100	112	132			
	34.83	40.2	1600	6.73	2.2	16.7	80	90	100	112	132			
	31.57	44.3	1600	7.43	2.1	16.0	80	90	100	112	132			
	28.26	49.5	1600	8.30	2.0	15.1	80	90	100	112	132			
	26.98	51.9	1600	8.69	2.0	14.8			100	112	132	160		
	23.14	60.5	1600	10.14	1.8	13.7			100	112	132	160		
	21.69	64.5	1600	10.81	1.7	13.2			100	112	132	160		
	19.66	71.2	1600	11.93	1.6	12.6			100	112	132	160		
	18.81	74.4	1500	11.69	1.6	12.7			100	112	132	160		
	16.86	83.0	1500	13.04	1.5	12.1			100	112	132	160		
	15.13	92.6	1500	14.54	1.3	11.4			100	112	132	160		
	13.71	102.1	1400	14.97	1.3	11.3			100	112	132	160		
	11.20	125.0	1100	14.39	1.3	11.5					132	160		
	9.01	155.4	900	14.65	1.3	11.2					132	160		
	8.16	171.5	800	14.36	1.3	11.2					132	160		
	7.55	185.5	800	15.54	1.2	10.8					132	160		
	6.07	230.6	700	16.91	1.0	10.3					132	160		
	5.50	254.5	700	18.65	0.8	9.8					132	160		
A501 F501 W mm 129 + PAM - IEC mm 129	8.56	163.6	350	6.00	2.5	4.0	80	90	100	112	132			
	7.60	184.2	350	6.75	2.4	4.0	80	90	100	112	132			
	6.17	227.0	340	8.08	2.3	3.9	80	90	100	112	132			
	5.62	249.3	330	8.62	2.2	3.7	80	90	100	112	132			
	4.73	295.8	320	9.91	2.1	3.5			100	112	132			
	4.06	344.9	320	11.56	1.9	3.3			100	112	132			
	3.78	370.6	310	12.03	1.9	3.2			100	112	132			
	3.30	424.2	310	13.77	1.7	3.0			100	112	132			
	2.58	541.9	280	15.89	1.5	2.8			100	112	132			
	1.97	712.3	230	17.15	1.4	2.7					132			
	1.46	960.8	220	22.13	0.9	2.4					132			
	1.32	1057.1	200	22.14	0.9	2.3					132			

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A603	242.67	5.8	3600	2.17	4.0	22.0	90	100	112	132				
F603	215.56	6.5	3500	2.38	4.0	22.0	90	100	112	132				
W	194.31	7.2	3500	2.64	4.0	22.0	90	100	112	132				
mm	181.13	7.7	3500	2.83	4.0	22.0	90	100	112	132				
135	160.90	8.7	3500	3.19	3.9	22.0	90	100	112	132				
	143.57	9.8	3500	3.57	3.9	22.0	90	100	112	132				
+	134.25	10.4	3500	3.82	3.9	22.0		100	112	132	160			
PAM - IEC	121.02	11.6	3500	4.24	3.9	22.0		100	112	132	160			
mm	100.21	14.0	3500	5.12	3.9	22.0		100	112	132	160			
135	93.60	15.0	3500	5.48	3.8	22.0		100	112	132	160			
	84.37	16.6	3500	6.08	3.8	22.0		100	112	132	160			
	79.98	17.5	3500	6.42	3.8	22.0		100	112	132	160			
	69.87	20.0	3500	7.34	3.7	22.0		100	112	132	160			
	55.75	25.1	3500	9.20	3.7	22.0				132	160			
A602	50.91	27.5	3300	9.50	3.6	22.0	100	112	132					
F602	45.27	30.9	3300	10.69	3.6	22.0	100	112	132	160				
W	40.81	34.3	3300	11.85	3.5	21.7	100	112	132	160				
mm	38.00	36.8	2800	10.80	3.6	22.0	100	112	132					
135	33.79	41.4	3200	13.88	3.4	20.0	100	112	132	160				
	30.35	46.1	3200	15.46	3.4	18.9	100	112	132	160				
+	28.36	49.4	3300	17.06	3.3	17.8	100	112	132	160	180			
PAM - IEC	25.57	54.8	3300	18.92	3.2	16.8	100	112	132	160	180			
mm	23.66	59.2	3300	20.45	3.1	16.1	100	112	132	160	180			
135	21.17	66.1	3200	22.16	3.1	15.4	100	112	132	160	180			
	19.59	71.5	3200	23.94	3.0	14.7	100	112	132	160	180			
	17.60	79.5	3200	26.65	2.9	13.8	100	112	132	160	180			
	15.87	88.2	3200	29.56	2.7	12.9	100	112	132	160	180			
	13.14	106.5	3100	34.59	2.5	11.8	100	112	132	160	180			
	10.91	128.3	3000	40.31	2.2	10.8			132	160	180			
	9.83	142.4	2800	41.74	2.2	10.8			132	160	180			
	8.14	171.9	2500	45.01	2.0	10.6			132	160	180			
	6.92	202.4	2300	48.74	1.8	10.4			132	160	180			
	6.24	224.5	2000	47.02	1.9	10.9			132	160	180			
	5.16	271.1	1800	51.10	1.7	10.5			132	160	180			
A601	8.30	168.7	650	11.48	3.4	5.0	100	112	132	160				
F601	7.45	187.8	650	12.78	3.4	5.0	100	112	132	160				
W	6.15	227.5	640	15.25	3.3	4.9	100	112	132	160				
mm	5.20	269.2	620	17.48	3.1	4.6	100	112	132	160	180			
133	4.81	290.9	620	18.89	3.1	4.4	100	112	132	160	180			
	4.28	327.3	610	20.90	3.0	4.2			132	160	180			
+	3.65	383.6	600	24.10	2.8	3.9	100	112	132	160	180			
PAM - IEC	3.23	433.8	600	27.25	2.7	3.7	100	112	132	160	180			
mm	2.44	572.7	550	32.98	2.4	3.4			132	160	180			
133	2.00	700.0	450	32.98	2.4	3.3			132	160	180			
	1.38	1011.1	450	47.64	1.7	2.8			132	160	180			
	1.27	1103.8	400	46.23	1.8	2.8			132	160	180			

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A703	260.15	5.4	5000	2.82	3.9	30.0	100	112	132					
F703	231.34	6.1	5000	3.17	3.9	30.0	100	112	132	160	180			
W	207.78	6.7	5000	3.53	3.9	30.0	100	112	132	160	180			
mm	189.54	7.4	5000	3.87	3.9	30.0	100	112	132	160	180			
139	173.11	8.1	5000	4.23	3.9	30.0	100	112	132	160	180			
+	155.48	9.0	5000	4.71	3.8	30.0	100	112	132	160	180			
PAM - IEC	144.94	9.7	5000	5.06	3.8	30.0	100	112	132	160	180	200		
mm	128.35	10.9	5000	5.71	3.8	30.0	100	112	132	160	180			
139	118.75	11.8	5000	6.17	3.8	30.0	100	112	132	160	180	200		
	108.46	12.9	5000	6.76	3.8	30.0	100	112	132	160	180	200		
	100.38	13.9	5000	7.30	3.7	30.0	100	112	132	160	180	200		
	89.95	15.6	5000	8.15	3.7	30.0	100	112	132	160	180	200		
	83.35	16.8	5000	8.79	3.7	30.0	100	112	132	160	180	200		
	73.70	19.0	5000	9.95	3.6	30.0	100	112	132	160	180	200		
	67.31	20.8	5000	10.89	3.6	30.0	100	112	132	160	180	200		
	55.75	25.1	5000	13.15	3.5	30.0			132	160	180	200		
	45.67	30.7	5000	16.05	3.4	30.0			132	160	180	200		
A702	44.67	31.3	5000	16.41	3.4	30.0	132	160	180					
F702	36.60	38.3	5000	20.03	3.2	30.0	132	160	180					
W	33.43	41.9	5000	21.93	3.2	29.5	132	160	180					
mm	30.27	46.2	5000	24.21	3.1	28.0	132	160	180					
139	27.87	50.2	5000	26.30	3.0	26.8	132	160	180	200				
+	24.80	56.4	5000	29.55	2.9	25.2	132	160	180					
PAM - IEC	22.84	61.3	5000	32.10	2.8	24.1	132	160	180	200				
mm	20.86	67.1	5000	35.14	2.6	22.9	132	160	180	200				
139	19.60	71.4	5000	37.40	2.6	22.1	132	160	180	200				
	17.18	81.5	4800	40.95	2.4	21.1	132	160	180	200				
	14.08	99.5	4600	47.90	2.1	19.4	132	160	180	200				
	12.86	108.9	4400	50.17	2.0	19.0	132	160	180	200				
	10.53	132.9	4000	55.68	1.8	18.2		160	180	200				
	8.63	162.3	3800	64.57	1.5	16.9		160	180	200				
	7.88	177.7	3700	68.83	1.3	16.3		160	180	200				
	7.20	194.6	3600	73.34	1.1	15.8		160	180	200				
	5.90	237.5	3200	79.57	0.9	15.3		160	180	200				
	5.38	260.0	3000	81.68	0.8	15.2		160	180	200				
A701	7.80	179.5	1000	18.79	3.2	6.0	132	160	180					
F701	6.33	221.1	900	20.83	3.1	6.0	132	160	180					
W	5.29	264.9	880	24.41	3.0	5.8	132	160	180					
mm	4.87	287.7	870	26.21	2.9	5.6	132	160	180	200				
137	4.18	335.2	850	29.84	2.7	5.3	132	160	180	200				
+	3.63	385.5	850	34.31	2.6	5.0	132	160	180	200				
PAM - IEC	3.19	438.8	820	37.68	2.4	4.8	132	160	180	200				
mm	3.00	466.7	800	39.09	2.4	4.7	132	160	180	200				
137	2.52	555.6	800	46.54	2.1	4.3	132	160	180	200				
	2.03	688.1	750	54.04	1.8	4.0	132	160	180	200				
	1.84	761.4	700	55.81	1.7	3.9		160	180	200				
	1.44	969.2	700	71.04	1.1	3.5		160	180	200				
	1.26	1114.3	650	75.84	0.9	3.4		160	180	200				

Typ / Type / Tipo Type / Tipo	i_{ges}	4-pol 50Hz 1400rpm n2 [min-1]	M_{amax} f_B=1 4 - pol. [Nm]	P_{1max} W $f_B \geq 1$			PAM - IEC f_B ➡ 39 - 107							
				4 - pol. 1400rpm [kW]	FR1 [kN]	FR2 [kN]								
A903	205.73	6.8	8000	5.70	8.0	55.0	132	160	180					
F903	185.64	7.5	8000	6.32	8.0	55.0	132	160	180					
W	154.07	9.1	8000	7.61	8.0	55.0	132	160	180					
mm	139.41	10.0	8000	8.41	8.0	55.0	132	160	180					
141	128.36	10.9	8000	9.14	8.0	55.0	132	160	180	200				
+	115.83	12.1	8000	10.13	8.0	55.0	132	160	180	200				
PAM - IEC	104.41	13.4	8000	11.23	8.0	55.0	132	160	180					
mm	96.13	14.6	8000	12.20	8.0	55.0	132	160	180	200				
141	86.43	16.2	8000	13.57	8.0	55.0	132	160	180	200				
	79.13	17.7	8000	14.82	8.0	55.0	132	160	180	200				
	71.40	19.6	8000	16.43	8.0	54.3	132	160	180	200				
	63.02	22.2	8000	18.61	8.0	51.2	132	160	180	200				
	59.26	23.6	8000	19.79	8.0	49.6	132	160	180	200				
	53.66	26.1	8000	21.86	8.0	47.2	132	160	180	200				
	48.50	28.9	8000	24.18	8.0	44.9		160	180	200				
A902	42.47	33.0	8000	27.61	5.1	42.3	160	180	200	225				
F902	38.33	36.5	8000	30.60	5.1	40.1	160	180	200	225				
W	31.81	44.0	8000	36.87	5.1	36.3	160	180	200	225				
mm	26.38	53.1	8000	44.46	5.1	32.3	160	180	200	225				
141	23.80	58.8	8000	49.28	5.1	30.8	160	180	200	225				
	19.75	70.9	8000	59.37	5.1	27.5	160	180	200	225				
+	17.18	81.5	7900	67.42	5.1	25.5	160	180	200	225				
PAM - IEC	15.50	90.3	7800	73.77	5.1	24.2	160	180	200	225				
mm	12.86	108.8	7300	83.19	5.1	22.9	160	180	200	225				
141	10.28	136.2	7200	102.69	5.0	20.0	160	180	200	225				
	9.28	150.9	6500	102.74	5.0	20.7	160	180	200	225				
	7.70	181.9	5300	100.94	5.0	21.9	160	180	200	225				
	6.89	203.2	5000	106.38	4.0	21.5	160	180	200	225				
	6.22	225.2	4900	115.54	4.0	20.6	160	180	200	225				
	5.16	271.3	4600	130.69	4.0	19.4	160	180	200	225				

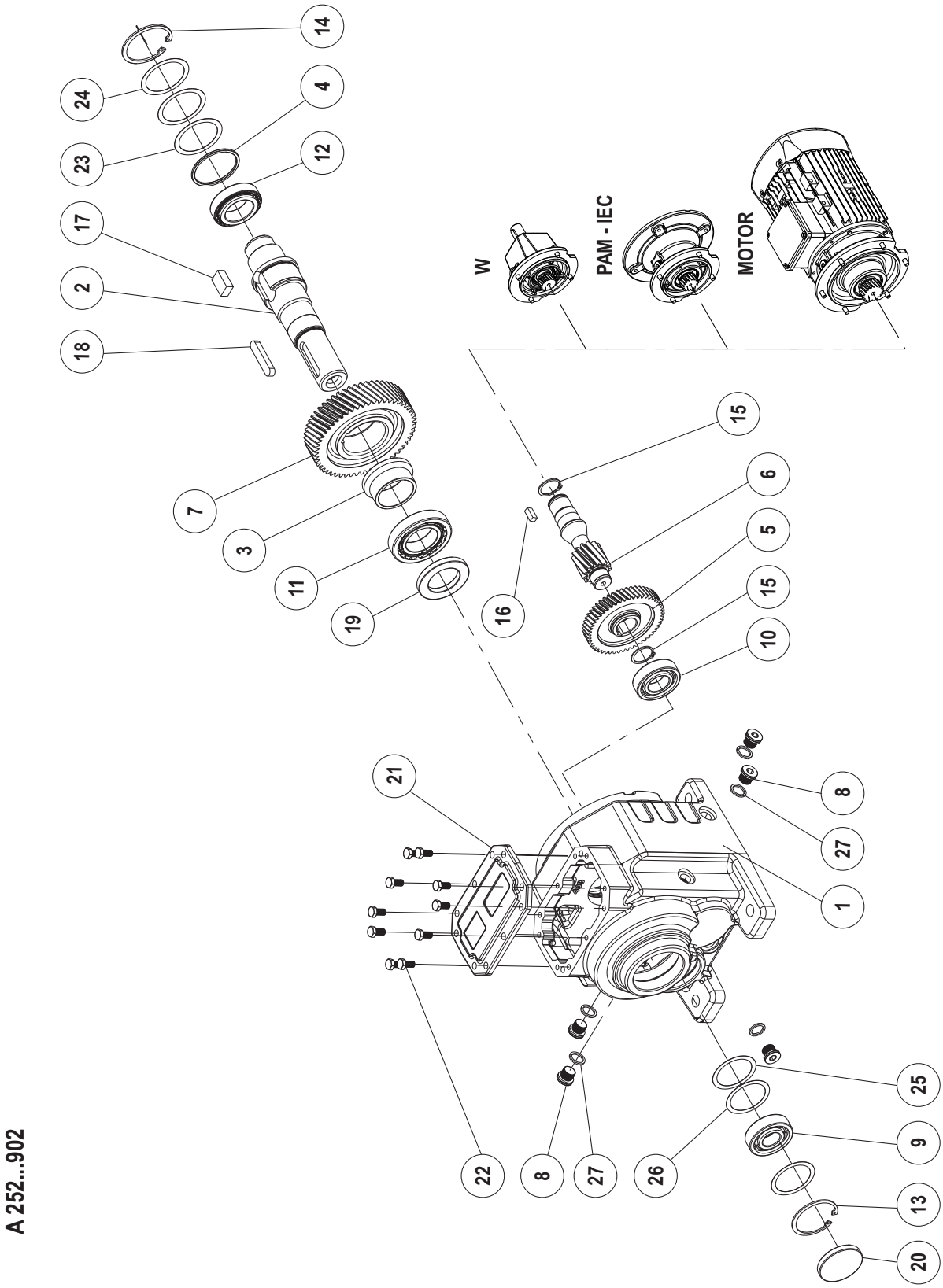
DE ALLGEMEINE TEILELISTE

EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL



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DE ALLGEMEINE TEILELISTE

EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL

01	**Getriebegehäuse**	Gear Case	Ingranaggi Box
02	**Abtriebswelle**	Solid Shaft	Albero di uscita
03	**Distanzbuchse**	Spacer	Distanziatore
04	**Stützscheibe**	Washer	Rondella
05	**Abtriebsrad**	Driving Gear	Ingranaggio Conduttore
06	**Ritzel Welle**	Pinion Shaft	Pignone
07	**Abtriebsrad**	Driven Gear	Ingranaggio Condotto
08	**Ölstopfen**	Oil Plug	Olio Tappo
09	**Kugellager**	Bearing	Cuscinetto
10	**Kugellager**	Bearing	Cuscinetto
11	**Kugellager**	Bearing	Cuscinetto
12	**Kugellager**	Bearing	Cuscinetto
13	**Sicherungsring**	Circlip	Anello di sicurezza
14	**Sicherungsring**	Circlip	Anello di sicurezza
15	**Sicherungsring**	Circlip	Anello di sicurezza
16	**Passfeder**	Key	Chiavetta
17	**Passfeder**	Key	Chiavetta
18	**Passfeder**	Key	Chiavetta
19	**Wellendichtring**	Shaft Seal	Tenuta Albero
20	**Verschlusskappe**	Locking cap	Tappo di chiusura
21	**Gehäusedeckel**	Case Cover	Coperchio della custodia
22	**Schraube**	Bolt	Bullone
23	**Scheibe**	Shim	Shim
24	**Scheibe**	Shim	Shim
25	**Scheibe**	Shim	Shim
26	**Scheibe**	Shim	Shim
27	**Dichtung**	Seal	Sigillo

01	Carter d'engrenage	La caja de engranajes
02	Arbre de sortie	Eje salida
03	Doville entretoise	Espaciador
04	Rondelle support	El apoyo el disco
05	Rove d'entrée	Engranaje conducido
06	Arbre intermédiaire	Deleje del piñón
07	Rove desortie	Engranaje conducido
08	Visde vidange	Tapón
09	Roulement a billes	Rodamiento de bolas
10	Roulement a billes	Rodamiento de bolas
11	Roulement a billes	Rodamiento de bolas
12	Roulement a billes	Rodamiento de bolas
13	Circlip	Anillo de seguridad
14	Circlip	Anillo de seguridad
15	Circlip	Anillo de seguridad
16	Clavette	Clave
17	Clavette	Clave
18	Clavette	Clave
19	Bague d'étancheite	Sello del eje
20	Bouchon	Tapón de cierre
21	Couvercle du carter	Tapá de la carcasa
22	Boulonner	Atornillor
23	Rondella d'ajustage	Calce
24	Rondella d'ajustage	Calce
25	Rondella d'ajustage	Calce
26	Rondella d'ajustage	Calce
27	Joint	Sellar

