

**"quality accessories  
distinguish the door"**





## Optional accessories for NINZ doors

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# Handles

Standard for REVER - UNIVER - PROGET doors



ACCESSORIES  
doors

## BLACK PLASTIC HANDLES

By default Rever, Univer and Proget doors include safety levers coupled with long plates with cylinder holes. Each handle set includes a patent key insert, a 9 x 9mm square spindle, fastener screws and spacers.

### M1 HANDLE

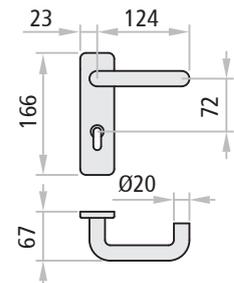
The M1-type handles are supplied as standard for Univer and Proget doors and, on request, for all other types of NINZ doors.

M1 handles are fire rated consisting of a metal core inside the lever and a galvanized steel cover plate to protect the cylinder hole and have been certified in accordance with DIN 18273:1997-12.

The M1 handle package includes: a pair of black plastic lever with metal cores and galvanized steel installation plates, a pair of black plastic cover plates with patent-type cylinder hole adaptable for installation of Euro profile cylinders, a 125 mm long 9 x 9 square spindle, fastener screws and spacers. The package includes also the hexagonal key for setting of the hinges and fastening of the spring screw.



M1 plastic handle



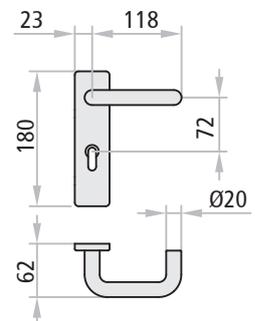
### M1R HANDLE

Multi-purpose Univer and Rever doors are equipped with M1R-type handles.

The M1R handle package includes: a pair of black plastic lever handles, a pair of black plastic cover plates with patent-type cylinder holes adaptable for installation of Euro profile cylinders, a 125 mm long 9 x 9 square spindle, fastener screws and spacers.



M1R plastic handle



# Handles

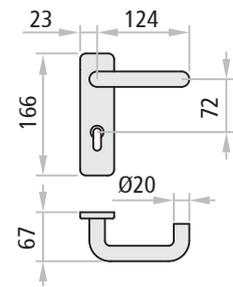
For locks with an inter-axis distance of 72 mm

## COLORED HANDLES

On request, painted resin handles can be provided which match or provide better contrast with the base color of the door.

M1C and M2C handles are fire rated like the M1 handle, and have also been certified in accordance with DIN 18273:1997-12.

The M1C and M2C handles package consist of: one pair of lever handles (M1C) or the handle/ doorknob combination (M2C) made of plastic with a metal core and galvanized steel installation plate, a pair of plastic cover plates with a Euro profile cylinder hole, a 9x9mm square spindle, fastener screws and spacers.



M1C handle colored RAL1023

Colors available:

RAL	RAL	RAL	RAL	RAL
1023	7016	7035	9006*	9010

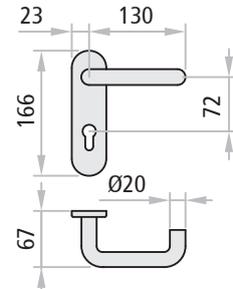
\*light aluminium

## STAINLESS STEEL HANDLES

On request, brushed stainless steel AISI 304 levers and cover plates can be provided which endow the product with a higher quality while at the same time ensuring optimal corrosion resistance and a noteworthy robustness of the entire set.

In addition, M1X, M2X, M11X and M20X handles are equipped with a return spring that maintains perfect alignment with the geometry of the door.

They are mounted on a galvanized steel mechanism and are supplied with fastener screws, spacers and a 9x9mm square spindle (where required).



M1X stainless steel handle

### NOTE

Euro profile cylinder to be ordered separately (except for M11X and M20X handles).

Only M1C, M1X and M11X models are combinable with the three point locking mechanism.

On request, Proget door handles can be supplied in the stainless steel version "SERTOS", certified according to DIN EN 1906 with the maximum class of corrosion resistance (grade 5) and also tested for 1 million cycles for the durability class (five times the maximum grade 7)



„SERTOS“ stainless steel version, available on request for Proget doors

# Handles

For locks with an inter-axis distance of 72 mm

## HANDLES

Rever, Univer and Proget doors may be equipped on request with handles with special functions other than those provided by standard handles.

Versions			description	functioning	use
	M1, M1R, M1C	M1X, M1Xs	handle/handle combination with cylinder hole on both sides. For combination with lock with an inter-axis distance of 72 mm (015)	door opening by handle or key from both sides	applications in which both door opening directions are accessible without key
	M2, M2C	M2X, M2Xs	handle/doorknob combination with cylinder hole on both sides. For combination with lock with an inter-axis distance of 72 mm (015)	the doorknob side requires the key for opening	applications in which only one of the door opening directions is accessible with a key
	M4	M4X, M4Xs	doorknob/doorknob combination with cylinder hole on both sides. For combination with lock with an inter-axis distance of 72 mm (015)	both sides require the key for opening. The doorknobs serve for pushing or pulling the door	applications in which both door opening directions are accessible by key only
	M5	M5X, M5Xs	plate/plate combination with cylinder hole on both sides. For combination with lock with an inter-axis distance of 72 mm (015)	both sides require the key for opening	applications in technical rooms with doors that usually remain closed and require key for opening
	M9	M9X, M9Xs	doorknob/plate combination with cylinder hole on both sides. For combination with lock with an inter-axis distance of 72 mm (015)	both sides require the key for opening. The doorknob serves for pulling the door	applications in which both door opening directions are accessible by key only
	M11	M11X, M11Xs	handle/handle combination without cylinder hole. For combination with lock with an inter-axis distance of 72 mm (015)	opening is possible at any time using the handle	applications in which the door never needs to be locked
	M20	M20Xs	handle/handle and thumbturn latch combination for interior closure. For combination with lock with star-shaped spindles only (Stel 15)	closure using thumbturn latch from inside. Emergency opening from outside with screwdriver	typical closure for bathroom doors

### NOTE

For stainless steel handle the Euro profile cylinder must be ordered separately (except for M11X, M11Xs and M20Xs handles).

Only M1, M1C, M1X, M1Xs, M11, M11X, M11Xs models are combinable with the three point locking mechanism.

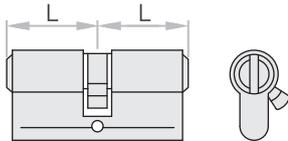
# Cylinders

For REVER - UNIVER - PROGET doors

## CYLINDERS

On request Rever, Univer and Proget doors with standard locks (Std 015), MAC2 system control access locks or three-point locking mechanisms (3vie PRO) may be supplied with a Euro profile cylinder with three keys. They may also be provided in unique coding or group coded versions, or in combination with unique or group mastering.

### Cylinders for handles



Nickel-plated cylinder equipped with 3 keys

#### Versions available

standard cylinder
single coded cylinder
group coded cylinder
sample key coded cylinder
single mastered cylinder
group mastered cylinder



#### Lengths available

40/40
30/30

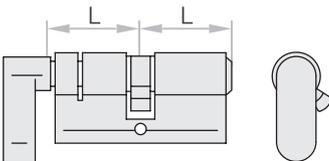
#### for doors

Univer, Proget
Rever

### ATTENTION

It is important to specify MAC lock combinations in the order.

### Cylinders with thumbturn latch



Nickel-plated cylinder with chrome-plated thumbturn latch equipped with 3 keys

#### Versions available

standard cylinder with thumbturn latch
group coded cylinder with thumbturn latch
sample key coded cylinder with thumbturn latch
single mastered cylinder with thumbturn latch
group mastered cylinder with thumbturn latch
mastered and emergency cylinder with thumbturn latch



#### Lengths available

40/40
30/30

#### for doors

Univer, Proget
Rever

### NOTE

Cylinders to be combined with locks of NINZ doors must meet DIN 18254 standards.

