

Gearbox + Motor



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:

- **Direct C.:** Dunker GR53 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.

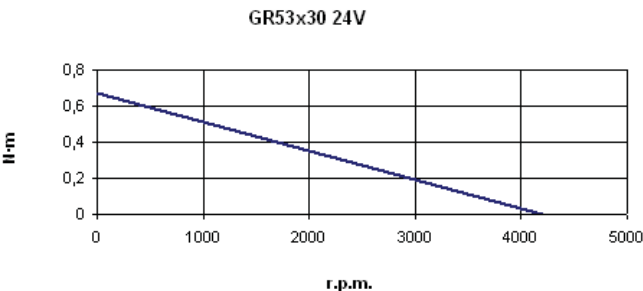
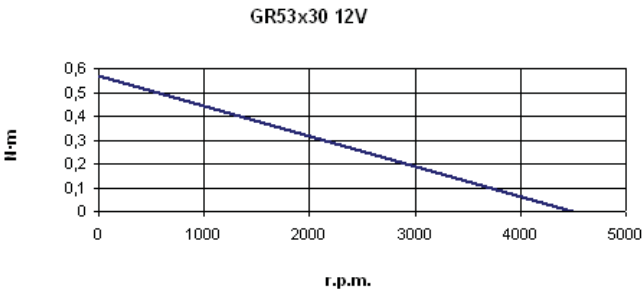
DC MOTORS MODEL: Dunker GR53								
			GR53x30 12V			GR53x30 24V		
Reduction ratio $i = X:1$	Stages	Torque factor	No load speed n_0 (r.p.m.)	Nominal Speed n_N (r.p.m.)	Nominal Torque (N.m)	No load speed n_0 (r.p.m.)	Nominal Speed n_N (r.p.m.)	Nominal Torque (N.m)
1,44	1	1,30	3118,06	2631,94	0,12	2916,67	2500,00	0,12
2,17	1	1,95	2069,12	1746,54	0,17	1935,48	1658,99	0,19
3,46	2	2,80	1297,69	1095,38	0,25	1213,87	1040,46	0,27
4,79	2	3,88	937,37	791,23	0,34	876,83	751,57	0,37
9,28	2	7,52	483,84	408,41	0,67	452,59	387,93	0,72
12,88	2	10,43	348,60	294,25	0,93	326,09	279,50	1,00
15,07	3	10,99	297,94	251,49	0,98	278,70	238,89	1,05
19,54	3	14,24	229,79	193,96	1,27	214,94	184,24	1,36
29,19	3	21,28	153,82	129,84	1,89	143,88	123,33	2,04
40,49	3	29,52	110,89	93,60	2,62	103,73	88,91	2,83

NO LOAD SPEED/NOMINAL TORQUE
Motor GR 53x30-12V= 4490 r.p.m./0,57Nm.
Motor GR 53x30-24V= 4200 r.p.m./0,67Nm.

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

Ex Exceeds maximal admissible torque

CURVES



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.