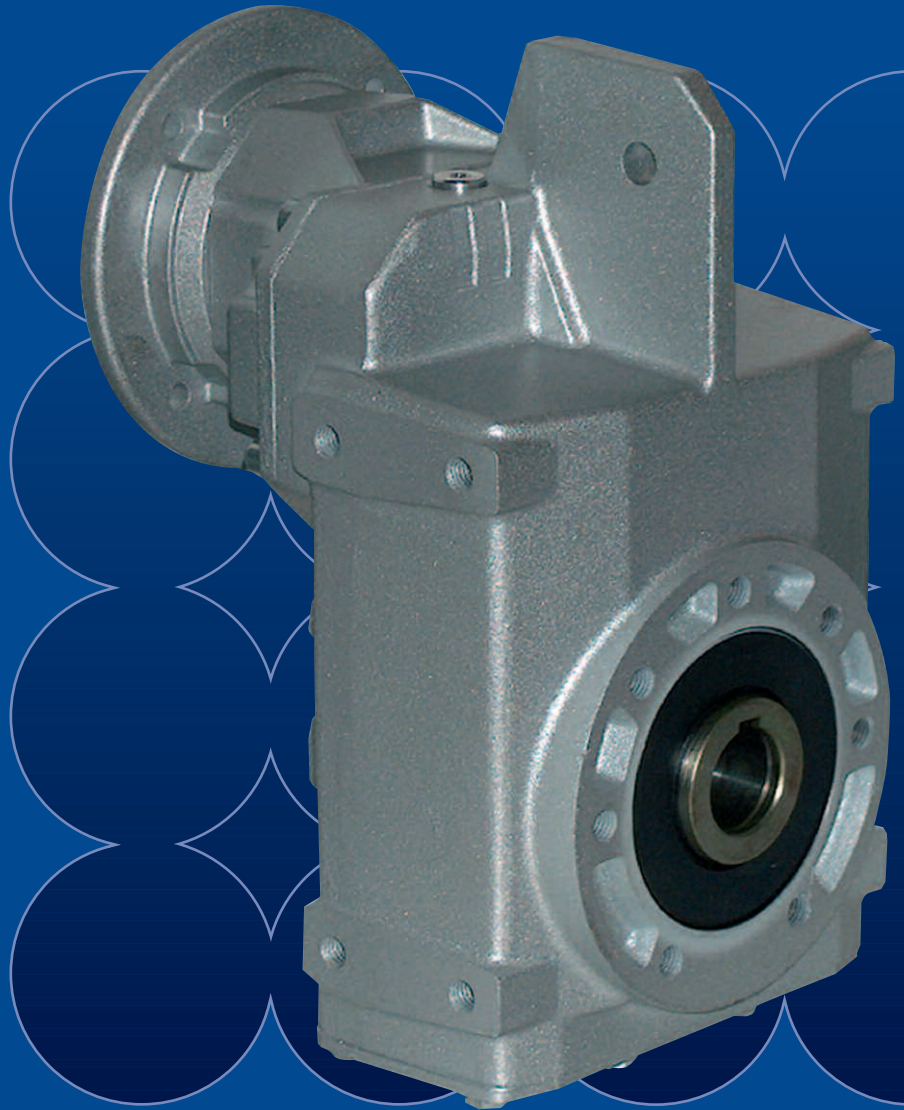


RF Series

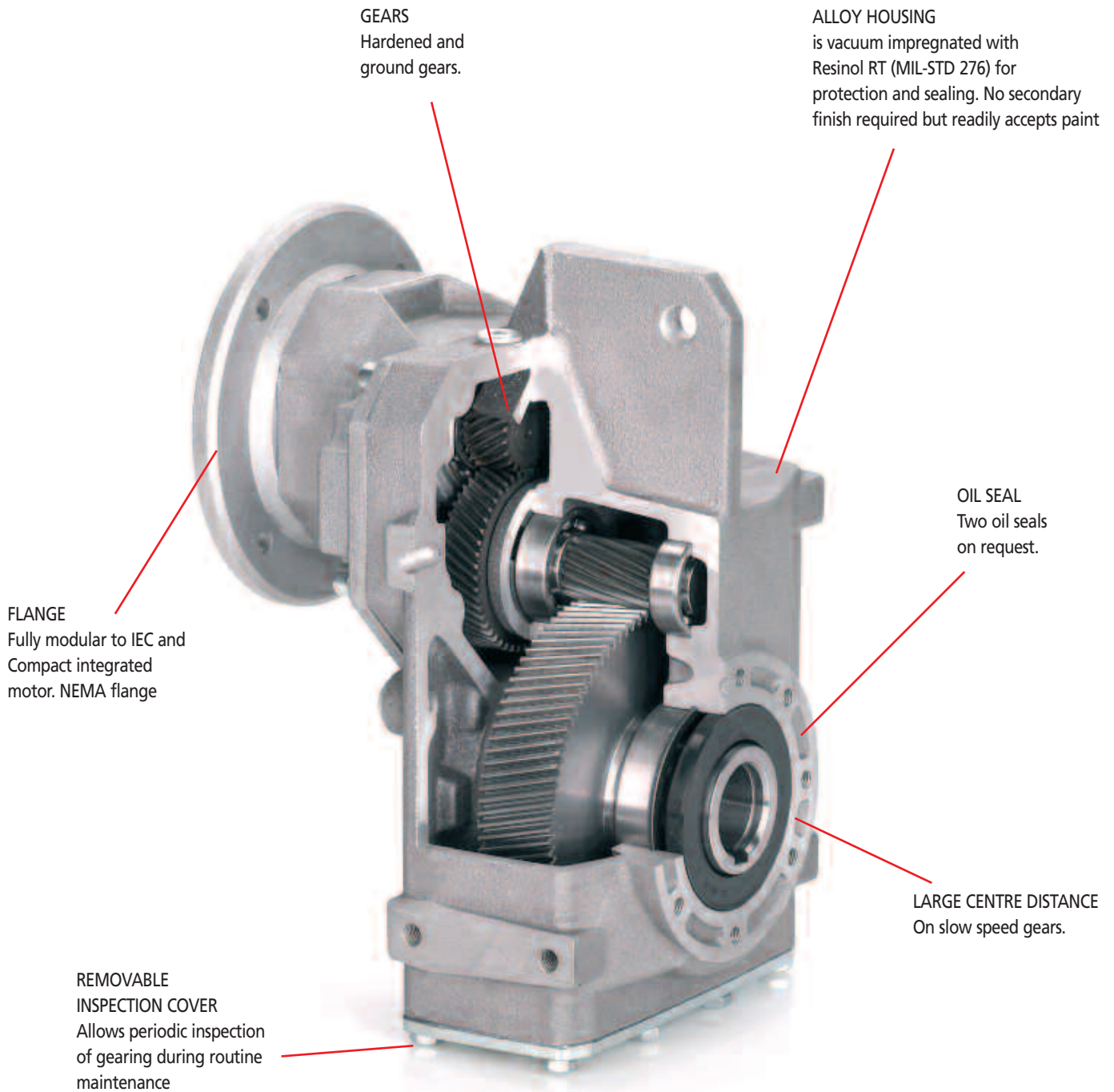
Shaft Mounted Gear Units



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| | Pagina - Page - Seite - Página |
|--|--------------------------------|
| Guida alla selezione Selection guide Auswahl Guide pour la sélection Para la selección | 4 - 9 |
| Codifica How to order Typenbezeichnungen Codification Codificación | 10 - 11 |
| Lubrificazione Lubrication Schmierung Lubrification Lubrificación | 12 - 14 |
| Carichi radiali e assiali Radial and axial loads Radiale und axiale Belastung Charges radiales et axiales Carga radial y axial | 15 - 16 |
| Selezione riduttori, dimensioni Gearboxes selection, dimensions Getriebe ohne motor- Auswahl, Abmessungen Sélection réducteurs, dimensions Selección reductores, dimensiones | 17 - 26 |
| Selezione motoriduttori Gearmotors selection Wahl des Getriebemotors Sélection des motoréducteurs Selección moto-reductores | 27 - 39 |
| Accessori e varianti Accessories and optionals Zubehör und Optionen Accessoires et variants Accesorios y variantes | 40 - 49 |
| Installazione, uso e manutenzione Installation use and maintenance Einbauvorschriften und Wartung Installation, utilisation et entretien Instalación, uso y mantenimiento | 50 - 51 |
| Liste parti di ricambio Spare parts lists Ersatzteilliste Listes pièces de rechange Lista de repuestos | 52 - 53 |
| Motori elettrici Electric motors Elektromotoren Moteurs électriques Motores eléctricos | 54 - 55 |

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Per una corretta selezione del riduttore o motoriduttore è importante rispettare le seguenti indicazioni:

For a proper selection of the required gearbox it is essential to follow the following guide:

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

1

Determinare tramite la seguente tabella il fattore di servizio **fs** relativo all'applicazione.

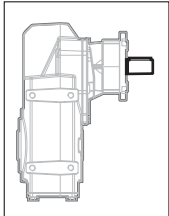
Find out the application service factor through the following table.

| | | fs | | | |
|--|------|--|-------------|-------------|------|
| Tipo di carico e avviamenti per ora Type of load and starts per hour | | Ore di funz. giorn. Oper. hours per day | | | |
| | | 3 h | 10 h | 24 h | |
| Applicazione cont. o interm. con n.ro operazioni/ora Continuous or intermittent appl. with start/hour | ≤ 10 | Uniforme / Uniform | 0.8 | 1 | 1.25 |
| | | Moderato / Moderate | 1 | 1.25 | 1.5 |
| | | Forte / Heavy | 1.25 | 1.5 | 1.75 |
| Applicazione intermittente con n.ro operazioni/ora Intermittent application with start/hour | > 10 | Uniforme / Uniform | 1 | 1.25 | 1.5 |
| | | Moderato / Moderate | 1.25 | 1.5 | 1.75 |
| | | Forte / Heavy | 1.5 | 1.75 | 2.15 |

N.B. Per azionamenti con motore a scoppio o per funzionamento alternato istantaneo, moltiplicare il valore del coefficiente di servizio per 1.15.

N.B. For applications with flameproof motors or instantaneous reversal, multiply the service coefficient by 1.15.

Scelta di un riduttore
Gearbox selection
Getriebeauswahl
Choix d'un réducteur
Selección del reductor


2

Un riduttore nella configurazione R dovrà essere ricercato nelle tabelle di selezione riduttori in base alla potenza richiesta P_{1r} (o alla coppia richiesta M_{2r}) e ai giri uscita n_2 riferiti a 1400 min^{-1} (o al rapporto di trasmissione i).

A gearbox version R should be searched for in the selection tables, considering the required P_{1r} power (or M_{2r} torque required) and output rpms n_2 referred to 1400 min^{-1} (or to reduction ratio).

Il riduttore selezionato in base alla potenza P_{1r} (indicata in tabella) e a n_1 dovrà soddisfare le seguenti condizioni:

Once the gearbox has been selected upon P_{1r} power (indicated in the table) and n_1 , it should comply with the following conditions:

$$n_1 = 1400 \text{ min}^{-1}$$

$$P_{1R} \geq P_{1r} \times fs \quad (M_{2R} \geq M_{2r} \times fs)$$

$$n_1 = 2800 \text{ min}^{-1}$$

$$P_{1R} \times 1.6 \geq P_{1r} \times fs \quad (M_{2R} \times 0.8 \geq M_{2r} \times fs)$$

Per l'abbinamento a motori a 2800 min^{-1} , specificare sempre tale caratteristica in fase di ordine.

Where 2 pole motors are required, specify when placing order.

$$n_1 = 900 \text{ min}^{-1}$$

$$P_{1R} / 1.5 \geq P_{1r} \times fs \quad (M_{2R} \geq M_{2r} \times fs)$$

Alle tabelle di selezione dei riduttori è associata la seguente simbologia:

Following symbols will be found in the selection tables of the gearboxes:

| n_2 in^{-1} | i | P_1 k | M_2 | fs | P_1 k | M_2 | |
|---------------------------|-----|------------|-------|------|------------|-------|---|
| 3 | 3 2 | 1 | 1 | 1 | 3.3 | 75 | 2 |
| 32 | 3 | 1 | 1 | 1 | 2.8 | 80 | 2 |
| 2 2 | | 1 | | | 1.2 | 80 | 2 |
| 22 | 3 | 1 | | 1 | 1.8 | 75 | 2 |
| 1 1 | 33 | 1 | 2 | 1 1 | 1.7 | 80 | 2 |

n_2 [min^{-1}] giri in uscita ($n_1 = 1400 \text{ min}^{-1}$)

i — rapporto di riduzione

P_{1M} [kW] potenza motore installata ($n_1 = 1400 \text{ min}^{-1}$)

P_{1R} [kW] potenza in entrata riduttore ammissibile con $fs=1$ ($n_1 = 1400 \text{ min}^{-1}$)

M_{2M} [Nm] coppia in uscita riferita a P_{1M} ($n_1 = 1400 \text{ min}^{-1}$)

M_{2R} [Nm] coppia in uscita riferita a P_{1R} ($n_1 = 1400 \text{ min}^{-1}$)

fs — fattore di servizio (riferito a P_{1M})

n_2 [min^{-1}] output speed ($n_1 = 1400 \text{ min}^{-1}$)

i — reduction ratio

P_{1M} [kW] motor input power ($n_1 = 1400 \text{ min}^{-1}$)

P_{1R} [kW] transmitted power at input gearbox with $fs=1$ ($n_1 = 1400 \text{ min}^{-1}$)

M_{2M} [Nm] output torque referred to P_{1M} ($n_1 = 1400 \text{ min}^{-1}$)

M_{2R} [Nm] output torque referred to P_{1R} ($n_1 = 1400 \text{ min}^{-1}$)

fs — service factor (referred to P_{1M})

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D
F
E

Für eine exakte Auswahl der benötigten Getriebe werden folgende Angaben benötigt:

Pour une sélection correcte du réducteur ou du motoréducteur il est important de respecter les indications suivantes:

Para una correcta selección del reductor o moto-reductor es importante respetar las siguientes indicaciones:

Anhand der beigefügten Tabelle kann der Betriebsfaktor bestimmt werden:

Déterminer au moyen du tableau suivant le facteur de service **fs** correspondant l'application.

Determinar a través de la tabla siguiente el factor de servicio **fs** correspondiente a la aplicación.

| Belastungsart und schaltungen/Stunde Type de charge et type de fonctionnement par heure Tipo de carga y arranques/hora | | fs | | | |
|---|------|---|------|------|------|
| | | 3 h | 10 h | 24 h | |
| Daueranwendung oder unterbrochene Anwendung mit Anzahl Starts/Stunde Service continu ou intermittent avec démarrage/heure Aplicación continua o intermitente con numero de arranques/hora | ≤ 10 | Gleichmäßige Belastung Normal / Uniforme | 0.8 | 1 | 1.25 |
| | | Mittlere Belastung Légère / Moderado | 1 | 1.25 | 1.5 |
| | | Schwere Belastung Forte / Fuerte | 1.25 | 1.5 | 1.75 |
| Unterbrochene Anwendung mit Anzahl Starts/Stunde Service intermittent avec démarrage/heure Aplicación intermitente con numero de arranques/hora | > 10 | Gleichmäßige Belastung Normal / Uniforme | 1 | 1.25 | 1.5 |
| | | Mittlere Belastung Légère / Moderado | 1.25 | 1.5 | 1.75 |
| | | Schwere Belastung Forte / Fuerte | 1.5 | 1.75 | 2.15 |

Achtung: Bei Einsatz der Getriebe mit Verbrennungsmotoren bzw. anderen stark lastschwankenden Antrieben ist der Betriebsfaktor mit 1.15 zu multiplizieren.

N.B. Pour des actionnements avec moteur à explosion ou pour un fonctionnement alterné instantané, multiplier la valeur du coefficient de service par 1.15

Atención: Para accionamientos con motor de explosión o para funcionamiento con cargas alternas puntuales, multiplicar el valor del coeficiente de servicio por 1.15.

Auswahl eines Getriebetyps R (oder "B") aus den Auswahltabellen unter Berücksichtigung der Leistung bzw. des Drehmomentes, der Eintriebsdrehzahl 1400 1/min der Untersetzung i und des daraus resultierenden Abtriebsdrehmomentes. Sollte das Getriebe von der Leistung und der Eintriebsdrehzahl (1400 1/min) nicht nach der nebenstehenden Tabelle aus gesucht werden können, so ist folgendes zu beachten:

Un réducteur dans la configuration R (ou B) devra être recherché dans les tableaux de sélection réducteurs sur la base de la puissance demandée P_{1r} (ou du couple maximal M_{2r}) et une vitesse de sortie n_2 se référant à 1400 min (ou au rapport de transmission i). Le réducteur sélectionné sur la base de la puissance P_1 (indiquée sur le tableau) et de n_1 devra satisfaire les conditions suivantes:

Un reductor en la configuración R (o B) tendrá que buscarse en las tablas para la selección de los reductores en función de la potencia requerida P_{1r} (o del par máximo M_{2r}) y de las revoluciones salida n_2 referidas a 1400 min (o a la relación de transmisión i). El reductor elegido en función de la potencia P_1 (indicada en la tabla) y a n_1 deberá satisfacer las condiciones siguientes:

$$n_1 = 1400 \text{ min}^{-1}$$

$$P_{1R} \geq P_{1r} \times fs \quad (M_{2R} \geq M_{2r} \times fs)$$

$$n_1 = 2800 \text{ min}^{-1}$$

$$P_{1R} \times 1.6 \geq P_{1r} \times fs \quad (M_{2R} \times 0.8 \geq M_{2r} \times fs)$$

Beim Anbau von zweipoligen Motoren bitte immer bei der Bestellung angeben.

Pour le montage de moteurs à 2800 min, toujours spécifier cette caractéristique en phase de commande.

Para el montaje con motores de 2800 min, especificar siempre esta característica al efectuar el pedido.

$$n_1 = 900 \text{ min}^{-1}$$

$$P_{1R} / 1.5 \geq P_{1r} \times fs \quad (M_{2R} \geq M_{2r} \times fs)$$

Folgende Zeichen sind in der Auswahltabelle für Getriebe zu finden

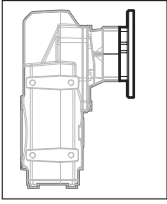
Aux tableaux de sélection des réducteurs est associée la symbolgie suivante:

A las tablas para la selección de los reductores se ha asociado la simbología siguiente:

| | | |
|----------|-----------------------|---|
| n_2 | [min^{-1}] | Abtriebsdrehzahl ($n_1 = 1400$ 1/min) |
| i | — | Lieferbare Untersetzungen |
| P_{1M} | [kW] | Motoreingangsleistung ($n_1 = 1400$ min^{-1}) |
| P_{1R} | [kW] | Durchtriebsleistung am Getriebe eingang $fs=1$ ($n_1 = 1400$ min^{-1}) |
| M_{2M} | [Nm] | Ausgangsdrehmoment bezogen auf P_{1M} ($n_1 = 1400$ min^{-1}) |
| M_{2R} | [Nm] | Ausgangsdrehmoment bezogen auf P_{1R} ($n_1 = 1400$ min^{-1}) |
| fs | — | Betriebsfaktor (bezogen auf P_{1M}) |

| | | |
|----------|-----------------------|--|
| n_2 | [min^{-1}] | vitesse de sortie ($n_1 = 1400$ min^{-1}) |
| i | — | rapport de réduction |
| P_{1M} | [kW] | puissance du moteur ($n_1 = 1400$ min^{-1}) |
| P_{1R} | [kW] | puissance du réducteur en entrée $fs=1$ ($n_1 = 1400$ min^{-1}) |
| M_{2M} | [Nm] | couple de sortie rapportée a P_{1M} ($n_1 = 1400$ min^{-1}) |
| M_{2R} | [Nm] | couple de sortie rapportée a P_{1R} ($n_1 = 1400$ min^{-1}) |
| fs | — | facteur de service (rapportée a P_{1M}) |

| | | |
|----------|-----------------------|--|
| n_2 | [min^{-1}] | revoluciones de salida ($n_1 = 1400$ min^{-1}) |
| i | — | relación de reducción |
| P_{1M} | [kW] | potencia motor ($n_1 = 1400$ min^{-1}) |
| P_{1R} | [kW] | potencia transmitida en la entrada $fs=1$ ($n_1 = 1400$ min^{-1}) |
| M_{2M} | [Nm] | par de salida referida a P_{1M} ($n_1 = 1400$ min^{-1}) |
| M_{2R} | [Nm] | par de salida referida a P_{1R} ($n_1 = 1400$ min^{-1}) |
| fs | — | factor de servicio (referida a P_{1M}) |



- 3** Le tabelle per la selezione riduttori possono essere utilizzate anche per i riduttori nella configurazione P (predisposti per attacco motore IEC B5 o B14).
Oltre alle verifiche precedentemente illustrate è necessario controllare, nelle colonne retinate, l'applicabilità della grandezza (63, 71, ecc.) del motore desiderato.
La simbologia aggiuntiva associata è la seguente:

Selection tables can also be used for mounting version P (prearranged for motor attachment throughout IEC flange B5 or B14).
In this case, besides carrying out all previous checks, it is also important to verify the suitability of the required motor sizes (63, 71, etc.) in the shaded columns.
Associated symbols are as follows:

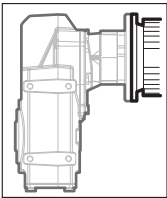
| B5 | | | | | B14 | | | | | RD | |
|----|----|----|----|------------|-----|----|----|----|----|------------|---|
| B | C | D | E | F | O | P | Q | R | T | | U |
| 63 | 71 | 80 | 90 | 100 112 | 56 | 63 | 71 | 80 | 90 | 100 112 | |

| | | | | | | | | | | |
|---|---|--|--|--|--|--|-----|---|--|----|
| B | B | | | | | | B-C | C | | 96 |
| B | B | | | | | | B-C | C | | 96 |
| B | B | | | | | | B-C | C | | 96 |
| B | B | | | | | | B-C | C | | 96 |
| B | B | | | | | | B-C | C | | 96 |

- 63... — grandezze motore (IEC) applicabili
B5 — predisposizione flange B5
B14 — predisposizione flange B14
— grandezze motore accoppiabili
B — montaggio con boccia di riduzione
C — posizione fori flangia/basetta motore
RD — rendimento dinamico

- 63... — suitable motor sizes (IEC)
B5 — B5 motorflange
B14 — B14 motorflange
— available motor adaptors
B — assembling by means of reduction bushes
C — motor flange/terminal box position
RD — dynamic efficiency

**Scelta di un motoriduttore
Selection of a motorized gearbox
Auswahl eines Getriebes mit Motor
Choix d'un moto-réducteur
Selección del moto-reductor**



- 4** I motoriduttori (configurazione M) possono essere selezionati agevolmente tramite le tabelle di selezione motoriduttori.
Conoscendo P_{1M} , in corrispondenza del numero di giri in uscita n_2 desiderato, si sceglierà il motoriduttore il cui fattore di servizio f_s sia uguale o maggiore a quello definito al punto 1.
Oltre alle motorizzazioni con motori a 4 poli (1400 min^{-1}) è possibile selezionare (dove disponibili) motori a 2 poli (2800 min^{-1}) e a 6 poli (900 min^{-1}).

Motorised gearboxes (version M) can be easily selected throughout the appropriate selection tables.
Knowing P_1 value, in corresponding to the required output speed, the gearbox should be selected having a service factor equal or higher than the one shown in point 1.
In addition to 4 pole motors (1400 min^{-1}) it is also possible to select 2 pole (2800 min^{-1}) and 6 pole (900 min^{-1}) motors.

| $P_{1M} = 0.37 \text{ kW}$ $n_1 = 2800 \text{ min}^{-1}(71A2) - 1400 \text{ min}^{-1}(71B4) - 900 \text{ min}^{-1}(80A6)$ | | | | | | | | | | |
|---|---------------|-------|-------|----|------|------|----------------------------|--|--|----|
| n_2 [min^{-1}] | M_2 [Nm] | i | f_s | | | | | | | |
| | | | | | | | B5 | B14 | | |
| 96 | 35 | 14.53 | 5.7 | 25 | F32A | 71B4 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | | 19 |
| 112 | 30 | 8.03 | 5.6 | 25 | F32A | 80A6 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | | 19 |
| 135 | 25 | 10.40 | 7.3 | 25 | F32A | 71B4 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | | 19 |
| 142 | 24 | 19.76 | 7.5 | 25 | F32A | 71A2 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | | 19 |
| 166 | 20 | 16.84 | 8.8 | 25 | F32A | 71A2 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | | 19 |

Alle tabelle di selezione dei motoriduttori è associata la seguente simbologia:

Following symbols are associated to the selection tables of the geared motors:

- P_{1M} [kW] potenza in entrata
 n_2 [min^{-1}] giri in uscita
 M_2 [Nm] coppia trasmessa in uscita
i — rapporto di riduzione
 f_s — fattore di servizio
B5 — predisposizione flange B5
B14 — predisposizione flange B14
B) — montaggio con boccia di riduzione
C) — posizione fori flangia/basetta motore

- P_{1M} [kW] input power
 n_2 [min^{-1}] output speed
 M_2 [Nm] transmitted output torque
i — reduction ratio
 f_s — service factor
B5 — B5 motorflange
B14 — B14 motorflange
B) — coupling by means of reduction bushing
C) — motor flange/terminal box position

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D

F



E

Die Auswahltabellen werden auch für die Montage der P- Version (vorbereitet für Motorflansche nach IEC - B5 bzw. B14) verwendet. In diesem Fall sind die anbaubaren Motorgrößen (BG 63, 71 usw.) aus der unterlegten Tabelle zu entnehmen.



Folgende Symbole werden verwendet:

| | | | |
|-------|---|---|---|
| 63,.. | — | Mögliche Motorgrößen nach IEC | |
| B5 | — | Motorflansche B5 | |
| B14 | — | Motorflansche B14 | |
| | — | Mögliche Motoradapter | |
| B | — | Zusammenbau unter Verwendung der Reduzierhülsen |  |
| C | — | Bohrungsposition am Motorflansch/-sockel |  |
| RD | — | Dynamischer Wirkungsgrad | |

Les tableaux pour la sélection des réducteurs peuvent aussi être utilisés pour les réducteurs dans la configuration P (prédisposés pour montage moteur IEC B5 ou B14). En plus des vérifications précédentes, il est nécessaire de contrôler dans les colonnes tramées l'application de la taille (63, 71, etc.) du moteur souhaité. La symbolique utilisée est la suivante:

| | | | |
|-------|---|---|--|
| 63,.. | — | taille moteur (IEC) applicables | |
| B5 | — | prédisposition brides B5 | |
| B14 | — | prédisposition brides B14 | |
| | — | tailles moteurs pouvant être accouplés | |
| B | — | montage avec douille de réduction |  |
| C | — | position trous bride/barrette à bornes moteur |  |
| RD | — | rendement dynamique | |

Las tablas para la selección de los reductores pueden también utilizarse para los reductores en la configuración P (predispuestos para el montaje con el motor IEC B5 ó B14). Además de los controles anteriormente ilustrados, es necesario controlar, en las columnas reticuladas, la aplicación del tamaño (63, 71, etc.) del motor deseado. La simbología adicional asociada es la siguiente:






| | | | |
|-------|---|--------------------------------------|---|
| 63,.. | — | tamaño motor (IEC) aplicables | |
| B5 | — | predisposición bridas B5 | |
| B14 | — | predisposición bridas B14 | |
| | — | tamaño motor acoplable | |
| B | — | montaje con casquillo de reducción |  |
| C | — | posición agujeros brida / base motor |  |
| RD | — | rendimiento dinámico | |

Getriebe mit Motoren (version M) werden einfach durch die Auswahltabellen ausgesucht. Ist die Leistung (P_1) und die Abtriebsdrehzahl bekannt so sollte das ausgesuchte Getriebe einen Betriebsfaktor >1 haben. Anstelle von 4-polige Motoren können auch 6- polige Motoren verwendet werden.- Drehzahlen beachten.

Les moto-réducteurs (configuration M) peuvent être sélectionnés aisément au moyen des tableaux de sélection moto-réducteurs. En connaissant P_1 , en correspondance de la vitesse de sortie n_2 souhaité, on choisira le moto-réducteur dont le facteur de service f_s soit égal ou supérieur à celui défini au point 1. En plus des motorisations avec moteurs à 4 pôles (1400 min^{-1}) il est possible de sélectionner (là où disponible) des moteurs à 6 pôles (900 min^{-1})

Los moto-reductores (configuración M) pueden seleccionarse fácilmente a través de las tablas de los moto-reductores. Conociendo P_1 , en correspondencia del número de revoluciones en salida n_2 deseado, se elegira el moto-reductor cuyo factor de servicio f_s sea igual o mayor al definido en el punto 1. Además de las motorizaciones con motores de 4 polos (1400 min^{-1}) es posible seleccionar (si está disponible) motores de 6 polos (900 min^{-1}).




$P_{1M} = 0.37 \text{ kW}$ $n_1 = 2800 \text{ min}^{-1}(71A2) - 1400 \text{ min}^{-1}(71B4) - 900 \text{ min}^{-1}(80A6)$




| n_2 [min^{-1}] | M_2 [Nm] | i | f_s |  |  |  | |  |  Di ensions on page |
|--------------------------------|---------------|-------|-------|---|---|---|----------------------------|---|---|
| | | | | | | B5 | B14 | | |
| 96 | 35 | 14.53 | 5.7 | 25 | F32A | 71B4 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | 19 |
| 112 | 30 | 8.03 | 5.6 | 25 | F32A | 80A6 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | 19 |
| 135 | 25 | 10.40 | 7.3 | 25 | F32A | 71B4 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | 19 |
| 142 | 24 | 19.76 | 7.5 | 25 | F32A | 71A2 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | 19 |
| 166 | 20 | 16.84 | 8.8 | 25 | F32A | 71A2 | 63 ^{B)} -71-80-90 | 71 ^{C)} -80 ^{C)} -90 | 19 |




Symbole der Auswahltabellen für Getriebe mit Motor

Aux tableaux de sélection des moto-réducteurs est associée la symbolique suivante:

A las tablas para la selección de los moto-reductores se ha asociado la simbología siguiente:

| | | | |
|----------|-----------------------|--|---|
| P_{1M} | [kW] | Leistung Motor | |
| n_2 | [min^{-1}] | Abtriebsdrehzahl | |
| M_2 | [Nm] | Abtriebsdrehmoment | |
| i | — | Lieferbare Untersetzungen | |
| f_s | — | Betriebsfaktor | |
| B5 | — | Motorflansche B5 | |
| B14 | — | Motorflansche B14 | |
| B) | — | Reduzierhülsen |  |
| C) | — | Bohrungsposition am Motorflansch/-sockel |  |
| | | Lieferbare Motorflansche nach IEC |  |

| | | | |
|----------|-----------------------|---|--|
| P_{1M} | [kW] | puissance en entrée | |
| n_2 | [min^{-1}] | vitesse de sortie | |
| M_2 | [Nm] | couple transmis en sortie | |
| i | — | rapport de réduction | |
| f_s | — | facteur de service | |
| B5 | — | prédisposition brides B5 | |
| B14 | — | prédisposition brides B14 | |
| B) | — | Montage avec douille de réduction |  |
| C) | — | position trous bride/barrette à bornes moteur |  |
| | | bridas acoplamiento motor IEC disponibles |  |

| | | | |
|----------|-----------------------|---|---|
| P_{1M} | [kW] | potencia de entrada | |
| n_2 | [min^{-1}] | revoluciones de salida | |
| M_2 | [Nm] | Par transmitido de salida | |
| i | — | relación de reducción | |
| f_s | — | factor de servicio | |
| B5 | — | predisposición bridas B5 | |
| B14 | — | predisposición bridas B14 | |
| B) | — | montaje con casquillo de reducción |  |
| C) | — | posición agujeros brida / base motor |  |
| | | bridas acoplamiento motor IEC disponibles |  |

Una selezione semplificata del motoriduttore in base ad un unico fattore di servizio (il più prossimo a 1) può essere effettuata tramite le tabelle di selezione riduttori (punto 2).
In questo caso sono riportati solo motoriduttori con motori a 4 poli (1400 min⁻¹).