DE ALLGEMEINE TEILELISTE

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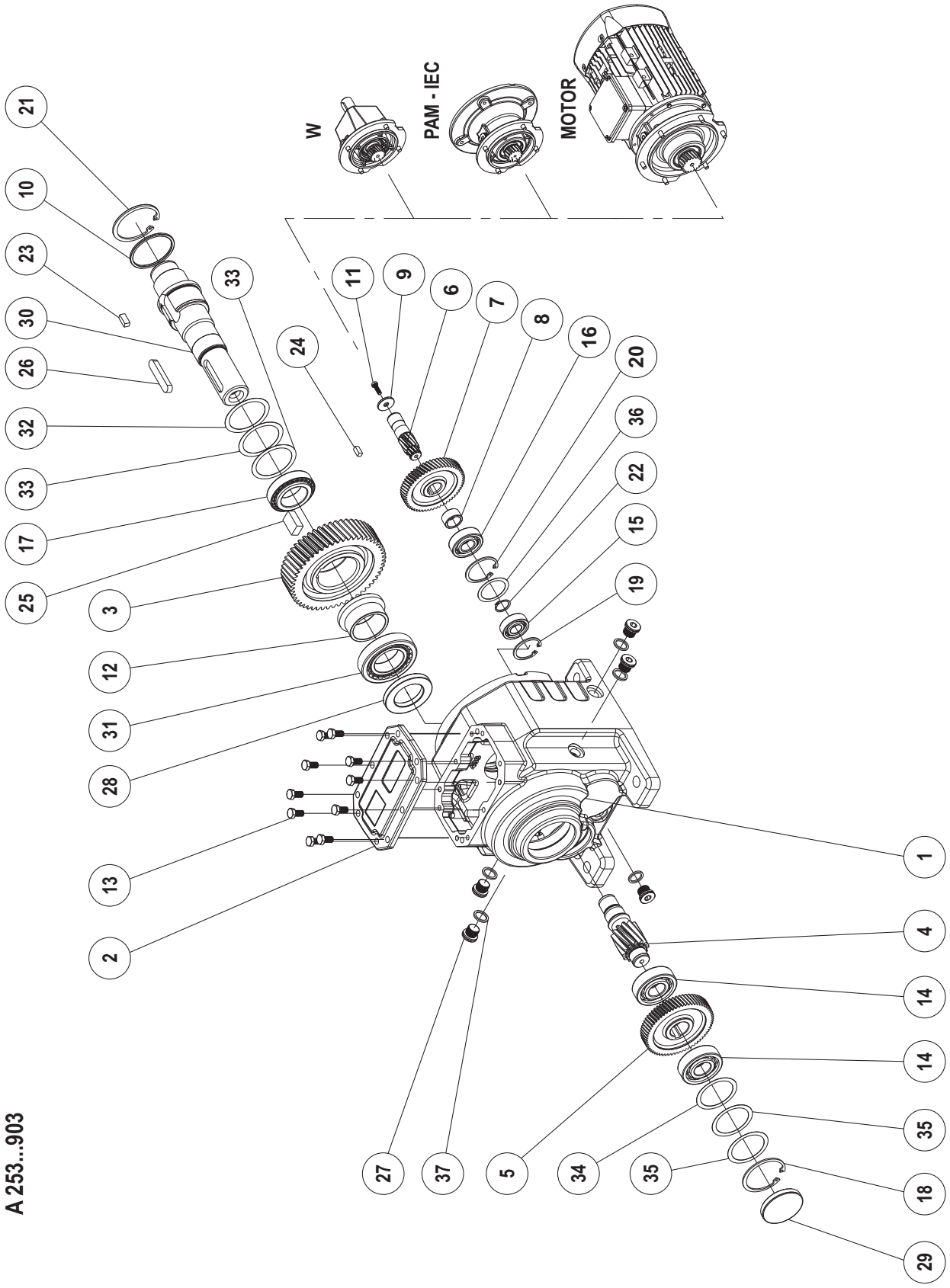
FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL



DE ALLGEMEINE TEILELISTE

EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL

01	**Getriebegehäuse**	Gear Case	Ingranaggi Box	Carter d'engrenage	La caja de engranajes
02	**Gehäusedeckel**	Case Cover	Coperchio della custodia	Couvercle du carter	Tapá de la carcasa
03	**Ausgangswelle**	Output Shaft	Albero di uscita	l'arbre de sortie	Eje de salida
04	**Abtriebsritzwelle**	Output Pinion Shaft	Pignone di uscita	Arbre de pignon de sortie	El eje de piñón de salida
05	**Abtriebsrad**	Driven Gear	Ingranaggio Condotto	Rove de sortie	Engranaje conducido
06	**Ritzel Welle**	Pinion Shaft	Pignone	Arbre intermédiare	Deleje del piñón
07	**Abtriebsrad**	Driving Gear	Ingranaggio Conduttore	Rove d'entrèe	Engranaje con ducido
08	**Abstandhalter**	Spacer	Distanziatore	Doville entretoise	Espaciador
09	**Stützscheibe**	Washer	Rondella	Rondelle support	El apoyo a disco
10	**Stützscheibe**	Washer	Rondella	Rondelle support	El apoyo a disco
11	**Schraube**	Bolt	Bullone	Boulonner	Atornillor
12	**Distanzbuchse**	Spacer	Distanziatore	Doville entretoise	Espaciador
13	**Schraube**	Bolt	Bullone	Boulonner	Atornillor
14	**Kugellager**	Bearing	Cuscinetto	Roulement a billes	Rodamiento de bolas
15	**Kugellager**	Bearing	Cuscinetto	Roulement a billes	Rodamiento de bolas
16	**Kugellager**	Bearing	Cuscinetto	Roulement a billes	Rodamiento de bolas
17	**Kugellager**	Bearing	Cuscinetto	Roulement a billes	Rodamiento de bolas
18	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
19	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
20	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
21	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
22	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
23	**Passfeder**	Key	Chiavetta	Clavette	Clave
24	**Passfeder**	Key	Chiavetta	Clavette	Clave
25	**Passfeder**	Key	Chiavetta	Clavette	Clave
26	**Passfeder**	Key	Chiavetta	Clavette	Clave
27	**Ölstopfen**	Oil Plug	Olio Tappo	Visde vidange	Tapón
28	**Wellendichtring**	Shaft Seal	Tenuta Albero	Bague d'étancheite	Sello del eje
29	**Öleinfüllstutzen Tasse**	Locking cap	Tappo di chiusura	Bouchon	Tapón de cierre
30	**Abtriebswelle**	Solid Shaft	Albero di uscita	Arbre de sortie	Eje de salida
31	**Kugellager**	Bearing	Cuscinetto	Roulement a billes	Rodamiento de bolas
32	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
33	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
34	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
35	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
36	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
37	**Dichtung**	Seal	Sigillo	Joint	Sellar

DE ALLGEMEINE TEILELISTE

EN GENERAL PART LIST

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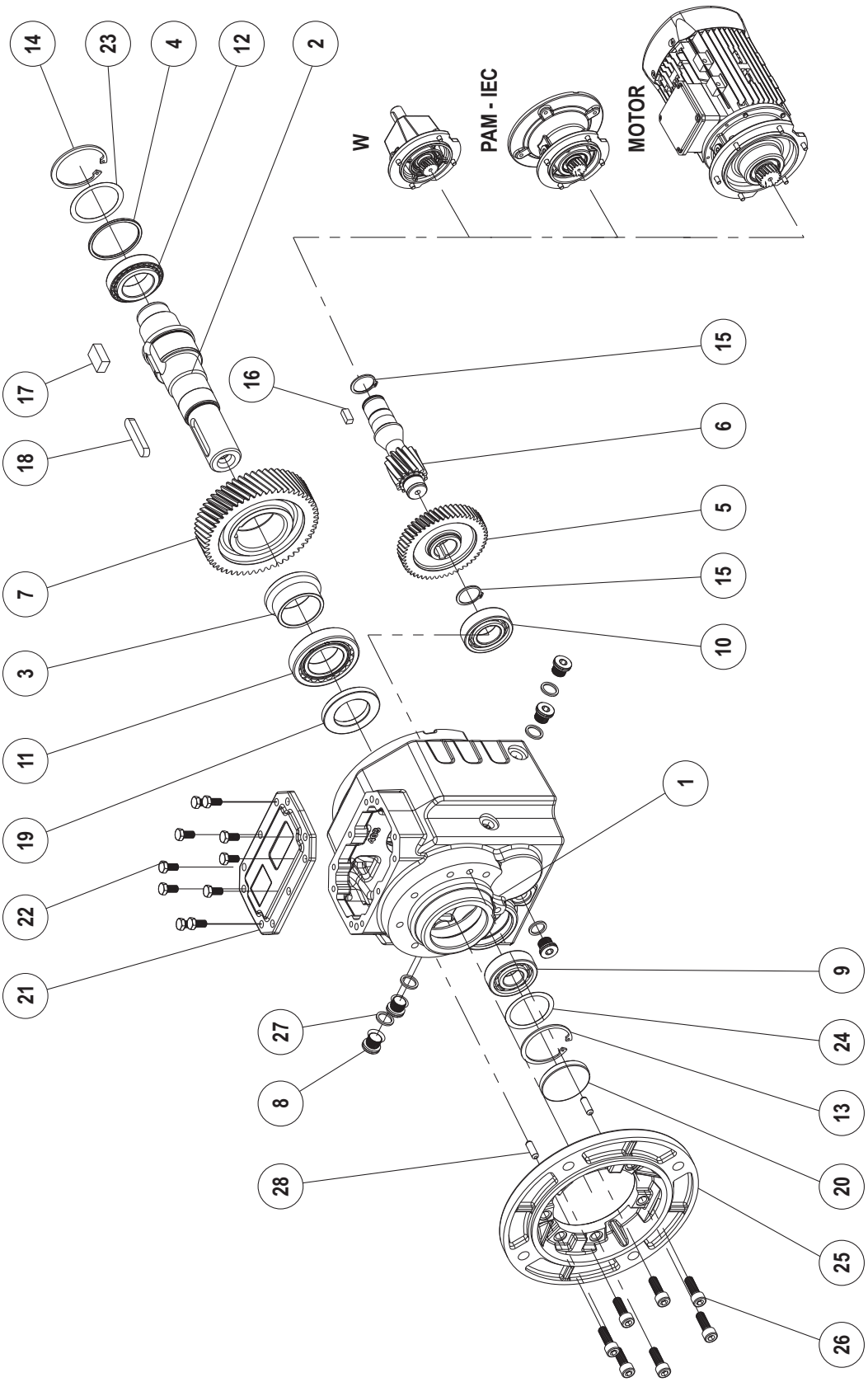
FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL



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DE ALLGEMEINE TEILELISTE

EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL

01	**Getriebegehäuse**	Gear Case	Ingranaggi Box
02	**Abtriebswelle**	Solid Shaft	Albero di uscita
03	**Distanzbuchse**	Spacer	Distanziatore
04	**Stützscheibe**	Washer	Rondella
05	**Abtriebsrad**	Driving Gear	Ingranaggio Conduttore
06	**Ritzel Welle**	Pinion Shaft	Pignone
07	**Abtriebsrad**	Driven Gear	Ingranaggio Condotto
08	**Ölstopfen**	Oil Plug	Olio Tappo
09	**Kugellager**	Bearing	Cuscinetto
10	**Kugellager**	Bearing	Cuscinetto
11	**Kugellager**	Bearing	Cuscinetto
12	**Kugellager**	Bearing	Cuscinetto
13	**Sicherungsring**	Circlip	Anello di sicurezza
14	**Sicherungsring**	Circlip	Anello di sicurezza
15	**Sicherungsring**	Circlip	Anello di sicurezza
16	**Passfeder**	Key	Chiavetta
17	**Passfeder**	Key	Chiavetta
18	**Passfeder**	Key	Chiavetta
19	**Wellendichtring**	Shaft Seal	Tenuta Albero
20	**Verschlusskappe**	Locking Cap	Tappo di chiusura
21	**Gehäusedeckel**	Case Cover	Coperchiodella custodia
22	**Schraube**	Bolt	Bullone
23	**Scheibe**	Shim	Shim
24	**Scheibe**	Shim	Shim
25	**B5 Flansch**	Flange B5	Flangia B5
26	**Schraube**	Bolt	Bullone
27	**Dichtung**	Seal	Sigillo
28	**Spannstift**	Dowel Pin	Tassello Pin

01	Carter d'engrenage	La caja de engranajes
02	Arbre de sortie	Eje de salida
03	Doville entretoise	Espaciador
04	Rondelle support	El apoyo a disco
05	Rove d'entrée	Engraneje conducido
06	Arbre intermêdiaire	Deleje del piñón
07	Rove de sortie	Engranaje conducido
08	Visde vidange	Tapón
09	Roulement a billes	Rodamientode bolas
10	Roulement a billes	Rodamientode bolas
11	Roulement a billes	Rodamientode bolas
12	Roulement a billes	Rodamientode bolas
13	Circlip	Anillo de seguridad
14	Circlip	Anillo de seguridad
15	Circlip	Anillo de seguridad
16	Clavette	Clave
17	Clavette	Clave
18	Clavette	Clave
19	Bague d'értancheite	Sello del eje
20	Bouchon	Tapón de cierre
21	Couvercle de carter	Tapá de la carcasa
22	Boulonner	Atornillor
23	Rondelle d'ajustage	Calce
24	Rondelle d'ajustage	Calce
25	B5 à bride	Brida B5
26	Boulonner	Atornillor
27	Joint	Sellar
28	Goupille	Pasador

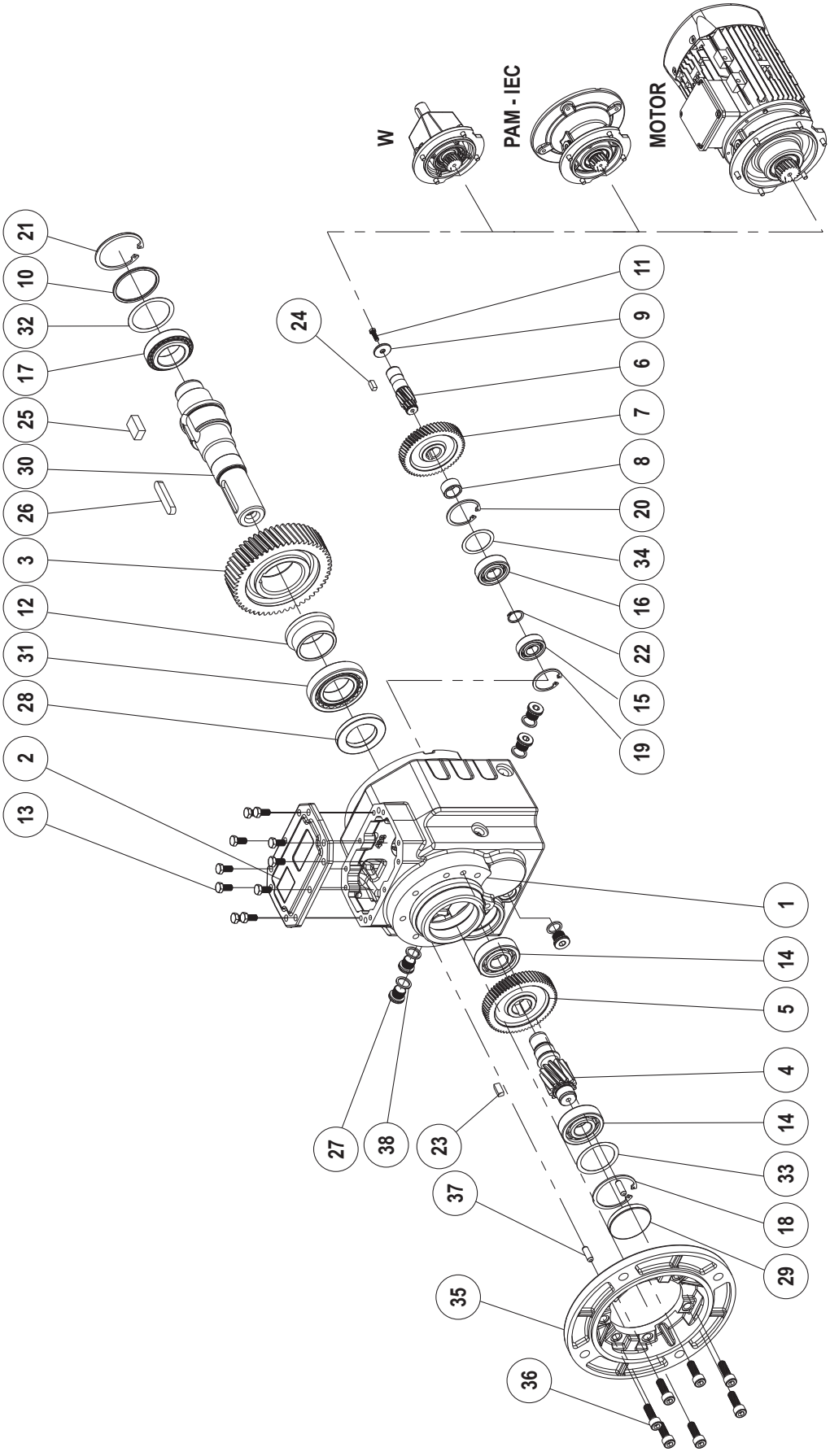
DE ALLGEMEINE TEILELISTE

EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL



F 253...903

DE ALLGEMEINE TEILELISTE

EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL

01	**Getriebegehäuse**	Gear Case	Ingranaggi Box	Carter d'engrenage	La caja de engranajes
02	**Gehäusedeckel**	Case Cover	Coperchiodella custodia	Couvercle du carter	Tapá de la carcasa
03	**Abtriebsrad**	Driving Gear	Ingranaggio Conduttore	Rove d'entrée	Engranaje conducido
04	**Ritzel welle**	Pinion Shaft	Pignone	Arbre intermédiaire	Deleje del piñón
05	**Abtriebsrad**	Driven Gear	Ingranaggio condotto	Rove de sortie	Engranaje conducido
06	**Pinion Gear**	Pinion Gear	Pignone	Arbre intermédiaire	Deleje del piñón
07	**Abtriebsrad**	Driving Gear	Ingranaggio conduttore	Rove d'entrée	Engranaje conducido
08	**Distanzbuchse**	Spacer	Distanziatore	Doville entretoise	Espaciador
09	**Stützscheibe**	Washer	Rondella	Rondelle support	El apoyo a disco
10	**Stützscheibe**	Washer	Rondella	Rondelle support	El apoyo a disco
11	**Schraube**	Bolt	Bullone	Boulonner	Atornillar
12	**Distanzbuchse**	Spacer	Distanziatore	Doville entretoise	Espaciador
13	**Schraube**	Bolt	Bullone	Boulonner	Atornillar
14	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
15	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
16	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
17	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
18	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
19	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
20	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
21	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
22	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
23	**Passfeder**	Key	Chiavetta	Clavette	Clave
24	**Passfeder**	Key	Chiavetta	Clavette	Clave
25	**Passfeder**	Key	Chiavetta	Clavette	Clave
26	**Passfeder**	Key	Chiavetta	Clavette	Clave
27	**Verschlussschraube**	Oil Plug	Olio Tappo	Visde vidange	Tapón
28	**Wellendichtring**	Shaft Seal	Tenuta Albero	Bague d'étancheité	Sello del eje
29	**Verschlusskappe**	Locking cap	Tappo di chiusura	Bouchon	Tapón de cierre
30	**Abtriebswelle**	Solid Shaft	Albero di uscita	Arbre de sortie	Eje de salida
31	**Verschlussschraube**	Bearing	Cuscinetto	Roulement a billes	Rodamiento de bolas
32	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
33	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
34	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Calce
35	**B5 Flansch**	Flange B5	Flangia B5	Brida B5	Brida B5
36	**Schraube**	Bolt	Bullone	Boulonner	Atornillar
37	**Pin**	Dowel Pin	Pin	Pin	Pin
38	**Dichtung**	Seal	Sigillo	Joint	Sellar

