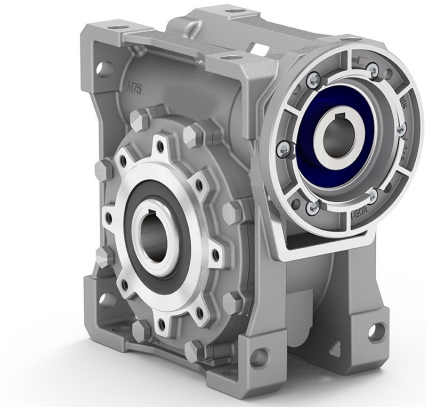
Technical Data Sheet
Gearbox
UMSG

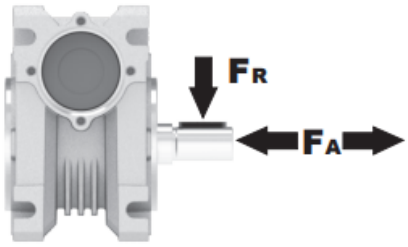
| | | |
|---|---|---|
| MODEL | UMSG90 | |
| Ø OUTPUT SHAFT | 35 | mm |
| APPROXIMATE RATIO | 80 | |
| EXACT RATIO | 80.00 | |
| OUTPUT SPEED | 18 | RPM |
| EXACT OUTPUT SPEED | 18 | RPM |
| INPUT POWER | 1.10 | KW |
| INPUT ROTATION | 1400 | RPM |
| INPUT PAM | 80B5 | |
| OUTPUT TORQUE | 378.15 | N.m |
| NOMINAL TORQUE | 285.33 | N.m |
| NOMINAL POWER | 0.83 | KW |
| SERVICE FACTOR | 0.75 | |
| DYNAMIC EFFICIENCY | 0.63 | |



## Oil Quantity (L)

| B3/H1 | B6/H4 | B7/H3 | B8/H2 | V5/H5 | V6/H6 |
|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 |

## Radial and Axial Loads




| $n_2$ [min-1] | FA [N] | FR [N] |
|---|---|---|
| 200 | 500 | 2500 |
| 100 | 600 | 3000 |
| 50 | 800 | 4000 |
| 15 | 1160 | 5800 |

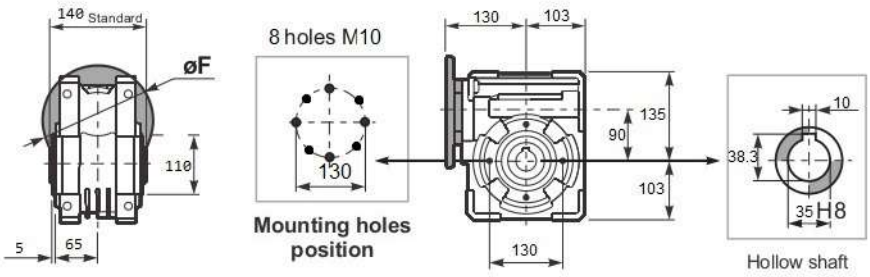
Universal Motors S.A.
Rua Comendador Brandão, 484
4495-375 Póvoa de Varzim
geral@universalmotors.pt
TEL.: 252 299 080

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

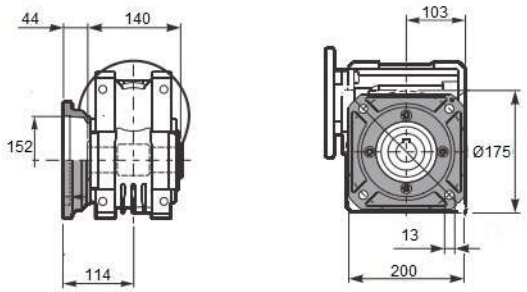
Universal Motors SL
C/La Habana n.6 nave 4 Pl Camporroso
28806 Alcala de Henares
info@universalmotors-group.es
TEL.: 918 864 213

