



FIRE DOOR CONTROL SOLUTIONS

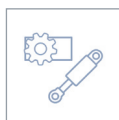
Central units | Smoke & heat detectors | Electromagnets | Counter plates | Door sequence selectors
ATEX-proof hold-open systems | Accessories for hold-open systems | Accessories for fire doors



LIFT
EQUIPMENT



DOOR CLOSING
SOLUTIONS



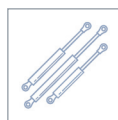
HYDRAULIC
DAMPERS



DOOR & GATE
OPERATORS



FIRE DOOR
OPERATORS



GAS
SPRINGS



FIRE DOOR
CONTROL
SOLUTIONS



DOOR
INTERLOCK
SYSTEMS

TABLE OF CONTENTS - FIRE DOOR CONTROL SOLUTIONS

	07.00. DICTATOR HOLD-OPEN SYSTEMS	Page
	General information	07.00.04
	07.01. CENTRAL UNITS	
	Central unit RZ-24	07.01.04
	Additional functions & components	07.01.06
	Central unit RZ-24-05	07.01.10
	07.02. SMOKE & HEAT DETECTORS	
	Smoke detector RM 4000	07.02.04
	Heat detector WM 4000	07.02.06
	07.03. ELECTROMAGNETS	
	Electromagnets range S	07.03.04
	Electromagnets range K	07.03.05
	Electromagnets range Q	07.03.06
	Electromagnets range R	07.03.07
	Electromagnets range RI	07.03.08
	Electromagnets range F	07.03.10
	Electromagnets range FT	07.03.12
	Electromagnets range U	07.03.13
	Electromagnets range FB	07.03.14
	Electromagnets range RM	07.03.15
	Electromagnets range ST	07.03.16
	Electromagnets range EM FH	07.03.17
	07.04. COUNTER PLATES	
	Counter plates range G	07.04.04
	Counter plates range W	07.04.05
	Counter plates range T	07.04.06
	07.05. DOOR SEQUENCE SELECTORS	
	Door sequence selector SR 90	07.05.04
	Door sequence selector SR 2000	07.05.05
	07.07. HOLD-OPEN SYSTEMS FOR HAZARDOUS AREAS	
	General information	07.06.04
	Smoke detector RM 3000IS EX & heat detector WM 3000IS EX	07.06.06
	ATEX electromagnets for ATEX zones 2 & 22	07.06.08
	ATEX electromagnets with connection terminal box	07.06.10
	ATEX electromagnets with connection cable	07.06.12
	Zener barrier Z779	07.06.14
	Explosion-proof hand switch	07.06.15
	07.06. ACCESSORIES FOR HOLD-OPEN SYSTEMS	
	Hand switch	07.07.04
	Telescopic bracket	07.07.05
	Bracket for electromagnets	07.07.06
	07.06. ACCESSORIES FOR FIRE DOORS	
	Door damper V 1600 / V 1600F for fire doors	07.08.04
	Thermal bolt HLS	07.08.08

DICTATOR hold-open systems

General information



Website

DESCRIPTION

Hold-open systems keep doors open during normal operation and, at the same time, ensure that they close automatically in case of a fire.

In case of fire, fire closures ensure that the fire cannot spread unhindered through the entire building. Therefore, doors in fire sections must be tested and approved for this purpose and must be self-closing in accordance with the regulations. However, in many buildings, it is necessary to keep a fire / smoke protection closure temporarily open. If a wedge - or similar - is used for this purpose, then doors cannot fulfill their function in the event of a fire! Therefore hold-open systems have to be used for the task.

THE DICTATOR ADVANTAGE

- Many years of experience in the field of fire protection
- Versatile quality components for fire and smoke doors
- Broad product range enables many special solutions
- Robust and resistant systems
- Also hold-open systems for hazardous areas
- Individual planning and advisory service



Questionnaire

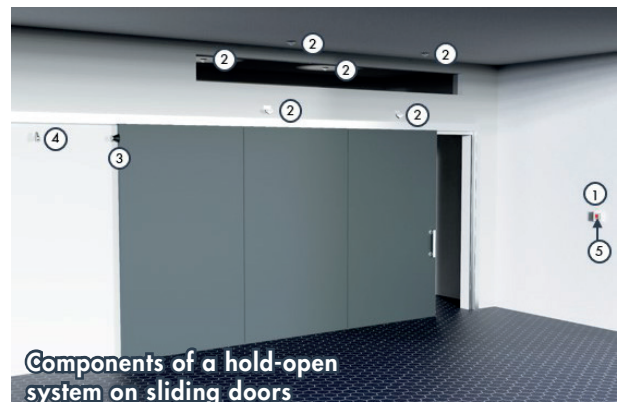
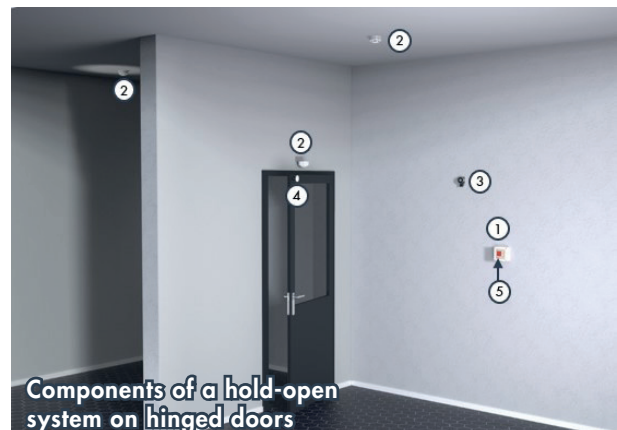