DE ALLGEMEINE TEILELISTE

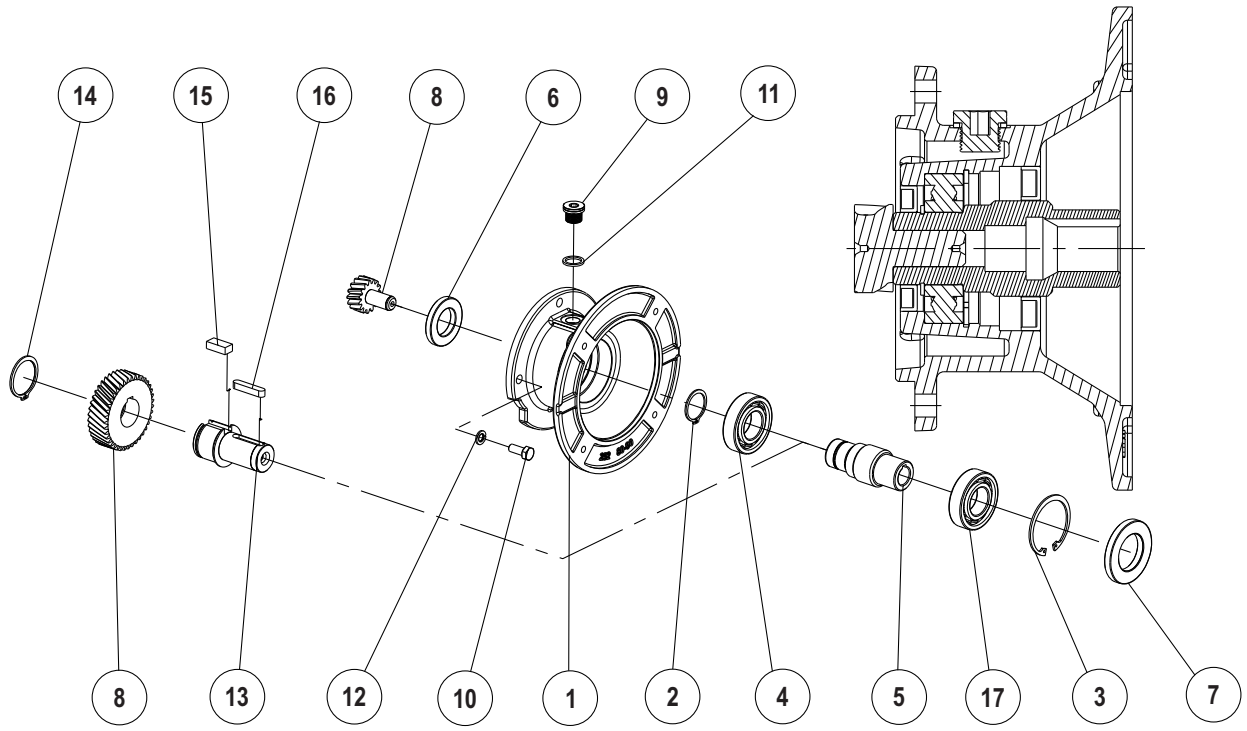
EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL

A/F 252...502 PAM
A/F 253...503 PAM



01	**PAM Box**	PAM Case	PAM Box	PAM Boite	PAM Caja
02	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
03	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
04	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
05	**PAM Welle**	PAM Shaft	PAM Albero	PAM Arbre	PAM Eje
06	**Wellendichtring**	Shaft Seal	Tenuta Albero	Bague d'étancheite	Sello del eje
07	**Wellendichtring**	Shaft Seal	Tenuta Albero	Bague d'étancheite	Sello del eje
08	**Antriebsritzel**	Input Pinion	Ingresso Pignone	Pignon d'entrée	Piñón de entrada
09	**Verschlussschraube**	Oil Plug	Olio Tappo	Visde vidange	Tapón
10	**Schraube**	Bolt	Bullone	Boulonner	Atornillor
11	**Dichtung**	Seal	Sigillo	Joint	Sellar
12	**Federscheibe**	Spring Washer	Rondella elastica	Rondella élastique	Arandela
13	**Z1 Welle**	Z1 Shaft	Z1 Albero	Z1 Arbre	Z1 Eje
14	**Circlip**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
15	**Passfeder**	Key	Chiavetta	Clavette	Clave
16	**Passfeder**	Key	Chiavetta	Clavette	Clave
17	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas

DE ALLGEMEINE TEILELISTE

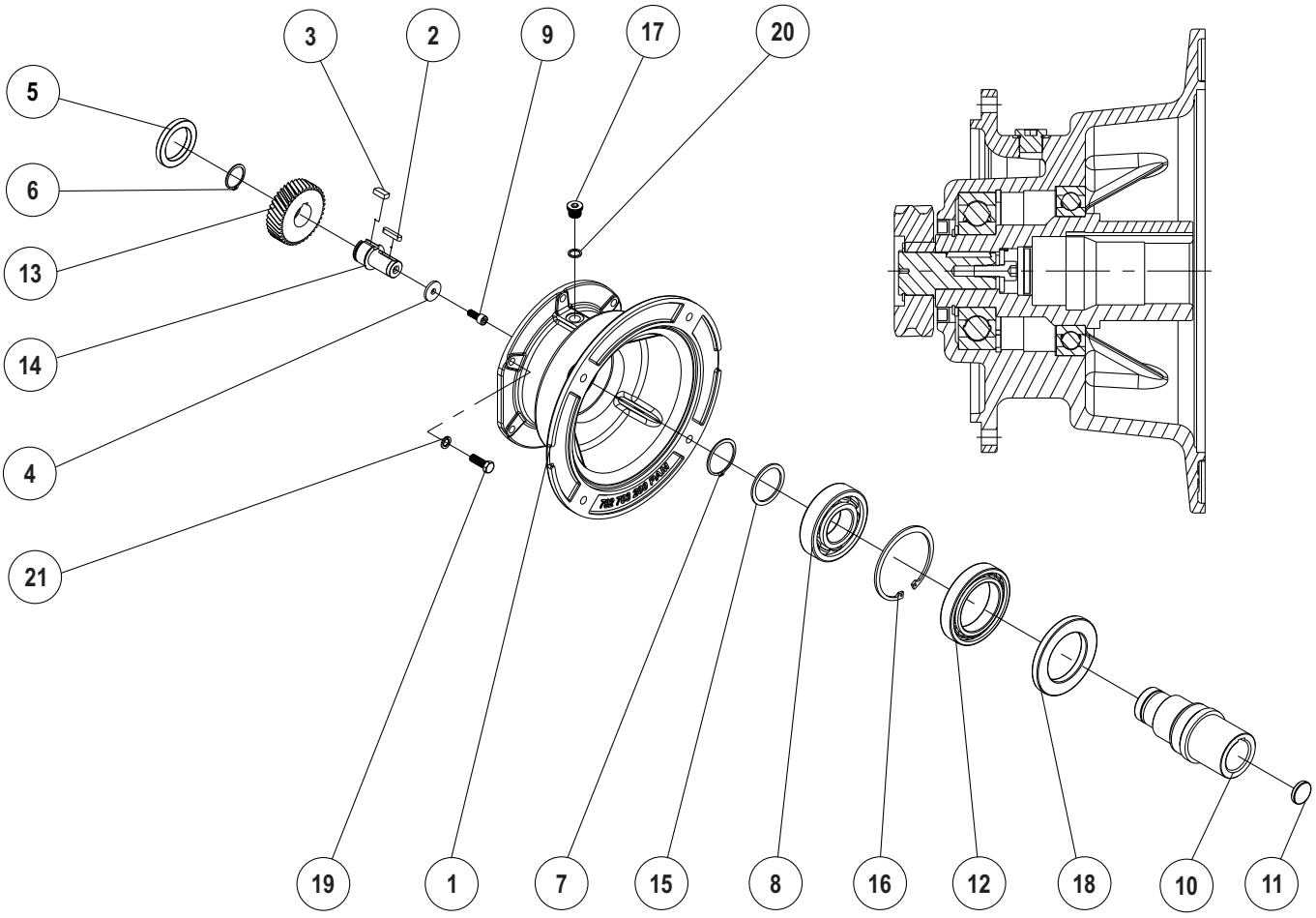
EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL

A/F 602...902 PAM
A/F 603...903 PAM



01	**PAM Box**	PAM Case	PAM Box	PAM Boite	PAM Caja
02	**Passfeder**	Key	Chiavetta	Clavette	Clave
03	**Passfeder**	Key	Chiavetta	Clavette	Clave
04	**Stützscheibe**	Washer	Rondella	Rondelle support	Al apoyo a disco
05	**Wellendichtring**	Shaft Seal	Tenuta Albero	Bagua d'étancheite	Sello del eje
06	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
07	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
08	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
09	**Schraube**	Bolt	Bullone	Boulonner	Atornillar
10	**PAM Welle**	PAM Shaft	PAM Albero	PAM Arbre	PAM Eje
11	**Verschlusskappe**	Locking cap	Tappo di chiusura	Bouchon	Tapón de cierre
12	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
13	**Antriebsritzel**	Input Pinion	Ingresso Pignone	Pignon d'entrée	Piñón de entrada
14	**Z1 Welle**	Z1 Shaft	Z1 Albero	Z1 Arbre	Z1 Eje
15	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Rondelle d'ajustage
16	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
17	**Verschlussschraube**	Oil Plug	Olio Tappo	Visde vidange	Tapón
18	**Wellendichtring**	Shaft Seal	Tenuta Albero	Bague d'étancheite	Sello del eje
19	**Schraube**	Bolt	Bullone	Boulonner	Atornillor
20	**Dichtung**	Seal	Sigillo	Joint	Sellar
21	**Federscheibe**	Spring Washer	Rondella Elastica	Rondella élastique	Arandela

DE ALLGEMEINE TEILELISTE

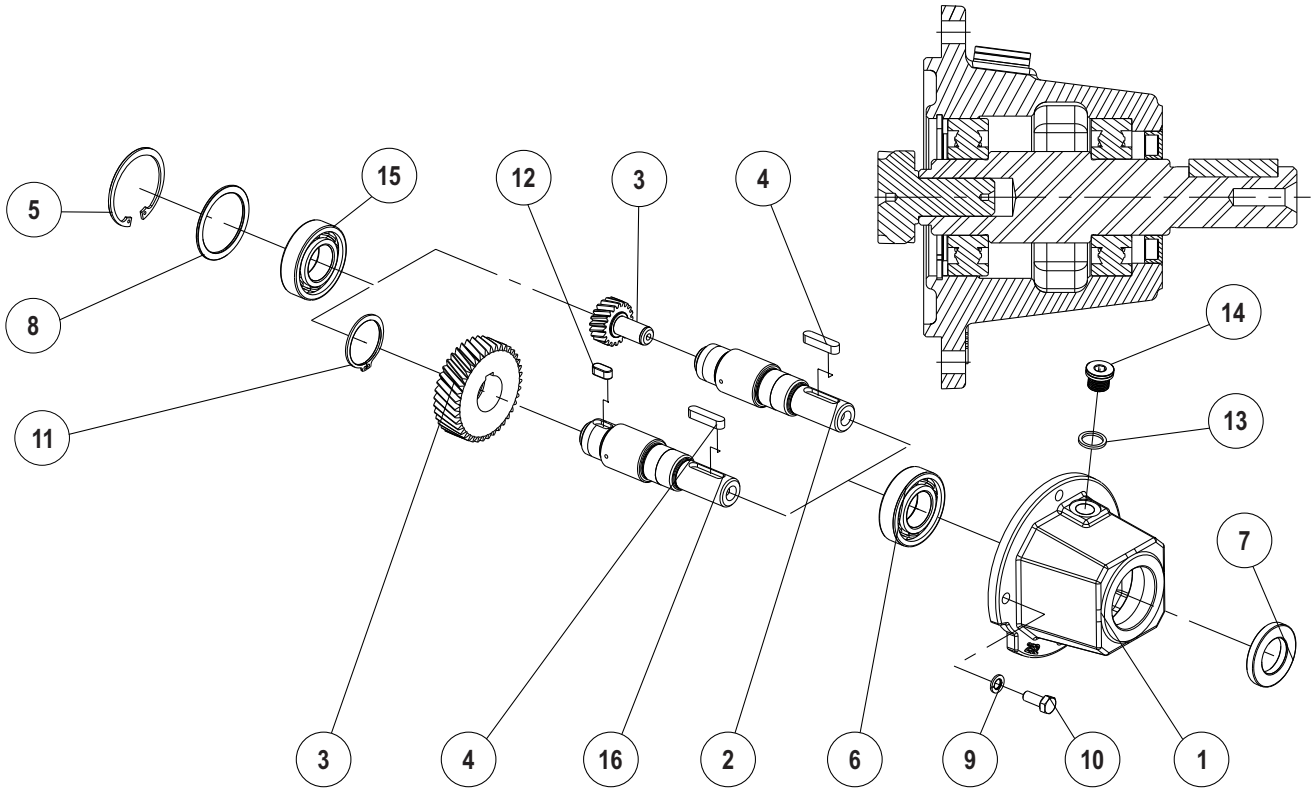
EN GENERAL PART LIST

IT GENERALE ELENCO DELLE PARTI

FR GÉNÉRALE LA LISTE DES PIÈCES

ES LISTE DE PIEZAS EN GENERAL

A/F 252...253 / 902...903 W



1	**W Box**	W Case	W Box	W Boite	W Caja
2	**W Welle mit Getriebe**	W Shaft with gear	W Albero con ingranaggio	W Arbre avec des engins	W Eje col el engranaje
3	**Antriebsritzel**	Input Pinion	Ingresso Pignone	Pignon d'entrée	Piñón de entrada
4	**Passfeder**	Key	Chiavetta	Clavette	Clave
5	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
6	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
7	**Wellendichtring**	Shaft Seal	Tenuta Albero	Bague d'étancheite	Sello del eje
8	**Scheibe**	Shim	Shim	Rondelle d'ajustage	Rondelle d'ajustage
9	**Federscheibe**	Spring Washer	Rondella elastica	Rondella élastique	Arandela
10	**Schraube**	Bolt	Bullone	Boulonner	Atornillor
11	**Sicherungsring**	Circlip	Anello di sicurezza	Circlip	Anillo de seguridad
12	**Passfeder**	Key	Chiavetta	Clavette	Clave
13	**Dichtung**	Seal	Sigillo	Joint	Sellar
14	**Verschlussschraube**	Oil Plug	Olio Tappo	Visde vidange	Tapón
15	**Kugellager**	Bearing	Cuscinetto	Roulement	Rodamiento de bolas
16	**W Welle**	W Shaft	W Albero	W Arbre	W Eje

