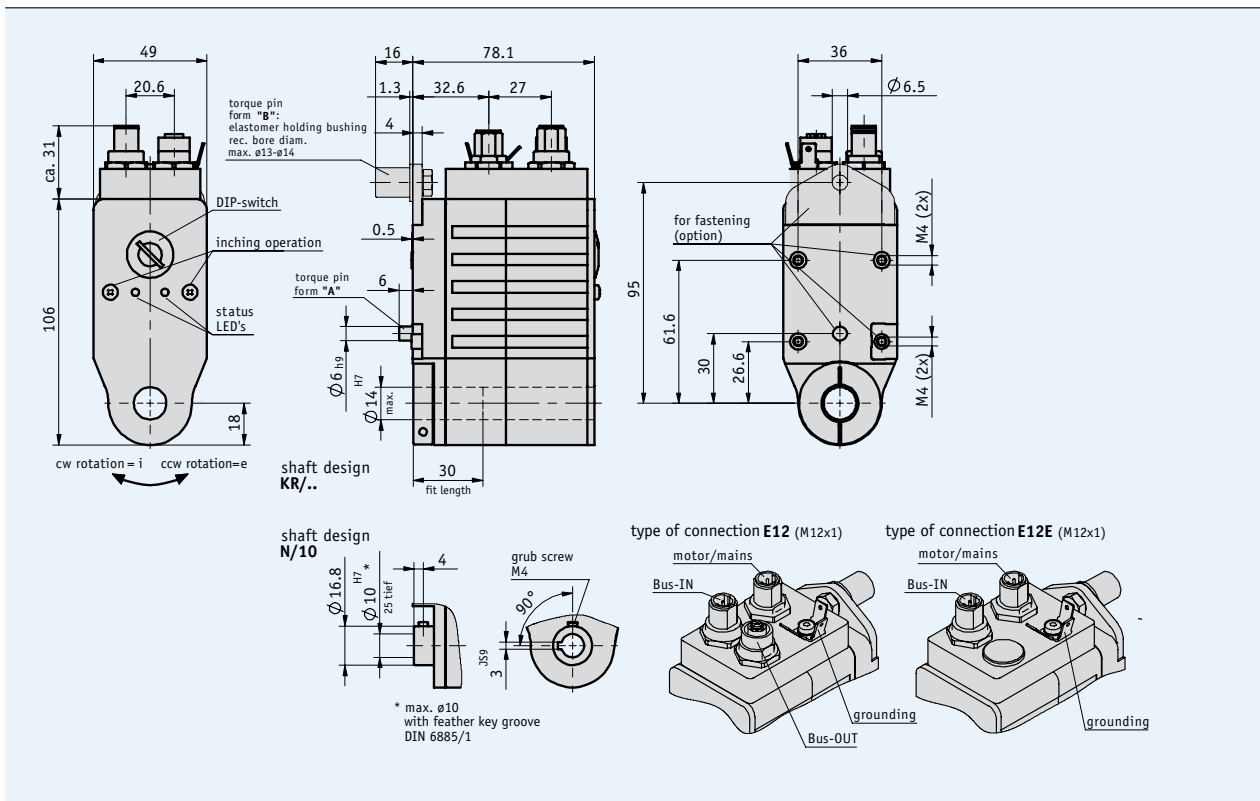


## Profile

- Space-saving, easy mounting
- Through hollow shafts up to max.  $\varnothing$  14 mm
- Integrated magnetic absolute position encoder on the output shaft
- Brushless EC motor with a long service life
- Integrated position controller
- Integrated fieldbus interface
- Electrical connection via M12 connector



## 4.1



## Mechanical data

Feature	Technical data	Additional information
Hollow shaft	browned steel	
Housing	aluminum, zinc die-cast powder-coated	
Nominal torque	1.6 Nm, 200 rpm	with $i = 24$
	3.2 Nm, 100 rpm	with $i = 48$
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	EN 61000-6-2, EN 61000-6-4	
Protection category	IP50, IP63, IP65	DIN VDE 0470
Weight	approx. 0.8 kg	

## Electrical data

### Motor/control data

Feature	Technical data	Additional information
Voltage supply	+24 V DC $\pm 10\%$	with inverse-polarity protection
Power consumption, fed	58 W	
Rated current with output value 100 %	2.4 A $\pm 7\%$ (50W-M)	max. load current 2.58 A
Idle current (with gear)	300 mA $\pm 20\%$	

### Encoder data

Feature	Technical data	Additional information
Resolution absolute encoder (ABM)	$\pm 6250$ revolutions 1600 steps per revolution	

## Pin assignment

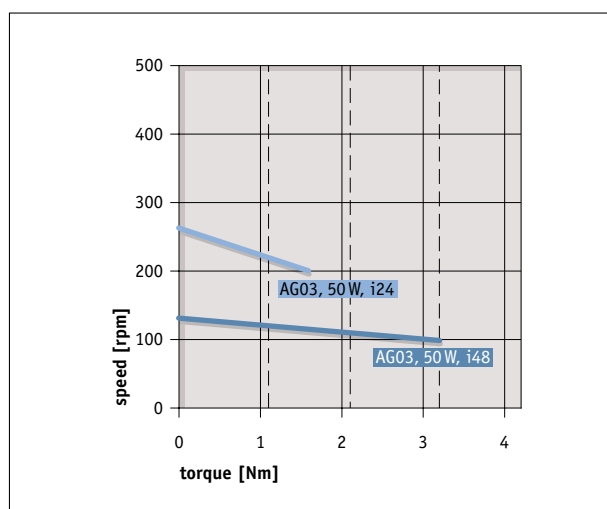
### Network

Signal	PIN
+ Ub (24 V DC)	1
Enable (24 V DC)	2
- GND	3
N.C.	4

### Fieldbus

Signal	EX
+ 5 V CD	1
BUS A	2
GND	3
BUS B	4
N.C.	5

## Performance curve



## Order

### Order table

Feature	Order text	Specification	Additional information
Gear ratio	48	A	25 % duty cycle
	24		25 % duty cycle
Protection category	IP50	B	
	IP63		
	IP65		
Shaft design	KR/14	C	clamp ring, Ø 14 mm
	KR/12		clamp ring, Ø 12 mm
	N/10		keyway JS9 DIN 6885, 1, Ø 10 mm
Torque support (form)	A	D	bolt, Ø 6 mm
	B		lug I
Type of connection	E12	E	Bus-IN/Bus-OUT
	E12E		Bus-IN

### Order code

AG03 -  - 50W-M -  -  -  -  -  - ABM - OMS - PB - SW

A
B
C
D
E

**Scope of delivery:** AG03, User information  
CD (manual, GDS and EDS files)

**Accessories:**  
Mating connectors Page 44  
S7 module on request

**Additional information:**  
General information and areas of application Page 4 cont.