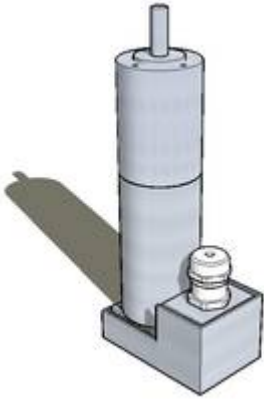


## Compact Drive elmkobull –KD42



The compact drives elmkobull-KD42 can be configured in accordance to your individual requirements. You can select between two motor types and three gear boxes with various gear ratios.

The elmkobull-KD42 is a single unit consisting of an electronic control, a brushless DC motor and a planetary gear box.

### Electronic Control elmkobull KD-4Q-24-05:

- Compact position and speed control for brushless DC motors
- Supporting serial interface RS232 with standard instruction set (various interfaces are being prepared).
- Control is monitoring power supply, current load and temperature, all limits are configurable
- Connection via PVC-cable with 0,5 meter length (8x20AWG LIYCY)
- Two digital inputs and one configurable input or output
- Controls can linked together, up to 255 various addresses are possible
- The Control can be freely programmed as an option

Technical specifications:	
Supply voltage	15...30VDC
Peak current	15A
Continuous current	5A
No load current (at 24VDC)	ca. 40mA
Number of digital inputs	2
Number of digital input/output	1
Voltage range of digital input high level	11...30VDC
Voltage range of digital input low level	0...9VDC
Operating temperature	0...70°C
Humidity (not condensing)	20...80%
Weight	0,7 – 1kg

Pin assignment of connection cable:	
Colour	Description
Pink	Power supply
Grey	Digital/Analog Ground
Brown	Digital input/output
Green	RS232 RxD
Yellow	RS232 TxD
White	Digital input 1
Red	Digital input 2
Blue	Ground

BLDC-Motor BG42x15 und BG42x30:

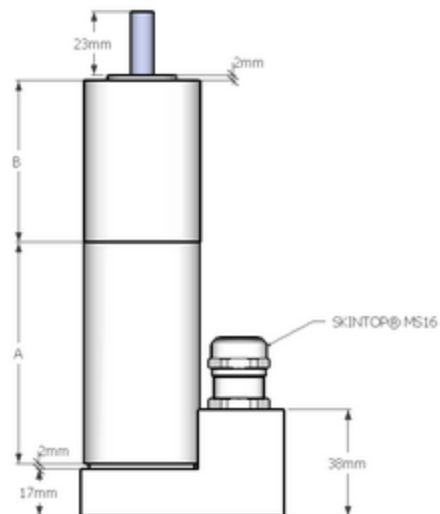
- BLDC-motor, 8 poles
- Hall sensors for exact detection of rotor position
- 24 steps resolution at one rotor cycle rotation
- Motor is available in two power versions
- Nominal torque 10,5 – 17,1 Ncm
- Nominal speed 3600- 3700 U/min
- Weight 400 – 500 g

Planetary Gear Boxes GP1, GP2 und GP3:

- One-, two- or three stage planetary gear box, coming up with various transmission ratios
- Nominal torques up to 1400 Ncm
- Efficiency 0,73 – 0,9
- Axial shaft load 250 N
- Weight 270 – 470g

KD42xx-xx-xx mechanical specification:

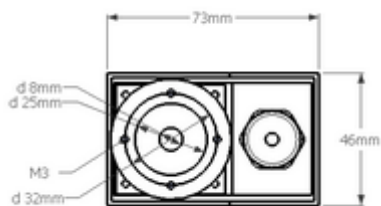
Front view:



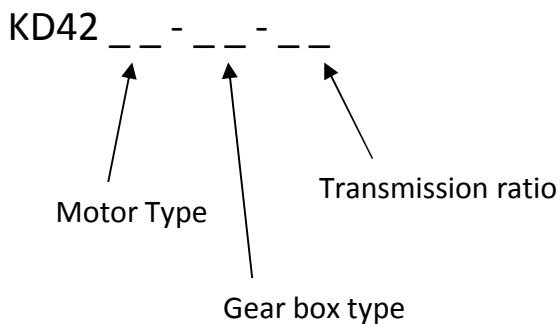
Side view:



Top view:



Key Code elmkobull-KD42:



Transmission	Ratio	Gear box type
01	4:1	01
02	8:1	01
03	16:1	02
04	25:1	02
05	32:1	02
06	50:1	02
07	64:1	02
08	100:1	03
09	128:1	03
10	156:1	03
11	200:1	03
12	256:1	03
13	312,5:1	03
14	400:1	03
15	512:1	03

Motor	Power	Current	Torque	Speed	Voltage	Dim A
15	40W	2,3A	10,5 Ncm	3700 U/min	24V	65mm
30	65W	3,5A	17,1 Ncm	3600 U/min	24V	80mm

Gear Box	Stage	Nominal torque	Weight	Efficiency	Dimension B
01	1	350 Ncm	0,27 kg	0,9	46,8mm
02	2	600 Ncm	0,37 kg	0,81	58,6mm
03	3	1400 Ncm	0,47 kg	0,73	70,4mm

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