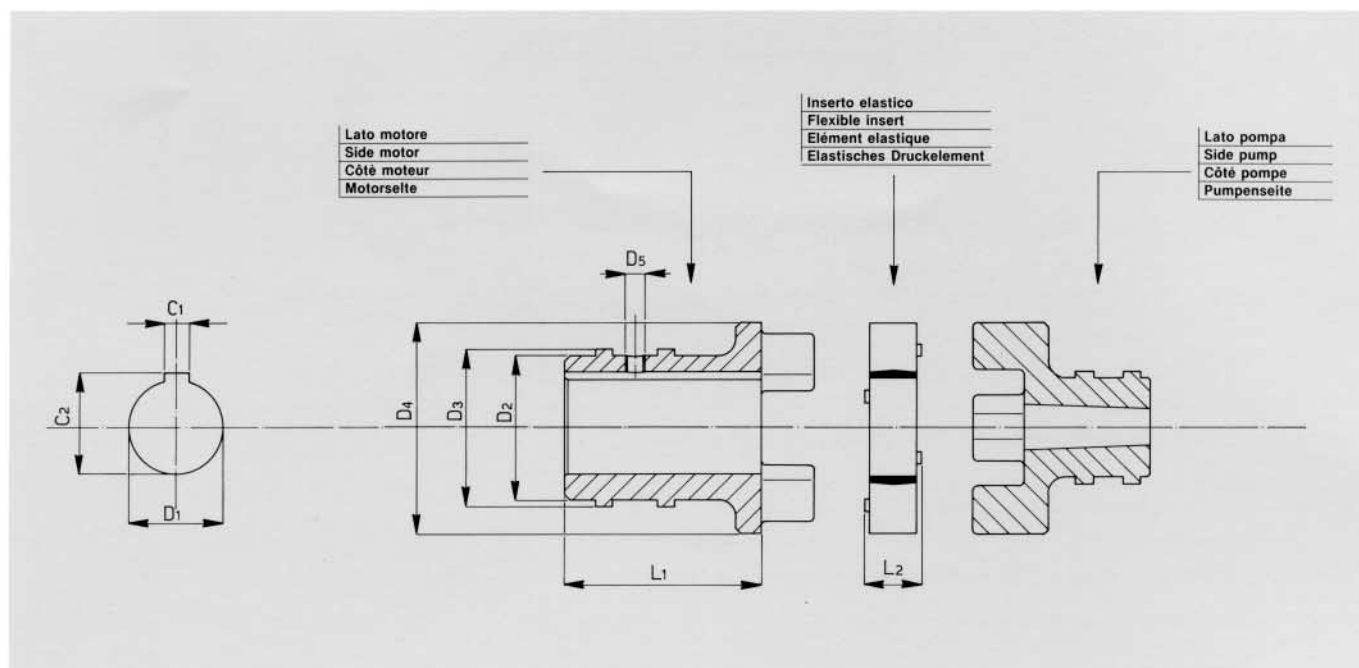


# GIUNTI ELASTICI TIPO HE HE FLEXIBLE COUPLINGS ACCOUPEMENTS ELASTIQUES SERIE HE DREHELASTISCHE KUPPLUNGEN DER BAUREIHE HE



| Riferimento<br>Motore El.<br>E. Motor<br>reference<br>Référence pour<br>E. Moteur<br>E.<br>Motorsbeziehung | Semigiunto lato motore<br>Motor side hub<br>Demi-accouplement côté moteur<br>Moterseite Kupplung |     |    |    |      |      |    |      |      | Tassello<br>Flexible insert<br>Élément élastique<br>Elastisches Element |    |
|--|--|-----|----|----|------|------|----|------|------|---|----|
|  | Matricola<br>Part. number<br>Reference<br>Artikel nr.  | D4  | D1 | D2 | D3   | D5   | C1 | C2   | L1   | Matricola<br>Part. number<br>Reference<br>Artikel nr.                   | L2 |
| 71   | 31303200   | 43  | 14 | 29 | —    | M6   | 5  | 16,1 | 29,5 | 39200300  | 16 |
| 80   | 31303300   |     | 19 | 36 | —    |      | 8  | 6    | 21,6 |   |    |
|  | 31302600   | 37  |    | —  | 21,6 | 44,5 |    |      |      |   |    |
| 90   | 31302500   | 63  | 24 | 44 | —    | M8   | 8  | 27,2 | 36   | 39200400  | 19 |
|  | 31301500   |     |    | —  | 44,5 |      |    |      |      |   |    |
| 100/112  | 31301600   | 86  | 28 | 51 | —    | M8   | 8  | 31,2 | 64,5 | 39200500  | 23 |
|  | 31300200   |     |    | 50 | 56   |      |    |      | 50,5 |   |    |
| 132  | 31300500   | 110 | 38 | 58 | 64   | M10  | 10 | 41,7 | 79   | 39200600  | 27 |
| 160  | 31303400   |     | 42 | 76 | 82   |      | 12 | 45,6 | 105  |   |    |
| 180  | 31303500   | 48  |    |    |      |      | 14 | 52,1 |      |   |    |

