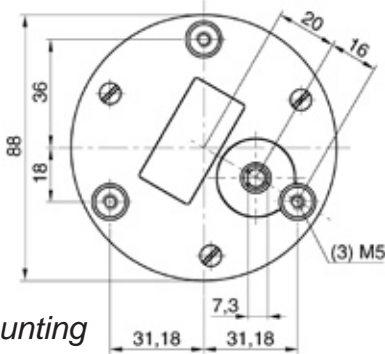




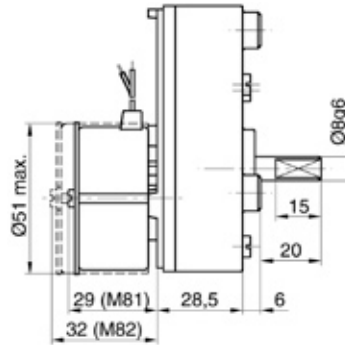
# series K50

5 Nm

## GEARBOX

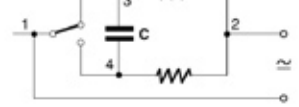


K50-Mounting

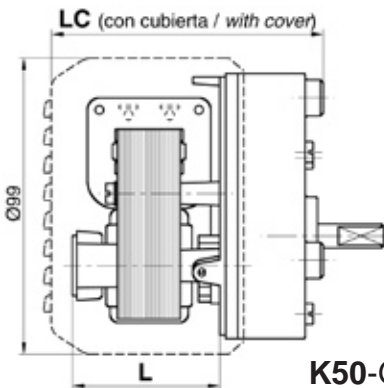


K50-M81  
K50-M82

Wiring diagram



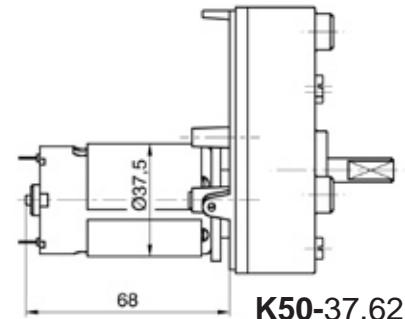
V.- Hz. 50/60	C		Color del hilo/Wire colours		
	µF	V.T	(2)	(3)	(4)
110	0,47	250	azul blue	naranja orange	violeta violet
230	0,12	630	azul blue	blanco white	rojo red



K50-G...

LONGITUDES TOTALES - TOTAL LENGTH

Tipo-Type	L	LC	LC+COMPLEMENTOS - ACCESORIES			
			VV	DS+VV	FU	DS FDS
K50-G411	39	82	107	126	107	126
K50-G416	44	82	107	126	107	126
K50-G620	48	91	107	-	107	-
K50-G630	58	109	126	-	126	-
K50-G640	68	109	126	-	126	-



K50-37.62

## TECHNICAL CHARACTERISTICS

Gearbox for heavy duty continuous workload in any position, at room temperature from -20° to 50°C, with torque load up to 5 Nm.

- **Box.** Die-cast zamak. Frontal mounting by three M5 threaded holes.
- **Gearset.** Spur gearset with hardened steel pinions and steel gearwheels with superficial thermal treatment, which turns on rectified hardened steel shafts attached to the box.
- **Output shaft.** Steel shaft Ø8 mm and 20 mm. long with a flat surface. This shaft turns on ball bearings.
- **Maximal output shaft load:**  
Axial pull. 400 N ≈ 40 Kg.  
Axial push. 400 N ≈ 40 Kg.  
Radial at 10 mm. from flange. 250 N ≈ 25 Kg.
- **Lubrication.** Lithium grade 2 grease lubricant.
- **Weight.** With maximal number of stages 0.5 Kg.


### MOTOR COUPLING.

- **DC Motors.** Type 37.62 at 12 and 24 V. DC.

### OPTIONAL.

- **Motor cover CP.** ABS plastic cover protector with lead wires 250 mm. long.
- **Torque limiter.** The last gearwheel drives the output shaft through a friction device with an adjusted torque to a maximal of 4.9 Nm ± 10%.

