

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



Display/Operation

Power indicator yes

Polarity reversal protected yes
 Rated frequency, AC DC
 Rated insulation voltage Ui 75 V DC
 Rated operating voltage Ue DC 24 V
 Ripple max. (% of Ue) 10 %

Electrical connection

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

Environmental conditions

Ambient temperature -10...75 °C
 Protection type IEC 60529 IP67

Electrical data

Contamination scale 3
 Limit frequency -3 dB 1500 Hz
 Load resistance RL 2000...500 Ohm
 MTTF (40 °C) 280 a
 Operating voltage Ub DC (Ia) 10...30 V
 Operating voltage Ub DC (Ua) 15...30 V
 Output current at Se 12 mA
 Output current at SI max. 20 mA
 Output current at SI min. 4 mA
 Output voltage at Se 5 V
 Output voltage at SI max. 10 V
 Output voltage at SI min. 0 V

General data

Approval/Conformity CE
cULus
 Basic standard BWN PR 44
IEC 60947-5-2
IEC 60947-5-7

Material

Housing material PA

Mechanical data

Dimension 95 x 15 x 24 mm

Output/Interface

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

Range/Distance

Linearity range SI 5...55 mm
 Measuring range 5...55 mm
 Measuring speed max. 5 m/s
 Non-linearity max. ±0.6 mm
 Repeat accuracy ±60.0 µm
 Response time max. 1 ms

Temperature drift max. from end value ±2.5 %

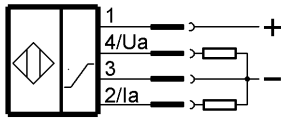
Remarks

LED 1: Power
 LED 2: Position marker detection
 Only for applications per NFPA 79 (machines with a supply voltage of maximum 600 V). Appropriate connectors can be obtained from Balluff.
 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.
 Load resistance RL max. applies for Ub min. 16V.
 For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.
 Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Connector view



Wiring Diagram



Diagram

