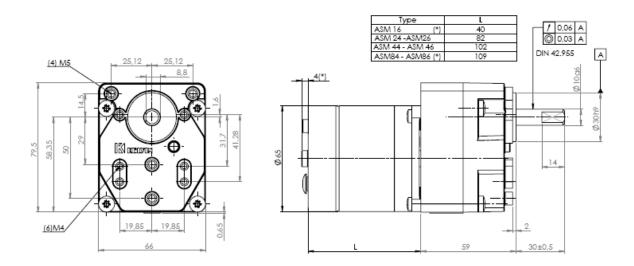


Gearbox + Motor K80-ASTRO



K80

TECHNICAL CHARACTERISTICS

High endurance gearbox for heavy duty continuous workload in any position, at room temperature from -15 to 50°C, with **torque load up to 8 Nm**, **steady load**.

- **Box.** Made of die-cast Zamak. Frontal mounting by four M5 threaded holes (3 the same as K40 gearbox).
- **Gear set.** Hobbed spur gear set with steel pinions and gear wheels, with case superficial heat anti-friction treatment. The intermediate gears turn on rectified hardened steel shafts, which are fixed to the box.
- Output shaft. Ø10 mm steel shaft, 30 mm usable length, with a flat. Incorporates and turns on ball bearings.

Output shaft load:

Axial direction, pull or push 500 N \approx 50 Kg. Radial direction, at 15 mm from box 400 N \approx 40 Kg.

- **Lubrication.** Lithium grade 2 grease.
- Weight. With maximal number of stages: 1.41 Kg.

MOTOR COUPLING:

■ **Alternating C.:** SYNCHRONOUS ASM 16, 24, 44, 46, 84 and 86 types, at 230 V - 50/60 Hz.

■ OPTIONAL:

■ Frontal mounting by six M4 threaded holes (4 the same as K40 gearbox).

Avoid impacts on the output shaft when assembling or disassembling parts on it, this could damage the gearbox.

Your special requests are welcome.

Standard ratios Gearbox-K80

KIKI	=1\	/IN	AC MOTORS MODELO:Motor ASTRO ASM						
			ASM 16 1Phase						
Reduction ratio i = X:1	Stages	Efficiency	Speed n _o (r.p.m.)	Nominal Torque (N.m)					
3,69	2	0,81	271,00	0,09					
6	2	0,81	166,67	0,15					
9,9	2	0,81	101,01	0,24					
16	2	0,81	62,50	0,39					
32,9	3	0,73	30,40	0,72					
39,4	3	0,73	25,38	0,86					
53,3	3	0,73	18,76	1,17					
64	3	0,73	15,63	1,40					
78,8	4	0,66	12,69	1,55					
109	4	0,66	9,17	2,15					
128	4	0,66	7,81	2,52					
131	4	0,66	7,63	2,58					
158	4	0,66	6,33	3,11					
178	4	0,66	5,62	3,50					
213	4	0,66	4,69	4,19					
256	4	0,66	3,91	5,04					
315	5	0,59	3,17	5,58					
364	5	0,59	2,75	6,45					
426	5	0,59	2,35	7,55					
512	5	0,59	1,95	9,07					
592	5	0,59	1,69						
630	5	0,59	1,59	_					
711 853	5	0,59	1,41	Ex.					
1024	5	0,59	1,17	Max.					
1024	6	0,59 0,53	0,98 0.69	torque 8 Nm					
1408 2100	6	0,53	0,69 2,1 min.	o retti					
2844	6	0,53	2,1 min. 2.8 min.						

