

Main features

Approvals:

Category **2G** and **M2**

- Metal housing, one conduit entry
- Protection degree IP66
- Versions with gold-plated silver contacts

ATEX markings and quality labels:

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⟨□⟩ II 2G Ex ia IIC T6 Gb⟨□⟩ I M2 Ex ia I Mb

Technical data

Housing

Metal housing, baked powder coating

One threaded conduit entry: M20x1.5

Protection degree: IP66 according to EN 60529 with cable gland having equal or higher

protection degree

General data

Ambient temperature: -20°C ... +60°C

Max. actuation frequency: 3600 operating cycles¹/hour

Mechanical endurance:
F• ••••-EX•

F• ••••EX• 10 million operating cycles¹ 500.000 operating cycles¹ 500.000 operating cycles¹ 250.000 operating cycles¹ 250.000 operating cycles¹

Mounting position: an

Safety parameters B_{10d}(NC contacts):

F• •••-EX• 20,000,000 F• ••93-EX•,F• ••78-EX•, F• ••8•-EX 1,000,000

F• ••99-EX•, F• ••R2-EX• 500,000 F• ••95-EX• 2,500,00

Mechanical interlock, not coded: type 1 according to EN ISO 14119

Tightening torques for installation: see pages 235-246

(1) One operation cycle means two movements, one to close and one to open contacts, as defined in EN 60947-5-1.

Cable cross section (flexible copper strands)

In conformity with standards:

IEC 60947-5-1, EN 60947-5-1, EN 60947-1, EN 50041, IEC 60204-1, EN 60204-1, EN ISO 14119, EN ISO 12100, IEC 60529, EN 60529, UL 508, CSA 22.2 No.14, IEC 60079-0, EN 60079-0, IEC 60079-11, EN 60079-11.

In conformity with the requirements of:

ATEX Directive 94/9/EC

Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and EMC Directive 2004/108/EC.

Positive contact opening in conformity with standards:

IEC 60947-5-1, EN 60947-5-1.

Installation for safety applications:

Use only switches marked with the symbol \odot aside the product code. Always connect the safety circuit to the **NC contacts** (normally closed contacts: 11-12, 21-22 or 31-32) as stated in **standard EN 60947-5-1**, **encl. K**, **par. 2**. Actuate the switch **at least up to the positive opening travel** shown in the travel diagrams on page 238. Operate the switch **at least with the positive opening force**, indicated between brackets below each article, aside the minimum force value.

⚠ If not expressly indicated in this chapter, for correct installation and utilization of all articles see chapter utilization requirements from page 235 to page 246.

Category Zone EPL Approvals Product code extension

2G 1 Gb & II 2G Ex ia IICT6 Gb
M2 M2 Mb & I M2 Ex ia I Mb

Product code extension

-EX7

Electrical data

Maximum current (Ii): 2.1 A
Maximum voltage (Ui): 30 Vdc

Conditional short circuit current: 1000 A according to EN 60947-5-1 Frotection against short circuits: 1000 A according to EN 60947-5-1 fuse 4 A 250 V type gG

Pollution degree:

 \triangle This type of switches must be used only in intrinsic safety circuits in conformity with standard IEC 60079-11, EN 60079-11 \triangle For the correct utilization of the switch please use cable glands suitable for the zone according to the ATEX directive