# 3D dimensions UMSG90

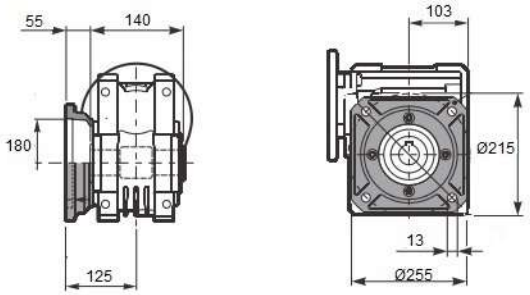
Basic wormbox



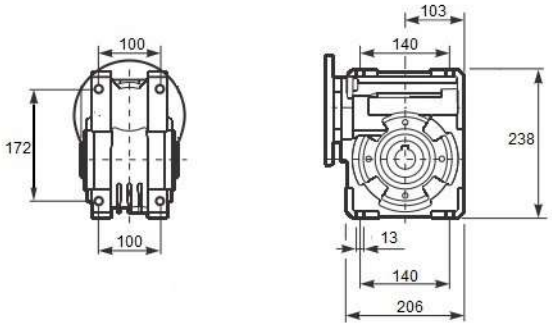

Square flange FA



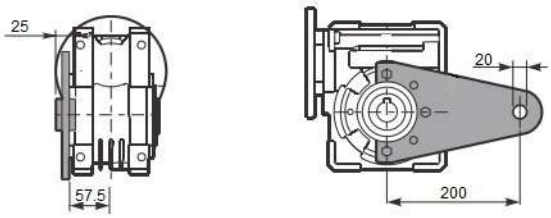

Round flange FB



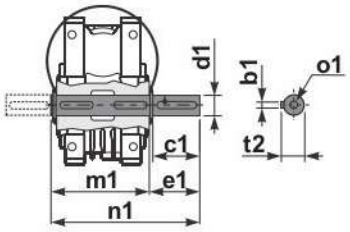

Feet




Reaction arm




Single Shaft




| b1 | c1 | d1 | e1 | m1 | n1 | t2 | o1 |
|---|---|---|---|---|---|---|---|
| 10 | 80 | 35 | 84.5 | 140 | 234 | 38 | M12 |

| 1400 rpm | N2 | Relação | P1 | FS | P1n | M2 | Rend. | Fr max | Veio | | Flanges de entrada | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | rpm | i | kW | | kW | Nm | % | N | Entrada | Saída | 80 | 90 | 100/112 |
| UMSG90 | 187 | 7,5 | 5,5 | 1,1 | 6,3 | 287 | 0,9 | 3081 | 28 | 35 | | B14/B5 | B14/B5 |
| | 140 | 10 | 5,5 | 0,9 | 5,1 | 306 | 0,89 | 3391 | | | | B14/B5 | B14/B5 |
| | 93 | 15 | 4 | 1,0 | 4,1 | 357 | 0,86 | 3882 | | | | B14/B5 | B14/B5 |
| | 70 | 20 | 3 | 1,0 | 3,1 | 351 | 0,84 | 4273 | | | | B14/B5 | B14/B5 |
| | 56 | 25 | 2,2 | 1,1 | 2,4 | 332 | 0,82 | 4603 | | | | B14/B5 | B14/B5 |
| | 47 | 30 | 2,2 | 1,2 | 2,6 | 415 | 0,78 | 4891 | | | | B14/B5 | B14/B5 |
| | 35 | 40 | 1,5 | 1,2 | 1,8 | 363 | 0,75 | 5383 | 24 | | B14/B5 | B14/B5 | |
| | 28 | 50 | 1,1 | 1,3 | 1,4 | 339 | 0,72 | 5799 | | | B14/B5 | B14/B5 | |
| | 23 | 60 | 1,1 | 1,0 | 1,1 | 307 | 0,69 | 6163 | | | B14/B5 | B14/B5 | |
| | 18 | 80 | 0,75 | 1,1 | 0,83 | 285 | 0,63 | 6783 | 19 | | B14/B5 | | |
| | 14 | 100 | 0,55 | 1,2 | 0,67 | 270 | 0,59 | 7306 | | | B14/B5 | | |