Guidebook

COMPONENTS

- **Power supply & tripping device (1):** The central unit is the heart of the hold-open system. It ensures power supply for the components and evaluates the fire detectors.
- **Fire detectors (2):** Smoke and/or heat detectors immediately report a fire to the central unit and thus ensure that the hold-open system is triggered safely.
- **Hold-open device (3):** An electromagnet with the corresponding counter plate keeps the door open. In the event of an alarm or when a manual release button is pressed, the magnet releases the door for automatic closing.
- **Manual release switch (4):** Hold-open systems must also be able to be released manually in order to check the function of the hold-open device and to close the fire closure when operation no longer requires keeping the door open. There is a separate manual release button fitted for this purpose. It is important that the push-button is always clearly visible and mounted directly next to the door.

The exact configuration of a hold-open system may vary from country to country. In Europe, the existing standard for hold-open systems is the EN 14637. However, this standard has not yet been harmonized, so that national regulations may partially or completely replace or supplement them.






CENTRAL UNITS FOR HOLD-OPEN SYSTEMS



The central unit is the 'heart' of the hold-open system. All essential functions are centralized in one place: power supply, control unit and hand switch. In the event of an alarm or malfunction, the control unit activates and the doors close.

DICTATOR's central units meet the requirements of the EN 14637, are tested, and approved by the German Institute for Building Technology (DIBt).

TABLE OF CONTENTS - CENTRAL UNITS FOR HOLD-OPEN SYSTEMS

	Page
 Central unit RZ-24 07.01.04 Versatile central unit for hold-open systems	07.01.04
 Special features & accessories 07.01.06 For central unit RZ-24	07.01.06
 Central unit RZ-24-05 07.01.10 Compact design solution for flush-mounted switch boxes	07.01.10

Subject to technical changes. No claim for compensation in case of errors.

Central unit RZ-24

For power supply and evaluation of fire detectors



Website

CHARACTERISTICS

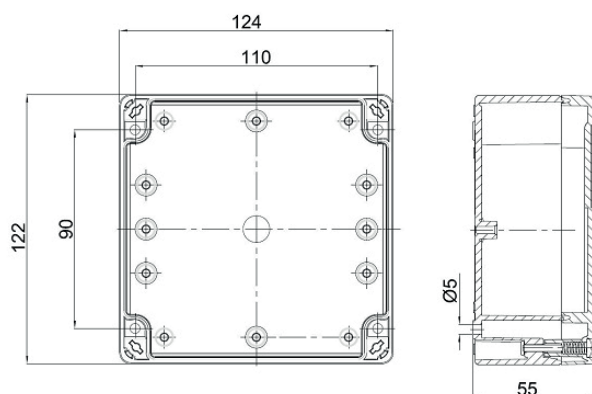
- Complies with the requirements of the norm EN 14637
- Tested and approved by the DIBt (German institute for building engineering)
- With integrated manual release button
- Due to its high power (900 mA), even large hold-open system can be operated with just one central unit
- Optionally available in a large casing, with sufficient space for additional components such as relay boards or an emergency power supply (see Additional components for RZ-24)
- Also suitable for EX-proof hold-open systems

FUNCTIONS

- All essential functions (power supply, control of fire detectors, Reset, hand release button) are combined in one device, so that only fire detectors and electromagnets have to be connected
- Resetting the hold-open system after an alarm is also done with the central unit
- In addition to the alarm in case of fire, malfunctions such as short circuits or wire breaks in the system are also detected

DIMENSIONS

All dimensions in mm



INSTALLATION



Technical manual



TECHNICAL DATA

Supply voltage	85 VAC - 265 VAC, 50/60 Hz
Power consumption	about 30 W, own consumption about 30 mA
Additional switching contact	potential-free contact 8 A/<250 V~/AC1 (relay fallen off = tripping)
Secondary output voltage	24 VDC \pm 5 %
Secondary total load	0.9 A supply of fire detectors, electromagnets and other consumers)
Operating temperature	-25 °C to +40 °C
IP rating	IP 64 when IP 64 cable inlets are used
Casing	plastic casing in ABS, light grey, with 4 threads M16 for cable inlets
Emergency power supply	on demand, up to max. 10 minutes (at a consumption of 100 mA)
Keys on the casing	integrated release key (1) integrated RESET key (2) key quitting horn: switches the horn off after an alarm. (4)
Indications on the casing	Green LED = operation (normal operation) (3) Red LED = alarm (error or alarm) (3)



