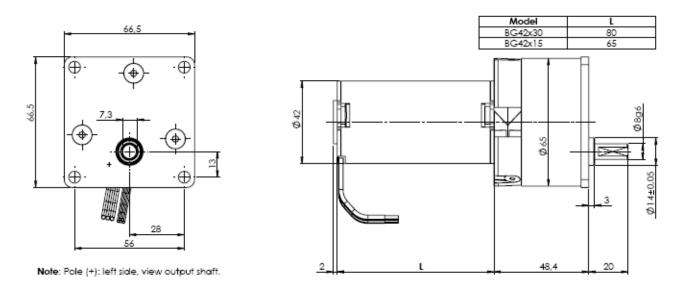
Gearbox + Motor KT50-BG42



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 aluminion 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:

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

Standard ratios

Gearbox-KT50

			BRUSHLESS DC MOTORS MODEL: Dunker BG42											
			BG42x30 12V			BG42x30 24∨			BG42x30KI 12V			BG42x30KI 24∨		
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)
1,44	1	1,30	2909,72	2312,50	0,22	2854,17	2486,11	0,22	2986,11	2506,94	0,13	2861,11	2548,61	0,22
2,17	1	1,95	1930,88	1534,56	0,34	1894,01	1649,77	0,33	1981,57	1663,59	0,20	1898,62	1691,24	0,32
3,46	2	2,80	1210,98	962,43	0,48	1187,86	1034,68	0,48	1242,77	1043,35	0,28	1190,75	1060,69	0,47
4,79	2	3,88	874,74	695,20	0,67	858,04	747,39	0,66	897,70	753,65	0,39	860,13	766,18	0,64
9,28	2	7,52	451,51	358,84	1,30	442,89	385,78	1,29	463,36	389,01	0,76	443,97	395,47	1,25
12,88	2	10,43	325,31	258,54	1,80	319,10	277,95	1,78	333,85	280,28	1,05	319,88	284,94	1,73
15,07	3	10,99	278,04	220,97	1,90	272,73	237,56	1,88	285,34	239,55	1,11	273,39	243,53	1,82
19,54	3	14,24	214,43	170,42	2,46	210,34	183,21	2,44	220,06	184,75	1,44	210,85	187,82	2,36
29,19	3	21,28	143,54	114,08	3,68	140,80	122,64	3,64	147,31	123,67	2,15	141,14	125,73	3,53
40,49	3	29,52	103,48	82,24		101,51	88,42		106,20	89,16	2,98	101,75	90,64	

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

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.

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.