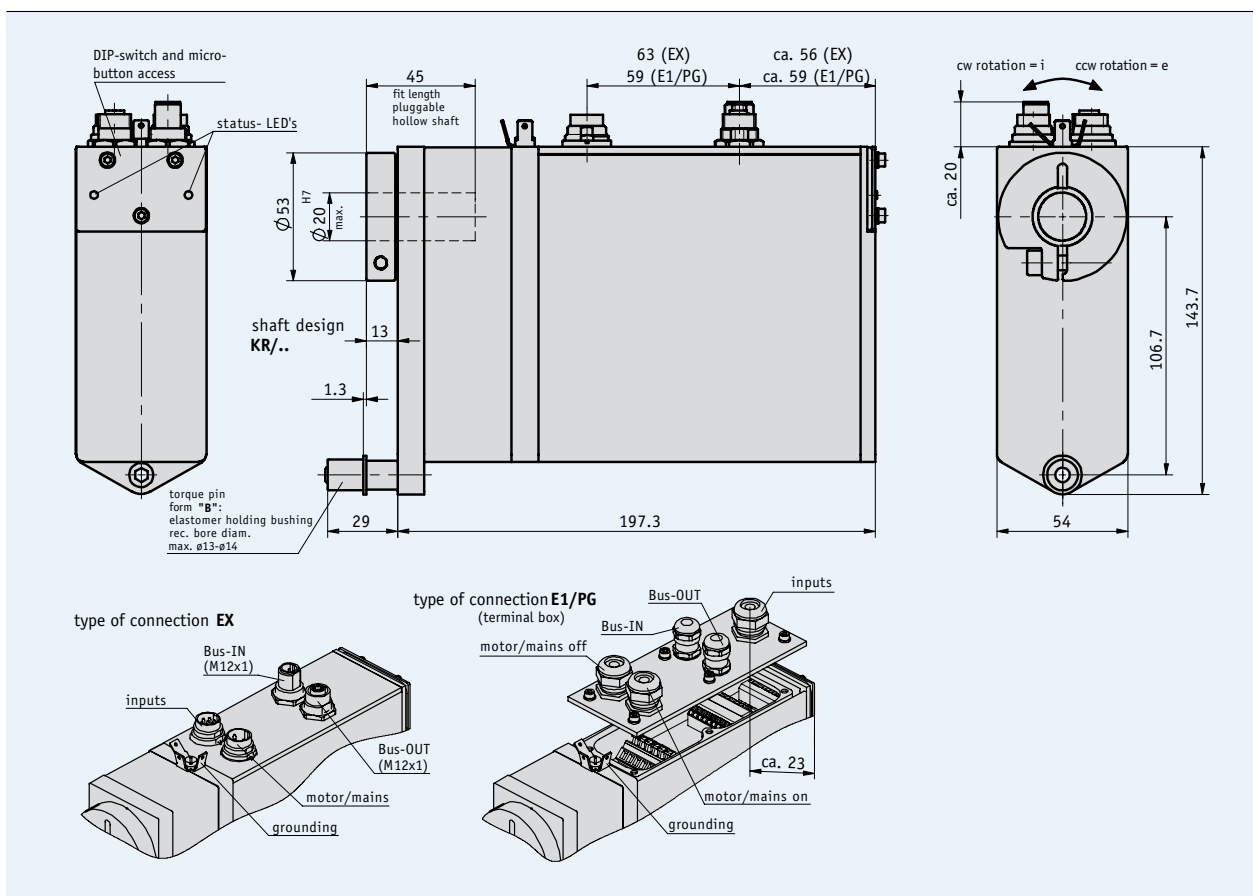


### Profile

- Easy mounting
- Stainless steel hollow shafts up to max.  $\varnothing$  20 mm
- "Manual" traveling without control via micro-button
- Brushless 160 W, 24 V DC motor with long service life
- Integrated magnetic absolute position encoder on the output shaft
- Electrical connection via spring terminals or connector
- Integrated positioning controller
- Integrated fieldbus interface
- Integrated spring-operated brake (option)



### 4.1

## Mechanical data

| Feature                            | Technical data  | Additional information                                |
|------------------------------------|---|---|
| Hollow shaft/clamp ring            | stainless steel   | Nirosta   |
| Housing                            | aluminum  |   |
| Nominal torque                     | 6 Nm, 150 rpm ( $\pm 5\%$ )<br>10 Nm, 90 rpm ( $\pm 5\%$ )<br>14 Nm, 64 rpm ( $\pm 5\%$ ) | with $i = 30.6$<br>with $i = 50.0$<br>with $i = 70.8$ |
| Shock resistance                   | 50 g, 11 ms   | DIN EN 60068-2-27                                     |
| Vibration resistance axial, radial | 10 g, 50 Hz   | DIN EN 60068-2-6                                      |
| Operating temperature              | 0 ... +80 °C  | condensation inadmissible                             |
| Ambient temperature                | 0 ... +45 °C  |   |
| Operating mode                     | short-time operation S2, 25 % duty cycle  | DIN 57530, VDE 0530 part 1                            |
| Interference protection class      | category C3   | EN 61800-3  |
| Protection category                | IP50, IP54, IP65  | DIN VDE 0470  |
| Weight                             | approx. 3.2 kg  |   |

