

**Service factor**

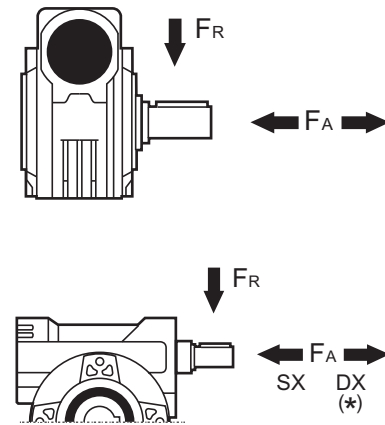
f.s.		Oper. hours per day			
		<2 h	2 - 8 h	8 - 16 h	
Continuous or intermittent appl. with start/hour	10	Uniform	0.9	1	1.25
		Moderate	1	1.25	1.5
		Heavy	1.25	1.5	1.75
Intermittent application with start/hour	> 10	Uniform	1.25	1.5	1.75
		Moderate	1.5	1.75	2
		Heavy	1.75	2	2.25

**Radial and axial loads**

n <sub>2</sub> [min <sup>-1</sup> ]	045		050		063		085	
	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]
200	40.4	202.2	53.9	269.6	80.8	404.4	112.3	561.6
150	44.9	224.6	62.9	314.5	89.8	449.3	130.3	651.5
100	49.4	247.2	67.4	337	103.3	516.7	134.8	674
75	53.9	269.6	76.4	381.9	112.3	561.6	157.2	786.3
50	58.4	314.5	85.3	426.8	134.8	674	179.7	898.6
25	67.4	404.4	107.8	561.6	157.2	853.7	224.6	1123
15	89.8	449.3	125.8	629	179.7	898.6	260.6	1303

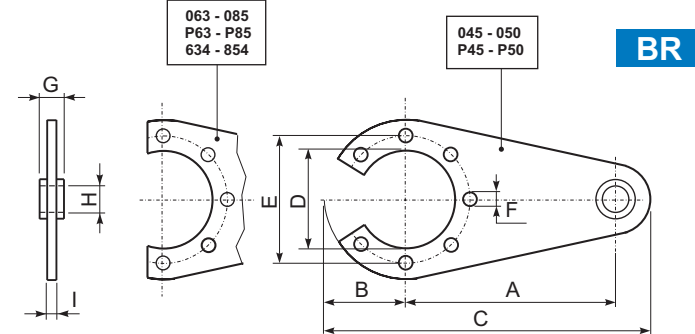
n <sub>1</sub> [min <sup>-1</sup> ]	045		050		063		085	
	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]	F <sub>A</sub> [lb.]	F <sub>R</sub> [lb.]
1400	9.4	47.1	17	85.3	20.2	101.1	35.9	181.7

\* Strog axial loads in the DX direction are not allowed



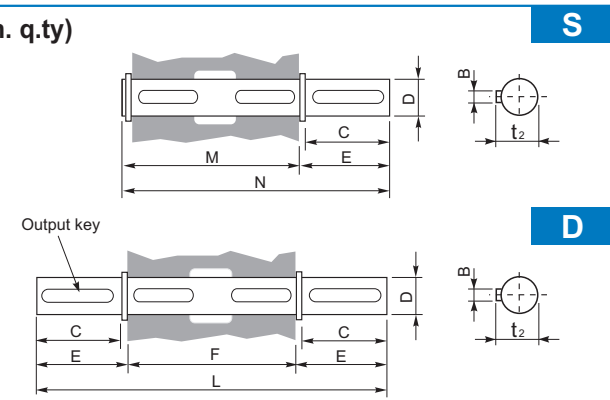
**Reaction arm**

	A	B	C	D	E	F	G	H	I
045	3.93	1.77	6.22	1.96	2.55	0.27	0.15	0.31	0.15
050	3.93	2.16	6.81	2.67	3.70	0.27	0.15	0.31	0.15
063	5.90	2.16	9.25	2.95	3.54	0.35	0.78	0.39	0.23
085	7.87	3.14	12.59	4.33	5.11	0.43	0.98	0.78	0.23



**Single and double output shaft (On request with min. q.ty)**

	C	D	E	F	L	M	N	output key
045	1.26	0.750	1.69	2.55	5.94	2.75	4.44	3/16 SQ.
050	2.04	1.000	2.36	3.18	7.87	3.46	5.74	1/4 SQ.
063	2.36	1.125	2.48	4.72	9.70	5.00	7.48	1/4 SQ.
085	2.36	1.500	2.89	5.31	11.1	5.51	8.42	3/8 SQ.