ELECTRICAL CHARACTERISTICS AT 50 Hz

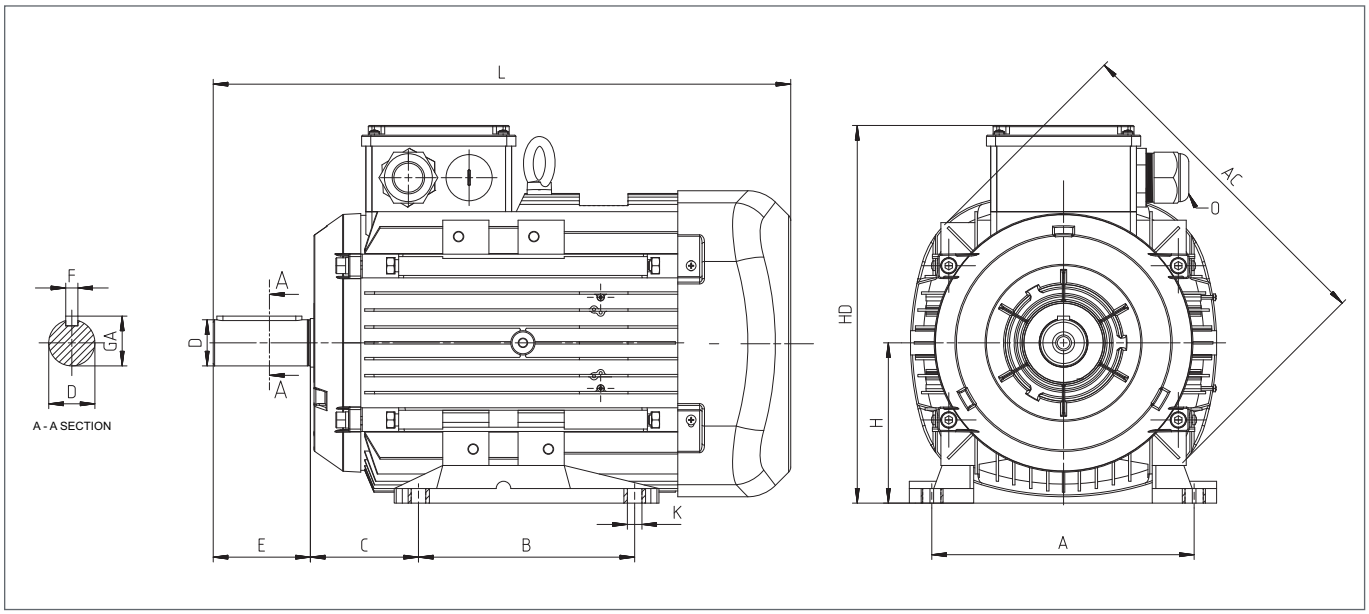
	Motor Type	Housing Type	Rated Values					Starting Values				Brakedown Torque Ratio	Efficiency*			Cos ϕ	J	Weight (B3)	Sound Pressure Level dBA**
			Power		Speed	Current	Torque	Current I_A / A_N		Torque M_A / M_N			η%						
			kW	HP	d/d	A	Nm	⅄	Δ	⅄	Δ	Mk/Mn	4/4	3/4	2/4	4/4	kgm²	kg	
	2pole3000d/d																		
220/380V	Q3E80M2C	Aluminum	0,75	1,0	2880	1,7	2,5	7,4	-	4,0	-	4,8	80,7	79,1	77,4	0,86	0,00109	12,2	58
	Q3E80M2D	Aluminum	1,1	1,5	2895	2,4	3,7	8,4	-	4,9	-	5,1	82,7	82,1	78,9	0,84	0,00150	13	58
	Q3E90L2C	Aluminum	1,5	2,0	2910	3,2	4,9	8,9	-	4,2	-	4,9	84,2	84,7	82,3	0,86	0,00182	17,5	62
	Q3E90L2D	Aluminum	2,2	3,0	2900	4,6	7,2	8,6	-	4,6	-	4,0	85,9	87,0	85,5	0,84	0,00182	18	62
	Q3E100L2D	Aluminum	3,0	4,0	2920	5,6	9,8	9,8	-	4,1	-	4,4	87,1	86,9	84,5	0,89	0,00335	25	64
380/660V	Q3E112M2C	Aluminum	4,0	5,5	2915	7,8	13,2	3,2	9,7	1,3	3,8	5,1	88,1	87,9	85,7	0,87	0,00489	31	67
	Q3E132S2C	Aluminum	5,5	7,5	2900	10,4	18,0	3,6	10,8	1,0	3,0	3,5	89,2	88,9	86,7	0,91	0,01410	48	70
	Q3E132M2A	Aluminum	7,5	10,0	2930	13,7	24,5	3,2	9,7	1,3	3,8	4,4	90,1	90,3	88,9	0,91	0,01596	51	70
	Q3E160L2A	Aluminum	11,0	15,0	2940	19,8	35,9	2,9	8,8	1,0	3,0	5,1	91,2	91,4	90,3	0,93	0,03317	77	71
	Q3E160L2C	Aluminum	15,0	20,0	2945	26,7	48,8	3,6	10,8	1,1	3,2	3,9	91,9	91,0	90,3	0,93	0,04075	91	71
	Q3E160L2D	Aluminum	18,5	25,0	2940	33,4	60,0	2,9	8,8	1,3	3,8	4,1	92,4	92,0	90,9	0,91	0,04075	101	71
	Q3E180M2A	Aluminum	22,0	30,0	2955	38,7	71,3	3,5	10,5	1,1	3,2	3,2	92,7	92,9	91,7	0,93	0,06193	139	77
	Q3E200L2C	Aluminum	30,0	40,0	2950	52,9	97,4	3,0	9,1	0,8	2,4	3,5	93,3	93,8	93,4	0,93	0,11917	167	80
	Q3E200L2D	Aluminum	37,0	50,0	2950	65,2	119,5	3,2	9,7	0,9	2,7	3,5	93,7	94,1	93,8	0,92	0,15010	179	80
	Q3E225M2C	Aluminum	45,0	60,0	2965	80,3	145,2	2,7	8,0	0,8	2,4	3,4	94,0	94,0	93,2	0,91	0,23505	249	81
	Q3EP250M2C	Cast Iron	55,0	75,0	2980	95,9	178,5	2,1	6,4	0,7	2,1	3,1	94,3	94,0	92,6	0,91	0,48707	488	82
	Q3EP280M2C	Cast Iron	75,0	100,0	2975	125,4	240,8	2,7	8,0	0,6	1,9	4,0	94,7	94,0	92,7	0,92	0,54033	585	84
	Q3EP280M2D	Cast Iron	90,0	125,0	2975	151,3	289,4	2,7	8,0	0,7	2,1	4,9	95,0	94,2	92,7	0,93	0,64510	587	84
400/690V	Q3EP315S2C	Cast Iron	110,0	127,0	2.983	187	358	2,4	7,2	0,6	1,7	2,6	95,2	95,2	94,0	0,89	2,19900	963	83
	Q3EP315M2B	Cast Iron	132,0	152,0	2.983	224	418	2,5	7,5	0,6	1,8	2,6	95,4	95,4	94,4	0,89	2,37790	1.007	83
	Q3EP315L2A	Cast Iron	160,0	184,0	2.983	271	513	2,5	7,5	0,6	1,8	2,6	95,6	95,6	94,4	0,89	2,62170	1.065	83
	Q3EP315L2C	Cast Iron	200,0	230,0	2.983	339	641	2,5	7,5	0,6	1,9	2,6	95,8	95,8	94,9	0,89	2,90860	1.180	83
	Q3EP355M2C	Cast Iron	250,0	280,0	2.983	419	800	2,4	7,3	0,6	1,7	2,5	95,8	95,8	94,7	0,90	3,81300	1.612	91
	Q3EP355L2B	Cast Iron	315,0	353,0	2.984	527	1.008	2,4	7,3	0,6	1,8	2,5	95,8	95,7	94,4	0,90	4,52000	1.771	91
	Q3EP355L2C	Cast Iron	355,0	398,0	2.981	594	1.137	2,6	7,9	0,7	2,2	2,5	95,8	95,8	95,0	0,90	5,58000	2.002	91
	4pole1500d/d																		
220/380V	Q3E80M4D	Aluminum	0,75	1,0	1430	1,8	5,0	6,1	-	3,0	-	3,1	82,5	81,2	78,0	0,77	0,00268	12	49
	Q3E90L4C	Aluminum	1,1	1,5	1440	2,5	7,4	7,5	-	2,9	-	3,3	84,1	84,1	81,3	0,80	0,00365	18	54
	Q3E90L4D	Aluminum	1,5	2,0	1440	3,5	10,0	7,9	-	3,2	-	3,6	85,3	84,9	82,0	0,76	0,00365	18	55
	Q3E100L4C	Aluminum	2,2	3,0	1445	5,1	14,6	7,6	-	3,7	-	4,0	86,7	84,4	82,0	0,78	0,00545	26	56
	Q3E100L4D	Aluminum	3,0	4,0	1435	7,1	19,9	8,2	-	3,8	-	4,1	87,7	87,3	85,5	0,73	0,00581	26	56
380/660V	Q3E112M4D	Aluminum	4,0	5,5	1445	8,3	26,3	2,8	8,3	1,0	3,0	4,0	88,6	87,6	85,8	0,83	0,01123	31	58
	Q3E132M4B	Aluminum	5,5	7,5	1465	11,4	36,2	2,3	6,8	1,1	3,2	3,9	89,6	89,0	86,8	0,80	0,02763	54	61
	Q3E132M4C	Aluminum	7,5	10,0	1450	15,8	49,4	2,5	7,4	1,0	3,0	4,1	90,4	89,3	87,4	0,82	0,02980	57	61
	Q3E160L4A	Aluminum	11,0	15,0	1470	23,0	71,9	2,4	7,1	1,0	3,0	3,6	91,4	90,7	89,4	0,81	0,06922	90	63
	Q3E160L4B	Aluminum	15,0	20,0	1465	30,8	98,0	2,7	8,0	0,9	2,6	3,4	92,1	91,7	90,7	0,82	0,07991	107	63
	Q3E180M4B	Aluminum	18,5	25,0	1470	35,3	120,7	2,8	8,3	0,8	2,4	3,1	92,6	92,5	92,2	0,86	0,11220	148	69
	Q3E180L4B	Aluminum	22,0	30,0	1475	42,0	142,4	2,7	8,0	0,8	2,4	2,5	93,0	93,0	93,0	0,86	0,12773	157	69
	Q3E200L4D	Aluminum	30,0	40,0	1480	54,3	193,6	2,4	7,1	0,7	2,2	2,5	93,6	93,6	93,7	0,86	0,26448	183	70
	Q3E225M4D	Aluminum	37,0	50,0	1485	77,8	239,6	2,8	8,3	0,9	2,7	3,3	93,9	92,6	90,6	0,81	0,36429	280	71
	Q3E225M4DE	Aluminum	45,0	60,0	1480	84,3	289,9	2,9	8,6	0,9	2,7	3,3	94,2	93,1	91,6	0,85	0,43513	282	71
	Q3EP250M4E	Cast Iron	55,0	75,0	1450	100,0	356,1	2,6	7,7	0,9	2,7	3,2	94,6	94,0	92,8	0,87	0,90782	506	72
	Q3EP280M4C	Cast Iron	75,0	100,0	1485	141,7	482,0	2,5	7,4	0,9	2,7	2,9	95,0	94,7	93,5	0,84	1,06114	624	73
	Q3EP280M4D	Cast Iron	90,0	125,0	1485	163,5	584,2	2,5	7,4	0,9	2,7	2,9	95,2	94,5	93,7	0,86	1,14768	653	73
400/690V	Q3EP315S4C	Cast Iron	110,0	127,0	1.489	194	705	2,5	7,5	0,7	2,0	2,5	95,4	95,4	94,7	0,86	3,46500	867	70
	Q3EP315M4B	Cast Iron	132,0	152,0	1.489	232	846	2,5	7,6	0,7	2,1	2,5	95,6	95,6	95,0	0,86	3,96600	993	70
	Q3EP315L4A	Cast Iron	160,0	184,0	1.489	274	1.026	2,5	7,6	0,7	2,2	2,5	95,8	95,8	95,4	0,88	4,88320	1.165	70
	Q3EP315L4C	Cast Iron	200,0	230,0	1.489	346	1.282	2,7	8,2	0,7	2,2	2,5	96,0	96,0	95,5	0,87	5,23440	1.223	70
	Q3EP355M4C	Cast Iron	250,0	280,0	1.491	422	1.601	2,5	7,5	0,6	1,9	2,4	96,0	96,0	95,5	0,89	9,30600	1.692	82
	Q3EP355L4B	Cast Iron	315,0	353,0	1.491	532	2.017	2,5	7,5	0,6	1,9	2,4	96,0	96,0	95,5	0,89	10,06700	1.879	82
	Q3EP355L4C	Cast Iron	355,0	398,0	1.491	600	2.273	2,5	7,5	0,7	2,0	2,3	96,0	96,0	95,5	0,89	11,90000	1.953	82

ELECTRICAL CHARACTERISTICS AT 50 Hz

	Motor Type	Housing Type	Rated Values					Starting Values				Brakedown Torque Ratio	Efficiency*			Cos ϕ	J	Weight (B3)	Sound Pressure Level dBA**
			Power		Speed	Current	Torque	Current I_A / A_N		Torque M_A / M_N			η%						
			kW	HP	d/d	A	Nm	⅄	Δ	⅄	Δ	Mk/Mn	4/4	3/4	2/4	4/4	kgm²	kg	
	6pole1000d/d																		
220/380V	Q3E90L6C	Aluminum	0,75	1,0	940	2,2	7,6	4,0	-	2,3	-	2,5	78,9	77,7	76,1	0,65	0,00365	18	54
	Q3E90L6D	Aluminum	1,1	1,5	940	3,1	11,2	4,2	-	2,3	-	2,6	81,0	80,5	79,9	0,66	0,00451	20	55
	Q3E100L6D	Aluminum	1,5	2,0	940	3,9	15,2	4,5	-	2,3	-	2,7	82,5	81,9	79,0	0,68	0,00570	26	56
	Q3E112M6D	Aluminum	2,2	3,0	950	5,4	22,0	4,7	-	2,4	-	2,7	84,3	83,7	80,7	0,73	0,01107	32	58
380/660V	Q3E132M6B	Aluminum	3,0	4,0	960	7,5	29,7	1,7	5,2	0,6	1,7	2,3	85,6	85,2	82,8	0,70	0,02709	58,5	61
	Q3E132M6C	Aluminum	4,0	5,5	955	9,5	39,8	1,8	5,3	0,6	1,9	2,3	86,8	85,7	82,8	0,74	0,02921	67	61
	Q3E132M6D	Aluminum	5,5	7,5	950	12,7	55,0	1,7	5,0	0,6	1,8	2,3	88,0	87,6	85,3	0,75	0,03347	76	61
	Q3E160L6C	Aluminum	7,5	10,0	970	17,7	74,2	1,8	5,5	0,6	1,9	2,7	89,1	89,0	88,0	0,72	0,07663	96	63
	Q3E160L6D	Aluminum	11,0	15,0	955	25,3	109,4	1,8	5,5	0,6	1,9	2,7	90,3	90,1	89,3	0,75	0,08129	100,5	63
	Q3E180L6B	Aluminum	15,0	20,0	978	32,2	146,2	2,0	5,9	0,6	1,8	2,6	91,2	90,9	88,7	0,79	0,22951	155	69
	Q3E200L6C	Aluminum	18,5	25,0	975	37,7	180,3	1,8	5,5	0,5	1,6	2,4	91,7	91,5	90,9	0,82	0,31281	165	70
	Q3E200L6D	Aluminum	22,0	30,0	975	44,5	214,4	1,8	5,5	0,5	1,6	2,4	92,2	92,0	91,4	0,82	0,33078	170	70
	Q3E225M6C	Aluminum	30,0	40,0	970	62,1	293,8	1,8	5,4	0,5	1,6	2,3	92,9	92,8	91,8	0,79	0,52901	237,5	71

*** According to IEC 60034-2-1**
**** The sound pressure measurement are taken 1m away from the motor.**
**** Tolerance + 3 dBA**

DIMENSIONS - B3



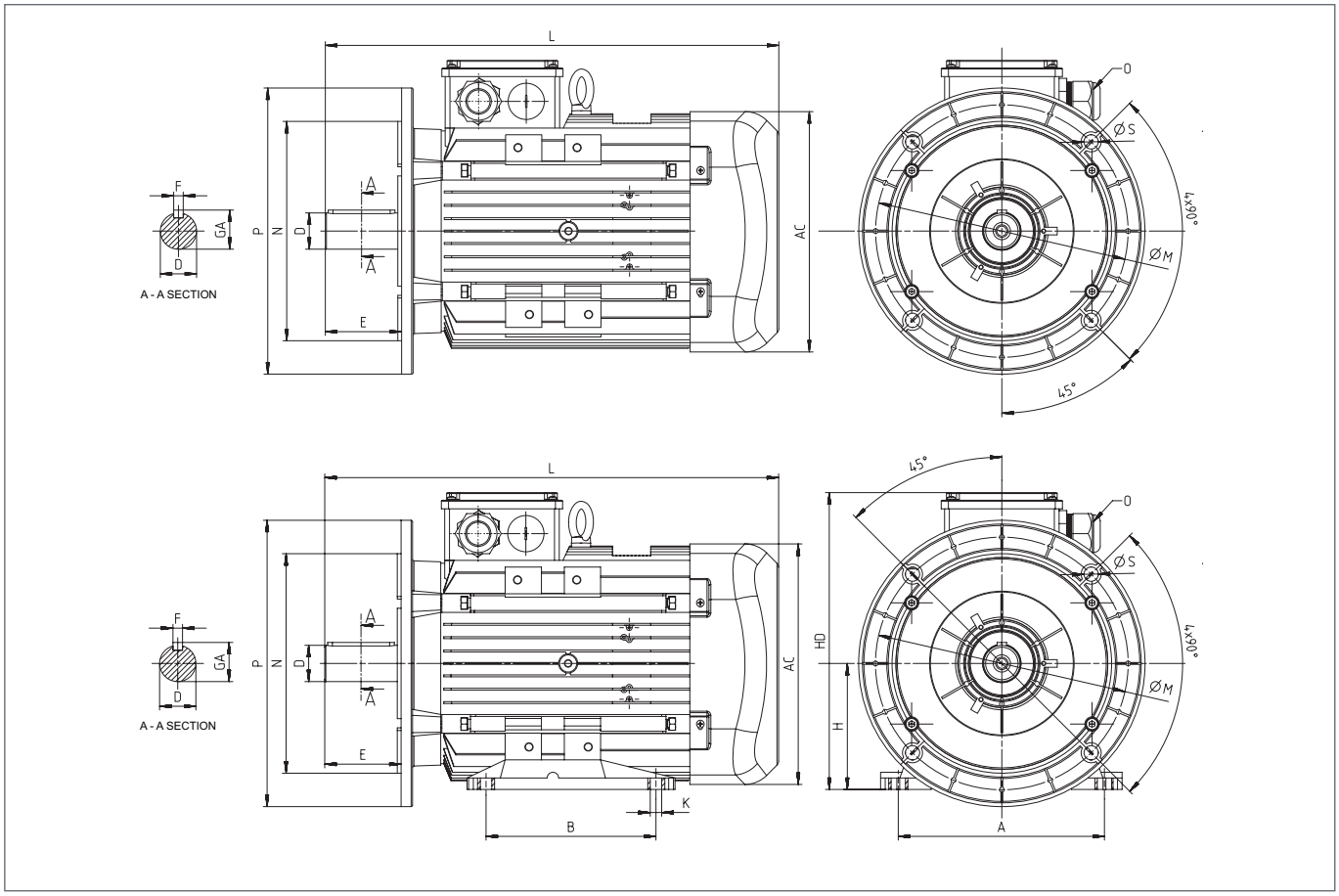
				Main Dimensions			Foot Mounted Motors						Shaft				Bearing		Seal	
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	C	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side
	2	Q3E80M2C	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
0,75	4	Q3E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	6	Q3E90L6C	Aluminum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	2	Q3E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
1,1	4	Q3E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q3E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	2	Q3E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
1,5	4	Q3E90L4D	Aluminum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q3E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*47*7
	2	Q3E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
2,2	4	Q3E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q3E112M6D	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	2	Q3E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
3,0	4	Q3E100L4D	Aluminum	217	377,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q3E132M6B	Aluminum	260	481,0	2*M32	178	216	132	323	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	2	Q3E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
4,0	4	Q3E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	6	Q3E132M6C	Aluminum	260	481,0	2*M32	178	216	132	323	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	2	Q3E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
5,5	4	Q3E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	6	Q3E132M6D	Aluminum	260	481,0	2*M32	178	216	132	323	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	2	Q3E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
7,5	4	Q3E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	6	Q3E160L6C	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	2	Q3E160L2A	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
11,0	4	Q3E160L4A	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q3E160L6D	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	2	Q3E160L2C	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
15,5	4	Q3E160L4B	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q3E180L6B	Aluminum	347	689,0	2*M40	279	279	180	452	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	2	Q3E160L2C	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
18,5	4	Q3E180M4B	Aluminum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q3E200L6C	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10

DIMENSIONS - B3

				Main Dimensions			Foot Mounted Motors						Shaft				Bearing		Seal	
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	C	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side
22,0	2	Q3E160L2D	Aluminum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	2	Q3E180M2A	Aluminum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	4	Q3E180L4B	Aluminum	370	629,0	2*M40	279	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q3E200L6D	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
30,0	2	Q3E200L2B	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10
	4	Q3E200L4D	Aluminum	415	665,0	2*M50	311	318	200	461	19	133	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10
	6	Q3E225M6C	Aluminum	456	765,0	2*M40	311	356	225	485	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
37,0	2	Q3E200L2C	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10
	4	Q3E225M4C	Aluminum	456	765,0	2*M50	286	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
45,0	2	Q3E225M2B	Aluminum	456	735,0	2*M50	311	356	225	504	19	149	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13
	4	Q3E225M4D	Aluminum	456	765,0	2*M50	311	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
55,0	2	Q3EP250M2C	Cast Iron	527	886,0	2*M50	349	406	250	615	24	168	60	140	64	18	6316	6316	80*100*10	80*100*10
	4	Q3EP250M4E	Cast Iron	527	886,0	2*M50	349	406	250	615	24	168	65	140	69	18	6316	6316	80*100*10	80*100*10
75,0	2	Q3EP280M2C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q3EP280M4C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
90,0	2	Q3EP280M2D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q3EP280M4D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
110,0	2	Q3EP315S2C	Cast Iron	652	1176,0	2*M63	406	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
	4	Q3EP315S4C	Cast Iron	652	1206,0	2*M63	406	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
132,0	2	Q3EP315M2B	Cast Iron	652	1176,0	2*M63	457	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
	4	Q3EP315M4B	Cast Iron	652	1206,0	2*M63	457	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
160,0	2	Q3EP315L2A	Cast Iron	652	1287,0	2*M63	508	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
	4	Q3EP315L4A	Cast Iron	652	1317,0	2*M63	508	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
200,0	2	Q3EP315L2C	Cast Iron	652	1287,0	2*M63	508	508	315	833	28	216	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5
	4	Q3EP315L4C	Cast Iron	652	1317,0	2*M63	508	508	315	833	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
250,0	2	Q3EP355M2C	Cast Iron	762	1512,0	4*M63	560	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q3EP355M4C	Cast Iron	762	1542,0	4*M63	560	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
315,0	2	Q3EP355L2B	Cast Iron	762	1512,0	4*M63	630	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q3EP355L4B	Cast Iron	762	1542,0	4*M63	630	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
355,0	2	Q3EP355L2C	Cast Iron	762	1512,0	4*M63	630	610	355	997	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q3EP355L4C	Cast Iron	762	1542,0	4*M63	630	610	355	997	28	254	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885

