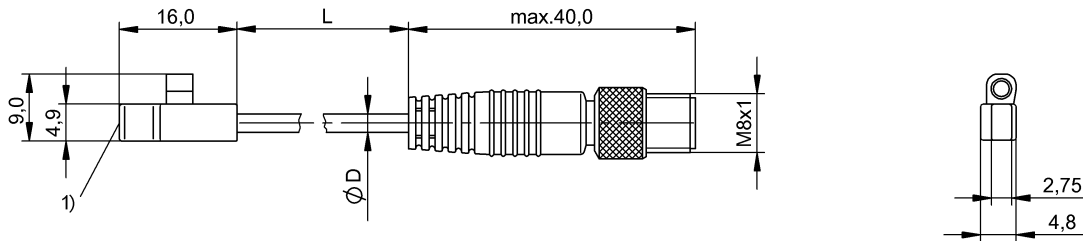


BMF 103K-PS-C-2A-SA2-S49-00,3 BMF001L



1) Sensing surface



Display/Operation

Function indicator yes

Electrical connection

Cable diameter D 2.50 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 H_a 2 kA/m
 Hysteresis H max. (% of H_n) 45 %
 Load capacitance max. at U_e 1 μ F
 MTTF (40 °C) 739 a
 No-load current I_o max., undamped 3.5 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. 10 μ A
 Switching frequency 30000 Hz
 Turn-off delay t_{off} max. 0.02 ms
 Turn-on delay t_{on} max. 0.02 ms

Utilization category DC -13
 Voltage drop static max. 1 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

Application Optimized response path especially suited for short-stroke cylinders.
 Approval/Conformity cULus
CE
 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 9 x 4.8 x 16 mm

BMF 103K-PS-C-2A-SA2-S49-00,3 BMF001L

Output/Interface

Switching output PNP Normally open (NO)

Range/Distance

Ripple max. (% of Ue) 15 %

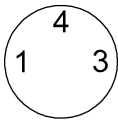
Remarks

Switching frequency $f_{max.}$: Measured at 50 % duty cycle and 20 % I_e
Max. pull force on cable 10 N.
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