FUNCTIONS IN DETAIL

Functions of the standard model

- Manual release of the hold-open system by means of either the integrated hand-release switch or an additional one (mounted in the immediate vicinity of the fire door)
- Tripping the hold-open system by the connected fire detectors, as well as the fire detectors (by the potential-free contact of a fire alarm central)
- Reset of the complete hold-open system: first, use the hand-release switch to reset the fire detector and then the reset switch on the central unit RZ-24 to reset the whole system
- Automatic RESET after a power cut (NOT after a manual tripping or a fire alarm)
- Integrated over-current protection: if there are too many consumers connected, the power supply automatically cuts off
- Potential-free contact for signaling the tripping, e.g. for sending the alarm-status to a central control system, an additional warning device, etc. If there is a door drive integrated in the hold-open system, the contact is used to cut the power supply of the control unit of the door operator in the event of an alarm, so that the door is closed mechanically (door closer, closing spring or counterweight)
- Status indication for normal operation and alarm on the cover of the central

Additional functions - optional

- Rechargeable battery buffering: depending on the consumption of the connected fire detectors, electromagnets and other consumers - up to 10 minutes can be bridged in the event of failure of the 230 VAC supply (usable capacity 0.022 Ah)
- Additional relay contacts (circuit boards with one, two or four relay contacts, each a change-over contact 2 A/30 VDC)
- Additional circuit board for the automatic reset of the RZ-24 central unit after a power outage or fire alarm (however, the tripping fire detector has to be reset additionally by means of a hand-release switch)
- Further options on demand
- More information on Additional functions and accessories for central unit RZ-24

ORDER INFORMATION

Description	Part no.
RZ-24 central unit with power supply and tripping device, 0.9 A	040553
RZ-24 central unit with power supply and tripping device, 0.9 A, IP 64, 202x152x90 mm (big casing)	040554
Power supply with integrated release device RZ-24, 0.9 A, IP 64, 202x152x90 mm (big housing), emergency power supply and time relay circuit board as signal control for sliding doors	040561-2

Special features & accessories

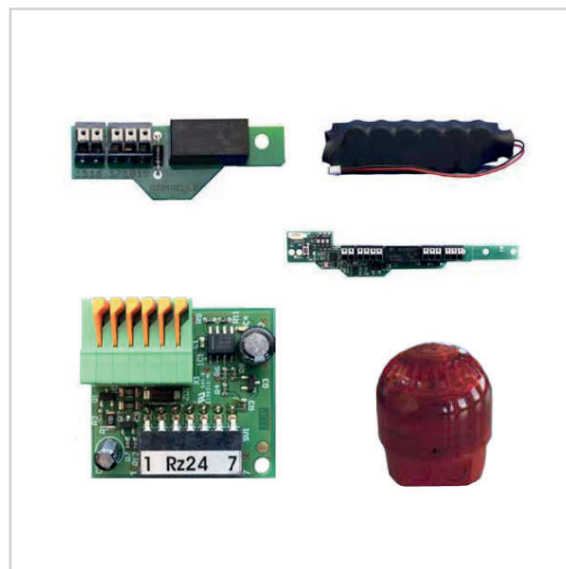
For central unit RZ-24



Website

CHARACTERISTICS

- Besides the standard functions, the central unit RZ-24 offers many more possibilities
- These especial functions can be realized by using additional components
- Among these are the rechargeable battery buffering, a time relay, the use of the RZ-24 as a signal control, additional signal contacts, etc.
- Further options available upon request
- In some cases, the use of additional components may require the version with the larger casing
- We will gladly assist you with choosing the additional components for the RZ-24



CENTRAL RZ-24 AS SIGNAL CONTROL



Description

The RZ-24 central unit also allows to control a siren and a signal light during the closing of a fire door. Acoustic and optical warning signals can be especially used on power-operated doors for which the demands of the standard EN 12604 have to be observed.

Function

- The signalers are activated the moment when the power supply of the hold-open system is cut off and the door starts to close
- There are 3 ways of switching off the signalers after the door is closed:
 - ☐ Installation of a time relay circuit board (part no. 040562), on which the time until switching off can be set (see 'Time relay circuit board')
 - ☐ Installation of an additional limit switch in the closed position
 - ☐ By hand via the RESET button on the cover of the RZ-24
- The central unit RZ-24 is also available as 'signal control' completely pre-assembled with timer relay and emergency power supply (article no. 040561-2)

SIGNALER



General information

- For use with the central unit RZ-24, using the signaler (article no. 700171) is recommended
- Includes both a siren and a flashing light
- Acoustic and optical warning signals are used especially for power-operated doors where the demands of the EN 12604 must be observed
- Adjustable volume
- If necessary, it can also be completely deactivated, e.g. when a signaler is mounted on each side of the door to make sure the warning light is seen from both sides - in this case it is normally enough if only one siren sounds
- Extremely low power consumption

