



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



**Basic features**

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

**Display/Operation**

<b>Error diagnostic indicator</b>	Error - LED red
<b>Function indicator</b>	LED yellow
<b>Power indicator</b>	Run - LED green

**Electrical connection**

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

**Electrical data**

<b>Current load capacity in SIO-mode</b>	≤ 100 mA
<b>Load resistance RL max. (Analog I)</b>	500 ohms
<b>No-load current I<sub>o</sub> max. at U<sub>e</sub></b>	25 mA
<b>Operating voltage U<sub>b</sub></b>	15...30 VDC
<b>Output current max. (Analog V)</b>	5 mA
<b>Rated insulation voltage U<sub>i</sub></b>	75 V DC
<b>Rated operating voltage U<sub>e</sub> DC</b>	24 V
<b>Ready delay t<sub>v</sub> max.</b>	100 ms

**Environmental conditions**

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

**Functional safety**

<b>MTTF (40 °C)</b>	201 a
---------------------	-------

Magnetic Sensors  
**BMP 01-EL1PP21A-0160-00-P00,5-S4**  
**Order Code: BMP000R**



**IO-Link**

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

**Material**

<b>Housing material</b>	PA 12 Aluminium
<b>Material jacket</b>	PUR

**Mechanical data**

<b>Dimension</b>	17.5 x 9.6 x 170 mm
<b>Tightening torque max.</b>	0.1 Nm

**Interface**

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

**Range/Distance**

<b>Measuring range</b>	160 mm
<b>Non-linearity typ.</b>	±250 µm
<b>Repeat accuracy</b>	100 µm
<b>Resolution</b>	≤ 1 µm (IO-Link), 12 Bit (analog)
<b>Sampling rate max.</b>	1 kHz
<b>Temperature drift max. from end value</b>	±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 exponential 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**

