

Proximity Magnetic Sensors Explosive Environment Sensors M Atex Series - Intrinsically safe

CARLO GAVAZZI



- Rectangular plastic housing
- Intrinsically safe, NO output function
- PVC cable
- According to EN 60079-0 and 60079-11
- Atex certified



Product Description

These products have been developed and approved to be used in potentially explosive areas, applying protection methods for the intrinsic safety, in accordance with EN 60079-0 normative (Electrical apparatus for poten-

tially explosive atmospheres. General requirements) and EN 60079-11 (Intrinsic safety "i"). M magnetic sensors are in category 1, suitable for zone 0, 1 or 2 (gas), 20, 21 or 22 (dusts).

Ordering Key

M Q A0 EX

Type _____
Housing type _____
Contact type _____
Atex certified _____

Atex Marking

As for 94/9/EC (ATEX) Directive, products are marked:



II 1G Ex ia IIC T6 Ga
II 1D Ex ia IIIC T 100°C Da IP67

Marking as for ATEX directive: **II 1 G or II 1 D**

- **II**: group, it identifies the surface industry.
- **1**: very high protection category, allowing use in areas where an explosive atmosphere is present continually or for long periods (zone 0 and 20, covering also zone 1, 21, 2 and 22).
- **G**: presence of gases, vapours and mists.
- **D**: presence of explosive dust.
- **Ex**: product realized for use in explosive environments.
- **ia**: level of protection for intrinsic safety. The ignition energy (thermal, mechanical, chemical and so on) is not enough to create an explosion, also in case of up to 2 countable faults.
- **IIC**: group of explosive gases with minimum ignition energy 0,02 mJ (Hydrogen/Acetylene, valid also for groups IIA- Propane and IIB-Ethylene).
- **IIIC**: group of explosive dust (conductive dust, valid also for group IIIA-combustible flyings and IIIB-non conductive dust).
- **T6**: maximum surface temperature 85°C (gas or vapour ignition temperature > 85°C).
- **T 100°C IP67**: max surface temperature and protection degree, with reference to presence of explosive dusts.
- **Ga, Da**: equipment protection level respectively for gas and dust, according to EN60079-0. Equipment with a very high level of protection, which is not source of ignition in normal operation, during expected malfunctions or during rare malfunctions.

Type Selection

Housing type	Output function	Cable type	Reference
Rectangular, miniature	NO	2 m, PVC	M Q A0 EX



Output Specifications

Output	NO
Contact ratings	
Max Switching Voltage	30 V AC/DC
Max Switching Current	120 mA

Operating Distance

Magnetic Units	CL1	CL2	CL3	CL4
MQA0EX	10	15	22	35

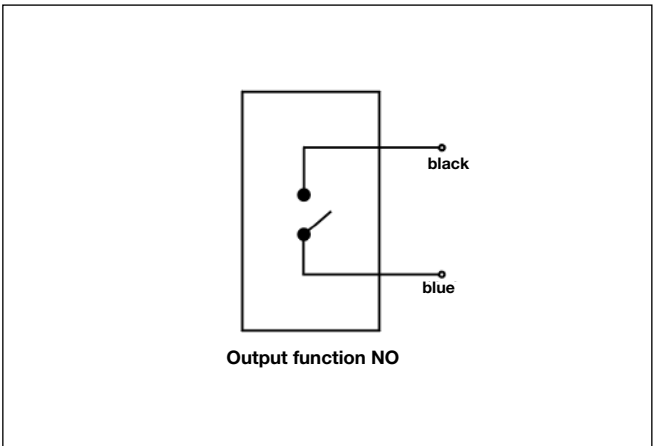
Distances are specified in millimeters (mm)
xx: operating distance (for all output functions)

General Specifications

Operating distance	See Operating Distance table
Suitable magnetic unit	See Operating Distance table
Operating temperature	-20 to +60 °C
Degree of protection	IP 67

Housing	
Dimensions	37 x 16 x 8.3 mm
Material	Autoextinguishing polypropylene with 30% fiber glass
Approvals	ATEX
CE-marking	Yes

Wiring Diagrams



Dimensions

