

The magnetic contacts consist of two elements: magnetic sensor (reed switch) and magnet. The reed switch, which is situated near the magnet, makes the electric circuit. Each of the magnetic contact elements is placed in an identical watertight housing, the part with reed switch having electric lead-outs (Fig. 1,2,3). Inside the housing together with the reed switch are installed two 1.1k $\Omega$  resistors connected with the reed switch in 2EOL configuration (see Fig. 5). They enable the control panel to detect a tamper of the magnetic contact by monitoring the resistance changes on the zone. Each detector of this type must be connected to a separate zone of the control panel.

Individual magnetic contacts differ in the housing style and the way of mounting. The K-1 2E is designed for surface mounting and the K-2 E & K-3 2E for flush mounting.

The magnetic contacts can be used wherever required for controlling the status of doors, windows and/or other movable elements, e.g. for protection or monitoring of access to particular sites, spaces, facilities; in automatic control systems, etc.

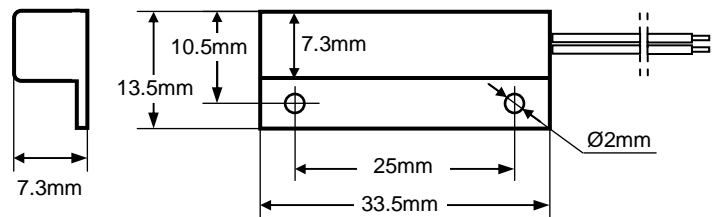


Fig. 1 K-1 2E reed switch in plastic housing

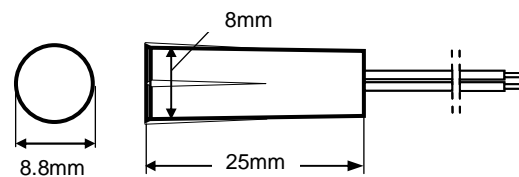


Fig. 2 K-2 2E reed switch in plastic housing

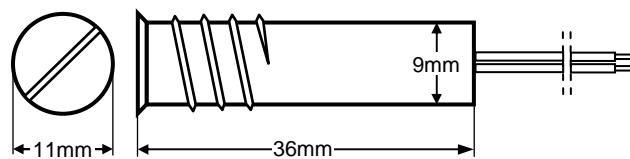


Fig. 3 K-3 2E reed switch in metal housing

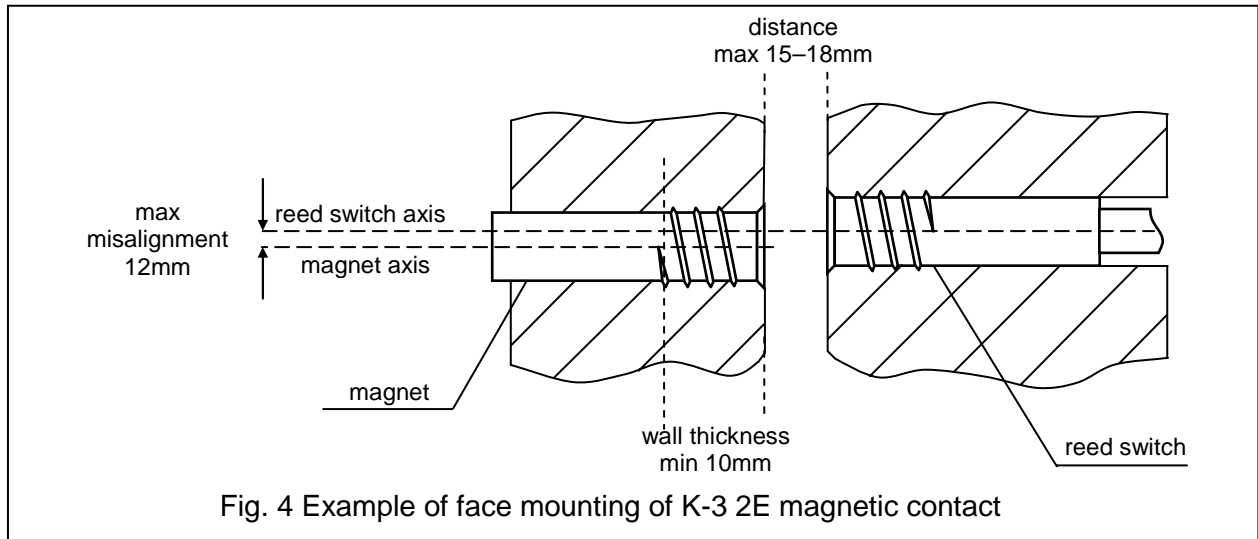
## INSTALLATION – Fig. 4

The magnetic contact element containing the magnet should be mounted on the movable part, while the reed switch – on the stationary part of protected doors, windows, etc. Elements of the K-1 2E magnetic contact should be attached to the surface by means of screws, suitable glue, or a two-side self-adhesive tape. The K-2 E & K-3 2E magnetic contacts are designed for face mounting in such materials as wood or plastic (Fig. 4). The walls, the magnetic contact is to be fitted in, should be