An easier selection of the motorised gearbox (closer as possible to sf 1) can be effected throughout gear selection table (Point 2).
In fact only 4 pole motors (1400 min⁻¹) are listed here.

Riduttore con variatore di velocità
Gearbox coupled to a speed variator
Getriebe mit Regelgetriebe kombiniert
Réducteur avec variateur de vitesse
Reductor con variador de velocidad

- 5** Qualora al riduttore venga abbinato un variatore idraulico o meccanico, è necessario considerare che a bassi giri, al diminuire della velocità d'ingresso, le coppie M_2 possono superare anche notevolmente il valore nominale. Tale effetto deve essere maggiormente tenuto in considerazione nei rapporti elevati.

Where a hydraulic or mechanic variator is coupled to a gearbox, it is necessary to take into consideration the fact that in the presence of low output speed, decreasing the input speed, M_2 torques can easily exceed their nominal values. In high reduction ratios this effect should be taken even more into consideration.

Riduttore con motore autofrenante
Gearbox equipped with a brake motor
Getriebebremmotor
Réducteur avec moteur frein
Reductor con motor freno

- 6** Nella selezione con motori autofrenanti, potendo essere considerevole l'effetto inerziale delle masse, è opportuno scegliere riduttori con $fs \geq 1$.

For selection with brake motors, having considerable mass inertia values, it is advisable to select gearboxes with sf higher or equal to 1.

Selezioni fuori catalogo
Selections not listed in the catalogue
Auswahl von Nichtkatalog-Getrieben
Sélection hors catalogue
Selección fuera de catálogo

- 7** Nel caso vengano applicate potenze superiori a quelle indicate a catalogo, la nostra ditta non può garantire il corretto funzionamento del gruppo.

In those cases where higher powers than the ones given in this catalogue have to be used, Renold cannot guarantee the proper operation of the gearbox.

Note
Notes
Anmerkungen
Note
Notas

- 8** Occorre tenere nella giusta considerazione e valutare attentamente le segg. applicazioni consultando il ns. Servizio Tecnico.
- Utilizzo in servizi che potrebbero risultare pericolosi per l'uomo in caso di rottura del riduttore.
 - Applicazioni con inerzie particolarmente elevate.
 - Utilizzo come organo di sollevamento.
 - Applicazioni con elevate sollecitazioni dinamiche sulla cassa del riduttore.
 - Utilizzo in ambiente con T° inferiore a 5°C o superiore a 40°C.
 - Utilizzo in ambiente con presenza di aggressivi chimici.
 - Utilizzo in ambiente salmastro.
 - Posizioni di piazzamento non previste a catalogo.
 - Utilizzo in ambiente radioattivo.
 - Utilizzo in ambiente con pressione diversa da quella atmosferica.
 - Evitare applicazioni dove è prevista l'immersione, anche parziale, del riduttore.

For the following applications, please contact Renold.

- Dangerous applications in case of gearbox breakage.
- Particularly high inertia applications
- Lifting devices.
- High dynamic stress on gearbox housing.
- Particular environment conditions with temperatures lower than 5°C or higher than 40°C.
- Highly chemical aggressive environment.
- Salty environment.
- Applications not considered in the catalogue.
- Radioactive environment.
- Pressure different to atmospheric.
- Avoid those applications where total or partial immersion of the gearbox is required.

GUIDA ALLA SELEZIONE / SELECTION GUIDE / AUSWAHL GUIDE POUR LA SELECTION / GUÍA PARA LA SELECCION

D
F
E

Eine weitere Auswahl von Getriebemotoren kann durch Selektion der Verzahnungen getroffen werden. Dadurch kann der Betriebsfaktor näher an 1 gelegt werden. Es sind nur 4-polige Motoren (1400 1/min) aufgeführt.

Une sélection simplifiée du moto-réducteur sur la base d'un unique facteur de service (le plus proche de 1) peut être effectuée au moyen des tableaux de sélection réducteurs (point 2). Dans ce cas, sont reportés uniquement les moto-réducteurs. Avec moteurs à 4 pôles (1400 min⁻¹).

Una selección simplificada del moto-reductor en base de un único factor de servicio (el más próximo a 1) puede efectuarse a través de las tablas para la selección del reductor (punto 2). En este caso se incluyen exclusivamente los moto-reductores con motores de 4 polos (1400 min⁻¹).

Beim Anbau eines mechanischen oder hydraulischen Regelgetriebes muss darauf geachtet werden, daß sich bei niederen Eintriebsdrehzahlen in das Getriebe die Drehmomente deutlich erhöhen. Besonders bei höheren Untersetzungen muss dies gesondert beachtet werden.

Au cas où on assemblerait au réducteur un variateur hydraulique ou mécanique, il est nécessaire de considérer que lorsque la vitesse d'entrée diminue, les couples M_2 peuvent dépasser même considérablement la valeur nominale cet effet doit être encore plus tenu en considération dans les rapports élevés.

Si al reductor se le acopla un variador hidráulico o mecánico, es necesario considerar que a bajas revoluciones, al disminuir la velocidad de entrada, los pares M_2 podrían superar, el máximo del valor nominal. Este efecto debe tenerse todavía más en cuenta en las relaciones de reducción elevadas.

Bei der Auswahl der Getriebe mit Bremsmotor ist es wichtig, die Massenträgheit des Motors zu beachten. Die Getriebe immer mit einem Betriebsfaktor ≥ 1 auswählen.

Dans la sélection avec moteurs freins, puisque l'effet inertiel des masses peut être considérable, il est opportun de choisir des réducteurs avec $f_s \geq 1$.

En la selección con motores freno, pudiendo ser considerable el efecto inercial de las masas, es conveniente elegir reductores con $f_s \geq 1$.

Werden die Getriebe mit größeren Leistungen als im Katalog angegeben belastet, kann Hydromec keine Gewährleistung für sicheren Betrieb übernehmen.

Au cas où on appliquerait des puissances supérieures à celles indiquées sur le catalogue, notre société ne peut pas garantir le fonctionnement correct du groupe.

Si se aplican potencias superiores a las indicadas en el catálogo, nuestra empresa no puede garantizar el correcto funcionamiento del grupo.

Bei folgenden Einsatzfällen sollte mit unserer technischen Abteilung Rücksprache gehalten werden:

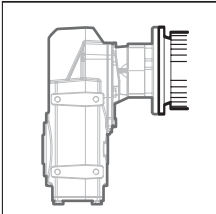
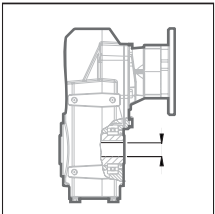
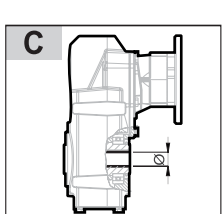
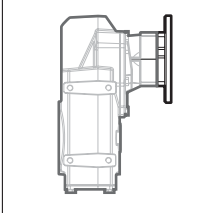
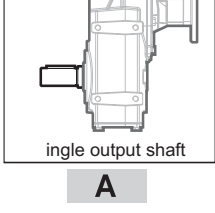
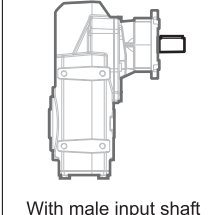
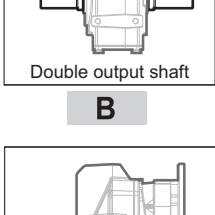
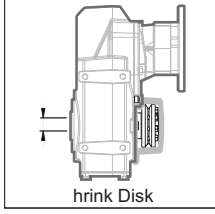
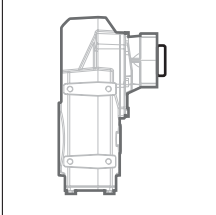
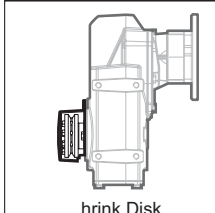
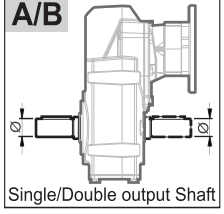
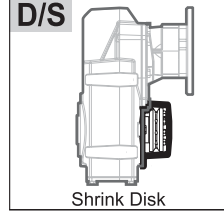
- Mechanische Beanspruchung, die zum Gehäusebruch führen kann.
- Einsatzfälle mit höheren Eintriebsleistungen als angegeben.
- Hubantriebe.
- Höchste dynamische Belastungen des Gehäuses.
- Umgebungstemperaturen höher + 50°C und kleiner + 5°C.
- Chemisch aggressive Umgebung.
- Salzhaltige Umgebungsluft.
- Umgebungsbedingungen und Einsatzfälle die nicht im Katalog aufgeführt sind.
- Radioaktive Umgebungsbedingungen
- Anderer Luftdruck als der Atmosphärendruck.
- Alle ungewöhnlichen Einsatzbedingungen, von denen unsere Getriebe teilweise oder im Ganzen betroffen sind.

Il faut considérer et évaluer attentivement les applications suivantes par la consultation de notre Service Technique:

- Utilisation pour des services dangereux pour l'homme en cas de casse du réducteur.
- Applications avec des inerties particulièrement élevées.
- Utilisation comme organe de levage.
- Applications avec des sollicitations dynamiques élevées sur la caisse du réducteur.
- Utilisation avec une température ambiante inférieure à 5°C ou supérieure à 40°C.
- Utilisation en ambiance avec présence d'agents chimiques.
- Utilisation en ambiance saumâtres.
- Positions de montage non prévues dans le catalogue.
- Utilisation en ambiance radioactive.
- Utilisation avec une pression différente que celle atmosphérique.
- Eviter les applications avec une immersion, même partielle, du réducteur.

Las siguientes aplicaciones deben considerarse en modo adecuado y evaluarse atentamente consultando nuestro Servicio Técnico

- Utilización en servicios que podrían resultar peligrosos para la persona en caso de rotura del reductor.
- Aplicaciones con inercias particularmente elevadas.
- Utilización como órgano de elevación.
- Aplicaciones con elevadas exigencias dinámicas en la carcasa del reductor.
- Utilización en ambiente con temperatura inferior a 5°C o superior a 40°C.
- Utilización en ambiente con presencia de agentes químicos.
- Utilización en ambiente salobre.
- Posiciones de montaje no previstas en el catálogo.
- Utilización en ambiente radioactivo.
- Utilización en ambiente con presión distinta a la atmosférica.
- Evitar aplicaciones en las que se prevé la inmersión, incluso parcial, del reductor.

| Tipo - Type - Typ Types - Tipo | Grandezza Size Größe Taille Tamaño | Montaggio Mounting Montage Fixation tipo de montaje | Rapporto Ratio Untersetzung Reduction Relacion | Albero uscita Output shaft Ausgangsflansch Bride de sortie Brida de solida | | | | |
|--|--|--|---|--|------|------|------|------|
| M | F32A | C | 10.40 | B | | | | |
|  <p>with IEC motor</p> <p style="text-align: center;">M</p> | <p>Alluminio Aluminium Aluminium Aluminium Aluminio</p> <p>Ghisa Cast iron Grauguss Fonte Fundicion</p> <p style="text-align: center;">2</p> <p>Riduzioni Stages Stufen Trains Etapas</p> |  <p>ollo utput haft</p> <p style="text-align: center;">C</p> | <p>Vedi tabella dati tecnici See technical data table Technisches datenblatt beachten! Voir tableau données techniques Ver tabla datos técnicos</p> |  <p>Output shaft</p> <p style="text-align: center;">C</p> | | | | |
| M | <p>F32A M_{2R} = 200 Nm</p> | C | | <p>→ STANDARD * Reduced Key</p> <table border="1" data-bbox="1276 716 1452 750"> <tr> <td>F32A</td> <td>F33A</td> </tr> </table> | F32A | F33A | | |
| F32A | F33A | | | | | | | |
|  <p>with motor flange</p> <p style="text-align: center;">P</p> | <p>F42A M_{2R} = 350 Nm</p> <p>F52A M_{2R} = 510 Nm</p> |  <p>ingle output shaft</p> <p style="text-align: center;">A</p> | | <table border="1" data-bbox="1276 862 1452 896"> <tr> <td>F42A</td> <td>F43A</td> </tr> </table> <p>B ⇨ Ø 20 C ⇨ Ø 25 D ⇨ Ø 30*</p> <table border="1" data-bbox="1276 996 1452 1030"> <tr> <td>F52A</td> <td>F53A</td> </tr> </table> <p>C ⇨ Ø 25 D ⇨ Ø 30 E ⇨ Ø 35*</p> | F42A | F43A | F52A | F53A |
| F42A | F43A | | | | | | | |
| F52A | F53A | | | | | | | |
| P | | A | | | | | | |
|  <p>With male input shaft</p> <p style="text-align: center;">R</p> | <p style="text-align: center;">3</p> <p>Riduzioni Stages Stufen Trains Etapas</p> |  <p>Double output shaft</p> <p style="text-align: center;">B</p> | | <table border="1" data-bbox="1276 1153 1452 1187"> <tr> <td>F52A</td> <td>F53A</td> </tr> </table> <p>D ⇨ Ø 30 E ⇨ Ø 35 F ⇨ Ø 40*</p> <table border="1" data-bbox="1276 1288 1452 1321"> <tr> <td>F62C</td> <td>F63C</td> </tr> </table> <p>E ⇨ Ø 35 F ⇨ Ø 40</p> | F52A | F53A | F62C | F63C |
| F52A | F53A | | | | | | | |
| F62C | F63C | | | | | | | |
| R | <p>F33A M_{2R} = 200 Nm</p> <p>F43A M_{2R} = 350 Nm</p> <p>F53A M_{2R} = 510 Nm</p> |  <p>hrink Disk</p> <p style="text-align: center;">D</p> | | <table border="1" data-bbox="1276 1411 1452 1444"> <tr> <td>F62C</td> <td>F63C</td> </tr> </table> <p>E ⇨ Ø 35 F ⇨ Ø 40</p> | F62C | F63C | | |
| F62C | F63C | | | | | | | |
|  <p>Modular base</p> <p style="text-align: center;">B</p> | <p>F62C M_{2R} = 670 Nm</p> <p>F63C M_{2R} = 670 Nm</p> |  <p>hrink Disk</p> <p style="text-align: center;">S</p> | | <p style="text-align: center;">A/B</p>  <p>Single/Double output Shaft</p> <p>L F32/3A ⇨ Ø 25 M F42/3A ⇨ Ø 30 N F52/3A ⇨ Ø 35 O F62/3C ⇨ Ø 40</p> | | | | |
| B | | S | | | | | | |
| B | | <p style="text-align: center;">I</p> <p>Mozzo in acciaio inox per foro Standard Stainless steel hub Edelstahlhohlwelle Moyeu en acier INOX Nucleo corona de acero INOX</p> | | <p style="text-align: center;">D/S</p>  <p>Shrink Disk</p> <p>ONLY STANDARD</p> <p>P F32/3A ⇨ Ø 25 Q F42/3A ⇨ Ø 30 R F52/3A ⇨ Ø 35 S F62/3C ⇨ Ø 40</p> | | | | |

F32A/3A – F62C/3C

Tutti i riduttori sono forniti completi di olio sintetico per la lubrificazione permanente e non necessitano di alcuna manutenzione.

All the units are supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.

Alle Getriebes sind mit synthetischem Öl gefüllt und sind lebensdauer geschmiert.

Les reducteurs sont fournis avec une lubrification permanente à l'huile synthétique et ne demandent aucun entretien.

Los reductores se suministran con lubricación permanente por aceite sintético y no requieren mantenimiento alguna.

I riduttori sono forniti con una quantità di olio adatta per le posizioni di montaggio 1.

The gearboxes are filled with quantity of oil for the assembly position 1.

Die Getriebe werden standardig mit der Füllmenge für Einbaulage 1 ausgeliefert.

Les réducteurs sont achalandés avec une quantité d'huile adaptée pour les positions d'assemblage 1.

Los reductores son dotados con una cantidad de aceite adaptada por las posiciones de montaje 1.

Nel caso di utilizzo in altre posizioni tipo H2 / H3 / H4 / H5 / H6 è necessario specificare in fase d'ordine tale scelta.

Specify in the order, when mounting position is: B6 B56 V5 V1 V6 V3 V8 V58

Bei Montage in den Einbaulagen H2 / H3 / H4 / H5 / H6 ist die Einbaulage in der Bestellung anzugeben.

Dans le cas de jouissance en autres positions type H2 / H3 / H4 / H5 / H6 est nécessaire spécifier en phase d'ordre tel choix.

En el caso de empleo en otras posiciones tipo H2 / H3 / H4 / H5 / H6 es necesario precisar en fase de orden tal selección.

nel caso i riduttori forniti con una quantità di lubrificante per posizioni di montaggio 1 vengano utilizzati in altre posizioni va sottratto l'olio sintetico fino alla quantità tale riportata in tabella.

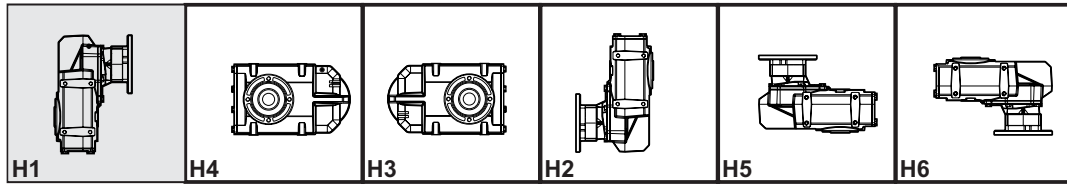
If gearboxes are ordered for 1 but used in different positions subtract the oil quantity as specified below.

Wenn die Getriebe welche für die Einbaulage 1 geliefert werden in anderen Einbaulagen verwendet ist die Füllmenge entsprechend der Tabelle zu ändern.

Dans le cas les réducteurs achalandés avec une quantité de lubrifiant pour positions d'assemblage 1 ils soient utilisés en autres positions il va effectuée une addition d'huile synthétique usuellement la quantité totale reportée en tableau.

En el caso los reductores dotados con una cantidad de lubricante por posiciones de montaje 1 sean utilizados en otras posiciones va efectuada una adición de aceite sintético hasta la cantidad total reconducida en tablero.

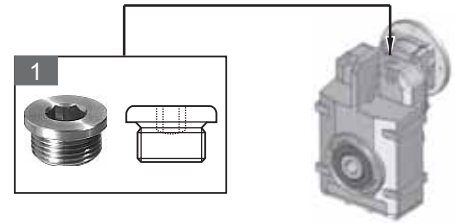
Standard A richiesta / On request / Auf Anfrage / A la demande / A solicitud



Quantità di olio / Oil quantity / Ölmenge / Quantités d'huile / Cantidad de aceite

| | H1 | H4 | H3 | H2 | H5 | H6 |
|------|------|------|------|------|------|------|
| F32A | 1.00 | 0.65 | 0.50 | 0.70 | 1.00 | 0.70 |
| F33A | 1.05 | 0.70 | 0.55 | 0.75 | 1.05 | 0.75 |
| F42A | 1.20 | 0.80 | 0.60 | 0.80 | 1.20 | 0.85 |
| F43A | 1.25 | 0.85 | 0.65 | 0.85 | 1.25 | 0.90 |
| F52A | 1.80 | 1.20 | 0.90 | 1.25 | 1.80 | 1.25 |
| F53A | 1.90 | 1.30 | 1.00 | 1.35 | 1.90 | 1.35 |
| F62C | 1.90 | 1.40 | 1.05 | 1.50 | 1.90 | 1.40 |
| F63C | 2.00 | 1.50 | 1.15 | 1.60 | 2.00 | 1.50 |

Tutti i riduttori sono forniti con un solo tappo di carico / scarico del tipo 1.
 All the gearboxes are fitted with a type 1 plug.
 Die Getriebe werden standardig mit einer Schraube ausgeliefert.
 Tous les réducteurs sont fournis avec un bouchon seul de charge / décharge de type 1.
 Todos los reductores van provistos de un tapón de carga / descarga del tipo 1.



Lubrificanti consigliati

Suggested lubricants

Vorgeschlagene Schmierstoffe

Lubrifiants indiqués

Lubricante recomendados

| STANDARD | | Temperatura ambiente Ambient temperature Einsatztemperaturen Température ambiante Temperatura ambiente Tc (°C) | FORNITORE / MANUFACTURER / HERSTELLER FOURNISSEUR / FABRICIANTE | | | | |
|--|---------|---|--|------------------|---------------|------------------|-----------------|
| ISO VG | | | AGIP | BP | SHELL | KLÜBER | MOBIL |
| Olio sintetico Synthetic oil Synthetisches Öl Huile Synthétique Aceite sintético | 150 | -30° - 70° | Telium VSF 150 | Energol SGXP 150 | | Syntheso D150 EP | Glygoyle 22 |
| | 220-320 | -25° - 80° | Telium VSF 320 | Energol SGXP 220 | Tivela OIL WB | Syntheso D220 EP | Glygoyle 30 |
| | 460 | -15° - 100° | — | Energol SGXP 460 | Tivela OIL SD | Syntheso D460 EP | Glygoyle HE 460 |

A richiesta / On request / Auf Anfrage / A la demande / A solicitud

A richiesta i riduttori possono essere forniti con tappi carico, livello, scarico.

On request, gearboxes can be supplied with oil, level and drain plugs

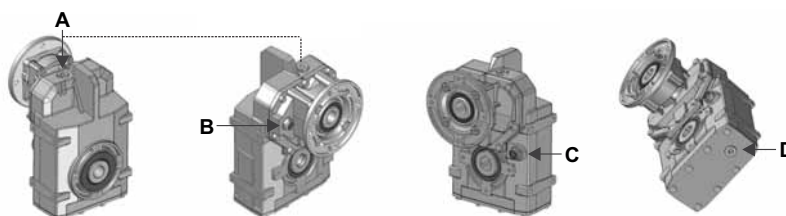
Auf Anfrage können die Getriebe komplett mit Öl, Schauglas und Überdruckventil geliefert werden

Sur demande, les réducteurs peuvent être fournis avec huile, bouchons de vidange et niveau.

Bajo pedido, los reductores pueden suministrarse con tapones De Llenado, nivel y vaciado de aceite.



○ Tappo di sfiato
Breather plug
Überdruckventil
Bouchon d'évent
Tapón con respiradero



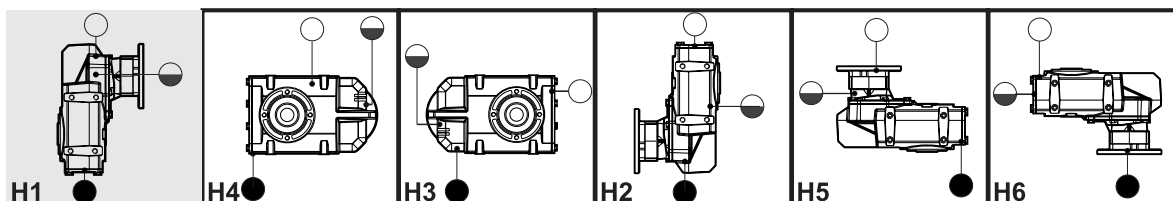
◐ Tappo di livello
Level plug
Füllstopfen
Bouchon de niveau
Tapón de nivel

● Tappo di scarico
Drain plug
Ablasserschraubung
Bouchon de vidange
Tapón de vaciado

| Positions | H1 | H4 | H3 | H2 | H5 | H6 |
|-----------|-------|-------|-------|-------|-------|-----------|
| A | 2 (3) | 4 | 4 | 1 | 4 | 1 |
| B | 4 | 1 | 2 (3) | 1 | 2 (3) | 1 |
| C | 1 | 2 (3) | 1 | 4 | 1 | 1 |
| D | 1 | 1 | 1 | 2 (3) | 1 | 5+2 (3)+4 |

Standard

A richiesta / On request / Auf Anfrage / A la demande / A solicitud



Quantita' di olio / Oil quantity / Olmenge / Quantités d'huile / Cantidad de aceite

| | | | | | | |
|------|------|------|------|------|------|------|
| F32A | 1.00 | 0.65 | 0.50 | 0.70 | 1.00 | 0.70 |
| F33A | 1.05 | 0.70 | 0.55 | 0.75 | 1.05 | 0.75 |
| F42A | 1.20 | 0.80 | 0.60 | 0.80 | 1.20 | 0.85 |
| F43A | 1.25 | 0.85 | 0.65 | 0.85 | 1.25 | 0.90 |
| F52A | 1.80 | 1.20 | 0.90 | 1.25 | 1.80 | 1.25 |
| F53A | 1.90 | 1.30 | 1.00 | 1.35 | 1.90 | 1.35 |
| F62C | 1.90 | 1.40 | 1.05 | 1.50 | 1.90 | 1.40 |
| F63C | 2.00 | 1.50 | 1.15 | 1.60 | 2.00 | 1.50 |

Lubrificantii consigliati

Suggested lubricants

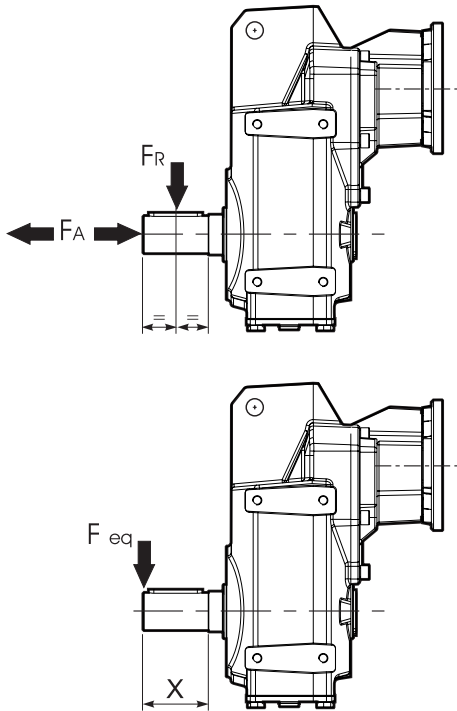
Vorgeschlagene Schmierstoffe

Lubrifiants indiqués

Lubricante recomendados

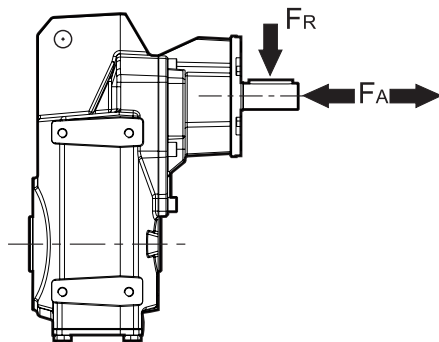
| ON REQUEST | | Temperatura ambiente Ambient temperature Einsatztemperaturen Température ambiante Temperatura ambiente Tc (°C) | AGIP | BP | ESSO | SHELL | KLÜBER | MOBIL |
|--|-----|---|------------|------------------|----------------|---------------|------------|---------------|
| ISO VG | | | | | | | | |
| Olio minerale mineral oil Mineralisches Öl Huile minérale Aceite mineral | 220 | - 0° - 35° | Blasia 220 | Energol GRXP 220 | Spartan EP 220 | Omala OIL 220 | Lamora 220 | Mobilgear 630 |
| | 320 | - 0° - 40° | Blasia 330 | Energol GRXP 320 | Spartan EP 320 | Omala OIL 320 | Lamora 320 | Mobilgear 632 |
| | 460 | 5° - 45° | Blasia 460 | Energol GRXP 460 | Spartan EP 460 | Omala OIL 460 | Lamora 460 | Mobilgear 636 |
| | 680 | 5° - 50° | Blasia 680 | Energol GRXP 680 | Spartan EP 680 | Omala OIL 680 | Lamora 680 | Mobilgear 636 |

Albero uscita / Output shaft / Abtriebswelle / Arbre lent / Eje de salida



| n_2 [min ⁻¹] | F32/3A | | F42/3A | | F52/3A | | F62/3C | |
|-------------------------------|--|--------------|-----------------------------------|--------------|---------------------------------------|--------------|---------------------------------------|--------------|
| | F_A [N] | F_R [N] | F_A [N] | F_R [N] | F_A [N] | F_R [N] | F_A [N] | F_R [N] |
| 200 | 240 | 1200 | 384 | 1920 | 420 | 2100 | 834 | 4169 |
| 140 | 267 | 1335 | 427 | 2136 | 466 | 2328 | 937 | 4686 |
| 120 | 282 | 1410 | 451 | 2256 | 554 | 2772 | 990 | 4950 |
| 85 | 312 | 1562 | 500 | 2498 | 568 | 2376 | 1122 | 5610 |
| 70 | 327 | 1635 | 523 | 2616 | 590 | 2952 | 1188 | 5940 |
| 40 | 401 | 2003 | 641 | 3204 | 706 | 3528 | 1430 | 7150 |
| 15 | 420 | 2100 | 672 | 3360 | 960 | 4800 | 1430 | 7150 |
| $F_{eq} =$ | $F_R \cdot \frac{35.7}{x \cdot 30.15}$ | | $F_R \cdot \frac{68}{x \cdot 38}$ | | $F_R \cdot \frac{69.1}{x \cdot 39.1}$ | | $F_R \cdot \frac{71.5}{x \cdot 41.5}$ | |

Albero entrata / Input shaft / Antriebswelle / Arbre rapide / Eje de entrada



| n_1 [min ⁻¹] | F32/3A | | F42/3A | | F52/3A | | F62/3C | |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | F_A [N] | F_R [N] | F_A [N] | F_R [N] | F_A [N] | F_R [N] | F_A [N] | F_R [N] |
| 1400 | 194 | 967 | 310 | 1548 | 300 | 1500 | 120 | 602 |
| 900 | 195 | 975 | 312 | 1560 | 377 | 1884 | 245 | 1227 |
| 500 | 195 | 975 | 312 | 1560 | 493 | 2466 | 385 | 1925 |

**CARICHI RADIALI E ASSIALI / RADIAL AND AXIAL LOADS / RADIALE UND AXIALE BELASTUNG
CHARGES RADIALES ET AXIALES / CARGA RADIAL Y AXIAL**

$$F_R [N] = \frac{M \cdot 2000}{d} \cdot f_k$$

| | |
|------------------|---|
| M [Nm] | Momento torcente / Output torque / Drehmoment / Couple / Par torsor |
| d [mm] | Diametro primitivo / Diam. of driving element / Durchmesser / Diamètre / Diámetro primitivo |
| f _k = | Coeff. di trasmissione / Factor / Übertragungsfaktor / Coefficient / Coeficiente de transmisión |
| 1.15 | Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje |
| 1.25 | Catena / Chain sprockets / Antriebskette / Chaîne / Cadena |
| 1.75 | Cinghia trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal. |
| 2.5 | Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana |

Nel caso la vs. applicazione richieda carichi radiali o assiali superiori consultate il ns. ufficio tecnico; valori maggiori possono essere accettati.

If your application requires higher radial loads contact Renold, it is in practice often possible to apply higher loads.

Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.

Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.

En ei caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultara nuestras oficina tecnica.

SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR



Come selezionare un riduttore / How to select a gearbox / Wie wählt man ein Getriebe
Comment sélectionner un réducteur / Cómo seleccionar un reductor

| | | | | | | | | |
|----------|--|--|--|---|---|--|---|---|
| B | Velocità in uscita Output speed Abtriebsdrehzahl Vitesse de sortie Velocidad de salida | Potenza nominale Nominal power Max. mögliche Leistung Puissance nominale Potencia nominal | Potenza motore Motor power Motorleistung Puissance moteur Potencia motor | Fattore di servizio Service factor Betriebsfaktor Facteur de service Factor de servicio | A | Momento torcente nominale Nominal torque Nenn-Drehmoment Couple nominal Par de torsión nominal | Codice flangia Flange code Flanschtype Code bride Código bridas | Note Notes Anmerkungen Note Notas |
| C | Rapporto Ratio Untersetzung Rapport de réduction Relación | Diam. albero uscita Output shaft diam. Durchmesser Abtriebswelle Diamètre arbre de sortie Diametro eje de salida | Momento torcente trasmesso Transmitted torque Übertragenes Drehmoment Couple de sortie Par transmitido | D | Flange disponibili Motor flange available Erhältliche Motorflansche Brides disponibles Bridas disponibles | Grandezza riduttore Gear size Getriebegröße Taille réducteur Tamaño reductor | Velocità in entrata Input speed Eintriebsdrehzahl Vitesse d'entrée Velocidad de entrada | |

| n_2 [min ⁻¹] | i | P_{1M} [kW] | M_{2M} [Nm] | fs | P_{1R} [kW] | M_{2R} [Nm] | | B5 | | | | | B14 | | | | | RD | | Ratios code | | |
|-------------------------------|---|------------------|------------------|----|------------------|------------------|--|----|----|----|----|------------|-----|----|----|----|----|------------|-----|-------------|---|---|
| | | | | | | | | B | C | D | E | F | O | P | Q | R | T | | | | U | V |
| | | | | | | | | B | C | D | E | F | O | P | Q | R | T | U | V | | | |
| | | | | | | | | 63 | 71 | 80 | 90 | 100 112 | 56 | 63 | 71 | 80 | 90 | 100 112 | 132 | | | |

| F32A | | | | | | | | | | | | $n_1 = 1400 \text{ min}^{-1}$ | | | | | | | | | | | |
|------|-------|-----|-----|-----|-----|-----|----|---|--|--|--|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| 174 | 8.03 | 1.5 | 79 | 2.2 | 3.2 | 170 | 25 | B | | | | | | | | | | | | | | | |
| 135 | 10.40 | 1.5 | 102 | 1.8 | 2.7 | 185 | 25 | B | | | | | | | | | | | | | | | |
| 96 | 14.53 | 1.5 | 143 | 1.4 | 2.1 | 200 | 25 | B | | | | | | | | | | | | | | | |
| 83 | 16.84 | 1.5 | 165 | 1.2 | 1.8 | 200 | 25 | B | | | | | | | | | | | | | | | |
| 71 | 19.76 | 1.5 | 194 | 1.0 | 1.5 | 200 | 25 | B | | | | | | | | | | | | | | | |

| | | | | | |
|----------|--|--|--|---|--|
| A | Seleziona la coppia desiderata (comprensiva del fattore di servizio) | Select required torque (according to service factor) | Max. Drehmoment in Bezug zum Betriebsfaktor | Sélectionner le couple souhaité (comprenant le facteur de service) | Seleccionar el par deseado (incluyendo el factor de servicio) |
| B | Seleziona la velocità in uscita | Select output speed | Ausgewählte Abtriebsdrehzahl | Sélectionner la vitesse en sortie | Seleccionar la velocidad de salida |
| C | Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione | On the same line of selected motorisation, you can find the gear ratio | Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung | Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction | En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción |
| D | Scegli la flangia disponibile (se richiesta) | Select motor flange available (if requested) | Erhältliche Motorflansche (auf Anfrage) | Choisir la bride disponible (si elle est demandée) | Seleccionar la brida disponible (sobre pedido) |

| n ₂ [min ⁻¹] | i | P _{1M} [kW] | M _{2M} [Nm] | fs | P _{1R} [kW] | M _{2R} [Nm] |  | B5 | | | | | B14 | | | | | RD |  Ratios code | | |
|--|---|-------------------------|-------------------------|----|-------------------------|-------------------------|---|----|----|----|----|------------|-----|----|----|----|----|----|---|------------|-----|
| | | | | | | | | B | C | D | E | F | O | P | Q | R | T | | | U | V |
| | | | | | | | | 63 | 71 | 80 | 90 | 100 112 | 56 | 63 | 71 | 80 | 90 | | | 100 112 | 132 |

F32A



n₁ = 1400 min⁻¹

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---------------|------|-----|-----|-------------|------------|----|---|--|--|--|--|--|--|--|--|--|---|---|---|--|--|--|----|------|------|
| 174 | 8.03 | 1.5 | 79 | 2.2 | 3.2 | 170 | 25 | B | | | | | | | | | | C | C | | | | | 96 | 2818 | |
| 135 | 10.40 | 1.5 | 102 | 1.8 | 2.7 | 185 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 2813 |
| 96 | 14.53 | 1.5 | 143 | 1.4 | 2.1 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1918 |
| 83 | 16.84 | 1.5 | 165 | 1.2 | 1.8 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1718 |
| 71 | 19.76 | 1.5 | 194 | 1.0 | 1.5 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1518 |
| 59 | 23.59 | 1.1 | 170 | 1.2 | 1.3 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1318 |
| 55 | 25.58 | 1.1 | 184 | 1.1 | 1.2 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1513 |
| 43.5 | 32.20 | 0.75 | 158 | 1.3 | 0.9 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1018 |
| 35.8 | 39.05 | 0.55 | 141 | 1.2 | 0.7 | 170 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1510 |
| 33.6 | 41.68 | 0.55 | 150 | 1.3 | 0.7 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 1013 |
| 25.7 | 54.39 | 0.37 | 132 | 1.5 | 0.6 | 200 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 913 |
| 19.5 | 71.82 | 0.37 | 174 | 1.0 | 0.38 | 180 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 713 |
| 16.9 | 83.04 | 0.25 | 136 | 1.3 | 0.31 | 170 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 910 |
| 12.8 | 109.66 | 0.25 | 180 | 0.9 | 0.24 | 170 | 25 | B | | | | | | | | | | | C | C | | | | | 96 | 710 |

F33A

n₁ = 1400 min⁻¹

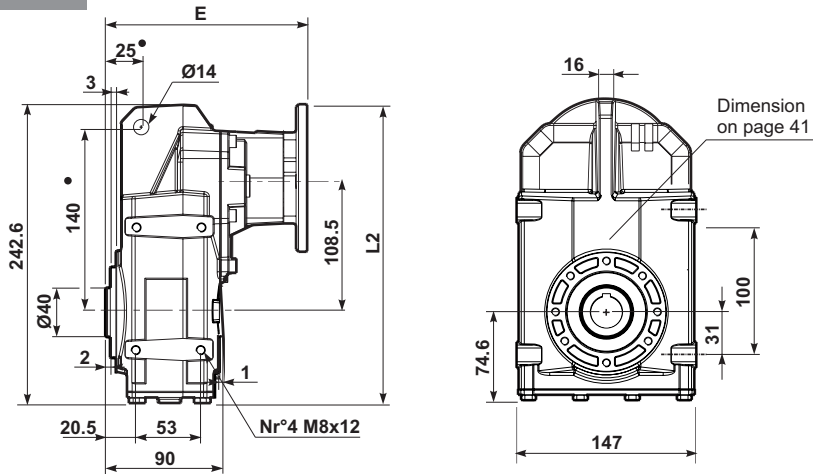
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---------------|------|-----|-----|------------|------------|----|--|--|--|--|--|--|--|--|--|--|-----|-----|---|--|--|--|--|----|--------|--------|
| 13.2 | 106.07 | 0.25 | 168 | 1.2 | 0.3 | 200 | 25 | | | | | | | | | | | B-C | C | | | | | | 93 | 101718 | |
| 11.9 | 118.06 | 0.25 | 187 | 1.1 | 0.3 | 200 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 151313 |
| 10.1 | 138.43 | 0.25 | 220 | 0.9 | 0.2 | 200 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 91718 |
| 9.9 | 140.92 | 0.18 | 161 | 1.2 | 0.2 | 200 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 131313 |
| 7.7 | 182.80 | 0.18 | 209 | 1.0 | 0.2 | 200 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 71718 |
| 7.3 | 192.36 | 0.18 | 220 | 0.9 | 0.2 | 200 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 101313 |
| 5.5 | 256.12 | 0.12 | 195 | 1.0 | 0.1 | 200 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 71318 |
| 4.2 | 331.50 | 0.12 | 252 | 0.8 | 0.1 | 200 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 71313 |
| 3.9 | 361.22 | 0.12 | 275 | 0.5 | 0.1 | 140 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 71710 |
| 2.8 | 506.11 | 0.12 | 385 | 0.4 | 0.1 | 170 | 25 | | | | | | | | | | | | B-C | C | | | | | | 93 | 71310 |

| | | | | | | | |
|----------|--|---|---|--|---|---|---|
| B, C, .. | Flange disponibili Motor flange available | B | Montaggio con boccia di riduzione Coupling by means of reduction bushing |  | C | Posizione fori flangia/basetta motore Motor flange/terminal box position |  |
|----------|--|---|---|--|---|---|---|

F 32A
F 33A

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES

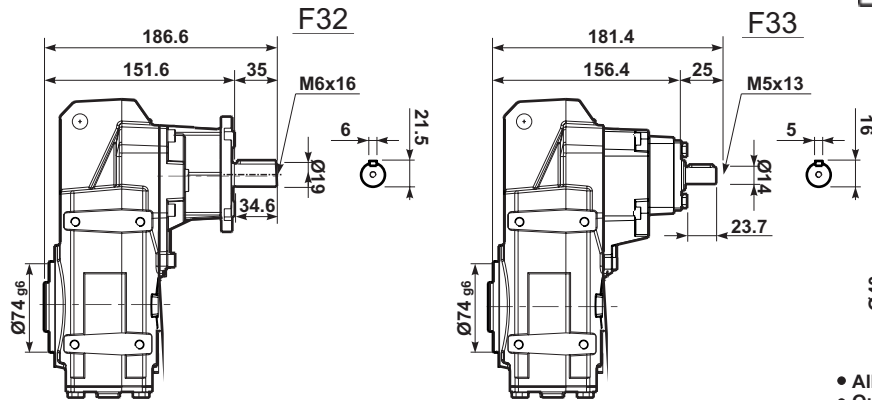
Shaft Mount



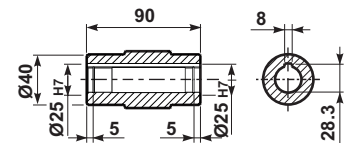
| Motor Flange | E | |
|--------------|-----|-------|
| | F32 | F33 |
| 63 B5 | 161 | 163 |
| 71 B5 | 159 | 161 |
| 80-90 B5 | 161 | - |
| 56 B14 | - | 166.5 |
| 63 B14 | - | 165.5 |
| 71 B14 | 159 | 162.5 |
| 80 B14 | 160 | - |
| 90 B14 | 161 | - |

| Motor Flange | L2 | |
|--------------|-------|-------|
| | F32 | F33 |
| 63 B5 | 253 | 253 |
| 71 B5 | 264 | 264 |
| 80-90 B5 | 284 | - |
| 56 B14 | - | 222 |
| 63 B14 | - | 228 |
| 71 B14 | 235.5 | 235.5 |
| 80 B14 | 243 | - |
| 90 B14 | 253 | - |

Type R

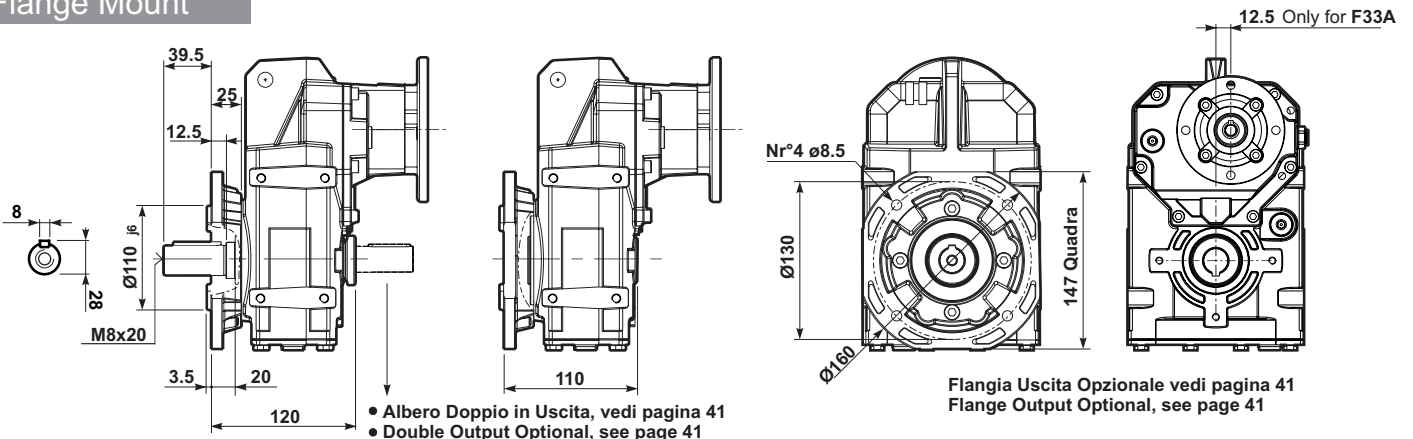


| Peso Weight Kg | |
|----------------|-----|
| F32A | 7.2 |
| F33A | 7.6 |



- Alberi di uscita a richiesta vedi pagina 40
- Output shaft on request, see page 40

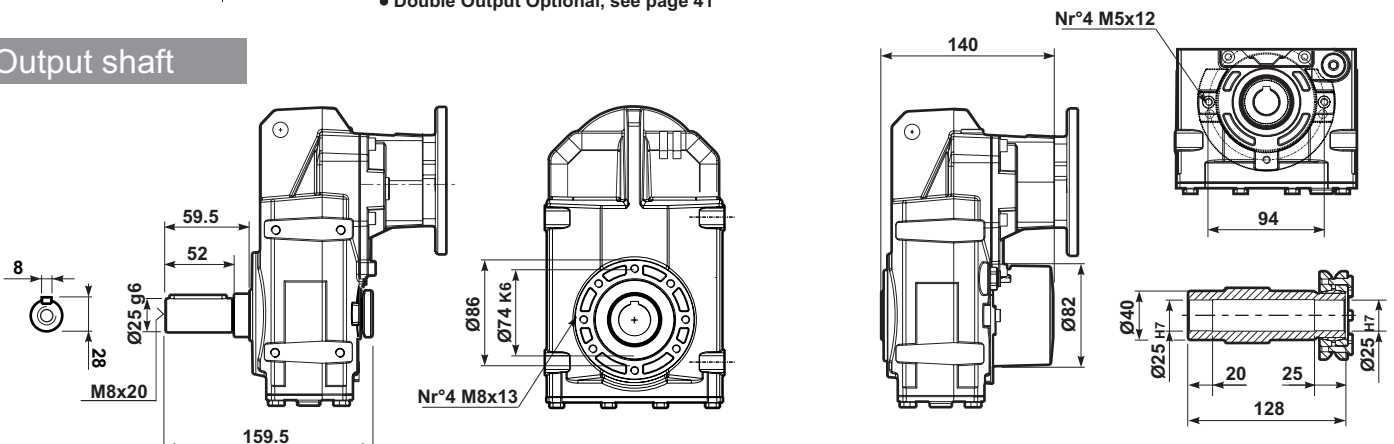
Flange Mount



Flangia Uscita Opzionale vedi pagina 41
Flange Output Optional, see page 41

- Albero Doppio in Uscita, vedi pagina 41
- Double Output Optional, see page 41

Output shaft



| n ₂ [min ⁻¹] | i | P _{1M} [kW] | M _{2M} [Nm] | fs | P _{1R} [kW] | M _{2R} [Nm] | | B5 | | | | | B14 | | | | | RD | Ratios code | | |
|--|---|-------------------------|-------------------------|----|-------------------------|-------------------------|--|----|----|----|----|------------|-----|----|----|----|----|----|--------------------|------------|-----|
| | | | | | | | | B | C | D | E | F | O | P | Q | R | T | | | U | V |
| | | | | | | | | 63 | 71 | 80 | 90 | 100 112 | 56 | 63 | 71 | 80 | 90 | | | 100 112 | 132 |

F42A

n₁ = 1400 min⁻¹

| | | | | | | | | | | | | | | | | | | | | | | | |
|------|--------------|------|-----|-----|-------------|------------|----|---|--|--|--|--|--|--|--|--|--|--|--|--|----|------|------|
| 172 | 8.12 | 3.0 | 160 | 1.2 | 3.57 | 190 | 30 | B | | | | | | | | | | | | | 96 | 2818 | |
| 139 | 10.06 | 3.0 | 198 | 1.0 | 3.04 | 200 | 30 | B | | | | | | | | | | | | | | 96 | 2815 |
| 82 | 17.02 | 2.2 | 245 | 1.0 | 2.24 | 250 | 30 | B | | | | | | | | | | | | | | 96 | 1718 |
| 77 | 18.19 | 2.2 | 262 | 1.0 | 2.18 | 260 | 30 | B | | | | | | | | | | | | | | 96 | 1915 |
| 66 | 21.08 | 1.5 | 207 | 1.5 | 2.29 | 316 | 30 | B | | | | | | | | | | | | | | 96 | 1715 |
| 57 | 24.75 | 1.5 | 243 | 1.2 | 1.83 | 297 | 30 | B | | | | | | | | | | | | | | 96 | 1515 |
| 47.4 | 29.54 | 1.5 | 290 | 1.1 | 1.60 | 310 | 30 | B | | | | | | | | | | | | | | 96 | 1315 |
| 43.0 | 32.55 | 1.1 | 234 | 1.0 | 1.14 | 244 | 30 | B | | | | | | | | | | | | | | 96 | 1018 |
| 34.7 | 40.32 | 1.1 | 290 | 1.0 | 1.14 | 300 | 30 | B | | | | | | | | | | | | | | 96 | 1015 |
| 33.0 | 42.48 | 0.75 | 209 | 1.0 | 0.72 | 200 | 30 | B | | | | | | | | | | | | | | 96 | 918 |
| 26.6 | 52.62 | 0.75 | 258 | 1.0 | 0.72 | 247 | 30 | B | | | | | | | | | | | | | | 96 | 915 |
| 20.1 | 69.49 | 0.37 | 168 | 1.1 | 0.42 | 190 | 30 | B | | | | | | | | | | | | | | 96 | 715 |

F43A

n₁ = 1400 min⁻¹

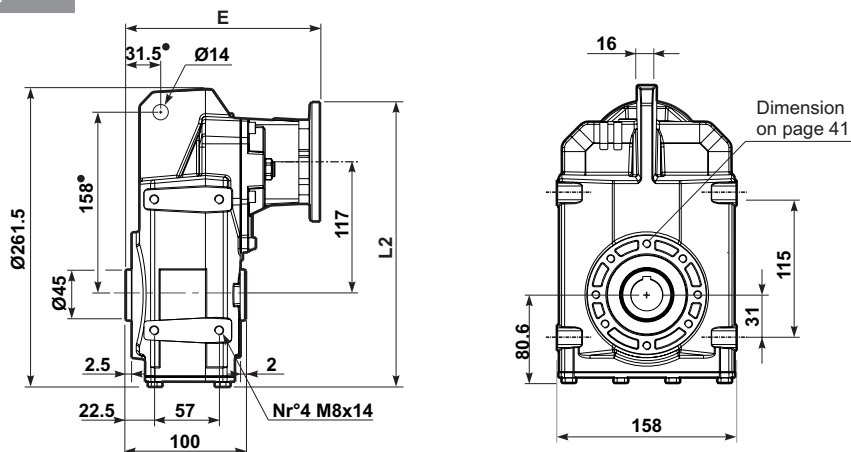
| | | | | | | | | | | | | | | | | | | | | | | | |
|------|---------------|------|-----|-----|-------------|------------|----|---|--|--|--|--|--|--|--|--|--|--|--|--|--|----|--------|
| 42.3 | 33.13 | 1.5 | 315 | 1.1 | 1.6 | 337 | 30 | B | | | | | | | | | | | | | | 93 | 281715 |
| 37.4 | 37.47 | 1.1 | 261 | 1.0 | 1.1 | 250 | 30 | B | | | | | | | | | | | | | | 93 | 281318 |
| 28.9 | 48.37 | 0.75 | 230 | 1.2 | 0.9 | 272 | 30 | B | | | | | | | | | | | | | | 93 | 191718 |
| 23.4 | 59.92 | 0.75 | 285 | 1.2 | 0.9 | 337 | 30 | B | | | | | | | | | | | | | | 93 | 191715 |
| 21.3 | 65.81 | 0.75 | 313 | 0.9 | 0.7 | 272 | 30 | B | | | | | | | | | | | | | | 93 | 151718 |
| 20.2 | 69.45 | 0.75 | 330 | 1.0 | 0.8 | 337 | 30 | B | | | | | | | | | | | | | | 93 | 171715 |
| 17.2 | 81.52 | 0.55 | 284 | 1.2 | 0.7 | 337 | 30 | B | | | | | | | | | | | | | | 93 | 151715 |
| 14.4 | 97.30 | 0.55 | 339 | 1.0 | 0.5 | 337 | 30 | B | | | | | | | | | | | | | | 93 | 131715 |
| 13.1 | 107.22 | 0.37 | 252 | 1.1 | 0.4 | 272 | 30 | | | | | | | | | | | | | | | 93 | 101718 |
| 12.3 | 114.21 | 0.37 | 268 | 1.2 | 0.4 | 310 | 30 | | | | | | | | | | | | | | | 93 | 151315 |
| 10.3 | 136.33 | 0.37 | 320 | 1.0 | 0.4 | 310 | 30 | | | | | | | | | | | | | | | 93 | 131315 |
| 7.5 | 186.09 | 0.25 | 295 | 1.1 | 0.3 | 310 | 30 | | | | | | | | | | | | | | | 93 | 101315 |
| 6.1 | 228.89 | 0.25 | 363 | 0.9 | 0.23 | 337 | 30 | | | | | | | | | | | | | | | 93 | 71715 |
| 5.8 | 242.87 | 0.18 | 277 | 1.1 | 0.20 | 310 | 30 | | | | | | | | | | | | | | | 93 | 91315 |
| 4.4 | 320.70 | 0.18 | 366 | 0.8 | 0.15 | 310 | 30 | | | | | | | | | | | | | | | 93 | 71315 |

| | | | | | | | |
|----------|--|---|--|--|---|---|--|
| B, C, .. | Flange disponibili Motor flange available | B | Montaggio con boccola di riduzione Coupling by means of reduction bushing | | C | Posizione fori flangia/basetta motore Motor flange/terminal box position | |
|----------|--|---|--|--|---|---|--|

F 42A
F 43A

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES

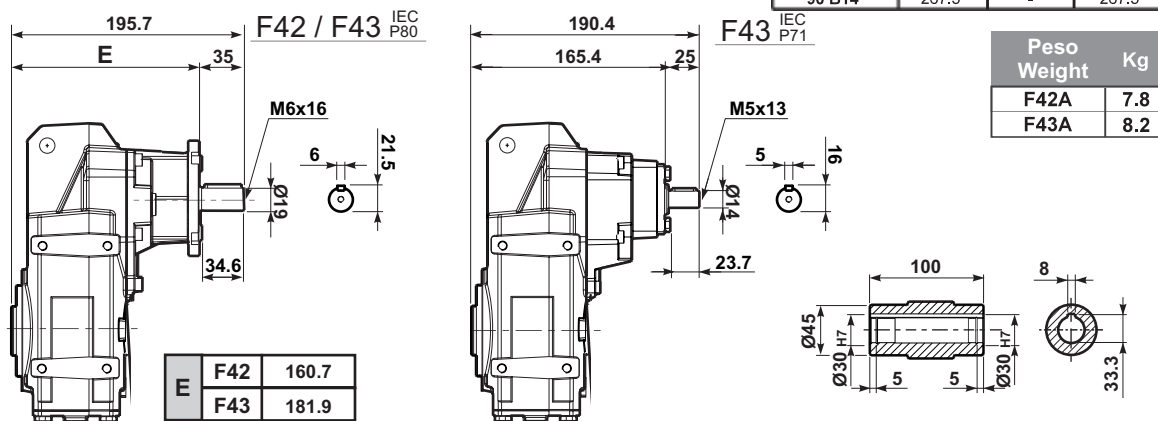
Shaft Mount



| Motor Flange | E | | |
|--------------|-----|-------------|-------------|
| | F42 | F43 IEC P71 | F43 IEC P80 |
| 63 B5 | 170 | 172 | 191 |
| 71 B5 | 168 | 170 | 189 |
| 80-90 B5 | 170 | - | 191 |
| 56 B14 | - | 175.5 | - |
| 63 B14 | - | 174.5 | - |
| 71 B14 | 168 | 171.5 | 189 |
| 80 B14 | 169 | - | 190 |
| 90 B14 | 170 | - | 191 |

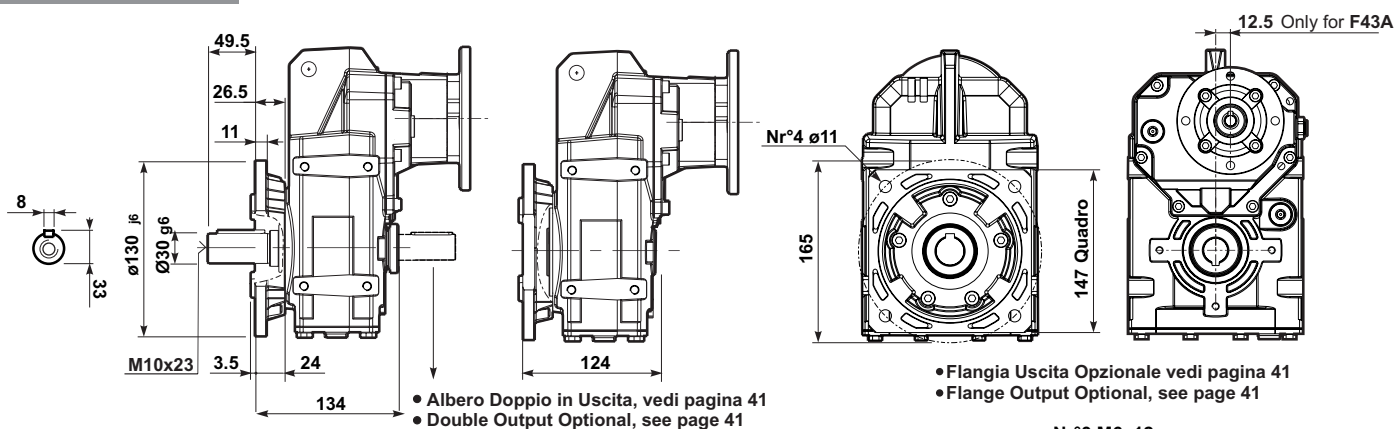
| Motor Flange | L2 | | |
|--------------|-------|-------------|-------------|
| | F42 | F43 IEC P71 | F43 IEC P80 |
| 63 B5 | 267.5 | 267.5 | 267.5 |
| 71 B5 | 277.5 | 264 | 277.5 |
| 80-90 B5 | 297.5 | - | 297.5 |
| 56 B14 | - | 236.5 | - |
| 63 B14 | - | 242.5 | - |
| 71 B14 | 250 | 250 | 250 |
| 80 B14 | 257.5 | - | 257.5 |
| 90 B14 | 267.5 | - | 267.5 |

Type R



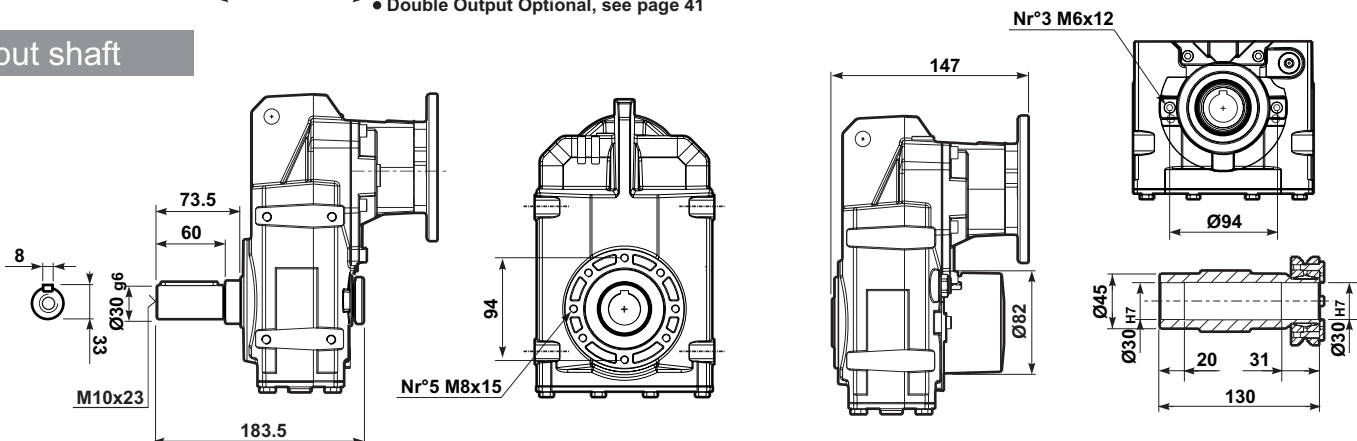
- Alberi di uscita a richiesta vedi pagina 40
- Output shaft on request, see page 40

Flange Mount



- Flangia Uscita Opzionale vedi pagina 41
- Flange Output Optional, see page 41

Output shaft



| n ₂ [min ⁻¹] | i | P _{1M} [kW] | M _{2M} [Nm] | fs | P _{1R} [kW] | M _{2R} [Nm] | | B5 | | | | | B14 | | | | | RD | Ratios code | | |
|--|---|-------------------------|-------------------------|----|-------------------------|-------------------------|--|----|----|----|----|------------|-----|----|----|----|----|----|--------------------|------------|-----|
| | | | | | | | | B | C | D | E | F | O | P | Q | R | T | | | U | V |
| | | | | | | | | 63 | 71 | 80 | 90 | 100 112 | 56 | 63 | 71 | 80 | 90 | | | 100 112 | 132 |

F52A n₁ = 1400 min⁻¹

| | | | | | | | | | | | | | | | | | | | |
|------|--------------|-----|-----|-----|-------------|------------|----|---|--|--|--|--|--|--|--|--|--|----|------|
| 213 | 6.57 | 5.5 | 237 | 1.2 | 6.74 | 290 | 35 | B | | | | | | | | | | 96 | 3018 |
| 185 | 7.56 | 5.5 | 272 | 1.1 | 6.06 | 300 | 35 | B | | | | | | | | | | 96 | 3016 |
| 159 | 8.82 | 5.5 | 318 | 1.2 | 6.58 | 380 | 35 | B | | | | | | | | | | 96 | 3014 |
| 113 | 12.39 | 5.5 | 446 | 0.9 | 4.93 | 400 | 35 | B | | | | | | | | | | 96 | 2018 |
| 98 | 14.24 | 4 | 373 | 1.1 | 4.50 | 420 | 35 | B | | | | | | | | | | 96 | 2016 |
| 84 | 16.63 | 4 | 435 | 1.1 | 4.55 | 495 | 35 | B | | | | | | | | | | 96 | 2014 |
| 73 | 19.25 | 4 | 504 | 1.0 | 3.97 | 500 | 35 | B | | | | | | | | | | 96 | 1616 |
| 64 | 21.78 | 3 | 428 | 1.2 | 3.54 | 505 | 35 | B | | | | | | | | | | 96 | 1318 |
| 62 | 22.48 | 3 | 442 | 1.1 | 3.36 | 495 | 35 | B | | | | | | | | | | 96 | 1614 |
| 56 | 25.04 | 3 | 492 | 1.0 | 3.05 | 500 | 35 | B | | | | | | | | | | 96 | 1316 |
| 47.9 | 29.23 | 2.2 | 421 | 1.2 | 2.59 | 495 | 35 | B | | | | | | | | | | 96 | 1314 |
| 45.7 | 30.65 | 2.2 | 442 | 1.1 | 2.5 | 500 | 35 | B | | | | | | | | | | 96 | 1116 |
| 39.1 | 35.78 | 2.2 | 515 | 1.0 | 2.1 | 430 | 35 | B | | | | | | | | | | 96 | 1114 |
| 36.3 | 38.55 | 1.5 | 379 | 1.2 | 1.8 | 455 | 35 | B | | | | | | | | | | 96 | 818 |
| 31.6 | 44.32 | 1.5 | 435 | 1.1 | 1.7 | 500 | 35 | B | | | | | | | | | | 96 | 816 |
| 27.1 | 51.74 | 1.5 | 508 | 1.0 | 1.5 | 495 | 35 | B | | | | | | | | | | 96 | 814 |
| 22.9 | 61.03 | 1.1 | 440 | 1.0 | 1.1 | 420 | 35 | B | | | | | | | | | | 96 | 616 |
| 19.6 | 71.25 | 1.1 | 513 | 0.8 | 0.9 | 430 | 35 | B | | | | | | | | | | 96 | 614 |

