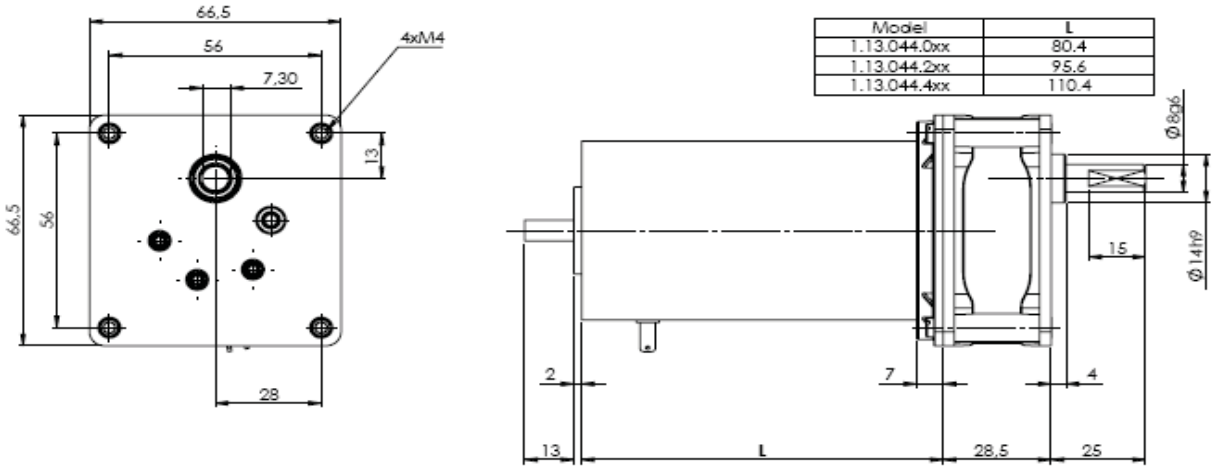
Gearbox + Motor KF65-BHL51



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. The intermediate gears turn on sintened bushings.
- **Output shaft.** Ø8 mm. steel shaft, 25 mm usable length, with a flat. Incorporates and turns on ball sintened bushings.
- **Output shaft load:**
  Axial direction, pull or push 200 N ≈ 20 Kg.
  Radial direction, at 10 mm from box 100 N ≈ 10 Kg.
- **Lubrication.** Lithium grade 2 grease.
- **Weight.** With maximal number of stages: 0.95 Kg

MOTOR COUPLING:

- **Direct C.:** Bühler 51 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: Büehler 51,xx (1.13.044.xxx)											
			235 - 12V			236 - 24V			413 - 12V			414 - 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	244,21	187,85	1,72	244,21	187,85	1,72	244,21	187,85	2,26	244,21	187,85	2,53
35,65	3	25,99	109,40	84,15	3,84	109,40	84,15	3,84	109,40	84,15	5,04	109,40	84,15	5,64
61,77	4	40,53	63,14	48,57	5,99	63,14	48,57	5,99	63,14	48,57		63,14	48,57	
93,65	4	61,44	41,64	32,03		41,64	32,03		41,64	32,03		41,64	32,03	
115,4	5	68,14	33,80	26,00	Ex. Torque max. 6,5 N·m	33,80	26,00	Ex. Torque max. 6,5 N·m	33,80	26,00	Ex. Torque max. 6,5 N·m	33,80	26,00	Ex. Torque max. 6,5 N·m
160,08	5	94,53	24,36	18,74		24,36	18,74		24,36	18,74		24,36	18,74	
191,24	5	112,93	20,39	15,69		20,39	15,69		20,39	15,69		20,39	15,69	
303,15	5	179,01	12,86	9,90		12,86	9,90		12,86	9,90		12,86	9,90	
395,92	5	233,79	9,85	7,58		9,85	7,58		9,85	7,58		9,85	7,58	

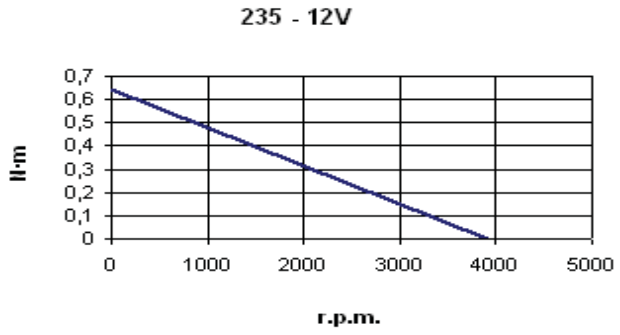
Note: Express ratios in red

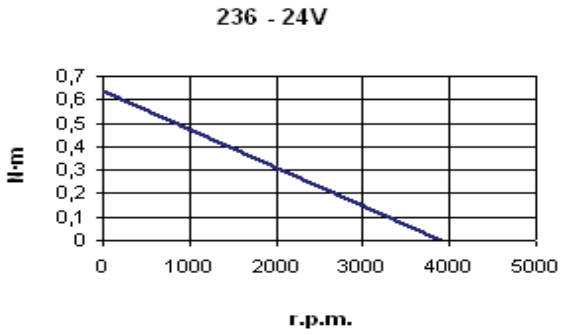
Ex Exceeds maximal admissible torque

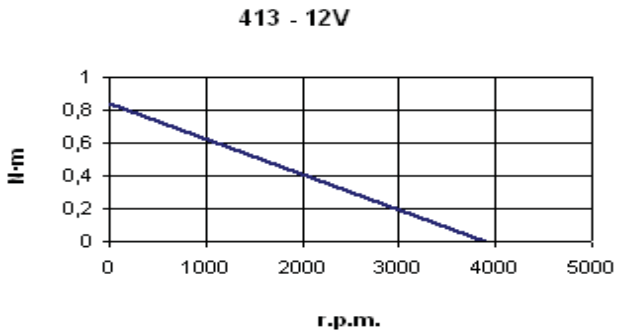
NO LOAD SPEED/NOMINAL TORQUE
Motor BHL 235-12V= 3900 r.p.m./0,64Nm.
Motor BHL 236-24V= 3900 r.p.m./0,64Nm.
Motor BHL 413-12V= 3900 r.p.m./0,84Nm.
Motor BHL 414-24V= 3900 r.p.m./0,94Nm.

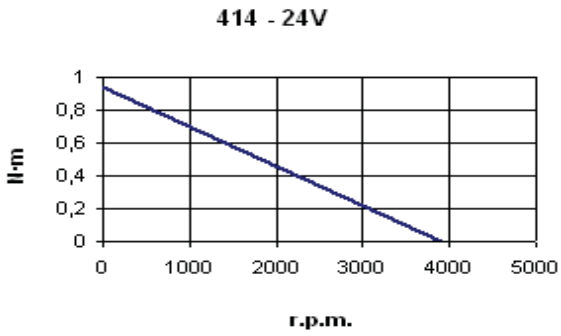
WARNING: The load might reduce final speed up to 40%.

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.