

Technical Data Sheet  
Gearbox  
WORM GEARBOX SQUARE DESIGN



|                    |        |     |
|--------------------|--------|-----|
| MODEL              | Q11    |     |
| Ø OUTPUT SHAFT     | 42     | mm  |
| APPROXIMATE RATIO  | 100    |     |
| EXACT RATIO        | 99.00  |     |
| OUTPUT SPEED       | 15     | RPM |
| EXACT OUTPUT SPEED | 15     | RPM |
| INPUT POWER        | 0.55   | KW  |
| INPUT ROTATION     | 1400   | RPM |
| INPUT PAM          | 80B5   |     |
| OUTPUT TORQUE      | 222.84 | N.m |
| NOMINAL TORQUE     | 483.00 | N.m |
| NOMINAL POWER      | 1.2    | KW  |
| SERVICE FACTOR     | 2.18   |     |
| DYNAMIC EFFICIENCY | 0.60   |     |



#### Oil Quantity (L)

| B3/H1 | B6/H4 | B7/H3 | B8/H2 | V5/H5 | V6/H6 |
|-------|-------|-------|-------|-------|-------|
| 1.9   | 1.35  | 1.35  | 2     | 2     | 2     |

#### Radial and Axial Loads



| $n_2$ [min-1] | FA [N] | FR [N] |
|---------------|--------|--------|
| 200           | 600    | 2900   |
| 100           | 750    | 3600   |
| 50            | 920    | 4600   |
| 15            | 1400   | 7000   |

Universal Motors S.A.  
Rua Comendador Brandão, 484  
4495-375 Póvoa de Varzim  
[geral@universalmotors.pt](mailto:geral@universalmotors.pt)  
TEL.: 252 299 080

Universal Motors UK, Ltd  
Unit E2, Meltham Mills Road  
West Yorkshire HD9 4AR  
[enquiries@universalmotors-group.co.uk](mailto:enquiries@universalmotors-group.co.uk)  
TEL.: +44(0) 1484660222

Universal Motors SL  
C/La Habana n.6 nave 4 PI Camporoso  
28806 Alcala de Henares  
[info@universalmotors-group.es](mailto:info@universalmotors-group.es)  
TEL.: 918 864 213

## PQ11FB...

Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore

35.0 kg

| M. flanges | Kit code   | øF  | A   |
|------------|------------|-----|-----|
| 71B5       | K023.4.041 | 160 | 136 |
| 80/90B5    | K023.4.042 | 200 | 138 |
| 100/112B5  | K023.4.043 | 250 | 147 |
| 132B5      | -          | 300 | 187 |
| 80B14      | K085.4.046 | 120 | 138 |
| 90B14      | K085.4.045 | 140 | 138 |
| 100/112B14 | K023.4.041 | 160 | 136 |
| 132B14     | -          | 200 | 187 |



## PQ11FC...

Output flange  
Flangia uscita

| type B | øD                                      | E  | G    | L     | N   | O   | P   | Q  | kit code            |
|--------|-----------------------------------------|----|------|-------|-----|-----|-----|----|---------------------|
| FC     | 170 <sup>+0.083</sup> <sub>+0.043</sub> | 11 | 16.5 | 131.5 | 54  | 230 | 270 | 13 | 1 K110.9.010<br>2 - |
| FL     | 170 <sup>+0.083</sup> <sub>+0.043</sub> | 11 | 16.5 | 179.5 | 102 | 230 | 270 | 13 | 1 K110.9.011<br>2 - |

## PQ11F1...

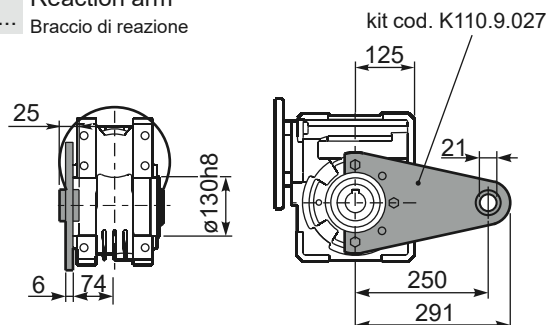
Output flange  
Flangia uscita

| type S | øD                                 | E | G  | L   | N    | O   | P   | Q  | kit code             |
|--------|------------------------------------|---|----|-----|------|-----|-----|----|----------------------|
| F1     | 180 <sup>+0.040</sup> <sub>0</sub> | 5 | 18 | 150 | 72.5 | 215 | 250 | 15 | 1 KS110.9.014<br>2 - |
| F3     | 180 <sup>+0.040</sup> <sub>0</sub> | 5 | 18 | 130 | 52.5 | 215 | 250 | 15 | 1 KS110.9.013<br>2 - |

## PQ11FB...

Feet  
Piedini

## PQ11BR...

Reaction arm  
Braccio di reazione

## RQ11FB...

Input shaft  
Albero in entrata

|        | ød    | e  | g | l  | m     | x     | kit code                                    |
|--------|-------|----|---|----|-------|-------|---------------------------------------------|
| type B | 25 h6 | 28 | 8 | 50 | 131.5 | M8x20 | 1 K085.5.007 PAM90<br>2 K085.5.008 PAM100   |
| type S | 24 h6 | 27 | 8 | 50 | 131.5 | M8x20 | 1 KS085.5.009 PAM90<br>2 KS085.5.011 PAM100 |

## PQ11.....S...

Single Shaft  
Albero lento semplice

## PQ11.....D...

Double Shaft  
Albero lento bisp.

1 kit cod. K110.5.028 type B      2 kit cod. K110.5.029 type B

|        | b1 | c1 | d1                                     | e1   | f1  | l1  | m1    | n1  | t2 | o1     |
|--------|----|----|----------------------------------------|------|-----|-----|-------|-----|----|--------|
| type B | 12 | 75 | 42 <sup>-0.005</sup> <sub>-0.020</sub> | 96.5 | 155 | 348 | 163.5 | 260 | 45 | M12x32 |
| type S | -  | -  | -                                      | -    | -   | -   | -     | -   | -  | -      |