P<sub>IM</sub> [HP] = input power (n<sub>1</sub>=1750 min<sup>-1</sup>)

n<sub>2</sub> [min<sup>-1</sup>] = output speed (n<sub>1</sub>=1750 min<sup>-1</sup>)

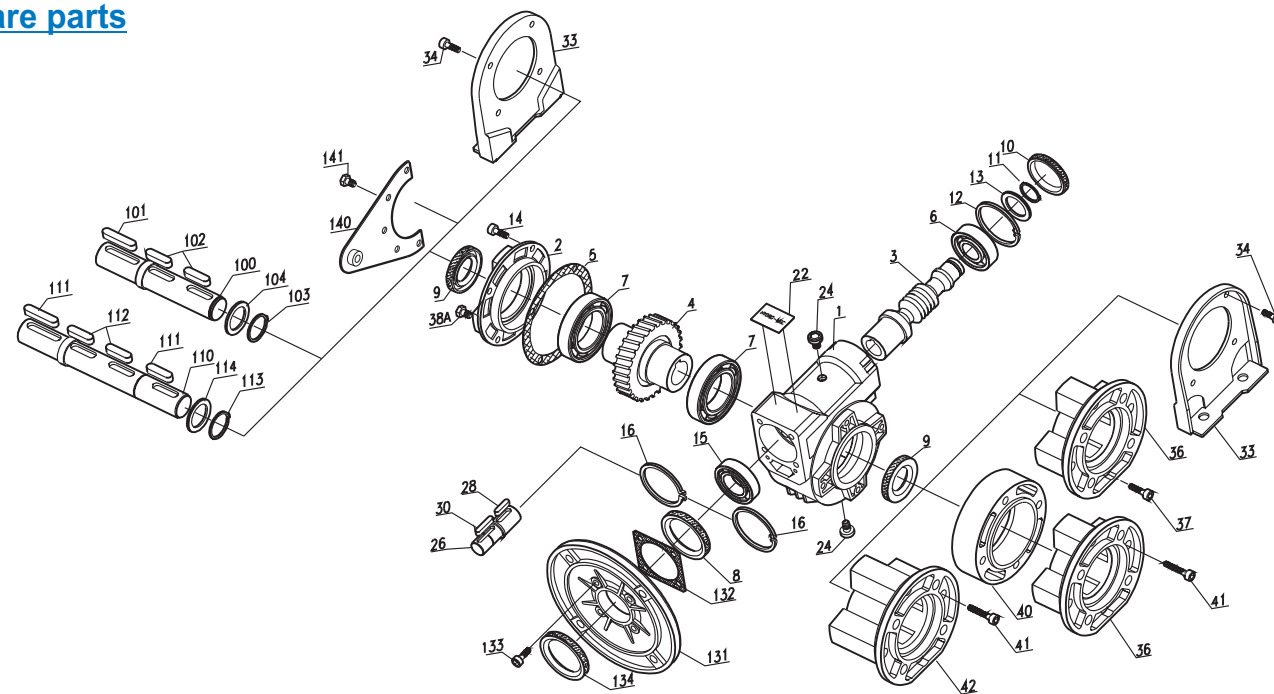
M<sub>2M</sub> [lb.in.] = trasmitted output torque

☐ = motor flange available    ○ |    ⊞ = connection by means of reduction bush

**Codifica / How to order**

P	045	PA	10	U	Ø	W	B3
Type	Size	Mounting	Ratio	Hub	Output shaft	Motor size	Mounting Position
	<b>045</b> <b>050</b> <b>063</b> <b>085</b>						
<b>P</b>		<b>FB</b> <b>PA</b>	STANDARD 045 ⇔ 0.750 050 ⇔ 1.000 063 ⇔ 1.125 085 ⇔ 1.500	<b>U</b>	<b>Ø</b>	With Flange for type <b>P</b> <b>W</b> ⇔ 56C <b>X</b> ⇔ 143/5TC <b>Y</b> ⇔ 182/4TC	
						For Modular Base type <b>B</b> 045 ⇔ ø5/8 050 ⇔ ø5/8 063 ⇔ ø7/8 085 ⇔ ø1-1/8	
<b>B</b>		<b>FC</b> <b>PV</b>			<b>S</b>	<b>Z</b> For Type - R	
<b>R</b>		<b>FL</b> <b>F1</b> <b>F2</b> <b>F3</b> <b>F4</b> <b>PB</b>			<b>D</b> Only for min. q.ty		
<b>M</b>		<b>BR</b>					

