



RIDUTTORI AD INGRANAGGI K80

HELICAL GEAR UNITS K80

<i>Indice</i>	<i>Index</i>	Pag. Page
Caratteristiche tecniche	<i>Technical characteristics</i>	12
Configurazioni disponibili	<i>Available versions</i>	13
Dati tecnici	<i>Technical data</i>	14
Dimensioni	<i>Dimensions</i>	14
Dati tecnici	<i>Technical data</i>	15
Dimensioni	<i>Dimensions</i>	15
Simbologia	<i>Symbols</i>	16

Caratteristiche tecniche

Technical characteristics

E' un tipo di riduttore per servizio continuo e applicabile in ogni posizione ad una temperatura ambiente compresa fra -15 °C e +50 °C, con una coppia massima di 8 Nm.

Cassa

Costruita in lega di alluminio Zamak. Provvista di 4 fori M5 per il fissaggio frontale.

Ingranaggi

Costituiti da pignoni in acciaio cementato e da ingranaggi con trattamento superficiale dei denti, calettati su alberi rettificati supportati dalla cassa.

Albero uscita

In acciaio, di 10 mm di diametro e 30 mm di lunghezza con un piano fresato all'estremità.
E' supportato da cuscinetti a sfere schermati.

Carichi massimi applicabili sull'albero uscita

Carico assiale: 500 N
Carico radiale a 15 mm dalla flangia: 400 N

Lubrificazione

Grasso al Litio con grado di consistenza 2.

Peso

0.8 Kg con il massimo numero di stadi.

Motori accoppiabili

Motore C.A. K90. 230/400 V trifase o 230 V monofase.
Avvolgimenti speciali a 50 - 60 Hz.

Motore C.C. C42-85 a 12 o 24 V.
Motore C.C. C63-105 a 12 - 24 - 48 V.
Motore C.C. C63-129 a 12 o 24 V

Con freno

Opzioni

Altri motori:
Il motore da accoppiare alla controflangia del riduttore deve avere l'albero del rotore fino a 7 mm di diametro e una velocità massima di 4000 min⁻¹.

Montaggio frontale: tramite 6 fori maschiati M4.

Albero entrata

Disponibile nella configurazione K80 ER con diametro di 6 o 8 mm, l'albero entrata è supportato da cuscinetti a sfere ed è collocato assialmente dal lato opposto dell'albero uscita.

Gearbox for heavy duty continuous workload in any position, at room temperature from - 15 to 50°C with maximum torque load 8 Nm.

Box

Made of die-cast Zamak. Frontal mounting by four M5 holes.

Gearset

Spur gearset with hardened steel pinions and steel gearwheels with superficial treatment which turns on rectified hardened steel shafts attached to the box.

Output shaft

Steel shaft 10 Ø mm and 30 mm long with a flat, surface on the end. It is supported by ball bearings with seal.

Maximum output shaft load

*Axial load: 500 N
Radial, at 15 mm from the flange: 400 N*

Lubrication

Lithium grease grade 2.

Weight

0.8 kg with the maximum number of stages.

Motors coupling

*AC-motor K90. 230/400 V three phase or 230 V single phase.
Special windings 50 - 60 Hz.*

*DC motor C42-85 at 12 or 24 V.
DC motor C63-105 at 12 - 24 - 48 V.
DC motor C63-129 at 12 or 24 V.*

With brake.

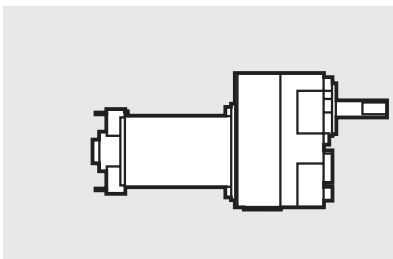
Options

*Other motors:
The coupling motor is made with counterflange and must have rotor shaft up to Ø7 mm and maximum speed of 4.000 min⁻¹.*

Frontal mounting through: 6 tapped holes M4.