DIMENSIONS - B5, B35



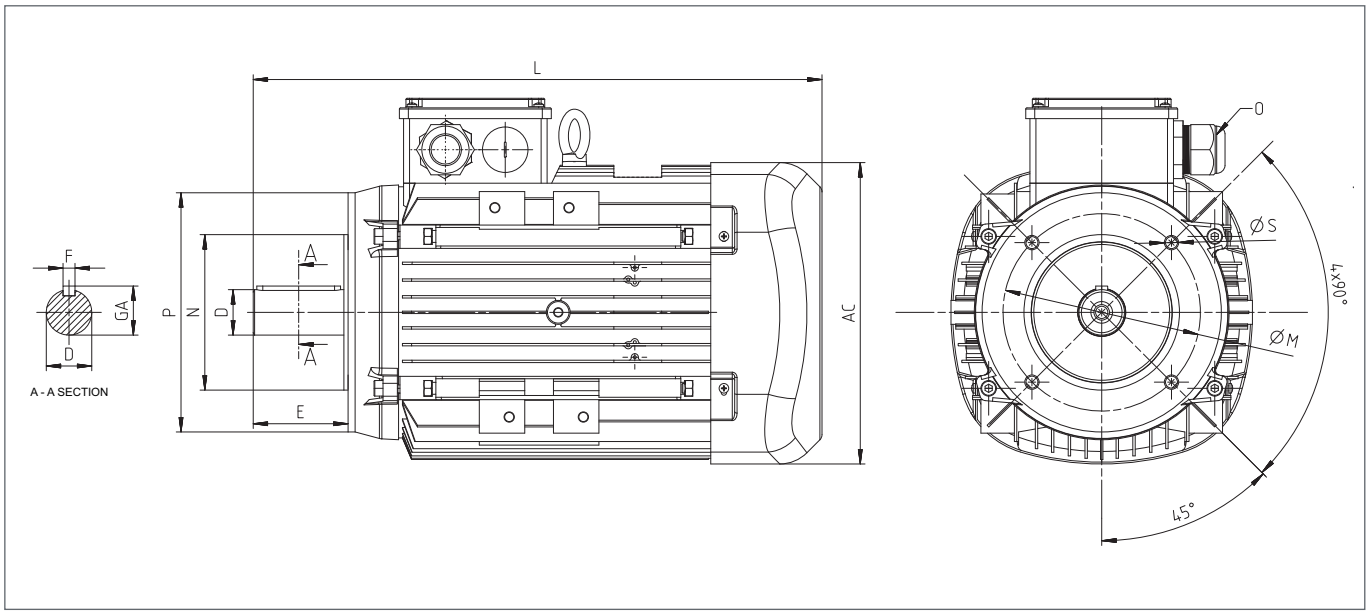
				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FA) (B5)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
	2	Q3E80M2C	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
0,75	4	Q3E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	6	Q3E90L6C	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q3E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
1,1	4	Q3E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	6	Q3E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q3E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,5	4	Q3E90L4D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	6	Q3E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*47*7	250	180	215	0	15
	2	Q3E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
2,2	4	Q3E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	6	Q3E112M6D	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	2	Q3E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
3,0	4	Q3E100L4D	Aluminum	217	377,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	6	Q3E132M6B	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	2	Q3E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
4,0	4	Q3E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	6	Q3E132M6C	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	2	Q3E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
5,5	4	Q3E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	6	Q3E132M6D	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	2	Q3E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
7,5	4	Q3E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	6	Q3E160L6C	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	2	Q3E160L2A	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
11,0	4	Q3E160L4A	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	6	Q3E160L6D	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19

DIMENSIONS - B5, B35

				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FA) (B5)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
15,0	2	Q3E160L2C	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q3E160L4B	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	6	Q3E180L6B	Aluminum	347	689,0	2*M40	279	279	180	452	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
18,5	2	Q3E160L2C	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q3E180M4B	Aluminum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	6	Q3E200L6C	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
22,0	2	Q3E160L2D	Aluminum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	2	Q3E180M2A	Aluminum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	4	Q3E180L4B	Aluminum	370	629,0	2*M40	279	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	6	Q3E200L6D	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
30,0	2	Q3E200L2B	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10	400	300	350	0	19
	4	Q3E200L4D	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10	400	300	350	0	19
	6	Q3E225M6C	Aluminum	456	765,0	2*M40	311	356	225	485	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
37,0	2	Q3E200L2C	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6310-2Z	60*90*10	50*80*10	400	300	350	0	19
	4	Q3E225M4C	Aluminum	456	765,0	2*M50	286	356	225	504	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
45,0	2	Q3E225M2B	Aluminum	456	735,0	2*M50	311	356	225	504	19	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
	4	Q3E225M4D	Aluminum	456	765,0	2*M50	311	356	225	504	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
55,0	2	Q3EP250M2C	Cast Iron	527	886,0	2*M50	349	406	250	615	24	60	140	64	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q3EP250M4E	Cast Iron	527	886,0	2*M50	349	406	250	615	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
75,0	2	Q3EP280M2C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q3EP280M4C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
90,0	4	Q3EP280M2D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q3EP280M4D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
110,0	2	Q3EP315S2C	Cast Iron	652	1176,0	2*M63	406	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
	4	Q3EP315S4C	Cast Iron	652	1206,0	2*M63	406	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
132,0	2	Q3EP315M2B	Cast Iron	652	1176,0	2*M63	457	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
	4	Q3EP315M4B	Cast Iron	652	1206,0	2*M63	457	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
160,0	2	Q3EP315L2A	Cast Iron	652	1287,0	2*M63	508	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
	4	Q3EP315L4A	Cast Iron	652	1317,0	2*M63	508	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
200,0	2	Q3EP315L2C	Cast Iron	652	1287,0	2*M63	508	508	315	833	28	65	140	69	18	6316	6316	80*100*5.5	80*100*5.5	660	550	600	0	24
	4	Q3EP315L4C	Cast Iron	652	1317,0	2*M63	508	508	315	833	28	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
250,0	2	Q3EP355M2C	Cast Iron	762	1512,0	4*M63	560	610	355	997	28	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
	4	Q3EP355M4C	Cast Iron	762	1542,0	4*M63	560	610	355	997	28	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24
315,0	2	Q3EP355L2B	Cast Iron	762	1512,0	4*M63	630	610	355	997	28	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
	4	Q3EP355L4B	Cast Iron	762	1542,0	4*M63	630	610	355	997	28	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24
355,0	2	Q3EP355L2C	Cast Iron	762	1512,0	4*M63	630	610	355	997	28	75	140	80	20	6317	6317	85*105*5,5	85*105*5,5	800	680	740	0	24
	4	Q3EP355L4C	Cast Iron	762	1542,0	4*M63	630	610	355	997	28	95	170	100	25	6322	6322	110*130*5,5	110*130*5,5	800	680	740	0	24

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885
(3) Tolerance DIN EN 50347 "j6"

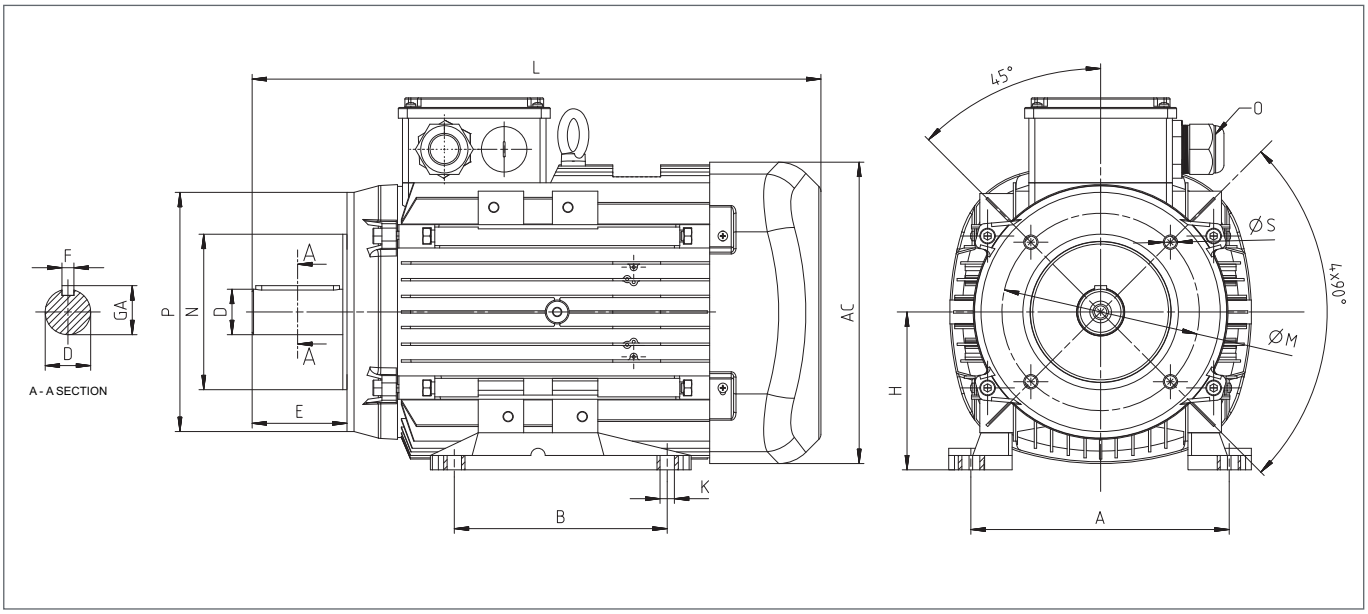
DIMENSIONS - B14a, B34a



				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FC) (B14a)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
	2	Q3E80M2C	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
0,75	4	Q3E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	6	Q3E90L6C	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q3E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
1,1	4	Q3E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	6	Q3E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q3E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
1,5	4	Q3E90L4D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	6	Q3E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*47*7	250	180	215	0	15
	2	Q3E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
2,2	4	Q3E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	6	Q3E112M6D	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	2	Q3E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
3,0	4	Q3E100L4D	Aluminum	217	377,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	6	Q3E132M6B	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	2	Q3E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
4,0	4	Q3E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
	6	Q3E132M6C	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	2	Q3E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
5,5	4	Q3E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
	6	Q3E132M6D	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
7,5	2	Q3E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
	4	Q3E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885
(3) Tolerance DIN EN 50347 "j6"

DIMENSIONS - B14b, B34b



				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FB) (B14b)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
0,75	2	Q3E80M2C	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q3E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	6	Q3E90L6C	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,1	2	Q3E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q3E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q3E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,5	2	Q3E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q3E90L4D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q3E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*47*7	250	180	215	0	15
2,2	2	Q3E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q3E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q3E112M6D	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
3,0	2	Q3E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	4	Q3E100L4D	Aluminum	217	377,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q3E132M6B	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
4,0	2	Q3E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	4	Q3E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	6	Q3E132M6C	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
5,5	2	Q3E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
	4	Q3E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
	6	Q3E132M6D	Aluminum	260	481,0	2*M32	178	216	132	323	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
7,5	2	Q3E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
	4	Q3E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885
(3) Tolerance DIN EN 50347 "j6"

ELECTRICAL CHARACTERISTICS AT 50 Hz

	Motor Type	Housing Type	Rated Values					Starting Values				Brakedown Torque Ratio	Efficiency*			Cos ϕ	J	Weight (B3)	Sound Pressure Level dBA**
			Power		Speed	Current	Torque	Current I_A / A_N		Torque M_A / M_N			η%						
			kW	HP	d/d	A	Nm	⅄	Δ	⅄	Δ	Mk/Mn	4/4	3/4	2/4	4/4	kgm²	kg	
	2pole3000d/d																		
220/380V	Q2E71M2C*	Aluminum	0,37	1/2	2850	1,0	1,2	7,7	-	3,6	-	3,8	69,5	69,6	67,3	0,80	0,00067	8	54
	Q2E71M2D*	Aluminum	0,55	3/4	2860	1,2	1,8	7,8	-	3,7	-	3,9	74,1	74,2	72,0	0,82	0,00086	9,7	54
	Q2E80M2B	Aluminum	0,75	1,0	2860	1,7	2,5	7,7	-	3,7	-	4,0	77,4	77,0	73,6	0,84	0,00109	11	58
	Q2E80M2D	Aluminum	1,1	1,5	2860	2,4	3,6	7,7	-	3,7	-	4,1	79,6	79,1	77,1	0,84	0,00150	13	58
	Q2E90L2C	Aluminum	1,5	2,0	2900	3,2	5,0	7,8	-	3,4	-	4,0	81,3	80,8	77,7	0,83	0,00182	17	62
	Q2E90L2D	Aluminum	2,2	3,0	2900	4,7	7,3	7,9	-	3,5	-	4,1	83,2	82,9	80,5	0,84	0,00182	18	62
	Q2E100L2C	Aluminum	3,0	4,0	2875	6,0	9,9	9,1	-	3,9	-	4,6	84,6	84,5	83,1	0,90	0,00335	21	64
380/660V	Q2E112M2C	Aluminum	4,0	5,5	2900	7,7	13,2	2,9	8,6	1,3	3,8	4,5	85,8	85,7	84,3	0,88	0,00489	31	67
	Q2E132S2C	Aluminum	5,5	7,5	2900	10,4	18,0	3,0	8,9	1,1	3,2	4,2	87,0	86,9	85,2	0,91	0,01410	46	70
	Q2E132M2A	Aluminum	7,5	10,0	2920	13,6	24,5	2,9	8,6	1,0	3,0	3,7	88,1	87,7	85,9	0,90	0,01596	53	70
	Q2E160M2B	Aluminum	11,0	15,0	2930	20,3	35,9	3,1	9,4	1,0	3,0	3,8	89,4	89,3	87,5	0,91	0,02644	76	71
	Q2E160L2A	Aluminum	15,0	20,0	2930	27,0	48,7	2,9	8,6	1,0	3,0	3,3	90,3	90,2	88,4	0,93	0,03317	82	71
	Q2E160L2C	Aluminum	18,5	25,0	2930	32,8	60,0	3,3	10,0	0,5	1,4	4,3	90,9	90,8	89,0	0,91	0,04075	90	71
	Q2E180M2A	Aluminum	22,0	30,0	2945	38,7	71,3	2,6	7,9	0,7	2,2	3,4	91,3	90,9	89,5	0,91	0,06193	114	77
	Q2E200L2B	Aluminum	30,0	40,0	2955	56,6	97,1	2,6	7,9	0,6	1,9	4,1	92,0	91,4	89,6	0,86	0,11917	167	80
	Q2E200L2C	Aluminum	37,0	50,0	2955	66,8	119,4	2,8	8,3	0,6	1,9	3,1	92,5	91,9	90,1	0,91	0,15010	167	80
	Q2E225M2B	Aluminum	45,0	60,0	2965	85,7	145,2	2,8	8,3	0,7	2,2	3,4	92,9	92,6	91,1	0,86	0,23505	235	81
	Q2EP250M2B	Cast Iron	55,0	75,0	2970	97,9	178,5	1,7	5,1	0,7	2,1	3,1	93,2	92,1	90,9	0,91	0,48707	486	82
	Q2EP280M2B	Cast Iron	75,0	100,0	2970	135,0	241,1	3,0	9,1	0,7	2,1	2,6	93,8	93,7	92,5	0,90	0,54033	576	84
	Q2EP280M2C	Cast Iron	90,0	125,0	2970	156,5	291,3	3,3	10,0	1,1	3,2	3,6	94,1	93,9	92,9	0,93	0,64510	585	84
400/690V	Q2EP315S2C	Cast Iron	110,0	127,0	2.975	185	353	2,6	7,8	0,7	2,2	2,4	94,3	94,3	93,1	0,91	1,43600	920	87
	Q2EP315M2C	Cast Iron	132,0	152,0	2.975	221	423	2,6	7,8	0,8	2,3	2,4	94,6	94,6	93,4	0,91	1,72300	970	87
	Q2EP315L2C	Cast Iron	160,0	184,0	2.975	268	513	2,5	7,5	0,8	2,3	2,4	94,8	94,8	93,6	0,91	1,95300	1.170	87
	Q2EP315L2D	Cast Iron	200,0	230,0	2.975	334	643	2,7	8,0	0,8	2,4	2,6	95,0	95,0	93,8	0,91	2,52700	1.200	87
	Q2EP355M2C	Cast Iron	250,0	280,0	2.985	422	799	2,3	7,0	0,7	2,0	2,4	95,0	95,0	93,8	0,90	3,92000	1.690	87
	Q2EP355L2C	Cast Iron	315,0	353,0	2.985	532	1.007	2,5	7,4	0,7	2,0	2,3	95,0	95,0	93,8	0,90	4,17000	1.870	87
	Q2EP355L2D	Cast Iron	355,0	398,0	2.985	599	1.135	2,5	7,5	0,6	1,8	2,1	95,0	95,0	93,8	0,90	4,44000	1.953	87
	4pole1500d/d																		
220/380V	Q2E71M4C*	Aluminum	0,25	1/3	1415	0,7	1,7	4,4	-	2,3	-	3,4	68,5	68,8	68,8	0,74	0,00095	9	45
	Q2E71M4D*	Aluminum	0,37	1/2	1415	1,1	2,5	4,4	-	2,3	-	3,4	72,7	73,1	72,0	0,75	0,00095	8,5	45
	Q2E80M4B*	Aluminum	0,55	3/4	1415	1,5	3,7	4,8	-	2,8	-	3,2	77,1	77,6	76,4	0,76	0,00205	10,5	49
	Q2E80M4D	Aluminum	0,75	1,0	1435	2	5,1	5,2	-	2,9	-	3,2	79,6	78,9	75,3	0,7	0,00268	12	49
	Q2E90L4C	Aluminum	1,1	1,5	1430	2,5	7,4	6,7	-	2,9	-	3,3	81,4	80,8	78,1	0,81	0,00365	18	54
	Q2E90L4D	Aluminum	1,5	2,0	1430	3,5	10,0	7,0	-	3,2	-	3,6	82,8	82,0	79,3	0,76	0,00365	18	55
	Q2E100L4C	Aluminum	2,2	3,0	1430	5,0	14,6	7,1	-	3,9	-	4,2	84,3	83,8	81,2	0,77	0,00545	26	56
	Q2E100L4D	Aluminum	3,0	4,0	1440	6,4	20,0	7,1	-	3,4	-	3,8	85,5	85,1	83,0	0,75	0,00581	26	56
380/660V	Q2E112M4C	Aluminum	4,0	5,5	1440	8,7	26,3	2,6	7,9	0,9	2,8	3,9	86,6	86,0	84,5	0,81	0,01123	31	58
	Q2E132M4B	Aluminum	5,5	7,5	1450	11,7	36,2	2,4	7,1	1,1	3,2	3,9	87,7	87,6	85,2	0,81	0,02763	54	61
	Q2E132M4C	Aluminum	7,5	10,0	1450	15,8	49,4	2,9	8,7	0,9	2,8	4,1	88,7	88,5	86,6	0,80	0,02980	57	61
	Q2E160M4B	Aluminum	11,0	15,0	1460	22,5	72,5	2,0	6,0	0,7	2,2	2,7	89,8	89,7	88,2	0,83	0,05547	76	63
	Q2E160L4A	Aluminum	15,0	20,0	1460	28,8	98,5	2,0	6,0	0,8	2,3	2,7	90,6	90,5	89,5	0,83	0,06922	92	63
	Q2E180M4B	Aluminum	18,5	25,0	1465	36,5	121,4	2,5	7,4	1,0	3,0	4,1	91,2	91,1	90,2	0,84	0,11220	119	69
	Q2E180L4B	Aluminum	22,0	30,0	1465	44,5	143,5	2,6	7,7	0,8	2,4	3,4	91,6	91,5	90,6	0,82	0,12773	127	69
	Q2E200L4D	Aluminum	30,0	40,0	1465	57,3	195,6	2,4	7,3	0,8	2,5	3,2	92,3	92,1	91,1	0,86	0,26448	177	70
	Q2E225M4C	Aluminum	37,0	50,0	1480	70,7	240,0	2,5	7,5	1,0	2,9	3,5	92,7	92,6	91,5	0,84	0,36429	260	71
	Q2E225M4D	Aluminum	45,0	60,0	1470	85,9	292,3	2,6	7,7	1,0	2,9	3,5	93,1	93,0	91,9	0,85	0,43513	280	71
	Q2EP250M4D	Cast Iron	55,0	75,0	1480	105,0	359,0	2,4	7,1	0,7	2,1	2,9	93,5	93,2	90,7	0,83	0,90782	506	72
	Q2EP280M4B	Cast Iron	75,0	100,0	1475	147,0	485,7	2,5	7,4	0,7	2,1	3,1	94,0	93,9	93,2	0,85	1,06114	624	73
	Q2EP280M4C	Cast Iron	90,0	125,0	1470	173,8	584,2	2,5	7,4	0,7	2,1	3,0	94,2	94,4	93,6	0,85	1,14768	638	73

