



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



Basic features

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

Display/Operation

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

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	M8x1-Male, 4-pin, A-coded
Number of conductors	4
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Current load capacity in SIO-mode	≤ 100 mA
Load resistance RL max. (Analog I)	500 ohms
No-load current I₀ 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

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

Functional safety

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

Magnetic Sensors
BMP 01-EL1PP21A-0096-00-P00,5-S75
Order Code: BMP0003



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

Material

Housing material	PA 12 Aluminium
Material jacket	PUR

Mechanical data

Dimension	17.5 x 9.6 x 106 mm
Tightening torque max.	0.1 Nm

Interface

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

Range/Distance

Measuring range	96 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

