

Magnetic Contact
Surface mounting

Instruction Manual MC 740-E

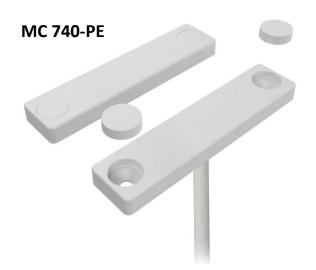


### **DESCRIPTION**

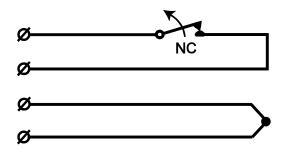
MC 740-E is a surface mounted magnetic contact used in both alarm and security access control systems for protection of doors and windows against unauthorised opening. The magnetic contact is designed to be mounted in places with limited space.

## **MOUNTING INSTRUCTIONS**

- MC 740-PE option with the cable inlet at the bottom of the housing is available.
- Contact and magnet should be installed in parallel, corresponding to each other. Offset will reduce the working distances.
- Contact can operate in front-to-front or side-to-side configuration.

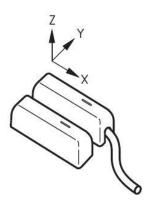


## **CIRCUIT DIAGRAM**



MC 740-E Instruction Manual 4-MC740-E-01

# **DISTANCES / DIRECTIONS**



# **TECHNICAL DATA**

Working environment	Wood <sup>1)</sup>	Steel	
Y direction Make distance	typ. 37 mm ±40%	not recommended	
Break distance	typ. 44 mm ±40%	not recommended	
X Left direction Make distance	typ. 15 mm ±40%	not recommended	
Break distance	typ. 16 mm ±40%	not recommended	
X Right direction Make distance	typ. 16 mm ±40%	not recommended	
Break distance	typ. 17 mm ±40%	not recommended	
Z direction Make distance	typ. 46 mm ±40%	not recommended	
Break distance	typ. 52 mm ±40%	not recommended	
Contact type	form A, SPST		
Switching voltage max.	48 V DC/AC		
Switching current max.	500 mA DC/peak AC		
Contact rating max.	10 W		
Cable	φ 3,4 mm, 4x0,182 mm <sup>2</sup>		
Environmental class (EN50130-5:2011)	IIIA		
Operating temperature range	-40°C to +70°C		
Operating humidity	max. 95% RH		
Housing protection	IP67, IK04		
Housing material	plastic ABS		
Dimensions:			
Contact part	60,5 x 14 x 5 mm		
Magnet part	60,5 x 14 x 5 mm		
Security grade (EN50131-2-6:2008)			
	VdS EN-ST-000102 & G116504	VdS EN-ST-000102 & G116504 (class B), SBSC 9-216, F&P 10.212-12857,	
Approvals	FG MKT-1000/09, INCERT B-58	FG MKT-1000/09, INCERT B-582-1003, NF&A2P 2124030004A0	

 $<sup>^{1)}</sup>$  Make distance is always shorter than break distance

#### **OPERATING PRINCIPLE**

MC 740-E magnetic contact has two parts: the contact part with a reed switch and the magnet part. In its neutral position the reed switch remains closed under the force of the magnetic field. Opening the monitored object increases the distance between the reed switch and the magnet. This reduces the influence of the magnetic field on the reed switch until it opens and activates an alarm.

Magnetic contacts should not be installed in the vicinity of strong magnetic fields.

#### **INSTALLATION**

Depending on the application, contact and magnet should be installed in either front-to-front or side-to-side configuration. MC 740-PE option increases the number of possible applications. Installation drawings show the correct positioning of the contact parts. Contact and magnet should be installed in parallel, corresponding to each other. Offset will reduce the working distances. The contact should be mounted on the stationary part of the monitored object (ex. door frame) and the magnet on the movable part (ex. door leaf).

During installation of the contact part of MC 740-PE (cable inlet at the bottom) in window or door frame, it is advised to leave additional cable loop for about 10cm long.



After the installation, use an ohmmeter to check the electrical connections and test the operation of the magnetic contact.

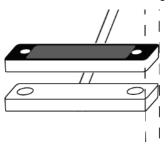
Warning: applying excessive force to the housing of the contact may damage the glass body of the reed switches inside.

Warning: installation in ferromagnetic environment is not recommended.

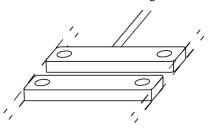
### **INSTALLATION DRAWINGS**

Correct positioning of side cable inlets ensures the maximum working distances.

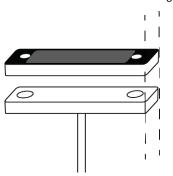
MC 740-E in front-to-front configuration



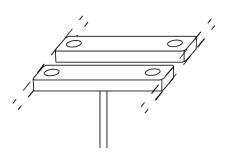
MC 740-E in side-to-side configuration



MC 740-PE in front-to-front configuration



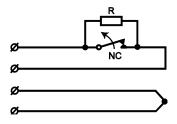
MC 740-PE in side-to-side configuration



## **RESISTORS (OPTIONAL)**

MC 740-E (MC 740-PE) is available in two additional options with resistors of the chosen value: MC 740-E-R (MC 740-PE-R) with one resistor parallel to the alarm switch and MC 740-E-2R (MC 740-PE-2R) with two resistors in 2 EOL configuration (see schematics below).

MC 740-E-R (MC 740-PE-R):



MC 740-E-2R (MC 740-PE-2R):

