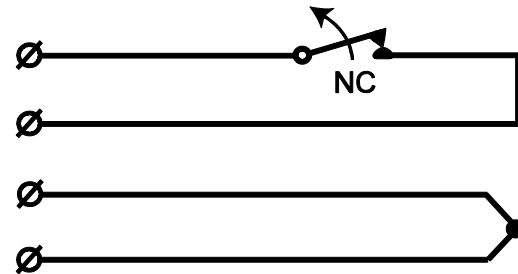
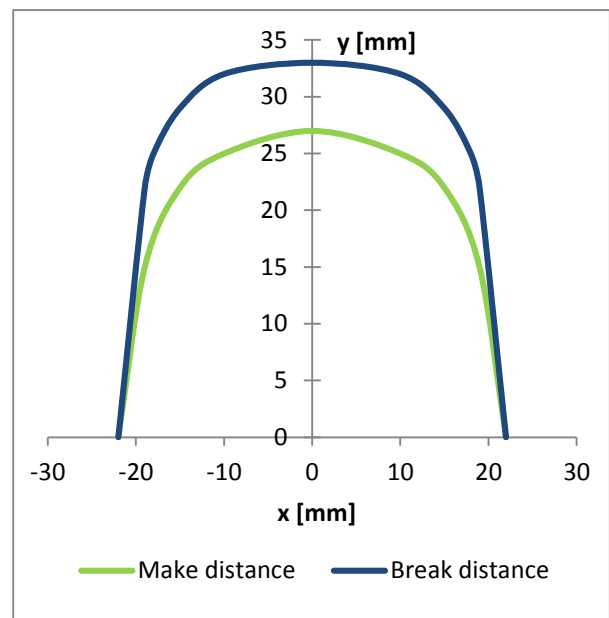




CIRCUIT DIAGRAM



DISTANCE DIAGRAM - WOOD



DESCRIPTION

MC 240 is a versatile magnetic contact used in both alarm and security access control systems for protection of doors, gates and windows against unauthorized opening. A wide range of accessories enables the contact to be recessed- or surface-mounted on a variety of surfaces, including ferromagnetic materials.

MC 240 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.

TECHNICAL DATA

Working environment	Wood	Steel
Make distance	typ. 27 mm +/- 40 %	see distance table
Break distance	typ. 33 mm +/- 40 %	see distance table
Contact type	form A, SPST	
Switching voltage max.	48 V DC/AC	
Switching current max.	400 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 ²	
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 36 mm	
Magnet part	ϕ 11 x 36 mm	
Security grade (EN50131-2-6:2008)	2	
Approvals	ITR 4/2013	

OPERATING PRINCIPLE

MC 240 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 240 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 ϕ 10 mm holes in wood and plastic.

Twisting the contact housing counterclockwise 2-3 times before mounting will protect 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.

DISTANCE TABLE

Contact	Accessory	Distance on wood [mm]		Distance on steel [mm]	
		Make	Break	Make	Break
MC 240	-	27	33	X	X
	MC 200-S3	24	29	14 ^{a)}	17 ^{a)}
	MC 200-S11	27	33	X	X
	MC 200-S12	38	44	19	22
	MC 200-S21	27	33	X	X
	MC 200-S22	38	44	24	29
	MC 200-S31	27	33	X	X
	MC 200-S32	38	44	19	22
	MC 200-4, MC 200-5	51	59	X	X
	MC 200-4, MC 200-8	51	59	36 ^{b)}	42 ^{b)}
	MC 200-6, MC 200-5	51	59	35 ^{c)}	40 ^{c)}
	MC 200-6, MC 200-8	51	59	35 ^{c)}	40 ^{c)}
	MC 200-7, MC 200-8	51	59	36	42

X – not recommended; ^{a)} measured with MC 400-4 spacers (included in the MC 200-S3 set)^{b)} measured with contact part installed 15 mm above the ferromagnetic surface (e. g. using MC L/MC Z accessory); ^{c)} contact part mounted on non-ferromagnetic surface

We reserve the right to changes without notice.