at least 10mm thick, so as to ensure adequate stability for the elements mounted. To make holes for the **K-2 2E** magnetic contact, use  $\varnothing 8\text{mm}$  drill, and for the **K-3 2E** magnetic contact –  $\varnothing 9\text{mm}$  drill. The K-2 2E is to be pressed in, while the K-3 2E, which has a thread, needs to be screwed in. The mounted magnetic contact elements can be reinforced with a suitable glue.

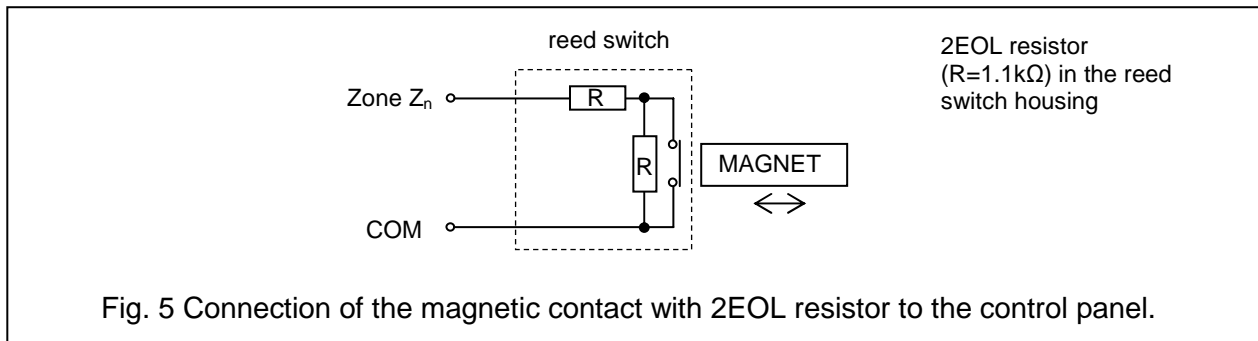
In order to ensure correct functioning of the magnetic contact, the distance between magnet and reed switch should not exceed 12–15mm for K-1 2E & K-2 2E, and 15–18mm for K-3 2E. Misalignment of the axes of magnet and reed switch in cylindrical magnetic contacts should not be greater than 10mm for K-2 2E and 12mm for K-3 2E.

### Notes:

- You are in no case allowed to shorten (cut short) the element containing the magnet.
- Special care must be taken when installing reed contact part of the detector. It should not be hammered into the slot, because the fragile component inside the detector might be damaged then.
- When screwing the K-3 2E reed relay in, the wire will get twisted; to prevent it from damage, make sure that it has a sufficient spare length, or twist it in the opposite direction before installation so that it can straighten out when mounted.




**HOOKUP – Fig. 5**



**TECHNICAL DATA**

Magnetic contact type .....	2EOL/NC
Resistance.....	2x1.1kΩ
Maximum switchable voltage of reed switch .....	200V
Maximum switchable current .....	500mA
Maximum continuous (non-switchable) current.....	1.5 A
Rated power .....	10 VA
Minimum number of switchings under load	
1V, 10mA.....	1000x10 <sup>6</sup>
10V, 10mA.....	500x10 <sup>6</sup>
50V, 100mA.....	2x10 <sup>6</sup>
100V, 100mA.....	2x10 <sup>6</sup>
Contact material.....	Ru (ruthenium)
Weight:	
K-1 2E.....	10g
K-2 2E.....	8g
K-3 2E.....	24g

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