Technical data

Voltage	24 VDC
Power consumption	aprox. 26 mA when siren activated, 6 mA when siren deactivated
Volume	about 100 dBA, can be reduced by the integrated potentiometer
Flashing frequency	1 Hz
Colour	red
IP rating	IP 65
Dimensions Ø x h	97.5 x 104 mm

EMERGENCY POWER SUPPLY FOR RZ-24



General information

- The emergency power supply allows for a short time to buffer the hold-open system during a power cut. The energy stored in the condenser pack thus prevents unintentional closures in the event of short-term power failures and voltage fluctuations.
- The length of this hold-up time depends mainly on the power consumption of the connected components.
- As energy storage devices, capacitors are used instead of accumulators. They are less sensitive to temperature influences, have shorter charging times and a much longer service life.
- When using this emergency power supply, the RZ-24 central unit has to be in the large casing. In this casing is enough room for placing the battery pack.
- Its connection cable is simply plugged in the provided jack on the printed circuit board of the RZ-24. The charging is done directly from the power supply of the RZ-24, so that the 0.9 A load of the RZ-24 is completely available for external consumers.
- Charging time: approx. 30 minutes for 80% of capacity, approx. 50 minutes for 100% of capacity.

Hold-up time

- The battery pack has an output of 0.022 Ah
- All of the following values for the length of the hold-up time are only for orientation!

Load at U-Nominal 24 VDC	Hold-up time
70 mA + 30 mA own consumption = 100 mA (0.1 A)	10,91 minutes
140 mA + 30 mA own consumption = 170 mA (0.17 A)	6,42 minutes
280 mA + 30 mA own consumption = 310 mA (0.31 A)	3,52 minutes

Notes:

- The own consumption of the RZ-24 is 30 mA
- The fire alarm loop of the RZ-24 sets off at a tension of about 16 VDC
- The hold-up times depend on the charging state of the emergency power supply and the ambient temperature

Simplified calculation formula:

- Hold-up time in seconds = 65/load

Example:

Hold-open system with RZ-24 and 4 smoke detectors RM 4000 & 1 electromagnet EM GD 70:

- RZ-24: own consumption 0.03 A
- 4 x RM 4000: $4 \times 95 \mu\text{A} = 380 \mu\text{A} = 0.38 \text{ mA} = 0.00038 \text{ A}$
- Electromagnet EM GD 70 = 71 mA = 0.071 A

Total consumption: 0.101 A

Hold-up time = $65 / 0.101 \text{ A} = 648 \text{ secs}$ (about 10 mins)

TIME RELAY CIRCUIT BOARD



General information

- The time relay circuit board is incorporated into the RZ-24 central unit
- Therefore, the RZ-24 with the large casing must be used together with the time relay circuit board
- Thanks to the time relay circuit board, different time-controlled functions can be implemented, such as:
 - Switching off the signaling after a certain time (e.g. when using the RZ-24 as signal control)
 - Signaling that the door will close shortly (e.g. mandatory in Austria for doors in underground car parks) - release delay
 - The desired function and time range are set using 3 DIP-switches and a programming button
- The successful input is indicated by a green LED

Technical data

Relay	24 VDC, 25 mA
1 changeover contact	2 A, 30 VDC
1 output	24 VDC, max. 2 A, with potential
Selectable functions	on-delay, power-off delay, interval with signal on, interval with signal off, symmetrical flasher (starting pulse on), symmetrical flasher (starting pulse off), pulse shaper
Adjustable periods	hours : minutes: max. 96 h : 59 min minutes : seconds: max. 59 min : 59 s 100 milliseconds : 10 milliseconds: max. 10000 ms :1000 ms
Dimensions	112 x 27 mm

RELAY CIRCUIT BOARD WITH 1 ADDITIONAL CONTACT



General information

- By default the RZ-24 central unit has a potential-free contact for passing on the tripping. Should this not be sufficient, an additional circuit board with a relay contact can be refitted
- Models with 2 or 4 contacts also available on demand
- Generally we recommend to choose the RZ-24 with the large casing when installing this additional circuit board

Technical data

1 relay	24 VDC
1 potential-free changeover contact	2 A
Dimensions	55 x 19 mm

ADDITIONAL CIRCUIT BOARD FOR THE AUTOMATIC RESET OF THE RZ-24



General information

After every manual release or fire alarm the complete hold-open system has to be reset. Two steps are necessary:

- Resetting the fire detectors by pressing the hand release switch
- Resetting the complete hold-open system by pressing the RESET key

Only when these two steps have been performed, the electromagnets are supplied with current again and the doors can be locked in the open position. If the doors are used by many different people who are not familiar with the details of the hold-open system, the additional circuit board for the automatic reset of the RZ-24 should be used.

Furthermore, the RZ-24 control panel is not always directly accessible. However, since the RESET button is located on the casing of the RZ-24, the additional board not only eases the reset, but also saves time. The circuit board is simply plugged on the main circuit board of the RZ-24, for which the small casing is enough.