Your special requests are welcome

			MOTORES DE C.C. - DC MOTORS					
			12 V			24 V		
Reducción Ratio $i = X:1$	Nº Pasos Stages	Factor de par Torque factor	Velocidad en vacío	Velocidad nominal	Par Nominal	Velocidad en vacío	Velocidad nominal	Par Nominal
			No load speed Vo (r.p.m.)	Nominal speed Vn (r.p.m.)	Nominal torque (N.m)	No load speed Vo (r.p.m.)	Nominal speed Vn (r.p.m.)	Nominal torque (N.m)
7,7	2	6,24	539	478	0,12	487	445	0,12
11,6	2	9,40	358	317	0,18	323	296	0,18
19,1	2	15,47	217	193	0,30	196	180	0,29
23,1	3	16,84	180	159	0,32	162	148	0,32
29,1	3	21,21	143	126	0,41	129	118	0,40
34,9	3	25,44	119	105	0,49	107	98	0,48
47,7	3	34,77	87	77	0,66	79	72	0,66
57,3	3	41,77	72	64	0,80	65	60	0,79
76,4	3	55,70	54	48	1,06	49	45	1,06
95,5	3	69,62	43	39	1,33	39	36	1,32
120	4	78,73	35	31	1,50	31	29	1,50
143	4	93,82	29	26	1,79	26	24	1,78
191	4	125,32	22	19	2,39	20	18	2,38
229	4	150,25	18	16	2,87	16	15	2,85
239	4	156,81	17	15	3,00	16	14	2,98
287	4	188,30	14	13	3,60	13	12	3,58
358	5	211,40	12	10	4,04	10	10	4,02
430	5	253,91	10	9	4,85	9	8	4,82
478	5	282,25	9	8	Ex par/torque máx. 5 N.m	8	7	Ex par/torque máx. 5 N.m
573	5	338,35	7	6		7	6	
688	5	406,26	6	5,3		5,5	5	
717	5	423,38	5,8	5,1		5,2	4,8	
860	5	507,82	5	4,3		4,4	4	
956	5	564,51	4	3,8		3,9	3,6	
1.434	5	846,76	3	3		3	2	
1.911	6	1.015,58	2	2		2	2	
2.866	6	1.523,11	1	1		1	1	
4.300	6	2.285,20	1 min	1,2 min		1,1 min	1,25 min	
5.733	6	3.046,75	1,4 min	1,6 min	1,5 min	1,6 min		
7.166	6	3.808,31	1,7 min	1,9 min	1,9 min	2 min		
8.600	7	4.113,35	2 min	2,3 min	2,3 min	2,5 min		
12.900	7	6.170,03	3,1 min	3,5 min	3,3 min	3,7 min		
14.333	7	6.855,43	3,4 min	3,9 min	3,7 min	4,2 min		
17.200	7	8.226,71	4,1 min	4,7 min	4,8 min	5 min		
21.500	7	10.283,38	5,2 min	5,8 min	5,7 min	6,3 min		
22.933	7	10.968,78	5,5 min	6,2 min	6,1 min	6,7 min		
25.800	8	11.106,05	6,2 min	7 min	6,9 min	7,5 min		
34.400	8	14.808,07	8,3 min	9,3 min	9,2 min	10 min		
43.000	8	18.510,09	10,4 min	11,7 min	11,5 min	12,5 min		
45.867	8	19.744,24	11 min	12,5 min	12,2 min	13,4 min		
51.600	8	22.212,11	12,4 min	14 min	13,7 min	15 min		
57.333	8	24.679,98	13,8 min	15,6 min	15,3 min	16,7 min		
68.800	8	29.616,14	16,6 min	18,7 min	18,3 min	20 min		
71.666	8	30.849,86	17,3 min	19,5 min	19,1 min	20,9 min		
86.000	8	37.020,18	20,7 min	23,4 min	23 min	25 min		
91.733	8	39.488,05	22,1 min	24,9 min	24,5 min	26,7 min		
114.666	8	49.359,95	27,6 min	31,1 min	30,6 min	33,4 min		
143.333	8	61.700,16	34,5 min	57 min	38,2 min	41,8 min		

**VELOCIDAD EN VACÍO/PAR NOMINAL  
NO LOAD SPEED/NOMINAL TORQUE**

Motor 37.62-12 V= 4.150 r.p.m./0,0191 N.m.  
Motor 37.62-24 V= 3.750 r.p.m./0,0190 N.m.