F53A n₁ = 1400 min⁻¹

| | | | | | | | | | | | | | | | | | | | |
|------|---------------|------|-----|-----|------------|------------|----|---|--|--|--|--|---|---|--|--|--|----|--------|
| 35.6 | 39.30 | 1.5 | 374 | 1.4 | 2.0 | 510 | 35 | B | | | | | C | C | | | | 93 | 281316 |
| 30.5 | 45.93 | 1.5 | 437 | 1.1 | 1.7 | 500 | 35 | B | | | | | C | C | | | | 93 | 281314 |
| 22.6 | 61.89 | 1.1 | 432 | 1.2 | 1.3 | 530 | 35 | B | | | | | C | C | | | | 93 | 191318 |
| 19.7 | 71.16 | 1.1 | 497 | 1.0 | 1.1 | 510 | 35 | B | | | | | C | C | | | | 93 | 191316 |
| 17.0 | 82.48 | 0.75 | 392 | 1.3 | 1.0 | 510 | 35 | B | | | | | C | C | | | | 93 | 171316 |
| 14.5 | 96.82 | 0.75 | 461 | 1.1 | 0.8 | 510 | 35 | B | | | | | C | C | | | | 93 | 151316 |
| 12.1 | 115.56 | 0.55 | 403 | 1.3 | 0.7 | 510 | 35 | B | | | | | C | C | | | | 93 | 131316 |
| 10.2 | 137.20 | 0.55 | 479 | 1.1 | 0.6 | 530 | 35 | B | | | | | C | C | | | | 93 | 101318 |
| 8.9 | 157.74 | 0.55 | 550 | 0.9 | 0.5 | 510 | 35 | B | | | | | C | C | | | | 93 | 101316 |
| 7.8 | 179.06 | 0.37 | 420 | 1.3 | 0.5 | 530 | 35 | B | | | | | C | C | | | | 93 | 91318 |
| 7.6 | 184.15 | 0.37 | 432 | 1.2 | 0.4 | 500 | 35 | B | | | | | C | C | | | | 93 | 101314 |
| 6.8 | 205.87 | 0.37 | 483 | 1.1 | 0.4 | 510 | 35 | B | | | | | C | C | | | | 93 | 91316 |
| 5.8 | 240.34 | 0.25 | 381 | 1.3 | 0.3 | 500 | 35 | B | | | | | C | C | | | | 93 | 91314 |
| 5.1 | 271.85 | 0.25 | 431 | 1.2 | 0.3 | 510 | 35 | B | | | | | C | C | | | | 93 | 71316 |
| 4.4 | 317.36 | 0.25 | 503 | 1.0 | 0.2 | 500 | 35 | B | | | | | C | C | | | | 93 | 71314 |

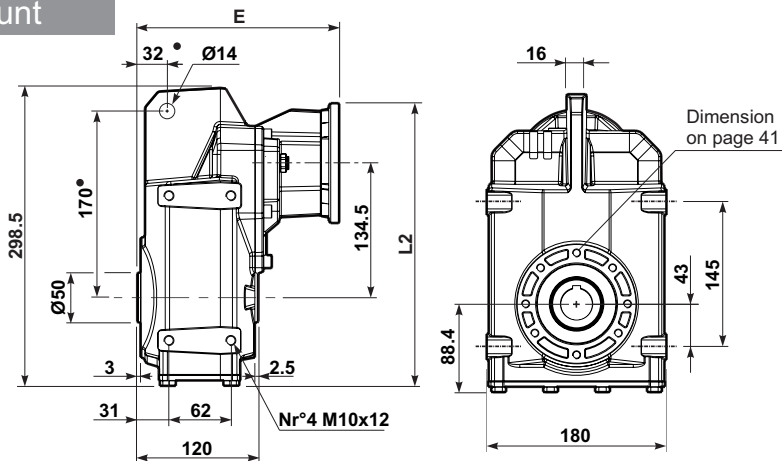
Disponibile versione speciale FS50, vedi pag. 26
Also available FS50 special version, see page. 26

| | | | | | | | |
|----------|--|---|---|--|---|---|--|
| B, C, .. | Flange disponibili Motor flange available | B | Montaggio con boccia di riduzione Coupling by means of reduction bushing | | C | Posizione fori flangia/basetta motore Motor flange/terminal box position | |
|----------|--|---|---|--|---|---|--|

F 52A
F 53A

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES

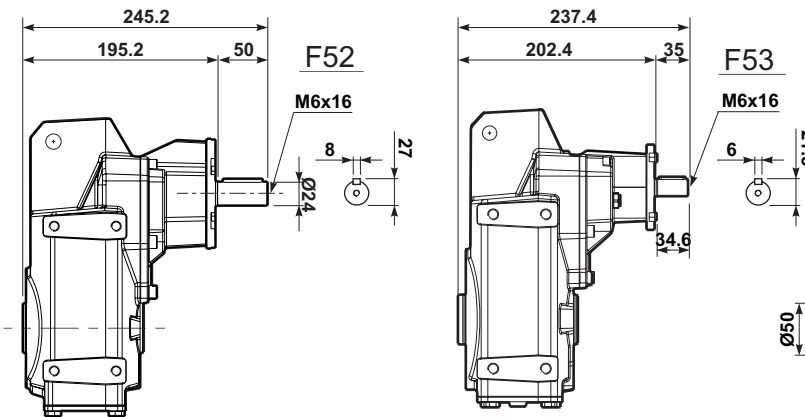
Shaft Mount



| Motor Flange | E | |
|--------------|-------|-------|
| | F52 | F53 |
| 63 B5 | - | 211.5 |
| 71 B5 | 201.5 | 212.5 |
| 80-90 B5 | 203.5 | 211.5 |
| 100-112 B5 | 203.5 | - |
| 71 B14 | - | 209.5 |
| 80 B14 | 202 | 210.5 |
| 90 B14 | 205 | 211.5 |
| 100 B14 | 201.5 | - |

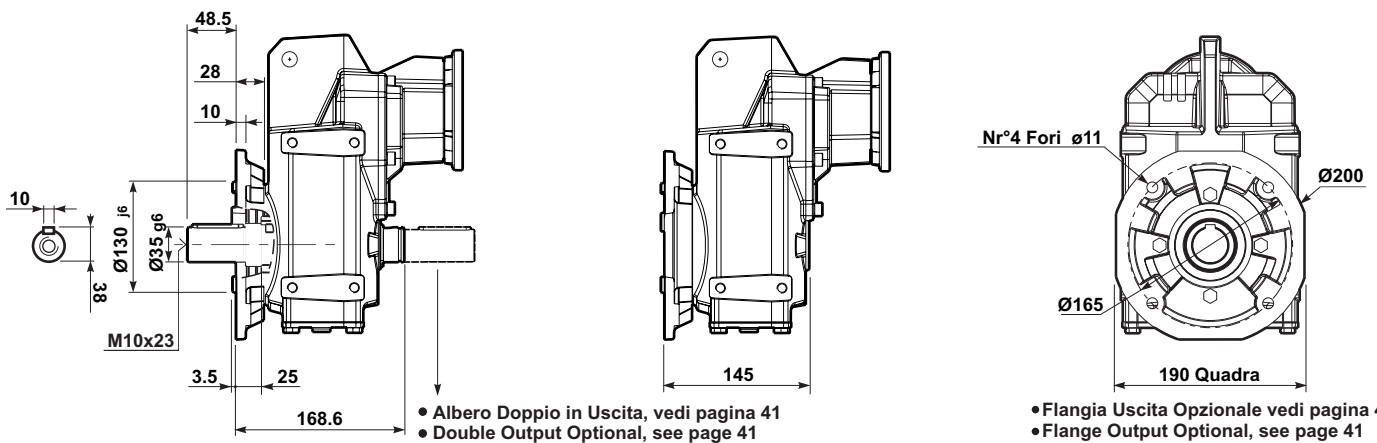
| Motor Flange | L2 | |
|--------------|-------|-------|
| | F52 | F53 |
| 63 B5 | - | 293.5 |
| 71 B5 | 303 | 303.5 |
| 80-90 B5 | 323 | 323.5 |
| 100-112 B14 | 348 | - |
| 71 B14 | - | 276 |
| 80 B14 | 283.5 | 283.5 |
| 90 B14 | 294 | 293.5 |
| 100 B14 | 303 | - |

Type R



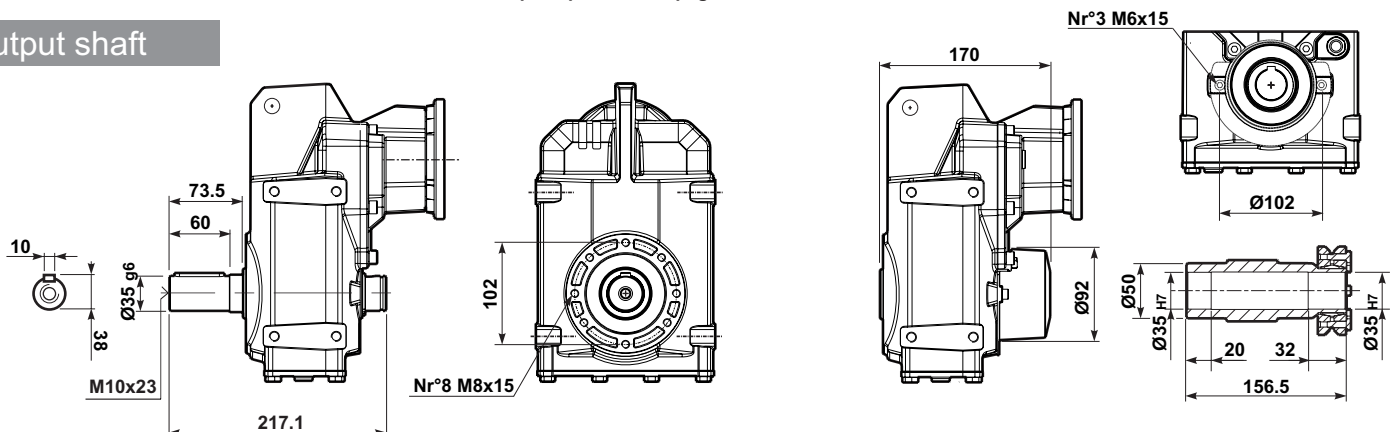
| Peso Weight | Kg |
|-------------|------|
| F52A | 13.2 |
| F53A | 13.4 |

Flange Mount





- Alberi di uscita a richiesta vedi pagina 40
- Output shaft on request you see page 40

Output shaft



- Flangia Uscita Opzionale vedi pagina 41
- Flange Output Optional, see page 41

| n ₂ [min ⁻¹] | i | P _{1M} [kW] | M _{2M} [Nm] | fs | P _{1R} [kW] | M _{2R} [Nm] |  | B5 | | | | | B14 | | | | | RD |  Ratios code | | |
|--|---|-------------------------|-------------------------|----|-------------------------|-------------------------|---|----|----|----|----|------------|-----|----|----|----|----|----|---|------------|-----|
| | | | | | | | | B | C | D | E | F | O | P | Q | R | T | | | U | V |
| | | | | | | | | 63 | 71 | 80 | 90 | 100 112 | 56 | 63 | 71 | 80 | 90 | | | 100 112 | 132 |

F62C

n₁ = 1400 min⁻¹

| | | | | | | | | | | | | | | | | | | | |
|------|--------------|-----|-----|-----|-----|-----|----|---|--|--|--|--|--|--|--|--|--|----|------|
| 225 | 6.21 | 7.5 | 305 | 1.0 | 7.9 | 320 | 40 | B | | | | | | | | | | 96 | 3018 |
| 196 | 7.15 | 7.5 | 351 | 1.0 | 7.9 | 369 | 40 | B | | | | | | | | | | 96 | 3016 |
| 168 | 8.36 | 7.5 | 410 | 1.0 | 7.9 | 431 | 40 | B | | | | | | | | | | 96 | 3014 |
| 120 | 11.71 | 7.5 | 575 | 1.0 | 7.6 | 585 | 40 | B | | | | | | | | | | 96 | 2018 |
| 104 | 13.48 | 5.5 | 485 | 1.3 | 7.0 | 620 | 40 | B | | | | | | | | | | 96 | 2016 |
| 89 | 15.75 | 5.5 | 567 | 1.1 | 6.0 | 617 | 40 | B | | | | | | | | | | 96 | 2014 |
| 77 | 18.22 | 4 | 477 | 1.3 | 5.2 | 620 | 40 | B | | | | | | | | | | 96 | 1616 |
| 68 | 20.58 | 4 | 539 | 1.1 | 4.2 | 566 | 40 | B | | | | | | | | | | 96 | 1318 |
| 66 | 21.29 | 4 | 558 | 1.1 | 4.4 | 617 | 40 | B | | | | | | | | | | 96 | 1614 |
| 59 | 23.69 | 4 | 621 | 1.0 | 4.0 | 620 | 40 | B | | | | | | | | | | 96 | 1316 |
| 51 | 27.69 | 3 | 544 | 1.1 | 3.4 | 617 | 40 | B | | | | | | | | | | 96 | 1314 |
| 48.3 | 29.00 | 3 | 570 | 1.0 | 3.1 | 580 | 40 | B | | | | | | | | | | 96 | 1116 |
| 41.3 | 33.90 | 3 | 666 | 0.9 | 2.8 | 617 | 40 | B | | | | | | | | | | 96 | 1114 |
| 38.4 | 36.43 | 2.2 | 525 | 1.0 | 2.3 | 550 | 40 | B | | | | | | | | | | 96 | 818 |
| 33.4 | 41.94 | 1.5 | 412 | 1.5 | 2.3 | 620 | 40 | B | | | | | | | | | | 96 | 816 |
| 28.6 | 49.02 | 1.5 | 481 | 1.3 | 1.9 | 617 | 40 | B | | | | | | | | | | 96 | 814 |
| 24.2 | 57.75 | 1.1 | 416 | 1.1 | 1.2 | 440 | 40 | B | | | | | | | | | | 96 | 616 |
| 20.7 | 67.50 | 1.1 | 486 | 1.0 | 1.1 | 507 | 40 | B | | | | | | | | | | 96 | 614 |

F63C

n₁ = 1400 min⁻¹

| | | | | | | | | | | | | | | | | | | | |
|------|---------------|------|-----|-----|------|-----|----|---|--|--|--|--|---|---|--|--|--|----|--------|
| 37.6 | 37.23 | 1.5 | 354 | 1.8 | 2.8 | 652 | 40 | B | | | | | C | C | | | | 93 | 281316 |
| 32.2 | 43.52 | 1.5 | 414 | 1.6 | 2.3 | 648 | 40 | B | | | | | C | C | | | | 93 | 281314 |
| 23.9 | 58.49 | 1.5 | 557 | 1.0 | 1.6 | 576 | 40 | B | | | | | C | C | | | | 93 | 191318 |
| 20.8 | 67.34 | 1.5 | 641 | 1.0 | 1.53 | 652 | 40 | B | | | | | C | C | | | | 93 | 191316 |
| 17.9 | 78.05 | 1.1 | 545 | 1.2 | 1.32 | 652 | 40 | B | | | | | C | C | | | | 93 | 171316 |
| 15.3 | 91.61 | 1.1 | 639 | 1.0 | 1.12 | 652 | 40 | B | | | | | C | C | | | | 93 | 151316 |
| 12.8 | 109.35 | 0.75 | 520 | 1.3 | 0.94 | 652 | 40 | B | | | | | C | C | | | | 93 | 131316 |
| 10.8 | 129.66 | 0.75 | 617 | 0.9 | 0.70 | 576 | 40 | B | | | | | C | C | | | | 93 | 101318 |
| 9.4 | 149.26 | 0.55 | 521 | 1.3 | 0.69 | 652 | 40 | B | | | | | C | C | | | | 93 | 101316 |
| 8.3 | 169.22 | 0.55 | 590 | 1.0 | 0.54 | 576 | 40 | B | | | | | C | C | | | | 93 | 91318 |
| 8.0 | 174.46 | 0.55 | 609 | 1.1 | 0.59 | 648 | 40 | B | | | | | C | C | | | | 93 | 101314 |
| 7.2 | 194.80 | 0.55 | 680 | 1.0 | 0.53 | 652 | 40 | B | | | | | C | C | | | | 93 | 91316 |
| 6.1 | 227.69 | 0.37 | 534 | 1.2 | 0.45 | 648 | 40 | B | | | | | C | C | | | | 93 | 91314 |
| 5.4 | 257.23 | 0.37 | 604 | 1.1 | 0.40 | 652 | 40 | B | | | | | C | C | | | | 93 | 71316 |
| 4.7 | 300.66 | 0.25 | 477 | 1.4 | 0.34 | 648 | 40 | B | | | | | C | C | | | | 93 | 71314 |

B, C, ... Flange disponibili
Motor flange available

B

Montaggio con boccia di riduzione
Coupling by means of reduction bushing



C

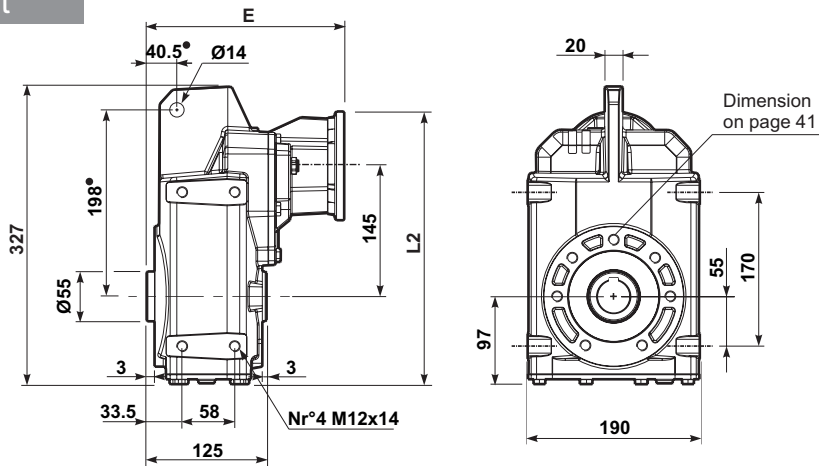
Posizione fori flangia/basetta motore
Motor flange/terminal box position



F 62C
F 63C

DIMENSIONI / DIMENSIONS / ABMESSUNGEN / DIMENSIONS / DIMENSIONES

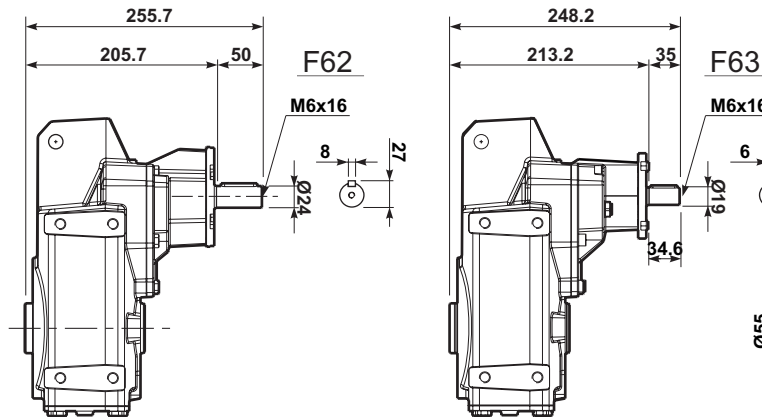
Shaft Mount



| Motor Flange | E | |
|--------------|-------|-------|
| | F62 | F63 |
| 63 B5 | - | 222.5 |
| 71 B5 | 212.5 | 223.5 |
| 80-90 B5 | 214.5 | 222.5 |
| 100-112 B5 | 214.5 | - |
| 71 B14 | - | 220.5 |
| 80 B14 | 212.5 | 221.5 |
| 90 B14 | 215.5 | 222.5 |
| 100 B14 | 212 | - |

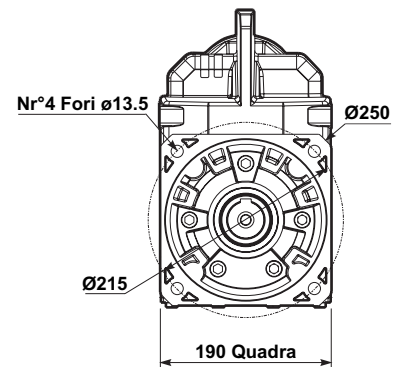
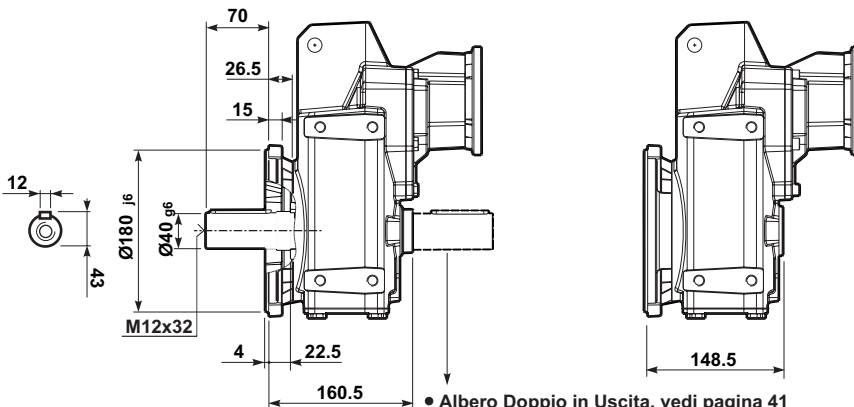
| Motor Flange | L2 | |
|--------------|-----|-------|
| | F62 | F63 |
| 63 B5 | - | 312 |
| 71 B5 | 321 | 322 |
| 80-90 B5 | 341 | 342 |
| 100-112 B14 | 366 | - |
| 71 B14 | - | 294.5 |
| 80 B14 | 301 | 302 |
| 90 B14 | 311 | 312 |
| 100 B14 | 321 | - |

Type R



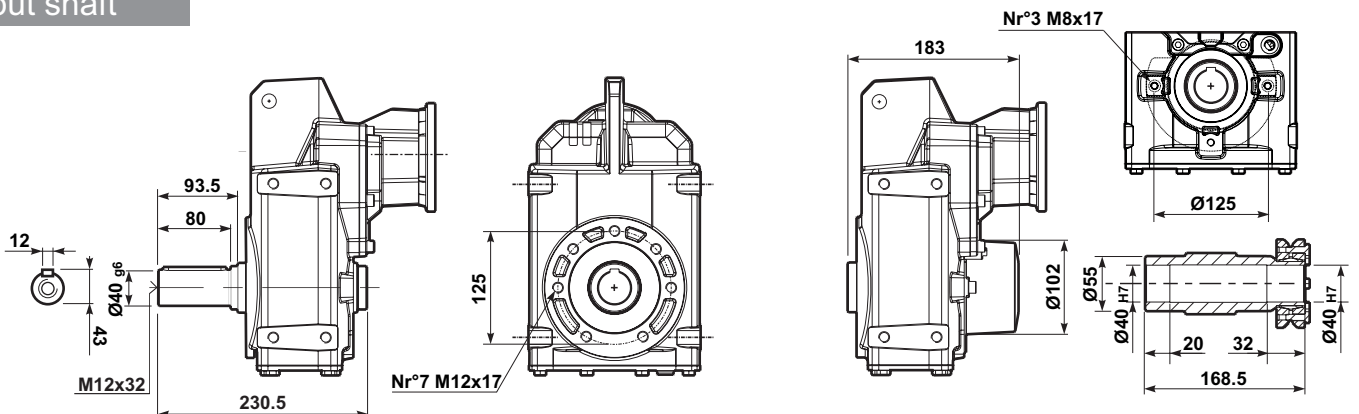
| Peso Weight Kg | |
|----------------|------|
| F62C | 21.8 |
| F63C | 22.0 |

Flange Mount



- Alberi di uscita a richiesta vedi pagina 40
- Output shaft on request you see page 40

Output shaft



- Albero Doppio in Uscita, vedi pagina 41
- Double Output Optional, see page 41

- Flangia Uscita Opzionale vedi pagina 41
- Flange Output Optional, see page 41

SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

Come selezionare un motoriduttore / How to select a motorised gearbox / Wie wählt man einen Getriebemotor
Comment sélectionner un moto-réducteur / Cómo seleccionar un moto-reductores

| | | | | | | | | | | |
|---|---|--------------|---|---|---|--|--|--|---|---|
| B | Velocità di rotazione Rotation speed Abtriebsdrehzahl Vitesse de rotation Velocidad de salida | C | Momento torcente Torque moment Drehmoment Moment de torsion Par torsion | Fattore di servizio Service factor Betriebsfaktor Facteur de service Factor de servicio | Diametro albero uscita Output shaft diam. Durchmesser Abtriebswelle Diamètre arbre de sortie Diametro eje de salida | A | Potenza motore Power Leistung Puissance Potencia | E | Flangia IEC IEC Flange IEC Flansch Bride CEI Bridas IEC | Note Notes Anmerkungen Note Notas |
| P_{1M} = 0.37 kW n₁ = 2800 min⁻¹(71A2) - 1400 min⁻¹(71B4) - 900 min⁻¹(80A6) | | | | | | | | | | |
| n₂ [min ⁻¹] | M₂ [Nm] | i | fs | | | | | | | |
| | | | | | | | B5 | B14 | | Dimensions on page |
| 96 | 35 | 14.53 | 5.7 | 25 | F32A | 71B4 | 63 ^B -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 112 | 30 | 8.03 | 5.6 | 25 | F32A | 80A6 | 63 ^B -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 135 | 25 | 10.40 | 7.3 | 25 | F32A | 71B4 | 63 ^B -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 142 | 24 | 19.76 | 7.5 | 25 | F32A | 71A2 | 63 ^B -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 166 | 20 | 16.84 | 8.8 | 25 | F32A | 71A2 | 63 ^B -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| | | | | | D | D2 | | | | |
| | | | | | Rapporto Ratio Untersetzung Rapport Relación | Riduttore in alluminio Aluminium gearbox Aluminiumgetriebe Réducteur en aluminium Reductor en aluminio | Codice motore IEC IEC motor code Motor code IEC Code moteur IEC Código motor IEC | | | |
| n₁ = 1400 (2800, 900) min⁻¹ | | | | | | | | | | |







| | | | | |
|----------|---|-----------|--|--|
| E | Flange disponibili Motor flange available Erhältliche Motorflansche Brides disponibles Bridas disponibles | B) | Montaggio con boccia di riduzione / Coupling by means of reduction bushing Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción | |
| | | C) | Posizione fori flangia/basetta motore / Motor flange/terminal box position Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor | |

| | | | | | |
|--------------|---|--|--|--|--|
| A | Seleziona la potenza | Select power | Ausgewählte Leistung | Sélectionne la puissance | Seleccionar la potencia |
| B | Seleziona la velocità in uscita | Select power speed | Ausgewählte Abtriebsdrehzahl | Sélectionne la vitesse en sortie | Seleccionar la velocidad de salida |
| C | Seleziona la coppia in base al fattore di servizio fs desiderato | Select required torque according to service factor | Ausgewähltes Drehmoment in Bezug zum Betriebsfaktor | Sélectionne le couple sur la base du facteur de service fs souhaité | Seleccionar el par de torsión en función del factor de servicio fs deseado |
| D, D1 | Scegli la motorizzazione desiderata (riduttore con cassa in alluminio o in ghisa) | Select the required motorisation (gearbox with cast iron or aluminium housing) | Wählen Sie die gewünschte Motorisierung (Untersetzungsgetriebe mit Aluminium- oder Gußeisengehäuse) | Choisissez la motorisation que vous souhaitez (réducteur avec caisse en aluminium ou en fonte) | Seleccionar la motorización deseada (reductor con carcasa de aluminio o de hierro fundido) |
| D2 | Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il tipo di motore (es. 63B6 dove 63 è la grandezza motore, 6 è la polarità 6 poli e 4 la polarità 4 poli) | On the same line of selected motorisation, you can find relevant motor type (i.e. 63B6 where 63 correspond to motorsize, 6 is the poles number at 6 pole and 4 is the poles number at 4 pole (63A4)) | Auf der gleichen Linie wie der ausgewählte Getriebemotor ist die entsprechende Motorgröße zu finden. (z.B. 63B6 = BG 63, 6-polig oder 63A4 = BG 63, 4-polig) | Sur la ligne correspondante à la motorisation pré-choisie on peut relever le type de moteur (ex. 63B6 là où 63 est la grandeur moteur, 6 est la polarité 6 pôles et 4 est la polarité 4 pôles) | En la línea correspondiente al motor preseleccionado se puede encontrar el tipo de motor (ej. 63B6, donde 63 nos indica el tamaño del motor, 6 es la polaridad 6 polos ó 4 la polaridad 4 polos) |
| E | Scegli la flangia disponibile | See motor flange available | Erhältliche Motorflansche | Choisir la bride disponible | Seleccionar la brida disponible |

SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 0.09 kW

n₁ = 1400 min⁻¹ (56B4) - 900 min⁻¹ (63A6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|---------------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 2.8 | 285 | 320.70 | 1.1 | 30 | F43A | 63A6 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 2.8 | 282 | 317.36 | 1.8 | 35 | F53A | 63A6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 23 |
| 3.5 | 227 | 256.12 | 0.9 | 25 | F33A | 63A6 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 3.7 | 216 | 242.87 | 1.4 | 30 | F43A | 63A6 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 4.2 | 189 | 331.50 | 1.1 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 4.4 | 183 | 320.70 | 1.7 | 30 | F43A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 5.5 | 146 | 256.12 | 1.4 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 5.8 | 139 | 242.87 | 2.2 | 30 | F43A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 6.1 | 131 | 228.89 | 2.6 | 30 | F43A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 7.3 | 110 | 192.36 | 1.8 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 7.5 | 106 | 186.09 | 2.9 | 30 | F43A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 7.7 | 104 | 182.80 | 1.9 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 8.1 | 99 | 173.18 | 2.6 | 30 | F43A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 9.9 | 80 | 140.92 | 2.5 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 10.1 | 79 | 138.43 | 2.5 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 11.9 | 67 | 118.06 | 3.0 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 13.1 | 61 | 107.22 | 4.4 | 30 | F43A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 13.2 | 61 | 106.07 | 3.3 | 25 | F33A | 56B4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 14.4 | 56 | 97.30 | 6.1 | 30 | F43A | 56B4 | 63-71-80-90 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} -80 ^{C(L)} -90 | | 21 |
| 16.5 | 50 | 54.39 | 4.0 | 25 | F32A | 63A6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |
| 17.2 | 47 | 81.52 | 7.2 | 30 | F43A | 56B4 | 63-71-80-90 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} -80 ^{C(L)} -90 | | 21 |
| 20.2 | 40 | 69.45 | 8.5 | 30 | F43A | 56B4 | 63-71-80-90 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} -80 ^{C(L)} -90 | | 21 |
| 21.6 | 38 | 41.68 | 5.2 | 25 | F32A | 63A6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |
| 23.0 | 36 | 39.05 | 4.7 | 25 | F32A | 63A6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |
| 28.0 | 30 | 32.20 | 6.8 | 25 | F32A | 63A6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |
| 35.2 | 23 | 25.58 | 8.5 | 25 | F32A | 63A6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |
| 38.2 | 22 | 23.59 | 9.2 | 25 | F32A | 63A6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |

