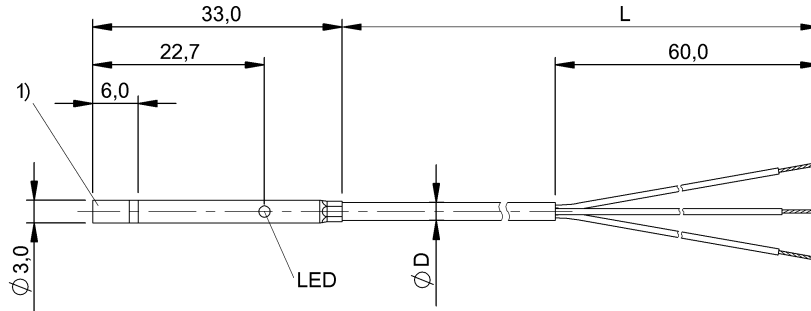


**BES 516-3048-G-E4-C-PU-02**  
**Ordering code: BES00ME**

**Inductive sensor**  
**D03.0x33 mm**  
**Long range**  
**Small housing**

**DC, direct current**  
**PNP/Normally open (NO)**  
**Sn = 3 mm**  
**Non embeddable**

**BALLUFF**  
*sensors worldwide*



**Characteristic data**

Eff. switching distance $S_r$	3 mm
Tolerance $S_r$	$\pm 10\%$
Assured operating distance $S_a$	2,3 mm
Hysteresis $H$ max. (in % of $S_r$ )	20 %
Repeat accur. $R$ max. (% of $S_r$ )	15 %
Ambient temperature	0...70 °C
Temp. drift max. (% of $S_r$ )	15%
Switching freq. $f$ max.	3000 Hz
Ready delay $t_v$ max.	20 ms
Utilisation category	DC 13
Function indicator	Yes
Power-on indicator	No
Short-circuit protected	Yes
Degree of protection as per IEC 60529	IP67
Protected against polarity reversal	Yes
Protected against reverse connection	Yes

**Electrical data**

Operating voltage	
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	10 %
Voltage drop static max.	2,5 V
Rated insulation voltage $U_i$	75 DC V
Effective operating current $I_e$	50 mA
No-load current $I_o$ damped	10 mA
No-load current $I_o$ undamped	8 mA
Off-state current $I_r$ max.	10 $\mu$ A
Minimum operating current $I_m$	0 mA

Rated short circuit current	100 A
Output resistance $R_a$	Open emitter
Load capacitance max. (at $U_e$ )	0,5 $\mu$ F
Principle of operation	Inductive

**Mechanical data**

Housing material	Stainless steel
Sensing surface material	PET-C
Connection type	Cable
Cable jacket material	PUR
Cable diameter $D$ max.	2,4 mm
Cable short designation	LiFY11Y-O
Cable length	2 m
Number of conductors	3
Conductor cross-section	0.09 mm <sup>2</sup>
Shock rating	Shock, half-sinus, 30 gn, 11ms
Vibration rating	55 Hz, 1 mm ampl., 3x30 min
Degree of contamination	3

**Basic data**

Basic standard	IEC 60947-5-2
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**Remarks**

The sensor is functional again after the overload has been eliminated.  
 Non-flush mounting (unshielded): See installation instructions for inductive sensors with extended range 843281. Avoid pressure and contact in the area of the clear zone cap.  
 EMC: EMC protection circuit needed, see 825345. Burst: 1.2 IVW: 2.2  
 ESD: EN 61000-4-2, 2 kV contact discharge



Definitions see main catalog

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