

KT50

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 5 Nm, steady load.**

- **Box.** Made of die-cast Zamak with a tubular aluminium cover and aluminium frontal fixation flange.
- **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.** Ø8 mm steel shaft, 20 mm usable length, with a flat. Incorporates and turns on ball bearings.
- **Output shaft load:**
 - Axial direction, pull or push 100 N ≈ 10 Kg.
 - Radial direction, at 10 mm from box 100 N ≈ 10 Kg.
- **Lubrication.** Lithium grade 2 grease.
- **Weight.** With maximal number of stages: 1.20 Kg.

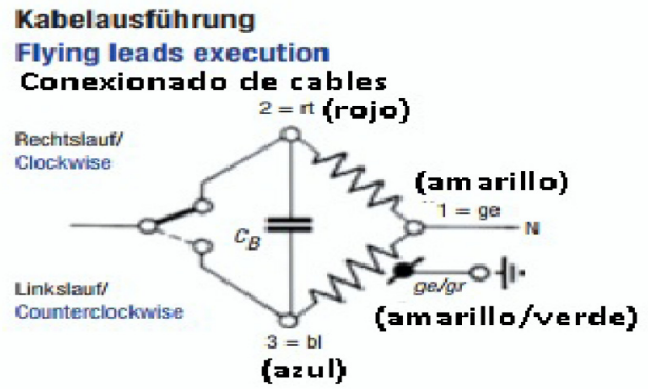
MOTOR COUPLING:

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

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

Your special requests are welcome.

KELVIN			AC MOTORS MODELO:Motor ASTRO ASM	
			ASM 16 1Phase	
Reduction ratio $i = X:1$	Stages	Efficiency	Speed n_0 (r.p.m.)	Nominal Torque (N.m)
1,44	1	0,90	694,44	0,04
2,17	1	0,90	460,83	0,06
3,46	2	0,81	289,02	0,08
4,79	2	0,81	208,77	0,12
9,28	2	0,81	107,76	0,23
12,88	2	0,81	77,64	0,31
15,07	3	0,73	66,36	0,33
19,54	3	0,73	51,18	0,43
29,19	3	0,73	34,26	0,64
40,49	3	0,73	24,70	0,89



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_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)
1,44	1	0,90	1041,67	0,04	1041,67	0,06	694,44	0,06	694,44	0,08
2,17	1	0,90	691,24	0,07	691,24	0,09	460,83	0,10	460,83	0,12
3,46	2	0,81	433,53	0,10	433,53	0,13	289,02	0,14	289,02	0,17
4,79	2	0,81	313,15	0,13	313,15	0,19	208,77	0,19	208,77	0,23
9,28	2	0,81	161,64	0,26	161,64	0,36	107,76	0,38	107,76	0,44
12,88	2	0,81	116,46	0,35	116,46	0,50	77,64	0,52	77,64	0,62
15,07	3	0,73	99,54	0,37	99,54	0,53	66,36	0,55	66,36	0,65
19,54	3	0,73	76,77	0,48	76,77	0,68	51,18	0,71	51,18	0,84
29,19	3	0,73	51,39	0,72	51,39	1,02	34,26	1,06	34,26	1,26
40,49	3	0,73	37,05	1,00	37,05	1,42	24,70	1,48	24,70	1,74

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_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)
1,44	1	0,90	1041,67	0,10	1041,67	0,13	694,44	0,14	694,44	0,17
2,17	1	0,90	691,24	0,15	691,24	0,19	460,83	0,21	460,83	0,25
3,46	2	0,81	433,53	0,22	433,53	0,27	289,02	0,29	289,02	0,36
4,79	2	0,81	313,15	0,30	313,15	0,38	208,77	0,41	208,77	0,50
9,28	2	0,81	161,64	0,58	161,64	0,74	107,76	0,79	107,76	0,97
12,88	2	0,81	116,46	0,80	116,46	1,02	77,64	1,10	77,64	1,35
15,07	3	0,73	99,54	0,85	99,54	1,08	66,36	1,15	66,36	1,42
19,54	3	0,73	76,77	1,10	76,77	1,40	51,18	1,50	51,18	1,84
29,19	3	0,73	51,39	1,64	51,39	2,09	34,26	2,23	34,26	2,75
40,49	3	0,73	37,05	2,27	37,05	2,89	24,70	3,10	24,70	3,81

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_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)	Speed n_0 (r.p.m.)	Nominal Torque (N.m)
1,44	1	0,90	1041,67	0,21	1041,67	0,22	694,44	0,25	694,44	0,30
2,17	1	0,90	691,24	0,31	691,24	0,33	460,83	0,37	460,83	0,45
3,46	2	0,81	433,53	0,45	433,53	0,47	289,02	0,54	289,02	0,64
4,79	2	0,81	313,15	0,62	313,15	0,65	208,77	0,74	208,77	0,89
9,28	2	0,81	161,64	1,20	161,64	1,26	107,76	1,44	107,76	1,73
12,88	2	0,81	116,46	1,67	116,46	1,75	77,64	2,00	77,64	2,40
15,07	3	0,73	99,54	1,76	99,54	1,85	66,36	2,11	66,36	2,53
19,54	3	0,73	76,77	2,28	76,77	2,39	51,18	2,73	51,18	3,28
29,19	3	0,73	51,39	3,40	51,39	3,57	34,26	4,09	34,26	4,89
40,49	3	0,73	37,05	4,72	37,05	4,96	24,70	5,47	24,70	6,67

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./0,06Nm.
- Motor ASM44 1-phase= 1500 r.p.m./0,08Nm.
- Motor ASM44 3-phase= 1500 r.p.m./0,10Nm.
- Motor ASM46 1-phase= 1000 r.p.m./0,11Nm.
- Motor ASM46 3-phase= 1000 r.p.m./0,13Nm.
- Motor ASM84 1-phase= 1500 r.p.m./0,16Nm.
- 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%.

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.