



### Basic features

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

### Display/Operation

Function indicator	yes
Power indicator	no

### Electrical connection

Cable diameter D	3.5 mm
Cable length L	5 m
Conductor cross-section	0.22 mm <sup>2</sup>
Connection	M12x1-Male, 4-pin, A-coded
Connection type	Connector, 5.0 m, PTFE
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

### Electrical data

Load capacitance max. at U <sub>e</sub>	9 µF
Min. operating current I <sub>m</sub>	0 mA
No-load current I <sub>o</sub> max., damped	7 mA
No-load current I <sub>o</sub> max., undamped	3 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Rated operating current I <sub>e</sub>	150 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	14 ms
Residual current I <sub>r</sub> max.	20 µA
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	9 Hz
Utilization category	DC -13
Voltage drop static max.	1.3 V

### Environmental conditions

Ambient temperature	0...230 °C
IP rating	IP50

### Functional safety

MTTF (40 °C)	3600 a
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### Interface

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

Housing material	Stainless steel
Material jacket	PTFE
Material sensing surface	LCP

Inductive Sensors  
**BES M18ED-PSC50B-GT05-T**  
Order Code: **BES05N4**

**BALLUFF**

**Mechanical data**

Dimension	Ø 18 x 35 mm
Installation	for flush mounting
Size	M18x1

**Range/Distance**

Assured operating distance Sa	4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	5 mm
Real switching distance sr	5 mm
Repeat accuracy max. (% of Sr)	1.7 %
Tolerance Sr	±15 %

**Remarks**

Connector has a permissible temperature range of -20 °C to +70 °C

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**

