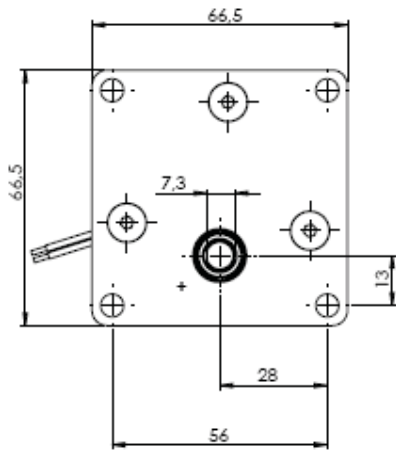
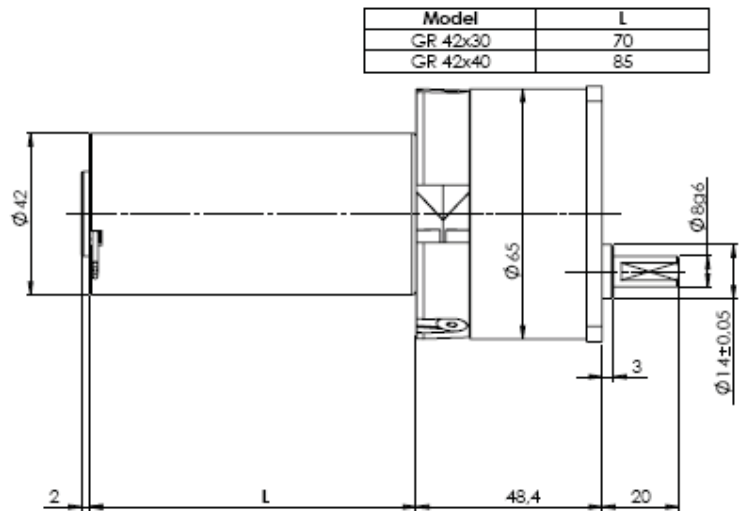


Gearbox + Motor **KT50-GR42**



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 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 GR42 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 GR42 | | | | | | | | | | | |
|------------------------------|--------|---------------|------------------------------------|------------------------------------|-------------------------|------------------------------------|------------------------------------|-------------------------|------------------------------------|------------------------------------|-------------------------|------------------------------------|------------------------------------|-------------------------|
| | | | GR42x25 12V | | | GR42x25 24V | | | GR42x40 12V | | | GR42x40 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) |
| 1,44 | 1 | 1,30 | 3020,83 | 2395,83 | 0,05 | 2916,67 | 2361,11 | 0,05 | 3159,72 | 2604,17 | 0,07 | 2638,89 | 2152,78 | 0,08 |
| 2,17 | 1 | 1,95 | 2004,61 | 1589,86 | 0,08 | 1935,48 | 1566,82 | 0,07 | 2096,77 | 1728,11 | 0,11 | 1751,15 | 1428,57 | 0,12 |
| 3,46 | 2 | 2,80 | 1257,23 | 997,11 | 0,11 | 1213,87 | 982,66 | 0,11 | 1315,03 | 1083,82 | 0,16 | 1098,27 | 895,95 | 0,17 |
| 4,79 | 2 | 3,88 | 908,14 | 720,25 | 0,15 | 876,83 | 709,81 | 0,15 | 949,90 | 782,88 | 0,22 | 793,32 | 647,18 | 0,24 |
| 9,28 | 2 | 7,52 | 468,75 | 371,77 | 0,30 | 452,59 | 366,38 | 0,29 | 490,30 | 404,09 | 0,42 | 409,48 | 334,05 | 0,46 |
| 12,88 | 2 | 10,43 | 337,73 | 267,86 | 0,41 | 326,09 | 263,98 | 0,40 | 353,26 | 291,15 | 0,59 | 295,03 | 240,68 | 0,63 |
| 15,07 | 3 | 10,99 | 288,65 | 228,93 | 0,43 | 278,70 | 225,61 | 0,42 | 301,92 | 248,84 | 0,62 | 252,16 | 205,71 | 0,67 |
| 19,54 | 3 | 14,24 | 222,62 | 176,56 | 0,56 | 214,94 | 174,00 | 0,54 | 232,86 | 191,91 | 0,80 | 194,47 | 158,65 | 0,87 |
| 29,19 | 3 | 21,28 | 149,02 | 118,19 | 0,84 | 143,88 | 116,48 | 0,81 | 155,88 | 128,47 | 1,19 | 130,18 | 106,20 | 1,29 |
| 40,49 | 3 | 29,52 | 107,43 | 85,21 | 1,16 | 103,73 | 83,97 | 1,12 | 112,37 | 92,62 | 1,66 | 93,85 | 76,56 | 1,79 |

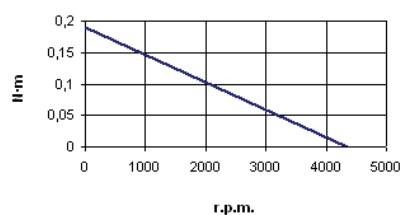
NO LOAD SPEED/NOMINAL TORQUE

Motor GR 42x25-12V= 4350 r.p.m./0,19Nm.
 Motor GR 42x25-24V= 4200 r.p.m./0,2Nm.
 Motor GR 42x40-12V= 4550 r.p.m./0,319Nm.
 Motor GR 42x40-24V= 3800 r.p.m./0,33Nm.

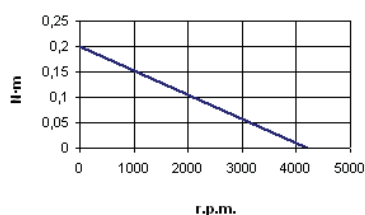
WARNING: The load might reduce final speed up to 40%.

CURVES

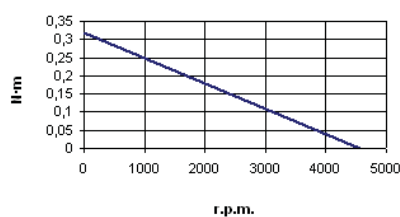
GR42x25 12V



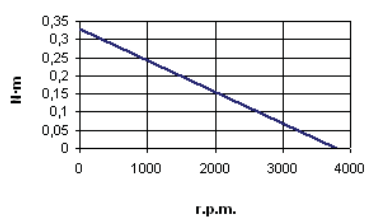
GR42x25 24V



GR42x40 12V



GR42x40 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.