**ATENCIÓN:** Las velocidades pueden verse influenciadas por la carga hasta un -40%.  
**WARNING:** The load might reduce final speed up to 40%.

**RECOMENDACIONES:**

**Nivel de ruido:** el nivel de ruido del reductor depende de la uniformidad de la carga, ubicación (evitar resonancia) y de la velocidad; a menor velocidad, principalmente la del motor, menor nivel de ruido.

**Par admisible:** sobrepasar la carga máx. implica disminuir sensiblemente la vida del reductor.

**Evitar** montar o desmontar ninguna pieza a golpes en el eje de salida, ya que podría dañar el reductor de forma irreparable.

**GEARBOX TIPS:**

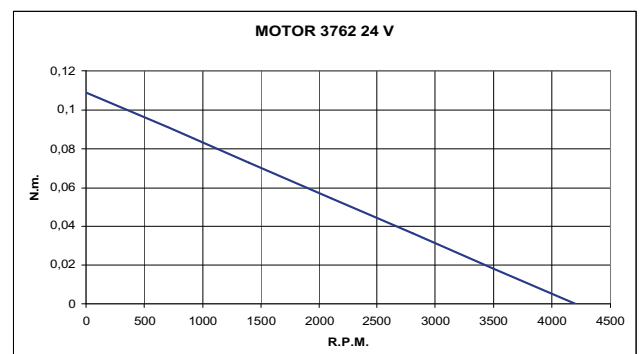
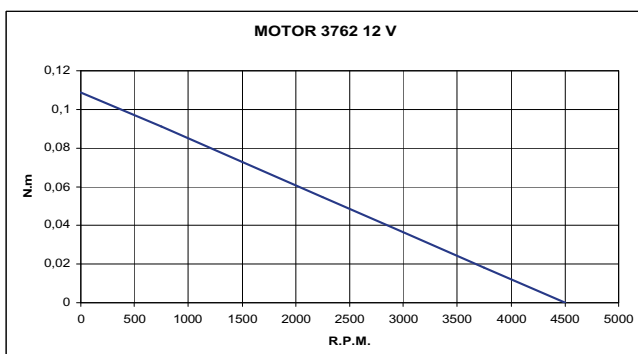
**Noise.** Noise level depends on load symmetry, location (avoid acoustic resonance), and rotation speed; the lower the speed on the input shaft (motor), the lower the noise.

