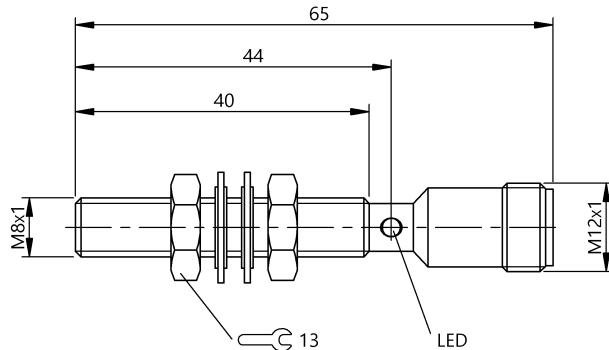


Inductive Sensors

BES M08EG1-PSC15S-S04G-S

Order Code: BES02YZ

**BALLUFF**

#### Basic features

Approval/Conformity	CE 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, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

#### Electrical data

Min. operating current $I_m$	0 mA
No-load current $I_0$ max., damped	15 mA
No-load current $I_0$ max., undamped	15 mA
Operating voltage $U_b$	10...30 VDC
Rated insulation voltage $U_i$	75 V DC
Rated operating current $I_e$	100 mA
Rated operating voltage $U_e$ DC	24 V
Rated short circuit current	100 A
Ready delay $t_v$ max.	20 ms
Residual current $I_r$ max.	10 $\mu$ A
Ripple max. (% of $U_e$ )	15 %
Switching frequency	80 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 <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

#### Functional safety

MTTF (40 °C)	990 a
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#### Interface

Switching output	PNP normally open (NO)
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#### Material

Housing material	Stainless steel
Material sensing surface	Stainless steel

#### Mechanical data

Dimension	Ø 8 x 65 mm
Installation	for flush mounting
Mounting length	40.00 mm
Size	M8x1
Tightening torque	10 Nm

#### Range/Distance

Assured operating distance Sa	1.2 mm
Hysteresis H max. (% of Sr)	10.0 %
Rated operating distance Sn	1.5 mm
Real switching distance sr	1.5 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

#### Remarks

EMC: Achieves severity level only with shielded connector BKSS19-14-... Connect shield to both ends.

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

