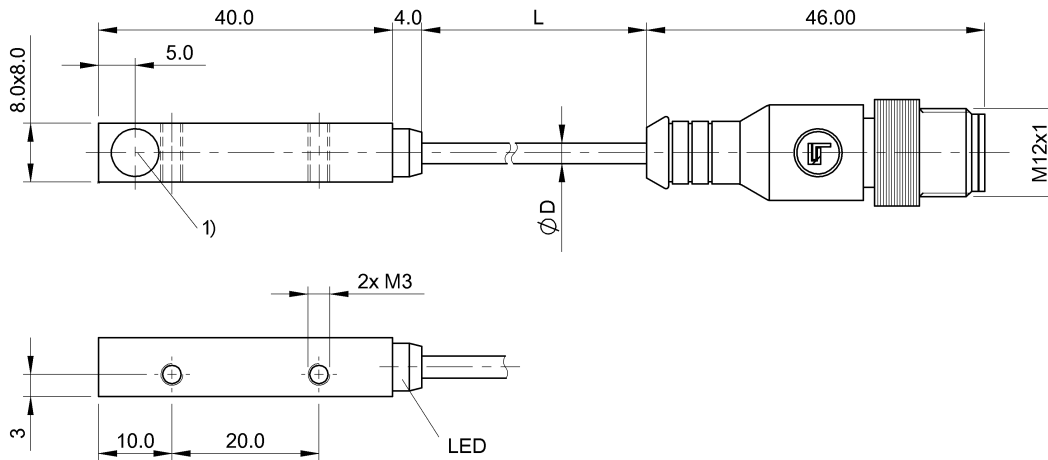


BES 516-300-S166-00,3-S4
BES017N



1) Sensing surface



IND. CONT. EQ
81U2
for use in the secondary of
a class 2 source of supply
Environmental - Type 1 Enclosure



Display/Operation

| | |
|--------------------|-----|
| Function indicator | yes |
| Power indicator | no |

Electrical connection

| | |
|-----------------------------|-----------------------------------|
| Cable diameter D | 3.00 mm |
| Cable length | 0.3 m |
| Connection | M12x1-Connector, 4-pole, A-coded |
| Connection type | Cable with connector, 0.30 m, PUR |
| Polarity reversal protected | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|---------------|
| Hysteresis H max. (% of Sr) | 15.0 % |
| Load capacitance max. at Ue | 0.5 µF |
| MTTF (40 °C) | 830 a |
| No-load current I ₀ max., undamped | 4 mA |
| Operating voltage U _b | 10...30 VDC |
| Output resistance R _a | 33.0 kOhm + D |
| Pollution degree | 3 |
| Protected against miswiring | yes |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e DC | 200 mA |
| Rated operating voltage U _e DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay t _v max. | 10 ms |
| Repeat accuracy max. (% of Sr) | 5.0 % |
| Residual current I _r max. | 80 µA |
| Switching frequency | 5000 Hz |
| Utilization category | DC -13 |

Voltage drop static max. 2.5 V

Environmental conditions

| | |
|---------------------------|-------------|
| Ambient temperature | -25...70 °C |
| Protection type IEC 60529 | IP67 |

Functional safety

| | |
|---------------------|------|
| Diagnostic coverage | 0 % |
| Functional safety | no |
| Mission Time | 20 a |

General data

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

Material

| | |
|--------------------------|-------------------|
| Housing material | Zinc, Die casting |
| Material jacket | PUR |
| Material sensing surface | PBT |

Mechanical data

| | |
|--------------|--------------------|
| Dimension | 40 x 8 x 8 mm |
| Installation | for flush mounting |

Output/Interface

| | |
|------------------|------------------------|
| Switching output | PNP Normally open (NO) |
|------------------|------------------------|

BES 516-300-S166-00,3-S4 BES017N

Range/Distance

| | |
|----------------------------------|--------|
| Assured operating distance Sa | 1.2 mm |
| Range | 1.5 mm |
| Rated operating distance Sn | 1.5 mm |
| Ripple max. (% of Ue) | 15 % |
| Temperature drift max. (% of Sr) | 10 % |

Remarks

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

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