**Spare parts**



**Rightangle-Gears**



Manufactured by :

**HYDRO-MEC s.r.l.**

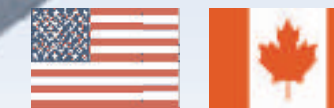
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[hydromec@hydromec.com](mailto:hydromec@hydromec.com)

# Rightangle-Gears

BU - Catalogue

**Worm gear speed reducers for NEMA motors / Inch dimensions.**



**HP: From 1/4 To 7 1/2**

**Catalog V5F-BU-2005**  
Effective: JANUARY 2005

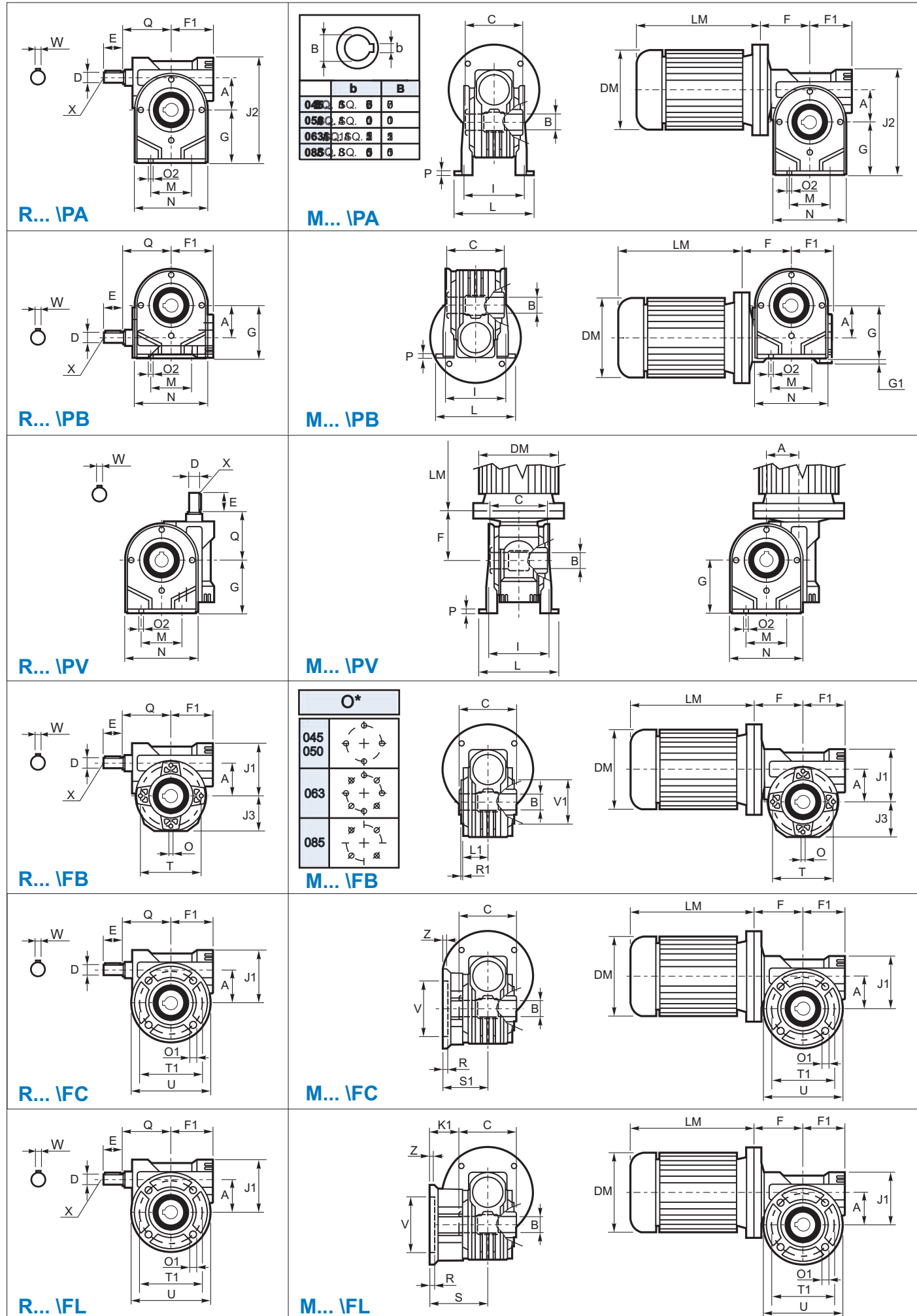
**Selection** Available motor flanges  $n_1=1750 \text{ min}^{-1}$