P_{1M} = 0.13 kW

n₁ = 1400 min⁻¹ (63A4) - 900 min⁻¹ (63B6)

| | | | | | | | | | | |
|------|-----|---------------|-----|----|-------------|-------------|------------------------------|--|--|----|
| 2.8 | 407 | 317.36 | 1.2 | 35 | F53A | 63B6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 23 |
| 3.0 | 386 | 300.66 | 1.7 | 40 | F63C | 63B6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 25 |
| 3.7 | 312 | 242.87 | 1.0 | 30 | F43A | 63B6 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 3.7 | 308 | 240.34 | 1.6 | 35 | F53A | 63B6 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 23 |
| 3.9 | 294 | 228.89 | 1.1 | 30 | F43A | 63B6 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 4.4 | 264 | 320.70 | 1.2 | 30 | F43A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 4.4 | 262 | 317.36 | 1.9 | 35 | F53A | 63A4 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 23 |
| 4.7 | 248 | 300.66 | 2.6 | 40 | F63C | 63A4 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 25 |
| 5.1 | 224 | 271.85 | 2.3 | 35 | F53A | 63A4 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 23 |
| 5.5 | 211 | 256.12 | 0.9 | 25 | F33A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 5.8 | 200 | 242.87 | 1.5 | 30 | F43A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 5.8 | 198 | 240.34 | 2.5 | 35 | F53A | 63A4 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 23 |
| 6.1 | 189 | 228.89 | 1.8 | 30 | F43A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 6.8 | 170 | 205.87 | 3.0 | 35 | F53A | 63A4 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 23 |
| 7.3 | 159 | 192.36 | 1.3 | 25 | F33A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 7.5 | 153 | 186.09 | 2.0 | 30 | F43A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 7.7 | 151 | 182.80 | 1.3 | 25 | F33A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 8.1 | 143 | 173.18 | 1.8 | 30 | F43A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 9.9 | 116 | 140.92 | 1.7 | 25 | F33A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 10.1 | 114 | 138.43 | 1.8 | 25 | F33A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 10.3 | 112 | 136.33 | 2.8 | 30 | F43A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 ^{B(C)} | | 21 |
| 11.9 | 97 | 118.06 | 2.1 | 25 | F33A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 12.8 | 93 | 109.66 | 1.8 | 25 | F32A | 63A4 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |
| 13.2 | 87 | 106.07 | 2.3 | 25 | F33A | 63A4 | 63-71 | 56 ^{B(C)} -63 ^{C(L)} -71 | | 19 |
| 16.9 | 71 | 83.04 | 2.4 | 25 | F32A | 63A4 | 63 ^{B(L)} -71-80-90 | 71 ^{C(L)} -80 ^{C(L)} -90 | | 19 |

B

Montaggio con boccia di riduzione
Coupling by means of reduction bushing



C







Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 0.13 kW

n₁ = 1400 min⁻¹ (63A4) - 900 min⁻¹ (63B6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|-------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 20.1 | 59 | 69.49 | 3.0 | 30 | F42A | 63A4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{Bl} Cl-80 ^{Cl} -90-100/112 | | 21 |
| 21.6 | 55 | 41.68 | 3.6 | 25 | F32A | 63B6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 23.0 | 52 | 39.05 | 3.3 | 25 | F32A | 63B6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 25.7 | 46 | 54.39 | 4.3 | 25 | F32A | 63A4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 28.0 | 43 | 32.20 | 4.7 | 25 | F32A | 63B6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 33.6 | 35 | 41.68 | 5.6 | 25 | F32A | 63A4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 35.8 | 33 | 39.05 | 5.1 | 25 | F32A | 63A4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 38.2 | 31 | 23.59 | 6.4 | 25 | F32A | 63B6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 43.5 | 27 | 32.20 | 7.3 | 25 | F32A | 63A4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 55 | 22 | 25.58 | 9.2 | 25 | F32A | 63A4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |

P_{1M} = 0.18 kW

n₁ = 1400 min⁻¹ (63B4)- 900 min⁻¹ (71A6)

| | | | | | | | | | | |
|------|-----|--------|-----|----|------|------|---|--|--|----|
| 2.8 | 564 | 317.36 | 0.9 | 35 | F53A | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 3.0 | 534 | 300.66 | 1.2 | 40 | F63C | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 25 |
| 3.3 | 483 | 271.85 | 1.1 | 35 | F53A | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 3.5 | 457 | 257.23 | 1.4 | 40 | F63C | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 25 |
| 3.7 | 427 | 240.34 | 1.2 | 35 | F53A | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 3.9 | 407 | 228.89 | 0.8 | 30 | F43A | 71A6 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 4.4 | 366 | 320.70 | 0.8 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 4.4 | 362 | 317.36 | 1.4 | 35 | F53A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 4.7 | 343 | 300.66 | 1.9 | 40 | F63C | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 25 |
| 5.1 | 310 | 271.85 | 1.6 | 35 | F53A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 5.4 | 294 | 257.23 | 2.2 | 40 | F63C | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 25 |
| 5.8 | 277 | 242.87 | 1.1 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 5.8 | 274 | 240.34 | 1.8 | 35 | F53A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 6.1 | 261 | 228.89 | 1.3 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 6.1 | 260 | 227.69 | 2.5 | 40 | F63C | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 25 |
| 6.8 | 235 | 205.87 | 2.2 | 35 | F53A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 7.3 | 220 | 192.36 | 0.9 | 25 | F33A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 | | 19 |
| 7.5 | 212 | 186.09 | 1.5 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 7.6 | 210 | 184.15 | 2.4 | 35 | F53A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 7.7 | 209 | 182.80 | 1.0 | 25 | F33A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 | | 19 |
| 7.8 | 204 | 179.06 | 2.6 | 35 | F53A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 8.1 | 198 | 173.18 | 1.3 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 8.3 | 193 | 169.22 | 3.0 | 40 | F63C | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 25 |
| 8.9 | 180 | 157.74 | 2.8 | 35 | F53A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 23 |
| 9.9 | 161 | 140.92 | 1.2 | 25 | F33A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 | | 19 |
| 10.1 | 158 | 138.43 | 1.3 | 25 | F33A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 | | 19 |
| 10.3 | 156 | 136.33 | 2.0 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 11.9 | 135 | 118.06 | 1.5 | 25 | F33A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 | | 19 |
| 12.3 | 130 | 114.21 | 2.4 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 12.8 | 129 | 109.66 | 1.3 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 13.1 | 122 | 107.22 | 2.2 | 30 | F43A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl | | 21 |
| 13.2 | 121 | 106.07 | 1.7 | 25 | F33A | 63B4 | 63-71 | 56 ^{Bl} Cl-63 ^{Cl} -71 | | 19 |
| 14.4 | 111 | 97.30 | 3.0 | 30 | F43A | 63B4 | 63-71-80-90 | 56 ^{Bl} Cl-63 ^{Cl} -71 ^{Bl} Cl-80 ^{Cl} -90 | | 21 |
| 16.9 | 98 | 83.04 | 1.7 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 20.1 | 82 | 69.49 | 2.2 | 30 | F42A | 63B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{Bl} Cl-80 ^{Cl} -90-100/112 | | 21 |
| 21.2 | 78 | 42.48 | 2.6 | 30 | F42A | 71A6 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{Bl} Cl-80 ^{Cl} -90-100/112 | | 21 |
| 21.6 | 76 | 41.68 | 2.6 | 25 | F32A | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 23.0 | 72 | 39.05 | 2.4 | 25 | F32A | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 25.7 | 64 | 54.39 | 3.1 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 28.0 | 59 | 32.20 | 3.4 | 25 | F32A | 71A6 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |
| 33.6 | 49 | 41.68 | 4.1 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^{Cl} -80 ^{Cl} -90 | | 19 |

B

Montaggio con boccola di riduzione
Coupling by means of reduction bushing



C







Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 0.18 kW

n₁ = 1400 min⁻¹ (63B4)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|-------|-----|---|---|---|---|--------------------------------------|---|--|
| | | | | | | | B5 | B14 | | |
| 35.8 | 46 | 39.05 | 3.7 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 43.5 | 38 | 32.20 | 5.3 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 55 | 30 | 25.58 | 6.6 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 59 | 28 | 23.59 | 7.2 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 71 | 23 | 19.76 | 8.6 | 25 | F32A | 63B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |

P_{1M} = 0.25 kW

n₁ = 1400 min⁻¹ (71A4) - 900 min⁻¹ (71B6)

| | | | | | | | | | | |
|------|-----|--------|-----|----|------|------|---|--|--|----|
| 3.0 | 742 | 300.66 | 0.9 | 40 | F63C | 71B6 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 3.7 | 593 | 240.34 | 0.8 | 35 | F53A | 71B6 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 4.4 | 503 | 317.36 | 0.9 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 4.7 | 477 | 300.66 | 1.2 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 5.1 | 431 | 271.85 | 1.1 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 5.4 | 408 | 257.23 | 1.4 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 5.8 | 381 | 240.34 | 1.2 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 6.1 | 363 | 228.89 | 0.8 | 30 | F43A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} | | 21 |
| 6.1 | 361 | 227.69 | 1.6 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 6.8 | 327 | 205.87 | 1.4 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 7.2 | 309 | 194.80 | 1.9 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 7.5 | 295 | 186.09 | 0.9 | 30 | F43A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} | | 21 |
| 7.6 | 292 | 184.15 | 1.5 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 7.8 | 284 | 179.06 | 1.7 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 8.0 | 277 | 174.46 | 2.1 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 8.1 | 275 | 173.18 | 0.8 | 30 | F43A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} | | 21 |
| 8.3 | 268 | 169.22 | 1.9 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 8.9 | 250 | 157.74 | 1.8 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 9.4 | 237 | 149.26 | 2.5 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 9.9 | 223 | 140.92 | 0.8 | 25 | F33A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 | | 19 |
| 10.1 | 220 | 138.43 | 0.8 | 25 | F33A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 | | 19 |
| 10.2 | 218 | 137.20 | 2.2 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 10.3 | 216 | 136.33 | 1.3 | 30 | F43A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} | | 21 |
| 10.8 | 206 | 129.66 | 2.5 | 40 | F63C | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 11.9 | 187 | 118.06 | 1.0 | 25 | F33A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 | | 19 |
| 12.1 | 183 | 115.56 | 2.5 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 12.3 | 181 | 114.21 | 1.5 | 30 | F43A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} | | 21 |
| 12.8 | 180 | 109.66 | 0.9 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 13.1 | 170 | 107.22 | 1.4 | 30 | F43A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} | | 21 |
| 13.2 | 168 | 106.07 | 1.1 | 25 | F33A | 71A4 | 63-71 | 56 ^{B(C)} -63 ^C -71 | | 19 |
| 14.4 | 154 | 97.30 | 2.0 | 30 | F43A | 71A4 | 63-71-80-90 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} -80 ^C -90 | | 21 |
| 14.5 | 154 | 96.82 | 3.0 | 35 | F53A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 16.9 | 136 | 83.04 | 1.1 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 17.2 | 129 | 81.52 | 2.3 | 30 | F43A | 71A4 | 63-71-80-90 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} -80 ^C -90 | | 21 |
| 20.1 | 114 | 69.49 | 1.4 | 30 | F42A | 71A4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{B(C)} -80 ^C -90-100/112 | | 21 |
| 20.2 | 110 | 69.45 | 2.8 | 30 | F43A | 71A4 | 63-71-80-90 | 56 ^{B(C)} -63 ^C -71 ^{B(C)} -80 ^C -90 | | 21 |
| 21.3 | 104 | 65.81 | 2.3 | 30 | F43A | 71A4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{B(C)} -80 ^C -90 | | 21 |
| 25.7 | 89 | 54.39 | 2.0 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 26.6 | 86 | 52.62 | 2.6 | 30 | F42A | 71A4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{B(C)} -80 ^C -90-100/112 | | 21 |
| 33.0 | 70 | 42.48 | 2.6 | 30 | F42A | 71A4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{B(C)} -80 ^C -90-100/112 | | 21 |
| 33.6 | 68 | 41.68 | 2.6 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 35.8 | 64 | 39.05 | 2.4 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 43.5 | 53 | 32.20 | 3.4 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 55 | 42 | 25.58 | 4.3 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 59 | 39 | 23.59 | 4.7 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 71 | 32 | 19.76 | 5.6 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |

B

Montaggio con boccola di riduzione
Coupling by means of reduction bushing



C







Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 0.25 kW

n₁ = 1400 min⁻¹ (71A4) - 900 min⁻¹ (71B6)







| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|--------------|-----|---|---|---|---|--------------------------------------|---|--|
| | | | | | | | B5 | B14 | | |
| 83 | 28 | 16.84 | 6.5 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 96 | 24 | 14.53 | 7.6 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 112 | 20 | 8.03 | 8.3 | 25 | F32A | 71B6 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 135 | 17 | 10.40 | 9.8 | 25 | F32A | 71A4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |

P_{1M} = 0.37 kW n₁ = 2800 min⁻¹(71A2) - 1400 min⁻¹(71B4) - 900 min⁻¹(80A6)

| | | | | | | | | | | |
|-------------|-----|---------------|-----|----|-------------|-------------|---|--|--|----|
| 4.7 | 706 | 300.66 | 0.9 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 5.1 | 638 | 271.85 | 0.8 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 5.4 | 604 | 257.23 | 1.1 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 5.8 | 564 | 240.34 | 0.9 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 6.1 | 534 | 227.69 | 1.2 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 6.8 | 483 | 205.87 | 1.1 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 7.2 | 457 | 194.80 | 1.4 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 7.6 | 432 | 184.15 | 1.2 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 7.8 | 420 | 179.06 | 1.3 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 8.0 | 410 | 174.46 | 1.6 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 8.3 | 397 | 169.22 | 1.5 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 8.9 | 370 | 157.74 | 1.4 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 9.4 | 350 | 149.26 | 1.9 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 10.2 | 322 | 137.20 | 1.6 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 10.3 | 320 | 136.33 | 1.0 | 30 | F43A | 71B4 | 63-71 | 56 ^{BlC} -63 ^C -71 ^{BlC} | | 21 |
| 10.8 | 304 | 129.66 | 1.9 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 12.1 | 271 | 115.56 | 1.9 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 12.3 | 268 | 114.21 | 1.2 | 30 | F43A | 71B4 | 63-71 | 56 ^{BlC} -63 ^C -71 ^{BlC} | | 21 |
| 12.8 | 257 | 109.35 | 2.5 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 13.1 | 252 | 107.22 | 1.1 | 30 | F43A | 71B4 | 63-71 | 56 ^{BlC} -63 ^C -71 ^{BlC} | | 21 |
| 13.2 | 249 | 106.07 | 0.8 | 25 | F33A | 71B4 | 63-71 | 56 ^{BlC} -63 ^C -71 | | 19 |
| 14.4 | 228 | 97.30 | 1.5 | 30 | F43A | 71B4 | 63-71-80-90 | 56 ^{BlC} -63 ^C -71 ^{BlC} -80 ^C -90 | | 21 |
| 14.5 | 227 | 96.82 | 2.2 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 15.3 | 215 | 91.61 | 3.0 | 40 | F63C | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 16.9 | 201 | 83.04 | 0.8 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 17.0 | 194 | 82.48 | 2.6 | 35 | F53A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 17.2 | 191 | 81.52 | 1.8 | 30 | F43A | 71B4 | 63-71-80-90 | 56 ^{BlC} -63 ^C -71 ^{BlC} -80 ^C -90 | | 21 |
| 19.5 | 174 | 71.82 | 1.1 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 19.6 | 173 | 71.25 | 2.9 | 35 | F52A | 71B4 | 71 ^{Bl} -80-90-100/112 | 80-90-100/112 | | 23 |
| 20.1 | 168 | 69.49 | 1.1 | 30 | F42A | 71B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{BlC} -80 ^C -90-100/112 | | 21 |
| 20.2 | 163 | 69.45 | 2.1 | 30 | F43A | 71B4 | 63-71-80-90 | 56 ^{BlC} -63 ^C -71 ^{BlC} -80 ^C -90 | | 21 |
| 21.3 | 154 | 65.81 | 1.8 | 30 | F43A | 71B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{BlC} -80 ^C -90 | | 21 |
| 23.4 | 141 | 59.92 | 2.4 | 30 | F43A | 71B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{BlC} -80 ^C -90 | | 21 |
| 25.7 | 132 | 54.39 | 1.5 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 26.6 | 128 | 52.62 | 1.9 | 30 | F42A | 71B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{BlC} -80 ^C -90-100/112 | | 21 |
| 28.9 | 114 | 48.37 | 2.4 | 30 | F43A | 71B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{BlC} -80 ^C -90 | | 21 |
| 33.0 | 103 | 42.48 | 1.9 | 30 | F42A | 71B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{BlC} -80 ^C -90-100/112 | | 21 |
| 33.6 | 101 | 41.68 | 2.0 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 35.8 | 95 | 39.05 | 1.8 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 37.4 | 88 | 37.47 | 2.8 | 30 | F43A | 71B4 | 63 ^{Bl} -71 ^{Bl} -80-90 | 71 ^{BlC} -80 ^C -90 | | 21 |
| 43.5 | 78 | 32.20 | 2.6 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 55 | 62 | 25.58 | 3.2 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 59 | 57 | 23.59 | 3.5 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 71 | 48 | 19.76 | 4.2 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 83 | 41 | 16.84 | 4.9 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 96 | 35 | 14.53 | 5.7 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 112 | 30 | 8.03 | 5.6 | 25 | F32A | 80A6 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 135 | 25 | 10.40 | 7.3 | 25 | F32A | 71B4 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 142 | 24 | 19.76 | 7.5 | 25 | F32A | 71A2 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 166 | 20 | 16.84 | 8.8 | 25 | F32A | 71A2 | 63 ^{Bl} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |

SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 0.55 kW n₁ = 2800 min⁻¹(71A2) - 1400 min⁻¹(80A4) - 900 min⁻¹(80B6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|--------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 6.1 | 794 | 227.69 | 0.8 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 7.2 | 680 | 194.80 | 1.0 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 7.8 | 625 | 179.06 | 0.8 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 8.0 | 609 | 174.46 | 1.1 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 8.3 | 590 | 169.22 | 1.0 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 8.9 | 550 | 157.74 | 0.9 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 9.4 | 521 | 149.26 | 1.3 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 10.2 | 479 | 137.20 | 1.1 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 10.8 | 452 | 129.66 | 1.3 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 12.1 | 403 | 115.56 | 1.3 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 12.8 | 382 | 109.35 | 1.7 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 14.4 | 339 | 97.30 | 1.0 | 30 | F43A | 80A4 | 63-71-80-90 | 56 ^{B1C1} -63 ^{C1} -71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 14.5 | 338 | 96.82 | 1.5 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 15.3 | 320 | 91.61 | 2.0 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 17.0 | 288 | 82.48 | 1.8 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 17.2 | 284 | 81.52 | 1.2 | 30 | F43A | 80A4 | 63-71-80-90 | 56 ^{B1C1} -63 ^{C1} -71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 17.9 | 272 | 78.05 | 2.4 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 19.6 | 257 | 71.25 | 1.9 | 35 | F52A | 80A4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 19.7 | 248 | 71.16 | 2.1 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 20.2 | 242 | 69.45 | 1.4 | 30 | F43A | 80A4 | 63-71-80-90 | 56 ^{B1C1} -63 ^{C1} -71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 20.7 | 243 | 67.50 | 2.1 | 40 | F62C | 80A4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 20.8 | 235 | 67.34 | 2.8 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 21.3 | 230 | 65.81 | 1.2 | 30 | F43A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 22.6 | 216 | 61.89 | 2.5 | 35 | F53A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 22.9 | 220 | 61.03 | 2.1 | 35 | F52A | 80A4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 23.9 | 204 | 58.49 | 2.8 | 40 | F63C | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 24.2 | 208 | 57.75 | 2.1 | 40 | F62C | 80A4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 25.7 | 196 | 54.39 | 1.0 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 26.6 | 190 | 52.62 | 1.3 | 30 | F42A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 27.1 | 186 | 51.74 | 2.7 | 35 | F52A | 80A4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 28.9 | 169 | 48.37 | 1.6 | 30 | F43A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 33.0 | 153 | 42.48 | 1.3 | 30 | F42A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 33.6 | 150 | 41.68 | 1.3 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 34.7 | 145 | 40.32 | 2.1 | 30 | F42A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 35.8 | 141 | 39.05 | 1.2 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 37.4 | 131 | 37.47 | 1.9 | 30 | F43A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 43.0 | 117 | 32.55 | 2.1 | 30 | F42A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 43.5 | 116 | 32.20 | 1.7 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 47.4 | 106 | 29.54 | 2.9 | 30 | F42A | 80A4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 55 | 92 | 25.58 | 2.2 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 59 | 85 | 23.59 | 2.4 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 71 | 71 | 19.76 | 2.8 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 83 | 61 | 16.84 | 3.3 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 96 | 52 | 14.53 | 3.8 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 112 | 45 | 8.03 | 3.8 | 25 | F32A | 80B6 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 135 | 37 | 10.40 | 4.9 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 142 | 36 | 19.76 | 5.1 | 25 | F32A | 71A2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 174 | 29 | 8.03 | 5.9 | 25 | F32A | 80A4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 193 | 26 | 14.53 | 6.9 | 25 | F32A | 71A2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 269 | 19 | 10.40 | 8.9 | 25 | F32A | 71A2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |

B

Montaggio con boccola di riduzione
Coupling by means of reduction bushing









C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 0.75 kW n₁ = 2800 min⁻¹(80A2) - 1400 min⁻¹(80B4) - 900 min⁻¹(90S6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|--------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 9.4 | 710 | 149.26 | 0.9 | 40 | F63C | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 10.2 | 653 | 137.20 | 0.8 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 10.8 | 617 | 129.66 | 0.9 | 40 | F63C | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 12.1 | 550 | 115.56 | 0.9 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 12.8 | 520 | 109.35 | 1.3 | 40 | F63C | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 14.5 | 461 | 96.82 | 1.1 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 15.3 | 436 | 91.61 | 1.5 | 40 | F63C | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 17.0 | 392 | 82.48 | 1.3 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 17.2 | 388 | 81.52 | 0.9 | 30 | F43A | 80B4 | 63-71-80-90 | 56 ^{B14} -63 ^C -71 ^{B14} -80 ^C -90 | | 21 |
| 17.9 | 371 | 78.05 | 1.8 | 40 | F63C | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 19.6 | 350 | 71.25 | 1.4 | 35 | F52A | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 19.7 | 339 | 71.16 | 1.5 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 20.2 | 330 | 69.45 | 1.0 | 30 | F43A | 80B4 | 63-71-80-90 | 56 ^{B14} -63 ^C -71 ^{B14} -80 ^C -90 | | 21 |
| 20.7 | 332 | 67.50 | 1.5 | 40 | F62C | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 20.8 | 320 | 67.34 | 2.0 | 40 | F63C | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 21.3 | 313 | 65.81 | 0.9 | 30 | F43A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90 | | 21 |
| 22.6 | 294 | 61.89 | 1.8 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 22.9 | 300 | 61.03 | 1.5 | 35 | F52A | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 23.4 | 285 | 59.92 | 1.2 | 30 | F43A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90 | | 21 |
| 23.9 | 278 | 58.49 | 2.1 | 40 | F63C | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 24.2 | 284 | 57.75 | 1.5 | 40 | F62C | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 26.6 | 258 | 52.62 | 1.0 | 30 | F42A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90-100/112 | | 21 |
| 27.1 | 254 | 51.74 | 1.9 | 35 | F52A | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 28.6 | 241 | 49.02 | 2.6 | 40 | F62C | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 28.9 | 230 | 48.37 | 1.2 | 30 | F43A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90 | | 21 |
| 30.5 | 219 | 45.93 | 2.3 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 23 |
| 31.6 | 218 | 44.32 | 2.3 | 35 | F52A | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 33.0 | 209 | 42.48 | 1.0 | 30 | F42A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90-100/112 | | 21 |
| 33.4 | 206 | 41.94 | 3.0 | 40 | F62C | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 33.6 | 205 | 41.68 | 1.0 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 34.7 | 198 | 40.32 | 1.5 | 30 | F42A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90-100/112 | | 21 |
| 35.6 | 187 | 39.30 | 2.7 | 35 | F53A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 23 |
| 35.8 | 192 | 39.05 | 0.9 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 36.3 | 189 | 38.55 | 2.4 | 35 | F52A | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 37.4 | 178 | 37.47 | 1.4 | 30 | F43A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90 | | 21 |
| 38.4 | 179 | 36.43 | 2.8 | 40 | F62C | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 39.1 | 176 | 35.78 | 2.8 | 35 | F52A | 80B4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 43.0 | 160 | 32.55 | 1.5 | 30 | F42A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90-100/112 | | 21 |
| 43.5 | 158 | 32.20 | 1.3 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 47.4 | 145 | 29.54 | 2.1 | 30 | F42A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90-100/112 | | 21 |
| 55 | 126 | 25.58 | 1.6 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 57 | 122 | 24.75 | 2.4 | 30 | F42A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90-100/112 | | 21 |
| 59 | 116 | 23.59 | 1.7 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 71 | 97 | 19.76 | 2.1 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 77 | 89 | 18.19 | 2.9 | 30 | F42A | 80B4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B14} -80 ^C -90-100/112 | | 21 |
| 83 | 83 | 16.84 | 2.4 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 96 | 71 | 14.53 | 2.8 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 112 | 61 | 8.03 | 2.8 | 25 | F32A | 90S6 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 135 | 51 | 10.40 | 3.6 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 166 | 41 | 16.84 | 4.4 | 25 | F32A | 80A2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 174 | 39 | 8.03 | 4.3 | 25 | F32A | 80B4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 193 | 36 | 14.53 | 5.0 | 25 | F32A | 80A2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 269 | 26 | 10.40 | 6.5 | 25 | F32A | 80A2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 349 | 20 | 8.03 | 7.8 | 25 | F32A | 80A2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |

B

Montaggio con boccola di riduzione
Coupling by means of reduction bushing









C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 1.1 kW n₁ = 2800 min⁻¹(80B2) - 1400 min⁻¹(90S4) - 900 min⁻¹(90L6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|--------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 12.8 | 763 | 109.35 | 0.9 | 40 | F63C | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 15.3 | 639 | 91.61 | 1.0 | 40 | F63C | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 17.0 | 576 | 82.48 | 0.9 | 35 | F53A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 17.9 | 545 | 78.05 | 1.2 | 40 | F63C | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 19.6 | 513 | 71.25 | 1.0 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 19.7 | 497 | 71.16 | 1.0 | 35 | F53A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 20.7 | 486 | 67.50 | 1.0 | 40 | F62C | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 20.8 | 470 | 67.34 | 1.4 | 40 | F63C | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 22.6 | 432 | 61.89 | 1.2 | 35 | F53A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 23 |
| 22.9 | 440 | 61.03 | 1.0 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 23.4 | 418 | 59.92 | 0.8 | 30 | F43A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 23.9 | 408 | 58.49 | 1.4 | 40 | F63C | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 25 |
| 24.2 | 416 | 57.75 | 1.0 | 40 | F62C | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 27.1 | 373 | 51.74 | 1.3 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 28.6 | 353 | 49.02 | 1.7 | 40 | F62C | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 28.9 | 338 | 48.37 | 0.8 | 30 | F43A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 30.5 | 321 | 45.93 | 1.6 | 35 | F53A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90-100/112 | | 23 |
| 31.6 | 319 | 44.32 | 1.6 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 32.2 | 304 | 43.52 | 2.1 | 40 | F63C | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90-100/112 | | 25 |
| 34.7 | 290 | 40.32 | 1.0 | 30 | F42A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 35.6 | 274 | 39.30 | 1.9 | 35 | F53A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90-100/112 | | 23 |
| 36.3 | 278 | 38.55 | 1.6 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 37.4 | 261 | 37.47 | 1.0 | 30 | F43A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 37.6 | 260 | 37.23 | 2.5 | 40 | F63C | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90-100/112 | | 25 |
| 38.4 | 262 | 36.43 | 1.9 | 40 | F62C | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 39.1 | 258 | 35.78 | 1.9 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 41.3 | 244 | 33.90 | 2.5 | 40 | F62C | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 42.3 | 231 | 33.13 | 1.5 | 30 | F43A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 43.0 | 234 | 32.55 | 1.0 | 30 | F42A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 43.5 | 232 | 32.20 | 0.9 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 45.7 | 221 | 30.65 | 2.3 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 47.4 | 213 | 29.54 | 1.5 | 30 | F42A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 47.9 | 211 | 29.23 | 2.4 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 48.3 | 209 | 29.00 | 2.8 | 40 | F62C | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 55 | 184 | 25.58 | 1.1 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 56 | 180 | 25.04 | 2.8 | 35 | F52A | 90S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 57 | 178 | 24.75 | 1.7 | 30 | F42A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 59 | 170 | 23.59 | 1.2 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 66 | 152 | 21.08 | 2.1 | 30 | F42A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 71 | 142 | 19.76 | 1.4 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 77 | 131 | 18.19 | 2.0 | 30 | F42A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 83 | 121 | 16.84 | 1.6 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 96 | 105 | 14.53 | 1.9 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 112 | 90 | 8.03 | 1.9 | 25 | F32A | 90L6 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 135 | 75 | 10.40 | 2.5 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 139 | 72 | 10.06 | 2.8 | 30 | F42A | 90S4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 174 | 58 | 8.03 | 2.9 | 25 | F32A | 90S4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 193 | 52 | 14.53 | 3.4 | 25 | F32A | 80B2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 269 | 37 | 10.40 | 4.4 | 25 | F32A | 80B2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 349 | 29 | 8.03 | 5.3 | 25 | F32A | 80B2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |

