

Technical Data Sheet  
Gearbox  
WORM GEARBOX SQUARE DESIGN



|                    |       |     |
|--------------------|-------|-----|
| MODEL              | M50   |     |
| Ø OUTPUT SHAFT     | 25    | mm  |
| APPROXIMATE RATIO  | 7     |     |
| EXACT RATIO        | 7.00  |     |
| OUTPUT SPEED       | 209   | RPM |
| EXACT OUTPUT SPEED | 209   | RPM |
| INPUT POWER        | 0.55  | KW  |
| INPUT ROTATION     | 1400  | RPM |
| INPUT PAM          | 80B5  |     |
| OUTPUT TORQUE      | 21.53 | N.m |
| NOMINAL TORQUE     | 57.00 | N.m |
| NOMINAL POWER      | 1.5   | KW  |
| SERVICE FACTOR     | 2.73  |     |
| DYNAMIC EFFICIENCY | 0.82  |     |



#### Oil Quantity (L)

| B3/H1 | B6/H4 | B7/H3 | B8/H2 | V5/H5 | V6/H6 |
|-------|-------|-------|-------|-------|-------|
| 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  |

#### Radial and Axial Loads



| $n_2$ [min-1] | FA [N] | FR [N] |
|---------------|--------|--------|
| 200           | 240    | 1200   |
| 100           | 300    | 1500   |
| 50            | 380    | 1900   |
| 15            | 560    | 2800   |

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

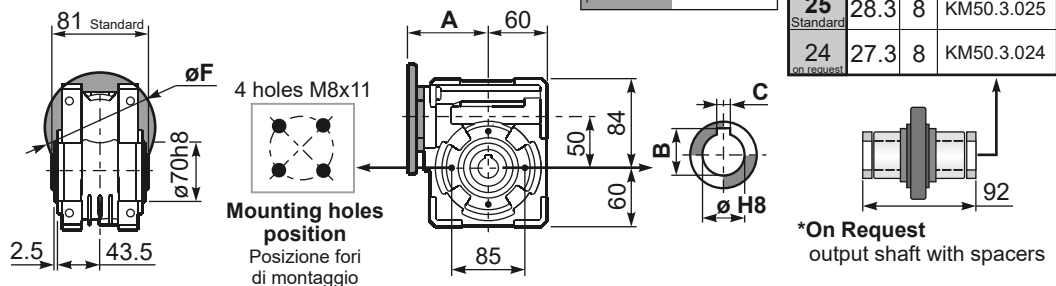
Universal Motors UK, Ltd  
Unit E2, Meltham Mills Road  
West Yorkshire HD9 4AR  
[enquiries@universalmotors-group.co.uk](mailto:enquiries@universalmotors-group.co.uk)  
TEL.: +44(0) 1484660222

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

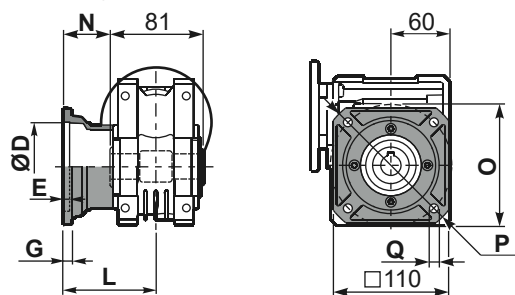
## PM50FB...

Basic wormbox  
Riduttore baseGearbox weight  
peso riduttore **3.25 kg**

| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>63B5</b>  | K050.4.041 | 138 | 83.5 |
| <b>71B5</b>  | K050.4.042 | 160 | 81   |
| <b>80B5</b>  | K050.4.043 | 200 | 81.5 |
| <b>56B14</b> | KC40.4.049 | 80  | 81   |
| <b>63B14</b> | K050.4.047 | 90  | 83.5 |
| <b>71B14</b> | K050.4.045 | 105 | 81   |
| <b>80B14</b> | K050.4.046 | 120 | 81.5 |

