

Technical Data Sheet  
Gearbox  
WORM GEARBOX ROUND DESIGN



MODEL	110	
Ø OUTPUT SHAFT	42	mm
APPROXIMATE RATIO	25	
EXACT RATIO	23.00	
OUTPUT SPEED	58	RPM
EXACT OUTPUT SPEED	63	RPM
INPUT POWER	2.20	KW
INPUT ROTATION	1400	RPM
INPUT PAM	100B5	
OUTPUT TORQUE	276.11	N.m
NOMINAL TORQUE	515.00	N.m
NOMINAL POWER	4.1	KW
SERVICE FACTOR	1.86	
DYNAMIC EFFICIENCY	0.80	



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 Pl Camporoso  
28806 Alcala de Henares  
[info@universalmotors-group.es](mailto:info@universalmotors-group.es)  
TEL.: 918 864 213

**P110FB...** Basic wormbox  
Riduttore base

Gearbox weight  
peso riduttore **35.00 kg**

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



**P110PA...** Feet  
Piedini

**P110PB...** Feet  
Piedini

**P110PV...** Feet  
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type B	170	180	8	224	200	240	286	333	ø13	K110.9.022
type S	-	-	-	-	-	-	-	-	-	-

**P110FC...** Output flange  
Flangia uscita

**P110BR...** Reaction arm  
Braccio di reazione



type B	øD	E	G	L	N	O	P	Q	kit code
<b>FC</b>	170 <sup>+0.083</sup> / <sub>-0.043</sub>	11	16.5	131.5	54	230	270	13	① K110.9.010 ② -
<b>FL</b>	170 <sup>+0.083</sup> / <sub>-0.043</sub>	11	16.5	179.5	102	230	270	13	① K110.9.011 ② -
type S	øD	E	G	L	N	O	P	Q	kit code
<b>F1</b>	180 <sup>+0.040</sup> / <sub>0</sub>	5	18	150	72.5	215	250	15	① KS110.9.014 ② -
<b>F3</b>	180 <sup>+0.040</sup> / <sub>0</sub>	5	18	130	52.5	215	250	15	① KS110.9.013 ② -

**P110.....S...** Single Shaft  
Albero lento semplice

**P110.....D...** Double Shaft  
Albero lento bisp.



① kit cod. K110.5.028 type B

② kit cod. K110.5.029 type B

**R110FB...** 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 ② K085.5.008 PAM100
type S	24 h6	27	8	50	131.5	M8x20	① KS085.5.009 PAM90 ② KS085.5.011 PAM100

	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	-	-	-	-	-	-	-	-	-	-