**Load torque.** Overloading of the output shaft will reduce the gearbox life.

**Warning.** Impact on the output when engaging the load could damage the gearbox.

**Ex** Excede el máximo par admisible  
Exceeds maximal admissible torque

**CURVAS - CURVES**

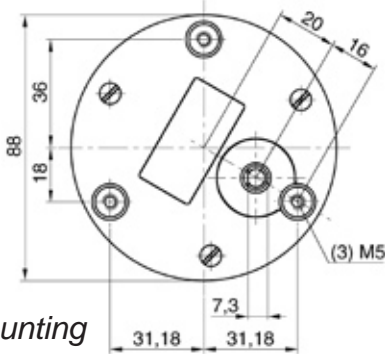




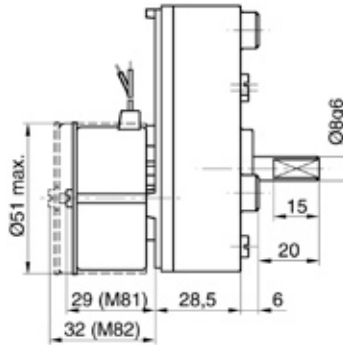
# series K50

5 Nm

## GEARBOX

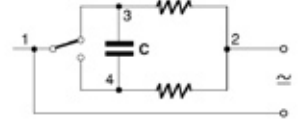


K50-Mounting

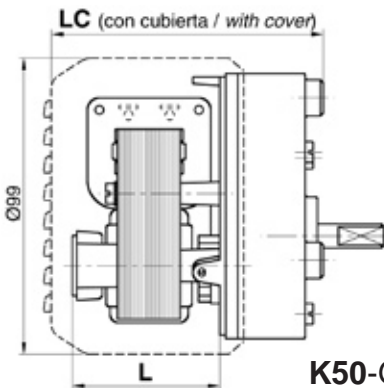


K50-M81  
K50-M82

Wiring diagram



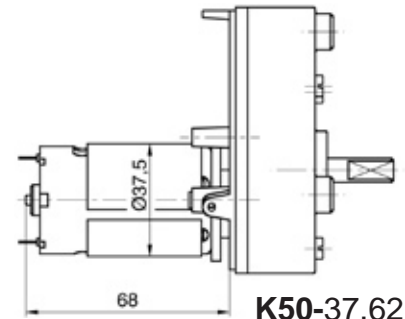
V.- Hz. 50/60	C		Color del hilo/Wire colours		
	µF	V.T	(2)	(3)	(4)
110	0,47	250	azul blue	nararanja orange	violeta violet
230	0,12	630	azul blue	blanco white	rojo red



K50-G...

LONGITUDES TOTALES - TOTAL LENGTH

Tipo-Type	L	LC	LC+COMPLEMENTOS - ACCESORIES			
			VV	DS+VV	FU	DS FDS
K50-G411	39	82	107	126	107	126
K50-G416	44	82	107	126	107	126
K50-G620	48	91	107	-	107	-
K50-G630	58	109	126	-	126	-
K50-G640	68	109	126	-	126	-



K50-37.62

## TECHNICAL CHARACTERISTICS

Gearbox for heavy duty continuous workload in any position, at room temperature from -20° to 50°C, with torque load up to 5 Nm.

- **Box.** Die-cast zamak. Frontal mounting by three M5 threaded holes.
- **Gearset.** Spur gearset with hardened steel pinions and steel gearwheels with superficial thermal treatment, which turns on rectified hardened steel shafts attached to the box.
- **Output shaft.** Steel shaft Ø8 mm and 20 mm. long with a flat surface. This shaft turns on ball bearings.
- **Maximal output shaft load:**  
 Axial pull. 400 N ≈ 40 Kg.  
 Axial push. 400 N ≈ 40 Kg.  
 Radial at 10 mm. from flange. 250 N ≈ 25 Kg.
- **Lubrication.** Lithium grade 2 grease lubricant.
- **Weight.** With maximal number of stages 0.5 Kg.


### MOTOR COUPLING.

- **AC Motors.** G... series ASYNCHRONOUS motors, 230 V. 50 Hz. (For others, ask for information). See information ASYNCHRONOUS motors G series.

### OPTIONAL.

- **Motor cover CP.** ABS plastic cover protector with lead wires 250 mm. long.
- **Torque limiter.** The last gearwheel drives the output shaft through a friction device with an adjusted torque to a maximal of 4.9 Nm ± 10%.

