



CE
0102



Model Number

MC60-12GM50-1N

Features

- 60 mm flush with permanent magnet DM 60-31-15

Accessories

BF 12

Mounting flange, 12 mm

EXG-12

Quick mounting bracket with dead stop

DM 60-31-15

Permanent magnet for magnetic field sensors

DM 25-32-07

Permanent magnet for magnetic field sensors

Technical Data

General specifications

Switching element function		NAMUR, NO
Rated operating distance	s_n	60 mm
Installation		flush in non-magnetic metal
Output polarity		NAMUR
Assured operating distance	s_a	10 ... 48.6 mm

Nominal ratings

Nominal voltage	U_o	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 5000 Hz
Current consumption		
Magnet detected		≥ 2.5 mA
Magnet not detected		≤ 1 mA
Switching state indication		LED, yellow

Functional safety related parameters

MTTF _d		4382 a
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Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection type		cable PVC, 2 m
Core cross-section		0.34 mm ²
Housing material		Stainless steel 1.4404 / AISI 316L
Sensing face		Stainless steel 1.4404 / AISI 316L
Protection degree		IP67

General information

Use in the hazardous area		see instruction manuals
Category		2G

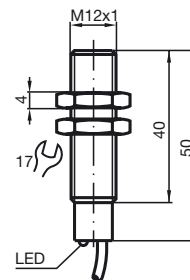
Compliance with standards and directives

Standard conformity		
NAMUR		EN 60947-5-6:2000
Standards		EN 60947-5-2:2007

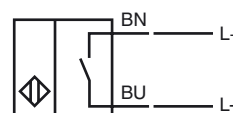
Approvals and certificates

FM approval		
Control drawing		116-0165F
CCC approval		CCC approval / marking not required for products rated ≤ 36 V

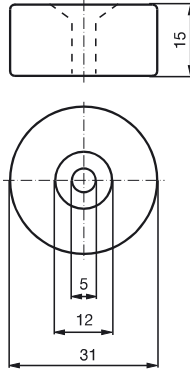
Dimensions



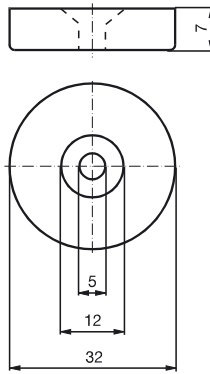
Electrical Connection



Magnet DM 60-31-15



Magnet DM 25-32-07



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ATEX 2G

Instruction

Device category 2G

EC-Type Examination Certificate

CE marking

ATEX marking

Directive conformity

Standards

Appropriate type

Effective internal capacitance C_i Effective internal inductance L_i

General

Installation, Commissioning

Maintenance

Specific conditions

Electrostatic charging

Manual electrical apparatus for hazardous areas

for use in hazardous areas with gas, vapour and mist

TÜV 01 ATEX 1718

CE 0102

II 2G Ex ib IIC T6 Gb

94/9/EG

EN 60079-0:2009, EN 60079-11:2007

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

MC60-12GM50-1N

 $\leq 15 \text{ nF}$; a cable length of 10 m is considered. $\leq 35 \text{ }\mu\text{H}$; a cable length of 10 m is considered.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EC-Type Examination Certificate has to be observed. The special conditions must be adhered to!

Directive 94/9/EG and hence also EC-Type Examination Certificates apply in general only to the use of electrical apparatus under atmospheric conditions.

The use in ambient temperatures of $> 60 \text{ }^\circ\text{C}$ was tested with regard to hot surfaces by the mentioned certification authority.

If the equipment is not used under atmospheric conditions, a reduction of the permissible minimum ignition energies may have to be taken into consideration.

Laws and/or regulations and standards governing the use or intended usage goal must be observed. The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety.

No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.

Electrostatic charges must be avoided on the mechanical housing components. Dangerous electrostatic charges on the mechanical housing components can be avoided by incorporating these in the equipotential bonding.