Functioning

- After a power failure, releasing the system by a hand switch or removing and inserting again a fire detector: automatic, RESET of the whole hold-open system.
- After a fire alarm triggered by a fire detector: First is required a manual reset of the detectors by the hand release switch. Then the RESET of the central unit is performed automatically. As the RZ-24 central unit is not always within reach, the RESET key, however, is on its casing, the additional circuit board not only makes the reset easier but also saves time.
- The reset command is automatically carried out every 8 seconds.

ORDER INFORMATION

Description	Part no.
Power supply with integrated release device RZ-24, 0.9 A, IP 64, 202x152x90 mm (big housing), emergency power supply and time relay circuit board as signal control for sliding doors	040561-2
Powerpac, emergency power supply for installation in RZ-24 central with big housing 040554	040555-2
Additional board for automatic reset of the RZ-24 central unit after power failure and fire alarm	040556
Relay board for RZ-24 central unit with 1 relay contact, potential-free changeover contact 2 A, 30 VDC	040559
Time relay board for installation in the RZ-24 central unit with large housing, relay 24 VDC/25 mA, 1 change-over contact 2A/30 VDC, 1 potential output 24 VDC/max. 2 A (large housing!)	040562
Signaller: red LED flashlight with separately switchable warning siren, IP 65	700171

Central unit RZ-24-05

The "design solution" for hold-open systems



Website

CHARACTERISTICS

- Fits in a standard flush mounted box with 60 mm diameter
- With integrated manual release button
- Despite its small dimensions, it includes all essential functions of a central unit for hold-open systems
- High output of 500 mA
- Complies with the requirements of the norm EN 14637
- Tested and approved by the DIBt (German Institute for Building Engineering)

OVERVIEW FUNCTIONS

- All essential functions (power supply, control of the release devices such as smoke detectors, Reset, hand release button) are combined in one device, so that only fire detectors and electromagnets have to be connected
- Resetting the hold-open system after an alarm is also done with the central unit
- In addition to the alarm in case of fire, malfunctions such as short circuits or wire breaks in the system are also detected

FUNCTIONS IN DETAIL

Functions of the standard model

- Manual release of the hold-open system by the hand release switch integrated in the RZ-24-05.
- Tripping the hold-open system by connected fire detectors.
- Tripping the hold-open system by a fire alarm central (requires a potential-free contact).
- RESET of the complete hold-open system via the keypad of the RZ-24-05: First reset the fire detectors by the hand release switch and then the RZ-24-05 central by its integrated RESET switch.
- Automatic RESET after a power cut or actuating the hand switch (if required, adjustable in the central unit by means of a DIP switch)
- Excess-current protection: If too many consumers are connected, the power supply automatically cuts off.
- Status indications for normal operation, alarm and various fault conditions on the keypad.

INSTALLATION NOTICE

Normally, the RZ-24-05 is installed in a standard flush-mounted box (not included). A model provided by the customer can be used as a frame for the circuit board with hand switch.

IMPORTANT: switch cut-out 55 x 55 mm, with-out rounded corners!



Technical manual



TECHNICAL DATA

Supply voltage	85 - 264 VAC
Power consumption	about 14 W, own consumption about 40 mA
Secondary output voltage	24 VDC \pm 10 %
Secondary total load	permanently 0,5 A (supply of fire detectors, electromagnets and other consumers)
Operating temperature	from 0 °C to +40 °C
IP rating	IP 30
Emergency power supply	upon request
Keys on casing	<ul style="list-style-type: none"> ■ Integrated manual release button (1) ■ Integrated RESET button (2)
Indications on casing	<p>3 different LEDs on the casing:</p> <ul style="list-style-type: none"> ■ LED "Triggering": lights up red in case of alarm ■ LED "Ready": lights up green when the detector loop is ready for operation ■ LED "Fault": different faults are indicated by permanent lighting or flashing with different frequencies!



ACCESSORIES



If there is no cover frame provided by the customer when installing the RZ-24-05, the cover frame can also be supplied by DICTATOR.

In addition to the normal cover frame, there is also a frame with transparent cover available. According to the type approval of the DIBt it is allowed to protect a hand switch against misuse with a suitable transparent cover. Another advantage is that accidental operation of the manual release button is prevented in places with a lot of foot traffic. Which model and mounting position suit your door the most? We'll gladly assist you.

ORDER INFORMATION

Description	Part no.
RZ-24-05 central unit with power supply and tripping device, 0.5 A, to be built into standard boxes	040563

ACCESSORIES

Description	Part no.
Cover frame, alpine white, for RZ-24-05, for installation in flush box	040566
Cover frame, polar white, with transparent cover for RZ-24-05, for installation in flush box	040567
Tool for removing wires in the RZ-24-05 central	040565

SMOKE & HEAT DETECTORS





Fire detectors (smoke or heat detectors) immediately report a fire to the central unit (RZ-24) and thus ensure that the hold-open system is triggered in time

The smoke detector identifies a possible fire quickly and reliably on the basis of smoke development

In some cases, heat detectors are also used – they register a rapid rise in temperature or recognise a certain threshold temperature which trigger them.