Temperature d'esercizio: da  $-25^{\circ}\text{C}$  a  $+80^{\circ}\text{C}$  con punte episodiche fino a  $+120^{\circ}\text{C}$ .  
Tutti i dati espressi sono relativi a giunti montati su nostre lanterne.

Working temperature: from  $-25^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$  with peak points to  $+120^{\circ}\text{C}$ .  
All informations are referred to couplings mounted with our bellhousings.

Temperature d'exercice: de  $-25^{\circ}\text{C}$  a  $+80^{\circ}\text{C}$  avec pointes maxi de  $+120^{\circ}\text{C}$ .  
Toutes caractéristiques sont considérées pour montage avec nos lanternes.

Betriebstemperatur: von  $-25^{\circ}\text{C}$  bis  $+80^{\circ}\text{C}$  mit temperatur-spitzen bis  $+120^{\circ}\text{C}$  sind zulässig.  
Die Kenndaten, deshalb, sind betreffend die Kupplungen, die mit unseren Pumpenträgen verwand werden.

(tab. 1)

| D4  | COUPLE "Mr" (in Nm) |     |
|-----|---------------------|-----|
|     | NOMINALE            | MAX |
| 43  | 13                  | 17  |
| 63  | 28                  | 35  |
| 86  | 62                  | 100 |
| 110 | 100                 | 190 |

## DETERMINATION DE LA COUPLE

$$\text{Couple moteur électrique "Mt"} = \frac{9560 \times K_w}{n/1'} = (\text{Nm})$$

$$\text{Mr} \geq \text{Mt} \times \text{S} = (\text{Nm})$$

**Kw** = Puissance du moteur

**n/1'** = Vitesse moteur

**Mr** = Voir tab. 1

**S** = voir tab. 2 2

(tab. 2)

S

|  |         |
|--|---------|
| <b>Pour petite pompes et fonctionnement uniforme avec basse pression:</b><br>exemple:<br>machine outiles pour travail rotatif,<br>appareils de levage avec 6 operations/heure.   | 1,2-1,3 |
| <b>Pour petite pompes et fonctionnement uniforme avec haute pression:</b><br>examole:<br>machine outiles pour travail rotatif,<br>appareils de levage avec 120 operations/heure. | 1,4-1,5 |
| <b>Pour pompes de moyenne taille et fonctionnement non-uniforme:</b><br>exemple:<br>melangeurs, petite excavateurs,<br>appareils de levage avec 300 operations/heure.            | 1,6-1,7 |

(tab. 1)

| D4  | DREHEMOMENT "Mr" (Nm) |     |
|-----|-----------------------|-----|
|     | NENNDREHEMOM.         | MAX |
| 43  | 13                    | 17  |
| 63  | 28                    | 35  |
| 86  | 62                    | 100 |
| 110 | 100                   | 190 |

## KALKULATION DES DREHEMOMENTES

$$\text{El. Motoren Drehemoment "Mt"} = \frac{9560 \times K_w}{n/1'} = (\text{Nm})$$

$$\text{Mr} \geq \text{Mt} \times \text{S} = (\text{Nm})$$

**Kw** = El. Motorskraft

**n/1'** = U/min.

**Mr** = sieh tab. 1

**S** = sieh tab. 2

(tab. 2)

