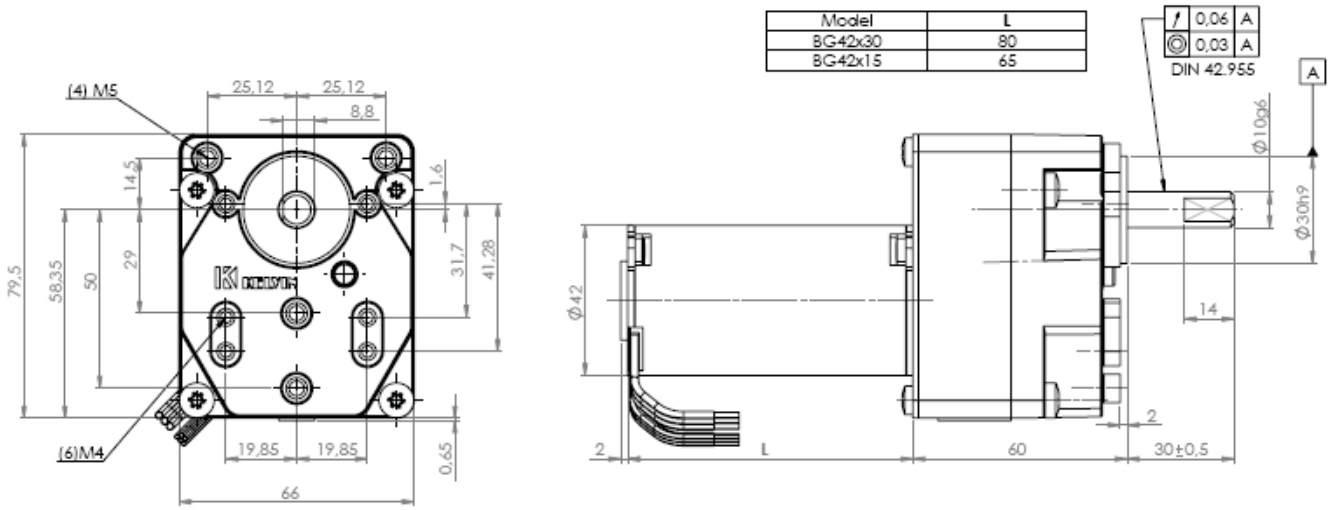
Gearbox + Motor **K80-BG42**



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 ≈ 50 Kg.
  Radial direction, at 15 mm from box 400 N ≈ 40 Kg.

- **Lubrication.** Lithium grade 2 grease.

- **Weight.** With maximal number of stages: 1.41 Kg.

MOTOR COUPLING:

- **Direct C.:** Dunker BG42 type, 12 or 24V.

■ **OPTIONAL:**

- Frontal mounting by six M4 threaded holes (4 the same as K40 gearbox).
- Speed regulation with electronic controller.

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

Your special requests are welcome.

			BRUSHLESS DC MOTORS MODEL: Dunker BG42											
			BG42x30 12V			BG42x30 24V			BG42x30KI 12V			BG42x30KI 24V		
Reduction ratio i = X:1	Stages	Torque factor	No load speed n_o (r.p.m.)	Nominal Speed n_N (r.p.m.)	Nominal Torque (N.m)	No load speed n_o (r.p.m.)	Nominal Speed n_N (r.p.m.)	Nominal Torque (N.m)	No load speed n_o (r.p.m.)	Nominal Speed n_N (r.p.m.)	Nominal Torque (N.m)	No load speed n_o (r.p.m.)	Nominal Speed n_N (r.p.m.)	Nominal Torque (N.m)
9,85	2	7,98	425,38	338,07	1,38	417,26	363,45	1,36	436,55	366,50	0,81	418,27	372,59	1,32
16	2	12,96	261,88	208,13	2,24	256,88	223,75	2,22	268,75	225,63	1,31	257,50	229,38	2,15
32,83	3	23,93	127,63	101,43	4,14	125,19	109,05	4,09	130,98	109,96	2,42	125,49	111,79	3,97
64	3	46,66	65,47	52,03	8,07	64,22	55,94	7,98	67,19	56,41	4,71	64,38	57,34	7,74
109,42	4	71,79	38,29	30,43	Ex. Torque max. 8 N·m	37,56	32,72	Ex. Torque max. 8 N·m	39,30	32,99	7,25	37,65	33,54	Ex. Torque max. 8 N·m
128	4	83,98	32,73	26,02		32,11	27,97		33,59	28,20	Ex. Torque max. 8 N·m	32,19	28,67	
157,57	4	103,38	26,59	21,13		26,08	22,72		27,29	22,91		26,15	23,29	
177,77	4	116,63	23,57	18,73		23,12	20,14		24,19	20,31		23,18	20,64	
315,13	5	186,08	13,30	10,57		13,04	11,36		13,65	11,46		13,07	11,65	
426,66	5	251,94	9,82	7,80		9,63	8,39		10,08	8,46		9,66	8,60	
511,99	5	302,32	8,18	6,50		8,03	6,99		8,40	7,05		8,05	7,17	

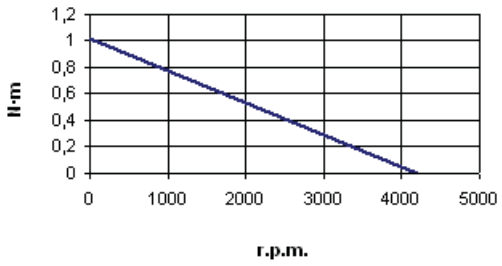
NO LOAD SPEED/NOMINAL TORQUE
Motor BG 42x30-12V= 4190 r.p.m./1,02Nm.
Motor BG 42x30-24V= 4110 r.p.m./1,52Nm.
Motor BG 42x30 KI-12V= 4300 r.p.m./0,288Nm.
Motor BG 42x30 KI-24V= 4120 r.p.m./0,445Nm.

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

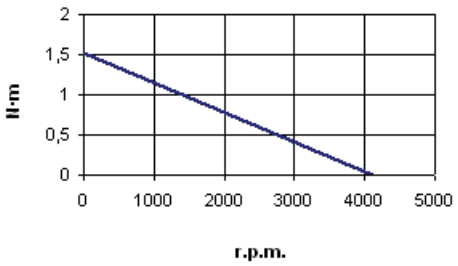
Ex **Ex**ceeds maximal admissible torque

CURVES

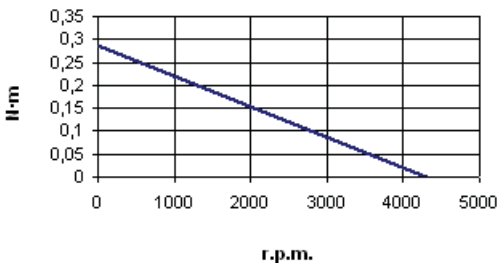
BG42x30 12V



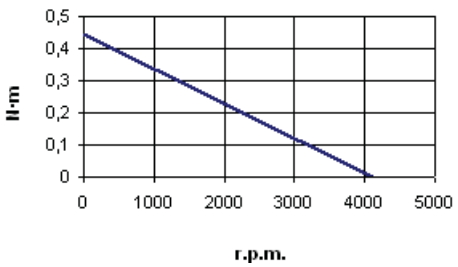
BG42x30 24V



BG42x30KI 12V



BG42x30KI 24V



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.