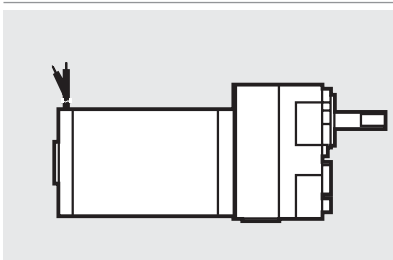
Input shaft

K80 ER incorporates a Ø6 or Ø8 mm input shaft turning on ball bearings located on the opposite side of the output shaft.



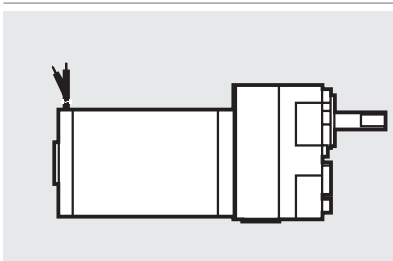
K80-C42-85

Con motore C.C. a 12/24 V
With DC motor at 12/24 V



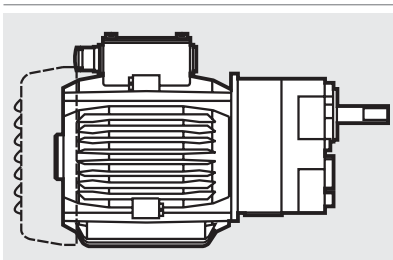
K80-C63-105

Con motore C.C. a 12/24 e 48 V
With DC motor at 12/24 and 48 V



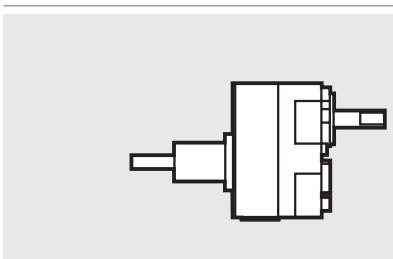
K80-C63-129

Con motore C.C. a 12/24 V
With DC motor at 12/24 V



K80-K90

Con motore C.A. a 4 poli (.M4 e .T4) e a 2 poli (.M2 e .T2)
With AC motor 4 pole (.M4 and .T4)
and 2 pole (.M2 and .T2)



K80-ER

Senza motore
Without motor

K80		C42-85	
Ns	ir	12 V / 24 V	
		M ₂ [Nm]	n ₂ [min ⁻¹]
2	3.7	—	—
	4.5	—	—
	6.0	—	—
	9.9	0.6	398
	12.0	0.7	329
	*16.0	0.9	246
3	23.6	1.2	167
	28.8	1.5	137
	*36.9	1.9	107
	40.0	2.0	98
	45.0	2.3	87
	*53.3	2.7	74
	60.0	3.1	66
	64.0	3.3	61
4	69.1	3.5	57
	86.4	3.9	46
	92.2	4.2	43
	96.0	4.4	41
	*108	4.9	36
	120	5.5	33
	128	5.8	31
	135	6.1	29
	150	6.8	26
	160	7.3	24
	*180	8.0	22
	200	8.0	20
	240	8.0	16
	5	259	8.0
288		8.0	13
360		8.0	11
400		8.0	10
500		8.0	8
600		8.0	7
800		8.0	5
1024		8.0	4
6	2250	8.0	1.8
	2880	8.0	1.3

K80		C63-105			
Ns	ir	M ₂ [Nm]	12 V	24 V	48 V
			n ₂ [min ⁻¹]	n ₂ [min ⁻¹]	n ₂ [min ⁻¹]
2	3.7	0.5	918	989	910
	4.5	0.7	755	813	748
	6.0	0.9	566	610	561
	9.9	1.4	343	370	340
	12.0	1.7	283	305	281
	*16.0	2.2	213	229	211
3	23.6	2.9	144	155	143
	28.8	3.6	118	127	117
	*36.9	4.6	92	99	91
	40.0	5.0	85	92	84
	45.0	5.6	76	81	75
	*53.3	6.6	64	69	63
	60.0	7.5	57	61	56
	64.0	7.6	53	57	53
4	69.1	7.9	49	53	49
	86.4	8.0	39	42	39
	92.2	8.0	37	40	37
	96.0	8.0	35	38	35
	*108	8.0	31	34	31
	120	8.0	28	31	28
	128	8.0	27	29	26
	135	8.0	25	27	25
	150	8.0	23	24	22
	160	8.0	21	23	21
	*180	8.0	19	20	19
	200	8.0	17	18	17
	240	8.0	14	15	14
	5	259	8.0	13	14
288		8.0	12	13	12
360		8.0	9	10	9
400		8.0	8	9	8
500		8.0	7	7	7
600		8.0	6	6	6
800		8.0	4	5	4
1024		8.0	3	4	3
6	2250	8.0	1.5	1.6	1.5
	2880	8.0	1.2	1.3	1.2

