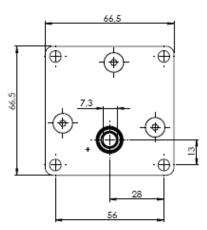
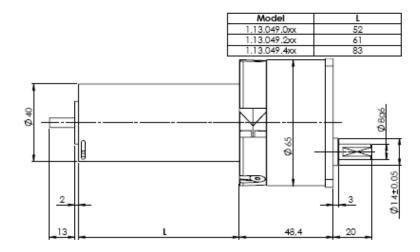
# Gearbox + Motor KT50-BHL 40





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  $\approx$  10 Kg. Radial direction, at 10 mm from box 100 N  $\approx$  10 Kg.

- Lubrication. Lithium grade 2 grease.
- Weight. With maximal number of stages: 1.20 Kg.

#### MOTOR COUPLING:

- **Direct C.**: Bühler 1.13.049.xxx 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.

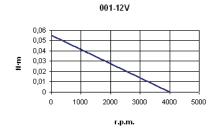
			DC MOTORS MODEL:Bühler 40,xx (1,13,049,xxx)																	
			001-12V			002-24V			201-12V			202-24V			401-12V			402-24V		
Reduction ratio i = X:1	Stages	Torque Factor	No load speed n <sub>o</sub> (r.p.m.)	Nominal speed n <sub>N</sub> (r.p.m.)	Nominal Torque (N.m)	No load speed n <sub>o</sub> (r.p.m.)	Nominal speed n <sub>N</sub> (r.p.m.)	Nominal Torque (N.m)	No load speed n <sub>o</sub> (r.p.m.)	Nominal speed n <sub>N</sub> (r.p.m.)	Nominal Torque (N.m)	No load speed n <sub>o</sub> (r.p.m.)	Nominal speed n <sub>N</sub> (r.p.m.)	Nominal Torque (N.m)	No load speed n <sub>o</sub> (r.p.m.)	Nominal speed n <sub>N</sub> (r.p.m.)	Nominal Torque (N.m)	No load speed n <sub>o</sub> (r.p.m.)	Nominal speed n <sub>N</sub> (r.p.m.)	Nominal Torque (N.m)
1,44	1	1,30	2777,78	2083,33	0,02	2777,78	2083,33	0,02	2986,11	2152,78	0,05	2986,11	2152,78	0,05	2638,89	2083,33	0,08	2638,89	2083,33	0,08
2,17	1	1,95	1843,32	1382,49	0,03	1843,32	1382,49	0,03	1981,57	1428,57	0,08	1981,57	1428,57	0,08	1751,15	1382,49	0,12	1751,15	1382,49	0,12
3,46	2	2,80	1156,07	867,05	0,04	1156,07	867,05	0,04	1242,77	895,95	0,12	1242,77	895,95	0,12	1098,27	867,05	0,18	1098,27	867,05	0,18
4,79	2	3,88	835,07	626,30	0,05	835,07	626,30	0,05	897,70	647,18	0,16	897,70	647,18	0,16	793,32	626,30	0,25	793,32	626,30	0,25
9,28	2	7,52	431,03	323,28	0,10	431,03	323,28	0,10	463,36	334,05	0,31	463,36	334,05	0,31	409,48	323,28	0,47	409,48	323,28	0,47
12,88	2	10,43	310,56	232,92	0,14	310,56	232,92	0,14	333,85	240,68	0,44	333,85	240,68	0,44	295,03	232,92	0,66	295,03	232,92	0,66
15,07	3	10,99	265,43	199,07	0,15	265,43	199,07	0,15	285,34	205,71	0,46	285,34	205,71	0,46	252,16	199,07	0,69	252,16	199,07	0,69
19,54	3	14,24	204,71	153,53	0,20	204,71	153,53	0,20	220,06	158,65	0,60	220,06	158,65	0,60	194,47	153,53	0,90	194,47	153,53	0,90
29,19	3	21,28	137,03	102,77	0,29	137,03	102,77	0,29	147,31	106,20	0,89	147,31	106,20	0,89	130,18	102,77	1,34	130,18	102,77	1,34
40,49	3	29,52	98,79	74,09	0,41	98,79	74,09	0,41	106,20	76,56	1,24	106,20	76,56	1,24	93,85	74,09	1,86	93,85	74,09	1,86

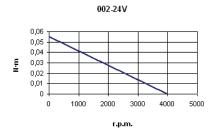
NO LOAD SPEED/NOMINAL TORQUE Motor BHL 001-12V= 4000 r.p.m./0,055Nm. Motor BHL 002-24V= 4000 r.p.m./0,055Nm.

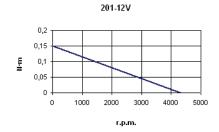
Motor BHL 201-12V= 4300 r.p.m./0,15Nm. Motor BHL 202-24V= 4300 r.p.m./0,15Nm. Motor BHL 401-12V= 3800 r.p.m./0,3Nm. Motor BHL 402-24V= 3800 r.p.m./0,3Nm.

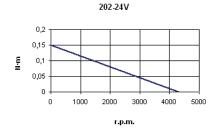
WARNING: The load might reduce final speed up to 40%.

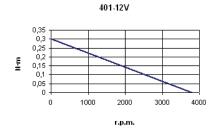
## **CURVES**

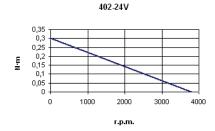












# **GEARBOX TIPS:**

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.