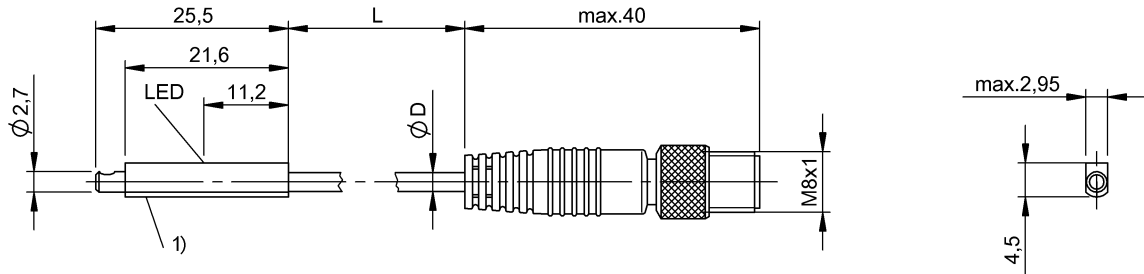


**BMF 303K-PS-C-2A-SA2-S49-00,3**  
**Ordering code: BMF0043**

**Sensors for cylinders**  
**BMF 303**  
**Cylinder housing: Depending on mounting**

**PNP, Normally open (NO)**  
**Miniature**

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1) Active surface

**Characteristic data**

|                                     |   |
|-------------------------------------|---|
| Connection type                     | Cable with connector  |
| Operating voltage                   | 10...30 V DC  |
| Short-circuit protected             | yes   |
| Protected against polarity reversal | yes   |
| Protected against miswiring         | yes   |
| Area of application                 | Optimized response path especially suited for short-stroke cylinders. |

**Electrical data**

|  |                    |
|--|--------------------|
| Electrical version                         | DC, direct current |
| Rated operating voltage U <sub>e</sub> DC  | 24                 |
| Effective operating current I <sub>e</sub> | 100 mA             |
| Rated insulation voltage U <sub>i</sub>    | 75 DC              |
| Rated short circuit current                | 100 A              |
| Output resistance R <sub>a</sub>           | Open emitter       |
| Load capacitance max. (at U <sub>e</sub> ) | 1 µF               |
| No-load current I <sub>o</sub> damped max. | 8 mA               |
| Max. no-load cur. I <sub>o</sub> undamped  | 5 mA               |
| Off-state current I <sub>r</sub> max.      | 110 µA             |
| Ripple max. (% of U <sub>e</sub> )         | 15                 |
| Switching freq. f max.                     | 7000 Hz            |
| Voltage drop static max.                   | 2,5 V              |
| Turn-off delay t <sub>off</sub> max.       | 0,07 ms            |
| Turn-on delay t <sub>on</sub> max.         | 0,07 ms            |
| Rated switching field strength             | 1,2 kA/m           |
| Assured switching field streng             | 2 kA/m             |

Hysteresis H max. (in % of H<sub>n</sub>) 45 %

**Mechanical data**

|  |             |
|--|-------------|
| Housing material                           | LCP         |
| Sensing surface material                   | LCP         |
| Cable jacket material                      | PUR         |
| Cable short designation                    | Li12Y11Y-O  |
| Cable length                               | 0,3 m       |
| Cable diameter D max.                      | 2,8         |
| Connector type                             | M08x1-S49   |
| Ambient temperature                        | -25...85 °C |
| Temperature drift max. % of H <sub>n</sub> | 0,3 %       |

**Basic data**

|                              |               |
|------------------------------|---------------|
| Principle of operation       | Magnetic      |
| Enclosure Type per IEC 60529 | IP67          |
| Degree of contamination      | 3             |
| Basic standard               | IEC 60947-5-2 |
| Utilisation category         | DC 13         |

**Remarks**

Not incl. in scope of delivery Mount.clamp, e.g. BMF303-HW-28  
 The sensor is functional again after the overload has been eliminated.  
 EMC: Surge immunity; external protection circuit required. Document 825345, Section 2.  
 Max. pull force on cable 10 N.



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