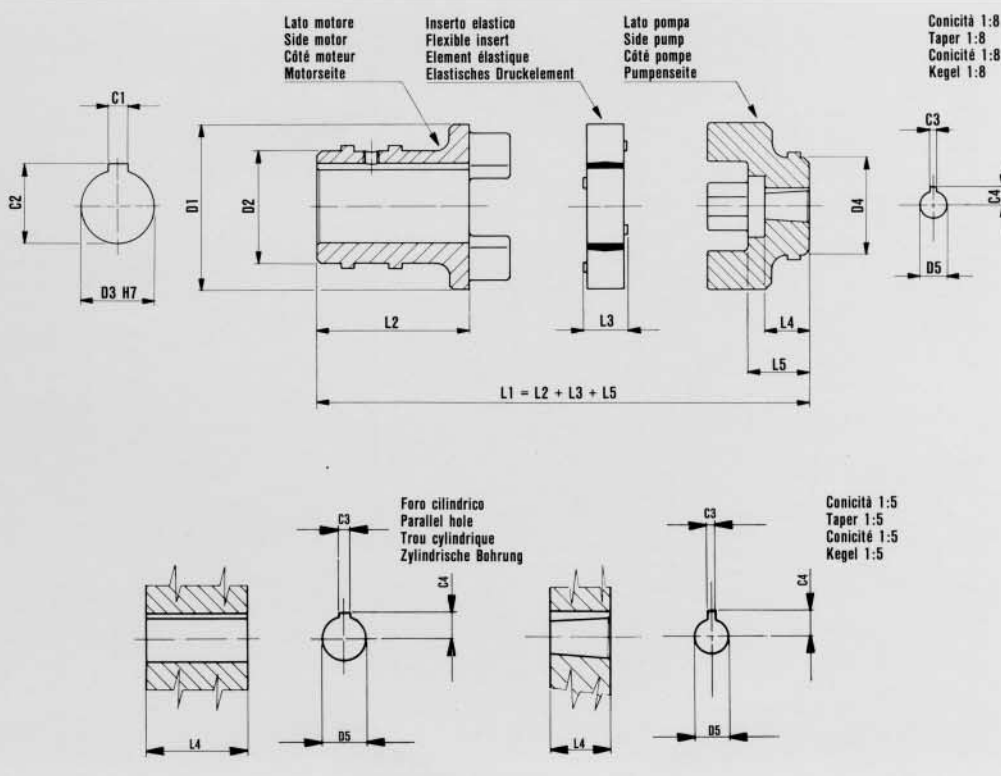
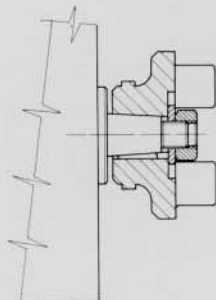
S

|  |         |
|--|---------|
| <b>Für kleine Pumpen, die steting mit Niederdruck arbeiten.</b><br>zum Beispiel:<br>Kreisbewegung auf Werkzeugmaschinen,<br>Hebeanlagen mit 6 Betätigungen/Stunde.               | 1,2-1,3 |
| <b>Für kleine Pumpen, die steting mit Hochdruck arbeiten.</b><br>zum Beispiel:<br>Kreisbewegung auf Werkzeugmaschinen,<br>Hebenlagen mit 120 Betätigungen/Stunde.                | 1,4-1,5 |
| <b>Für mittlere Pumpen, die unsetig arbeiten.</b><br>zum Beispiel:<br>Mischmaschinen und Baggermaschinen, Hebemaschinen und Autzüge,<br>Hebeanlagen mit 300 Betätigungen/Stunde. | 1,6-1,7 |

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**«HE» Drehelastische Kupplungen für Zahnradpumpen und E. Motoren nach UNEL/IEC Normen**

|         |               |
|---------|---------------|
| Gr. 1   | 0,5 – 1 Kgm   |
| Gr. 2   | 0,5 – 1 Kgm   |
| Gr. 3   | 0,5 – 1,5 Kgm |
| Gr. 3,5 | 0,5 – 1,5 Kgm |
| Gr. 4   | 1 – 2 Kgm     |

Coppie di serraggio per semigiunti elastici  
 Tightening torque  
 Couples de serrage  
 Verschraubungsmoment