TABLE OF CONTENTS - SMOKE DETECTORS & HEAT DETECTORS

	Page
 Smoke detector RM 4000 07.02.04 For hold-open systems – in conjunction with central unit RZ-24	07.02.04
 Heat detector WM 4000 07.02.06 For hold-open systems – in conjunction with central unit RZ-24	07.02.06

Subject to technical changes. No claim for compensation in case of errors.



Website

Smoke detector RM 4000

Together with the central unit RZ-24

CHARACTERISTICS

- Optical smoke detector tested according to EN 54-7
- Operated together with the RZ-24 central unit which supplies the necessary voltage to the detector and simultaneously evaluates it
- Apt for use in a temperature range from -40 °C to +70 °C
- Very low false alarm rate thanks to special sensor chamber and the use of algorithms for interference filtering
- If the detector is dirty to the point where it can no longer compensate, it will immediately change to alarm and the fire closures will reliably be closed
- No relay is required in the detector itself, which reduces costs
- Single operating states are indicated via integrated LED with 360° visibility in two colors (red/yellow) and different flashing frequencies
- The smoke detectors RM 4000 must be replaced after 8 years at the latest, even if the detectors are still working properly during the function or maintenance test. This ensures that the hold-open system is always fully functional and that doors close reliably in the event of a fire



TECHNICAL DATA

Supply voltage	8.5 to 33 VDC
Power consumption	Ø quiescent current + switch-on surge current at 24 VDC: 95 µA alarm current at 24 VDC: 40 mA
Sampling frequency	once every 4 seconds, photo-electric sensor with automatic detection and adaption of the sensitivity
Alarm indicator	integral LED (red/yellow) for status indication
Operating temperature	-40 °C to +70 °C (no condensation or icing!)
IP rating	IP 23D
Material casing	molded in white polycarbonate

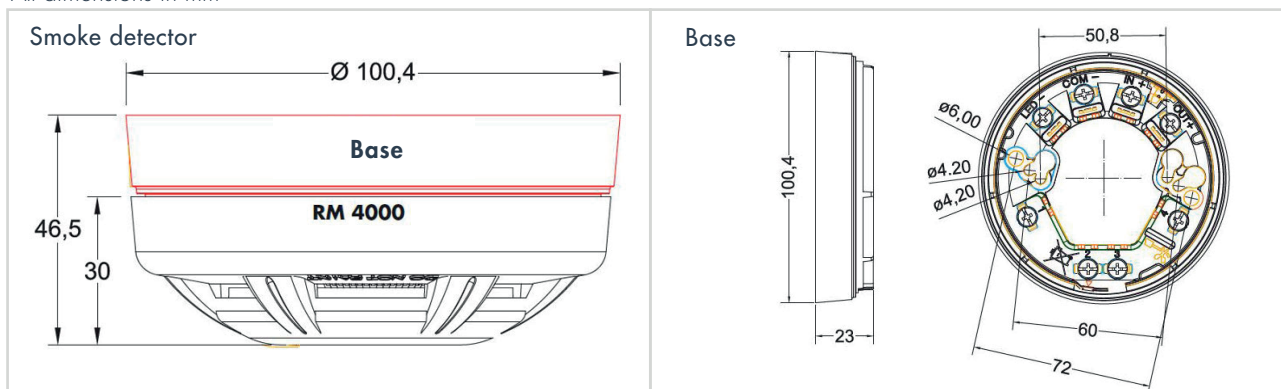
INSTALLATION



Installation instructions

DIMENSIONS

All dimensions in mm



STATUS INDICATIONS

The various operating states of the RM 4000 smoke detector are indicated by an LED. This LED lights up yellow or red depending on its status.

LED red	LED yellow	Function
Flashes 1x/sec	No flash	After switching on the power supply (or inserting the detector into the socket): confirms correct wiring. Phase duration: 4 minutes. During this start-up phase, a quick functional test is possible within few seconds. During normal operation it takes longer.
Permanently on	No flash	Alarm
No flash	No flash	Normal operation
No flash	Flashes 1x/sec during start-up	If the yellow LED flashes instead of the red LED during the first 4 minutes after switching on or inserting the detector, the detector has reached the drift compensation limit.
No flash	Flashes every 4 seconds after start-up	Sensor no longer functions properly and detector has to be replaced immediately

INSTALLATION ACCESSORIES

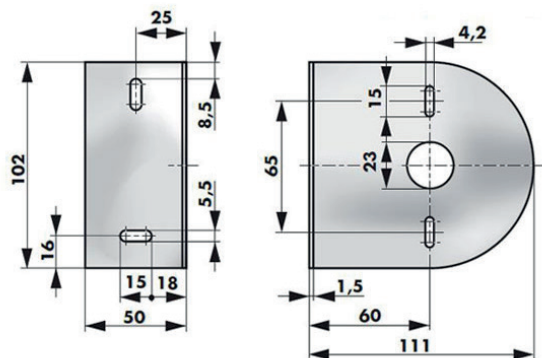
The mounting brackets allow a simple installation of the smoke detectors on walls. According to the DIBt requirements for the installation of fire detectors, it is permissible in exceptional cases to replace ceiling detectors with wall detectors. The prerequisite is that the horizontal distance between the wall and the axle of the detector must be 0.5 m. The mounting bracket, part no. 040575 meets this demand. All fixing holes correspond to those of the bracket part no. 040570.