B

Montaggio con boccola di riduzione
Coupling by means of reduction bushing









C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 1.5 kW n₁= 2800 min⁻¹(90S2) - 1400 min⁻¹(90LA4) - 900 min⁻¹(100A6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  |
|--|------------------------|-------|-----|---|---|---|---|---|---|---|
| | | | | | | | B5 | B14 | | |
| 17.9 | 743 | 78.05 | 0.9 | 40 | F63C | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 20.8 | 641 | 67.34 | 1.0 | 40 | F63C | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 22.6 | 589 | 61.89 | 0.9 | 35 | F53A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 23 |
| 23.9 | 557 | 58.49 | 1.0 | 40 | F63C | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 27.1 | 508 | 51.74 | 1.0 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 28.6 | 481 | 49.02 | 1.3 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 30.5 | 437 | 45.93 | 1.1 | 35 | F53A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 23 |
| 31.6 | 435 | 44.32 | 1.1 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 32.2 | 414 | 43.52 | 1.6 | 40 | F63C | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 25 |
| 33.4 | 412 | 41.94 | 1.5 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 35.6 | 374 | 39.30 | 1.4 | 35 | F53A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 23 |
| 36.3 | 379 | 38.55 | 1.2 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 37.6 | 354 | 37.23 | 1.8 | 40 | F63C | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 25 |
| 38.4 | 358 | 36.43 | 1.4 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 39.1 | 351 | 35.78 | 1.4 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 41.3 | 333 | 33.90 | 1.9 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 42.3 | 315 | 33.13 | 1.1 | 30 | F43A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90 | | 21 |
| 45.7 | 301 | 30.65 | 1.7 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 47.4 | 290 | 29.54 | 1.1 | 30 | F42A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 47.9 | 287 | 29.23 | 1.7 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 48.3 | 285 | 29.00 | 2.0 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 51 | 272 | 27.69 | 2.3 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 55 | 251 | 25.58 | 0.8 | 25 | F32A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 56 | 246 | 25.04 | 2.0 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 57 | 243 | 24.75 | 1.2 | 30 | F42A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 59 | 233 | 23.69 | 2.7 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 59 | 232 | 23.59 | 0.9 | 25 | F32A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 62 | 221 | 22.48 | 2.2 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 64 | 214 | 21.78 | 2.4 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 66 | 209 | 21.29 | 3.0 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 66 | 207 | 21.08 | 1.5 | 30 | F42A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 68 | 202 | 20.58 | 2.8 | 40 | F62C | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 71 | 194 | 19.76 | 1.0 | 25 | F32A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 73 | 189 | 19.25 | 2.6 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 77 | 179 | 18.19 | 1.5 | 30 | F42A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 82 | 167 | 17.02 | 1.5 | 30 | F42A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 83 | 165 | 16.84 | 1.2 | 25 | F32A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 84 | 163 | 16.63 | 3.0 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 96 | 143 | 14.53 | 1.4 | 25 | F32A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 98 | 140 | 14.24 | 3.0 | 35 | F52A | 90LA4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 109 | 126 | 25.58 | 1.4 | 25 | F32A | 90S2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 111 | 124 | 8.12 | 1.5 | 30 | F42A | 100A6 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 119 | 116 | 23.59 | 1.6 | 25 | F32A | 90S2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 119 | 115 | 7.56 | 2.6 | 35 | F52A | 100A6 | 71 ^{B5} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 135 | 102 | 10.40 | 1.8 | 25 | F32A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 139 | 99 | 10.06 | 2.0 | 30 | F42A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 154 | 89 | 18.19 | 2.6 | 30 | F42A | 90S2 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 166 | 83 | 16.84 | 2.2 | 25 | F32A | 90S2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 172 | 80 | 8.12 | 2.4 | 30 | F42A | 90LA4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} -80 ^C -90-100/112 | | 21 |
| 174 | 79 | 8.03 | 2.2 | 25 | F32A | 90LA4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 193 | 71 | 14.53 | 2.5 | 25 | F32A | 90S2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 269 | 51 | 10.40 | 3.3 | 25 | F32A | 90S2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 349 | 39 | 8.03 | 3.9 | 25 | F32A | 90S2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |

B

Montaggio con boccola di riduzione
Coupling by means of reduction bushing



C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 1.8 kW

n₁ = 2800 min⁻¹(90SB2) - 1400 min⁻¹(90LB4)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs | | | | | | | |
|--|------------------------|-------|-----|----|------|-------|---|--|--|----|
| | | | | | | | B5 | B14 | | |
| 20.8 | 790 | 67.34 | 0.8 | 40 | F63C | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 23.9 | 686 | 58.49 | 0.8 | 40 | F63C | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 25 |
| 28.6 | 594 | 49.02 | 1.0 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 30.5 | 539 | 45.93 | 0.9 | 35 | F53A | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 23 |
| 31.6 | 537 | 44.32 | 0.9 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 32.2 | 511 | 43.52 | 1.3 | 40 | F63C | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C 80 ^C -90-100/112 | | 25 |
| 33.4 | 508 | 41.94 | 1.2 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 35.6 | 461 | 39.30 | 1.1 | 35 | F53A | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90-100/112 | | 23 |
| 36.3 | 467 | 38.55 | 1.0 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 37.6 | 437 | 37.23 | 1.5 | 40 | F63C | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C 80 ^C -90-100/112 | | 25 |
| 38.4 | 441 | 36.43 | 1.1 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 39.1 | 433 | 35.78 | 1.1 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 41.3 | 411 | 33.90 | 1.5 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 42.3 | 389 | 33.13 | 0.9 | 30 | F43A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90 | | 21 |
| 45.7 | 371 | 30.65 | 1.3 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 47.4 | 358 | 29.54 | 0.9 | 30 | F42A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 47.9 | 354 | 29.23 | 1.4 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 48.3 | 351 | 29.00 | 1.7 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 51 | 335 | 27.69 | 1.8 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 56 | 303 | 25.04 | 1.6 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 57 | 300 | 24.75 | 1.0 | 30 | F42A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 59 | 287 | 23.69 | 2.2 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 62 | 272 | 22.48 | 1.8 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 64 | 264 | 21.78 | 1.9 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 66 | 258 | 21.29 | 2.4 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 66 | 255 | 21.08 | 1.2 | 30 | F42A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 68 | 249 | 20.58 | 2.3 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 71 | 239 | 19.76 | 0.8 | 25 | F32A | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 73 | 233 | 19.25 | 2.1 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 23 |
| 77 | 221 | 18.22 | 2.8 | 40 | F62C | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112 | | 25 |
| 77 | 220 | 18.19 | 1.2 | 30 | F42A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 82 | 206 | 17.02 | 1.2 | 30 | F42A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 83 | 204 | 16.84 | 1.0 | 25 | F32A | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 84 | 201 | 16.63 | 2.5 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 96 | 176 | 14.53 | 1.1 | 25 | F32A | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 98 | 173 | 14.24 | 2.4 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 113 | 150 | 12.39 | 2.7 | 35 | F52A | 90LB4 | 71 ^{B5} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 135 | 126 | 10.40 | 1.5 | 25 | F32A | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 139 | 122 | 10.06 | 1.6 | 30 | F42A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 172 | 98 | 8.12 | 1.9 | 30 | F42A | 90LB4 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 174 | 97 | 8.03 | 1.7 | 25 | F32A | 90LB4 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 193 | 88 | 14.53 | 2.0 | 25 | F32A | 90SB2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 269 | 63 | 10.40 | 2.6 | 25 | F32A | 90SB2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |
| 278 | 61 | 10.06 | 3.0 | 30 | F42A | 90SB2 | 63 ^{B5} -71 ^{B5} -80-90 | 71 ^{B5} 80 ^C -90-100/112 | | 21 |
| 349 | 49 | 8.03 | 3.1 | 25 | F32A | 90SB2 | 63 ^{B5} -71-80-90 | 71 ^C -80 ^C -90 | | 19 |

B

Montaggio con boccia di riduzione
Coupling by means of reduction bushing









C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 2.2 kW n₁= 2800 min⁻¹(90L2) - 1400 min⁻¹(100LA4) - 900 min⁻¹(112A6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|-------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 28.6 | 706 | 49.02 | 0.9 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 32.2 | 607 | 43.52 | 1.1 | 40 | F63C | 100LA4 | 63 ^{B1} -71-80-90 | 71 ^{C1} 80 ^{C1} -90-100/112 | | 25 |
| 33.4 | 604 | 41.94 | 1.0 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 35.6 | 548 | 39.30 | 0.9 | 35 | F53A | 100LA4 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90-100/112 | | 23 |
| 36.3 | 555 | 38.55 | 0.8 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 37.6 | 520 | 37.23 | 1.3 | 40 | F63C | 100LA4 | 63 ^{B1} -71-80-90 | 71 ^{C1} 80 ^{C1} -90-100/112 | | 25 |
| 38.4 | 525 | 36.43 | 1.0 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 39.1 | 515 | 35.78 | 1.0 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 41.3 | 488 | 33.90 | 1.3 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 45.7 | 442 | 30.65 | 1.1 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 47.9 | 421 | 29.23 | 1.2 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 48.3 | 418 | 29.00 | 1.4 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 51 | 399 | 27.69 | 1.5 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 56 | 361 | 25.04 | 1.4 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 59 | 341 | 23.69 | 1.8 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 62 | 324 | 22.48 | 1.5 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 64 | 314 | 21.78 | 1.6 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 66 | 307 | 21.29 | 2.0 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 66 | 304 | 21.08 | 1.0 | 30 | F42A | 100LA4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 68 | 297 | 20.58 | 1.9 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 69 | 290 | 40.32 | 0.9 | 30 | F42A | 90L2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 73 | 277 | 19.25 | 1.8 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 75 | 261 | 37.47 | 0.9 | 30 | F43A | 90L2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90 | | 21 |
| 77 | 262 | 18.22 | 2.4 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 77 | 262 | 18.19 | 1.0 | 30 | F42A | 100LA4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 82 | 245 | 17.02 | 1.0 | 30 | F42A | 100LA4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 84 | 240 | 16.63 | 2.1 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 89 | 227 | 15.75 | 2.7 | 40 | F62C | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 89 | 225 | 10.06 | 0.9 | 30 | F42A | 112A6 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 98 | 205 | 14.24 | 2.0 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 109 | 184 | 25.58 | 1.0 | 25 | F32A | 90L2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 111 | 182 | 8.12 | 1.0 | 30 | F42A | 112A6 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 113 | 178 | 12.39 | 2.2 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 133 | 152 | 21.08 | 1.9 | 30 | F42A | 90L2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 139 | 145 | 10.06 | 1.4 | 30 | F42A | 100LA4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 159 | 127 | 8.82 | 3.0 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 165 | 123 | 17.02 | 1.8 | 30 | F42A | 90L2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 166 | 121 | 16.84 | 1.5 | 25 | F32A | 90L2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 172 | 117 | 8.12 | 1.6 | 30 | F42A | 100LA4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 185 | 109 | 7.56 | 2.8 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 193 | 105 | 14.53 | 1.7 | 25 | F32A | 90L2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 213 | 95 | 6.57 | 3.1 | 35 | F52A | 100LA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 269 | 75 | 10.40 | 2.2 | 25 | F32A | 90L2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |
| 278 | 72 | 10.06 | 2.5 | 30 | F42A | 90L2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 345 | 58 | 8.12 | 2.9 | 30 | F42A | 90L2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 349 | 58 | 8.03 | 2.6 | 25 | F32A | 90L2 | 63 ^{B1} -71-80-90 | 71 ^{C1} -80 ^{C1} -90 | | 19 |

P_{1M} = 3.0 kW n₁= 2800 min⁻¹(100A2) - 1400 min⁻¹(100B4) - 900 min⁻¹(132S6)

| | | | | | | | | | | |
|------|-----|-------|-----|----|------|-------|---------------------------------|---|--|----|
| 37.6 | 709 | 37.23 | 0.9 | 40 | F63C | 100B4 | 63 ^{B1} -71-80-90 | 71 ^{C1} 80 ^{C1} -90-100/112 | | 25 |
| 41.3 | 666 | 33.90 | 0.9 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 45.7 | 602 | 30.65 | 0.8 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 47.9 | 574 | 29.23 | 0.9 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |

B

Montaggio con boccola di riduzione
Coupling by means of reduction bushing









C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 3.0 kW n₁= 2800 min⁻¹(100A2) - 1400 min⁻¹(100B4) - 900 min⁻¹(132S6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|-------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 48.3 | 570 | 29.00 | 1.0 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 51 | 544 | 27.69 | 1.1 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 56 | 492 | 25.04 | 1.0 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 59 | 465 | 23.69 | 1.3 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 62 | 442 | 22.48 | 1.1 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 64 | 428 | 21.78 | 1.2 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 66 | 418 | 21.29 | 1.5 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 68 | 404 | 20.58 | 1.4 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 73 | 378 | 19.25 | 1.3 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 77 | 358 | 18.22 | 1.7 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 84 | 327 | 16.63 | 1.5 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 89 | 309 | 15.75 | 2.0 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 98 | 280 | 14.24 | 1.5 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 104 | 265 | 13.48 | 2.3 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 119 | 231 | 7.56 | 1.3 | 35 | F52A | 132S6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 120 | 230 | 11.71 | 2.5 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 126 | 219 | 7.15 | 1.7 | 40 | F62C | 132S6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 137 | 201 | 6.57 | 1.4 | 35 | F52A | 132S6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 139 | 198 | 10.06 | 1.0 | 30 | F42A | 100B4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 145 | 190 | 6.21 | 1.7 | 40 | F62C | 132S6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 154 | 179 | 18.19 | 1.3 | 30 | F42A | 100A2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 159 | 173 | 8.82 | 2.2 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 21 |
| 168 | 164 | 8.36 | 2.6 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 172 | 160 | 8.12 | 1.2 | 30 | F42A | 100B4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 185 | 148 | 7.56 | 2.0 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 196 | 140 | 7.15 | 2.6 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 213 | 129 | 6.57 | 2.2 | 35 | F52A | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 225 | 122 | 6.21 | 2.6 | 40 | F62C | 100B4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 278 | 99 | 10.06 | 1.8 | 30 | F42A | 100A2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 345 | 80 | 8.12 | 2.1 | 30 | F42A | 100A2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |

P_{1M} = 4.0 kW

n₁= 1400 min⁻¹(112M4) - 900 min⁻¹(132MA6)

| | | | | | | | | | | |
|-----|-----|-------|-----|----|------|--------|---|--|--|----|
| 51 | 725 | 27.69 | 0.9 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 59 | 621 | 23.69 | 1.0 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 62 | 589 | 22.48 | 0.8 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 64 | 570 | 21.78 | 0.9 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 66 | 558 | 21.29 | 1.1 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 68 | 539 | 20.58 | 1.1 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 73 | 504 | 19.25 | 1.0 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 23 |
| 77 | 477 | 18.22 | 1.3 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112 | | 25 |
| 84 | 435 | 16.63 | 1.1 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 89 | 413 | 15.75 | 1.5 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 98 | 373 | 14.24 | 1.1 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 104 | 353 | 13.48 | 1.8 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 113 | 324 | 12.39 | 1.2 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 119 | 308 | 7.56 | 1.0 | 35 | F52A | 132MA6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 120 | 307 | 11.71 | 1.9 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 137 | 268 | 6.57 | 1.1 | 35 | F52A | 132MA6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 145 | 253 | 6.21 | 1.3 | 40 | F62C | 132MA6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 159 | 231 | 8.82 | 1.6 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 172 | 213 | 8.12 | 0.9 | 30 | F42A | 112M4 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1C1} -80 ^{C1} -90-100/112 | | 21 |
| 185 | 198 | 7.56 | 1.5 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |

B

Montaggio con boccia di riduzione
Coupling by means of reduction bushing









C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



SELEZIONE RIDUTTORI / GEARBOXES SELECTION / GETRIEBEAUSWAHL SELECTION REDUCTEURS / SELECCION REDUCTOR

P_{1M} = 4 kW n₁ = 2800 min⁻¹(112M2) - 1400 min⁻¹(112M4) - 900 min⁻¹(132MA6)

| n ₂ [min ⁻¹] | M ₂ [Nm] | i | fs |  |  |  |  | |  |  Dimensions on page |
|--|------------------------|-------|-----|---|---|---|---|--|---|--|
| | | | | | | | B5 | B14 | | |
| 196 | 187 | 7.15 | 2.0 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 213 | 172 | 6.57 | 1.7 | 35 | F52A | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 225 | 163 | 6.21 | 2.0 | 40 | F62C | 112M4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 278 | 132 | 10.06 | 1.4 | 30 | F42A | 112M2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1} -80 ^{C1} -90-100/112 | | 21 |
| 317 | 116 | 8.82 | 3.0 | 35 | F52A | 112M2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 345 | 106 | 8.12 | 1.6 | 30 | F42A | 112M2 | 63 ^{B1} -71 ^{B1} -80-90 | 71 ^{B1} -80 ^{C1} -90-100/112 | | 21 |
| 371 | 99 | 7.56 | 2.7 | 35 | F52A | 112M2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 426 | 86 | 6.57 | 3.0 | 35 | F52A | 112M2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |

P_{1M} = 5.5 kW n₁ = 2800 min⁻¹(132SA2) - 1400 min⁻¹(132S4) - 900 min⁻¹(132MB6)

| | | | | | | | | | | |
|-----|-----|-------|-----|----|------|--------|---------------------------------|-------------------|--|----|
| 67 | 755 | 13.48 | 0.8 | 40 | F62C | 132MB6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 77 | 656 | 11.71 | 0.9 | 40 | F62C | 132MB6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 84 | 599 | 16.63 | 0.8 | 35 | F52A | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 89 | 567 | 15.75 | 1.1 | 40 | F62C | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 98 | 513 | 14.24 | 0.8 | 35 | F52A | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 104 | 485 | 13.48 | 1.3 | 40 | F62C | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 113 | 446 | 12.39 | 0.9 | 35 | F52A | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 120 | 422 | 11.71 | 1.4 | 40 | F62C | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 145 | 348 | 6.21 | 0.9 | 40 | F62C | 132MB6 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 159 | 318 | 8.82 | 1.2 | 35 | F52A | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 168 | 301 | 8.36 | 1.4 | 40 | F62C | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 185 | 272 | 7.56 | 1.1 | 35 | F52A | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 196 | 258 | 7.15 | 1.4 | 40 | F62C | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 213 | 237 | 6.57 | 1.2 | 35 | F52A | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 225 | 224 | 6.21 | 1.4 | 40 | F62C | 132S4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 226 | 223 | 12.39 | 1.6 | 35 | F52A | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 239 | 211 | 11.71 | 2.5 | 40 | F62C | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 317 | 159 | 8.82 | 2.2 | 35 | F52A | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 335 | 150 | 8.36 | 2.6 | 40 | F62C | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 371 | 136 | 7.56 | 2.0 | 35 | F52A | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 392 | 129 | 7.15 | 2.6 | 40 | F62C | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 426 | 118 | 6.57 | 2.2 | 35 | F52A | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 451 | 112 | 6.21 | 2.6 | 40 | F62C | 132SA2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |

P_{1M} = 7.5 kW

n₁ = 2800 min⁻¹(132SB2) - 1400 min⁻¹(132MA4)

| | | | | | | | | | | |
|-----|-----|-------|-----|----|------|--------|---------------------------------|-------------------|--|----|
| 89 | 774 | 15.75 | 0.8 | 40 | F62C | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 104 | 662 | 13.48 | 0.9 | 40 | F62C | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 120 | 575 | 11.71 | 1.0 | 40 | F62C | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 159 | 433 | 8.82 | 0.9 | 35 | F52A | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 168 | 410 | 8.36 | 1.0 | 40 | F62C | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 168 | 408 | 16.63 | 1.1 | 35 | F52A | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 178 | 387 | 15.75 | 1.4 | 40 | F62C | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 185 | 371 | 7.56 | 0.8 | 35 | F52A | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 196 | 351 | 7.15 | 1.0 | 40 | F62C | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 213 | 323 | 6.57 | 0.9 | 35 | F52A | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 225 | 305 | 6.21 | 1.0 | 40 | F62C | 132MA4 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 239 | 287 | 11.71 | 1.8 | 40 | F62C | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 317 | 217 | 8.82 | 1.6 | 35 | F52A | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 335 | 205 | 8.36 | 1.9 | 40 | F62C | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 371 | 186 | 7.56 | 1.5 | 35 | F52A | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 392 | 176 | 7.15 | 1.9 | 40 | F62C | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |
| 426 | 161 | 6.57 | 1.6 | 35 | F52A | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 23 |
| 451 | 152 | 6.21 | 1.9 | 40 | F62C | 132SB2 | 71 ^{B1} -80-90-100/112 | 80-90-100/112-132 | | 25 |

B

Montaggio con boccia di riduzione
Coupling by means of reduction bushing



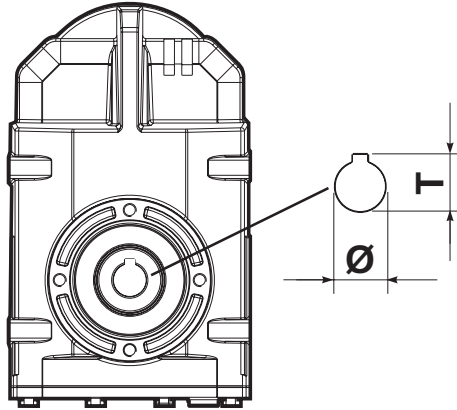
C

Posizione fori flangia/basetta motore
Motor flange/terminal box position



FA

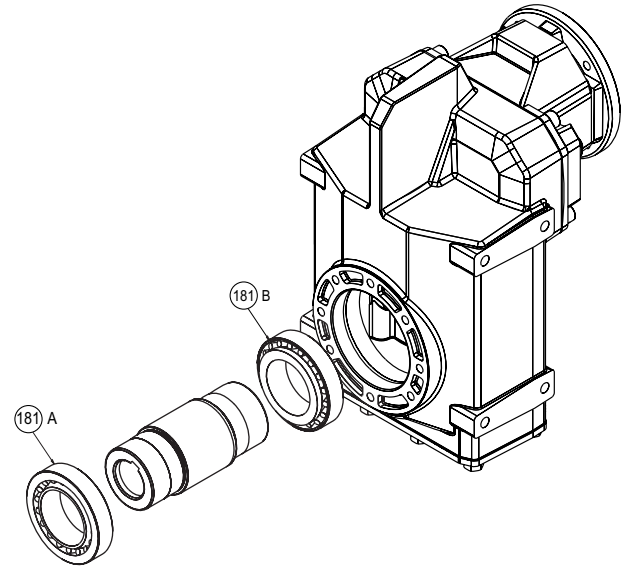
Alberi di uscita a richiesta e dimensione chiave ribassata
Output shaft on request (with reduced key)
Abtriebswellen auf Anfrage mit abgeflachtem Federkeil
Arbres lents sur demande et taille de la clavette abaissée
Árboles de salida a pedido y dimensión claveta menor



| | F32/3 | F42/3 | F52/3 | F62/3 |
|-----------------|---------------|---------------|---------------|-------|
| Ø On request | Ø20 | Ø25 | Ø30 | Ø35 |
| Reduced Key | Ø30 T=32.8 | Ø35 T=37.8 | Ø40 T=42.8 | |

FB

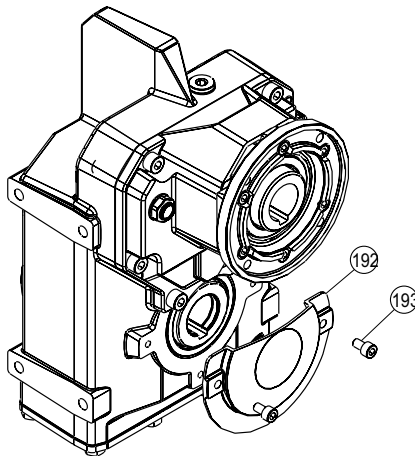
Cuscinetti conici sull' albero di uscita
Taper roller bearings on the output shaft
Schwere Kugellager an Antriebsseite
Roulements coniques sur l' arbre de sortie
Rodamientos cónicos en el árbol de salida



| | F32/3 | F42/3 | F52/3 | F62/3 |
|-------|-------|-------|-------|-------|
| 181 A | 32008 | 32009 | 32010 | 30211 |
| 181 B | | | | |

FC

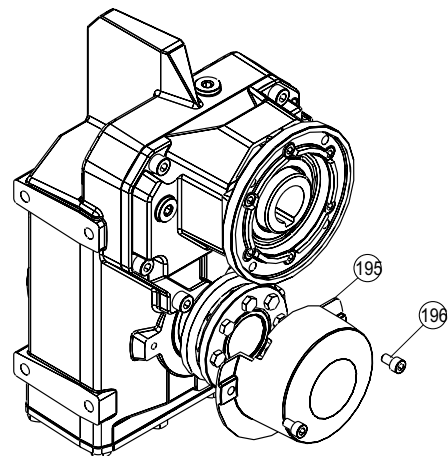
Coperchio di protezione albero uscita
Protection cup for output shaft
Schutzdeckel für Abtriebswelle
Couvercle de protection arbre lent
Tapa de protección árbol salida



| | F32/3 | F42/3 | F52/3 | F62/3 |
|-----|----------------|----------------|----------------|----------------|
| 192 | F40.0.209 | F40.0.209 | F50.0.209 | F60.0.209 |
| 193 | T.C.E.I. M6x10 | T.C.E.I. M6x10 | T.C.E.I. M6x10 | T.C.E.I. M8x12 |

FD

Coperchio di protezione per calettatore
Protection cup for shrink disk
Schutzabdeckung für Schrumpfscheibe
Couvercle de protection pour frette de serrage
Tapa de protección para ensamblador

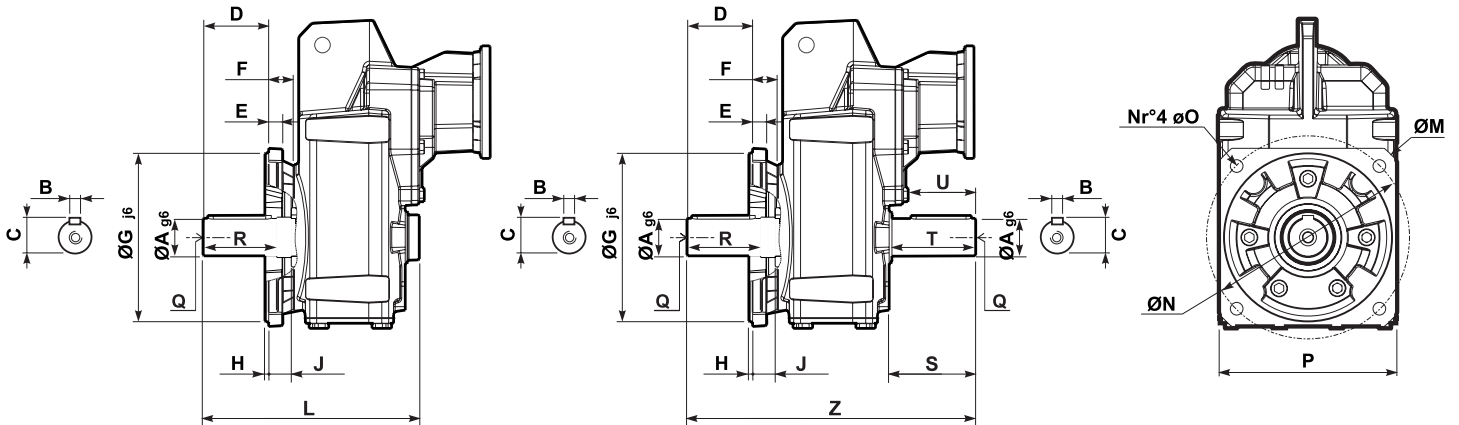


| | F32/3 | F42/3 | F52/3 | F62/3 |
|-----|----------------|----------------|----------------|----------------|
| 195 | F40.0.210 | F40.0.210 | F50.0.210 | F60.0.210 |
| 196 | T.C.E.I. M6x10 | T.C.E.I. M6x10 | T.C.E.I. M6x10 | T.C.E.I. M8x12 |

ACCESSORI E VARIANTI / ACCESSORIES AND OPTIONALS / ZUBEHÖR UND OPTIONEN
ACCESSOIRES ET VARIANTES / ACCESORIOS Y VARIANTES

Single Output Shaft

Double Output Shaft

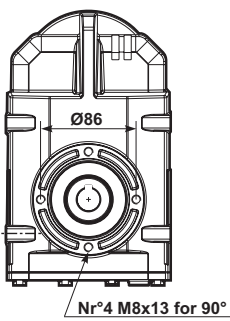


| | M | A g6 | B | C | D | E | F | G j6 | H | J | L | N | O | P | Q | R | S | T | U | Z |
|-----|------|------|----|----|------|----|------|------|-----|----|-------|-----|------|-----|--------------------|----|------|------|------|-------|
| F32 | 160* | 25 | 8 | 28 | 39.5 | 10 | 25 | 110 | 3.5 | 20 | 159.5 | 130 | 8.5 | 147 | M 8x 20 | 52 | 51.5 | 49.2 | 38.4 | 200 |
| F33 | 200 | | | | | | | 130 | | | | 165 | 11 | 147 | | | | | | |
| F42 | 160 | 30 | 8 | 33 | 49.5 | 10 | 26.5 | 110 | 3.5 | 24 | 183.5 | 130 | 8.5 | 147 | M 10 x2 3 | 60 | 76 | 72.4 | 65.4 | 247.5 |
| F43 | 200* | | | | | 11 | | 130 | | | | 165 | 11 | 147 | | | | | | |
| F52 | 200* | 35 | 10 | 38 | 48.5 | 10 | 28 | 130 | 3.5 | 25 | 217.1 | 165 | 11 | 190 | M 10 x2 3 | 60 | 91 | 85.9 | 74 | 282 |
| F53 | 250 | | | | | 15 | | 180 | 4 | | | 200 | 13.5 | 190 | | | | | | |

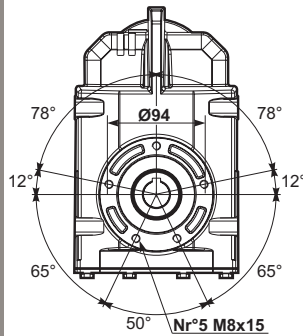
* Flangia uscita standard / Output flange standard

