

EH[C € 🗷

Basic features

Additional features **Function monitoring** Approval/Conformity CE EAC WEEE Basic standard IEC 60947-5-2

Display/Operation

Function indicator Power indicator no

Electrical connection

Connection M12x1-Male, 4-pin, A-coded Polarity reversal protected Protection against device mix-ups yes Short-circuit protection yes

Electrical data

Load capacitance max. at Ue $0.15 \, \mu F$ Min. operating current Im 1 mA No-load current lo max., damped 25 mA No-load current lo max., undamped 25 mA Operating voltage Ub 20...30 VDC Output resistance Ra Open collector 75 V DC Rated insulation voltage Ui Rated operating current le 130 mA Rated operating voltage Ue DC 24 V Rated short circuit current 100 A Ready delay tv max. 50 ms Residual current Ir max. 80 μΑ Ripple max. (% of Ue) 15 % 300 Hz Switching frequency **Utilization category** DC -12 Voltage drop static max. 2.5 V

Environmental conditions

-25...70 °C Ambient temperature 3 Contamination scale

Half-sinus, 30 gn, 11 ms EN 60068-2-27, Shock 55 Hz, amplitude 1 mm, 3x30 min

EN 60068-2-6, Vibration

Protection degree IP67

Functional safety

Subject to change without notice: 550105

MTTF (40 °C) 990 a

Inductive Sensors

BES 113-356-SA6-S4 **Order Code: BES02MC**



Material

Housing material Brass, nickel plated Material sensing surface PA 12 Surface protection nickel plated Mechanical data

Switching output

Dimension Ø 12 x 91.5 mm Installation non-flush M12x1 Size **Tightening torque** 10 Nm

Remarks

Max. cable length: 50 m.

Test pulses ≤ 0.5 ms typ. 160 Hz are superimposed on the output signal which are missing when there is a fault (single fault) in the sensor.

The sensor is functional again after the overload has been eliminated.

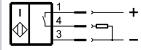
For more information about MTTF and B10d see MTTF / B10d Certificate

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



Output/Interface

PNP normally open (NO)

Range/Distance Assured operating distance Sa 2.9 mm Hysteresis H max. (% of Sr) 15.0 % Rated operating distance Sn 3.7 mm Real switching distance sr 3.7 mm Repeat accuracy max. (% of Sr) 5.0 % Temperature drift max. (% of Sr) 10 % Tolerance Sr -10 %/+20 %