Main, master and/or emergency key (or keys) should be ordered separately - they are not included with the cylinder.

# Cylinders

For REVER - UNIVER - PROGET doors



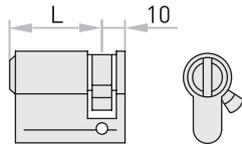
ACCESSORIES  
doors

## CYLINDERS FOR PANIC BARS AND MSC HANDLES

Standard panic bars are supplied with a Euro profile cylinder with three keys.

Cylinders with single coding, grouped coding or in combination with single or grouped mastering.

### Cylinders to be combined with MSC handle and panic bars (except EXUS DC)



Nickel-plated cylinder equipped with 3 keys

#### Versions available

standard half cylinder
single coded half cylinder
group coded half cylinder
sample key coded half cylinder
single mastered half cylinder
group mastered half cylinder

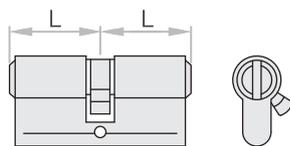
#### Lengths available

40/10	Univer, Proget
30/10	Rever

#### ATTENTION

It is important to specify MAC lock combinations in the order.

### Cylinders to be combined with EXUS DC panic bars



Nickel-plated cylinder equipped with 3 keys.

#### Versions available

standard cylinder
single coded cylinder
group coded cylinder
sample key coded cylinder
single mastered cylinder
group mastered cylinder

#### Lengths available

45/40	Univer, Proget
35/35	Rever

#### NOTE

Cylinders to be combined with the locks of NINZ doors must meet DIN 18254 standards.

Main, master and/or emergency key (or keys) should be ordered separately - they are not included with the cylinder.

## CONFIGURED AS NEEDED!

NINZ asks its partners to specify the system in the form of a key plan which, when prepared with care, serves as a map for optimizing the required intervention times (from order to installation) while ensuring that the mastering system meets the specific needs being requested.

Here are a few of the configurations that are available:

### 1) Standard

Cylinders with different keys.

### 2) Single coded

Cylinders with the same keys.

### 3) Grouped coded

Cylinders from the same group are coded alike.

### 4) Main/master key systems

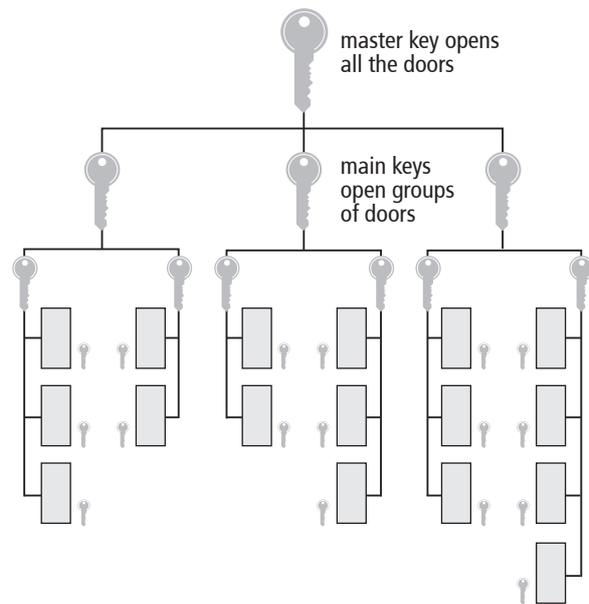
Grouped master key system in which each cylinder can be opened with its own key or with a master key that can open cylinders from one group but not others; a general master key can open all cylinders from all different groups. Standard cylinders closed from the interior with a thumb-turn latch cannot be opened with the main/master key.

### 5) Frictioned emergency

"Frictioned cylinder" means that the main or master key can only open doors that have not been closed from inside, while the same doors can still be opened with the emergency key.

### 6) Encrypted with sample key

Sample key coding allows for cylinders to be coded on the basis of a sample key supplied by the customer.



Key plan example for master key systems.

## KEYS

The order should specify the number of keys to be supplied with the mastered cylinders.

### Versions available

normal key	opens the single door only
main key	opens all doors from the same group
master key	opens all the doors that have grouped mastering
emergency key	opens all doors



Key

## DOOR CLOSER

The door closer regulates the closure of the door so that the door leaf returns properly to its final closed position after being released. Regulation is influenced by closure force, speed and the final impact.

Although Univer and Proget doors are equipped with spring hinges for automatic closure, the installation of door closers is recommended for wide and/or heavy doors and/or in the presence of windows on the leaf.

The door closer product is addressed by EU directive 89/106/CEE, which means it is subject to CE marking.

### CP1 with scissor arm

CE marked in conformity with EN 1154.

Rever, Univer and Proget doors are available, on request, with an overhead CP1 door closer with a silver-colored scissor arm.

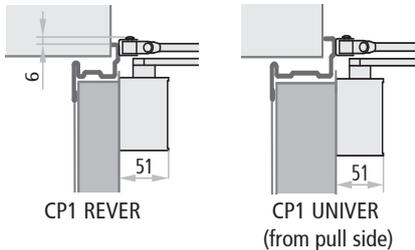
The silver-colored CP1-G door closer is available for Proget doors, for installation on the push side of the door.

The CP1/CP1-G can be used for fire rated doors and is classified for 180° closure with a force varying from 3 to 4.

Proget doors ordered with CP1 are provided with pre-drilled installation holes on the door leaf and the frame. Standard Univer and Proget doors include internal reinforcements for the CP1 application.

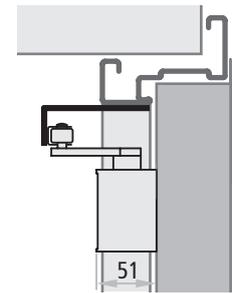
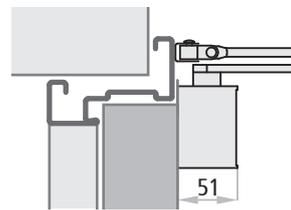
#### NOTE

Scissor arm protrusion = 290 mm



#### Optional colors:

RAL 9016 RAL 9005



### CP2 with slide channel

CE marked in conformity with EN 1154.

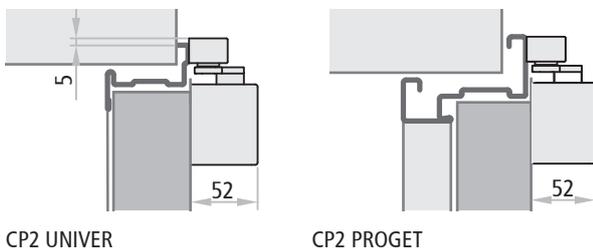
On request Rever, Univer and Proget doors are available with an overhead CP2 door closer with slide channel. Relative to the CP1, the advantage of this system is the absence of a protruding of scissor arm.

The CP2 is suited for use on fire rated doors and has been classified for 180° closure with force level 4.

The silver-colored CP2-G door closer is available for Proget doors, for installation on the push side of the door, with force level 3.

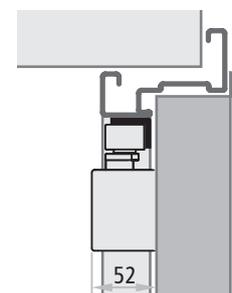
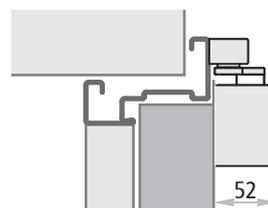
Minimum wall opening width of 1200 mm for two leaved doors with two CP2/CP2-G applied.

Proget doors ordered with CP2 are provided with pre-drilled installation holes on the door leaf and the frame. Standard Univer and Proget doors include internal reinforcements for the CP2 application.