Accessories for surface mounted applications provide installation solutions for sites where recessed mounting is not suitable.

Heavy duty accessories protect the MC 240 from mechanical damage and provide a large operating distance enabling the magnetic contact to be installed on garage doors, industrial gates etc.

Aluminium brackets can be used to mount the contact parts away from a ferromagnetic surface or to solve problems with aligning the contact with the magnet. Contact and/or magnet should be screwed to the oval slots in the brackets and adjusted to a suitable position.

The working distances of the magnetic contact will be decreased in the proximity of ferromagnetic surfaces. The closer the contact/magnet is installed to the ferromagnetic surface, the lower the working distances

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.

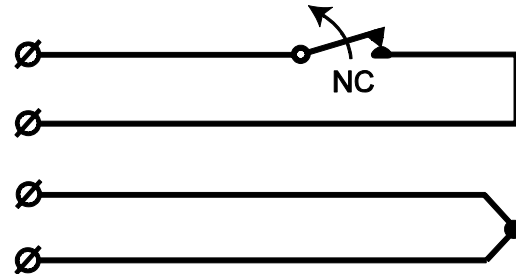
Warning: appropriate accessories must be used for installation in ferromagnetic environment.

RESISTORS (OPTIONAL)

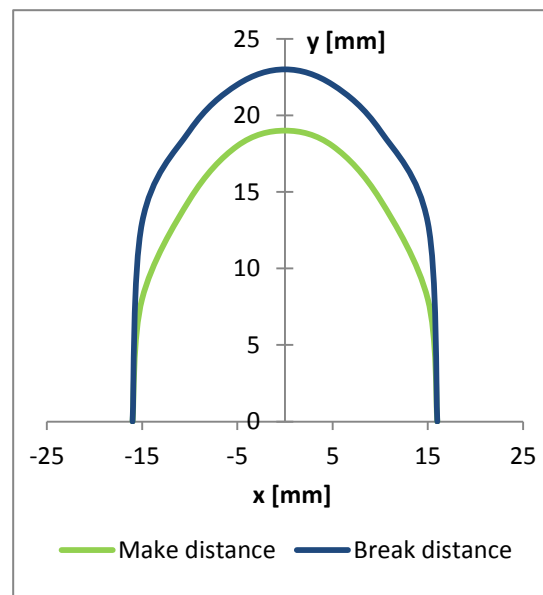
MC 240 is available in two additional options with resistors of the chosen value: MC 240-R with one resistor parallel to the alarm switch and MC 240-2R with two resistors in 2EOL configuration.



CIRCUIT DIAGRAM



DISTANCE DIAGRAM - WOOD



DESCRIPTION

MC 250 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. A wide range of accessories enables the contact to be recessed- or surface-mounted on a variety of surfaces, including ferromagnetic materials.

MC 250 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.

TECHNICAL DATA

Working environment	Wood	Steel
Make distance	typ. 19 mm +/- 40 %	see distance table
Break distance	typ. 23 mm +/- 40 %	see distance table
Contact type	form A, SPST	
Switching voltage max.	48 V DC/AC	
Switching current max.	400 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 ²	
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	ϕ 11 x 14 mm	
Security grade (EN50131-2-6:2008)	2	
Approvals	ITR 10/2013	

OPERATING PRINCIPLE

MC 250 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 250 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 ϕ 10 mm holes in wood and plastic.

Twisting the contact housing counterclockwise 2-3 times before mounting will protect 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.

Accessories for surface mounted applications provide installation solutions for sites where recessed mounting is not suitable.