KELVIN		AC MOTORS MODELO:Motor ASTRO ASM								
		ASM 24 1Phase		ASM 24 3Phase		ASM 26 1Phase		ASM 26 3Phase		
Reduction ratio i = X:1	Stages	Efficiency	Speed n _o (r.p.m.)	Nominal Torque (N.m)	Speed n _o (r.p.m.)	Nominal Torque (N.m)	Speed n _o (r.p.m.)	Nominal Torque (N.m)	Speed n _o (r.p.m.)	Nominal Torque (N.m)
3,69	2	0,81	406,50	0,10	406,50	0,14	271,00	0,15	271,00	0,18
6	2	0,81	250,00	0,17	250,00	0,23	166,67	0,24	166,67	0,29
9,9	2	0,81	151,52	0,27	151,52	0,38	101,01	0,40	101,01	0,47
16	2	0,81	93,75	0,44	93,75	0,62	62,50	0,65	62,50	0,76
32,9	3	0,73	45,59	0,82	45,59	1,15	30,40	1,20	30,40	1,42
39,4	3	0,73	38,07	0,98	38,07	1,38	25,38	1,44	25,38	1,69
53,3	3	0,73	28,14	1,32	28,14	1,87	18,76	1,94	18,76	2,29
64	3	0,73	23,44	1,59	23,44	2,24	15,63	2,33	15,63	2,75
78,8	4	0,66	19,04	1,76	19,04	2,48	12,69	2,59	12,69	3,05
109	4	0,66	13,76	2,43	13,76	3,43	9,17	3,58	9,17	4,22
128	4	0,66	11,72	2,86	11,72	4,03	7,81	4,20	7,81	4,95
131	4	0,66	11,45	2,92	11,45	4,13	7,63	4,30	7,63	5,07
158	4	0,66	9,49	3,52	9,49	4,98	6,33	5,18	6,33	6,12
178	4	0,66	8,43	3,97	8,43	5,61	5,62	5,84	5,62	6,89
213	4	0,66	7,04	4,75	7,04	6,71	4,69	6,99	4,69	
256	4	0,66	5,86	5,71	5,86		3,91		3,91	
315	5	0,59	4,76	6,32	4,76		3,17		3,17	
364	- 5	0,59	4,12	7,31	4,12		2,75		2,75	
426	- 5	0,59	3,52		3,52		2,35		2,35	
512	- 5	0,59	2,93		2,93	_	1,95		1,95	Ex.
592	5	0,59	2,53		2,53	Ex.	1,69	Ex.	1,69	Max.
630	5	0,59	2,38	EX. Max. torque 8 N·m	2,38	Max.	1,59	Max.	1,59	torque
711	- 5	0,59	2,11		2,11	torque	1,41	torque 8 N·m	1,41	8 H·m
853	5	0,59	1,76		1,76	8 H·m	1,17		1,17	
1024	- 5	0,59	1,46		1,46		0,98		0,98	
1458	6	0,53	1,03		1,03		0,69		0,69	
2100	6	0,53	1,4 min.		1,4 min.		0,48		0,48	
2844	6	0,53	1,9 min.		1,9 min.		0,35		0,35	

KELVIN		AC MOTORS MODELO:Motor ASTRO ASM								
		ASM 44 1Phase		ASM 44 3Phase		ASM 46 1Phase		ASM 46 3Phase		
Reduction ratio i = X:1	Stages	Efficiency	Speed n _o (r.p.m.)	Nominal Torque (N.m)						
3,69	2	0,81	406,50	0,23	406,50	0,29	271,00	0,31	271,00	0,39
6	2	0,81	250,00	0,37	250,00	0,48	166,67	0,51	166,67	0,63
9,9	2	0,81	151,52	0,62	151,52	0,79	101,01	0,84	101,01	1,03
16	2	0,81	93,75	1,00	93,75	1,27	62,50	1,36	62,50	1,67
32,9	3	0,73	45,59	1,85	45,59	2,35	30,40	2,52	30,40	3,09
39,4	3	0,73	38,07	2,21	38,07	2,81	25,38	3,02	25,38	3,71
53,3	3	0,73	28,14	2,99	28,14	3,81	18,76	4,08	18,76	5,01
64	3	0,73	23,44	3,59	23,44	4,57	15,63	4,90	15,63	6,02
78,8	4	0,66	19,04	3,98	19,04	5,07	12,69	5,43	12,69	6,67
109	4	0,66	13,76	5,51	13,76	7,01	9,17	7,51	9,17	
128	4	0,66	11,72	6,47	11,72		7,81		7,81	
131	4	0,66	11,45	6,62	11,45		7,63		7,63	
158	4	0,66	9,49	7,98	9,49		6,33		6,33	
178	4	0,66	8,43		8,43		5,62		5,62	
213	4	0,66	7,04		7,04		4,69		4,69	
256	4	0,66	5,86		5,86		3,91 3,17		3,91	
315	5	0,59	4,76		4,76				3,17	Ex.
364	5	0,59	4,12		4,12	Ex.	2,75	Ex.	2,75	Max.
426	5	0,59	3,52	Ev	3,52	Max.	2,35	Max. torque	2,35	torque
512	5	0,59	2,93	Ex.	2,93	torque	1,95		1,95	8 H·m
592	5	0,59	2,53	Max. torque	2.53	8 N·m	1,69	8 N-m	1,69	
630 711	5	0,59	2,38 2,11	8 II-m	2,38 2,11		1,59 1,41		1,59 1,41	
853	5	0,59	1,76		1,76		1,41		1,41	
1024	5	0,59	1,46		1,46		0,98		0.98	
1458	6	0,59	1,40		1,03		0,98		0,90	
2100	6	0,53	1,4 min.		1,4 min.		0,48		0,69	
2844	6	0,53	1,4 min.		1,4 min. 1,9 min.		0,46		0,46	

