

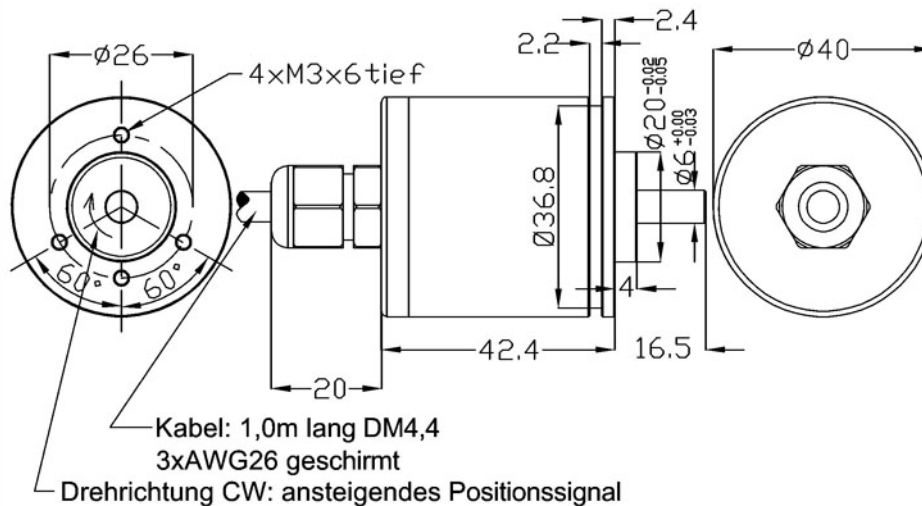
Serie MAB40A / Hall Effect Absolute Encoder

- Angle range 360° (special angles on request)
- 12 Bit resolution
- Protection class IP67
- Analog output: 0-5V, 0-10V, 4-20mA
- Supply voltage: 5V, 24V
- Housing Ø 40 mm with servoflange
- Precision ball bearings

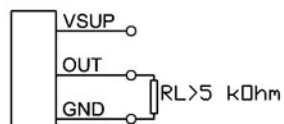
If cost effectiveness, rugged operation and versatility are required, the MAB40A is the ideal solution. 2 precision ball bearings and the magnetic measuring principle are warrants for a high life expectancy.



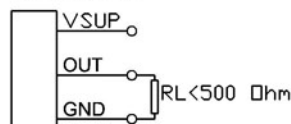
Drawing



Spannungsausgang



Stromausgang



Aderbelegung

| | |
|--------|------|
| rt | VSUP |
| bn | OUT |
| sw | GND |
| Schirm | |

Serie MAB40A / Hall Effect Absolute Encoder

| Electrical Data | | Voltage Output | | Current Output |
|---------------------------------|---------|----------------------------------|-------|----------------|
| Electrical Angle | [°] | 360 (other angles on request) | | |
| Independent Linearity Tolerance | [%] | ± 0,3 | | |
| Resolution | [Steps] | 4096 (12 Bit) | | |
| Update rate | [ms] | Standard: 1,0 High Speed: 0,2 | | |
| Output Signal | | 0,5V ratiometric | 0-10V | 4-20mA |
| Supply Voltage | [VDC] | 5 ± 10% | 15-30 | 8-30 |
| Supply Current (no load) | [mA] | < 20 | | |
| Signal load | [Ohm] | > 5k | | < 500 |

| Mechanical Data | | |
|----------------------------------|-------|---------------------------|
| Maximum Rotational Speed | [rpm] | 1000 |
| Operational Torque | [Ncm] | typical 1 |
| Operating Temperature | [°C] | -25 ... +85 |
| Storage Temperature | [°C] | -40 ... +85 |
| Bearing | | 2 precision ball bearings |
| Protection Class (shaft/housing) | | IP67 |

| Other Data | | |
|--|--|--------------------------|
| Material Housing | | Aluminium |
| Material Shaft | | stainless steel |
| Mounting parts (pls. order separately, Part-No. 106399) | | 3 clamps SFN1 (M3 x 0,5) |
| Weigth | | approx. 90 g |

Serie MAB40A / Hall Effect Absolute Encoder

Order Description

| | | | | | | |
|---|--------|-------------|-------------|-----------------------|---------|---------|
| Series MAB40A with single electronics | MAB40A | | | | | |
| <u>Resolution / Update rate</u> | | | | | | |
| 12 bit / Standard speed (*) | | 12 (*) | | | | |
| 12 bit / High speed | | 12HS | | | | |
| <u>Supply voltage / Output signal</u> | | | | | | |
| 5 V / 0...5 V | | | 0505 (*) | | | |
| 24 V (9...30 V) / 0...5 V | | | 2405 (*) | | | |
| 24 V (15...30 V) / 0...10 V | | | 2410 | | | |
| 24 V (9...30 V) / 4...20 mA | | | 2442 | | | |
| 24 V (9...30 V) / 0...20 mA | | | 2420 (*) | | | |
| Counterclockwise rising signal | | | | CCW360 (*) | | |
| Other electrical effective angle | | | | C(C)Wxxx (*) | | |
| Clockwise rising signal; 360°, zero point alignment | | | | | N | |
| Other shaft length [mm] | | | | | | Axx (*) |
| <u>Cable output</u> | | | | | | |
| Axial - 1 m | | | | | | - |
| Axial [m] | | | | | | CVxx(*) |
| Series MAB40A with redundant output | MAB40A | X | | | | |
| <u>Resolution / Update Rate</u> | | | | | | |
| 12 bit / Standard Speed (*) | | 12 (*) | | | | |
| 12 bit / High Speed | | 12HS | | | | |
| <u>Supply voltage / Output signal</u> | | | | | | |
| 5 V / 0...5 V | | | 0505 (*) | | | |
| 24 V (9...30 V) / 0...5 V | | | 2405 (*) | | | |
| 24 V (15...30 V) / 0...10 V | | | 2410 | | | |
| Clockwise rising signal; 360°, zero point alignment | | | | CW360/CW360 N | | |
| Counterclockwise rising signal at both channels | | | | CCW360/CCW360 (*) | | |
| Other electrical effective angle | | | | C(C)Wxxx/C(C)Wxxx (*) | | |
| Other shaft length [mm] | | | | | Axx (*) | |
| <u>Cable output</u> | | | | | | |
| Axial - 1 m | | | | | | - |
| Axial [m] | | | | | | CVxx(*) |

"bold print = standard option"

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/angle-sensors/lagerliste.html>

(*) = on request available for projects

23.02.2015