Your special requests are welcome

			MOTORES ASINCRONOS ASYNCHRONOUS MOTOR					
				G.411	G.416	G.620	G.630	G.640
Reducción Ratio $i = X:1$	Nº Pasos Stages	Factor de par Torque factor	Velocidad en vacío No load speed Vo (r.p.m.)	Par Nominal Nominal torque (N.m)	Par Nominal Nominal torque (N.m)	Par Nominal Nominal torque (N.m)	Par Nominal Nominal torque (N.m)	Par Nominal Nominal torque (N.m)
1,9	1	1,71	1.516	0,01	0,03	0,03	0,04	0,05
2,8	1	2,52	1.029	0,02	0,04	0,05	0,05	0,07
4,1	1	3,69	702	0,03	0,05	0,07	0,08	0,10
7,7	2	6,24	374	0,05	0,09	0,11	0,13	0,18
11,6	2	9,40	248	0,08	0,14	0,17	0,20	0,26
19,1	2	15,47	151	0,12	0,22	0,28	0,33	0,43
23,1	3	16,84	125	0,14	0,25	0,30	0,36	0,47
29,1	3	21,21	99	0,17	0,31	0,38	0,45	0,60
34,9	3	25,44	83	0,20	0,37	0,46	0,54	0,71
47,7	3	34,77	60	0,28	0,51	0,63	0,74	0,98
57,3	3	41,77	50	0,34	0,61	0,75	0,88	1,17
76,4	3	55,70	38	0,45	0,81	1,00	1,18	1,56
95,5	3	69,62	30	0,56	1,01	1,26	1,47	1,95
120	4	78,73	24	0,62	1,13	1,40	1,65	2,18
143	4	93,82	20	0,74	1,35	1,67	1,96	2,60
191	4	125,32	15	0,99	1,80	2,24	2,62	3,48
229	4	150,25	13	1,19	2,16	2,68	3,14	4,17
239	4	156,81	12	1,24	2,25	2,80	3,28	4,35
287	4	188,30	10	1,49	2,71	3,36	3,94	
358	5	211,40	8,0	1,69	3,06	3,80	4,46	D= 0,70 R= 1,60 BR= 2,28
430	5	253,91	6,7	2,03	3,68	4,57		
478	5	282,25	6,0	2,26	4,09		D= 0,70 R= 1,66 BR= 2,2	
573	5	338,35	5,0	2,71	4,90			
688	5	406,26	4,2	3,25		D= 0,70 BR= 1,7		
717	5	423,38	4,0	3,38	D= 0,70 R= 1,36			
860	5	507,82	3,3		D= 0,75			
956	5	564,51	3,0					
1.434	5	846,76	2,0					
1.911	6	1015,58	1,5					
2.866	6	1523,11	1,0					
4.300	6	2285,20	1,5					
5.733	6	3046,75	2,0					
7.166	6	3808,31	2,5					
8.600	7	4113,35	3,0					
12.900	7	6170,03	4,5					
14.333	7	6855,43	5,0					
17.200	7	8226,71	6,0					
21.500	7	10283,38	7,5					
22.933	7	10968,78	8,0					
25.800	8	11106,05	9,0					
34.400	8	14808,07	12					
43.000	8	18510,09	15					
45.867	8	19744,24	16					
51.600	8	22212,11	18					
57.333	8	24679,98	20					
68.800	8	29616,14	24					
71.666	8	30849,86	25					
86.000	8	37020,18	30					
91.733	8	39488,05	32					
114.666	8	49359,95	40					
143.333	8	61700,16	50					

**BOBINAS ESPECIALES**  
**D:** Par debilitado.  
**R:** Par reforzado.  
**BR:** Par bi-reforzado.  
 Multiplicar el par por el factor correspondiente.

**SPECIAL WINDINGS**  
**D:** Low torque.  
**R:** Extra torque  
**BR:** Super extra torque.  
 Multiply torque by the corresponding factor.

**Ex**  
 par/torque  
 máx. 5 N.m

**VELOCIDAD EN VACIO/PAR DE ARRANQUE  
 NO LOAD SPEED/STARTING TORQUE**  
 Motor **G411**= 2.650 r.p.m./0,0080 N.m.  
 Motor **G416**= 2.800 r.p.m./0,0145 N.m.  
 Motor **G620**= 2.700 r.p.m./0,0180 N.m.  
 Motor **G630**= 2.750 r.p.m./0,0211 N.m.  
 Motor **G640**= 2.850 r.p.m./0,0280 N.m

**Ex**  
 Excede el máximo par admisible  
 Exceeds maximal admissible torque

**RECOMENDACIONES:**

**Nivel de ruido:** el nivel de ruido del reductor depende de la uniformidad de la carga, ubicación (evitar resonancia) y de la velocidad; a menor velocidad, principalmente la del motor, menor nivel de ruido.

**Par admisible:** sobrepasar la carga máx. implica disminuir sensiblemente la vida del reductor.

**Evitar** montar o desmontar ninguna pieza a golpes en el eje de salida, ya que podría dañar el reductor de forma irreparable.

**GEARBOX TIPS:**

**Noise.** Noise level depends on load symmetry, location (avoid acoustic resonance), and rotation speed; the lower the speed on the input shaft (motor), the lower the noise.

