



### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |    |    |    | Available B14 motor flanges |    |    | Output Shaft<br> | Ratios code                                     |    |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|----|-----------------------------|----|----|------------------|---|----|
|   |              |                                 |                                   |                        |                                   |                                    | B                          | C  | D  | E  | Q                           | R  | T  |                  |   |    |
|   |              |                                 |                                   |                        |                                   |                                    | 63                         | 71 | 80 | 90 | 71                          | 80 | 90 |                  |   |    |
| 891   | <b>1.57</b>  | 1.5                             | 16                                | 1.3                    | <b>1.9</b>                        | <b>20</b>                          | B                          |    |    |    | C                           | C  |    | 2844             | standard<br>ø19<br><br>On request<br>ø14<br>ø24 | 01 |
| 493   | <b>2.84</b>  | 1.5                             | 28                                | 1.2                    | <b>1.8</b>                        | <b>35</b>                          | B                          |    |    |    | C                           | C  |    | 1954             |   | 02 |
| 425   | <b>3.29</b>  | 1.5                             | 33                                | 1.2                    | <b>1.7</b>                        | <b>38</b>                          | B                          |    |    |    | C                           | C  |    | 1756             |   | 03 |
| 362   | <b>3.87</b>  | 1.5                             | 39                                | 1.0                    | <b>1.5</b>                        | <b>40</b>                          | B                          |    |    |    | C                           | C  |    | 1558             |   | 04 |
| 303   | <b>4.62</b>  | 1.5                             | 46                                | 1.0                    | <b>1.5</b>                        | <b>47</b>                          | B                          |    |    |    | C                           | C  |    | 1360             |   | 05 |
| 222   | <b>6.30</b>  | 1.1                             | 46                                | 1.0                    | <b>1.1</b>                        | <b>46</b>                          | B                          |    |    |    | C                           | C  |    | 1063             |   | 06 |
| 170   | <b>8.22</b>  | 0.55                            | 30                                | 1.3                    | <b>0.69</b>                       | <b>38</b>                          | B                          |    |    |    | C                           | C  |    | 974              |   | 07 |
| 129   | <b>10.86</b> | 0.37                            | 27                                | 1.0                    | <b>0.39</b>                       | <b>28</b>                          | B                          |    |    |    | C                           | C  |    | 776              |   | 08 |

The dynamic efficiency is **0.98** for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

**B) Supplied with Reduction Bushing**  
Fornito con Bussola di Riduzione

**B) Available on Request without reduction bushing**  
Disponibile a Richiesta senza Bussola di Riduzione

**C) Motor Flange Holes Position**  
Posizione Fori Flangia Motore

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**EN** Unit **411A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **411A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **411A** ist mit synthetischem Öl gefüllt und ist lebensdauer geschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **411A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **411A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

### LUBRICATION 411A Oil Quantity 0.20 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

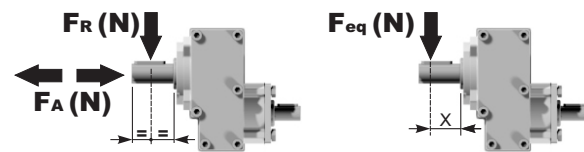
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita

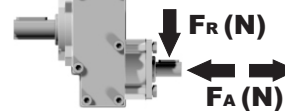
$$F_{eq} = F_R \cdot \frac{40}{X+20}$$



| $n_2$ | FA  | FR   | $n_2$ | FA  | FR   | $n_2$ | FA  | FR   |
|-------|-----|------|-------|-----|------|-------|-----|------|
| 700   | 182 | 910  | 400   | 230 | 1150 | 200   | 290 | 1450 |
| 600   | 200 | 1000 | 300   | 250 | 1250 | 140   | 320 | 1600 |

#### Input shaft

Albero in entrata

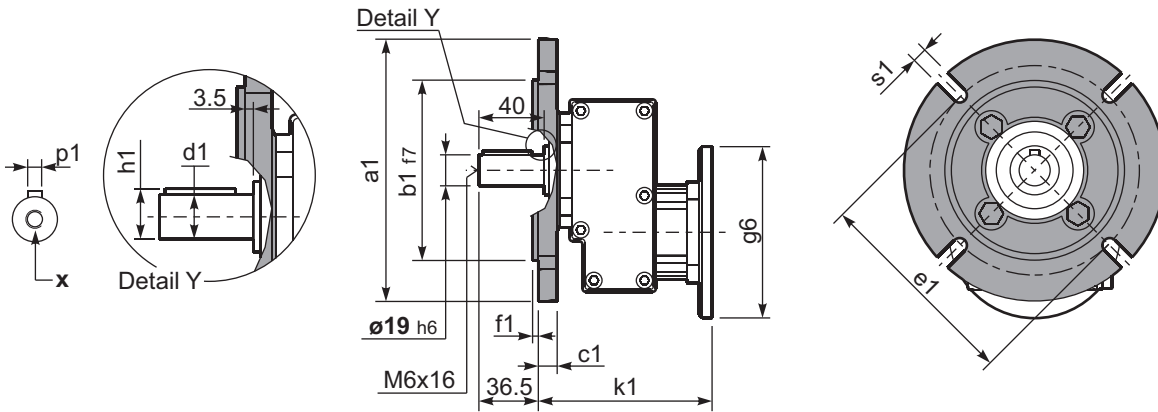


| $n_1$ | FA  | FR   |
|-------|-----|------|
| 1400  | 240 | 1200 |
| 900   | 280 | 1400 |

