

## KF65

### 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 6.5 Nm, steady load.**

- **Box.** Made of two aluminium plates and an aluminium tubular cover. Frontal mounting by four M4 threaded holes.
- **Gear set.** Hobbed spur gear set with steel pinions and gear wheels, with case superficial heat anti-friction treatment.
- **Output shaft.** Ø8 mm. steel shaft, 25 mm usable length, with a flat. Incorporates and turns on sintered bushings.
- **Output shaft load:**

Axial direction, pull or push	60 N ≈ 6 Kg.
Radial direction, at 10 mm from box	60 N ≈ 6 Kg.
- **Lubrication.** Lithium grade 2 grease.
- **Weight.** With maximal number of stages: 0.95 Kg

#### MOTOR COUPLING:


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

#### ■ 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.

			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 $n_0$ (r.p.m.)	Nominal Speed $n_N$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal Speed $n_N$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal Speed $n_N$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal Speed $n_N$ (r.p.m.)	Nominal Torque (N.m)
15,97	3	11,64	262,37	208,52	2,01	257,36	224,17	1,99	269,25	226,05	1,18	257,98	229,81	1,93
35,65	3	25,99	117,53	93,41	4,50	115,29	100,42	4,44	120,62	101,26	2,62	115,57	102,95	4,31
61,77	4	40,53	67,83	53,91	<b>Ex.</b> Torque max. 6,5 N·m	66,54	57,96	<b>Ex.</b> Torque max. 6,5 N·m	69,61	58,44	4,09	66,70	59,41	<b>Ex.</b> Torque max. 6,5 N·m
93,65	4	61,44	44,74	35,56		43,89	38,23		45,92	38,55	6,21	43,99	39,19	
115,4	5	68,14	36,31	28,86		35,62	31,02		37,26	31,28		35,70	31,80	
160,08	5	94,53	26,17	20,80		25,67	22,36		26,86	22,55		25,74	22,93	
191,24	5	112,93	21,91	17,41		21,49	18,72		22,48	18,88		21,54	19,19	
303,15	5	179,01	13,82	10,98		13,56	11,81		14,18	11,91		13,59	12,11	
395,92	5	233,79	10,58	8,41		10,38	9,04		10,86	9,12		10,41	9,27	

**NO LOAD SPEED/NOMINAL TORQUE**

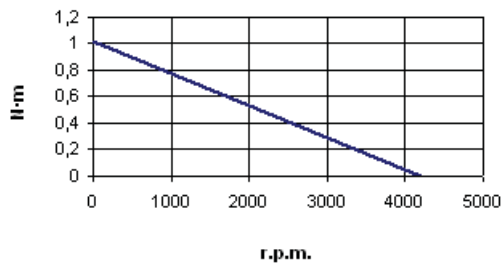
Motor BG 42x30-12V= 4190 r.p.m./1,02Nm.  
 Motor BG 42x30-24V= 4110 r.p.m./1,52Nm.  
 Motor BG 42x30 KI-12V= 4300 r.p.m./0,288Nm.  
 Motor BG 42x30 KI-24V= 4120 r.p.m./0,445Nm.

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

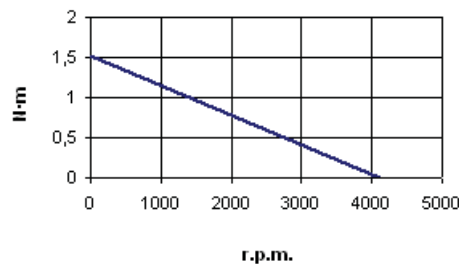
**Ex** Exceeds maximal admissible torque

**CURVES**

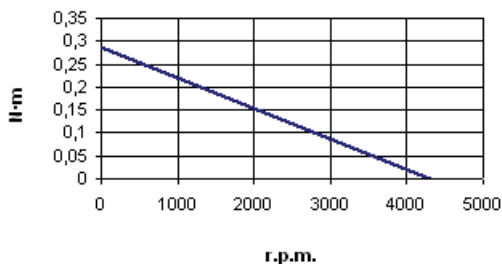
BG42x30 12V



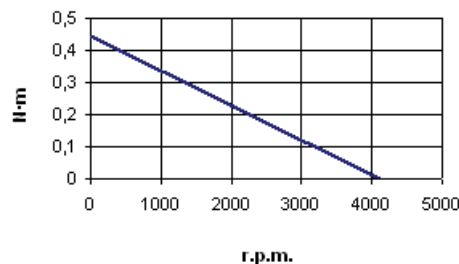
BG42x30 24V



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.