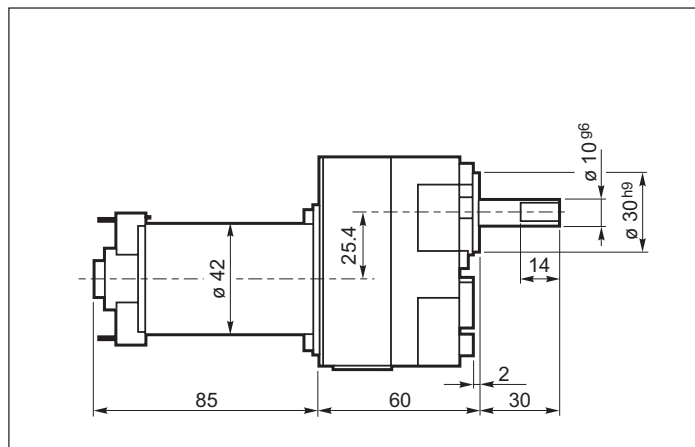
N.B. Le aree retinate indicano l'applicabilità geometrica dei motori indicati, verificando però che la coppia M₂ utilizzata non ecceda il valore massimo di 8 Nm.
NOTE: The marked areas indicate the possible connection of the exposed motors, but remind to check that the torque M₂ does not exceed the maximum value of 8 Nm.

* Rapporti preferenziali / Preferred Ratios

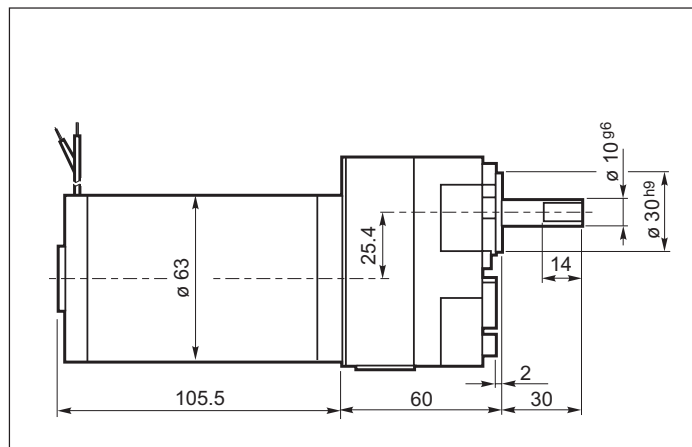
Dimensioni

Dimensions

K80-C42-85



K80-C63-105



N.B. Altre dimensioni a pag. S6 / Other dimensions on page S6

Dati tecnici

Technical data

K80		C63-129				
Ns	ir	12 V		24 V		
		M ₂ [Nm]	n ₂ [min ⁻¹]	M ₂ [Nm]	n ₂ [min ⁻¹]	
2	3.7	0.6	676	0.8	865	
	4.5	0.7	556	1.0	711	
	6.0	1.0	417	1.3	533	
	9.9	1.6	253	2.2	323	
	12.0	2.0	208	2.6	267	
	*16.0	2.6	156	3.5	200	
3	23.6	3.4	106	4.6	136	
	28.8	4.2	87	5.7	111	
	*36.9	5.4	68	7.3	87	
	40.0	5.8	63	7.8	80	
	45.0	6.6	56	8.0	71	
	*53.3	7.8	47	8.0	60	
	60.0	8.0	42	8.0	53	
	64.0	8.0	39	8.0	50	
	4	69.1	8.0	36	8.0	46
86.4		8.0	29	8.0	37	
92.2		8.0	27	8.0	35	
96.0		8.0	26	8.0	33	
*108		8.0	23	8.0	30	
120		8.0	21	8.0	27	
128		8.0	20	8.0	25	
135		8.0	19	8.0	24	
150		8.0	17	8.0	21	
160		8.0	16	8.0	20	
*180		8.0	14	8.0	18	
200		8.0	13	8.0	16	
240		8.0	10	8.0	13	
5		259	8.0	10	8.0	12
		288	8.0	8.7	8.0	11
	360	8.0	6.9	8.0	8.9	
	400	8.0	6.3	8.0	8.0	
	500	8.0	5.0	8.0	6.4	
	600	8.0	4.2	8.0	5.3	
	800	8.0	3.1	8.0	4.0	
	1024	8.0	2.4	8.0	3.1	
6	2250	8.0	1.1	8.0	1.4	
	2880	8.0	0.9	8.0	1.1	