tab. 2

**P411-F...** Output flange  
flange di uscita

Gearbox weight  
peso riduttore **3.20 kg**



**\*Available output shaft / Albero di uscita**

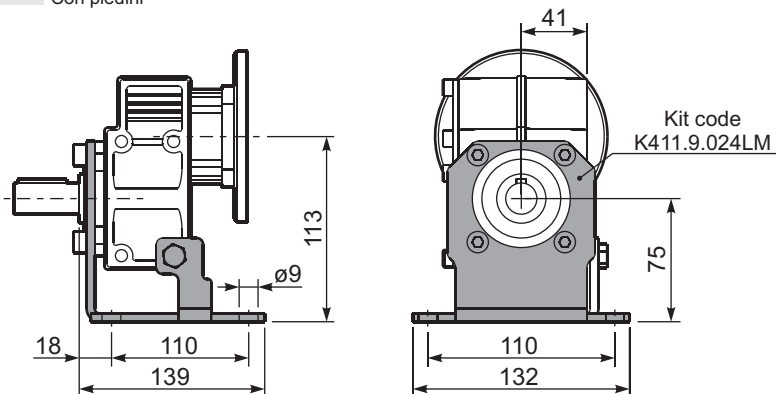
|                           | Shaft - d1         | p1     | h1       | x              |
|---------------------------|--------------------|--------|----------|----------------|
| Standard                  | ∅ 19x40            | 6      | 21.5     | M6x16          |
| On request<br>A richiesta | ∅ 14x30<br>∅ 24x40 | 5<br>8 | 16<br>27 | M5x13<br>M6x16 |

**Available output flanges / flange di uscita**

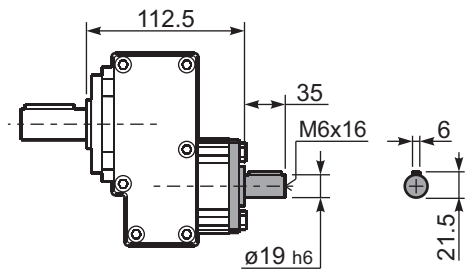
| a1 ∅ | b1  | c1   | e1  | f1  | s1 | kit code   |
|------|-----|------|-----|-----|----|------------|
| 120  | 80  | 11.5 | 100 | 3   | 9* | KC30.9.010 |
| 140  | 95  | 11.5 | 115 | 3   | 9  | KC30.9.011 |
| 160  | 110 | 11.5 | 130 | 3.5 | 9  | KC30.9.012 |
| 200  | 130 | 11.5 | 165 | 3.5 | 11 | KC30.9.013 |

\*Holes position  
posizione fori

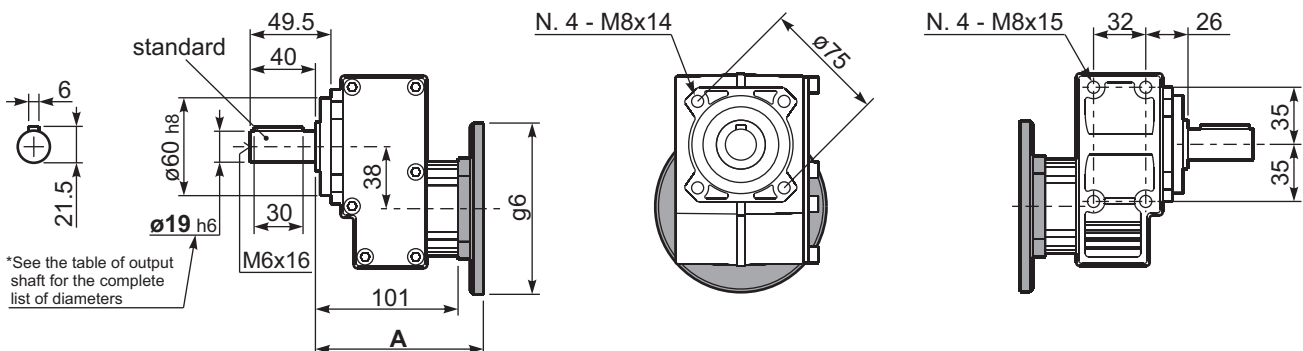
**P411-H1...** With feet  
Con piedini



**R411-N...** Input Shaft  
Albero in entrata



**P411-N...** Basic gearbox  
Riduttore base



\*See the table of output shaft for the complete list of diameters

| B5 Motor Flanges | A     | g6  | k1  | kit code   |
|------------------|-------|-----|-----|------------|
| 63 B5            | 121.5 | 140 | 125 | K063.4.041 |
| 71 B5            | 119.5 | 160 | 123 | K063.4.042 |
| 80/90 B5         | 121.5 | 200 | 125 | K063.4.043 |

| B14 Motor Flanges | A     | g6  | k1  | kit code   |
|-------------------|-------|-----|-----|------------|
| 71 B14            | 119.5 | 105 | 123 | K063.4.047 |
| 80 B14            | 121.5 | 120 | 125 | K063.4.046 |
| 90 B14            | 121.5 | 140 | 125 | K063.4.041 |