



Basic features

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

Display/Operation

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

Electrical connection

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

Electrical data

| | |
|---|----------------|
| Load capacitance max. at Ue | 0.5 μ F |
| Min. operating current I _m | 0 mA |
| No-load current I _o max., damped | 13 mA |
| No-load current I _o max., undamped | 7 mA |
| Operating voltage U _b | 10...55 VDC |
| Output resistance R _a | 33.0 kOhm + 2D |
| Protection class | II |
| Rated insulation voltage U _i | 250 V AC |
| Rated operating current I _e | 200 mA |
| Rated operating voltage U _e DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay t _v max. | 35 ms |
| Residual current I _r max. | 10 μ A |
| Ripple max. (% of U _e) | 15 % |
| Switching frequency | 430 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2.5 V |

Environmental conditions

| | |
|-------------------------|---------------------------------------|
| Ambient temperature | -40...85 °C |
| Contamination scale | 3 |
| EN 60068-2-27, Shock | Half-sinus, 30 g _n , 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min |
| IP rating | IP68 |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 271 a |
|--------------|-------|

Inductive Sensors
BES M18MN-PAH16F-S04G
Order Code: BES04RM



Interface

Switching output PNP normally open/normally closed (NO/NC)

Material

Housing material Brass, Nickel-free coated
Material sensing surface PBT

Mechanical data

Dimension Ø 18 x 86 mm
Installation non-flush
Size M18x1
Tightening torque 25 Nm

Range/Distance

Assured operating distance Sa 12.8 mm
Hysteresis H max. (% of Sr) 15.0 %
Rated operating distance Sn 16.0 mm
Real switching distance sr 16 mm
Repeat accuracy max. (% of Sr) 5.0 %
Switching distance marking ■■
Temperature drift max. (% of Sr) 15 %
Tolerance Sr ±10 %

Remarks

The sensor is functional again after the overload has been eliminated.
Flush: See installation instructions for inductive sensors with extended range 825357.
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