K80		K90..4		K90..2				
Ns	ir	n ₂ [min ⁻¹]	.M4	.T4	n ₂ [min ⁻¹]	.M2	.T2	
			M ₂ [Nm]	M ₂ [Nm]		M ₂ [Nm]	M ₂ [Nm]	
2	9.9	137	2.8	4.4	274	3.6	5.2	
	12.0	113	3.4	5.4	226	4.4	6.3	
	16.0	85	4.5	8.0	169	5.8	8.0	
3	23.6	57	6.0	8.0	115	7.8	8.0	
	28.8	47	7.4	8.0	94	8.0	8.0	
	36.9	37	8.0	8.0	73	8.0	8.0	
	40.0	34	8.0	8.0	68	8.0	8.0	
	45.0	30	8.0	8.0	60	8.0	8.0	
	53.3	25	8.0	8.0	51	8.0	8.0	
	60.0	23	8.0	8.0	45	8.0	8.0	
	64.0	21	8.0	8.0	42	8.0	8.0	
	4	69.1	20	8.0	8.0	39	8.0	8.0
86.4		16	8.0	8.0	31	8.0	8.0	
92.2		15	8.0	8.0	29	8.0	8.0	
96.0		14	8.0	8.0	28	8.0	8.0	
108		13	8.0	8.0	25	8.0	8.0	
120		12	8.0	8.0	23	8.0	8.0	
128		11	8.0	8.0	21	8.0	8.0	
135		10.5	8.0	8.0	20	8.0	8.0	
144		9.6	8.0	8.0	19	8.0	8.0	
160		8.4	8.0	8.0	17	8.0	8.0	
180		7.5	8.0	8.0	15	8.0	8.0	
200		6.8	8.0	8.0	13.5	8.0	8.0	
240		5.7	8.0	8.0	11.5	8.0	8.0	
5		259	5.2	8.0	8.0	10.6	8.0	8.0
		360	3.8	8.0	8.0	7.7	8.0	8.0
	400	3.4	8.0	8.0	6.9	8.0	8.0	
	600	2.3	8.0	8.0	4.6	8.0	8.0	
	800	1.7	8.0	8.0	3.4	8.0	8.0	
	960	1.4	8.0	8.0	2.8	8.0	8.0	
	6	1152	1.2	8.0	8.0	2.4	8.0	8.0
2250		0.6	8.0	8.0	1.2	8.0	8.0	
2880		0.5	8.0	8.0	1.0	8.0	8.0	

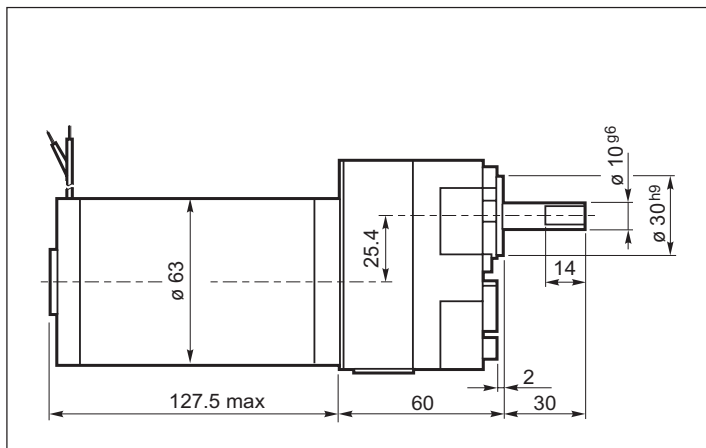
N.B. Le aree retinate indicano l'applicabilità geometrica dei motori indicati, verificando però che la coppia M₂ utilizzata non ecceda il valore massimo di 8 Nm.
NOTE: The marked areas indicate the possible connection of the exposed motors, but remind to check that the torque M₂ does not exceed the maximum value of 8 Nm.

