



**Basic features**

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

**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	0.5 µF
Min. operating current Im	0 mA
No-load current Io max., damped	8 mA
No-load current Io max., undamped	2 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm + D
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	30 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	600 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 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP68

**Functional safety**

MTTF (40 °C)	587 a
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**Interface**

Switching output	PNP normally open (NO)
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Inductive Sensors  
**BES M18ME-PSC80F-S04G**  
Order Code: BES055R



**Material**

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

**Mechanical data**

Dimension	Ø 18 x 56 mm
Installation	non-flush
Size	M18x1
Tightening torque	25 Nm

**Range/Distance**

Assured operating distance Sa	6.4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	8.0 mm
Real switching distance sr	8 mm
Repeat accuracy max. (% of Sr)	5.0 %
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**