**Load torque.** Overloading of the output shaft will reduce the gearbox life.

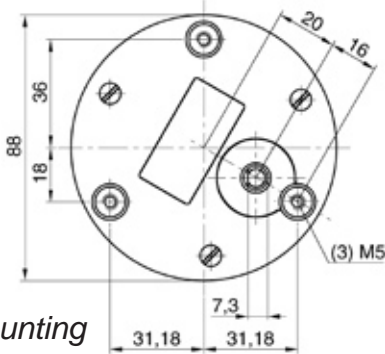
**Warning.** Impact on the output when engaging the load could damage the gearbox.



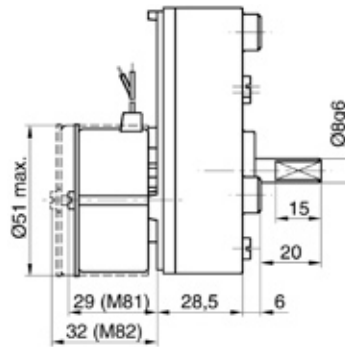
# series K50

5 Nm

## GEARBOX

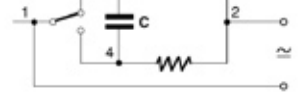


K50-Mounting

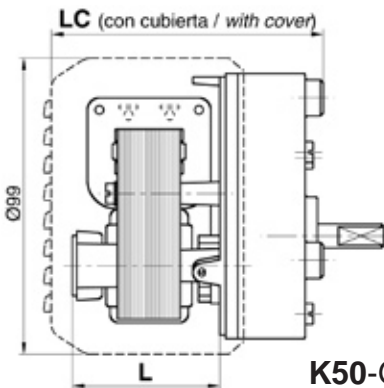


K50-M81  
K50-M82

Wiring diagram



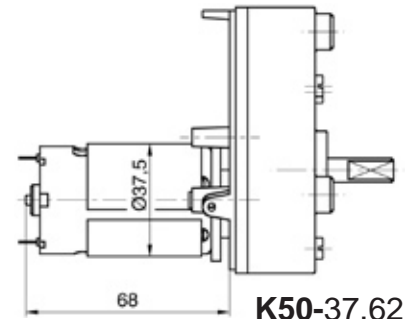
V.- Hz. 50/60	C		Color del hilo/Wire colours		
	µF	V.T	(2)	(3)	(4)
110	0,47	250	azul blue	nararanja orange	violeta violet
230	0,12	630	azul blue	blanco white	rojo red



K50-G...

LONGITUDES TOTALES - TOTAL LENGTH

Tipo-Type	L	LC	LC+COMPLEMENTOS - ACCESORIES			
			VV	DS+VV	FU	DS FDS
K50-G411	39	82	107	126	107	126
K50-G416	44	82	107	126	107	126
K50-G620	48	91	107	-	107	-
K50-G630	58	109	126	-	126	-
K50-G640	68	109	126	-	126	-



K50-37.62

## TECHNICAL CHARACTERISTICS

Gearbox for heavy duty continuous workload in any position, at room temperature from -20° to 50°C, with torque load up to 5 Nm.

- **Box.** Die-cast zamak. Frontal mounting by three M5 threaded holes.
- **Gearset.** Spur gearset with hardened steel pinions and steel gearwheels with superficial thermal treatment, which turns on rectified hardened steel shafts attached to the box.
- **Output shaft.** Steel shaft Ø8 mm and 20 mm. long with a flat surface. This shaft turns on ball bearings.
- **Maximal output shaft load:**  
 Axial pull. 400 N ≈ 40 Kg.  
 Axial push. 400 N ≈ 40 Kg.  
 Radial at 10 mm. from flange. 250 N ≈ 25 Kg.
- **Lubrication.** Lithium grade 2 grease lubricant.
- **Weight.** With maximal number of stages 0.5 Kg.

### MOTOR COUPLING.


- SYNCHRONOUS one turn direction type M81 230 V. 50 Hz. M82 two turning directions.