* Rapporti preferenziali / Preferred Ratios

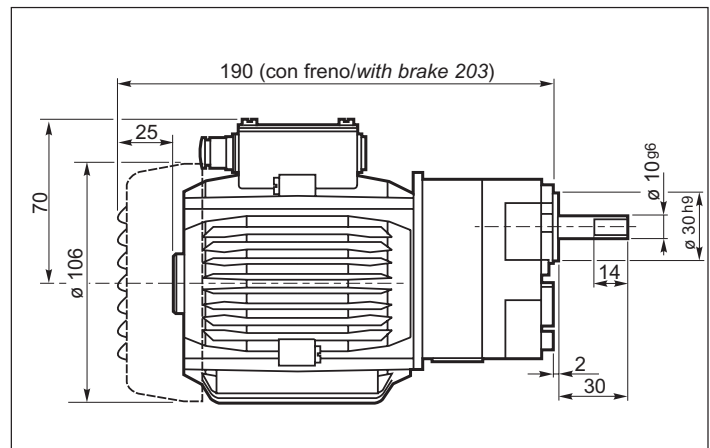
Dimensioni

Dimensions

K80-C63-129

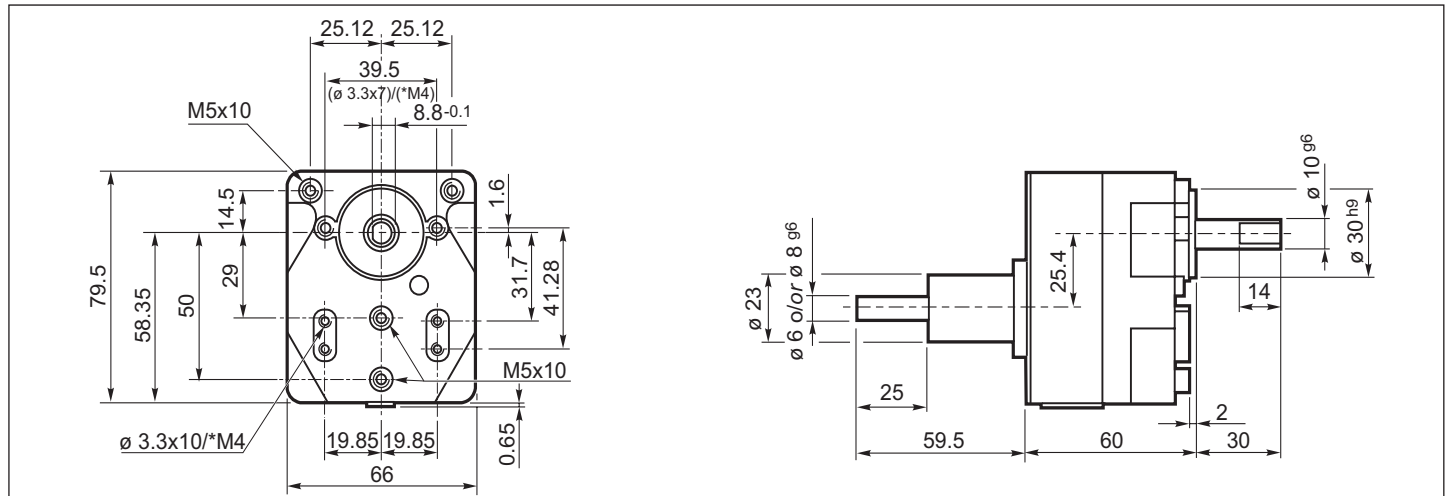


K80-K90



N.B. Altre dimensioni a pag. 26 / Other dimensions on page 26

K80-ER



*M4 Opzione/Option

Simbologia

Symbols

N_s		N° stadi / Stages nr.
i_r		Rapporto di riduzione / Ratio
M_2	[Nm]	Coppia uscita / Output torque
n_2	[min ⁻¹]	Giri uscita / Output speed