



Basic features

Additional features	Factor 1
	Extended temperature range
	Housing resistant to weld spatter
Approval/Conformity	CE
	UKCA
	cULus
	WEEE
Basic standard	IEC 60947-5-2
Scope of delivery	2x nut M18x1
Trademark	Factor 1

Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 3-pin, A-coded
Electrical version	3-wire
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 Im	0 mA
No-load current Io max., damped	30 mA
No-load current Io max., undamped	25 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	100.0 kOhm
Protection class	II
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	50 ms
Ripple max. (% of Ue)	15 %
Switching frequency	2000 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

Environmental conditions

Ambient temperature	-40...85 °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
IP rating	IP67, IP68, according to BWN Pr 20
Magnetic field immune	magnetic field immune (AC/DC)

Functional safety

MTTF (40 °C)	240 a
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Inductive Sensors
BES M18ME-PSC80A-S04G-W10
Order Code: BES05PR

BALLUFF

Interface

Switching output PNP normally open (NO)

Material

Housing material Brass, PTFE coated
Material sensing surface PBT

Mechanical data

Dimension Ø 18 x 46 mm
Installation for flush mounting
Mounting length 30 mm
Size M18x1
Tightening torque 15 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.
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 (Schematic)