#### Optional colors:

RAL 9016 RAL 9005

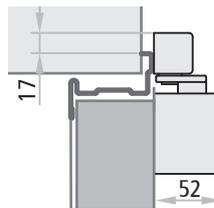


# Door closers

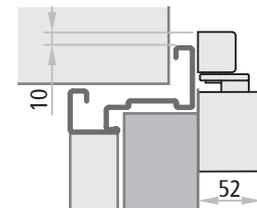
For UNIVER - PROGET doors

## CP2-EMF with slide channel and electro-mechanical hold open device

CE marked in conformity with EN 1154 and EN 1155. The CP2-EMF differs from the CP2 in that it has an electro-mechanical hold-open device that allows the door leaf to be locked at an angle ranging from 80° to 120°. During alarms or power outages, the hold-open device is unlocked and the door is closed by the door closer. The CP2-EMF can be used on fire doors and has a maximum opening range of 120°, with a closing force set at 4. Minimum wall opening width of 1200 mm for two leaved doors with two CP2-EMF applied. Proget doors ordered with CP2-EMF are provided with pre-drilled installation holes on the door leaf and the frame. Standard Univer and Proget doors include internal reinforcements for the CP2-EMF application.



CP2 EMF UNIVER



CP2 EMF PROGET

Model	maximum opening in the absence of obstacles			power supply	absorption	CE certification	standard
	one-leaved door	active leaf	inactive leaf				
CP1 - CP1-G	180°	180°	180°	-	-	0432-BPR-0054	EN 1154
CP2	175°	175°	175°	-	-	0432-BPR-0051	EN 1154
CP2-G	120°	120°	120°	-	-	0432-BPR-0051	EN 1154
CP2-EMF	120°	120°	120°	24V DC	58,3 mA	0432-BPR-0051 0432-BPR-0025	EN 1154 EN 1155
CP2-EMF-V	120°	120°	120°	48V DC	45,8 mA	0432-BPR-0051 0432-BPR-0025	EN 1154 EN 1155

### NOTE

For the automatic closing of doors exposed to strong winds, the use of a door closer with a higher closing force is recommended.

# Closing regulators

For UNIVER - PROGET fire doors



ACCESSORIES  
doors

## CLOSING REGULATOR

Closing regulators administer the closure of two-leaved doors so that the inactive leaf is overlaid on the active leaf upon final closure. This is why it is mandatory to apply closing regulators to all two-leaved fire doors.

### RC/STD

CE marked in conformity with EN 1158.

The RC/STD closing regulator device is distinct from the door closer and is a standard element of all Univer and Proget two-leaved fire doors.

In Proget doors the closing regulator is inserted into the upper horizontal groove of the frame, while in Univer doors it is supplied separately with an anchoring rod to be installed on site. In comparison with other regulators which are separate from the door closer, the advantage of the RC/STD regulator is that it is not visible when the door is closed.

The RC/STD regulator is suited for use on fire doors and is classified for forces ranging from 3 to 5.



### ATTENTION

In case of two-leaved Proget fire-rated doors with environmental characteristics it is mandatory to apply the RC2 closing regulator (to be ordered separately) instead of the RC/STD.

### RC2 system

CE marked in conformity with EN 1154 and EN 1158.

The self-closing RC2 system for the self closing of two-leaved doors incorporate two CP2 with force EN 4 with a slide channel and a regulator integrated in the upper sliding guide. The entire system is silver colored.

The silver-colored RC2-G system is available for Proget doors, for installation on the push side of the door, with force EN 3.

Proget fire doors with environmental characteristics must be ordered endowed with the RC2 system.

On request, two-leaved Univer and Proget doors are available with an RC2 regulator instead of the RC/STD.

The RC2/RC2-G system presents clear advantages:

- no protruding door-closer arms
- regulator concealed in the upper guide (even when the door is open)
- controlled closure of both leaves

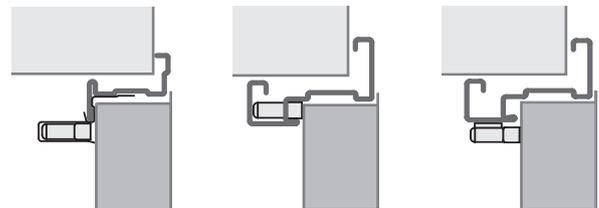
The RC2 regulator is suited for use on fire doors and is classified for both door closers with force EN 4; the RC2-G regulator is suited for use on Proget fire doors (installation from push side) and is classified for both door closers with force EN 3.

Minimum wall opening width: 1200 mm for the RC2; 1500 mm for the RC2-G. Minimum inactive leaf width: 370 mm for the RC2; 600 mm for the RC2-G.

Proget doors ordered with RC2 are provided with pre-drilled holes for the installation of two CP2 door closers on the leaves and the slide channel on the frame. The installation holes in Univer doors need to be drilled on site for anchoring to the internal reinforcement of the leaves.

There are two systems for applying it to the door:

- separated from the self-closing system of the spring hinge or the door closer
  - incorporated into the closure system of the door closer
- Closing regulators are addressed by EU directive 89/106/CEE, which means they are subject to CE marking.

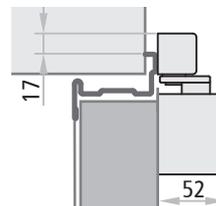


UNIVER

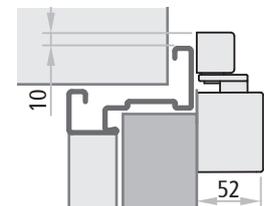
PROGET

PROGET\*

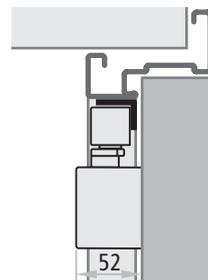
\* Position of RC/STD closing regulator in case of two-leaved Proget door with additional performances



RC2 UNIVER



RC2 PROGET (from pull side)



RC2-G PROGET (from push side)

Optional colors  
(except for RC2-G):

RAL 9016 RAL 9005



# Closing regulators

For UNIVER - PROGET fire doors

## RC2-EMF1 system

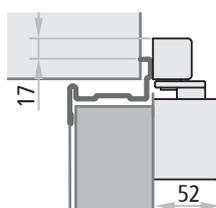
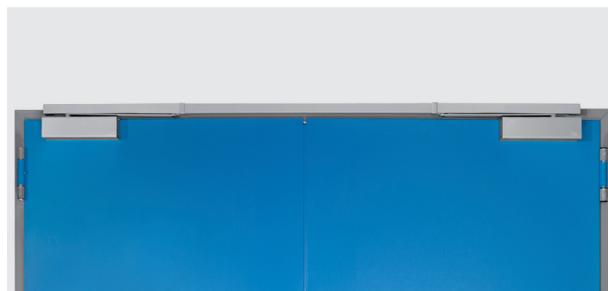
CE marked in conformity with EN 1154, EN 1158 and EN 1155. The RC2-EMF1 system differs from the RC2 in that it has an electro-mechanical hold-open device that allows the door leaf to be locked at an angle ranging from approx. 80° to 130°. The active leaf is held open by the closing regulator system. During alarms or power outages, the hold-open system is unlocked and the door is closed by the door closer. The entire system is provided in the standard silver color.

The RC2-EMF1 system presents multiple advantages:

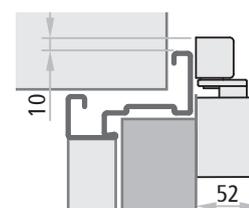
- possibility of holding the leaves open in the desired position
- no visible magnets
- no protruding door closer arms
- regulator concealed in the upper guide (even when the door is open)
- controlled closure of both leaves

The RC2-EMF1 system is suited for use on fire rated doors and is classified for both door closers with force level EN 4. Minimum wall opening width of 1200 mm and minimum of 370 mm for the inactive leaf.

Proget doors ordered with RC2-EMF1 are provided with pre-drilled installation holes on the door leaf and the frame. The Univer door series includes internal reinforcements for application of the two door closers.



