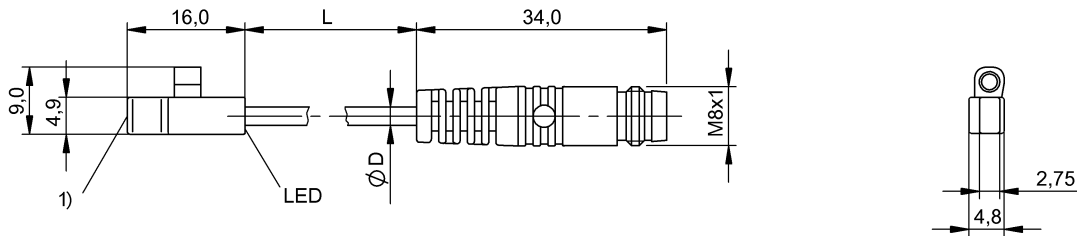


BMF 103K-PS-C-2-S49-00,2 BMF0018



1) Sensing surface



Display/Operation

Function indicator yes

Electrical connection

Cable diameter D 2.50 mm
 Cable length 0.2 m
 Connection M8x1-Connector, 3-pole
 Connection type Cable with connector, 0.20 m, PUR
 Polarity reversal protected yes
 Short-circuit protection yes

Electrical data

Assured switching field strength H_a 2 kA/m
 Hysteresis H max. (% of H_n) 45 %
 Load capacitance max. at U_e 1 μ F
 MTTF (40 °C) 520 a
 No-load current I_o max., undamped 8 mA
 Operating voltage U_b 10...30 VDC
 Output resistance R_a Open drain
 Pollution degree 3
 Protected against miswiring yes
 Rated insulation voltage U_i 75 V DC
 Rated operating current I_e DC 100 mA
 Rated operating voltage U_e DC 24 V
 Rated short circuit current 100 A
 Rated switch field strength H_n 1.2 kA/m
 Residual current I_r max. 80 μ A
 Switching frequency 10000 Hz
 Turn-off delay t_{off} max. 0.05 ms
 Turn-on delay t_{on} max. 0.05 ms

Utilization category DC -13
 Voltage drop static max. 2 V

Environmental conditions

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

Functional safety

Diagnostic coverage 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 103-HW-42

Material

Housing material LCP
 Material jacket PUR
 Material sensing surface LCP

Mechanical data

Dimension 5 x 3 x 16 mm

Output/Interface

Switching output PNP Normally open (NO)

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Range/Distance

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

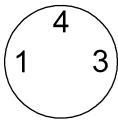
Remarks

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

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