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 250 is available in two additional options with resistors of the chosen value: MC 250-R with one resistor parallel to the alarm switch and MC 250-2R with two resistors in 2EOL configuration

DISTANCE TABLE

Contact	Accessory	Distance on wood [mm]		Distance on steel [mm]	
		Make	Break	Make	Break
MC 250	-	19	23	X	X
	MC 200-S3	10	12	X	X
	MC 200-S11	19	23	X	X
	MC 200-S12	33	38	19	21
	MC 200-S21	19	23	X	X
	MC 200-S22	33	38	23	27
	MC 200-S31	19	23	X	X
	MC 200-S32	33	38	19	21

X – not recommended

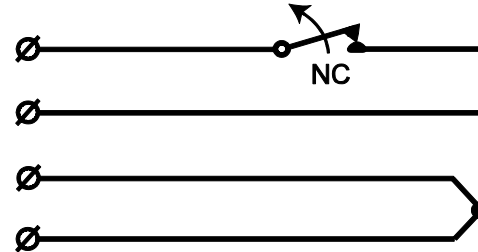
We reserve the right to changes without notice.

Instruction Manual

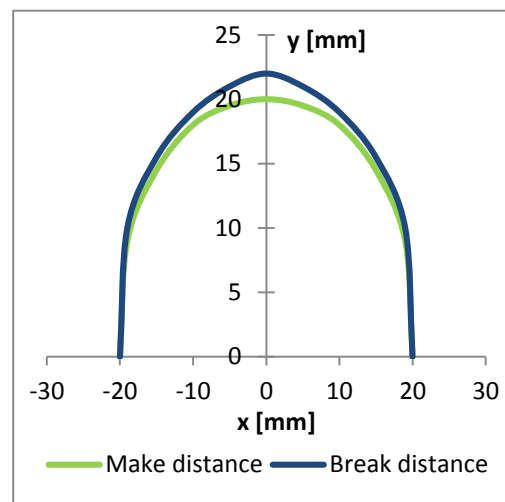
MC 255



CIRCUIT DIAGRAM



DISTANCE DIAGRAM - WOOD



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.

TECHNICAL DATA

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 ²	
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	ϕ 11 x 22 mm	
Security grade (EN50131-2-6:2008)	2	
Approvals	ITR 2/2014	

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 ϕ 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	X	X
	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

Type	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

We reserve the right to changes without notice.



DESCRIPTION

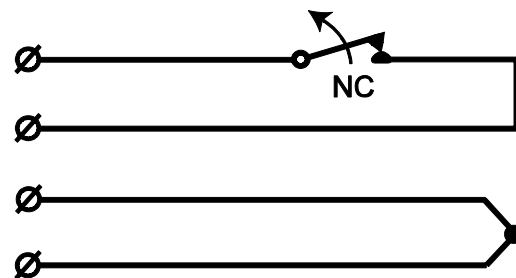
MC 340 is a versatile magnetic contact used in both alarm and security access control systems for protection of doors, gates and windows against unauthorised opening. A wide range of accessories enables the contact to be recessed- or surface-mounted on a variety of surfaces, including ferromagnetic materials.

MC 340 is certified according to EN 50131-2-6:2008.

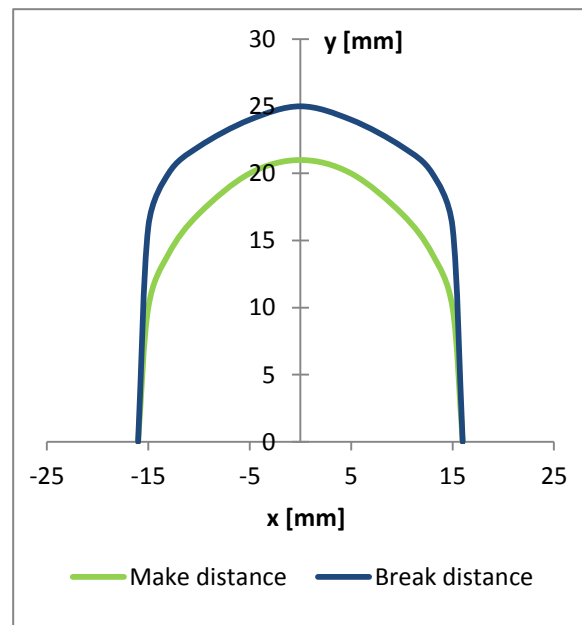
MOUNTING INSTRUCTIONS

- Contact and magnet should be installed axially, corresponding to each other.
- Catch-bolts on the housing enable direct installation in ϕ 8 mm holes in wood.
- Appropriate accessory must be used for installation in ferromagnetic environment.