ELECTRICAL CHARACTERISTICS AT 50 Hz

	Motor Type	Housing Type	Rated Values					Starting Values				Brakedown Torque Ratio	Efficiency*			Cos ϕ	J	Weight (B3)	Sound Pressure Level dBA**
			Power		Speed	Current	Torque	Current I_A / A_N		Torque M_A / M_N			η%						
			kW	HP	d/d	A	Nm	⅄	Δ	⅄	Δ	Mk/Mn	4/4	3/4	2/4	4/4	kgm²	kg	
	4pole1500d/d																		
400/690V	Q2EP315S4C	Cast Iron	110,0	127,0	1.480	191	709	2,4	7,2	0,7	2,2	2,5	94,5	94,5	93,9	0,88	3,03500	925	70
	Q2EP315M4C	Cast Iron	132,0	152,0	1.480	229	851	2,3	7,0	0,7	2,1	2,4	94,7	94,7	94,1	0,88	3,41500	1.010	70
	Q2EP315L4C	Cast Iron	160,0	184,0	1.480	273	1.032	2,5	7,5	0,7	2,2	2,5	94,9	94,9	94,3	0,89	4,11900	1.080	76
	Q2EP315L4D	Cast Iron	200,0	230,0	1.480	341	1.290	2,5	7,5	0,8	2,3	2,5	95,1	95,1	94,5	0,89	5,20300	1.200	76
	Q2EP355M4C	Cast Iron	250,0	280,0	1.485	426	1.607	2,6	7,9	0,8	2,3	2,5	95,1	95,1	94,5	0,89	8,79000	1.720	76
	Q2EP355L4C	Cast Iron	315,0	353,0	1.485	531	2.025	2,5	7,4	0,7	2,0	2,3	95,1	95,1	94,5	0,90	10,13300	1.920	87
	Q2EP355L4D	Cast Iron	355,0	398,0	1.485	605	2.283	2,9	8,8	0,6	1,8	2,0	95,1	95,1	94,5	0,89	10,67800	1.953	87
	6pole1000d/d																		
220/380V	Q2E90L6C	Aluminum	0,75	1,0	940	2,6	7,7	4,0	-	2,3	-	2,5	75.9	74,7	73,2	0,68	0,00371	18	53
	Q2E90L6D	Aluminum	1,1	1,5	940	3,2	11,3	4,0	-	2,6	-	2,6	78,1	77,6	74,8	0,65	0,00444	20	53
	Q2E100L6D	Aluminum	1,5	2,0	940	4	15,3	4,5	-	2,4	-	2,7	79,8	79,3	76,4	0,71	0,00570	26	56
	Q2E112M6C	Aluminum	2,2	3,0	950	5,4	22,1	5,0	-	2,3	-	2,7	81,8	81,2	78,3	0,71	0,00916	31	58
380/660V	Q2E132M6A	Aluminum	3,0	4,0	945	7,3	29,8	1,7	5,2	1,0	3,0	3,0	83,3	82,3	79,4	0,64	0,02057	53	62
	Q2E132M6B	Aluminum	4,0	5,5	965	10,5	39,8	1,8	5,3	0,6	1,9	2,3	84,6	83,5	80,7	0,65	0,02070	54	62
	Q2E132M6C	Aluminum	5,5	7,5	945	13,1	54,7	1,6	4,9	0,8	2,4	2,6	86,1	85,7	83,9	0,76	0,02709	67	62
	Q2E160L6B	Aluminum	7,5	10,0	965	18,7	74,6	2,0	6,0	1,1	3,2	3,4	87,2	84,3	81,7	0,66	0,07040	94	63
	Q2E160L6C	Aluminum	11,0	15,0	960	25,1	109,4	1,6	4,9	0,9	2,7	2,8	88,7	88,5	86,3	0,74	0,07040	95,5	63
	Q2E180L6A	Aluminum	15,0	20,0	960	31,8	147,7	2,0	5,9	0,6	1,8	2,6	89,7	89,5	87,3	0,80	0,18369	115	64
	Q2E200L6B	Aluminum	18,5	25,0	970	38,0	182,2	1,8	5,5	0,5	1,6	2,4	90,4	90,2	89,6	0,83	0,27088	155	64
	Q2E200L6C	Aluminum	22,0	30,0	970	45,6	216,6	1,8	5,5	0,5	1,6	2,4	90,9	90,7	90,1	0,83	0,31281	165	64
	Q2E225M6B	Aluminum	30,0	40,0	980	60,9	287,6	1,8	5,4	0,5	1,6	2,3	91,7	91,6	90,7	0,82	0,49334	221	65

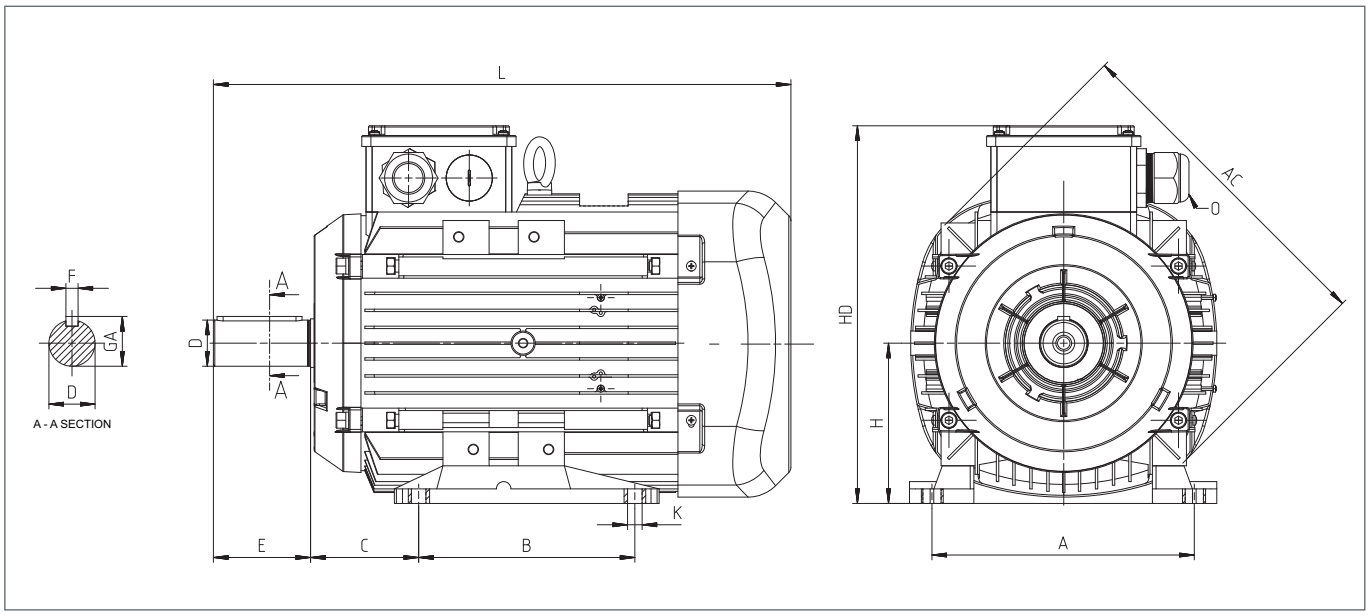
*** According to IEC 60034-2-1**
**** The sound pressure measurement are taken 1 m away from the motor.**
**** Tolerance + 3 dBA**

ELECTRICAL CHARACTERISTICS AT 50 Hz

	Motor Type	Housing Type	Rated Values					Starting Values				Brakedown Torque Ratio	Efficiency*			Cosϕ	J	Weight (B3)	Sound Pressure Level dBA**
			Power		Speed	Current	Torque	Current I_A / A_N		Torque M_A / M_N			η%						
			kW	HP	d/d	A	Nm	⅄	Δ	⅄	Δ	Mk/Mn	4/4	3/4	2/4	4/4	kgm²	kg	
	2pole3000d/d																		
220/380V	Q2E71M2DE	Aluminum	0,75	1,0	2870	1,7	2,4	8,8	-	5,0	-	5,2	77,4	77,5	75,9	0,77	0,00110	11	56
220/380V	Q2E80M2DE	Aluminum	1,5	2,0	2875	3,0	5,0	8,1	-	4,0	-	4,3	81,5	82,0	80,9	0,76	0,00150	13	58
220/380V	Q2E90L2DE	Aluminum	3,0	4,0	2880	6,1	9,9	8,3	-	4,0	-	4,5	84,6	84,1	80,8	0,75	0,00182	18	62
380/660V	Q2E100L2DE	Aluminum	4,0	5,5	2900	7,9	13,3	3,0	9,3	1,4	4,3	5,2	85,9	86,0	84,1	0,77	0,00335	27	64
380/660V	Q2E112M2CE	Aluminum	5,5	7,5	2910	9,1	17,9	3,1	9,5	1,4	4,2	5,0	86,3	86,5	84,7	0,87	0,00489	31	67
380/660V	Q2E132M2AE	Aluminum	11,0	15,0	2923	13,6	24,5	2,9	9,0	1,2	3,6	4,0	88,3	87,9	86,1	0,89	0,01596	53	70
380/660V	Q2E160L2DE	Aluminum	22,0	30,0	2943	31,4	60,0	2,6	8,2	1,1	3,3	3,9	91,4	91,8	91,2	0,92	0,04075	92	71
380/660V	Q2EP250M2C	Cast Iron	75,0	100,0	2975	125,4	241,1	2,5	7,5	0,8	2,8	3,3	93,8	93,7	92,5	0,92	0,54033	576	84
380/660V	Q2EP280M2D	Cast Iron	110,0	150,0	2980	191,0	352,4	2,6	7,7	0,9	2,9	3,4	94,3	94,3	93,6	0,88	0,74111	640	84
	4pole1500d/d																		
220/380V	Q2E80M4DE	Aluminum	1,1	1,5	1438	1,9	4,9	5,5	-	3,2	-	3,5	79,9	79,4	76,3	0,72	0,00268	12,5	49
220/380V	Q2E90L4DE	Aluminum	2,2	3,0	1440	4,8	14,5	7,5	-	3,5	-	4,0	84,3	83,5	80,6	0,70	0,00365	18	54
380/660V	Q2E112M4DE	Aluminum	5,5	7,5	1458	8,5	26,2	2,8	8,6	1,1	3,2	4,3	86,7	86,7	85,1	0,77	0,01123	34	58
380/660V	Q2EP250M4E	Cast Iron	75,0	100,0	1485	134,2	485,7	2,6	7,8	0,8	2,9	3,4	94,0	93,9	93,2	0,86	1,06114	624	73
380/660V	Q2EP280M4D	Cast Iron	110,0	150,0	1485	200,3	714,0	2,8	7,9	0,8	2,9	3,4	94,5	94,3	93,1	0,84	1,25586	654	73

*** According to IEC 60034-2-1**
**** The sound pressure measurement are taken 1 m away from the motor.**
**** Tolerance + 3 dBA**

DIMENSIONS - B3



				Main Dimensions			Foot Mounted Motors						Shaft				Bearing		Seal	
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	C	D(1)	E	GA	F(2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side
0,25	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
0,37	2	Q2E71M2C	Aluminum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
0,55	2	Q2E71M2D	Aluminum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5
	4	Q2E80M4B	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
0,75	2	Q2E71M2DE	Aluminum	138	252,5	1*M20	90	112	71	190	7	45	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5
	2	Q2E80M2B	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	4	Q2E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	6	Q2E90L6C	Aluminum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
1,1	2	Q2E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	4	Q2E80M4DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	4	Q2E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q2E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
1,5	2	Q2E80M2DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	50	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7
	2	Q2E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	4	Q2E90L4D	Aluminum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	6	Q2E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
2,2	2	Q2E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	4	Q2E90L4DE	Aluminum	193	344,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	4	Q2E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q2E112M6C	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
3,0	2	Q2E90L2DE	Aluminum	193	316,5	1*M25	125	140	90	222	10	56	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7
	2	Q2E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	4	Q2E100L4D	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	6	Q2E132M6A	Aluminum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10

DIMENSIONS - B3

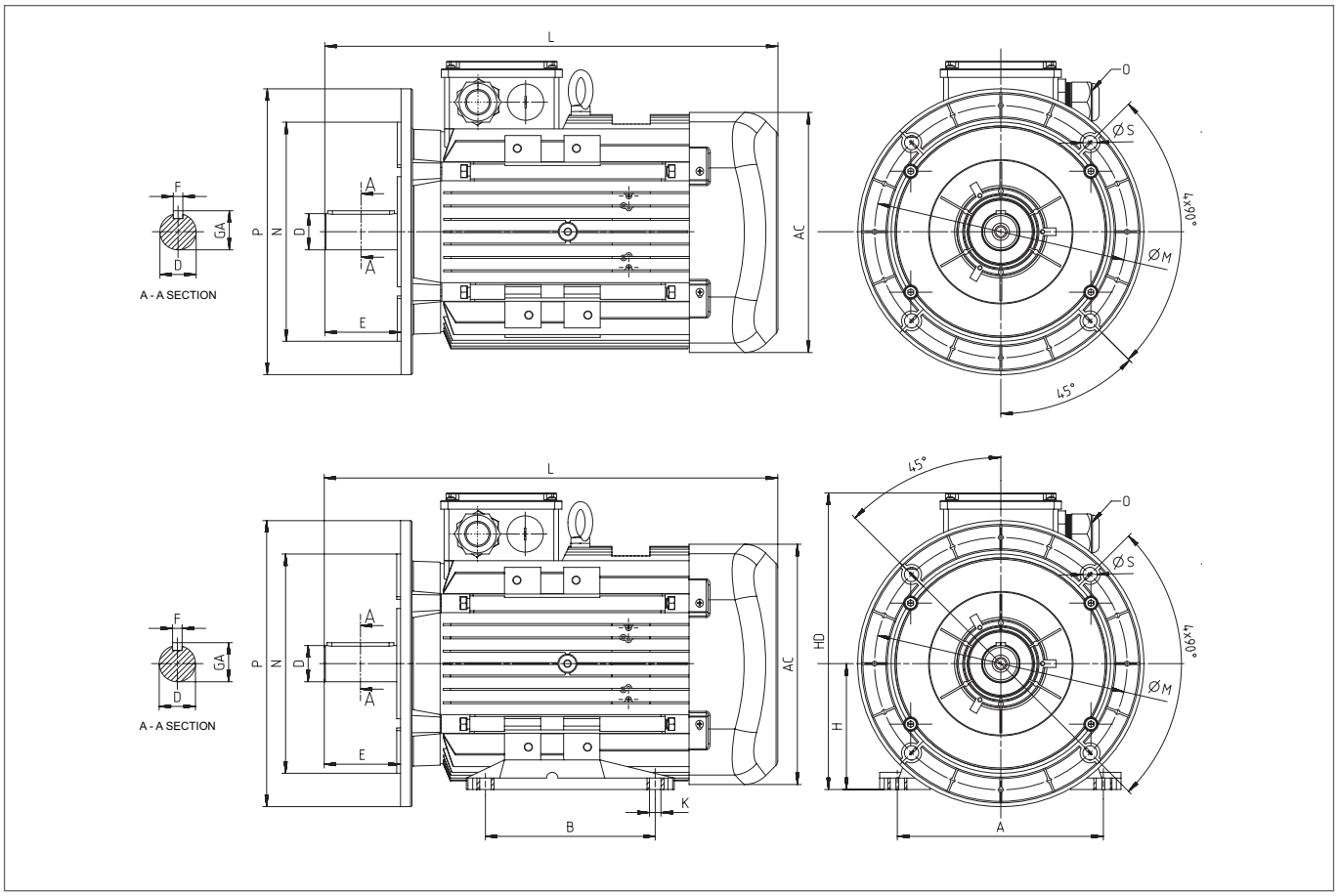
				Main Dimensions			Foot Mounted Motors						Shaft				Bearing		Seal	
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	C	D(1)	E	GA	F(2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side
4,0	2	Q2E100L2DE	Aluminum	217	352,0	1*M25	140	160	100	241	12	63	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7
	2	Q2E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	4	Q2E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	6	Q2E132M6B	Aluminum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
5,5	2	Q2E112M2CE	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	4	Q2E112M4D	Aluminum	232	395,5	2*M25	140	190	112	261	12	70	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7
	2	Q2E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	4	Q2E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	6	Q2E132M6C	Aluminum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
7,5	2	Q2E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	4	Q2E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	6	Q2E160M6B	Aluminum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
11,0	2	Q2E132M2AE	Aluminum	279	475,5	2*M32	140	216	132	314	12	89	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10
	2	Q2E160M2B	Aluminum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q2E160M4B	Aluminum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q2E160L6B	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
15,0	2	Q2E160L2A	Aluminum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q2E160L4A	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	6	Q2E180L6A	Aluminum	370	629,0	2*M40	279	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
18,5	2	Q2E160L2C	Aluminum	302	576,0	2*M32	254	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	4	Q2E180M4B	Aluminum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q2E200L6B	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
22,0	2	Q2E160L2D	Aluminum	302	576,0	2*M32	210	254	160	360	15	108	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10
	2	Q2E180M2A	Aluminum	370	629,0	2*M40	241	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	4	Q2E180L4B	Aluminum	370	629,0	2*M40	279	279	180	428	15	121	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10
	6	Q2E200L6C	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
30,0	2	Q2E200L2B	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
	4	Q2E200L4D	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
	6	Q2E225M6B	Aluminum	456	765,0	2*M50	311	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
37,0	2	Q2E200L2C	Aluminum	415	665,0	2*M50	305	318	200	461	19	133	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10
	4	Q2E225M4C	Aluminum	456	765,0	2*M50	286	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
45,0	2	Q2E225M2B	Aluminum	456	735,0	2*M50	311	356	225	504	19	149	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13
	4	Q2E225M4D	Aluminum	456	765,0	2*M50	311	356	225	504	19	149	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13
55,0	2	Q2EP250M2B	Cast Iron	527	886,0	2*M50	349	406	250	615	24	168	60	140	64	18	6316	6316	80*100*10	80*100*10
	4	Q2EP250M4D	Cast Iron	527	886,0	2*M50	349	406	250	615	24	168	65	140	69	18	6316	6316	80*100*10	80*100*10
75,0	2	Q2EP250M2C	Cast Iron	527	886,0	2*M50	349	406	250	615	24	168	60	140	64	18	6316	6316	80*100*10	80*100*10
	2	Q2EP280M2B	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q2EP250M4E	Cast Iron	527	886,0	2*M50	349	406	250	615	24	168	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q2EP280M4B	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
90,0	2	Q2EP280M2C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q2EP280M4C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10
110,0	2	Q2EP280M2D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	65	140	69	18	6316	6316	80*100*10	80*100*10
	4	Q2EP280M4D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	190	75	140	80	20	6316	6316	80*100*10	80*100*10