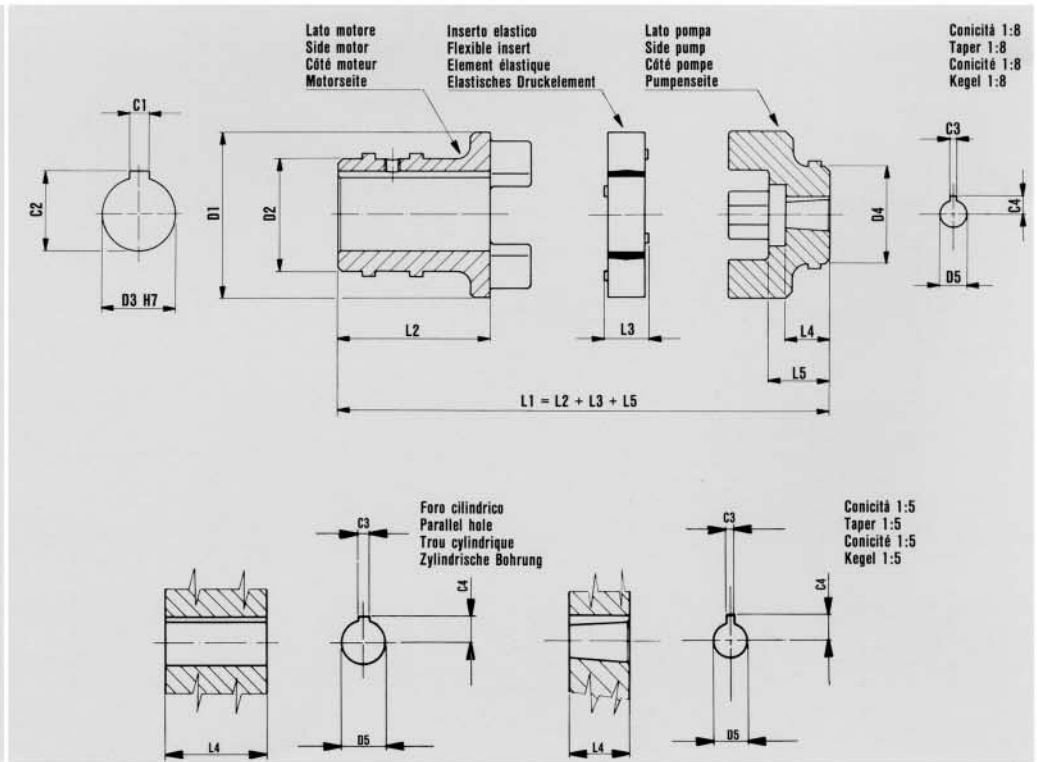
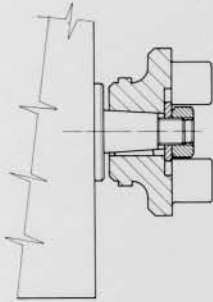