■ KELVIN		AC MOTORS MODELO:Motor ASTRO ASM								
		ASM 84 1Phase		ASM 84 3Phase		ASM 86 1Phase		ASM 86 3Phase		
Reduction ratio i = X:1	Stages	Efficiency	Speed n _o (r.p.m.)	Nominal Torque (N.m)						
3,69	2	0,81	406,50	0,48	406,50	0,50	271,00	0,57	271,00	0,69
6	2	0,81	250,00	0,78	250,00	0,82	166,67	0,93	166,67	1,12
9,9	2	0,81	151,52	1,28	151,52	1,35	101,01	1,54	101,01	1,84
16	2	0,81	93,75	2,07	93,75	2,18	62,50	2,49	62,50	2,98
32,9	3	0,73	45,59	3,84	45,59	4,03	30,40	4,60	30,40	5,52
39,4	3	0,73	38,07	4,60	38,07	4,83	25,38	5,51	25,38	6,61
53,3	3	0,73	28,14	6,22	28,14	6,53	18,76	7,46	18,76	
64	3	0,73	23,44	7,46	23,44	7,84	15,63		15,63	
78,8	- 4	0,66	19,04		19,04		12,69		12,69	
109	4	0,66	13,76		13,76		9,17		9,17	
128	4	0,66	11,72		11,72		7,81		7,81	
131	4	0,66	11,45		11,45		7,63		7,63	
158	4	0,66	9,49		9,49		6,33		6,33	
178	4	0,66	8,43		8,43		5,62		5,62	
213	4	0,66	7,04		7,04		4,69		4,69	
256	4	0,66	5,86		5,86		3,91		3,91	Ex.
315	- 5	0,59	4,76	Ex.	4,76	Ex.	3,17	Ex.	3,17	Max.
364	5	0,59	4,12	Max.	4,12	Max.	2,75	Max. torque	2,75	torque
426 512	5	0,59	3,52	torque 8 II-m	3,52	torque	2,35	8 H·m	2,35	8 H-m
512 592	5	0,59	2,93 2,53		2,93 2,53	8 II-m	1,95		1,95 1,69	
630	5	0,59	2,53		2,53		1,69 1,59		1,59	
711	5	0,59	2,30		2,11		1,41		1,41	
853	5	0,59	1.76		1.76		1,17		1,17	
1024	5	0,59	1,46		1,46		0.98		0.98	
1458	6	0,53	1.03		1.03		0,69		0,69	
2100	6	0,53	1,4 min.		1,4 min.		0.48		0,48	
2844	6	0.53	1,9 min.		1,9 min.		0.35		0,35	

NO LOAD SPEED/NOMINAL TORQUE

Motor ASM16 1-phase= 1000 r.p.m./0,03Nm. Motor ASM24 1-phase= 1500 r.p.m./0,03Nm. Motor ASM24 3-phase= 1500 r.p.m./0,05Nm. Motor ASM26 1-phase= 1000 r.p.m./0,05Nm. Motor ASM26 3-phase= 1000 r.p.m./0,05Nm. Motor ASM26 3-phase= 1000 r.p.m./0,06Nm. Motor ASM44 1-phase= 1500 r.p.m./0,08Nm. Motor ASM44 3-phase= 1500 r.p.m./0,11Nm. Motor ASM46 1-phase= 1000 r.p.m./0,13Nm. Motor ASM46 3-phase= 1000 r.p.m./0,13Nm. Motor ASM84 1-phase= 1500 r.p.m./0,15Nm. Motor ASM84 3-phase= 1500 r.p.m./0,17Nm. Motor ASM86 1-phase= 1000 r.p.m./0,19Nm. Motor ASM86 3-phase= 1000 r.p.m./0,23Nm.

WARNING: The load might reduce final speed up to 40%.

Exceeds maximal admissible torque

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.

