



Basic features

Additional features	Selective ferrous
Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Target material	Selective ferrous

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 3-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 µF
Magnetic field strength, interference field	100 kA/m
Min. operating current I _m	0 mA
No-load current I _o max., damped	21 mA
No-load current I _o max., undamped	17 mA
Operating voltage U _b	10...30 VDC
Output resistance R _a	33.0 kOhm + D
Rated insulation voltage U _i	75 V DC
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.	30 ms
Residual current I _r max.	10 µA
Ripple max. (% of U _e)	15 %
Switching frequency	110 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-25...70 °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 30 g, 10...2000 Hz
IP rating	IP68
Magnetic field immune	magnetic field immune (AC/DC)

Functional safety

MTTF (40 °C)	365 a
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Inductive Sensors
BES M18EG1-PSC80S-S04G-S
Order Code: BES05K8



Interface

Switching output PNP normally open (NO)

Material

Housing material Stainless steel
 Material sensing surface Stainless steel

Mechanical data

Dimension Ø 18 x 56 mm
 Installation for flush mounting
 Size M18x1
 Tightening torque 30 Nm

Range/Distance

Assured operating distance Sa 6.4 mm
 Hysteresis H max. (% of Sr) 15.0 %
 Rated operating distance Sn 8 mm
 Real switching distance sr 8 mm
 Repeat accuracy max. (% of Sr) 5.0 %
 Switching distance marking ■■
 Temperature drift max. (% of Sr) 10 %
 Tolerance Sr ±10 %

Remarks

The sensor is functional again after the overload has been eliminated.
 Ferrous - Detects ferromagnetic steel
 Non-Ferrous metals (such as aluminum, copper, brass) and austenitic steel are ignored.
 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