| Hydr-App<br>Riferimenti<br>References<br>Références<br>Beziehungen | Pump | E. Motor | Giunto<br>Coupling<br>Accouplement<br>Kupplung |                                       | Semigiunto lato motore<br>Side motor coupling<br>Demi-accouplement côté moteur<br>Motorseite Kupplung |      |                                       |    |     | Inserto elastico<br>Flexible insert<br>Élément élastique<br>Elastisches Druckelement |          | Semigiunto lato pompa<br>Side pump half coupling<br>Demi-accouplement côté pompe<br>Pumpenseite Kupplung |                                       |     |                                       |      |          |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|--|------|----------|--|---------------------------------------|---|------|---------------------------------------|----|-----|--|----------|--|---------------------------------------|-----|---------------------------------------|------|----------|-------|----------|----|----|----------|-------|-----|------|------|-----|-----|-----|------|-----|-----|-----|-----|
|  |      |          | Sigla<br>Model code<br>Sigle                   | Matricola<br>Part number<br>Matricule | D1  | L1   | Matricola<br>Part number<br>Matricule | D2 | D3  | L2   | C1       | C2   | Matricola<br>Part number<br>Matricule | L3  | Matricola<br>Part number<br>Matricule | D4   | D5       | L4    | L5       | C3 | C4 |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | O5   |          | HE1  | 10200001                              | 43  | 65   | 31303200                              | 29 | 14  | 29,5   | 5        | 16,1   | 39200300                              | 16  | 31305300                              | 20   | 6        | 10    | 19,5     | 2  | 4  |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | T05  |          | HE21   | 10200019                              |   |      |                                       |    |     |  |          |  |                                       |     | 7                                     |      | 4,6      |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | I    |          | HE2  | 10200002                              |   |      |                                       |    |     |  |          |  |                                       |     | 62                                    |      |          |       |          |    |    | 31303100 | 7,50  | 1:8 | 16,5 | 16,5 | 2,4 | 5,7 |     |      |     |     |     |     |
|  | IC   |          | HE3  | 10200003                              |   |      |                                       |    |     |  |          |  |                                       |     | 61,5                                  |      |          |       |          |    |    | 31305200 | 12    | 16  | 16   | 3    | 8,4 |     |     |      |     |     |     |     |
|  | IM   |          | HE4  | 10200004                              |   |      |                                       |    |     |  |          |  |                                       |     | 62                                    |      |          |       |          |    |    | 31305100 | 11,87 |     |      |      |     | 1:8 | 16  | 16   | 3   | 8,4 |     |     |
|  | ZBI  |          | HE101  | 10200044                              |   |      |                                       |    |     |  |          |  |                                       |     | 62                                    |      |          |       |          |    |    | 31305000 | 7,60  |     |      |      |     | 1:5 | 12  | 16,5 | 2   | 5,7 |     |     |
|  | 2    |          | HE55   | 10200091                              | 63  | 74,5 | 31323400                              | 44 | 14  | 33,5   | 5        | 16,1   | 39200400                              | 19  | 31301800                              | 36   |          | 14,30 | 1:8      | 22 | 22 | 3,2      | 9,7   |     |      |      |     |     |     |      |     |     |     |     |
|  | 2T   |          | HE56   | 10200092                              |   |      |                                       |    |     |  |          |  |                                       |     | 4                                     |      | 4        |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | O5   |          | HE5  | 10200005                              | 43  | 81   | 31303300                              | 36 | 19  | 45,5   | 6        | 21,6   | 39200300                              | 16  | 31305300                              | 20   | 6        | 10    | 19,5     | 2  | 4  |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | T05  |          | HE22   | 10200020                              |   |      |                                       |    |     |  |          |  |                                       |     | 7                                     |      | 4,6      |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | I    |          | HE6  | 10200006                              |   |      |                                       |    |     |  |          |  |                                       |     | 78                                    |      |          |       |          |    |    | 31303100 | 7,50  | 1:8 | 16,5 | 16,5 | 2,4 | 5,7 |     |      |     |     |     |     |
|  | IC   |          | HE7  | 10200007                              |   |      |                                       |    |     |  |          |  |                                       |     | 77,5                                  |      |          |       |          |    |    | 31305200 | 12    | 16  | 16   | 3    | 8,4 |     |     |      |     |     |     |     |
|  | IM   |          | HE8  | 10200008                              |   |      |                                       |    |     |  |          |  |                                       |     | 78                                    |      |          |       |          |    |    | 31305100 | 11,87 |     |      |      |     | 1:8 | 16  | 16   | 3   | 8,4 |     |     |
|  | ZBI  |          | HE103  | 10200045                              |   |      |                                       |    |     |  |          |  |                                       |     | 78                                    |      |          |       |          |    |    | 31305000 | 7,60  |     |      |      |     | 1:5 | 12  | 16,5 | 2   | 5,7 |     |     |
|  | I    |          | HE45   | 10200041                              | 63  | 86,5 | 31301700                              | 37 | 19  | 44,5   | 6        | 21,7   | 39200400                              | 19  | 31301700                              | 30   |          | 7,59  | 1:8      | 16 | 23 | 2,4      | 5,7   |     |      |      |     |     |     |      |     |     |     |     |
