

Technical Data Sheet  
Gearbox  
INLINE GEARBOX



|                    |        |     |
|--------------------|--------|-----|
| MODEL              | 512A   |     |
| Ø OUTPUT SHAFT     | 30     | mm  |
| APPROXIMATE RATIO  | 24.5   |     |
| EXACT RATIO        | 24.61  |     |
| OUTPUT SPEED       | 60     | RPM |
| EXACT OUTPUT SPEED | 59     | RPM |
| INPUT POWER        | 1.10   | KW  |
| INPUT ROTATION     | 1400   | RPM |
| INPUT PAM          | 90B14  |     |
| OUTPUT TORQUE      | 177.26 | N.m |
| NOMINAL TORQUE     | 326.00 | N.m |
| NOMINAL POWER      | 2      | KW  |
| SERVICE FACTOR     | 1.82   |     |
| DYNAMIC EFFICIENCY | 0.96   |     |

#### Oil Quantity (L)

| B3/H1 | B6/H4 | B7/H3 | B8/H2 | V5/H5 | V6/H6 |
|-------|-------|-------|-------|-------|-------|
| 0.7   | 0.8   | 1.15  | 1.2   | 1.15  | 1.25  |

#### Radial and Axial Loads



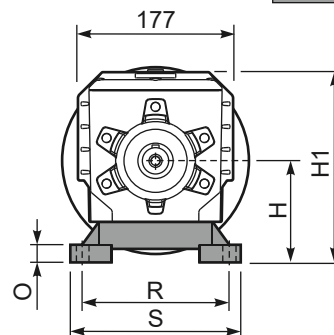
| $n_2$ [min-1] | FA [N] | FR [N] |
|---------------|--------|--------|
| 300           | 460    | 2300   |
| 200           | 520    | 2600   |
| 120           | 620    | 3100   |
| 15            | 1000   | 5000   |

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

|                                         |             |                |
|-----------------------------------------|-------------|----------------|
| <b>Gearbox weight</b><br>peso riduttore | With flange | <b>11.7 kg</b> |
|                                         | With feet   | <b>11.9 Kg</b> |



| Feet Code | Market reference | G  | H   | R       | L     | S   | H1  | O  | øI | S2 only with motor flange | B5 max. Flange | kit code   |
|-----------|------------------|----|-----|---------|-------|-----|-----|----|----|---------------------------|----------------|------------|
| B3        | 312/3            | 18 | 110 | 160     | 130   | 190 | 211 | 20 | 11 | 10 100/112B5<br>35 132B5  | -              | KC50.9.024 |
| B4        | 30/35            | 20 | 130 | 180     | 149.5 | 216 | 231 | 18 | 14 | 15 132B5                  | -              | KC60.9.024 |
| S4        | 47-57            | 30 | 115 | 135     | 165   | 170 | 216 | 25 | 14 | 5 100/112B5<br>30 132B5   | -              | KC50.9.022 |
| H3        | 023-233          | 30 | 130 | 135     | 135   | 185 | 231 | 25 | 14 | 15 132B5                  | -              | KC50.9.025 |
| M2        | 52/3             | 30 | 110 | 135+150 | 100   | 190 | 211 | 18 | 11 | 10 100/112B5<br>35 132B5  | -              | KC50.9.023 |

