

1) not included in scope of delivery, 2) Non-usable area, 3) Nominal length = Measuring length, 10) Null point, 11) Installation length



Basic features

| | |
|-----------------------------------|----------------------------|
| Approval/Conformity | CE cULus EAC WEEE |
| Magnets, number (factory setting) | 1 |
| Magnets, number max. | 16 |

Electrical connection

| | |
|-----------------------------|------------------------|
| Connection | Connector, M8x1, 4-pin |
| Connection 1 | M8x1, 4-pin |
| Connection 2 | M12x1, 4-pin, D-coded |
| Connection 3 | M12x1, 4-pin, D-coded |
| Connection version | axial |
| Polarity reversal protected | Ub up to 36 V |
| Short-circuit protection | to GND |

Electrical data

| | |
|--------------------------------------|-------------------|
| Current consumption max. at 24 V DC | 120 mA |
| Galvanic isolation | yes / EtherNet |
| Inrush current | ≤ 500 mA/10 ms |
| Operating voltage Ub | 10...30 VDC |
| Output signal adjustable | yes |
| Output value | Position in μm |
| Overvoltage protection | Ub up to 36 V |
| Switch-on delay max. | 5 s |
| Synchronous mode | yes, configurable |
| Voltage-proof up to (GND to housing) | 500 V AC |

Environmental conditions

| | |
|-------------------------------------|---|
| Ambient temperature | -40...85 °C |
| EN 55016-2-3, Radiation | For industrial and residential use |
| EN 60068-2-27, Continuous shock | 150 g, 2 ms |
| EN 60068-2-27, Shock | 150 g, 6 ms |
| EN 60068-2-6, Vibration | 20 g, 10...2000 Hz |
| EN 61000-4-2, ESD | Severity Level 3 |
| EN 61000-4-3, RFI | Severity Level 3 |
| EN 61000-4-4, Burst | Severity Level 3 |
| EN 61000-4-5, Surge | Severity Level 2 |
| EN 61000-4-6, High-frequency fields | Severity Level 3 |
| EN 61000-4-8 Magnetic fields | Severity Level 4 |
| IP rating | IP67 with connector |
| Relative humidity | ≤ 90 %, non-condensing |
| Storage temperature | -40...100 °C |
| Temperature coefficient typ. | ≤ 18 ppm/K at 50% of nominal stroke 500mm |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 119 a |
|--------------|-------|

Material

| | |
|--------------------------------------|-----------------------------------|
| Cover material | Aluminum, Die-cast, nickel plated |
| Housing material | Aluminum, Anodized |
| Housing material, surface protection | Anodized |

Mechanical data

| | |
|---------------------------------|-----------------|
| Installation length | 1156 mm |
| Minimum distance of the magnets | 65 mm |
| Mounting | Mounting clamps |
| Null point | 83.0 mm |

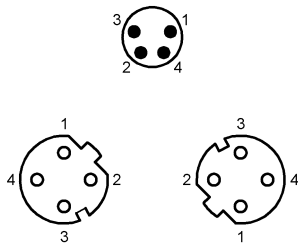
Range/Distance

| | |
|----------------------------|-----------------------------|
| Measuring length | 1000 mm |
| Non-linearity max. | ±30 µm |
| Repeat accuracy | ≤ ± 5 µm (typical ± 2.5 µm) |
| Reproducibility | ≤30 µm |
| Resolution, position | 1 µm |
| Resolution, traverse speed | 0.1 mm/s |
| Sampling frequency max. | 600 Hz |

Output/Interface

| | |
|-------------------------------|-------------------------------|
| Data format | 32-bit signed |
| Interface | Profinet Encoder Profile V4.1 |
| Process data, device – master | ≥ 12 bytes |
| Process data, master – device | 4 bytes |

Connector Drawings



Wiring Diagrams

| Pin | Bus Connectors |
|-----|----------------|
| 1 | TX+ |
| 2 | RX+ |
| 3 | TX- |
| 4 | RX- |

| Pin | Power Connector |
|-----|-----------------|
| 1 | +24 V DC |
| 2 | NC |
| 3 | 0 V GND |
| 4 | NC |