RC2-EMF1 UNIVER



RC2-EMF1 PROGET

Model	maximum opening in the absence of obstacles			absorption	CE certification	standard
	active leaf	inactive leaf	power supply			
RC/STD	180°	180°	-	-	0425-ICIM-1153	EN 1158
RC2	175°	175°	-	-	0432-BPR-0051	EN 1154
					0432-BPR-0026	EN 1158
RC2-G	120°	120°	-	-	0432-BPR-0051	EN 1154
					0432-BPR-0026	EN 1158
RC2-EMF1	175°	130°	24V DC	58,3 mA	0432-BPR-0051	EN 1154
					0432-BPR-0025	EN 1155
					0432-BPR-0026	EN 1158
RC2-EMF1-V	175°	130°	48V DC	45,8 mA	0432-BPR-0051	EN 1154
					0432-BPR-0025	EN 1155
					0432-BPR-0026	EN 1158

### NOTE

For the automatic closing of doors exposed to strong winds, the use of a door closer with a higher closing force is recommended.

# Automatic door sweep

For NINZ doors

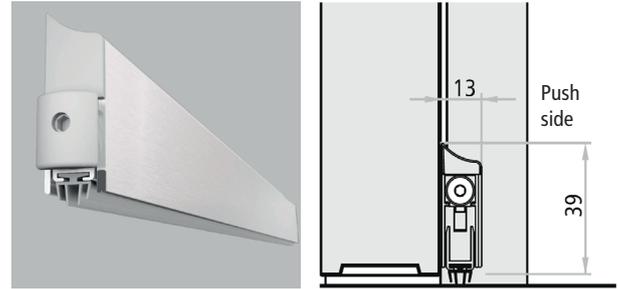


## AUTOMATIC DOOR SWEEP

On request, Rever, Univer and Proget doors are available with an automatic door sweep to prevent air drafts from entering through the crack between the leaf and the floor. It complements the sealing applied to the frame to provide better acoustic insulation and better air sealing for the door.

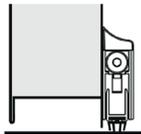
It is applied on the push side by using screws to attach it directly to the sheet metal of the door, after which the mechanism is completely covered with an anodized aluminium profile. On request, it can also be provided in the same color as the door leaf.

It is applied on site following door installation so that it can be adjusted to the actual leaf height.



## FIELDS OF APPLICATION FOR THE AUTOMATIC DOOR SWEEP

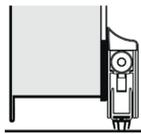
### REVER doors



1 leaf/active  
UNIVER  
REVER

Seals to be used	FM L one-leaved door	L1 active leaf	L2 inactive leaf with 30x4 mm profile
480 mm	-	-	400 mm
630 mm	700 mm	-	-
780 mm	800 mm	800 mm	-
930 mm	900 mm, 1000 mm	900 mm, 1000 mm	800 mm, 900 mm
1080 mm	1100 mm	-	1000 mm
1230 mm	1200 mm, 1300 mm	-	-
1330 mm	1350 mm	-	-

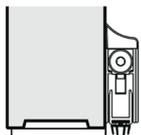
### UNIVER fire and multipurpose doors



inactive leaf  
UNIVER  
REVER

Seals to be used	FM L one-leaved door	L1 active leaf	L2 inactive leaf with 30x4 mm profile
480 mm	-	-	400 mm
630 mm	-	-	-
780 mm	800 mm	800 mm	-
930 mm	900 mm, 1000 mm	900 mm, 1000 mm	800 mm, 900 mm
1080 mm	1100 mm	-	1000 mm
1230 mm	1200 mm, 1300 mm	-	-
1330 mm	1350 mm	-	-

### PROGET fire and multipurpose doors



1 leaf active  
or inactive  
PROGET

Seals to be used	FM L one-leaved door	L1 active leaf	L2 inactive leaf
480 mm	from 500 mm to 574 mm	from 500 mm to 576 mm	from 350 mm to 495 mm
630 mm	from 575 mm to 724 mm	from 577 mm to 726 mm	from 496 mm to 645 mm
780 mm	from 725 mm to 874 mm	from 727 mm to 876 mm	from 646 mm to 795 mm
930 mm	from 875 mm to 1024 mm	from 877 mm to 1026 mm	from 796 mm to 945 mm
1080 mm	from 1025 mm to 1174 mm	from 1027 mm to 1176 mm	from 946 mm to 1095 mm
1230 mm	from 1175 mm to 1324 mm	from 1177 mm to 1326 mm	from 1096 mm to 1245 mm
1330 mm	from 1325 mm to 1340 mm	from 1327 mm to 1330 mm	from 1246 mm to 1330 mm

# Roofing - Drip-steel profile - Protective plates

For NINZ doors



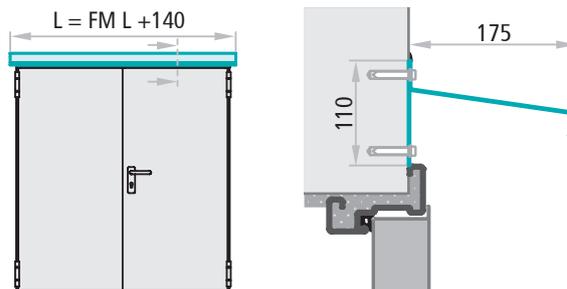
## ROOFING

Upon request for Univer and Proget doors, to be ordered together with the door.

Conceived for exterior use of metallic doors, the roofing protects against infiltration of rain from above between the door edge and the rebate of the frame. The small potrusion and RAL painting for exterior use in the same color of the frame complete the design of the door.

To be applied onto the wall, in contact with transom.

Made out of galvanized sheet metal with thickness 10/10 mm, painted with RAL for exterior use (in the frame color), complete with holes for fixing to the wall (screws and plugs excluded). Available for doors with FM L from 500 to 2660 mm (supplied in two elements for FM L > 2360 mm).



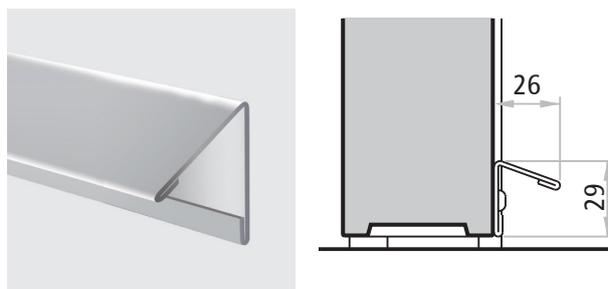
### ATTENTION

The roofing performs the function of a barrier against vertical rain limited to the upper part of the door. Therefore the roofing does not protect any eventual window or ventilation louvers on the door, so for these cases provide canopies or awnings for a complete protection of the product.

## DRIP-STEEL PROFILE

On request for Univer and Proget one-leaved doors. Normally used to prevent condensation from dripping down the door leaf and puddling beneath the door. The profile is made of "Sendzimir" processed galvanized sheet metal painted the color of the door leaf.

It is applied usually on the push side of the leaf on site after being cut to measure, to be attached with the screws provided.



Lengths available	FM L door leaf
828 mm	to 800 mm
928 mm	to 900 mm
1028 mm	to 1000 mm
1378 mm	to 1350 mm

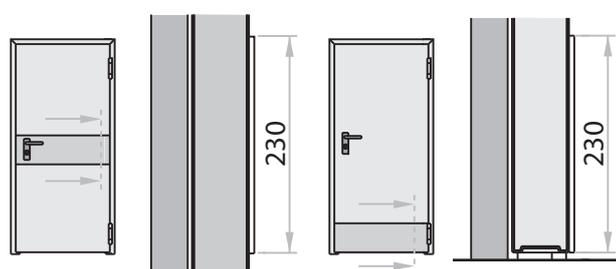
## PROTECTIVE PLATES AND KICKPLATES

On request for 1 and 2 leaf Univer and Proget doors, specifying the side of application (pull or push).

Their main function is to protect the parts of the door that are vulnerable to being scraped by carts, hospital beds, etc.

They are made of AISI 304 brushed stainless steel sheet metal with a standard height of 230 mm.

