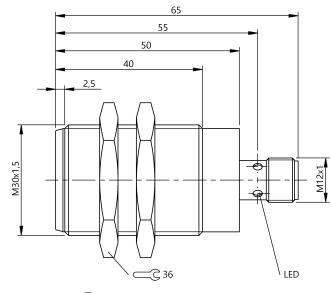
Inductive Sensors BES M30EG1-PSC80S-S04G-S **Order Code: BES02ZJ**

BALLUFF



IND. CONT. EQ. 57M3 US Class 2 Type 1

Basic features

Additional features	Selective ferrous
Approval/Conformity	CE
	EAC
	cULus
	WEEE
Basic standard	IEC 60947-5-2
Target material	Selective ferrous
Display/Operation	
Function indicator	yes
Power indicator	yes
Electrical connection	
Connection	M12x1-Male, 4-pin, A-coded

Connection	M12x1-Male, 4-pin, A-co
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

Electrical data

Min. operating current Im	0 mA
No-load current lo max., damped	10 mA
No-load current lo max., undamped	10 mA
Operating voltage Ub	1030 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current le	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	20 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	10 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-4070 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

Functional safety

MTTF (40 °C)

Material Housing material Stainless steel Material sensing surface Stainless steel

990 a

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Mechanical data

Range/Distance

Ø 30 x 65 mm	Assured operating distance Sa	6.5 mm	
for flush mounting	Hysteresis H max. (% of Sr)	10.0 %	
M30x1.5	Rated operating distance Sn	8 mm	
30 Nm	Real switching distance sr	8 mm	
	Repeat accuracy max. (% of Sr)	2.0 %	
	Temperature drift max. (% of Sr)	10 %	
PNP normally open (NO)	Tolerance Sr	±10 %	
	for flush mounting M30x1.5 30 Nm	for flush mounting M30x1.5 Bated operating distance Sn Real switching distance sr Repeat accuracy max. (% of Sr) Temperature drift max. (% of Sr) Tolerance Sr	for flush mounting Hysteresis H max. (% of Sr) 10.0 % M30x1.5 Rated operating distance Sn 8 mm 30 Nm Real switching distance sr 8 mm Repeat accuracy max. (% of Sr) 2.0 % 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