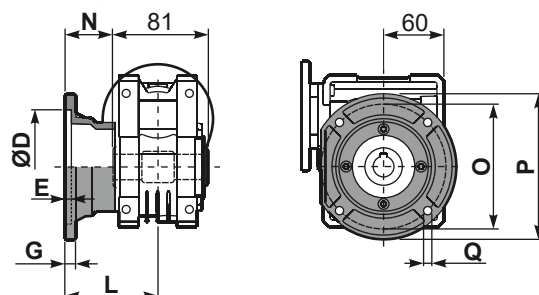


## PM50FC...

Square flange  
Flangia quadrata

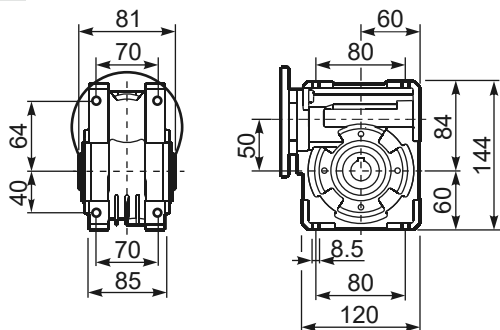
| type B    | øD    | E | G | L   | N    | O  | P   | Q  | kit code   |
|-----------|-------|---|---|-----|------|----|-----|----|------------|
| <b>FC</b> | 70 H8 | 5 | 9 | 90  | 49.5 | 85 | 125 | 11 | KM50.9.010 |
| <b>FL</b> | 70 H8 | 5 | 9 | 120 | 79.5 | 85 | 125 | 11 | KM50.9.011 |

## PM50F1...

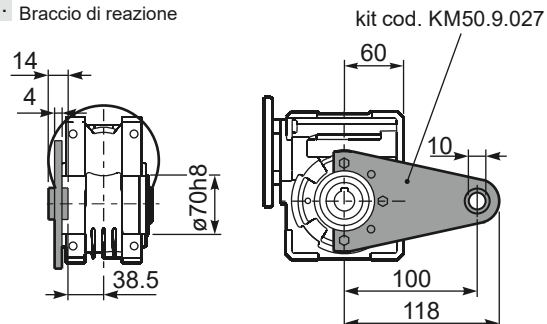
Round flange  
Flangia rotonda

| type S    | øD     | E | G    | L  | N    | O   | P   | Q   | kit code   |
|-----------|--------|---|------|----|------|-----|-----|-----|------------|
| <b>F1</b> | 110 H8 | 5 | 10   | 89 | 48.5 | 130 | 160 | 9.5 | KM50.9.012 |
| <b>F2</b> | 95 H8  | 5 | 14.5 | 72 | 31.5 | 115 | 140 | 11  | KM50.9.013 |

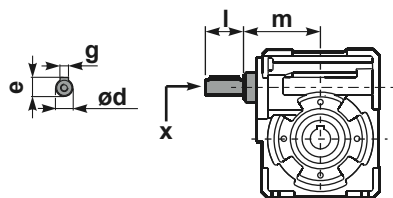
## PM50FB...

Feet  
Piedini

## PM50BR...

Reaction arm  
Braccio di reazione

## RM50FB...

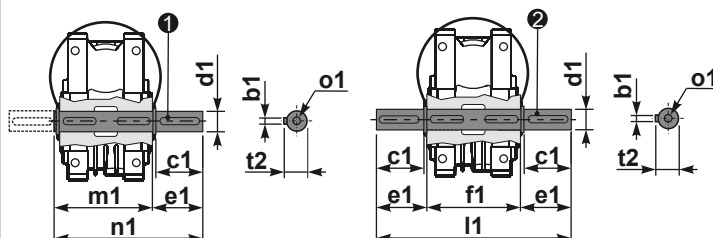
Input shaft  
Albero in entrata

|        | ød    | e  | g | l  | m    | x     | kit code                                   |
|--------|-------|----|---|----|------|-------|--------------------------------------------|
| type B | 16 h6 | 18 | 5 | 30 | 79.5 | M6x16 | ① K050.5.006 PAM71<br>② K050.5.007 PAM80   |
| type S | 14 h6 | 16 | 5 | 30 | 79.5 | M5x10 | ① KS050.5.008 PAM71<br>② KS050.5.009 PAM80 |

## PM50.....S...

Single Shaft  
Albero lento semplice

## PM50.....D...

Double Shaft  
Albero lento bisp.

- ① kit cod. K050.5.028 type B  
kit cod. KS050.5.030 type S
- ② kit cod. K050.5.029 type B

|        | b1 | c1 | d1                                     | e1   | f1 | l1  | m1   | n1  | t2 | o1    |
|--------|----|----|----------------------------------------|------|----|-----|------|-----|----|-------|
| type B | 8  | 52 | 25 <sup>-0.005</sup> <sub>-0.020</sub> | 59.5 | 81 | 200 | 86.5 | 146 | 28 | M8x20 |
| type S | 8  | 50 | 24 <sup>-0.005</sup> <sub>-0.020</sub> | 68.8 | -  | -   | 86.5 | 155 | 27 | M8x20 |