For on-site attachment with two-sided adhesive factory applied on the back, at the bottom of the door (kick plate) or at handle height (protective plate).



Protection plates

Kick plates



Holes are factory prepared for the passage of the handle panel and cylinder



Example of application on the push side

# Wall screws - Subframe

For NINZ doors

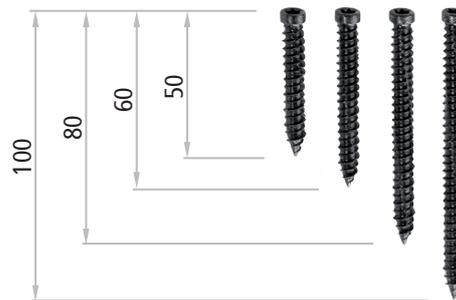


ACCESSORIES  
doors

## WALL SCREWS FOR FASTENING WITHOUT PLUGS

Field of use: installation of Proget insulated or multipurpose doorframes to the wall or subframe using screws but no plugs. Designed for installation into concrete, full bricks, half-full bricks, lightened cement and other materials.

**Advantages:** saves time and money thanks to direct attachment of the frame to the wall, with no need to enlarge the holes for plugs. Thanks to the black galvanization, the screws blend in smoothly with the FC sealing.



Dimensions	description
Ø 7,5 x 50 mm	for attachment to metal subframes
Ø 7,5 x 60 mm	for attachment to concrete and especially thick walls
Ø 7,5 x 80 mm	for attachment to walls of average thickness
Ø 7,5 x 100 mm	for attachment to walls of lower thickness

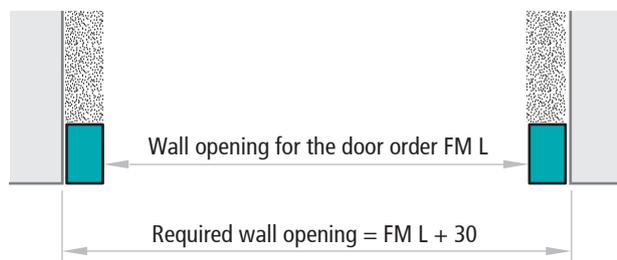
### NOTE

Holes should be drilled using a Ø6mm stone drill bit.

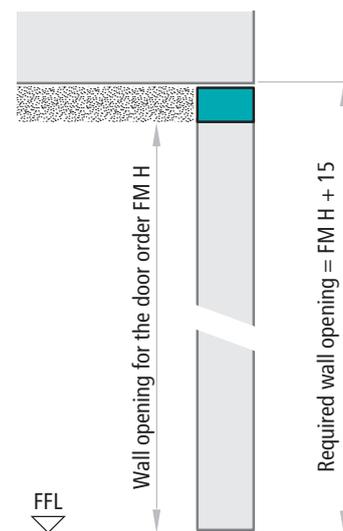
## SUBFRAME

Subframe made of 30x15x1,5mm hollow section profiles, derived from hot-galvanized steel coil, endowed with anchors for mortar fixing and removable spacers for the final installation.

To be ordered separately (mandatory for REI 60 and REI 120 Proget doors with installation onto subframe with screws).



Horizontal cross section



Vertical cross section

# MAC® Multifunctional Access Control

## Controlled opening system



Installation on the door of MAC and MAC FAILSAFE systems allow to control access by electric impulse. The particularity of the MAC and MAC FAILSAFE system is to integrate all command and control functions in the lock, which simplifies the electrical works required on site. Solenoid and electric card are inside the lock, and therefore better protected. The locks are marked CE in accordance with the EMC Directive (electromagnetic compatibility)

### Differences between MAC and MAC FAILSAFE systems:

- the MAC systems, in the event of a power failure, allow the opening only via key or panic/emergency exit device. Thus MAC systems are recommended in situations where the door shall remain closed, even in case of power failure
- the MAC FAILSAFE systems guarantee access in the situation of power failure. Thus MAC FAILSAFE systems are recommended in situations where free passage must be assured, even in case of power failure

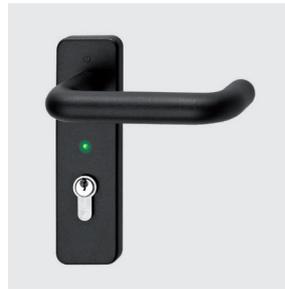
### The MAC system offers multiple advantages, such as:

- possibility of 12 or 24V AC/DC power supplies, which avoids problems due to inadequate voltage
- low power consumption, max 350 mA regardless of the operating voltage (basically from 300ma with 10V up to 350ma with 30V)
- DC power demand (10vdc - 24vdc) = 10 watts
- AC power demand (12V/24V +/- 10%) = 24VA
- timer incorporated, time set at 30 sec., eliminating the need for external timers. Further, in case of delivery with the door, an automatic reset function (reset of the timer) for every door opening is provided
- if powered by electrical contacts, the system will automatically reset at each door opening (zero time)
- If powered by a cable entry, the system will reset at the expiry of 30 sec.
- Red/green LED on handle plate which indicates the status of the system is active or deactivated, thus avoiding unnecessary mechanical stress.
- possible continuous activation of the handle via switch (not included)
- ready for the connection of a optional remote sensor (not supplied) for remote signaling of lock activation/deactivation
- guaranteed access in case of power failure (only for FAILSAFE version)

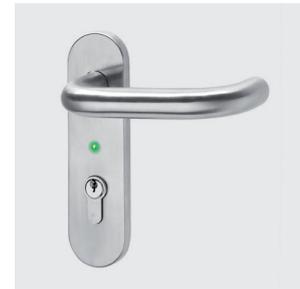
The MAC and MAC FAILSAFE systems can be delivered installed onto the door with internal wiring through the leaf and electrical contacts between the leaf and the doorframe. The KIT version includes a flexible cable sleeve and the electrical cables are to be installed externally.

### NOTE

Before the installation of doors with MAC locks it is necessary to prepare the power supply (active door leaf side in case of double leaved doors) at a height of approx. 800mm from the finished floor level and in proximity of the wall angle, where the door frame will be mounted. The power wires must have a section of 0,75-1,0mm<sup>2</sup> and must be flexible.



Plastic handle with LEDs



Stainless steel handle with LEDs



Electrical contacts between leaf and doorframe

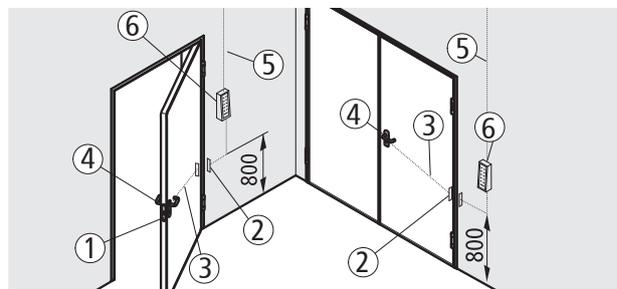


Diagram of components

*Supplied with the Proget door: lock with solenoid and electronic chip with timer incorporated (1), electrical contacts between leaf and frame (2), internal wiring inside the leaf (3); supplied to be installed: handle and cover plate with red/green LED and connectors (4).*

*Not included: power supply for doorframe contacts (5), opening button and command accessories (6).*

*Unlike the delivery together with the door, the KIT (supplied separately from the door) offers a flexible cable sleeve between the door leaf and the power supply instead of the double electrical contacts. In case of a handle the installation of a cable duct onto the door leaf (not supplied) is necessary for the power supply.*

### NOTE

**For Univer and Rever doors available only in KIT version.**

## MAC1 AND MAC1 FAILSAFE SYSTEM

### Door opening in case of power failure (LED off)

- MAC1: from pull side only by key; from push side by panic bar or emergency handle
- MAC1 FAILSAFE: from pull side by handle (or key); from push side by panic bar or emergency handle

### Operating mode

The system controls access from the pull side of the door. With the lock locked by key, the access consent is possible via electric impulse (button, badge reader, etc.), which gives power supply in case of MAC1 or it turn off in case of MAC1 FAILSAFE, while opening is always possible from the push side by means of the panic bar or emergency handle. Activation of the handle is signaled by illumination of the "green LED," while the "red LED" indicates when the handle is idle. Both LEDs are off when no power is being supplied.