CIRCUIT DIAGRAM



DISTANCE DIAGRAM - WOOD



TECHNICAL DATA

Working environment	Wood	Steel
Make distance	typ. 21 mm +/- 40 %	see distance table
Break distance	typ. 25 mm +/- 40 %	see distance table
Contact type	form A, SPST	
Switching voltage max.	48 V DC/AC	
Switching current max.	400 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 ²	
Environmental class (EN50130-5:2011)	IIIA	
Operating temperature range	-40°C to +55°C	
Operating humidity range	max. 95% r. h.	
Housing material	plastic ABS	
Dimensions:		
Contact part	ϕ 9 x 25,5 mm	
Magnet part	ϕ 9 x 25,5 mm	
Security grade (EN50131-2-6:2008)	2	
Approvals	ITR 5/2013	

OPERATING PRINCIPLE

MC 340 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 340 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. Catch-bolts on the housing enable direct installation in ϕ 8 mm holes in wood.

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.

Accessories for surface mounted applications provide installation solutions for sites where recessed mounting is not suitable.

The working distances of the magnetic contact will be decreased in the proximity of ferromagnetic surfaces. The closer the contact/magnet is installed to the ferromagnetic surface, the lower the working distances

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 340 is available in two additional options with resistors of the chosen value: MC 340-R with one resistor parallel to the alarm switch and MC 340-2R with two resistors in 2EOL configuration

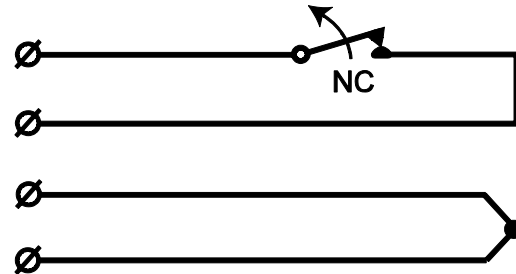
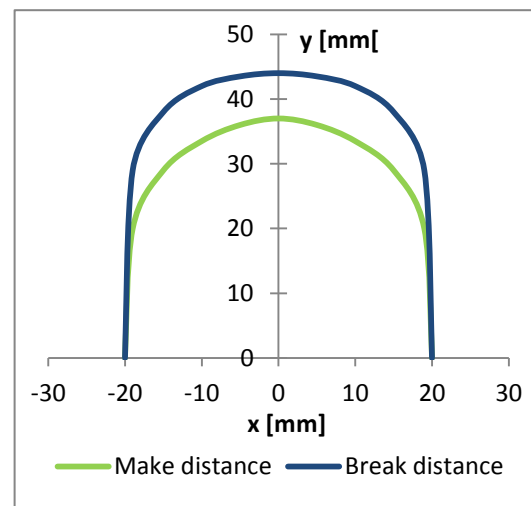
DISTANCE TABLE

Contact	Accessory	Distance on wood [mm]		Distance on steel [mm]	
		Make	Break	Make	Break
MC 340	-	21	25	X	X
	MC 300-S1	21	25	X	X
	MC 300-S3	17	20	12 ^{a)}	15 ^{a)}
	MC 300-S11	21	25	X	X
	MC 300-S12	35	40	22	24
	MC 300-S21	21	25	X	X
	MC 300-S22	35	40	27	30
	MC 300-S31	21	25	X	X
	MC 300-S32	35	40	22	24
	MC 300-S35	18	20	X	X

X – not recommended

^{a)} measured with spacers (included in the MC 300-S3 set)

We reserve the right to changes without notice.


CIRCUIT DIAGRAM

DISTANCE DIAGRAM -WOOD

DESCRIPTION

MC 740 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.