|  | IC   |          | HE44   | 10200040                              |   |      |                                       |    |     |  |          |  |                                       |     | 12                                    |      | 16       | 23    |          |    |    |          |       |     |      |      |     | 3   | 7,6 |      |     |     |     |     |
|  | IM   |          | HE40   | 10200036                              |   |      |                                       |    |     |  |          |  |                                       |     | 11,80                                 |      |          |       |          |    |    |          |       |     |      |      |     |     |     | 3    | 8,5 |     |     |     |
|  | 2    |          | HE46   | 10200042                              |   |      |                                       |    |     |  |          |  |                                       |     | 11,80                                 |      |          |       |          |    |    |          |       | 3,2 | 9,7  |      |     |     |     |      |     |     |     |     |
|  | 2T   |          | HE47   | 10200043                              |   |      |                                       |    |     |  |          |  |                                       |     | 14,30                                 |      |          |       |          |    |    |          |       |     |      | 22   | 22  |     |     |      |     | 4   | 9,6 |     |
|  | ZF2  |          | HE120  | 10200056                              |   |      |                                       |    |     |  |          |  |                                       |     | 12,50                                 |      |          |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     | 16  |
|  | ICB  |          | HE49   | 10200085                              | 10  | 22   | 22                                    | 4  | 9,6 |  |          |  |                                       |     |                                       |      |          |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | 2CB  |          | HE50   | 10200086                              | 85,5  |      |                                       |    |     | 31305800   | 30       | 10   | 16                                    | 23  | 3                                     | 6,6  |          |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | I    |          | HE41   | 10200037                              | 63  |      |                                       |    |     | 78   | 31302500 | 44   | 24                                    | 36  | 8                                     | 27,2 | 39200400 | 19    | 31305900 | 36 | 16 | 22       | 22    |     |      |      |     | 4   | 9,6 |      |     |     |     |     |
|  | IC   |          | HE42   | 10200038                              |   |      |                                       |    |     |  |          |  |                                       |     |                                       |      |          |       | 12       |    | 16 |          |       | 23  | 2,4  |      |     |     |     | 5,7  |     |     |     |     |
|  | IM   |          | HE43   | 10200039                              |   |      |                                       |    |     |  |          |  |                                       |     |                                       |      |          |       | 11,80    |    |    |          |       |     |      | 3    | 8,5 |     |     |      |     |     |     |     |
|  | ZBI  |          | HE122  | 10200057                              |   |      |                                       |    |     |  |          |  |                                       |     |                                       |      |          |       | 7,60     |    |    |          |       |     |      |      |     |     |     |      | 12  | 23  | 2   | 5,6 |
|  | I    |          | HE11   | 10200009                              |   | 7,59 | 1:8                                   | 16 | 2,4 |  |          |  |                                       |     |                                       |      |          |       | 5,7      |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | IC   |          | HE12   | 10200010                              |   | 12   |                                       |    |     |  |          |  |                                       |     |                                       |      |          |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | IM   |          | HE13   | 10200011                              | 11,80   | 3    |                                       |    |     | 8,5  |          |  |                                       |     |                                       |      |          |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | 2    |          | HE14   | 10200012                              | 14,30   |      |                                       |    |     |  | 22       | 22   | 3,2                                   | 9,7 |                                       |      |          |       |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | 2T   |          | HE15   | 10200013                              | 12,50   |      |                                       |    |     |  |          |  |                                       |     | 16                                    | 23   | 4        | 9,6   |          |    |    |          |       |     |      |      |     |     |     |      |     |     |     |     |
|  | ZF2  |          | HE108  | 10200046                              | 10  |      |                                       |    |     |  |          |  |                                       |     |                                       |      |          |       |          | 16 | 23 | 3        | 6,6   |     |      |      |     |     |     |      |     |     |     |     |
|  | ICB  |          | HE57   | 10200093                              | 85,5  |      | 31305800                              | 30 | 10  |  |          |  |                                       |     |                                       |      |          |       | 16       |    |    |          |       | 23  | 3    | 6,6  |     |     |     |      |     |     |     |     |
|  | 2CB  |          | HE58   | 10200094                              | 85,5  |      | 31305900                              | 36 | 16  |  |          |  |                                       |     |                                       |      |          |       | 22       |    |    |          |       | 22  | 4    | 9,6  |     |     |     |      |     |     |     |     |