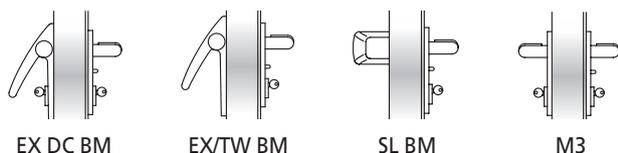
### Timed function

In this mode, the activation time lasts 30 seconds before the handle is returned to idle. In case of delivery with the door, if the door is opened within the 30 seconds, the timer is automatically reset to zero.

### Continuous "day time" function

In this mode the handle is continuously enabled by an electric switch (not supplied) for a longer period (for example during the day), which keeps the lock always enabled. The green LED remains switched on (not valid for the "Kit" version) and is switched off only for the period between the door's opening and its fully closure.

MAC1 can be combined with any BM type panic bar and M3 emergency handles (to be ordered on the side).



## MAC2 AND MAC2 FAILSAFE SYSTEM

### Door opening in case of power failure (LED off)

- MAC2: from both sides by key only
- MAC2 FAILSAFE: from both sides by handle (or key)

### Operating mode

The system controls access from both sides of the door. With the lock locked by key, the access consent is possible via electric impulse (button, badge reader, etc.), which gives power supply in case of MAC2 or it turn off in case of MAC2 FAILSAFE. Activation of both handles is signaled by illumination of the "green LED," with the "red LED" signaling when the handles are idle. Both LEDs are off when no power is being supplied.

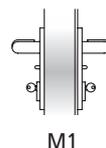
### Timed function

In this mode, the activation time lasts 30 seconds before both handles are returned to idle. In case of delivery with the door, if the door is opened within the 30 seconds, the timer is automatically reset to zero.

### Continuous "day time" function

In this mode both handles are continuously enabled by an electric switch (not supplied) for a longer period (for example during the day), which keeps the lock always enabled. The green LEDs remain switched on (not valid for the "Kit" version) and are switched off only for the period between the door's opening and its fully closure.

MAC2 standard delivery with M1 plastic handle. Upon request an M1X stainless steel handle can be delivered (to be ordered on the side).



## MAC3 AND MAC3 FAILSAFE SYSTEM

### Door opening in case of power failure (LED off)

- MAC3: from push side only by key; from pull side by the M3tir/M3Xtir emergency handle
- MAC3 FAILSAFE: from push side by handle (or key); from pull side by the M3tir/M3Xtir emergency handle

### Operating mode

The system controls access from the push side of the door. With the lock locked by key, the access consent is possible via electric impulse (button, badge reader, etc.), which gives power supply in case of MAC3 or it turn off in case of MAC3 FAILSAFE, while opening is always possible from the pull side by means of the emergency handle. Activation of the handle is signaled by illumination of the "green LED," while the "red LED" indicates when the handle is idle. Both LEDs are off when no power is being supplied.

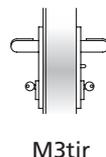
### Timed function

In this mode, the activation time lasts 30 seconds before the handle is returned to idle. In case of delivery with the door, if the door is opened within the 30 seconds, the timer is automatically reset to zero.

### Continuous "day time" function

In this mode the handle is continuously enabled by an electric switch (not supplied) for a longer period (for example during the day), which keeps the lock always enabled. The green LED remains switched on (not valid for the "Kit" version) and is switched off only for the period between the door's opening and its fully closure.

MAC3 standard delivery with M3tir plastic handle. Upon request an M3Xtir stainless steel handle can be delivered (to be ordered on the side).



### NOTE

Before the installation of doors with MAC locks it is necessary to prepare the power supply (active door leaf side in case of double leaved doors) at a height of approx. 800mm from the finished floor level and in proximity of the wall angle, where the door frame will be mounted. The power wires must have a section of 0,75-1,0mm<sup>2</sup> and must be flexible.

# Electric handles

## Controlled opening system

### ELM/MT AND ELM/FS MULTI-VOLTAGE ELECTRIC HANDLES

Controlled door opening system that employs an electronic device to activate the handle. The latter is equipped with an internal timer with a 30 seconds time allowance for opening the door, after which the electric handle is deactivated. The handle can be activated for longer time periods by means of the electrical switch.

The illumination of a green LED and sounding of an acoustic signal (buzzer) indicate handle activation, while a red LED indicates deactivation.

In the absence of power the electric handle ELM/mt is free (in neutral) and therefore it is not possible to open the door. In the absence of power the electric handle ELM/fs Failsafe is always enabled and therefore the door can be opened.

**When ordered together with the door (available only for Proget doors), the ELM/mt and ELM/fs systems include:**

electric handle, electrical contacts between the leaf and the frame, power cable inside the door connected to electrical contacts, command panel, lock and fixing screws.

**If ordered separately from the door, the system includes:**  
electric handle, command panel and fixing screws.

### ELM/CISA MULTI-VOLTAGE ELECTRIC HANDLE

Controlled door opening system that employs an electronic device to activate the handle. Equipped with a separate timer (for insertion into the switch box) which can be set for different opening times: from a minimum of 0,1 second to a maximum of 10 days.

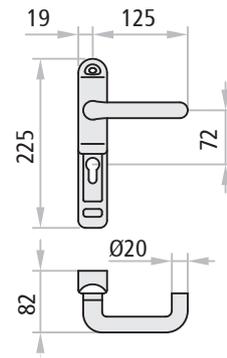
Equipped with green LED that signal activation of the handle.

The ELM/cisa system includes: electric handles, 2 meters of power cable, cable sleeve for the connection between the leaf and the frame, 8/9 square spindle, fixing screws, adjustable timer packaged separately.

### PANIC BARS FOR COMBINATION WITH ELM/MT, ELM/FS OR ELM/CISA ELECTRIC HANDLES

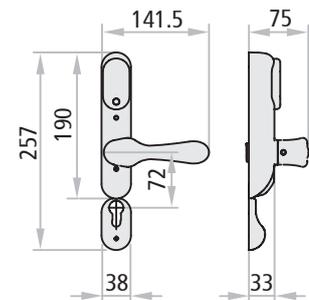
The controlled opening direction is from the pull side of the door (electric handle side). Locking the lock by key blocks the electric handle functioning, while opening is still possible via the panic bar on the push side.

Use: one- or two-leaved doors for anti-panic exits when access control is desired on the pull side.



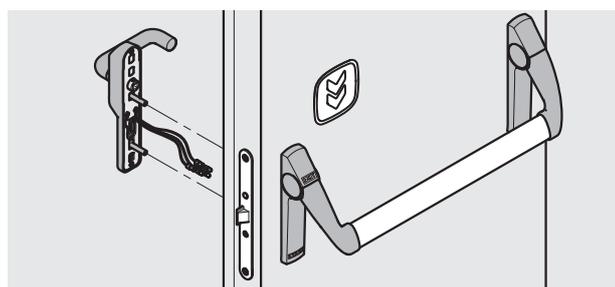
#### Technical data

power supply	12-24V AC/DC
current absorbed	at 12 V: 500 mA - at 24 V: 200 mA
startup current	at 12 V: 700 mA - at 24 V: 300 mA
minimum operating temperature	-5°C

