



1) Sensing surface



**Basic features**

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

**Display/Operation**

Function indicator	yes
--------------------	-----

**Electrical connection**

Cable	PUR, 0.3 m
Cable diameter D	2.50 mm
Connection	M5x0.5-Male
Polarity reversal protected	yes
Protection against device mix-ups	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
No-load current Io max., undamped	3.5 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	Open drain
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Rated switch field strength Hn	1.2 kA/m
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	30000 Hz
Turn-off delay toff max.	0.02 ms
Turn-on delay ton max.	0.02 ms
Utilization category	DC -13
Voltage drop static max.	1 V

**Environmental conditions**

Ambient temperature	-25...85 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
ESD	2A (4 kV)
Emission	Group 1, Class B
IP rating	IP67

Magnetic Sensors  
**BMF 303K-PS-C-2A-S26-00,3**  
Order Code: **BMF003Z**



**Functional safety**

MTTF (40 °C) 744 a

**Interface**

Switching output PNP normally open (NO)

**Material**

Housing material LCP  
Material jacket PUR  
Material sensing surface LCP

**Mechanical data**

Dimension 25.5 x 3 x 4.5 mm

**Remarks**

The sensor is functional again after the overload has been eliminated.  
Switching frequency f max.: Measured at 50 % duty cycle and 20 % I<sub>e</sub>  
Max. pull force on cable 10 N.  
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

**Connector Drawings**



**Wiring Diagrams**

