



Model Number

MC60-12GM50-1N-V1

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

V1-G

Female connector, M12, 4-pin, field attachable

V1-W

Female connector, M12, 4-pin, field attachable

V1-G-N-2M-PUR

Female cordset, M12, 2-pin, NAMUR, PUR cable

V1-W-N-2M-PUR

Female cordset, M12, 2-pin, NAMUR, PUR cable

Technical Data

General specifications

Switching function	Normally open (NO)
Output type	NAMUR
Rated operating distance	s_n 60 mm
Installation	flush in non-magnetic metal
Assured operating distance	s_a 10 ... 48.6 mm
Output type	2-wire

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 indicator	LED, yellow

Functional safety related parameters

MTTF _d	4382 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

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

Connection type	Connector plug M12 x 1, 4-pin
Housing material	stainless steel 1.4404 / AISI 316L
Sensing face	stainless steel 1.4404 / AISI 316L
Degree of protection	IP67

General information

Use in the hazardous area	see instruction manuals
Category	2G

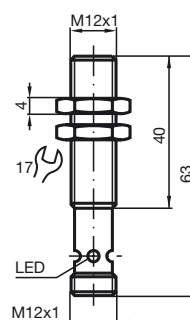
Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000
Standards	EN 60947-5-2:2007
	EN 60947-5-2/A1:2012
	IEC 60947-5-2:2007
	IEC 60947-5-2 AMD 1:2012

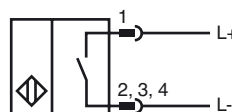
Approvals and certificates

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

Dimensions

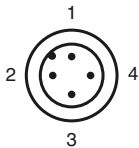


Electrical Connection

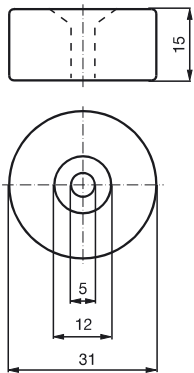




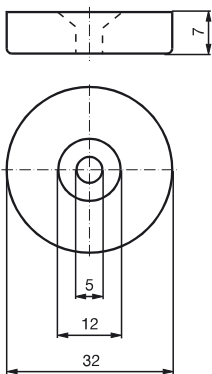
Pinout



Magnet DM 60-31-15



Magnet DM 25-32-07



Equipment protection level Gb

CE marking	CE 0102	
ATEX marking	II 2G Ex ib IIC T6 Gb	
Standards	EN 60079-0:2012+A11:2013, EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions	
Appropriate type	MC60-12GM50-1N-V1	
Effective internal inductivity	C_i	$\leq 15 \text{ nF}$; a cable length of 10 m is considered.
Effective internal inductance	L_i	$\leq 35 \text{ }\mu\text{H}$; a cable length of 10 m is considered.
Special conditions		

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