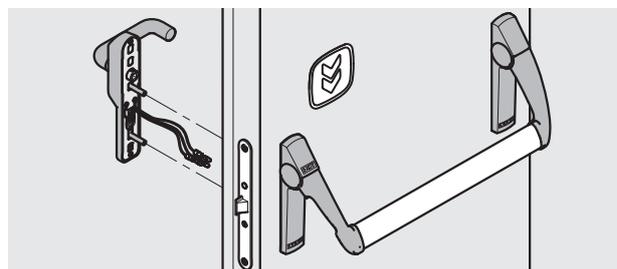


#### Technical data

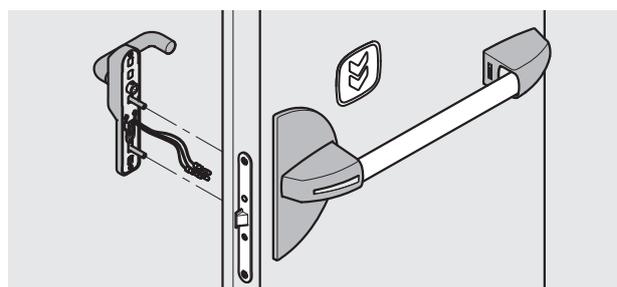
power supply	12-24V AC/DC
current	absorbed: 360 mA - startup: 800 mA
operational temperature	-20°C ÷ +80°C



Twist



Exus



Slash

# Electric handles - Electromagnetic sensor

Controlled opening system

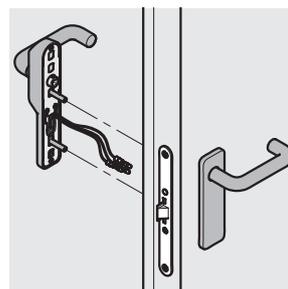


## HANDLES FOR COMBINATION WITH ELM/MT, ELM/FS OR ELM/CISA ELECTRIC HANDLES

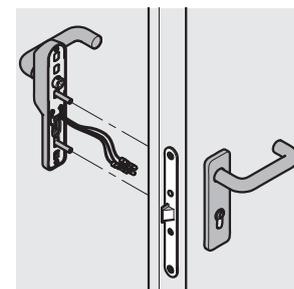
### MSC, MSC-X

Use: one- or two-leaved doors when control is desired for one of the two opening directions. Locking with the key blocks opening in both directions.

Controlled opening may be for either the push or pull direction, depending on where the electric handle is applied.



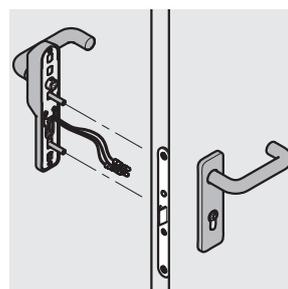
MSC



MCC/S

### MCC/S, MCC/S-X

Use: for one- or two-leaved doors where access is to be controlled from the pull side only (electric handle side). Locking with the key blocks opening from the push side, but not from the side where the electric handle is applied.



MCC/T

### MCC/T, MCC/T-X

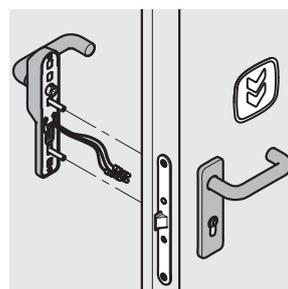
Use: for one- or two-leaved doors where access is to be controlled from the push side only (electric handle side). Locking with the key blocks opening from the pull side, but not from the side where the electric handle is applied.

## EMERGENCY HANDLES FOR COMBINATION WITH ELM/MT OR ELM/FS ELECTRIC HANDLES

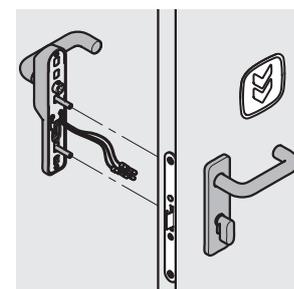
### M3, M3X

Use: one- or two-leaved doors for emergency exits when access control is desired on the pull side.

The controlled opening direction is from the pull side of the door (electric handle side). Locking the lock by key blocks the operation of the electric handle, while opening remains possible via the M3 or M3X emergency handle.



M3



HOT-CIL

### HOT-CIL, HOT-CIL-X

Use: for hotel rooms doors.

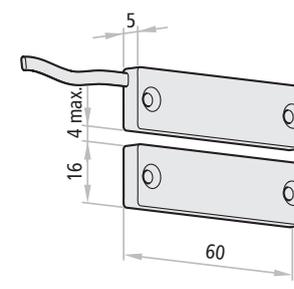
The controlled opening direction is from the push side of the door (electric handle side). Opening from push side is possible with an electric consent at the electric handle. Opening is always possible from the room side of the door via the HOT-CIL or HOT-CIL-X emergency handle, also in case of lock locked by thumbturn latch.

## ELECTROMAGNETIC SENSOR

The electromagnetic sensor allows to verify the position of the door leaf. To be applied to the door, composed of two elements: one electromagnetic sensor with two cables and one magnet.

### Technical data

maximum voltage	200 V DC / 500 mA with resistive load
internal switch contact	n.o. (n.c. with magnet aligned)
operational temperature	+5 / +40 °C



# Door blocking electromagnet

## Controlled opening system

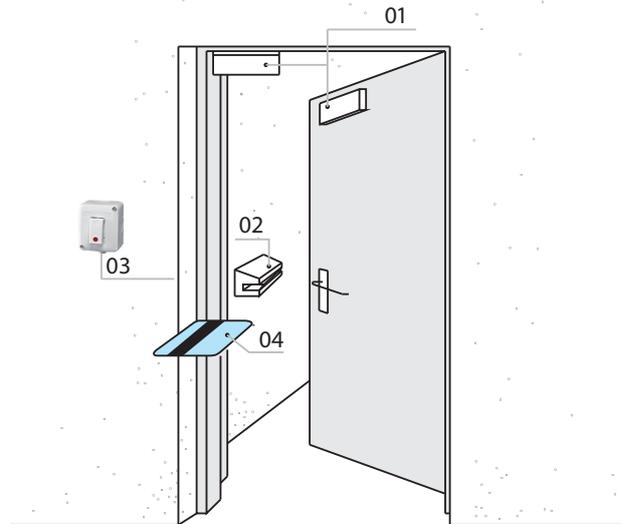
### DOOR BLOCKING ELECTROMAGNET

This system is for use in special situations when the doors remain closed and should only be opened with electrical consent. The electrically powered electromagnet holds the door closed with a holding force of approximately 300kg, rendering the action of the handle ineffective. Only electrical commands (badge reader, key button, etc.) or electrical consent from the fire detector system can deactivate the electromagnet making a door opening possible.

#### Operating mode

The door is held closed by the electromagnet (01) and the bolt of the lock. Opening from the outside can happen via magnetic card (04) using the Badge reader (02) of the card control system or any other system of choice and by retracting the bolt using the handle or key.

From the inside, the deactivation of the electromagnet is caused by the unlock button (03) (also remotely) or with the same system used for the pull side, while the locking bolt must still be retracted using the handle or key. The activated electromagnet signals its state with a red LED, whereas the green LED signals the temporary deactivation. Further a relay AC/DC signaling the electromagnetic state is supplied.



**NOTE**  
Unlocking of the door is only possible if the door is not locked by key.

#### Technical data

power supply	12/24V DC	time delay	0 ÷ 90 sec.
current absorbed	500mA at 12V DC - 250mA at 24V DC	electromagnetic compatibility standard	EMC - UNI CEI 70011
force	up to 300kg.	certificate Nr.	0123/02

### COMPONENTS INCLUDED WITH THE DOOR BLOCKING ELECTROMAGNET

#### For Proget doors

Door blocking electromagnet, withstanding force 300kg, 12/24V DC, fastener plate, anchor with stainless steel fastener backplate.

#### For Rever/Univer doors

Door blocking electromagnet, withstanding force 300kg, 12/24V DC, fastener plate and angle bar, anchor with stainless steel fastener backplate.

#### Control system:

- "Access" code keypad
- Card-based control system
- Biometric fingerprint reader
- Unlock button

#### NOTE

Detailed specifications for the Control system are found on the "Command accessories" page.



