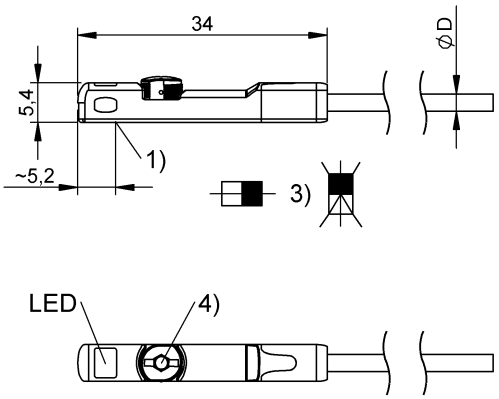
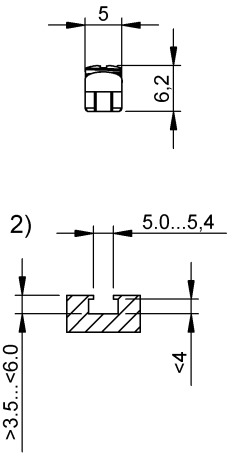
Magnetic Sensors

BMF 415KW-HAPS-W-5-P3-02
Order Code: BMF00MR





1) Position sensor element, 2) see remarks, 3) see remarks, 4) see remarks

Basic features

Application	Pneumatic cylinder with T-slot. For dimensions, see sketch in product view. Welding area
Approval/Conformity	CE cULus RoHS WEEE EAC
Basic standard	IEC 60947-5-2
Principle of operation	Magnetic field sensor
Scope of delivery	Position sensor Protective cover Cable clip for T-slot Short guide

Display/Operation

Function indicator	Active, LED yellow Error, LED red
Power indicator	External Power - LED green

Electrical connection

Cable	TPU welding spark resistant orange, 2 m
Cable diameter D	2.4 mm
Conductor cross-section	0.10 mm²
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Assured switching field strength Ha	5.2 kA/m
Interference suppression time	600 ms
Load capacitance max. at Ue	1.5 µF
No-load current Io max., undamped	18 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	Open drain
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	50 mA
Rated operating voltage Ue DC	24 V DC
Rated short circuit current	100 A
Rated switch field strength Hn	4.8 kA/m
Residual current Ir max.	10 µA
Utilization category	DC -13

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Environmental conditions

Ambient temperature	0...80 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g_n, 11 ms, 3x6 $_{Half}$-sinus, 100 gn, 2 ms, 3x8000
EN 60068-2-6, Vibration	55 Hz, amplitude 2 mm, 3x30 min 10…2000 Hz, amplitude 2 mm pp, 30 g_n, 120 sweeps
ESD	2A (4 kV)
Emission	Group 1, Class A
IP rating	IP67

Functional safety

MTTF (40 °C)	420 a

Material

Housing material	PA 12
Material jacket	TPU, welding spark resistant
Material sensing surface	PA 12

Mechanical data

Dimension	5 x 6.4 x 34 mm
Mounting part	can be installed in T-slot from above
Size	T-slot

Output/Interface

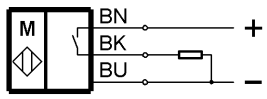
Switching output	PNP normally open (NO)

Remarks

Damping magnet axially magnetized
Effective operating current Ie with thermally coupled installation in metal.
Suitable for use in AC interference magnetic fields up to 140 mT / 110 kA/m with frequencies between 45 - 65 Hz
Suitable for use in MFDC interference magnetic fields up to 140 mT / 110 kA/m
For more information about MTTF and B10d see MTTF / B10d Certificate

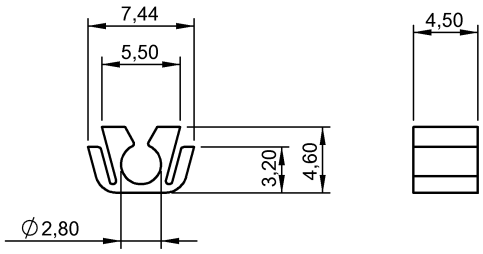
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

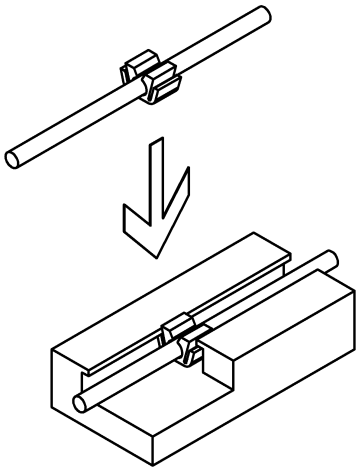
Wiring Diagrams

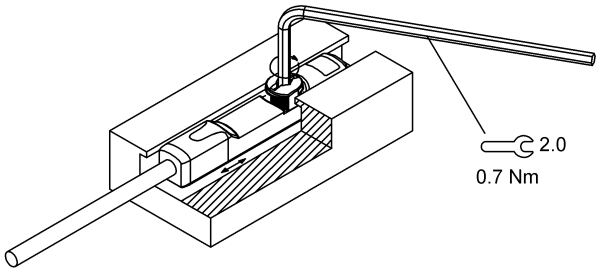


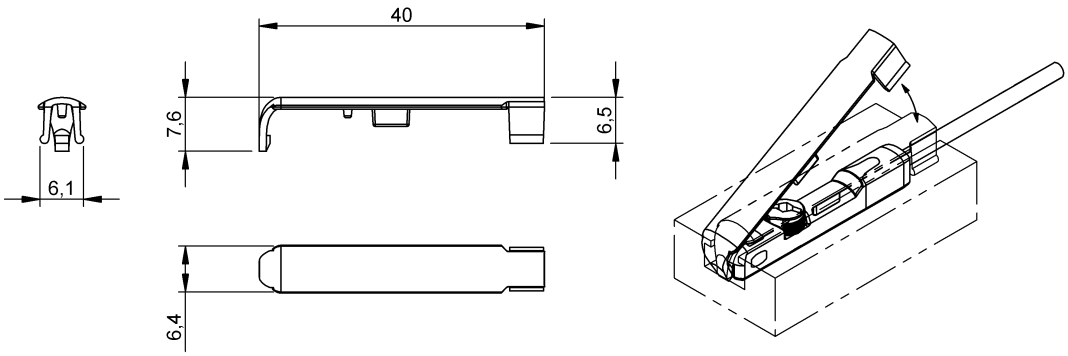
Help Views

BMF 415KW-HAPS-W-5-P3-02
Order Code: BMF00MR









Warning Symbols

