






### Z45 Ratios/Rating

Rapporti/Selezione Z45

| Ratio | Max output torque | Tooth module  | Standard input bore   | Ratio code  |
|-------|-------------------|---|---|---|
| $i_a$ | ** $M_{2R}$ [Nm]  |  |  |  |
| 7     | 35                | 2.2   | ø14   | 01  |
| 10    | 35                | 2.2   | ø14   | 02  |
| 14    | 35                | 2.4   | ø14   | 03  |
| 21    | 47                | 1.6   | ø14   | 04  |
| 28    | 47                | 2.5   | ø14   | 05  |
| 37    | 47                | 1.8   | ø14   | 06  |
| 46    | 47                | 1.5   | ø14   | 07  |
| 60    | 47                | 1.2   | ø14   | 08  |
| 70    | 35                | 1.0   | ø14   | 09  |
| 102   | 34                | 0.72  | ø14   | 10  |

### 211Z Ratios/Power

Rapporti/potenza 211Z

| Ratio | Max input power  | Standard output shaft   | Ratios code   |
|-------|------------------|---|---|
| $i_b$ | ** $P_{1M}$ [kW] |  |  |
| 2.05  | 0.37             | ø14   | 01  |
| 2.35  | 0.37             | ø14   | 02  |
| 2.80  | 0.37             | ø14   | 03  |
| 3.38  | 0.37             | ø14   | 04  |
| 4.70  | 0.37             | ø14   | 05  |
| 6.22  | 0.37             | ø14   | 06  |
| 8.29  | 0.37             | ø14   | 07  |
| 9.83  | 0.25             | ø14   | 08  |



### 211Z Motor flanges

Flange motore 211Z

|       | Kit code | g6  | A    |
|-------|----------|-----|------|
| 63B5  | KD454041 | 138 | 99.5 |
| 71B5  | KD454042 | 160 | 97   |
| 56B14 | KD454049 | 80  | 97   |
| 63B14 | KD454047 | 90  | 99.5 |
| 71B14 | KD454045 | 105 | 97   |

### How to connect Z45+211Z

Come collegare Z45 + 211Z

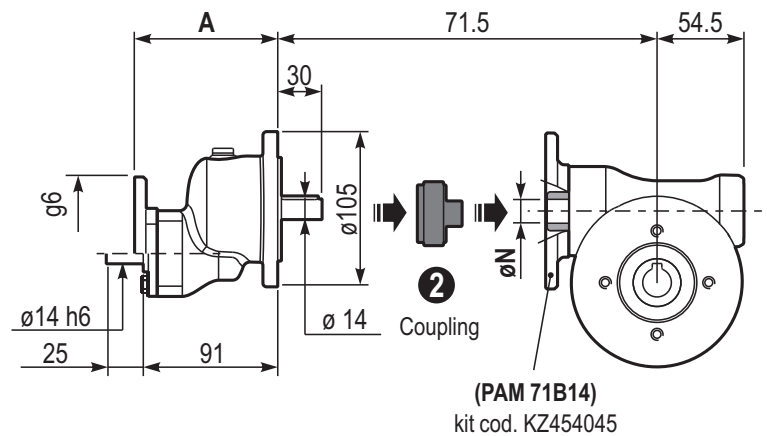
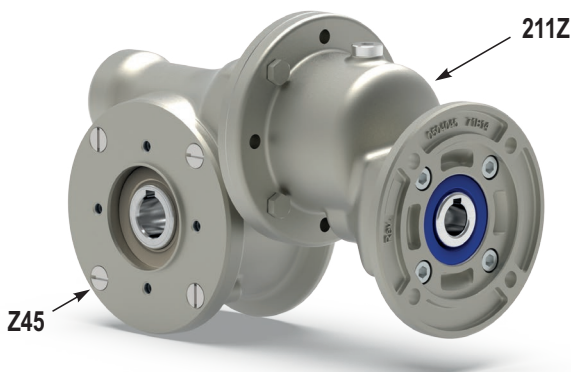
| Worm gearbox          |              | Ratio multiplier         | Connection kit  |   |
|-----------------------|--------------|--------------------------|---|---|
| Standard input bore   | Output shaft | With standard input bore | With coupling   |   |
| Z45                   | øN           | 211Z                     |  |  |
| Ratios from 1/7÷1/102 | ø14          | ø14                      | Reduction bushing is not necessary  | KB14P   |

Z45 weight  
Peso D45

2.50 kg

211Z weight  
Peso 211D

1.40 kg



### Ratios range: from 1/14 to 1/1003

Range rapporti: da 1/14 a 1/1003

### Lubrication

Lubrificazione

Unit **Z45+211Z** is supplied with synthetic oil to assure long life lubrication. Food grade oil is available on request. See Table 1 for lubrication and recommended quantity.

Il riduttore tipo **Z45+211Z** viene fornito con olio sintetico e lubrificazione tipo "long life".

Disponibile a richiesta olio alimentare. Vedi Tabella 1 per oli e quantità consigliati.

For all details on lubrication and plugs check our website.

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

|              |                        |                     |
|--------------|------------------------|---------------------|
| Z45: 0.09 L  | SHELL: Omala S4 WE 320 | ENI: Telium VSF 320 |
| 211Z: 0.05 L | SHELL: Omala S4 WE 320 | ENI: Telium VSF 320 |

### Calculate total ratio and output speed

Calcola il rapporto totale e la velocità di uscita

#### Ratios range: from 1/14 to 1/1003

Range rapporti: da 1/14 a 1/1003

$$i_{TOT} = i_a \cdot i_b$$

Ex.: 1/102 x 1/9.83 = 1/1003 (Max ratio)

#### Output speed ( $n_2$ )

Velocità di uscita

$$n_2 = n_1 : i_{TOT}$$

Ex.: 1448 : 1003 = 1.44 rpm

$i_a$  : Z45 ratio - Rapporto Z45

$i_b$  : 211Z ratio - Rapporto 211Z

\*\* Make sure input power for **211Z** and output torque for **Z45** is as catalogue ratios.

\*\* Prestare attenzione a selezionare la potenza in entrata del **211Z** ed il momento torcente del **Z45** secondo le tabelle del catalogo.

$n_1$  Input speed

Velocità di ingresso