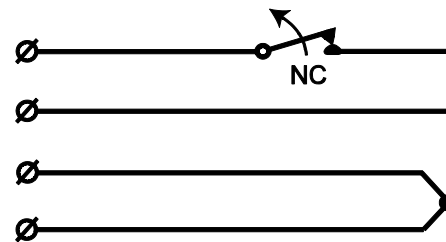




CIRCUIT DIAGRAM (WITH MAGNETIC FIELD)



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 unauthorized opening. The magnetic contact is designed to be mounted in places with limited space. The design of the contact enables rotation during mounting, thus protecting the cable from mechanical stress. A wide range of accessories allows the contact to be installed on a variety of surfaces, including ferromagnetic materials.

MC 255 is certified to VdS Class B and EN 50131-2-6:2008 Grade 2 Class IIIA.

MOUNTING INSTRUCTIONS

- Contact and magnet should be installed axially, corresponding to each other.
- Self-cutting and self-locking thread enables direct installation in ϕ 9-10 mm holes in wood and plastic.
- Appropriate accessories must be used for installation in ferromagnetic environment.

DISTANCE TABLE

The distances are measured when magnet and contact is mounted opposite each other along the Y-axis.

Accessory	Distance [mm] on wood (Y direction)		Distance [mm] on steel (Y direction)	
	Make	Break	Make	Break
-	21	23	X	X
MC 200-S11	21	23	6	8
MC 200-S12	25	27	15	18
MC 200-S21	21	23	12	14
MC 200-S22	27	28	19	21
MC 200-S31	21	23	8	10
MC 200-S32	27	28	13	15

TECHNICAL DATA

Working environment	Wood	Steel
Make distance	typ. 21 mm +/- 20%	see distance table above
Break distance	typ. 23 mm +/- 20%	see distance table above
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	Standard 2m, 6m and 10m length. ϕ 3,7 mm, 4x0,14 mm ²	
Environmental class: EN50130-5:2011	Class IIIA	
Operating temperature range	-40°C to +70°C	
Operating humidity range	max. 95% r. h.	
IP Class	IP 67	
Housing material	aluminum alloy	
Dimensions:		
Contact part	ϕ 11 x 23 mm	
Magnet part	ϕ 11 x 22 mm	
Security grade	EN50131-2-6:2008 Grade 2, VdS 2120 Class B	
Approvals	VdS EN-ST-000207 & G115506 (class B), SBSC 15-236, F&P 10.212-13315, FG MKT-1100/16	

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

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 ϕ 9-10 mm holes in wood and plastic.

The design 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 are 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