DIMENSIONS - B3

				Main Dimensions			Foot Mounted Motors						Shaft				Bearing		Seal	
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	C	D(1)	E	GA	F(2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side
110,0	2	Q2EP315S2C	Cast Iron	630	1180,0	2*M63	406	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315S4C	Cast Iron	630	1210,0	2*M63	406	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
132,0	2	Q2EP315M2C	Cast Iron	630	1290,0	2*M63	457	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315M4C	Cast Iron	630	1320,0	2*M63	457	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
160,0	2	Q2EP315L2C	Cast Iron	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315L4C	Cast Iron	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
200,0	2	Q2EP315L2D	Cast Iron	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP315L4D	Cast Iron	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5
250,0	2	Q2EP355M2C	Cast Iron	710	1486,0	4*M63	560	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP355M4C	Cast Iron	710	1517,0	4*M63	560	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
315,0	2	Q2EP355L2C	Cast Iron	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP355L4C	Cast Iron	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5
355,0	2	Q2EP355L2D	Cast Iron	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5
	4	Q2EP355L4D	Cast Iron	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885

DIMENSIONS - B5, B35



				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FA) (B5)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
0,25	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
0,37	2	Q2E71M2C	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
0,55	2	Q2E71M2D	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
	4	Q2E80M4B	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
0,75	2	Q2E71M2DE	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5	160	110	130	0	10
	2	Q2E80M2B	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	4	Q2E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	6	Q2E90L6C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,1	2	Q2E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	4	Q2E80M4DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	4	Q2E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	6	Q2E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
1,5	2	Q2E80M2DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	200	130	165	0	12
	2	Q2E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	4	Q2E90L4D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	6	Q2E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
2,2	2	Q2E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	4	Q2E90L4DE	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	4	Q2E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	6	Q2E112M6C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
3,0	2	Q2E90L2DE	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	200	130	165	0	12
	2	Q2E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	4	Q2E100L4D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	6	Q2E132M6A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15

DIMENSIONS - B5, B35

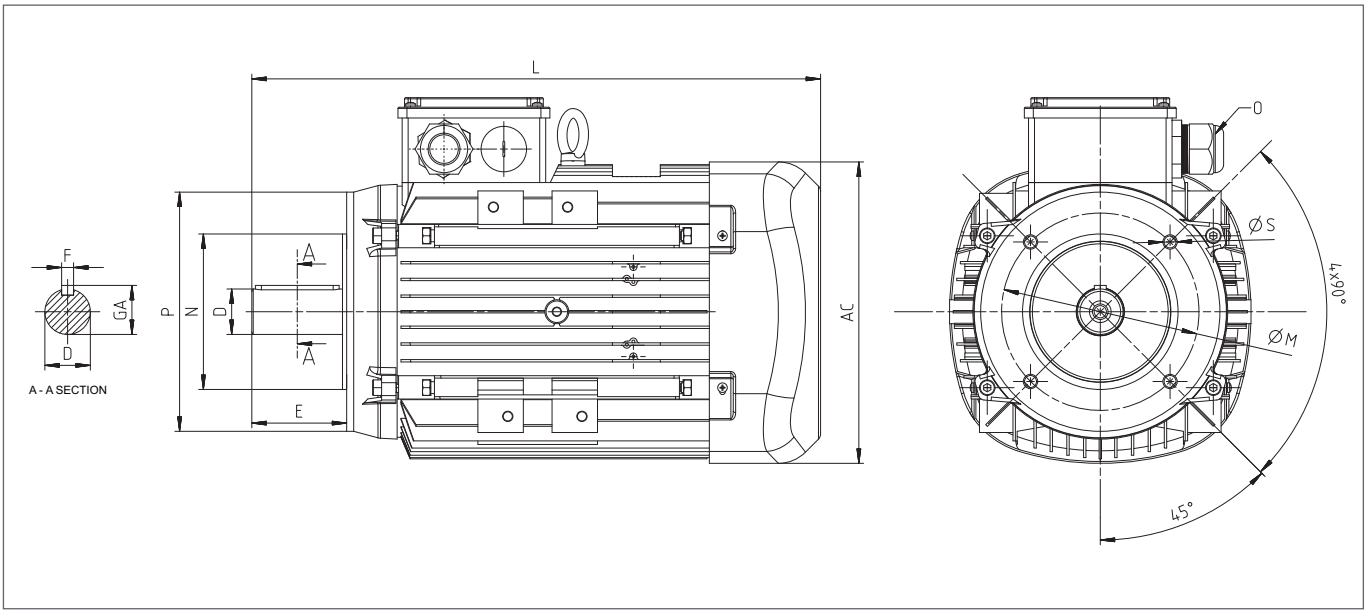
				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FA) (B5)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D [1]	E	GA	F [2]	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N [3]	M	R	S
4,0	2	Q2E100L2DE	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	250	180	215	0	15
	2	Q2E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	4	Q2E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	6	Q2E132M6B	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
5,5	2	Q2E112M2CE	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	4	Q2E112M4D	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	250	180	215	0	15
	2	Q2E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	4	Q2E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	6	Q2E132M6C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
7,5	2	Q2E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	4	Q2E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	6	Q2E160M6B	Aluminum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
11,0	2	Q2E132M2AE	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	300	230	265	0	15
	2	Q2E160M2B	Aluminum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q2E160M4B	Aluminum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	6	Q2E160L6B	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
15,0	2	Q2E160L2A	Aluminum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q2E160L4A	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	6	Q2E180L6A	Aluminum	370	629,0	2*M40	279	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
18,5	2	Q2E160L2C	Aluminum	302	576,0	2*M32	254	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	4	Q2E180M4B	Aluminum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	6	Q2E200L6B	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
22,0	2	Q2E160L2D	Aluminum	302	576,0	2*M32	210	254	160	360	15	42	110	45	12	6309-2Z	6209-2Z	45*72*10	45*72*10	350	250	300	0	19
	2	Q2E180M2A	Aluminum	370	629,0	2*M40	241	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	4	Q2E180L4B	Aluminum	370	629,0	2*M40	279	279	180	428	15	48	110	51,5	14	6310-2Z	6310-2Z	50*80*10	50*80*10	350	250	300	0	19
	6	Q2E200L6C	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
30,0	2	Q2E200L2B	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
	4	Q2E200L4D	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
	6	Q2E225M6B	Aluminum	456	765,0	2*M50	311	356	225	504	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
37,0	2	Q2E200L2C	Aluminum	415	665,0	2*M50	305	318	200	461	19	55	110	59	16	6312-2Z	6312-2Z	60*90*10	60*90*10	400	300	350	0	19
	4	Q2E225M4C	Aluminum	456	765,0	2*M50	286	356	225	504	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
45,0	2	Q2E225M2B	Aluminum	456	735,0	2*M50	311	356	225	504	19	55	110	59	16	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
	4	Q2E225M4D	Aluminum	456	765,0	2*M50	311	356	225	504	19	60	140	64	18	6313-2Z	6313-2Z	65*100*13	65*100*13	450	350	400	0	19
55,0	2	Q2EP250M2B	Cast Iron	527	886,0	2*M50	349	406	250	615	24	60	140	64	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP250M4D	Cast Iron	527	886,0	2*M50	349	406	250	615	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
75,0	2	Q2EP250M2C	Cast Iron	527	886,0	2*M50	349	406	250	615	24	60	140	64	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	2	Q2EP280M2B	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP250M4E	Cast Iron	527	886,0	2*M50	349	406	250	615	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP280M4B	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
90,0	2	Q2EP280M2C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP280M4C	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19
110,0	2	Q2EP280M2D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	65	140	69	18	6316	6316	80*100*10	80*100*10	550	450	500	0	19
	4	Q2EP280M4D	Cast Iron	527	1025,0	2*M50	419	457	280	647	24	75	140	80	20	6316	6316	80*100*10	80*100*10	550	450	500	0	19

DIMENSIONS - B5, B35

				Main Dimensions			Foot Mounted Motors						Shaft				Bearing		Seal		Flange (FA) (B5)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	C	D(1)	E	GA	F(2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N(3)	M	R	S
110,0	2	Q2EP315S2C	Cast Iron	630	1180,0	2*M63	406	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5	660	550	600	0	24
	4	Q2EP315S4C	Cast Iron	630	1210,0	2*M63	406	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
132,0	2	Q2EP315M2C	Cast Iron	630	1290,0	2*M63	457	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5	660	550	600	0	24
	4	Q2EP315M4C	Cast Iron	630	1320,0	2*M63	457	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
160,0	2	Q2EP315L2C	Cast Iron	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5	660	550	600	0	24
	4	Q2EP315L4C	Cast Iron	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
200,0	2	Q2EP315L2D	Cast Iron	630	1290,0	2*M63	508	508	315	845	28	216	65	140	69	18	6317	6317	85*105*5.5	85*105*5.5	660	550	600	0	24
	4	Q2EP315L4D	Cast Iron	630	1320,0	2*M63	508	508	315	845	28	216	80	170	85	22	6319	6319	95*115*5.5	95*115*5.5	660	550	600	0	24
250,0	2	Q2EP355M2C	Cast Iron	710	1486,0	4*M63	560	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
	4	Q2EP355M4C	Cast Iron	710	1517,0	4*M63	560	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24
315,0	2	Q2EP355L2C	Cast Iron	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
	4	Q2EP355L4C	Cast Iron	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24
355,0	2	Q2EP355L2D	Cast Iron	710	1486,0	4*M63	630	610	355	956	28	254	75	140	80	20	6317	6317	85*105*5.5	85*105*5.5	800	680	740	0	24
	4	Q2EP355L4D	Cast Iron	710	1517,0	4*M63	630	610	355	956	28	254	95	170	100	25	6322	6322	110*130*5.5	110*130*5.5	800	680	740	0	24

(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885
(3) Tolerance DIN EN 50347 "j6"

DIMENSIONS - B14a, B34a



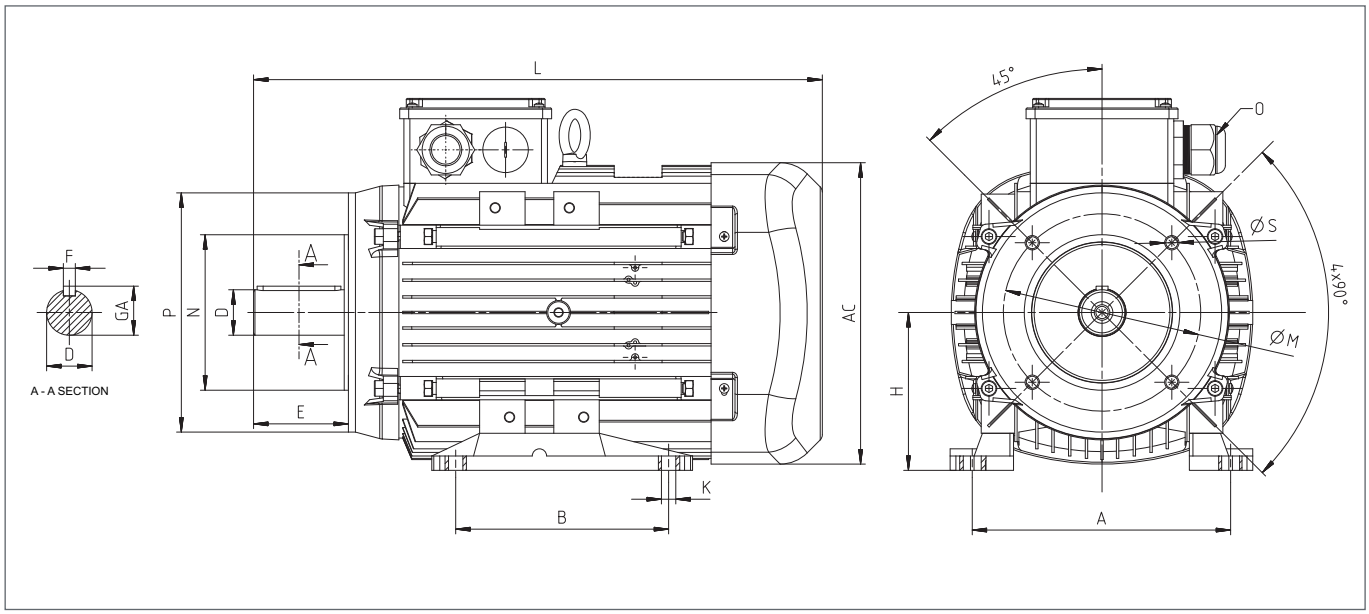
				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FC) (B14a)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
0,25	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
0,37	2	Q2E71M2C	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
0,55	2	Q2E71M2D	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
	4	Q2E80M4B	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
0,75	2	Q2E71M2DE	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5	105	70	85	0	M6
	2	Q2E80M2B	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	4	Q2E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	6	Q2E90L6C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
1,1	2	Q2E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	4	Q2E80M4DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	4	Q2E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	6	Q2E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
1,5	2	Q2E80M2DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	120	80	100	0	M6
	2	Q2E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	4	Q2E90L4D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	6	Q2E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
2,2	2	Q2E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	4	Q2E90L4DE	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	4	Q2E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	6	Q2E112M6C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
3,0	2	Q2E90L2DE	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	140	95	115	0	M8
	2	Q2E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	4	Q2E100L4D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	6	Q2E132M6A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
4,0	2	Q2E100L2DE	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	160	110	130	0	M8
	2	Q2E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
	4	Q2E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
	6	Q2E132M6B	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10

DIMENSIONS - B14a, B34a

				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FC) (B14a)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
5,5	2	Q2E112M2CE	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
	4	Q2E112M4D	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	160	110	130	0	M8
	2	Q2E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
	4	Q2E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
	6	Q2E132M6C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
7,5	2	Q2E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
	4	Q2E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10
11,0	2	Q2E132M2AE	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	200	130	165	0	M10

(1) Tolerance DIN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885
(3) Tolerance DIN EN 50347 "j6"

DIMENSIONS - B14b, B34b



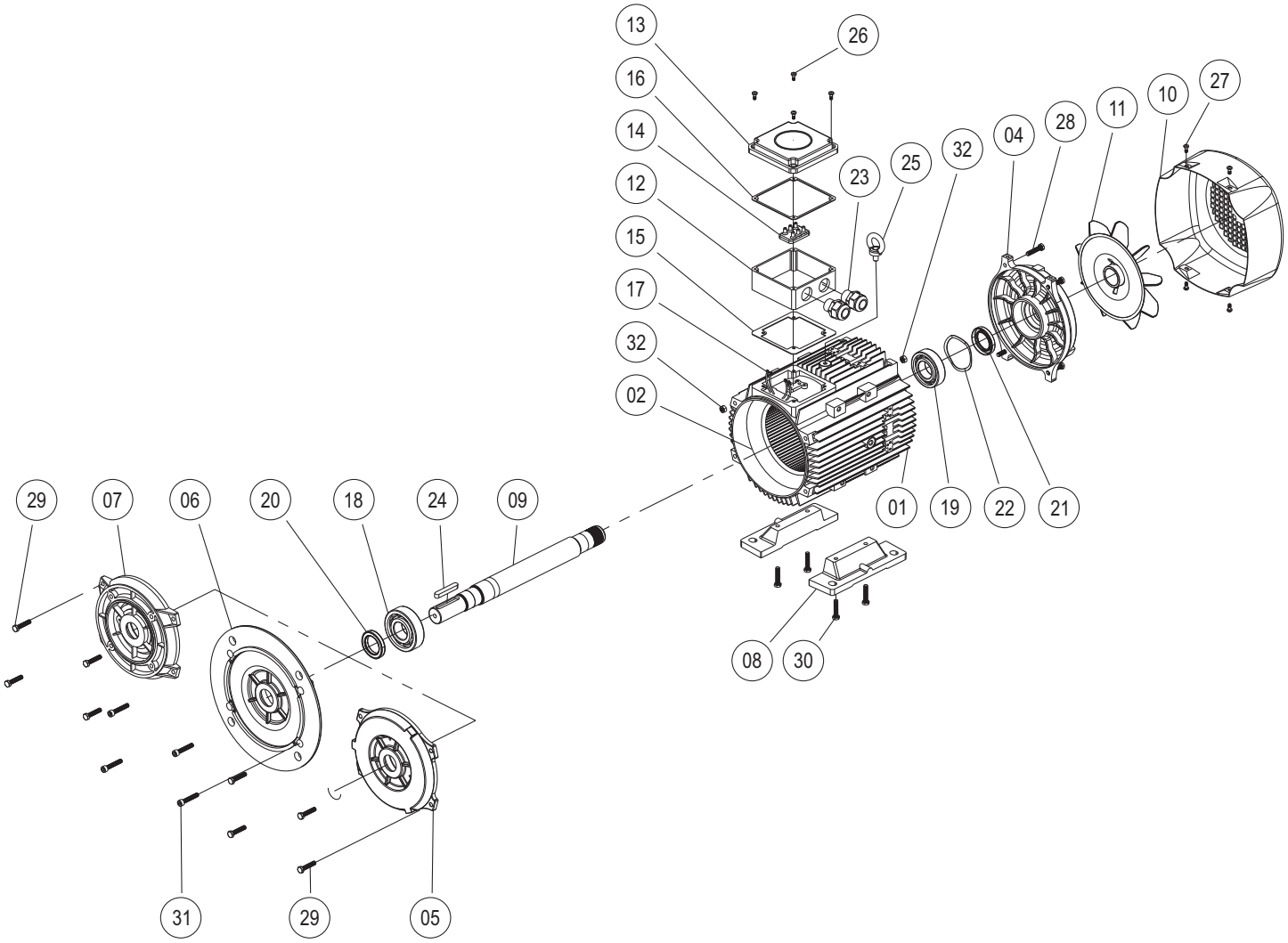
				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FB) (B14b)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D (1)	E	GA	F (2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N (3)	M	R	S
0,25	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
0,37	2	Q2E71M2C	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
	4	Q2E71M4B	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
0,55	2	Q2E71M2D	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
	4	Q2E80M4B	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
0,75	2	Q2E71M2DE	Aluminum	138	252,5	1*M20	90	112	71	190	7	14	30	16,0	5	6202-2Z	6202-2Z	15*24*5	15*24*5	140	95	115	0	M8
	2	Q2E80M2B	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q2E80M4D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	6	Q2E90L6C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
1,1	2	Q2E80M2D	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q2E80M4DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	4	Q2E90L4C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q2E90L6D	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
1,5	2	Q2E80M2DE	Aluminum	158	283,5	1*M20	100	125	80	195	10	19	40	21,5	6	6204-2Z	6204-2Z	20*30*7	20*30*7	160	110	130	0	M8
	2	Q2E90L2C	Aluminum	193	316,5	1*M25	100	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q2E90L4D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	6	Q2E100L6D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
2,2	2	Q2E90L2D	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q2E90L4DE	Aluminum	193	344,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	4	Q2E100L4C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q2E112M6C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
3,0	2	Q2E90L2DE	Aluminum	193	316,5	1*M25	125	140	90	222	10	24	50	27	8	6305-2Z	6205-2Z	25*40*7	25*40*7	160	110	130	0	M8
	2	Q2E100L2C	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	4	Q2E100L4D	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	6	Q2E132M6A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
4,0	2	Q2E100L2DE	Aluminum	217	352,0	1*M25	140	160	100	241	12	28	60	31	8	6306-2Z	6205-2Z	30*47*7	25*40*7	200	130	165	0	M10
	2	Q2E112M2C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	4	Q2E112M4C	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	6	Q2E132M6B	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15