PROGET electromagnet



REVER/UNIVER electromagnet

## CONTROL SYSTEMS AND RELATED ACCESSORIES

### “Access” code keypad

Keypad with 10 numeric buttons plus an Enter key, including control unit for 1 door, timer incorporated (0,5÷25 sec.) and flat cable. Up to 500 recordable different codes, composed from 1 to 10 digits.

#### Technical data

power supply	12 ÷ 18 V AC/DC
output	relay

### Card-based control system

Card control system, including control unit for 1 door, timer and AC adapter incorporated, badge reader, flat cable, three blank badges and a coded badge. Management of access control for multiple doors by P.C.

#### Technical data

power supply	230 V AC
output	12 V DC, max. 0,5 A

### Biometric fingerprint reader

Biometric reader for reading of fingerprints and transformation into key codes. Includes an internal unit for registering, memorizing and cancelling users, external unit for the reading of fingerprints and an autonomous low voltage AC adapter. The power supply for the management of the door is not included.

#### Technical data

power supply	230 V AC
output	relay

### Unlock button

Unlock button with white casing and control light.

### Power supply Switching

Can be combined with “Access code keypad”, with “Biometric fingerprint reader” and for the management of:

- max. Nr. 10 MAC® Multifunction Access Control \*
- or max. Nr. 5 electromagnets door blocking
- or max. Nr. 5 ELM/mt or ELM/fs electric handles \*
- or max. Nr. 5 ELM/cisa electric handles \*

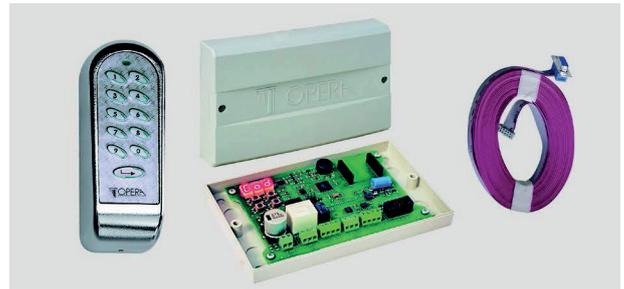
\* provided that they are not commanded simultaneously

#### Technical data

power supply	230 V AC
output	12 V DC - 3 A

#### NOTE

It is possible to wire a couple of buffer batteries to the power supply switching (see “Door-holding systems”).



„Access” code keypad



Card-based control system



Biometric fingerprint reader



Unlock button



Power supply switching

# Door-holding systems

For fire doors and gates

## C2 MONO-ZONE CENTRAL UNIT

Certified in accordance with EN 54-2 and EN 54-4 standards. The central unit designed and built in conformity with UNI EN 54 standards, which regulate unit for fire alarms and related accessories which each must conform with EN 54 standards.

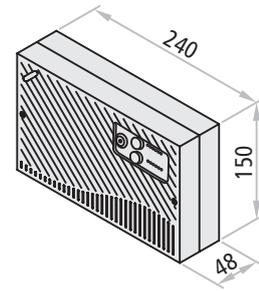
To use for the management of the door-holding electromagnets for fire-rated closures. Control all outputs towards the heat and smoke detectors, the alarm activation/reset buttons, the external siren and the charge of buffer batteries. Any breakdown or malfunction is signaled by LED on the front panel, and by internal acoustic signal for specific cases. There are three ways to reset alarm or breakdown signal: by a button located near the central unit, or by two other buttons of the front panel, one of which can be activated with key only.

### Technical data

model	52002
primary power supply	230V AC, 100mA, 50-60Hz
auxiliary power supply	2 batteries, 12V DC - 1,1 ÷ 1,3 Ah
"I" current	min. 264mA ÷ max. 424mA
maximum output current battery	300mA
buffer battery charger output	24V DC (27.6V DC)
protection rating	IP30
operational temperature	-5°C ÷ +40°C
operational zones	single zone (mono-zone)
acoustic alarm	internal buzzer
"low battery" signal	intermittent internal buzzer
CE certification	0051-CPD-0264
conformity with standards	EN 54-2 +A1:2006 EN 54-4:1997 + A1:2002 + A1:2006

## BUFFER BATTERIES

Pair of rechargeable buffer batteries, 12V DC - 1.2Ah



### ATTENTION

According to standard EN 54-4, it is obligatory for the mono-zone central unit to be equipped with:

- nr. 1 heat/smoke detector RFC certif. EN 54-7
- nr. 1 pair of buffer batteries
- nr. 1 external electronic siren certif. EN 54-3
- nr. 1 alarm activation button certif. EN 54/11
- nr. 1 fire/failure alarm deactivation button

### MANAGES

- max. nr. 8 RFC heat/smoke detectors
- max. nr. 5 alarm activation buttons
- max. nr. 2 electronic sirens
- nr. 4 EM or EMP or EMfr electromagnets
- nr. 2 buffer batteries

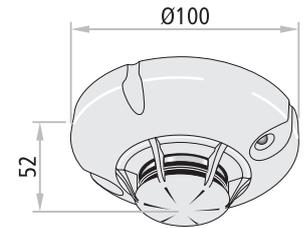


# Door-holding systems

## For fire doors and gates

### RFC HEAT AND SMOKE DETECTOR

Certified in accordance with EN 54-7 standard. RFC heat and smoke detector characterized by white ABS casing. Optical/thermic operation with intervention temperature to be set between 54 and 65°C. To ensure proper functioning, the detectors must be subjected to regular 6-month maintenance checks. Please note that it is inadvisable to position the sensor where strong air currents are present.

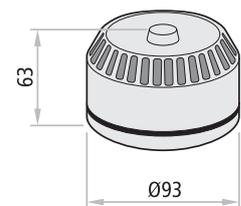


#### Technical data

operational voltage	11 ÷ 33V DC, typically 24V DC
consumption at rest, at 24V DC	67µA
absorption of alarm at 24V DC	45mA
operational temperature	-20°C ÷ +70°C
conformity with standards	EN 54-7

### ELECTRONIC SIREN

In red color ABS, includes a volume control function for installation in internal and external environments. The connection is made using double clamps (6) for branching. With 28 or 32 selectable tones and a second tone for two-phase alarms.

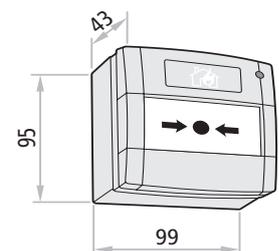


#### Technical data

power supply	9 ÷ 28V DC
absorption by alarm at 12V DC	8mA
absorption by alarm at 24V DC	16mA
protection rating	IP65
operational temperature	-25°C ÷ +70°C
conformity with standard	EN 54-3

### ALARM ACTIVATION BUTTON

In red color ABS with a weight of 110 gr. Pressure on the plastic front plate activates the electrical contact. Re-arming of the contact is executed manually using a key (provided).



#### Technical data

power supply	max. 30V DC
protection rating	IP41
operational temperature	max. +65°C
internal exchange contact	n.o./n.c.
conformity with standard	EN 54-11

## ELECTROMAGNETS

### EM and EMfr wall mounted

EM and EMfr wall electromagnet with white plastic casing, consisting of a galvanized metal core, both complete with unlock button. Anchor consisting of a nickel-plated plate and jointed baseboard.

EMfr wall mounted electromagnet differs from the normal EM by allowing to adjust the holding force of the door from 10 to 50 kg (the adjustment is via a trimmer). Emfr electromagnet is recommended for applications on inconsistent walls, in particular those made with plasterboard panels, avoiding potential damage to the electromagnet fixing system (rooting of the dowels).

#### Technical data EM - EMP

power supply	24Vcc
absorption	60mA
force	EM and EMP: 50kg - EMfr: 10 ÷ 50 kg
CE certification	0407-CPD-011 (IG-098-2004)/04
conformity with standard	EN 1155
anti-magnetism (residual)	pivot on the body of the electromagnet
anti-interference	connector with varistore

### EMP floor mounted

EMP floor electromagnets consisting of a galvanized metal core, both complete with unlock button. Anchor consisting of a nickel-plated plate and jointed baseboard.

