

1) Non-usable area, 2) Sensing surface, 3) Index slot, 4) Encoder



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2 IEC 60947-5-7

Display/Operation

Power indicator	no
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Electrical connection

Connection	M8x1
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Limit frequency -3 dB	300 Hz
Load resistance RL	2000...500 Ohm
Operating voltage Ub DC (Ia)	10...30 V
Operating voltage Ub DC (Ua)	15...30 V
Output current at SI max.	20 mA
Output current at SI min.	4 mA
Output current at Se	12 mA
Output voltage at SI max.	10 V
Output voltage at SI min.	0 V
Output voltage at Se	5 V
Rated frequency, AC	DC
Rated insulation voltage Ui	75 V DC
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	10 %

Environmental conditions

Ambient temperature	-10...75 °C
Contamination scale	3
IP rating	IP67

Magnetoinductive Sensors
BIL ED0-P160A-01-S75
Order Code: BIL0004



Interface

Analog output Analog, voltage 0...10 V Analog,
 current 4...20 mA

Material

Housing material PA

Mechanical data

Dimension 230 x 15 x 24 mm

Range/Distance

Linearity range SI 0...160 mm
Measuring range 0...160 mm
Measuring speed max. 5 m/s
Non-linearity max. ±2.4 mm
Repeat accuracy per BWN ±500.0 µm
Response time max. 1 ms
Temperature drift max. from end value ±3.0 %

Remarks

Se = Effective point (Index slot). Specifications apply only when using recommended position encoder: Position encoder BIL 000-MH-A, D = 2 mm Position encoder BIL 001-MH-A, D = 1 mm position encoder axis vertical to sensing surface. Other magnets on request. The characteristic data are valid only within the defined working range Sa at distance D for the respective position encoder.

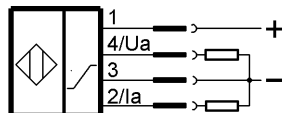
Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Appropriate connectors can be obtained from Balluff.

Load resistance RL max. applies for Ub min. 16V.

Connector Drawings



Wiring Diagrams



Technical Drawings