Type	$n_2$ [min <sup>-1</sup> ]	i	$P_{1M}$ [HP]	$M_{2M}$ [lb.in.]	f.s.	W			RD	Type	
						56C	143/5TC	182/4TC			
<b>045</b>	250	7	1.00	202	1.3					80	<b>045</b>
	175	10	0.75	212	1.25					79	
	125	14	0.75	290	0.9					77	
	83.3	21	0.50	252	1.4					67	
	62.5	28	0.50	325	1.1					65	
	47.3	37	0.33	277	1.3					63	
	38	46	0.33	322	1.0					59	
	29.1	60	0.33	399	0.8					56	
25	70	0.33	449	<0.7					54		
17.1	102	0.33	594	<0.7					49		
<b>050</b>	250	7	2.00	413	1.1					82	<b>050</b>
	175	10	1.50	432	1.2					80	
	125	14	1.00	398	1.4					79	
	97.2	18	1.00	486	1.1					75	
	67.3	26	0.75	482	1.1					69	
	48.6	36	0.50	444	1.4					69	
	40.7	43	0.50	508	1.1					66	
	29.1	60	0.33	413	1.2					58	
25.7	68	0.33	460	1.0					57		
21.9	80	0.33	513	0.9					54		
17.5	100	0.33	594	0.7					50		
<b>063</b>	250	7	3.00	627	1.7	B				83	<b>063</b>
	175	10	3.00	875	1.3	B				81	
	116.7	15	2.00	853	1.4	B				79	
	92.1	19	2.00	1067	1.1	B				78	
	72.9	24	1.50	972	1.2	B				75	
	58.3	30	1.50	1199	1.0	B				74	
	48.6	36	1.00	881	1.4	B				68	
	38.9	45	1.00	1069	1.1	B				66	
	26.1	67	0.50	719	1.5	B				60	
	21.9	80	0.50	815	1.2	B				57	
18.6	94	0.50	874	1.0	B				52		
<b>085</b>	250	7	7.50	1663	1.3	B	B			88	<b>085</b>
	175	10	5.00	1440	1.6	B	B			80	
	125	14	5.00	1965	1.3	B	B			78	
	87.5	20	3.00	1706	1.5	B	B			79	
	62.5	28	3.00	2268	1.2	B	B			75	
	46	38	2.00	1942	1.5	B	B			71	
	33.6	52	1.50	1853	1.3	B	B			66	
	26.1	67	1.00	1567	1.5	B	B			65	
	18.2	96	1.00	1831	1.1	B	B			53	

Type	Code
56C → 143/5TC	KBRU56143
143/5TC → 182/4TC	KBRU143182
182/4TC → 56C	KBRU18256

$P_{1M}$  [HP] = input power ( $n_1=1750 \text{ min}^{-1}$ )  
 $n_2$  [min<sup>-1</sup>] = output speed ( $n_1=1750 \text{ min}^{-1}$ )  
 $M_{2M}$  [lb.in.] = transmitted output torque  
 [B] = motor flange available  
 [B] = connection by means of reduction bush

