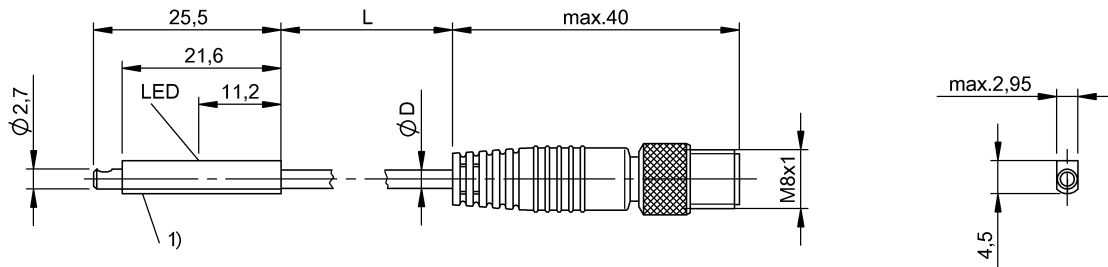


## BMF 303K-PS-C-2A-SA7-S49-00,3 BMF004C



1) Sensing surface



### Display/Operation

Function indicator	yes
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### Electrical connection

Cable diameter D	2.80 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

Assured switching field strength Ha	2 kA/m
Hysteresis H max. (% of Hn)	45 %
Load capacitance max. at Ue	1 µF
MTTF (40 °C)	520 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 emitter
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
Rated switch field strength H <sub>n</sub>	1.2 kA/m
Residual current I <sub>r</sub> max.	110 µA
Switching frequency	7000 Hz
Turn-off delay t <sub>off</sub> max.	0.07 ms
Turn-on delay t <sub>on</sub> max.	0.07 ms

Utilization category	DC -13
Voltage drop static max.	2.5 V

### Environmental conditions

Ambient temperature	-25...85 °C
Protection type IEC 60529	IP67

### Functional safety

Diagnostic coverage	0.0 %
Functional safety	no
Mission Time	20 a

### General data

Approval/Conformity	CE cULus
Basic standard	IEC 60947-5-2
Not incl. in scope of delivery	Mounting bracket, e.g. BMF 303-HW-28

### Material

Housing material	LCP
Material jacket	PUR
Material sensing surface	LCP

### Mechanical data

Dimension	25.5 x 3 x 4.5 mm
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### Output/Interface

Switching output	PNP Normally open (NO)
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## BMF 303K-PS-C-2A-SA7-S49-00,3 BMF004C

### Range/Distance

Ripple max. (% of Ue)	15 %
Temp. drift max. (% of Hn)	0.3 %

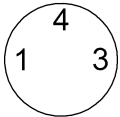
### Remarks

The sensor is functional again after the overload has been eliminated.  
EMC: Surge resistance  
External protection circuit is required. Document 825345, Section 2.  
Max. pull force on cable 10 N.  
For radially magnetized magnets therefore especially suited for Schunk grippers.

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

