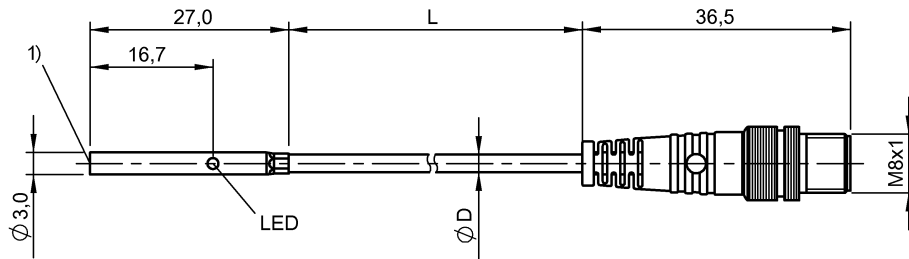


BES 516-3044-G-E4-C-S49-00,3  
BES00M5



1) Sensing surface



IND. CONT. EQ  
81U2  
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	0.3 m
Connection	M8x1-Connector, 3-pole
Connection type	Cable with connector, 0.30 m, PUR
Polarity reversal protected	yes
Short-circuit protection	yes

## Electrical data

Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at Ue	0.15 µF
MTTF (40 °C)	305 a
No-load current I <sub>0</sub> max., undamped	2 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 3 x 27 mm
Installation	for flush mounting
Size	D3.0

## Output/Interface

Switching output	PNP Normally open (NO)
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## BES 516-3044-G-E4-C-S49-00,3 BES00M5

### 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

EMC: Surge resistance  
External protection circuit is required. Document 825345, Section 2.  
The sensor is functional again after the overload has been eliminated.  
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.

### Connector view



### Wiring Diagram