## Electrical data

### Motor/control data

| Feature                | Technical data     | Additional information           |
|------------------------|--------------------|----------------------------------|
| Voltage supply         | 24 V DC $\pm 20\%$ | with inverse-polarity protection |
| Power consumption, fed | approx. 160 W      |                                  |
| Rated current          | 6.5 A              | with output value 100 %          |
| Idle current           | 350 mA $\pm 20\%$  |                                  |

### Encoder data

| Feature               | Technical data             | Additional information |
|-----------------------|----------------------------|------------------------|
| Resolution            | 1024 increments/revolution | 10 bit                 |
| Number of revolutions | 254                        | 8 bit (rounded)        |
|                       | 4094                       | 12 bit (rounded)       |

## Pin assignment

### Motor/voltage supply

| Signal | EX | E1 (terminal) |
|--------|----|---------------|
| +Ub    | 1  | X1.1<br>X1.2  |
| Enable | 2  | X3.5          |
| GND    | 3  | X1.3<br>X1.4  |
| Screen |    | X1.5<br>X1.6  |

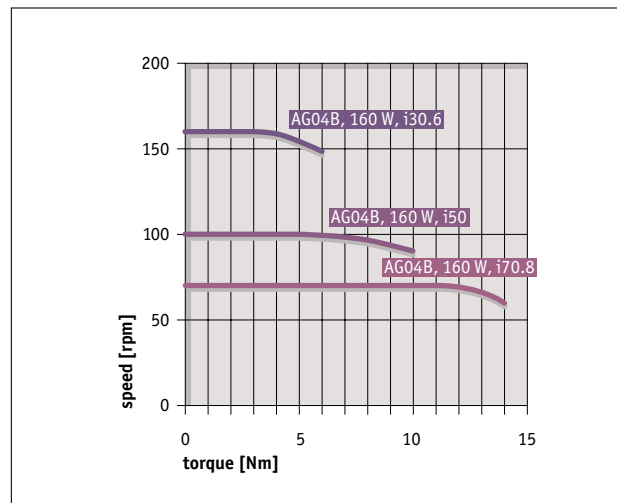
### Fieldbus

| Signal          | EX | E1 (terminal)                         |
|-----------------|----|---------------------------------------|
| do not connect! | 1  |                                       |
| BUS A           | 2  | X2.2, X2.9                            |
| do not connect! | 3  |                                       |
| BUS B           | 4  | X2.1, X2.10                           |
| do not connect! | 5  | X2.3, X2.4, X2.5,<br>X2.6, X2.7, X2.8 |

### Inputs

| Signal         | EX  | E1 (terminal) |
|----------------|-----|---------------|
| Limit switch 1 | 1   | X3.1          |
| Limit switch 2 | 2   | X3.2          |
| Input 1        | 3   | X3.3          |
| Input 2        | 4   | X3.4          |
| N.C.           | 5-7 |               |
| Enable         |     | X3.5          |
| EXT_GND        |     | X3.6          |
| GND            |     | X3.7          |

## Performance curve



## Order

### Order table

| Feature               | Order data | Specification                                   | Additional information  |
|-----------------------|------------|---|-------------------------|
| Gear ratio            | 70.8       | i = 70.8  | approx. 14 Nm at 60 rpm |
|                       | 50         | i = 50.0  | approx. 10 Nm at 90 rpm |
|                       | 30.6       | i = 30.6  | approx. 6 Nm at 150 rpm |
|                       |            | others on request                               |                         |
| Motor/brake           | 160W/MB    | 160 W EC motor with brake                       |                         |
|                       | 160W/OB    | 160 W EC motor without brake                    |                         |
| Protection category   | IP50       |   |                         |
|                       | IP54       |   |                         |
|                       | IP65       |   |                         |
| Shaft design/diameter | KR/20      | clamp ring Ø 20 mm stainless steel hollow shaft |                         |
|                       | KR/14      | clamp ring Ø 14 mm stainless steel hollow shaft |                         |
|                       |            | others on request                               |                         |
| Type of connection    | EX         | industry connector (2x M12, 2x M16)             | without network output  |
|                       | E1/PG      | terminal box (5x PG9)                           | with network output     |
| Number of revolutions | 254        | 8-bit (rounded)                                 | 254 revolutions         |
|                       | 4094       | 12-bit (rounded)                                | 4094 revolutions        |

4.1

### Order code

AG04B -  -  -  -  - **B** -  -  - **PB** - **SW**

A      B      C      D      E      F

**Scope of delivery:** AG04B, User information, CD (manual, GSD file)

#### Accessories:

Mating connectors  
Cable extension  
S7 module

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on request

#### Additional information:

General information and areas of application

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