DIMENSIONI MONTAGGIO FB
FACE MOUNTING DIMENSIONS

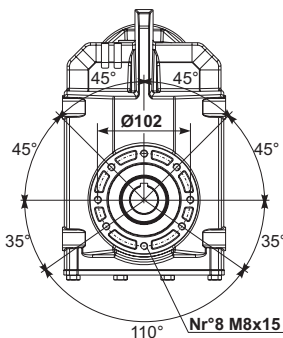
F32/3A



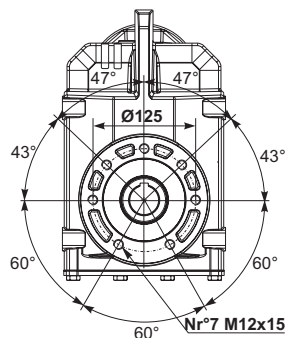
F42/3A



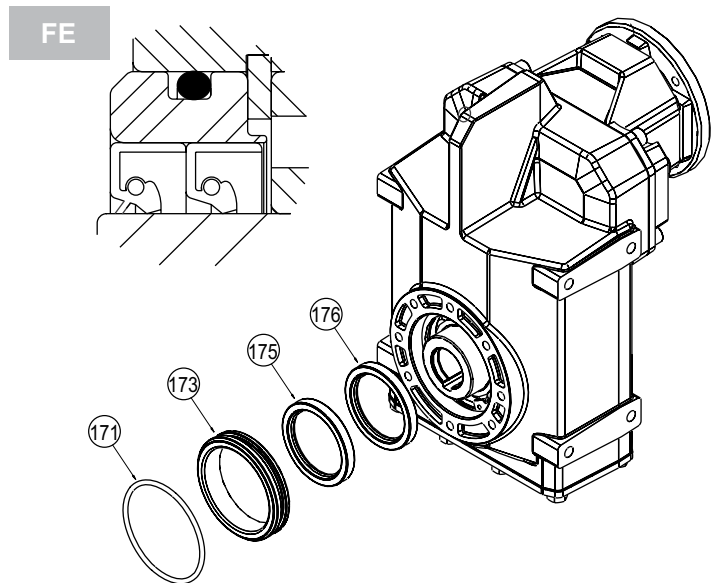
F52/3A



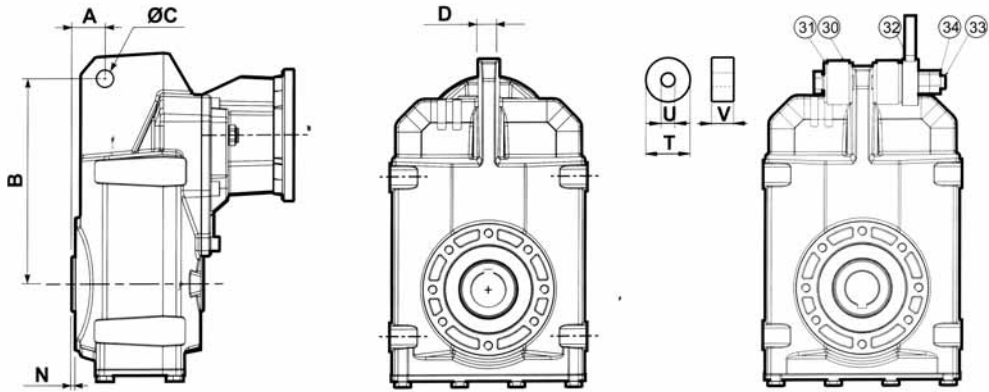
F62/3C



KIT PER DOPPIO ANELLO USCITA
DUBLE OIL SEAL KIT FOR OUTPUT SHAFT



| | F32/3 | F42/3 | F52/3 | F62/3 |
|-----|---------------|---------------|---------------|---------------|
| 171 | OR 63.17x2.62 | OR 68.26x3.53 | OR 73.03x3.53 | OR 89.69x5.34 |
| 173 | F30.0.271 | F40.0.271 | F50.0.271 | F60.0.271 |
| 175 | | | | |
| 176 | 40/52/7 | 45/60/7 | 50/65/8 | 55/80/8 |



| F32/3 | | Standard Dimensions | | | | | | | |
|-------|-----|---------------------|-----|----|----|---|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| ST | F27 | 25 | 140 | 14 | 16 | 5 | 40 | 12.5 | 20 |

| F42/3 | | Standard Dimensions | | | | | | | |
|-------|-----|---------------------|-----|----|----|-----|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| ST | F37 | 31.5 | 158 | 14 | 16 | 2.5 | 40 | 12.5 | 20 |

| F32/3 | | On Request | | | | | | | |
|-------|-------|------------|-----|------|----|---|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| S2 | F37 | 31.5 | 158 | 14 | 16 | 5 | 40 | 12.5 | 20 |
| B1 | F10 | 35 | 140 | 11 | 16 | 5 | 30 | 11 | 20 |
| B2 | F20 | 40 | 160 | 11 | 16 | 5 | 30 | 11 | 20 |
| N1 | N0182 | 20 | 120 | 11 | 16 | 5 | 40 | 12.5 | 20 |
| N2 | N0282 | 28 | 158 | 11 | 16 | 5 | 40 | 12.5 | 20 |
| L1 | GFL04 | 22.5 | 128 | 12.5 | 16 | 5 | 30 | 11 | 20 |

| F42/3 | | On Request | | | | | | | |
|-------|--------|------------|-----|------|----|-----|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| S3 | F47 | 32 | 170 | 14 | 16 | 2.5 | 40 | 12.5 | 20 |
| B1 | F10 | 35 | 140 | 11 | 16 | 2.5 | 30 | 11 | 20 |
| B2 | F20 | 40 | 160 | 11 | 16 | 2.5 | 30 | 11 | 20 |
| N2 | N0282 | 28 | 158 | 11 | 16 | 2.5 | 30 | 11 | 20 |
| N3 | N1282 | 34 | 165 | 11 | 16 | 2.5 | 30 | 11 | 20 |
| N4 | N1382 | 34 | 165 | 11 | 16 | 2.5 | 30 | 11 | 20 |
| F1 | Fd38 | 36.5 | 157 | 10.5 | 16 | 2.5 | 40 | 12.5 | 20 |
| D1 | db.F04 | 32 | 170 | 11 | 16 | 2.5 | 40 | 12.5 | 20 |
| L1 | GFL04 | 22.5 | 128 | 12.5 | 16 | 2.5 | 30 | 11 | 20 |
| L2 | GFL05 | 29 | 155 | 14 | 16 | 2.5 | 30 | 11 | 20 |

| F52/3 | | Standard Dimensions | | | | | | | |
|-------|-----|---------------------|-----|----|----|---|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| ST | F47 | 32 | 170 | 14 | 16 | 3 | 40 | 12.5 | 20 |

| F62/3 | | Standard Dimensions | | | | | | | |
|-------|-----|---------------------|-----|----|----|---|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| ST | F57 | 40.5 | 198 | 14 | 20 | 3 | 40 | 12.5 | 20 |

| F52/3 | | On Request | | | | | | | |
|-------|--------|------------|-----|------|----|---|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| S4 | F57 | 40.5 | 198 | 14 | 16 | 3 | 40 | 12.5 | 20 |
| B3 | F30 | 54 | 170 | 13 | 16 | 3 | 40 | 12.5 | 20 |
| N4 | N1382 | 34 | 165 | 11 | 16 | 3 | 30 | 11 | 20 |
| F1 | Fd38 | 36.5 | 157 | 10.5 | 16 | 3 | 40 | 12.5 | 20 |
| F2 | Fd48 | 53 | 185 | 14 | 16 | 3 | 40 | 12.5 | 20 |
| D1 | db.F04 | 32 | 170 | 11 | 16 | 3 | 40 | 12.5 | 20 |
| L1 | GFL04 | 29 | 155 | 14 | 16 | 3 | 30 | 11 | 20 |
| L2 | GFL05 | 29 | 155 | 14 | 16 | 3 | 30 | 11 | 20 |

| F62/3 | | On Request | | | | | | | |
|-------|--------|------------|-----|----|----|---|----|------|----|
| Code | | A | B | ØC | D | N | T | U | V |
| B3 | F30 | 54 | 170 | 14 | 20 | 3 | 40 | 12.5 | 20 |
| B4 | F40 | 56.5 | 218 | 14 | 20 | 3 | 40 | 12.5 | 20 |
| N5 | N2282 | 38 | 211 | 14 | 20 | 3 | 40 | 12.5 | 20 |
| F2 | Fd48 | 53 | 185 | 14 | 20 | 3 | 40 | 12.5 | 20 |
| D2 | db.F06 | 41 | 218 | 14 | 20 | 3 | 40 | 12.5 | 20 |
| L2 | GFL05 | 29 | 155 | 14 | 20 | 3 | 40 | 11 | 20 |
| L3 | GFL06 | 35 | 195 | 14 | 20 | 3 | 40 | 12.5 | 20 |

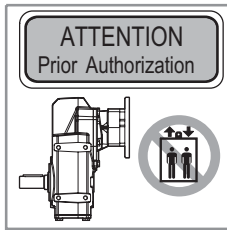
NOTE / NOTES / AUFZEICHNUNG / NOTES / NOTAS

SELECTION CHECK LIST

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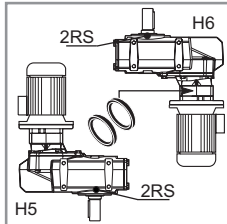
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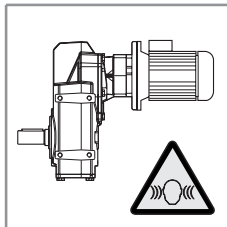
E' obbligatorio richiedere in fase d'ordine la autorizzazione scritta per usare i nostri riduttori in applicazioni che possono coinvolgere delle persone.

Written authorisation from Renold is required to operate or use reducers in lifts or people moving devices.



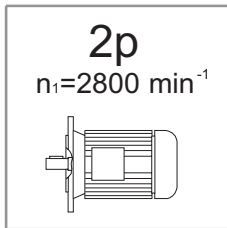
Specificare in fase d'ordine se i riduttori richiesti vengono utilizzati per posizioni di montaggio verticali H5-H6. Per queste posizioni va previsto un cuscinetto schermato 2RS come in figura. Per montaggio H6 suggeriamo l'uso di 2 anelli di tenuta in entrata. H6 (Posizione sconsigliata con motori 2

Do not change mounting positions without contacting Renold. Altering the mounting position may require special lubrication provisions which must be factory installed. When reducers are mounted in positions H5 or H6 and used in continuous duty applications, replace the upper bearing with a self lubricated style bearing, we suggest double input seal for H6.



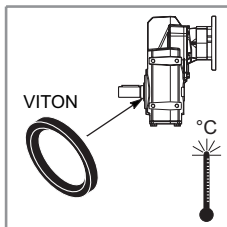
Segnalare in fase d'ordine se sono richiesti particolari livelli di rumorosità.

To signal in phase of order if levels for noisiness are particular demands.



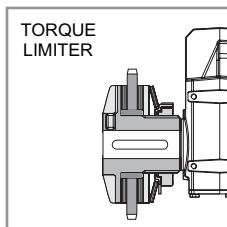
Specificare in fase d'ordine se in fase di utilizzo si applica un motore 2 poli.

2 poles can be used only for very intermittent applications. Specify it in the order to select the most suitable ratios.



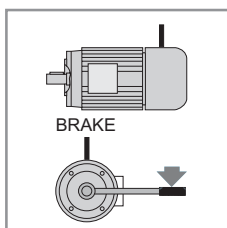
In caso di temperature elevate consigliamo di montare anelli di tenuta in VITON sull' albero uscita.

In case of high temperatures we advise to mount oil seal in VITON on the output shaft.



Se nell'applicazione si prevedono sovraccarichi prolungati, urti o bloccaggi improvvisi, installare sistemi meccanici o elettronici di limitazione della coppia.

If the application subjects the reducer to shock loads and sudden stops it is advisable to use mechanical or electronic torque limiting devices.



Segnalare se l'utilizzo è con motore autofrenante con elevati numeri di manovra. Nelle installazioni accertarsi che la coppia generata dall'inerzia del carico in fase di frenatura non superi i limiti del riduttore; verificare (con chiave dinamometrica) che la coppia di taratura del freno corrisponda ai dati convalidati dal progetto.

Reducers are not to be considered fail safe or self-locking devices. If these features are required, a properly sized, independent holding device should be utilised. Reducers should not be used as a brake. Any brakes that are used in conjunction with a reducer must be sized or positioned in such a way so as to not subject the reducer to loads beyond the catalogue rating.

SELECTION CHECK LIST

D

F

E

Bei der Bestellung muss eine schriftliche Befugnis angefordert werden, die den Einsatz unserer Getriebe in Applikationen autorisiert, von dem bzw. bei dem Personen betroffen sind.

In der Bestellung muss darüber hinaus angegeben werden, ob die angeforderten Getriebe für senkrechte Einbaulagen H5–H6 vorgesehen sind. Für diese Positionen muss ein abgeschirmtes Lager 2RS gemäß Abbildung vorgesehen werden. Für die Einbaulage H6 empfehlen wir, die Montage von 2 Dichtringen im Antrieb. 6 (Einbaulage, von der bei 2-poligen Motoren abgeraten wird).

In der Auftragsphase muss angegeben werden, ob besondere Geräuschpegelwerte gefordert werden.

Ist für den Einsatz ein 2-poliger Motor vorgesehen, muss dies in der Bestellung spezifiziert werden.

Bei erhöhten Temperaturen empfehlen wir an der Nabe die Montage von Dichtringen aus VITON.

Sollten in der jeweiligen Applikation die Möglichkeit länger anliegender Überlastungen, von Stößen oder plötzlichen Blockierungen bestehen, sind mechanische oder elektronische Drehmomentbegrenzungsvorrichtungen zu installieren.

Darüber hinaus muss angegeben werden, ob der Einsatz einen selbstbremsenden Motor mit hoher Schaltfrequenz vorsieht. Bei den Installationen muss man sich darüber vergewissern, dass das von der Lastträchtigkeit erzeugte Drehmoment die Grenzwerte des Getriebes nicht überschreitet. Überprüfen (mit einem Drehmomentenschlüssel), dass der Eichmoment der Bremse den vom Projekt vorgesehenen Daten entspricht.

Pour pouvoir utiliser nos réducteurs dans des applications impliquant des personnes, il faut nous en demander l'autorisation par écrit lors de la commande.

Préciser si les réducteurs commandés doivent s'utiliser dans des positions de montage verticales H5–H6. Pour pareilles positions il faut prévoir un roulement blindé 2RS (voir figure). Pour un montage H6 on suggère l'utilisation de 2 bagues d'étanchéité en entrée. La H6 est une position déconseillée pour les moteurs à 2 pôles

Préciser sur la commande si l'on exige des niveaux sonores particuliers.

Préciser sur la commande si en cours d'utilisation il faut appliquer un moteur à 2 pôles.

En cas de températures élevées il est conseillé d'utiliser des bagues d'étanchéité en VITON sur l'arbre de sortie.

Si l'application prévoit des surcharges prolongées, chocs ou arrêt intempestifs, installer des systèmes mécaniques ou électroniques limitant le couple.

Signaler si l'utilisation est avec moteur auto-freiné avec un nombre élevé de manœuvres. Dans les installations s'assurer que le couple engendré par l'inertie de la charge en cours de freinage ne dépasse pas les limites du réducteur ; vérifier (avec une clé dynamométrique) que le couple de réglage du frein correspond aux données autorisées par le projet.

Es obligatorio pedir nuestra autorización , para el uso de nuestros reductores en aplicaciones donde se transporten personas.

Especificar en el pedido si los reductores serán utilizados en posición de montaje vertical H5-H6. Para estas posiciones van montados rodamientos cerrados 2RS, como se indica en la figura.

En el montaje H6 sugerimos el uso de dos retenes en la entrada. Desaconsejamos el montaje en posición H6 con motor de 2 Po-

Remarcar con el pedido si se requieren niveles reducidos de rumorosidad.

Especificar en el pedido la utilización de motores de 2 Polos para lubricar el reductor con aceite sintético.

En caso de elevada temperatura ambiente aconsejamos montar retenes en viton en el eje de salida.

Si en la aplicación se prevén sobrecargas prolongadas, golpes o bloqueos imprevistos, instalar sistemas mecánicos o electrónicos de limitadores de par.

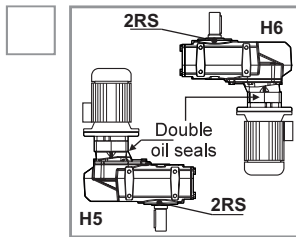
Remarcar el uso de motor freno con alto número de maniobras.

En las instalaciones con motores autofrenantes cerciorarse de que el par generado por la inercia de la carga en fase de frenado no supere los límites del reductor; comprobar (con llave dinamométrica) que el par de reglaje del freno corresponda con los datos reflejados por el proyecto.

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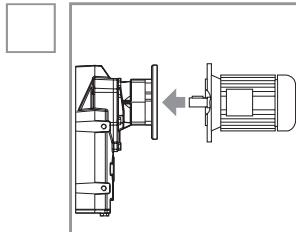
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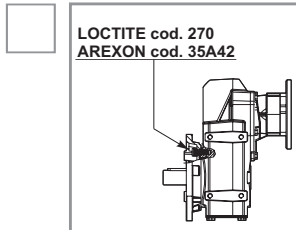
I riduttori sono forniti per posizioni di montaggio standard H1 se non diversamente specificato in fase d'ordine.
Per posizioni H6 è suggerito l'uso di 2RS in uscita e doppio anello di tenuta in entrata.
Per le posizioni H5 i cuscinetti 2RS sono standard.

Do not change mounting positions without contacting Renold. Altering the mounting position may require special lubrication provisions which must be factory installed.
When reducers are mounted in positions H5 or H6 and used in continuous duty applications, replace the upper bearing



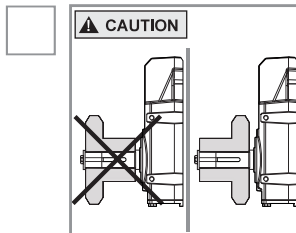
L'accoppiamento al motore deve essere libero e scorrevole. Il serraggio delle viti di fissaggio deve essere effettuato solo quando le due flange saranno a contatto.
Ad assemblaggio avvenuto controllare che il motore ruoti liberamente agendo manualmente sulla ventola.

When mounting a motor to reducers, the fastening bolts should not be tightened until both the reducer flange and motor face are in contact.
When mounting is complete check by manually rotating the motor's shaft to be sure the assembly turns freely.



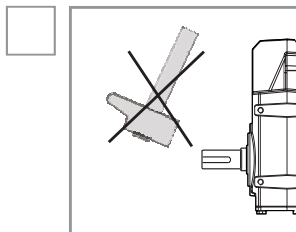
In applicazioni caratterizzate da numerosi avviamenti/arresti o inversioni, è consigliabile bloccare le viti di fissaggio delle flange con Loctite cod. 270 oppure Arexons cod. 35A42.

In applications where multiple starts, stops or reverses occur, it is advisable to use Loctite Code 270 or similar compounds on the fastening bolts of the output flange.



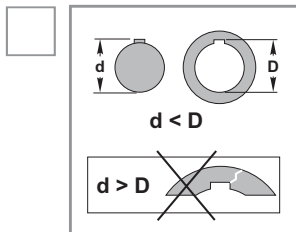
Accertarsi che l'eventuale montaggio di pignoni o pulegge a sbalzo sugli alberi sia stato convalidato da precedenti verifiche di ammissibilità dei carichi risultanti.

Make sure that mounting of pulleys or pinions does not create overhung loads exceeding the capacity of the reducer.



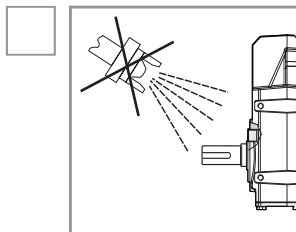
Nel montaggio di pignoni, giunti o plegge sugli alberi del riduttore evitare urti facendo uso di appropriati estrattori ancorati nei fori filettati presenti all'estremità degli alberi stessi.

When mounting anything on the reducer's shaft, protect the bearings from impact by using the appropriate pullers and threaded holes in the end of the reducer shaft.



In tutti gli accoppiamenti albero/mozzo spalmare le superfici a contatto con adeguati protettivi antiossidazione e verificare che le linguette non siano forzate onde evitare la rottura del mozzo.

When mounting items to the reducer shaft, appropriate anti-seize and oxidizer compounds should be used.



Durante l'eventuale verniciatura proteggere gli anelli di tenuta e i piani lavorati.

If the reducer is to be painted, protect machined surfaces and oil seals from over-spray.

INSTALLATION CHECK LIST

D

F

E

Falls nicht anderweitig in der Bestellung angefordert, werden die Getriebe für Montage in der Standardposition H1 geliefert.

Bei anderen Einbaulagen ist eine größere Ölmenge im Getriebe erforderlich, darüber hinaus müssen abgeschirmte Lager und zusätzliche Dichtringe eingesetzt werden.

Die Passung an den Motor muss frei und gleitend erfolgen. Der Anzug der Befestigungsschrauben darf erst dann erfolgen, wenn die beiden Flanschen auf Kontakt liegen. Nach erfolgtem Zusammenbau muss durch ein manuelles Einwirken auf das Lüfterrad kontrolliert werden, ob der Motor sich frei drehen kann.

Bei Applikationen, die durch häufige Starts/Stops oder Inversionen charakterisiert werden, sollten die Befestigungsschrauben der Flanschen mit Loctite Art. 270 oder Arexons Art. 35A42 blockiert werden.

Sich darüber vergewissern, dass die eventuelle Montage von überstehenden Ritzeln oder Riemenscheiben an den Wellen durch vorausgehende Überprüfungen der Zulässigkeit der daraus resultierenden Lasten bestätigt wird.

Bei der Montage von Ritzeln, Kupplungen oder Riemenscheiben an den Getriebe-Wellen sind durch die Anwendung angemessener Abzieher, die in den Gewindebohrungen an den Wellenenden verankert werden müssen, Stöße zu vermeiden.

In allen Passungen zwischen Welle/Nabe die Kontaktflächen mit angemessenen Antioxydationsmitteln einstreichen und überprüfen, dass die Federkeile nicht zu stark beansprucht werden, so dass ein Bruch der Nabe verhindert werden kann.

Während der eventuellen Lackierung die Dichtringe und die bearbeiteten Flächen schützen.

Sauf indication contraire communiquée en cours de commande, les réducteurs seront fournis pour une position de fonctionnement standard, soit H1.

Pour des positions de fonctionnement différentes, il faut augmenter la quantité d'huile à l'intérieur du réducteur et prévoir des roulements blindés ainsi que des joints d'étanchéité complémentaires.

L'accouplement au moteur doit s'avérer librement et sans points durs. Le serrage des vis de fixation ne doit s'effectuer que lorsque les deux flasques-bridés seront en contact. Assemblage terminé, contrôler que le moteur tourne librement en intervenant manuellement sur la pale de ventilation.

Dans les applications caractérisées par de nombreux démarrages/arrêts ou inversions, il est conseillé de bloquer les vis fixant les flasques-bridés avec du Loctite code 270 ou

S'assurer que tout montage en porte-à-faux de pignons ou poulies sur les arbres est bien validé par des vérifications, au préalable, sur l'admissibilité des charges qui en dérivent.

Lors de la pose de pignons, joints de raccordement ou poulies sur les arbres du réducteur, éviter tous chocs en utilisant des extracteurs appropriés, ancrés aux taraudages existant en tête des arbres.

Dans tous les accouplements arbre / moyeu enduire les surfaces de contact avec des produits de protection anti-oxydation et vérifier l'absence de forçage sur les clavettes afin d'empêcher la casse du moyeu.

En cours de peinture protéger les bagues d'étanchéité et les surfaces usinées.

Los reductores se suministran para posiciones de montaje estándar H1 si no se especifica de otra manera en el pedido.

Para otras posiciones de montaje, aumentar la cantidad de aceite dentro del reductor y prever rodamientos blindados y

El acoplamiento al motor debe ser libre y deslizante. El apriete de los tornillos de fijación, solo se llevara a cabo, cuando las dos bridas estén en contacto. Una vez finalizado el montaje, controlar que el motor gira libremente, actuando manualmente sobre el ventilador.

En aplicaciones que se caractericen por numerosas arrancadas y paradas o inversiones, es aconsejable bloquear los tornillos de fijación de las bridas con Loctite

En montajes de piñones o poleas sobre el eje de salida en voladizo, asegurarse de la admisibilidad de los valores de carga radial resultante.

Al montar piñones, juntas o poleas en los ejes del reductor evitar los golpes y usando extractores apropiados fijados en los orificios con rosca que hay en los extremos de los mismos ejes.

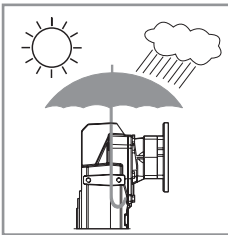
En los acoplamientos eje/cubo, utilizar protectores antioxidantes, y verificar que las clavetas no están forzadas, para evitar la rotura del cubo.

Durante el pintado proteger los retenes y las superficies mecanizadas.

✓ Please Check

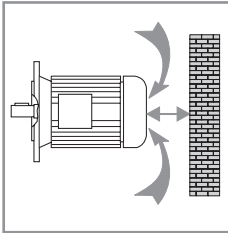
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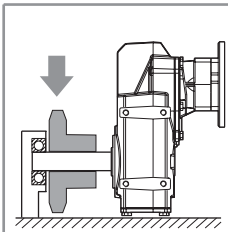
Per riduttori installati all'esterno prevedere opportune protezioni contro gli agenti atmosferici e l'irraggiamento diretto. Per installazioni in ambienti umidi adottare adeguate protezioni sulle superfici lavorate del riduttore.

When installed outdoors, make sure protection is provided from atmospheric elements.



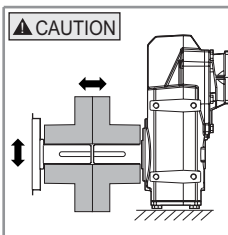
Lasciare fra il copriventola del motore e l'eventuale parete uno spazio sufficiente a garantire il passaggio dell'aria di raffreddamento.

Make sure there is sufficient space between any obstructions and the motor's air intake area to provide adequate cooling for the motor.



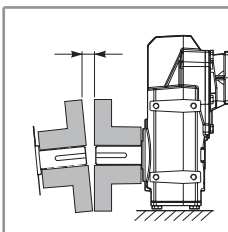
In applicazioni con un carico radiale molto elevato si consiglia di prevedere un supporto supplementare sull'albero.

For very heavy radial load, additional output shaft support may be required to prevent premature bearing failure or shaft breakage from bending fatigue.



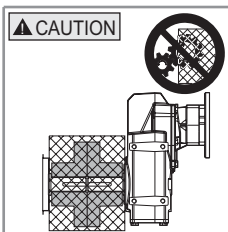
Il collegamento delle parti in rotazione deve essere esente da qualsiasi tipo di torsione o di vibrazione dovuta alla velocità.

The system of connected rotating parts must be free from critical speed, torsional or other type vibration, no matter how induced. The responsibility for this system analysis lies with the purchaser of the speed reducer.



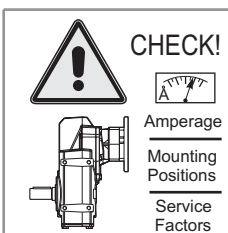
Si consiglia di controllare l'allineamento delle parti in rotazione (collegamenti, alberi etc.) prima della messa in funzione del riduttore e periodicamente controllare il fissaggio dei bulloni di collegamento.

Check shaft and coupling alignment.



Per la sicurezza, il compratore o l'utente dovrebbero prevedere delle protezioni sopra tutti gli alberi e tutti gli apparecchi messi in rotazione montati sul riduttore.

For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in his area and providing suitable guards. Failure to do so may result in bodily injury and/or damage to equipment.



Si consiglia di eseguire un check-up di prova prima della messa in funzione per assicurare un funzionamento adeguato, controllando la Potenza Assorbita.

Test run the first unit to verify proper operation.

INSTALLATION CHECK LIST**D****F****E**

Bei im Freien installierten Getrieben sind angemessene Schutzvorrichtungen gegen Wittereinflüsse und direkte Bestrahlungen vorzusehen. Für die Installation in feuchten Umgebungen müssen an den bearbeiteten Flächen des Getriebes angemessene Schutzmaßnahmen getroffen werden.

Zwischen der Lüfterradabdeckung des Motors und der eventuellen Wand ausreichend Freiraum belassen, der einen Luftfluß für die Kühlung gewährleistet.

Bei Applikationen mit einer sehr hohen Radialkraft wird empfohlen, eine zusätzliche Abstützung an der Welle vorzusehen.

Die Verbindung der rotierenden Teile darf keinerlei durch die Geschwindigkeit erzeugte Verwindung oder Schwingung aufweisen.

Es wird empfohlen, vor der Inbetriebsetzung des Getriebes die Fluchtung der rotierenden Teile (Verbindungen, Wellen, usw.) zu kontrollieren und darüber hinaus regelmäßig die Befestigung der Verbindungsbolzen zu überprüfen.

Im Sinne der Sicherheit sollte der Käufer oder Benutzer über allen am Getriebe montierten Wellen und allen in Umdrehung gebrachten Geräte Schutzvorrichtungen vorsehen.

Es wird empfohlen, vor der Inbetriebsetzung einen Check-up mit Kontrolle der aufgenommenen Leistung vorzunehmen, um einen angemessenen Betrieb gewährleisten zu können.

Pour les réducteurs installés à l'extérieur, prévoir les protections qui se conviennent contre les éléments atmosphériques et le rayonnement solaire direct. Pour l'installation dans des endroits humides adopter des protections adéquates sur les surfaces usinées du réducteur.

Entre le cache-pale de ventilation et toute paroi laisser un dégagement suffisant à garantir le passage de l'air de refroidissement.

Dans les applications impliquant une charge radiale très élevée, il est conseillé de prévoir un support supplémentaire sur l'arbre.

Le raccordement des pièces en rotation doit être libre de tout type de torsion ou vibration dues à la vitesse.

Il est conseillé de contrôler l'alignement des pièces en rotation (raccordements, arbres, etc.) avant la mise en service du réducteur et de vérifier périodiquement la fixation des boulons de raccordement.

A des fins de sécurité l'acheteur ou l'utilisateur devrait prévoir des protections pour tous les arbres et les appareils mis en rotation qui se trouvent montés sur les réducteurs.

Il est conseillé de réaliser un essai de vérification avant mise en service, pour s'assurer que le fonctionnement est approprié d'après le contrôle de la puissance absorbée.

Para reductores instalados al aire libre prever protecciones adecuadas contra los agentes atmosféricos y la irradiación directa. Para la instalación en ambientes húmedos, adoptense protectores adecuados en las superficies mecanizadas del reductor.

Dejar entre la tapa del ventilador del motor y la eventual pared, un espacio suficiente que garantice el paso del aire de refrigeración.

En aplicaciones con elevadas cargas radiales, aconsejamos el montaje de un soporte suplementario sobre el eje, para evitar el desgaste prematuro del rodamiento, o la rotura del eje.

La unión entre las partes en rotación, debe estar exenta de cualquier tipo de cargas o vibraciones debidas a la velocidad.

Aconsejamos controlar la alineación de los elementos en rotación, antes de la puesta en marcha del reductor, asimismo, recomendamos controlar periódicamente la fijación de los bulones de unión.

Por seguridad, el comprador o usuario, deben prever protecciones sobre todos los elementos en rotación montados sobre el reductor.

Aconsejamos efectuar un arranque en pruebas, antes de la puesta en funcionamiento, controlando la potencia absorbida y garantizando el uso correcto del reductor.

Manutenzione
Maintenance
Wartung
Entretien
Mantenimiento

I riduttori lubrificati a vita non necessitano di manutenzione.

Per gli altri è necessario effettuare **una verifica periodica del livello dell'olio** eventualmente ripristinandolo con un tipo compatibile.

Evitare di mescolare olii sintetici con olii minerali.

Effettuare **il primo cambio dell'olio** dopo 150 ore e i successivi dopo 4000 ore di funzionamento.

Gearboxes that are lubricated for life do not require any maintenance.

For others, the lubricant **needs to be periodically refilled** and eventually changed with a suitable grade.

Avoid mixing synthetic and mineral lubricants.

It is advisable to carry out **the first oil change** after 150 operating hours and the subsequent ones every 4000 operating hours.

Verificare che la griglia posteriore del motore non sia ostruita da polvere, filamenti o altro.

From time to time check that the fan cowl is not clogged with dust or fibres.

Nei motori autofrenanti controllare periodicamente il valore del traferro effettuando la sostituzione del ferodo se i valori sono superiori a quelli ammessi.

For brake motors it is also necessary to periodically check the air gap and replace the brake lining if the values exceed permissible ones.

Stoccaggio
Stocking
Lagerhaltung
Stockage
Almacenamiento

Per garantire l'efficienza dei riduttori ricevuti, è necessario osservare le seguenti indicazioni:

- **conservarli in ambienti riparati** con un basso livello di umidità
- **disporli su scaffali o pianali**
- per periodi di stoccaggio prolungati, **lubrificare con grasso** le parti esterne che potrebbero essere soggette ad ossidazione (alberi e piani lavorati).

Per i riduttori forniti privi di lubrificante è consigliabile riempirli completamente di olio ripristinandone ovviamente il livello corretto durante l'installazione.

In order to safeguard the efficiency of the gearboxes, please observe the following:

- **stock the gearboxes in appropriate environments with a low humidity level**
- **Place the same possibly onto shelves**
- In case of prolonged stocking periods, **lubricate the external parts** which could be subject to oxidation (shafts and machined parts).

The non lubricated gearboxes should be completely filled up with oil. Oil level should then be reset to required levels during installation.

Condizioni di fornitura
Supply terms
Lieferbedingungen
Conditions de fourniture
Condiciones de suministro

I riduttori vengono forniti come segue:

- già predisposti per essere installati nella posizione di montaggio come definito in fase di ordine
- collaudati secondo specifiche interne
- appositamente imballati
- le superfici di accoppiamento non sono verniciate
- sprovvisti di dadi e bulloni per montaggio motori per la versione IEC
- già provvisti di lubrificante (dove previsto)
- già verniciati (dove previsto)
- già provvisti di golfare di sollevamento (dove previsto)

Gearboxes are supplied as follows:

- prearranged to be installed in the ordered mounting position
- tested as per internal specifications
- with appropriate packing
- coupling surfaces not painted
- without nuts and bolts for motor mounting as per IEC version
- already filled with lubricant where specified
- already painted where specified
- already equipped with lifting eyebolts

D

Getriebe mit Lebendauerschmierung benötigen keine Wartung.

Bei allen anderen Getrieben ist es notwendig, regelmäßig den Ölstand zu prüfen und ggf. nachzufüllen.

ACHTUNG:

Niemals mineralisches und synthetisches Öl vermischen!

Der erste Ölwechsel muss nach 150 Betriebsstunden, jeder weitere nach 4000 Betriebsstunden erfolgen.