DIMENSIONS - B14b, B34b

				Main Dimensions			Foot Mounted Motors					Shaft				Bearing		Seal		Flange (FB) (B14b)				
Power (kW)	Number of Poles	Motor Type	Housing Type	AC	L	O	B	A	H	HD	K	D(1)	E	GA	F(2)	Drive Side	Non Drive Side	Drive Side	Non Drive Side	P	N(3)	M	R	S
5,5	2	Q2E112M2CE	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	4	Q2E112M4D	Aluminum	232	395,5	2*M25	140	190	112	261	12	28	60	31	8	6306-2Z	6206-2Z	30*47*7	30*47*7	200	130	165	0	M10
	2	Q2E132S2C	Aluminum	279	440,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
	4	Q2E132M4B	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
	6	Q2E132M6C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
7,5	2	Q2E132M2A	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
	4	Q2E132M4C	Aluminum	279	475,5	2*M32	178	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215	0	M12 or 15
11,0	2	Q2E132M2AE	Aluminum	279	475,5	2*M32	140	216	132	314	12	38	80	41	10	6208-2Z	6208-2Z	40*62*10	40*62*10	250	180	215		M12 or 15

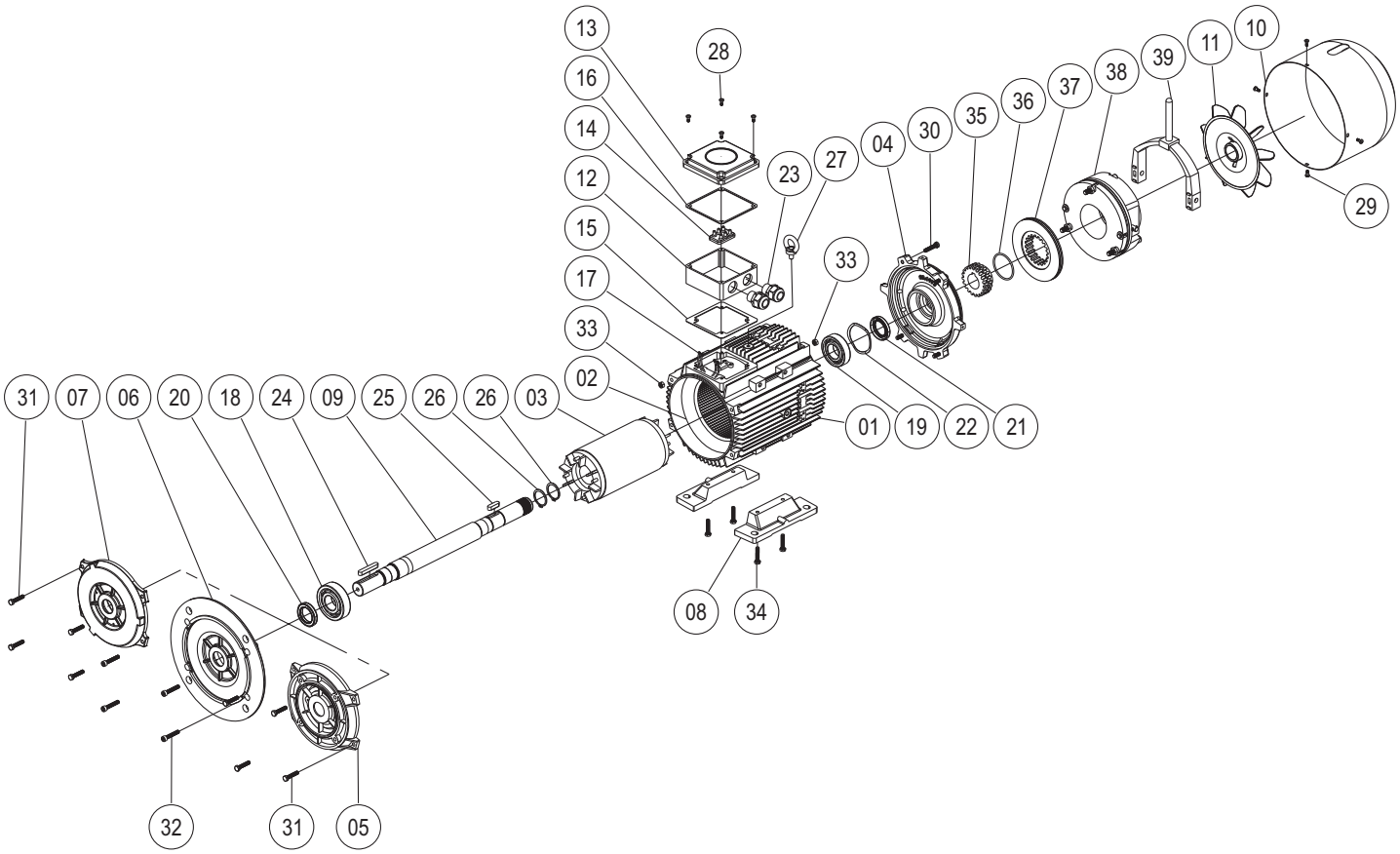
(1) Tolerance DIN EN 50347 "j6" up to 28 mm "k6" above 28 mm
(2) According to DIN 6885
(3) Tolerance DIN EN 50347 "j6"

THE MOTOR PART LIST WITH B3-B5-B14 FLANGE



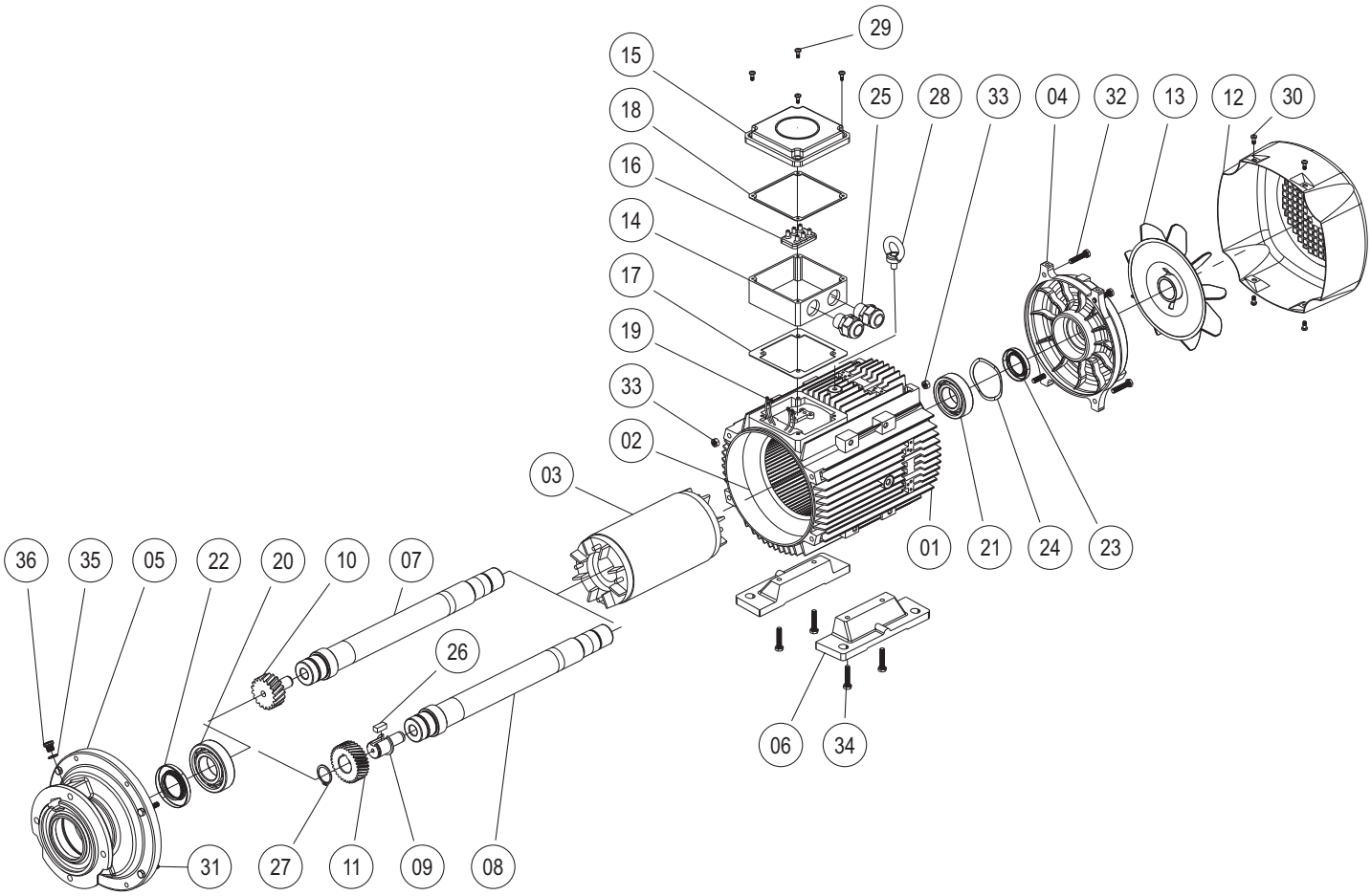
01	Housing	17	Lead Cables
02	Wound Stator	18	Bal Bearing (Drive-Side)
03	Rotor	19	Bal Bearing (Non-Drive-Side)
04	Nondrive - Endshield	20	Seal Ring (Front)
05	Flange	21	Seal Ring (Back)
06	Flange	22	Bearing Shim
07	Flange	23	Conduit
08	Foot	24	Key
09	Drive Shaft (Gearcut)	25	Eye Bolt
10	Fan Cover	26	Pan Head Secrews
11	Fan	27	Pan Head Secrews
12	Terminal Box	28	Bolt
13	Terminal Box Cover	29	Bolt
14	Terminal Plate	30	Bolt
15	Terminal Gasket Down	31	Bolt
16	Terminal Gasket Up	32	Nut

THE MOTOR PART LIST WITH BRAKE AND B3-B5-B14 FLANGE



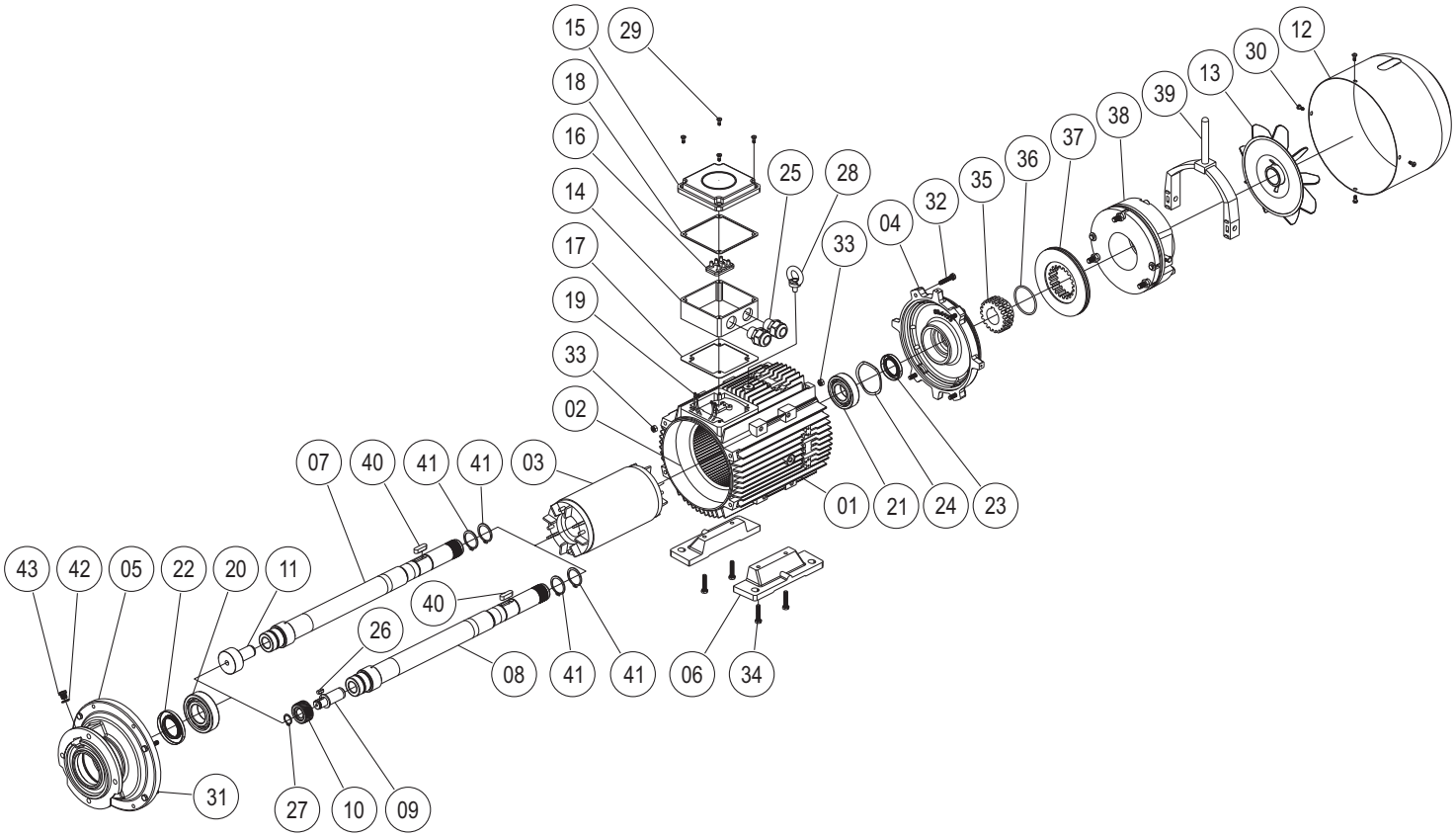
01	Housing	21	Seal Ring (Back)
02	Wound Stator	22	Bearing Shim
03	Rotor	23	Conduit
04	Brake Connection Flange	24	Key
05	Flange	25	Key
06	Flange	26	Circilip DIN 471
07	Flange	27	Eye Bolt
08	Foot	28	Pan Head Secrews
09	Drive Shaft (Gearcut)	29	Pan Head Secrews
10	Fan Cover	30	Bolt
11	Fan	31	Bolt
12	Terminal Box	32	Bolt
13	Terminal Box Cover	33	Nut
14	Terminal Plate	34	Bolt
15	Terminal Gasket Down	35	Coupling
16	Terminal Gasket Up	36	O-Ring
17	Lead Cables	37	Brake Lining
18	Bal Bearing (Drive-Side)	38	Brake
19	Bal Bearing (Non-Drive-Side)	39	Hand Release
20	Seal Ring (Front)		

THE MOTOR PART LIST



01	Housing	19	Lead Cables
02	Wound Stator	20	Bal Bearing (Drive-Side)
03	Rotor	21	Bal Bearing (Non-Drive-Side)
04	Nondrive - Endshield	22	Seal Ring (Front)
05	Moter Connection Flange	23	Seal Ring (Back)
06	Foot	24	Bearing Shim
07	Drive Shaft (Gearcut)	25	Conduit
08	Drive Shaft (Plain)	26	Key
09	Gear Shaft	27	Circilip DIN 471
10	Z1 Gear	28	Eye Bolt
11	Z1 Gear	29	Pan Head Secrews
12	Fan Cover	30	Pan Head Secrews
13	Fan	31	Bolt
14	Terminal Box	32	Bolt
15	Terminal Box Cover	33	Nut
16	Terminal Plate	34	Bolt
17	Terminal Gasket Down	35	Washer
18	Terminal Gasket Up	36	Oil Plug

THE MOTOR PART LIST WITH BRAKE



01	Housing	23	Seal Ring (Back)
02	Wound Stator	24	Bearing Shim
03	Rotor	25	Conduit
04	Brake Connection Flange	26	Key
05	Moter Connection Flange	27	Circilip DIN 471
06	Foot	28	Eye Bolt
07	Drive Shaft (Gearcut)	29	Pan Head Secrews
08	Drive Shaft (Plain)	30	Pan Head Secrews
09	Gear Shaft	31	Bolt
10	Z1 Gear	32	Bolt
11	Z1 Gear	33	Nut
12	Fan Cover	34	Bolt
13	Fan	35	Coupling
14	Terminal Box	36	O-Ring
15	Terminal Box Cover	37	Brake Lining
16	Terminal Plate	38	Brake
17	Terminal Gasket Down	39	Mond Release
18	Terminal Gasket Up	40	Key
19	Lead Cables	41	Circilip DIN 471
20	Bal Bearing (Drive-Side)	42	Washer
21	Bal Bearing (Non-Drive-Side)	43	Oil Plug
22	Seal Ring (Front)		

BRAKE PART LIST AND PROPERTIES

1 Electromagnet

2 Armature plate

3 Torque springs

4 Disc

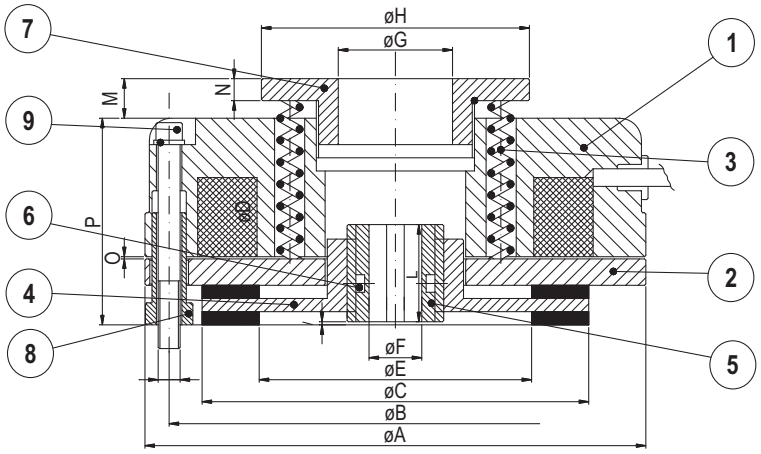
5 Splined hub

6 O-ring

7 Adjuster rings

8 Adjuster nuts

9 Fixing screws



Type Brake Model		K1	K2	K3	K4	K5	K6	K7	K7/D	K8	K8/D	K9	K9/D	K9/T
Static Braking Torque	(Nm)	5	12	16	20	40	60	90	180	200	400	300	600	900
Max Speed of the motor	(rpm)	3000	3000	3000	3000	3000	3000	3000	3000	1500	1500	1500	1500	1500
Input Power	(W)	15	20	25	30	45	50	55	55	60	60	65	65	65
Max noisiness	(≤dB-A)	68	69	68	69	70	70	70	70	70	69	69	69	70
Weight	(Kg.)	1,1	1,85	2,55	2,84	4,8	7	12	15	14,3	18	23	28	34
	A	84	104	114	124	148	159	189	189	218	218	248	248	248
	B	72	90	103	112	132	145	170	170	196	196	230	230	230
	C	61	77	88	98	119	128	151	151	176	176	204	204	204
	D	3xM4	3xM5	3xM5	3xM6	3xM6	3xM8	3xM8	3xM8	6xM10	6xM10	6xM10	6xM10	9xM10
Tollerance hole till size K3 H7, others + 0,01/-0,01	E	35	44	62	69	79	80	90	90	103	103	132	132	132
	F	10-11 12	11-14 15	11-15	14-25	24-25 28	25-30 34	25-30 34	25 H40 34 H60	24-34	34 H60 48	44-45 48	44-45 48	44-45 48-50
	G	20	26	26	42	60	60	60	60	60	60	60	60	60
	H	50	61	61	79	104	104	104	104	104	104	104	104	104
	I	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
	L	18	20	20	20	25	30	30	60	40	60	40	60	80
	M (max)	9	9	9	9,5	18	16	14	14	18	18	18	18	18
	N	4	4	4	5,5	8	8	8	8	8	8	8	8	8
	O	0,2	0,2	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,4	0,4	0,4	0,4÷0,5
	P	38,5	41,5	47	46,5	64	69,5	79	101,5	78	98	80	105	130

Note : The brake before running in, the static braking torque value could change by +20% from the reported value.

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