Magnetic Contact
Recessed mounting

Instruction Manual MC 255



### **DESCRIPTION**

MC 255 is a versatile magnetic contact used in both alarm and security access control systems for protection of doors, gates and windows against unauthorised opening. The magnetic contact is designed to be mounted in places with limited space. The construction of the contact enables rotation during mounting, thus protecting the cable from mechanical stress. A wide range of accessories enables the contact to be installed on a variety of surfaces, including ferromagnetic materials.

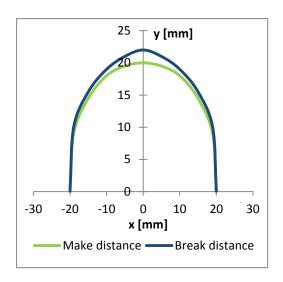
MC 255 is certified according to EN 50131-2-6:2008.

# **MOUNTING INSTRUCTIONS**

- Contact and magnet should be installed axially, corresponding to each other.
- Self-cutting and self-locking thread enables direct installation in φ 10 mm holes in wood and plastic.
- Appropriate accessory must be used for installation in ferromagnetic environment.

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# **DISTANCE DIAGRAM - WOOD**



# **TECHNICAL DATA**

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Working environment	Wood	Steel	
Make distance	typ. 20 mm +/– 40 %	see distance table	
Break distance	typ. 22 mm +/– 40 %	see distance table	
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		
Estimated life expectancy	>20 million switching operations at 10 V/4 mA		
Cable	2 m, φ 3,2 mm, 4x0,14 mm <sup>2</sup>		
Environmental class (EN50130-5:2011)	IIIA		
Operating temperature range	-40°C to +55°C		
Operating humidity range	max. 95% r. h.		
Housing material	aluminium alloy		
Dimensions:			
Contact part	φ 11 x 22 mm		
Magnet part	ф 11 x 22 mm		
Security grade (EN50131-2-6:2008)	2		
Approvals	ITR 2/2014		

MC 255 Instruction Manual 4-MC255-01

### **OPERATING PRINCIPLE**

MC 255 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**

Detailed installation instructions can be found in MC 255 Installer Manual.

Contact and magnet should be aligned axially in the frames and leaves of the monitored objects (windows, doors etc.). Offset will reduce the working distances. The contact should be mounted in the stationary part of the monitored object (ex. door frame) and the magnet in the movable part (ex. door leaf). Before mounting, holes must be drilled. The self-cutting and self-locking thread of the housing enables easy and reliable installation in  $\varphi$  10 mm holes in wood and plastic.

The construction of the contact enables rotation during

mounting, thus protecting the cable from mechanical stress.

For sites where it is impossible to mount the contact directly, a variety of accessories is available.

Accessories with a strong magnet provide a bigger working distance for more demanding applications and maintain the parameters of the magnetic contact when mounted in ferromagnetic environment.

Only non-ferromagnetic screws may be used when mounting the contact using accessories.

After the installation, use an ohmmeter to check the electrical connections and test the function 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: appropriate accessories must be used for installation in ferromagnetic environment.

# **RESISTORS (OPTIONAL)**

MC 255 is available in two additional options with resistors of the chosen value: MC 255-R with one resistor parallel to the alarm switch and MC 255-2R with two resistors in 2EOL configuration

### **DISTANCE TABLE**

Contact Accessory	Distance on wood [mm]		Distance on steel [mm]		
	Make	Break	Make	Break	
MC 255	-	20	22	Χ	Х
	MC 200-S11	20	22	11	12
	MC 200-S12	25	26	15	16
	MC 200-S21	20	22	14	15
	MC 200-S22	25	26	19	20
	MC 200-S31	20	22	11	12
	MC 200-S32	25	26	15	16

X – not recommended

# ORDERING INFORMATION

Туре	E-no.	Description
MC 255	6332894	Magnetic contact with rotating cable, 2m cable
MC 255-6	6332895	Magnetic contact with rotating cable, 6m cable
MC 255-10	6332896	Magnetic contact with rotating cable, 10m cable