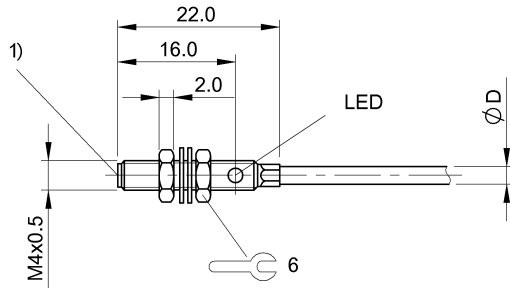


## BES M04EC-POC10B-EP02 BES03Z9



IND. CONT. EQ  
81U2  
US for use in the secondary of  
a class 2 source of supply  
Environmental - Type 1 Enclosure



### Display/Operation

Function indicator	yes
Power indicator	no

### Electrical connection

Cable diameter D	2.40 mm
Cable length	2 m
Conductor cross-section	0.10 mm <sup>2</sup>
Connection type	Cable, 2.00 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Short-circuit protection	yes

### Electrical data

Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at U <sub>e</sub>	0.15 µF
MTTF (40 °C)	305 a
No-load current I <sub>o</sub> max., undamped	5 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	Open drain
Pollution degree	3
Protected against miswiring	yes
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub> DC	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	25 ms
Repeat accuracy max. (% of Sr)	5.0 %
Residual current I <sub>r</sub> max.	10 µA
Switching frequency	3500 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

### Environmental conditions

Ambient temperature	-25...70 °C
Protection type IEC 60529	IP67

### Functional safety

Diagnostic coverage	0 %
Functional safety	no
Mission Time	20 a

### General data

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

### Material

Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	PBT

### Mechanical data

Dimension	Ø 4 x 22 mm
Installation	for flush mounting
Size	M4x0.5
Tightening torque	0.8 Nm

### Output/Interface

Switching output	PNP Normally closed (NC)
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## BES M04EC-POC10B-EP02 BES03Z9

### Range/Distance

Assured operating distance Sa	0.8 mm
Range	1 mm
Rated operating distance Sn	1 mm
Ripple max. (% of Ue)	10 %
Switching distance marking	■ ■
Temperature drift max. (% of Sr)	10 %

### Remarks

The sensor is functional again after the overload has been eliminated.  
 EMC: Surge resistance  
 External protection circuit is required. Document 825345, Section 2.  
 The temperature drift can be below -15°C and above +60°C, up to 15% of the sensing range.  
 For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

### Wiring Diagram

