

Technical Data Sheet  
Gearbox  
WORM GEARBOX ROUND DESIGN



MODEL	063	
Ø OUTPUT SHAFT	25	mm
APPROXIMATE RATIO	10	
EXACT RATIO	10.00	
OUTPUT SPEED	146	RPM
EXACT OUTPUT SPEED	146	RPM
INPUT POWER	1.10	KW
INPUT ROTATION	1400	RPM
INPUT PAM	90B14	
OUTPUT TORQUE	60.77	N.m
NOMINAL TORQUE	134.00	N.m
NOMINAL POWER	2.4	KW
SERVICE FACTOR	2.18	
DYNAMIC EFFICIENCY	0.81	



Oil Quantity (L)

B3/H1	B6/H4	B7/H3	B8/H2	V5/H5	V6/H6
0.4	0.4	0.4	0.4	0.4	0.4

Radial and Axial Loads



$n_2$ [min-1]	FA [N]	FR [N]
200	360	1800
100	460	2300
50	600	3000
15	800	4000

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 Alcalá de Henares  
[info@universalmotors-group.es](mailto:info@universalmotors-group.es)  
TEL.: 918 864 213



#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges				Available B14 motor flanges			Dynamic efficiency <b>RD</b>	Tooth Module  [mm]	Ratios code 	
							-B	-C	-D	-E	-Q	-R	-T				
							63	71	80	90	71	80	90				
200	<b>7</b>	1.8	71	1.8	<b>3.2</b>	<b>125</b>		<b>B</b>	<b>B</b>			<b>B-C</b>	<b>B-C</b>		83	3.1	01
140	<b>10</b>	1.8	99	1.4	<b>2.4</b>	<b>134</b>		<b>B</b>	<b>B</b>			<b>B-C</b>	<b>B-C</b>		81	3.1	02
93	<b>15</b>	1.5	121	1.1	<b>1.7</b>	<b>138</b>		<b>B</b>	<b>B</b>			<b>B-C</b>	<b>B-C</b>		79	3.1	03
74	<b>19</b>	1.1	111	1.2	<b>1.4</b>	<b>138</b>		<b>B</b>	<b>B</b>			<b>B-C</b>	<b>B-C</b>		78	2.6	04
58	<b>24</b>	1.1	135	1.0	<b>1.2</b>	<b>142</b>		<b>B</b>	<b>B</b>			<b>B-C</b>	<b>B-C</b>		75	2.0	05
47	<b>30</b>	1.1	167	0.9	<b>0.96</b>	<b>146</b>		<b>B</b>	<b>B</b>			<b>B-C</b>	<b>B-C</b>		74	3.2	06
39	<b>36</b>	0.75	125	1.2	<b>0.88</b>	<b>147</b>		<b>B</b>	<b>B</b>			<b>B-C</b>	<b>B-C</b>		68	2.7	07
35	<b>40</b>	0.75	135	1.0	<b>0.78</b>	<b>140</b>		<b>B</b>	<b>B</b>	<b>B</b>		<b>B-C</b>	<b>B-C</b>		66	2.5	13
31	<b>45</b>	0.55	111	1.2	<b>0.67</b>	<b>135</b>	<b>B</b>	<b>B</b>				<b>B-C</b>	<b>C</b>		66	2.1	08
23	<b>60</b>	0.55	140	0.9	<b>0.51</b>	<b>130</b>	<b>B</b>	<b>B</b>				<b>B-C</b>	<b>C</b>		62	1.6	12
21	<b>67</b>	0.55	151	0.8	<b>0.45</b>	<b>124</b>	<b>B</b>	<b>B</b>				<b>B-C</b>	<b>C</b>		60	1.5	09
17.5	<b>80</b>	0.37	115	1.0	<b>0.38</b>	<b>119</b>	<b>B</b>	<b>B</b>				<b>B-C</b>	<b>C</b>		57	1.3	10
14.9	<b>94</b>	0.37	123	1.0	<b>0.36</b>	<b>119</b>	<b>B</b>	<b>B</b>				<b>B-C</b>	<b>C</b>		52	1.1	11

**A** Motor Flanges Available  
Flange Motore Disponibili

**B** Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

**B** Available on Request without reduction bushing  
Disponibile a Richiesta senza Bussola di Riduzione

**C** Motor Flange Holes Position  
Posizione Fori Flangia Motore

**EN** Unit **063** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **063** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Für die Lebensdauerschmierung ist das Getriebe der Größe **063** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **063** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **063** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

#### LUBRICATION 063 Oil Quantity 0.40 Lt.

**SHELL** Omala S4 WE 320

**ENI** Telium VSF 320

For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

#### RADIAL AND AXIAL LOADS

##### Output shaft

Albero di uscita



$n_2$ [min <sup>-1</sup> ]	FA [N]	FR [N]
<b>200</b>	360	1800
<b>150</b>	400	2000
<b>100</b>	460	2300
<b>75</b>	500	2500
<b>50</b>	600	3000
<b>25</b>	700	3800
<b>15</b>	800	4000

##### Input shaft

albero in entrata



$n_1$ [min <sup>-1</sup> ]	FA [N]	FR [N]
<b>1400</b>	90	450

\*Strong axial loads in the DX direction are not allowed.  
Non sono consentiti forti carichi assiali con direzione DX

tab. 2