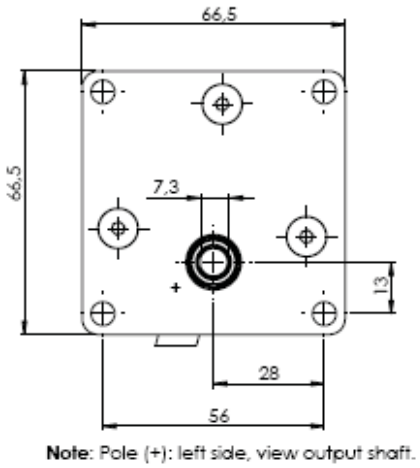
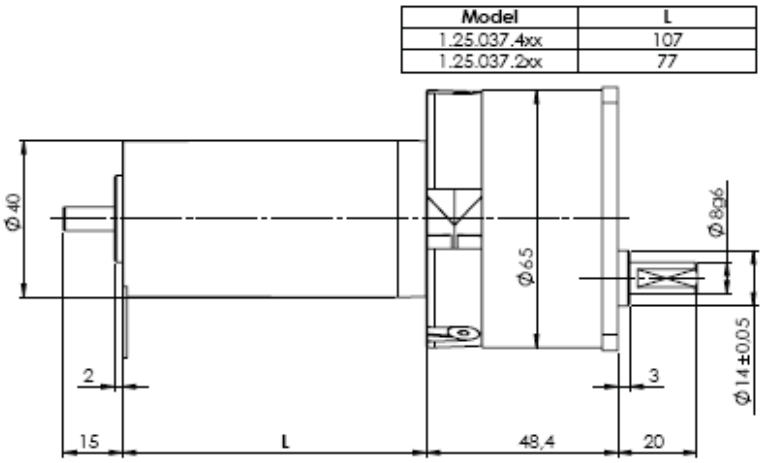
KELVIN
www.kelvingear.com

Gearbox + Motor KT50-BHL EC40



Note: Pole (+): left side, view output shaft.



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.:** Bühler 1.25.037.xxx 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.

KELVIN	BRUSHLESS DC MOTORS MODEL: Dunker BG44							
	39x77 24V 1,25,037,208					39x107 24V 1,25,037,408		
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)
1,44	2	1,17	3125,00	2430,56	0,13	3125,00	2465,28	0,27
2,17	2	1,76	2073,73	1612,90	0,19	2073,73	1635,94	0,40
3,46	3	2,52	1300,58	1011,56	0,28	1300,58	1026,01	0,58
4,79	3	3,49	939,46	730,69	0,38	939,46	741,13	0,80
9,28	3	6,77	484,91	377,16	0,74	484,91	382,54	1,56
12,88	3	9,39	349,38	271,74	1,03	349,38	275,62	2,16
15,07	4	9,89	298,61	232,25	1,09	298,61	235,57	2,27
19,54	4	12,82	230,30	179,12	1,41	230,30	181,68	2,95
29,19	4	19,15	154,16	119,90	2,11	154,16	121,62	4,40
40,49	4	26,57	111,14	86,44	2,92	111,14	87,68	

NO LOAD SPEED/NOMINAL TORQUE
Motor BHL 208-24V= 4500 r.p.m./0,5Nm.
Motor BHL 408-24V= 4500 r.p.m./1,1Nm.

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.