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|         |               |
|---------|---------------|
| Gr. 1   | 0,5 – 1 Kgm   |
| Gr. 2   | 0,5 – 1 Kgm   |
| Gr. 3   | 0,5 – 1,5 Kgm |
| Gr. 3,5 | 0,5 – 1,5 Kgm |
| Gr. 4   | 1 – 2 Kgm     |

Coppie di serraggio per semigiunti elastici  
 Tightening torque  
 Couples de serrage  
 Verschraubungsmoment



| Hydr-App<br>Riferimenti<br>References<br>Références<br>Bezeichnungen |          | Giunto<br>Coupling<br>Accouplement<br>Kupplung |                                       | Semigiunto lato motore<br>Side motor coupling<br>Demi-accouplement côté moteur<br>Motorseite Kupplung |       |                                       |    |      | Inserito elastico<br>Flexible insert<br>Élément élastique<br>Elastisches Druckelement |      | Semigiunto lato pompa<br>Side pump half coupling<br>Demi-accouplement côté pompe<br>Pumpseite Kupplung |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
|--|----------|--|---------------------------------------|---|-------|---------------------------------------|----|------|---|------|--|---------------------------------------|----------|---------------------------------------|-------|----------|------|-----|-----|------|----------|-------|-------|----|-----|-----|-------|----------|-------|-----|-----|------|------|-----|------|-------|-----|------|----|-----|-----|
| Pump   | E. Motor | Sigla<br>Model code<br>Sigle                   | Matricola<br>Part number<br>Matricule | D1  | L1    | Matricola<br>Part number<br>Matricule | D2 | D3   | L2  | C1   | C2   | Matricola<br>Part number<br>Matricule | L3       | Matricola<br>Part number<br>Matricule | D4    | D5       | L4   | L5  | C3  | C4   |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| I  |          | HE16   | 10200014                              | 63  | 106,5 | 31301600                              | 51 | 28   | 64,5  | 8    | 31,2   | 39200400                              | 19       | 31301700                              | 7,59  | 1:8      | 16   | 23  | 2,4 | 5,7  |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| IC   |          | HE17   | 10200015                              |   |       |                                       |    |      |   |      |  |                                       |          | 31302300                              | 30    | 12       |      |     |     |      | 3        | 7,6   |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| IM   |          | HE18   | 10200016                              |   |       |                                       |    |      |   |      |  |                                       |          | 31301900                              | 11,80 | 8,5      |      |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 2  |          | HE19   | 10200017                              |   |       |                                       |    |      |   |      |  |                                       |          | 36                                    | 14,30 |          | 1:8  | 22  | 22  | 3,2  | 9,7      |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 2T   |          | HE20   | 10200018                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31302200 |      |     |     |      |          | 36    | 14,30 | 4  | 9,7 |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| ZBI  |          | HE109  | 10200047                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31302400 |      |     |     |      |          | 30    | 7,60  |    |     | 12  | 23    | 2        | 5,6   |     |     |      |      |     |      |       |     |      |    |     |     |
| ZF2  |          | HE111  | 10200048                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31302000 |      |     |     |      |          | 36    | 12,50 | 22 | 22  |     |       |          |       | 3   | 9,6 |      |      |     |      |       |     |      |    |     |     |
| ICB  |          | HE59   | 10200095                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31305800 |      |     |     |      |          | 30    | 10    |    |     | 16  | 23    | 6,6      |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 2CB  |          | HE60   | 10200096                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31305900 |      |     |     |      |          | 36    | 16    | 22 | 22  |     |       |          | 4     | 9,6 |     |      |      |     |      |       |     |      |    |     |     |
| 3  |          | HE48   | 10200084                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31325500 |      |     |     |      |          | 44    | 18,36 |    |     | 1:8 | 28    | 36       |       |     | 4   | 12,5 |      |     |      |       |     |      |    |     |     |
| 2  |          | HE25   | 10200021                              | 86  | 105,5 | 31300200                              | 50 | 28   | 50,5  | 8    | 31,2   | 39200500                              | 23       |                                       |       | 31300800 |      |     |     |      |          | 14,17 | 1:8   | 23 | 3,2 | 9,7 |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 2T   |          | HE26   | 10200022                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31300900 |      |     |     |      |          |       |       |    |     |     | 4     | 9,7      |       |     |     |      |      |     |      |       |     |      |    |     |     |
| ZF2  |          | HE113  | 10200049                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       | 31301000 |      |     |     |      |          |       |       |    |     |     | 12,50 | 1:5      | 22    | 32  | 3   | 9,6  |      |     |      |       |     |      |    |     |     |