All dimensions in mm

Mounting bracket part no. 040570

Part no.: 040570

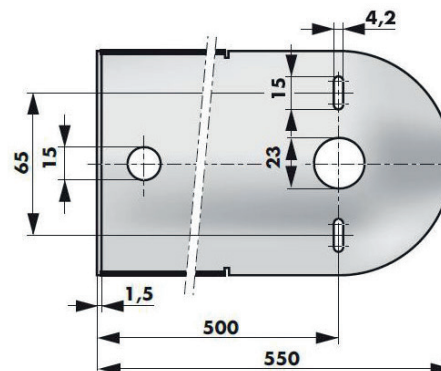
For the installation of smoke detector RM 4000 as lintel detector



Mounting bracket part no. 040575

Part no.: 040575

For the installation of smoke detector RM 4000 on the wall



ORDER INFORMATION

Description	Part no.
RM 4000 smoke detector with base	040860SET

ACCESSORIES

Description	Part no.
Mounting bracket for fire detectors RM/WM, arm length 550 mm	040575
Mounting bracket for fire detectors RM/WM, arm length 111 mm	040570
3,9 kOhm resistor	040893
Standard base for detectors RM/WM 4000	040862

Heat detector WM 4000

Together with the RZ-24 central unit



Website

CHARACTERISTICS

- Heat differential detector tested in accordance with EN 54-5
- Responds not only when a certain temperature has been reached, but also when the temperature increases rapidly
- Should be used whenever there's a danger of false alarm from smoke detectors caused by smoke or similar airborne particles (e.g. dust) that may occur during normal working conditions (ATTENTION: observe national regulations in your country!!!)
- Standard temperature level between 54 °C and 65°C. Heat detectors with different levels of demand are also available on demand
- Operated together with the RZ-24 central unit which supplies the necessary voltage to the detector and simultaneously evaluates it. This reduces the cost of the system considerably.
- Single operating states are indicated via integrated LED with 360° visibility in two colors (red/yellow) and different flashing frequencies
- The heat detectors WM 4000 must be replaced after 8 years at the latest, even if the detectors are still working properly during the function or maintenance test. This ensures that the hold-open system is always fully functional and that doors close reliably in the event of a fire.



TECHNICAL DATA

Supply voltage	8.5 to 33 VDC
Power consumption	Ø quiescent current + switch-on surge current at 24 VDC: 95 µA Alarm current at 24 VDC: 40 mA
Heat measurement	by means of a thermistor, 1 measurement every 4 seconds
Operating temperature	A1R: static response temperature between 54 °C and 65 °C; operating temperature: -40 °C to +50 °C (without alarm)
Alarm indicator	integral LED for status indication
IP rating	IP 23D
Material casing	moulded in white polycarbonate

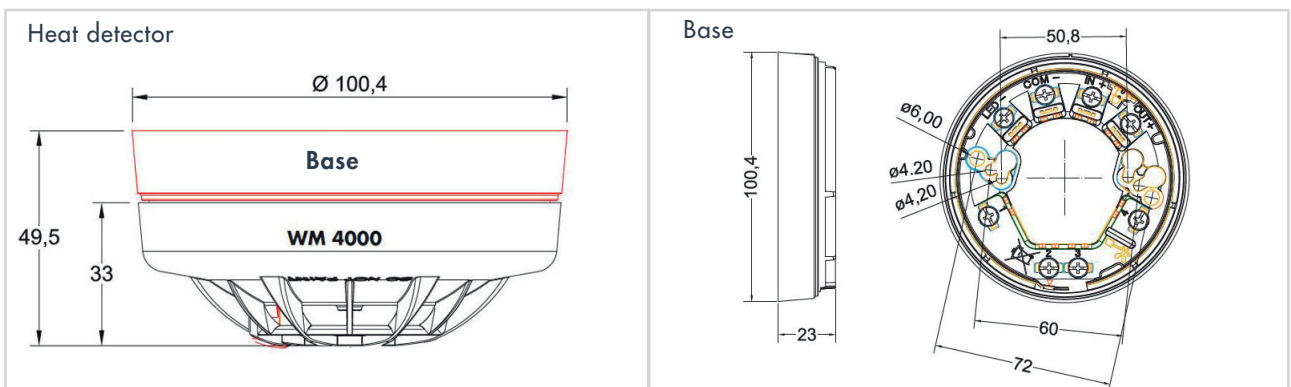
INSTALLATION



Installation instructions

DIMENSIONS

All dimensions in mm



STATUS INDICATIONS

The various operating states of the WM 4000 smoke detector are indicated by an LED. This LED lights up yellow or red depending on its status.