MC 740 is certified according to EN 50131-2-6:2008.

MOUNTING INSTRUCTIONS

- MC 740P 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.

TECHNICAL DATA

Working environment	Wood	Steel
Make distance	typ. 37 mm +/- 40 %	not recommended
Break distance	typ. 44 mm +/- 40 %	not recommended
Contact type	form A, SPST	
Switching voltage max.	48 V DC/AC	
Switching current max.	400 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 ²	
Environmental class (EN50130-5:2011)	IIIA	
Operating temperature range	-40°C to +55°C	
Operating humidity	max. 95% RH	
Housing material	plastic ABS	
Dimensions:		
Contact part	57,5 x 5 x 13,5 mm	
Magnet part	57,5 x 5 x 13,5 mm	
Security grade (EN50131-2-6:2008)	2	
Approvals	ITR 14/2013	

OPERATING PRINCIPLE

MC 740 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 740P 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).

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

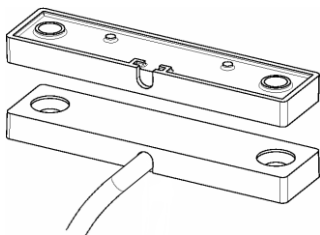
Warning: applying excessive force to the housing of the contact may damage the glass body of the reed switches inside.

Warning: installation in ferromagnetic environment is not recommended.

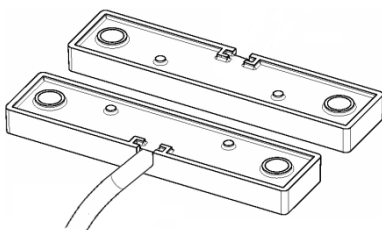
INSTALLATION DRAWINGS

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

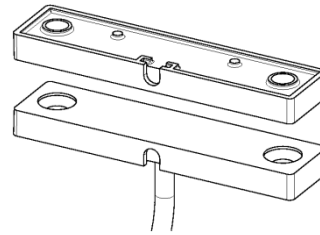
MC 740 in front to front configuration – inlets on the same side:



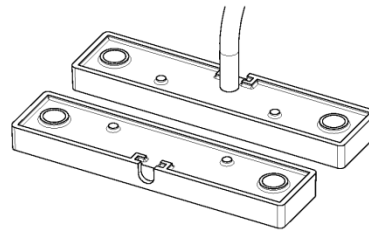
MC 740 in side to side configuration (bottom view) – inlets facing outwards:



MC 740P in front to front configuration – inlets on the same side:



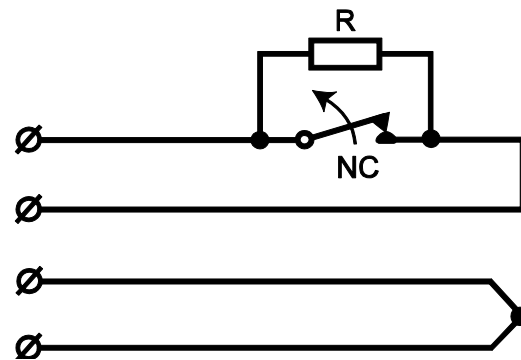
MC 740P in side to side configuration (bottom view) – inlets facing outwards:



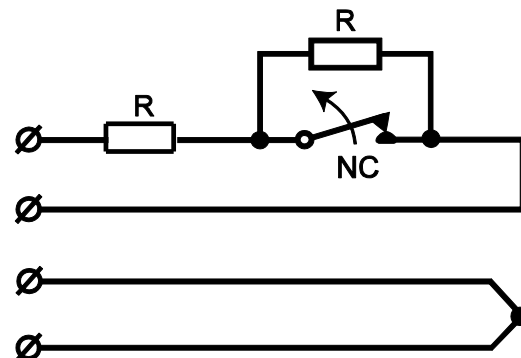
RESISTORS (OPTIONAL)

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

MC 740-R (MC 740P-R):



MC 740-2R (MC 740P-2R):



We reserve the right to changes without notice.