Von Zeit zu Zeit ist zu prüfen:

- a) die Lüfterhaube des Motors nach Verschmutzung oder Verfüllung.
- b) bei Bremsmotoren die Bremse auf ordnungsgemäße Funktion und Wirkung.

Für sichere und effiziente Lagerhaltung sollten folgende Punkte beachtet werden:

- **Getriebe in geschützter Umgebung mit wenig Personenverkehr**
- **Bei längerer Lagerhaltung sollten die bearbeiteten Stahlflächen mittels Fett vor Rost geschützt werden.**
- Getriebe ohne Ölfüllung sollten vor Lagerung zuerst mit Öl werden.

Die Ölmenge muss beim Einbau korrigiert werden.

Die Getriebe werden folgendemmaßen geliefert:

- vorbereitet für die bestellte Einbaulage
- geprüft nach den internen Vorschriften
- mit beigefügtem Zubehör
- ohne Schrauben und Muttern bei Lieferung ohne Motor
- Bereits mit Schmiermittel ausgestattet (sofern vorgesehen)
- Bereits lackiert (sofern vorgesehen).
- Bereits mit Transportöse ausgestattet (sofern vorgesehen)

F

Les réducteurs lubrifiés à vie ne nécessitent pas d'entretien.

Pour les autres il est nécessaire **d'effectuer une vérification périodique du niveau de l'huile** éventuellement en le remplaçant avec un type compatible.

éviter de mélanger les huiles synthétiques avec les huiles minérales.

Effectuer **le premier changement de l'huile** après 150 heures et les changements successifs après 4000 heures de fonctionnement.

Vérifier que le capot ventilateur du moteur ne soit pas bouchée par de la poussière, des filaments ou d'autres corps.

Pour les moteurs auto-freinants contrôler périodiquement la valeur de l'entrefer en effectuant le remplacement du ferodo si les valeurs sont supérieures à celles admises. Vérifier le couple de freinage avec une clé dynamométrique.

Pour garantir l'efficacité des réducteurs stockés il est nécessaire d'observer les indications suivantes:

- **les conserver dans des endroits avec un bas niveau d'humidité**
- **les disposer sur des étagères ou des plates-formes**
- pour des périodes de stockage prolongées, **lubrifier avec de la graisse** les parties extérieures qui pourraient être sujettes à oxydation (arbres et surfaces travaillées).

Pour les réducteurs fournis sans lubrifiant nous conseillons de les remplir complètement d'huile. Lors de l'installation, ajuster le niveau.

Les réducteurs sont fournis comme décrit ci-après:

- prédisposés pour être installés dans la position de montage définie lors de la commande
- testés selon les spécifications internes
- avec un emballage approprié
- les surfaces d'accouplement non peintes
- dépourvus d'écrous et de boulons pour montage moteurs pour la version IEC
- déjà pourvus de lubrifiant (là où prévu)
- déjà vernis (là où prévu)
- déjà pourvus de oeillet de soulèvement (là où prévu)

E

Los reductores con lubricación permanente no precisan mantenimiento.

Para los demás es necesario **controlar periódicamente el nivel del aceite** y, eventualmente, rellenar con uno de tipo compatible.

Evitar la mezcla de aceites sintéticos con aceites minerales.

Effectuar **el primer cambio de aceite** después de 150 horas. Efectuar el primer cambio de aceite después de 4000 horas de funcionamiento.

Comprobar que la rejilla trasera del motor no esté obstruida por polvo, hilos u otras cosas.

En los motores autofrenantes controlar periódicamente el valor del entrehierro efectuando la sustitución del ferodo si los valores superan los admitidos. Verificar el par del freno con llave dinamo-métrica.

Para garantizar el buen estado de los reductores recibidos, deben cumplirse las siguientes indicaciones:

- **conservarlos en locales resguardados** con un bajo nivel de humedad
- **disponerlos sobre estanterías o plataformas**
- para largos periodos de almacenamiento, **lubricar con grasa** las partes exteriores que podrían oxidarse (ejes y superficies mecanizadas).

Para los reductores suministrados sin lubricante, se aconseja llenarlos totalmente de aceite, restableciendo, obviamente, su correcto nivel durante la instalación.

Los reductores se suministran del siguiente modo:

- ya listos para su instalación en la posición de montaje como se ha solicitado en el pedido
- rodados según las normas internas
- específicamente embalados
- las superficies de acoplamiento no están pintadas
- desprovistos de tuercas y tornillos para el montaje motores para la versión IEC
- Provistos de lubricante (donde este previsto)
- Pintados (donde este previsto)

**LISTE PARTI DI RICAMBIO / SPARE PARTS LISTS / ERSATZTEILLISTE
LISTES PIÈCES DE RECHANGE / LISTA DE REPUESTO**

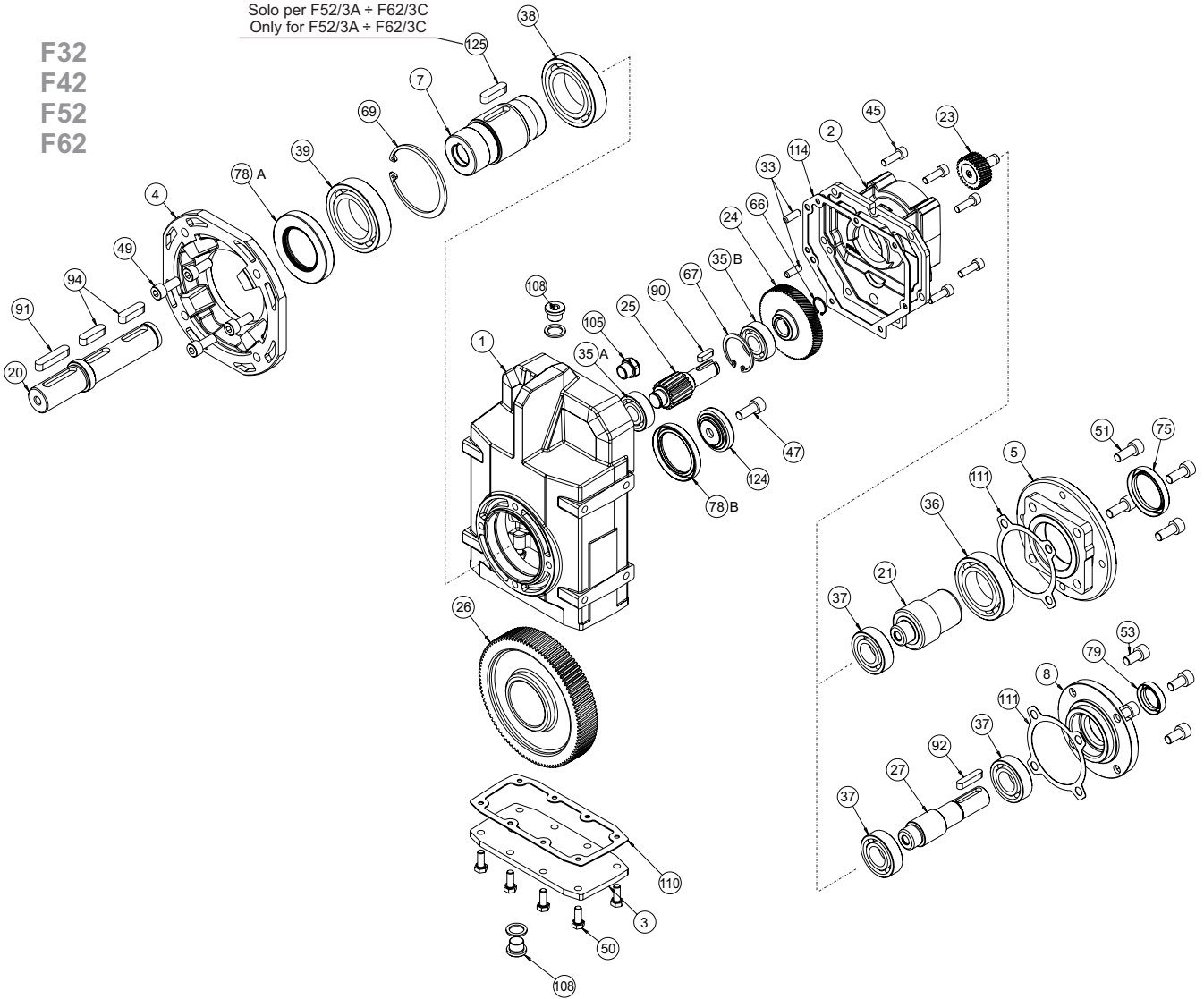
| Nr. | | F32 - F33 | F42 - F43 | F52 - F53 | F62 - F63 | |
|--|-------------|--|------------------|--------------------------------------|-----------|-----------|
| Anello di tenuta Oil seal Simmerring Joint d'étanchéité Reten | 75 | Anello di tenuta flangia PAM 2 stadi Motor flange oil seal, 2 stages Simmerring für Motorflansch, 2 Stufen Joint bride d'entrée, 2 étages Retén brida motor PAM 2 etapas | 35/47/7 | 35/47/7 | 45/62/7 | 45/62/7 |
| | 79 | Anello di tenuta per tipo R2 stadi Oil seal for type R, 2 stages Simmerring für Typ R, 2 Stufen Joint pour type R, 2 étages Retén para tipo R2 etapas | 20/30/7 | 20/30/7 | 20/30/7 | 25/35/7 |
| | 78 A | Anello di tenuta in uscita Output oil seal Simmerring am Abtrieb Joint de sortie Retén en salida | 40/68/8 | 45/75/8 | 50/80/7 | 55/100/8 |
| | 78 B | Anello di tenuta in uscita Output oil seal Simmerring am Abtrieb Joint de sortie Retén en salida | 40/55/7 | 45/62/7 | 50/65/7 | 55/80/8 |
| | 80 A | Anello di tenuta flangia PAM 3 stadi Motor flange oil seal, 3 stages Simmerring für Motorflansch, 3 Stufen Joint bride d'entrée, 3 étages Retén brida motor PAM 3 etapas | 25/40/7 IEC 71 | 35/47/7 IEC 80 25/40/7 IEC 71 | 35/47/7 | 35/47/7 |
| | 80 B | Anello di tenuta per tipo R 3 stadi Oil seal for type R, 3 stages Simmerring für Typ R, 3 Stufen Joint pour type R, 3 étages Retén para tipo R 3 etapas | 25/40/7 IEC 71 | 20/30/7 IEC 80 25/40/7 IEC 71 | 20/30/7 | 20/30/7 |
| Guarnizione Gasket Dichtung Joint Junts | 110 | Guarnizione coperchio di chiusura Cover oil seal Flachdichtung für Verschlussdeckel Joint couvercle de fermeture Junta tapa de cierre | F30.0.301 | F40.0.301 | F50.0.301 | F60.0.301 |
| | 111 | Guarnizione coperchio 2 stadi Cover oil seal 2 stages Flachdichtung für Verschlussdeckel, 2 Stufen Joint couvercle 2 étages Junta tapa 2 etapas | 022.0.302 | 022.0.302 | 23.00.302 | 23.00.302 |
| | 112 | Guarnizione coperchio 3 stadi Cover oil seal 3 stages Flachdichtung für Verschlussdeckel, 3 Stufen Joint couvercle 3 étages Junta tapa 3 etapas | 050.0.301 IEC 71 | 022.0.302 IEC 80 050.0.301 IEC 71 | 022.0.302 | 022.0.302 |
| | 114 | Guarnizione cassa/coperchio Housing/cover gasket Flachdichtung für Gehäuse/Verschlussdeckel Joint carter/couvercle Junta de la carcasa/tapa | F30.0.300 | F30.0.300 | F50.0.300 | F50.0.300 |

| | | | | | | |
|---|-------------|---|-------------|----------------------------|------|------|
| Cuscinetti Bearings Lager Roulements Rodamientos | 35 A | Cuscinetto da banco Main bearing Hauptlager Roulement principal Cojinete principal | 6202 | 6202 | 6302 | 6204 |
| | 35 B | Cuscinetto pignone lento Output pinion bearing Lager für Abtriebsritzel Roulement pignon lent Rodamiento piñón lento | 6202 | 6202 | 6204 | 6304 |
| | 36 | Cuscinetto per albero PAM 2 stadi Motor shaft bearing, 2 stages Motorwellenlager, 2 Stufen Roulement pour arbre accouplement moteur, 2 étages Rodamiento para árbol PAM 2 etapas | 6007 | 6007 | 6009 | 6009 |
| | 37 | Cuscinetto lato entrata Bearing at input end Lager auf Antriebsseite Roulement côté entrée Rodamiento lado entrada | 6004 | 6004 | 6205 | 6205 |
| | 38 | Cuscinetto mozzo uscita Output hub bearing Lager für Abtriebshohlwelle Roulement axe creux sortie Rodamiento de la corona salida | 6008 | 6009 | 6010 | 6211 |
| | 39 | Cuscinetto mozzo uscita Output hub bearing Lager für Abtriebshohlwelle Roulement axe creux sortie Rodamiento de la corona salida | 6008 | 6009 | 6010 | 6211 |
| | 41 A | Cuscinetto da banco 3 stadio Main bearing, 3rd stage Hauptlager, 3. Stufe Palier principal, 3e étage Cojinete principal, 3 etapas | 6202 | 6202 | 6302 | 6204 |
| | 41 B | Cuscinetto pignone lento 3 stadio Output pinion bearing, 3rd stage Lager für Abtriebsritzel, 3. Stufe Roulement pignon lent, 3e étage Rodamiento piñón lento 3 etapas | 6202 | 6202 | 6204 | 6304 |
| | 42 | Cuscinetto lato entrata 3 stadio Bearing at input end, 3rd stage Lager auf Antriebsseite, 3. Stufe Roulement côté entrée, 3e étage Rodamiento lado entrada 3 etapas | 6202 IEC 71 | 6004 IEC 80 6202 IEC 71 | 6004 | 6004 |
| | 43 A | Cuscinetto per albero PAM 3 stadio Motor shaft bearing, 3rd stage Motorwellenlager, 3. Stufe Roulement pour arbre accouplement moteur, 3 étage Rodamiento para árbol PAM 3 etapas | 6005 IEC 71 | 6007 IEC 80 6005 IEC 71 | 6007 | 6007 |
| | 43 B | Cuscinetto per tipo R 3 stadio Bearing for type R, 3rd stage Lager für Typ R, 3. Stufe Roulement pour type R, 3e étage Rodamiento para tipo R 3 etapas | 6005 IEC 71 | 6004 IEC 80 6005 IEC 71 | 6004 | 6004 |

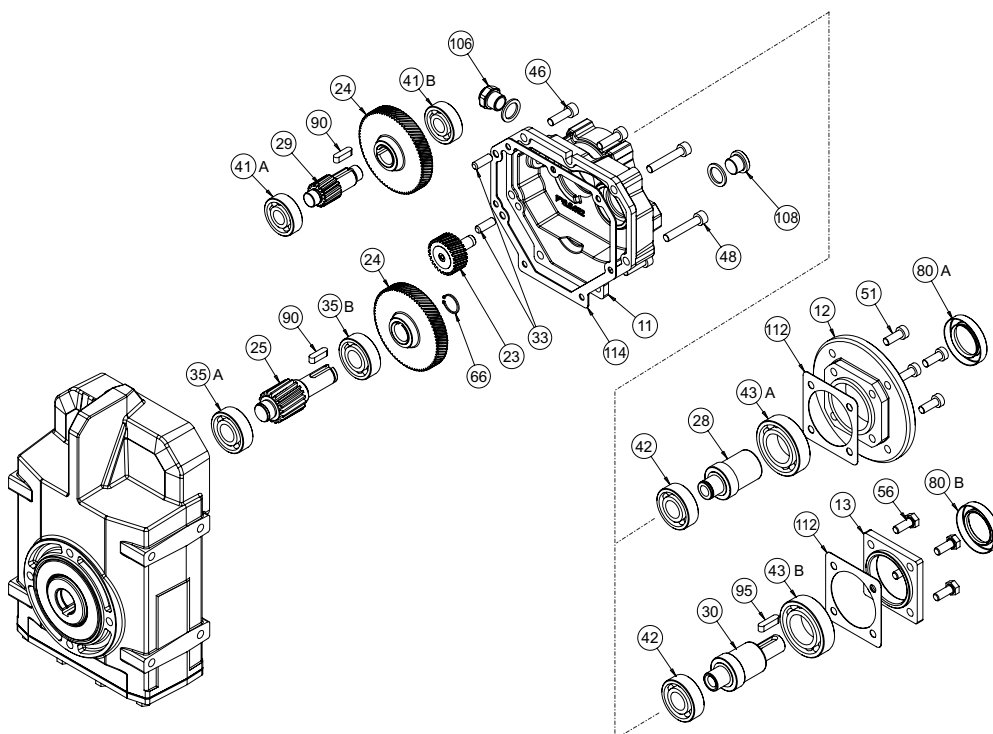
LISTE PARTI DI RICAMBIO / SPARE PARTS LISTS / ERSATZTEILLISTE
LISTES PIÈCES DE RECHANGE / LISTA DE REPUESTO

Solo per F52/3A + F62/3C
Only for F52/3A + F62/3C

F32
F42
F52
F62



F33
F43
F53
F63



Dimensioni e dati
tecnici

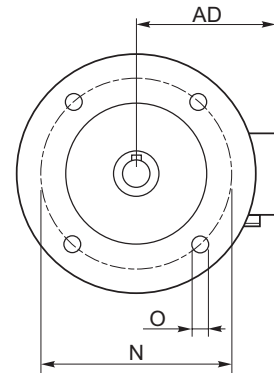
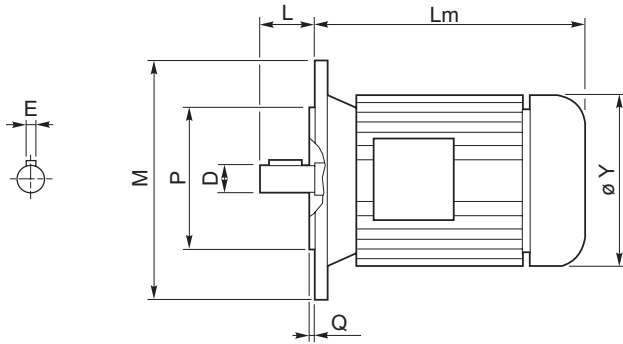
Dimensions and
technical data

Abmessungen und
Auswahltabellen

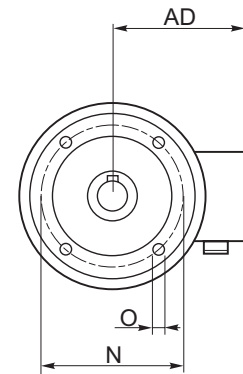
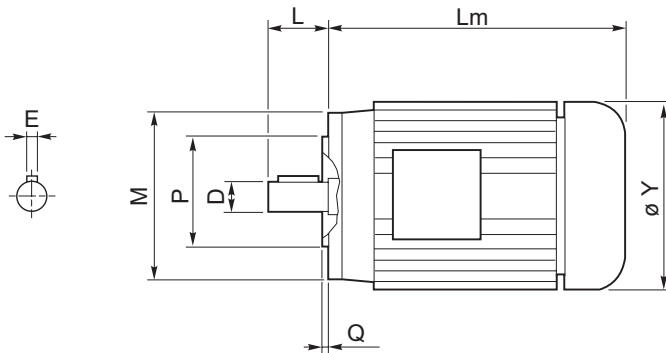
Dimensions et caractéristiques
techniques

Dimensiones y datos
tecnicos

B5



B14



Le dimensioni esterne sono indicative e possono variare tra i vari costruttori.
Outer dimensions may be different according to manufacturers.
Den jeweiligen Herstellern gemäß können die Außenmaße unterschiedlich ausfallen.
Les dimensions extérieures peuvent changer en fonction des différents fabricants.

| | 2 poli / poles | | | 4 poli / poles | | | 6 poli / poles | | | B5-B14 | | | | | B5 | | | | B14 | | | | | Kg | | |
|--------|----------------|------|-------------|----------------|------|-------------|----------------|------|-------------|--------|----|----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|
| | kW | Nm | A (400V) | kW | Nm | A (400V) | kW | Nm | A (400V) | D | E | L | Lm | Y | AD | P | N | M | O | Q | P | N | M | | O | Q |
| 56 A | 0.09 | 0.32 | 0.38 | 0.06 | 0.44 | 0.27 | — | — | — | 9 | 3 | 20 | 179 | 108 | 96 | 80 | 100 | 120 | 9 | 2.5 | 50 | 65 | 80 | M5 | 2.5 | 2.7 |
| 56 B | 0.12 | 0.42 | 0.46 | 0.09 | 0.67 | 0.37 | — | — | — | 9 | 3 | 20 | 179 | 108 | 96 | 80 | 100 | 120 | 9 | 2.5 | 50 | 65 | 80 | M5 | 2.5 | 2.9 |
| 63 A | 0.18 | 0.63 | 0.60 | 0.12 | 0.84 | 0.50 | 0.09 | 0.99 | 0.57 | 11 | 4 | 23 | 185 | 120 | 99 | 95 | 115 | 140 | 9.5 | 3 | 60 | 75 | 90 | M5 | 2.5 | 3.8 |
| 63 B | 0.25 | 0.87 | 0.76 | 0.18 | 1.30 | 0.69 | 0.12 | 1.32 | 0.74 | | | | | | | | | | | | | | | | | 4.2 |
| 71 A | 0.37 | 1.30 | 1.00 | 0.25 | 1.70 | 0.91 | 0.18 | 1.90 | 0.80 | 14 | 5 | 30 | - | 130 | 104 | 110 | 130 | 160 | 9.5 | 3.5 | 70 | 85 | 105 | M6 | 2.5 | 5.9 |
| 71 B | 0.55 | 1.90 | 1.54 | 0.37 | 2.52 | 1.14 | 0.25 | 2.72 | 1.10 | | | | 225 | 141 | 107 | | | | | | | | | | | 6.5 |
| 80 A | 0.75 | 2.60 | 1.85 | 0.55 | 3.77 | 1.51 | 0.37 | 3.84 | 1.18 | 19 | 6 | 40 | 256 | 159 | 127 | 130 | 165 | 200 | 11.5 | 3.5 | 80 | 100 | 120 | M6 | 3 | 8.5 |
| 80 B | 1.1 | 3.90 | 2.64 | 0.75 | 5.11 | 2.57 | 0.55 | 5.84 | 1.80 | | | | | | | | | | | | | | | | | 10 |
| 90 S | 1.5 | 5.00 | 3.31 | 1.1 | 7.45 | 2.78 | 0.75 | 7.92 | 2.32 | 24 | 8 | 50 | - | 170 | 135 | 130 | 165 | 200 | 11.5 | 3.5 | 95 | 115 | 140 | M8 | 3 | 12.5 |
| 90 L | 2.2 | 7.50 | 4.46 | 1.5 | 10.2 | 3.61 | 1.1 | 11.6 | 3.45 | | | | 280 | 15 | | | | | | | | | | | | |
| 100 LA | 3.0 | 10.0 | 6.28 | 2.2 | 14.8 | 5.07 | 1.5 | 15.4 | 3.88 | 28 | 8 | 60 | - | 190 | 148 | 180 | 215 | 250 | 13 | 4 | 110 | 130 | 160 | M8 | 3.5 | 20 |
| 100 LB | — | — | — | 3.0 | 20.1 | 6.66 | — | — | — | | | | 22 | | | | | | | | | | | | | |
| 112 M | 4.0 | 13.4 | 8.10 | 4.0 | 26.7 | 8.55 | 2.2 | 22.6 | 5.30 | | | | 321 | 210 | 164 | | | | | | | | | | | 35 |
| 132 S | 5.5 | 18.3 | 11.2 | 5.5 | 36.5 | 11.4 | 3.0 | 30.2 | 7.20 | 38 | 10 | 80 | 375 | 244 | 180 | 230 | 265 | 300 | 14 | 4 | 130 | 165 | 200 | M10 | 4 | 41 |
| | 7.5 | 24.9 | 15.3 | | | | | | | | | | | | | | | | | | | | | | | 51 |
| 132 M | — | — | — | 7.5 | 49.4 | 15.0 | 4.0 | 40.0 | 9.13 | | | | | | | | | | | | | | | | | 420 |

MOTORI ELETTRICI / ELECTRIC MOTORS / ELEKTROMOTOREN MOTEURS ÉLECTRIQUES / MOTORES ELÉCTRICOS

Grado di protezione

IP54 Standard
Specificare in sede di ordinazione per IP55 o superiore.

Protection

Standard IP54
To be specified upon placing the order if IP55 or higher protection is required

Schutzart

IP54 Standard.
IP55 oder höher im Auftrag angeben.

Degré de protection

IP54 standard.
Au moment de la commande, spécifiez si vous souhaitez l'IP55 ou supérieur.

Grado de protección

IP54 standard.
Especificar al efectuar el pedido el IP55 ó superior.

Isolamento

Cl. F Standard
Specificare in sede di ordinazione classe di isolamento diversa.

Insulation

Standard Cl.F
To be specified upon placing the order if different insulation is required.

Isolierung

Cl.F Standard.
Davon abweichende Isolierungsklasse im Auftrag angeben

Isolement

Cl.F standard.
Au moment de la commande, spécifiez si vous souhaitez une classe d'isolement différente.

Aislamientos

Cl.F standard.
Especificar al efectuar el pedido la clase diferente de aislamiento.

| Isolamento / Insulation Isolierung / Isolement / Aislamiento | | E | B | F | H |
|---|----|------|------|------|------|
| Max. temp. | C° | 120° | 130° | 155° | 175° |
| | F* | 248° | 266° | 311° | 347° |

Collegamenti

Connections

Verbindungselemente

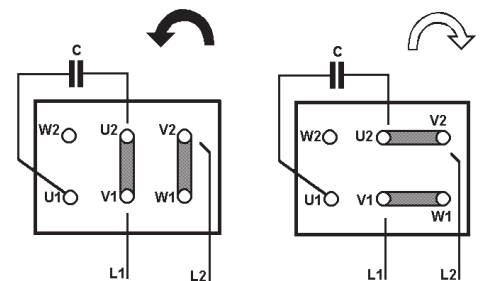
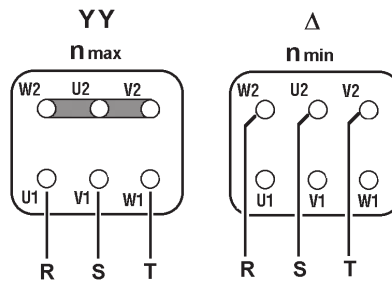
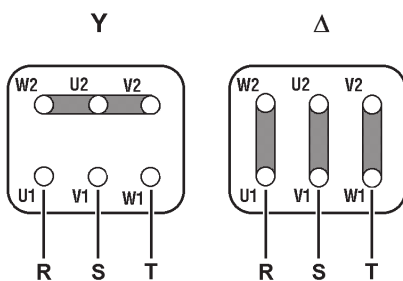
Branchements

Conexiones

Asincrono trifase singola polarità
Threephase asynchronous single polarity
Asynchronmotor 3-ph eine Drehzahl
Moteur triphasé à une vitesse
Asincrono trifasico de una velocidad

Asincrono trifase doppia polarità
Threephase asynchronous single polarity
Asynchronmotor 3-ph doppelte Drehzahl
Moteur triphasé à deux vitesses
Asincrono trifasico de dos velocidades

Asincrono monofase
Single phase asynchronous
Einphasen-Asynchronmotor
Moteur monophasé
Asincrono monofasico



Leggere attentamente

Le seguenti raccomandazioni sono fondamentali per la vostra protezione e per garantirvi molti anni di sicuro funzionamento del vostro prodotto senza alcun problema.

Leggere attentamente tutte le istruzioni prima di azionare il riduttore. L'inappropriata installazione, manutenzione o funzionamento del riduttore può causare incidenti al personale addetto e danni al riduttore stesso.

ATTENZIONE!

- E' richiesta autorizzazione scritta per azionare riduttori in ascensori o dispositivi per il movimento delle persone.
- Controllare che alcune applicazioni non eccedano la massima capacità di carico ammessa pubblicata in questo catalogo.
- L'acquirente è l'unico responsabile per la determinazione dell'adeguatezza del prodotto per qualcuna o tutte le utilizzazioni che l'acquirente stesso farà del riduttore. L'applicazione dell'acquirente non potrà essere soggetta ad alcuna implicita garanzia di montaggio per uno scopo particolare.
- Per ragioni di sicurezza l'acquirente dovrà provvedere a porre protezioni adeguate su tutta la lunghezza dell'albero a tutti gli organi in movimento. L'utilizzatore è responsabile del controllo di tutti i codici di sicurezza e la predisposizione di protezioni adeguate. In assenza di tali precauzioni si possono verificare incidenti alle persone e danni agli apparati.
- Olio e riduttori bollenti possono causare gravi ustioni. Usare estrema cautela nella rimozione dei tappi e delle ventole.
- Assicurarsi che la corrente di alimentazione sia scollegata prima di riparare o rimuovere alcun componente. Chiudere l'alimentazione e contrassegnare tale operazione per evitare accensioni accidentali.
- I riduttori non devono essere considerati esenti da guasti o a bloccaggio automatico. Se sono indispensabili queste caratteristiche, deve essere utilizzato un dispositivo indipendente della dimensione adatta. I riduttori non devono essere utilizzati come freni.
- Qualsiasi freno sia utilizzato insieme al riduttore deve essere della giusta grandezza e posizionato in modo da non causare carichi eccessivi non previsti dai dati forniti nel catalogo.
- I dispositivi di sollevamento come le golfare devono essere usati solo per sollevare verticalmente il riduttore e non altri dispositivi associati o motori.
- L'utilizzo di un olio con un additivo EP su gruppi provvisti di dispositivo di arresto possono inficiare l'uso corretto del freno e provocare danni alle persone, alle cose ed al riduttore stesso nonché ad altri apparecchi.
- I carichi sospesi assoggettano i cuscinetti dell'albero a sollecitazioni che possono causare, se non adeguatamente dimensionati, l'usura prematura dei cuscinetti e/o la rottura dell'albero a causa della resistenza alla flessione.

La nostra ditta non si ritiene responsabile per eventuali danni diretti o indiretti derivanti da un uso improprio dei prodotti e dalla mancata osservanza delle indicazioni riportate a catalogo.

Please Read Carefully

The following WARNING and CAUTION information is supplied to you for your protection and to provide you with many years of trouble free and safe operation of your product.

Read ALL instructions prior to operating reducer. Injury to personnel or reducer failure may be caused by improper installation, maintenance or operation.

WARNING:

- Written authorisation is required to operate or use reducers in lifts or people moving devices.
- Check to make certain application does not exceed the allowable load capacities published in the current catalogue.
- Buyer shall be solely responsible for determining the adequacy of the product for any and all uses to which Buyer shall apply the product. The application by Buyer shall not be subject to any implied warranty of fitness for a particular purpose.
- For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in his area and providing suitable guards. Failure to do so may result in bodily injury and/or damage to equipment.
- Hot oil and reducers can cause severe burns. Use extreme care when removing lubrication plugs and vents.
- Make certain that the power supply is disconnected before attempting to service or remove any components. Lock out the power supply and tag it to prevent unexpected application power.
- Reducers are not to be considered fail safe or self-locking devices. If these features are required, a properly sized, independent holding device should be utilised. Reducers should not be used as a brake.
- Any brakes that are used in conjunction with a reducer must be sized or positioned in such a way so as to not subject the reducer to loads beyond the catalogue rating.
- Lifting supports including eyebolts are to be used for vertically lifting the gearbox only and not other associated attachments or motors.
- Use of an oil with an EP additive on units with backstops may prevent proper operation of the backstop. Injury to personnel, damage to the reducer or other equipment may result.
- Overhung loads subject shaft bearings and shafts to stress which may cause premature bearing failure and or shaft breakage from bending fatigue, if not sized properly.

Our company will not be responsible for any direct or indirect damages, caused by a wrong use of the products or for not observing the catalogue indication

Rev. 1.1

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