 Most popular types  
Tipi più diffusi

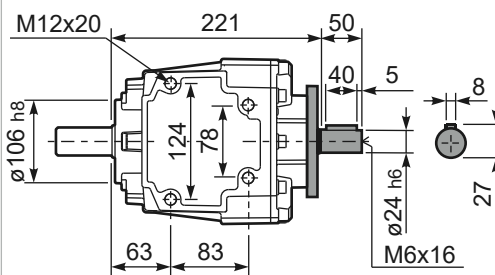
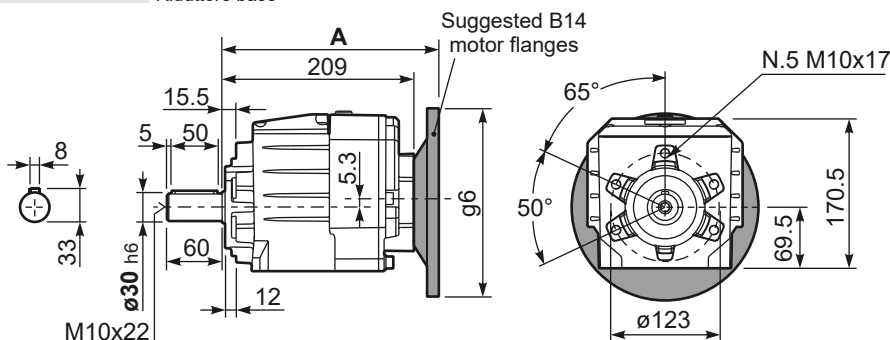
Technical drawing of the output shaft assembly. The drawing includes a front view on the left showing a circular shaft with a central hole, dimensions  $p1$  and  $x$ , and a circular detail callout labeled "Detail Y". The detail callout shows a cross-section of the shaft with dimensions  $h1$ ,  $d1$ , and  $2.5$ . The main shaft has a diameter of  $8.5$  with KC50.9.011. The side view on the right shows the shaft with dimensions  $a1$ ,  $b1$ ,  $f7$ ,  $f1$ ,  $c1$ ,  $57.5$ ,  $53$ ,  $96$ , and  $51.5$  with KC50.9.011. The detail callout "Detail Y" is also shown in the side view.

|                           | Shaft - d1 | p1 | h1 | x      |
|---------------------------|------------|----|----|--------|
| Standard                  | ø 30x60    | 8  | 33 | M10x22 |
| On request<br>A richiesta | ø 24x50    | 8  | 27 | M8x19  |
|                           | ø 25x50    | 8  | 28 | M8x19  |
|                           | ø 28x60    | 8  | 31 | M8x19  |
|                           | ø 35x60    | 10 | 38 | M10x22 |

| a1 ø | b1  | c1   | e1  | f1  | s1 | kit code   |
|------|-----|------|-----|-----|----|------------|
| 160  | 110 | 14   | 130 | 3.5 | 11 | KC50.9.011 |
| 200  | 130 | 13   | 165 | 3.5 | 11 | KC50.9.012 |
| 250  | 180 | 15.5 | 215 | 4   | 14 | KC50.9.013 |

With flange and feet only on request.  
Ask for compatibility

**R512A-N...** Input Shaft  
Albero in entrata



| <b>B5 Motor Flanges</b> | <b>A</b> | <b>C<sub>max</sub></b> | <b>g6</b> | <b>k1</b> | <b>kit code</b> | <b>k1 with KC50.9.011</b> | <b>B14 Motor Flanges</b> | <b>A</b> | <b>C<sub>max</sub></b> | <b>g6</b> | <b>k1</b> | <b>kit code</b> | <b>k1 with KC50.9.011</b> |
|-------------------------|----------|------------------------|-----------|-----------|-----------------|---------------------------|--------------------------|----------|------------------------|-----------|-----------|-----------------|---------------------------|
| 71 B5                   | 227.5    | 215.3                  | 160       | 230       | K023.4.041      | 236                       | 80 B14                   | 229.5    | 195.3                  | 120       | 232       | K085.4.046      | 238                       |
| 80/90 B5                | 229.5    | 235.3                  | 200       | 232       | K023.4.042      | 238                       | 90 B14                   | 229.5    | 205.3                  | 140       | 232       | K085.4.045      | 238                       |
| 100/112 B5              | 238.5    | 260.3                  | 250       | 241       | K023.4.043      | 247                       | 100/112 B14              | 238.5    | 215.3                  | 160       | 241       | K085.4.047      | 247                       |
| 132 B5                  | 259.5    | 285.3                  | 300       | 259       | KC51.4.043      | 265                       | 132 B14                  | 259.5    | 235.3                  | 200       | 259       | KC51.4.041      | 265                       |