

Model	L
1.13.049.0xx	52
1.13.049.2xx	61
1.13.049.4xx	83

## KT80

## 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 8 Nm, steady load.**


- **Box.** Made of die-cast Zamak with a tubular aluminium cover. Several options for frontal mounting.
- **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.** Ø10 mm steel shaft, 30 mm usable length, with a flat. Incorporates and turns on ball bearings.
- **Output shaft load:**
  - Axial direction, pull or push 500 N ≈ 50 Kg.
  - Radial direction, at 10 mm from box 350 N ≈ 35 Kg.
- **Lubrication.** Lithium grade 2 grease.
- **Weight.** With maximal number of stages: 1.41 Kg.

### MOTOR COUPLING:

- **Direct C.:** Bühler 1.13.049.xxx type, 12 or 24V.
- **OPTIONAL:** Optional fixation 4xM3
  - Ø8 shaft.
  - 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: Bühler 40,xx (1,13,049,xxx)																	
Reduction ratio $i = X:1$	Stages	Torque Factor	001-12V			002-24V			201-12V			202-24V			401-12V			402-24V		
			No load speed $n_0$ (r.p.m.)	Nominal speed $n_H$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal speed $n_H$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal speed $n_H$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal speed $n_H$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal speed $n_H$ (r.p.m.)	Nominal Torque (N.m)	No load speed $n_0$ (r.p.m.)	Nominal speed $n_H$ (r.p.m.)	Nominal Torque (N.m)
4,43	2	3,59	902,93	677,20	0,05	902,93	677,20	0,05	970,65	699,77	0,15	970,65	699,77	0,15	857,79	677,20	0,23	857,79	677,20	0,23
6,68	2	5,41	598,80	449,10	0,07	598,80	449,10	0,07	643,71	464,07	0,23	643,71	464,07	0,23	568,86	449,10	0,34	568,86	449,10	0,34
10,65	3	7,76	375,59	281,69	0,11	375,59	281,69	0,11	403,76	291,08	0,32	403,76	291,08	0,32	356,81	281,69	0,49	356,81	281,69	0,49
14,78	3	10,77	270,64	202,98	0,15	270,64	202,98	0,15	290,93	209,74	0,45	290,93	209,74	0,45	257,10	202,98	0,68	257,10	202,98	0,68
28,63	3	20,87	139,71	104,79	0,29	139,71	104,79	0,29	150,19	108,28	0,87	150,19	108,28	0,87	132,73	104,79	1,32	132,73	104,79	1,32
39,71	3	28,95	100,73	75,55	0,40	100,73	75,55	0,40	108,29	78,07	1,21	108,29	78,07	1,21	95,69	75,55	1,83	95,69	75,55	1,83
46,45	4	30,48	86,11	64,59	0,42	86,11	64,59	0,42	92,57	66,74	1,28	92,57	66,74	1,28	81,81	64,59	1,92	81,81	64,59	1,92
60,26	4	39,54	66,38	49,78	0,54	66,38	49,78	0,54	71,36	51,44	1,66	71,36	51,44	1,66	63,06	49,78	2,50	63,06	49,78	2,50
89,98	4	59,04	44,45	33,34	0,81	44,45	33,34	0,81	47,79	34,45	2,47	47,79	34,45	2,47	42,23	33,34	3,73	42,23	33,34	3,73
124,81	4	81,89	32,05	24,04	1,13	32,05	24,04	1,13	34,45	24,84	3,43	34,45	24,84	3,43	30,45	24,04	5,17	30,45	24,04	5,17

**NO LOAD SPEED/NOMINAL TORQUE**

Motor BHL 001-12V= 4000 r.p.m./0,055Nm.

Motor BHL 002-24V= 4000 r.p.m./0,055Nm.

Motor BHL 201-12V= 4300 r.p.m./0,15Nm.

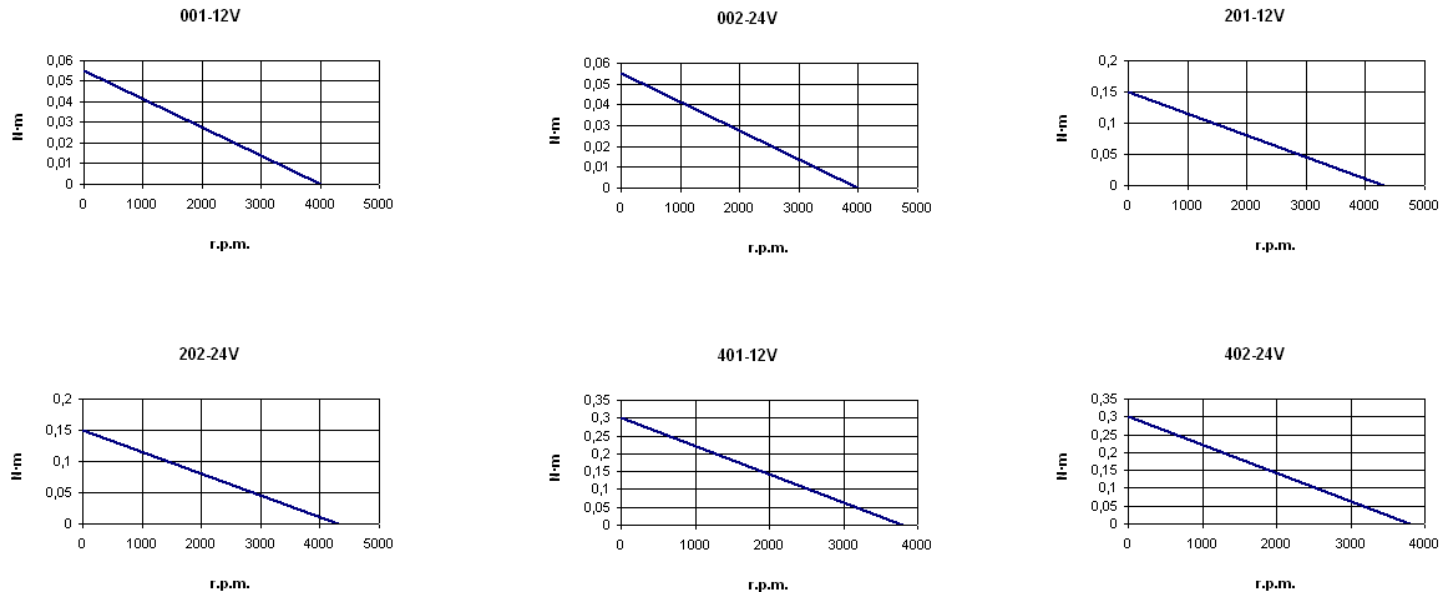
Motor BHL 202-24V= 4300 r.p.m./0,15Nm.

Motor BHL 401-12V= 3800 r.p.m./0,3Nm.

Motor BHL 402-24V= 3800 r.p.m./0,3Nm.

**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.