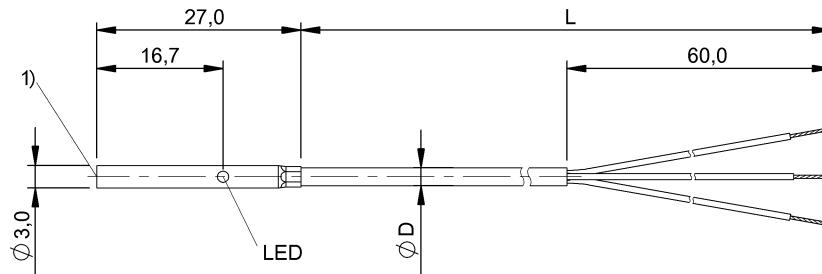


**BES 516-3044-G-E4-C-PU-02**  
**Ordering code: BES00M3**

**Inductive sensor**  
**D03.0x27 mm**  
**Small housing**

**DC, direct current**  
**PNP/Normally open (NO)**  
**Sn = 1 mm**  
**Flush (shielded)**

**BALLUFF**  
*sensors worldwide*



**Characteristic data**

|                                       |             |
|---------------------------------------|-------------|
| Eff. switching distance $S_r$         | 1 mm        |
| Tolerance $S_r$                       | $\pm 10\%$  |
| Assured operating distance $S_a$      | 0.8 mm      |
| Hysteresis $H$ max. (in % of $S_r$ )  | 15 %        |
| Repeat accur. $R$ max. (% of $S_r$ )  | 5 %         |
| Ambient temperature                   | -25...70 °C |
| Temp. drift max. (% of $S_r$ )        | 10 %        |
| Switching freq. $f$ max.              | 2000 Hz     |
| Ready delay $t_v$ max.                | 10 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 $I_e$ | 100 mA  |
| No-load current $I_0$ damped      | 12 mA   |
| No-load current $I_0$ undamped    | 9 mA    |

|                                 |              |
|---------------------------------|--------------|
| Off-state current $I_r$ max.    | 50 $\mu$ A   |
| Minimum operating current $I_m$ | 0 mA         |
| Rated short circuit current     | 100 A        |
| Output resistance $R_a$         | Open emitter |
| Principle of operation          | Inductive    |

**Mechanical data**

|                          |                                |
|--------------------------|--------------------------------|
| Housing material         | Stainless steel                |
| Sensing surface material | POM                            |
| Connection type          | Cable                          |
| Cable jacket material    | PUR                            |
| Cable diameter $D$ max.  | 2.4 mm                         |
| Cable short designation  | LI FY11Y-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 |
|----------------|---------------|

**Remarks**

The sensor is functional again after the overload has been eliminated.  
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

subject to change

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