### OPTIONAL.

- **Motor cover CP.** ABS plastic cover protector with lead wires 250 mm. long.
- **Torque limiter.** The last gearwheel drives the output shaft through a friction device with an adjusted torque to a maximal of 4.9 Nm ± 10%.

Your special requests are welcome



			MOTORES SINCRONOS SYNCHRONOUS MOTORS			
			M81		M82	
Reducción <i>Ratio</i> <b>i = X:1</b>	Nº Pasos <i>Stages</i>	Factor de par <i>Torque factor</i>	Velocidad nominal <i>Nominal speed Vn</i> (r.p.m.)	Par Nominal <i>Nominal torque</i> (N.m)	Velocidad nominal <i>Nominal speed Vn</i> (r.p.m.)	Par Nominal <i>Nominal torque</i> (N.m)
50	3	36,45	12	0,29	5	1,37
60	3	43,74	10	0,35	4	1,64
80	3	58,32	8	0,47	3,1	2,19
100	3	72,90	6	0,58	2,5	2,73
125	4	82,01	5	0,66	2	3,08
150	4	98,42	4	0,79	1,7	3,69
200	4	131,22	3	1,05	1	4,92
250	4	164,03	2,4	1,31	1 min	
300	4	196,83	2	1,57	1,2 min	
375	5	221,43	1,6	1,77	1,5 min	
500	5	295,25	1	2,36	2,0 min	
600	5	354,29	1 min	2,83	2,4 min	
750	5	442,87	1,2 min	3,54	3,0 min	
1.000	5	590,49	1,6 min	4,72	4,0 min	
1.500	5	885,74	2,5 min		6,0 min	
2.000	6	1062,88	3,3 min		8,0 min	
2.500	6	1328,60	4,2 min		10,0 min	
3.000	6	1594,32	5,0 min		12,0 min	
3.750	6	1992,90	6,2 min		15,0 min	
4.500	6	2391,48	7,7 min		18,0 min	
6.000	6	3188,65	10,0 min		24,0 min	
7.500	6	3985,81	12,5 min		30,0 min	
9.000	7	4304,67	15,0 min		36,0 min	
12.000	7	5739,56	20,0 min		48,0 min	
15.000	7	7174,45	25,0 min		1 h.	
18.000	7	8609,34	33,3 min		1 h. 12 min	
22.500	7	10761,68	37,4 min		1 h. 30 min	
24.000	7	11479,13	40,0 min		1 h. 36 min	
30.000	7	14348,91	50,0 min		2 h.	
45.000	8	19371,02	1 h. 15 min		3 h.	
60.000	8	25828,03	1 h. 40 min		4 h.	
75.000	8	32285,04	2h. 5 min		5 h.	
90.000	8	38742,05	2 h. 29 min		6 h.	
120.000	8	51656,07	3 h. 20 min		8 h.	
150.000	8	64570,08	4 h. 10 min		10 h.	

One turn every X...  
1 vuelta cada X...

Ex  
par  
torque  
máx.  
5 N.m

One turn every X...  
1 vuelta cada X...

Ex  
par  
torque  
máx.  
5 N.m

**VALORES NOMINALES/RATED VALUES**  
 Motor **M81**= 600 r.p.m./0,0080 N.m.  
 Motor **M82**= 250 r.p.m./0,0375 N.m.

**Ex** Excede el máximo par admisible  
 Exceeds maximal admissible torque

**RECOMENDACIONES:**

**Nivel de ruido:** el nivel de ruido del reductor depende de la uniformidad de la carga, ubicación (evitar resonancia) y de la velocidad; a menor velocidad, principalmente la del motor, menor nivel de ruido.

**Par admisible:** sobrepasar la carga máx. implica disminuir sensiblemente la vida del reductor.

**Evitar** montar o desmontar ninguna pieza a golpes en el eje de salida, ya que podría dañar el reductor de forma irreparable.

**GEARBOX TIPS:**

**Noise.** Noise level depends on load symmetry, location (avoid acoustic resonance), and rotation speed; the lower the speed on the input shaft (motor), the lower the noise.

**Load torque.** Overloading of the output shaft will reduce the gearbox life.

**Warning.** Impact on the output when engaging the load could damage the gearbox.