| 2  |          | HE28   | 10200024                              |   |       |                                       |    |      |   |      |  |                                       |          | 31300800                              | 14,17 | 23       | 3,2  | 9,7 |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 2T   |          | HE29   | 10200025                              |   |       |                                       |    |      |   |      |  |                                       |          | 31300900                              | 50    |          |      |     | 1:8 | 28   | 4        |       |       |    |     |     | 12,5  |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 3  |          | HE30   | 10200026                              |   |       |                                       |    |      |   |      |  |                                       |          | 31300500                              | 133,5 | 58       | 38   | 79  | 10  | 41,7 | 39200500 |       |       |    |     |     | 23    | 31301100 | 18,36 | 1:8 | 28  | 31,5 | 31,5 | 4,8 | 15,1 |       |     |      |    |     |     |
| 3,5  |          | HE31   | 10200027                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       | 31301200 |       |     |     |      |      |     |      | 21,08 |     |      |    |     |     |
| ZF2  |          | HE114  | 10200050                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       | 31301000 |       |     |     |      |      |     |      | 12,50 | 22  | 32   | 3  | 9,6 |     |
| ZG3  |          | HE115  | 10200051                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       | 31301300 |       |     |     |      |      |     |      | 19,30 |     |      |    |     | 1:5 |
| 2CB  |          | HE52   | 10200088                              |   |       |                                       |    |      |   |      |  |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       | 31306000 |       |     |     |      |      |     |      | 16    | 37  | 37   | 4  | 9,6 |     |
| 3CB  |          | HE53   | 10200089                              | 31306100  | 24    | 36                                    | 36 | 6    | 14,6  |      |  |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 2  |          | HE32   | 10200028                              | 174   | 133,5 | 31303400                              | 42 | 105  | 12  | 45,6 | 39200600   | 27                                    | 31303600 |                                       |       |          |      |     |     |      |          | 14,17 | 1:8   | 23 | 3,2 | 9,7 |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 2T   |          | HE33   | 10200029                              |   |       |                                       |    |      |   |      |  |                                       | 31303700 |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       | 18,36    |       |     |     |      |      |     |      | 28    | 4   | 12,5 |    |     |     |
| 3  |          | HE34   | 10200030                              |   |       |                                       |    |      |   |      |  |                                       | 31303800 |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       | 21,08    |       |     |     |      |      |     |      |       |     |      | 32 | 42  | 4,8 |
| 3,5  |          | HE35   | 10200031                              |   |       |                                       |    |      |   |      |  |                                       | 31303900 |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       | 27,61    |       |     |     |      |      |     |      | 42    | 6,4 | 18,7 |    |     |     |
| 4  |          | HE36   | 10200032                              |   |       |                                       |    |      |   |      |  |                                       | 31304000 | 12,90                                 | 20    | 3        | 9,6  |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| ZF2  |          | HE116  | 10200052                              |   |       |                                       |    |      |   |      |  |                                       | 31304100 | 19,30                                 |       |          |      | 1:5 | 26  | 47   | 6        |       |       |    |     |     | 14,6  |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| ZG3  |          | HE117  | 10200053                              |   |       |                                       |    |      |   |      |  |                                       | 31304200 | 24                                    | 28    | 4        | 12,5 |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 3CB  |          | HE51   | 10200087                              |   |       |                                       |    |      |   |      |  |                                       | 31304900 | 18,36                                 |       |          |      | 32  | 4,8 | 15,1 |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 3  |          | HE37   | 10200033                              |   |       |                                       |    |      |   |      |  |                                       | 31303800 | 27,61                                 | 42    | 6,4      | 18,7 |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 3,5  |          | HE38   | 10200034                              |   |       |                                       |    |      |   |      |  |                                       | 31303900 | 12,90                                 |       |          |      | 20  | 3   | 9,6  |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 4  |          | HE39   | 10200035                              | 31304000  | 19,30 | 1:5                                   | 26 | 5    | 15,1  |      |  |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| ZF2  |          | HE118  | 10200054                              | 31304100  | 24    |                                       |    |      |   | 47   | 47   | 6                                     | 14,6     |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| ZG3  |          | HE119  | 10200055                              | 31304200  | 24    | 28                                    | 4  | 12,5 |   |      |  |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |
| 3CB  |          | HE54   | 10200090                              | 31304900  | 18,36 |                                       |    |      | 32  | 4,8  | 15,1   |                                       |          |                                       |       |          |      |     |     |      |          |       |       |    |     |     |       |          |       |     |     |      |      |     |      |       |     |      |    |     |     |