



1) Sensing surface, 2) Notch, 3) LED function indicator, 4) Button



Basic features

| | |
|------------------------|-----------------------------------|
| Application | Positioning |
| Approval/Conformity | CE UKCA cULus WEEE |
| Basic standard | IEC 60947-5-2 IEC 60947-5-7 |
| Principle of operation | Magnetic field positioning system |
| Scope of delivery | Short guide |

Electrical data

| | |
|---|-------------|
| Current load capacity in SIO-mode | ≤ 100 mA |
| Load resistance RL max. (Analog I) | 500 ohms |
| No-load current I _o max. at U _e | 25 mA |
| Operating voltage U _b | 15...30 VDC |
| Output current max. (Analog V) | 5 mA |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating voltage U _e DC | 24 V |
| Ready delay t _v max. | 100 ms |

Display/Operation

| | |
|----------------------------|-----------------|
| Error diagnostic indicator | Error - LED red |
| Function indicator | LED yellow |
| Power indicator | Run - LED green |

Environmental conditions

| | |
|-------------------------|---------------------------------|
| Ambient temperature | -25...85 °C |
| Contamination scale | 3 |
| EN 60068-2-27, Shock | 30 g _n , 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 2 mm, 3x30 min |
| ESD | 2B (4 kV) |
| Emission | EN 55022, Class B |
| IP rating | IP67 |

Electrical connection

| | |
|-------------------------------------|----------------------------|
| Bending radius min., fixed cable | 3 x D |
| Bending radius min., flexible cable | 10 x D |
| Cable | PUR, 0.5 m |
| Cable diameter D | 2.4 mm |
| Connection | M12x1-Male, 4-pin, A-coded |
| Number of conductors | 4 |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 201 a |
|--------------|-------|

Magnetic Sensors
 BMP 01-EL1PP21A-0064-00-P00,5-S4
 Order Code: BMP000M



IO-Link

| | |
|----------------------------|--|
| IO-Link Profil IDs | 0x000B SSP3.2 0x4000 Identification and Diagnosis |
| IO-Link function classes | 0x8001 Binary Data Channel 0x8004 Teach Commands |
| Supported IO-Link Profiles | Common Profile Smart Sensor Profile - Measuring Device |

Interface

| | |
|---------------|--|
| Analog output | Analog, voltage/Analog, current selectable 0...10 V/4...20 mA |
| Interface | IO-Link 1.1 |
| SIO mode | yes |

Material

| | |
|------------------|--------------------|
| Housing material | PA 12 Aluminium |
| Material jacket | PUR |

Mechanical data

| | |
|------------------------|--------------------|
| Dimension | 17.5 x 9.6 x 74 mm |
| Tightening torque max. | 0.1 Nm |

Range/Distance

| | |
|---------------------------------------|-----------------------------------|
| Measuring range | 64 mm |
| Non-linearity typ. | ±250 µm |
| Repeat accuracy | 100 µm |
| Resolution | ≤ 1 µm (IO-Link), 12 Bit (analog) |
| Sampling rate max. | 1 kHz |
| Temperature drift max. from end value | ±0.3 % |

Remarks

Please refer to manual.

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



Wiring Diagrams