**Dimensions**



**Dimensions**

	045	050	063	085
A	1.77	1.96	2.48	3.34
B	0.750	1.000	1.125	1.500
C	2.56	3.18	4.72	5.31
D	0.625	0.625	0.750	0.875
E	1.18	1.18	1.75	1.75
F Max	2.91	3.20	3.91	4.88
F1	2.16	2.56	3.11	3.85
G	2.83	3.22	3.93	5.59
I	3.14 - 3.18	3.85 - 3.93	4.33 - 4.37	5.70
J	4.76	5.45	6.69	9.31
J1	2.83	3.18	3.93	5.43
J2	5.66	6.41	7.87	11.02
J3	1.93	2.14	2.75	3.72
L	3.93	4.84	5.66	7.16
L1	1.37	1.49	1.77	2.52
M	1.96 - 2.04	2.48 - 2.56	3.74	5.51
N	3.85	4.44	5.23	7.08
O	4 - M6x0.55	4 - M6x0.35	8 - M8x0.66	4 - M10x0.70
O1	0.33	0.41	0.41	0.51
O2	0.41	0.41	0.41	0.41
P	0.12	0.13	0.15	0.19
Q	2.67	2.93	3.66	4.40
R	0.35	0.35	0.27	0.19
R1	0.07	0.12	0.19	0.13
S (FL)	3.56	4.50	4.56	5.84
S1 (FC)	2.38	3.34	3.38	4.25
T	2.55	3.70	3.54	5.11
T1	3.42	3.54	5.90	6.92
U	4.33	4.84	6.88	8.07
V	2.36	2.75	4.52	5.98
V1	1.96	2.67	2.95	4.33
W	3/16 SQ.x1.00	3/16 SQ.x1.00	3/16 SQ.x1.50	3/16 SQ.x1.50
X	---	M6	M6	M8
Z	0.35	0.47	0.51	0.62
lb. (FB)	5.28	6.60	13.21	24.23

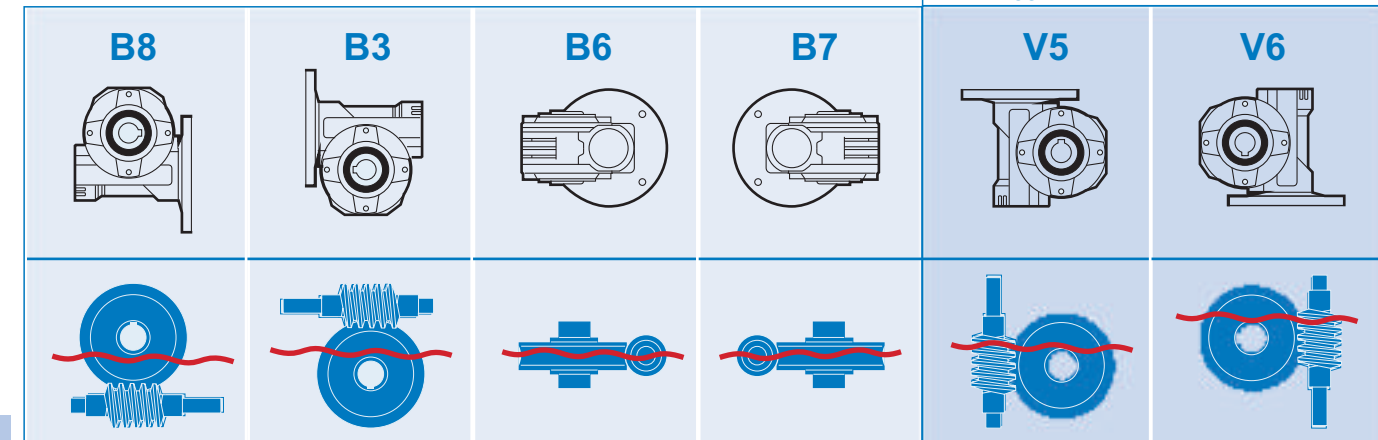
**LUBRICATION**

Units 045 to 085 are supplied with synthetic oil, providing " long life " lubrication for mounting positions B3-B6-B7-B8 (maintenance is not necessary). For V5-V6 please contact us.

	AGIP	KLUBER	SHELL	MOBIL	ESSO
045 + 085	Tellium VSF 320	Syntheso D220 EP	Tivela Oil WB	Glygoyl 30 SHC 630	---

	045	050	063	085
Q.tà / Q.ty	3.35 (oz)	6.35 (oz)	14.11 (oz)	42.32 (oz)

**Posizioni di montaggio standard/ Standard mounting positions**



Consigliato per utilizzi a intermittenza / Suggested for intermittence uses.