LED red	LED yellow	Function
Flashes 1x/sec	No flash	After switching on the power supply (or inserting the detector into the socket): confirms correct wiring. Phase duration: 4 minutes. During this start-up phase, a quick functional test is possible within few seconds. During normal operation it takes longer.
Permanently on	No flash	Alarm
No flash	No flash	Normal operation
No flash	Flashes 1x/sec during start-up	If the yellow LED flashes instead of the red LED during the first 4 minutes after switching on or inserting the detector, the detector has reached the drift compensation limit.
No flash	Flashes every 4 seconds after start-up	Sensor no longer functions properly and detector has to be replaced immediately

INSTALLATION ACCESSORIES

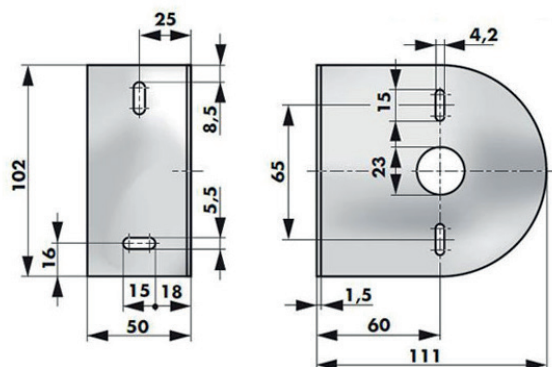
The mounting brackets allow a simple installation of the smoke detectors on walls. According to the DIBt requirements for the installation of fire detectors, it is permissible in exceptional cases to replace ceiling detectors with wall detectors. The prerequisite is that the horizontal distance between the wall and the axle of the detector must be 0.5 m. The mounting bracket, part no. 040575 meets this demand. All fixing holes correspond to those of the bracket part no. 040570.

All dimensions in mm

Mounting bracket part no. 040570

Part no.: 040570

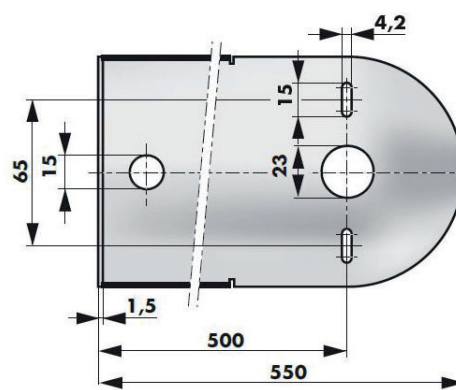
For the installation of smoke detector WM 4000 as lintel detector



Mounting bracket part no. 040575

Part no.: 040575

For the installation of smoke detector WM 4000 on the wall



ORDER INFORMATION

Description	Part no.
WM 4000 heat detector type A1R, with base	040861SET

ACCESSORIES

Description	Part no.
Mounting bracket for fire detectors RM/WM, arm length 550 mm	040575
Mounting bracket for fire detectors RM/WM, arm length 111 mm	040570
3,9 kOhm resistor	040893
Standard base for detectors RM/WM 4000	040862













ELECTROMAGNETS



DICTATOR electromagnets are manufactured in Germany. They meet the highest quality standards and have been tested according to all relevant regulations.

The electromagnets for hold-open systems are a great example of DICTATOR's flexibility. There are numerous different models available, so that the right magnet can be supplied for practically any application.

TABLE OF CONTENTS - ELECTROMAGNETS

	Page
 Electromagnets range S 07.03.04 Electromagnets with swivel head, for floor, wall or ceiling installation	07.03.04
 Electromagnets range K 07.03.05 Electromagnets for wall installation, with plastic base and optional interrupter key	07.03.05
 Electromagnets range Q 07.03.06 Electromagnets with lateral connection terminal	07.03.06
 Electromagnets range R 07.03.07 Electromagnets with lateral connection terminal	07.03.07
 Electromagnets range RI 07.03.08 Electromagnets with IP 65 connection terminal	07.03.08
 Electromagnets range F 07.03.10 Electromagnets with connection terminal on the mounting plate	07.03.10
 Electromagnets range FT 07.03.12 Electromagnets with plastic case and interrupter key	07.03.12
 Electromagnets range U 07.03.13 Electromagnet for flush installation	07.03.13
 Electromagnets range FB 07.03.14 Electromagnets for floor installation	07.03.14
 Electromagnets range RM 07.03.15 Electromagnets with feed-back contact and connection terminal block	07.03.15
 Electromagnets range ST 07.03.16 Electromagnets with feed-back contact and 4-pole plug-in termination	07.03.16
 Electromagnets range EM FH 07.03.17 High holding force – small size	07.03.17

Subject to technical changes. No claim for compensation in case of errors.

Electromagnets range S

Electromagnets with swivel head, for floor, wall or ceiling installation



Website

CHARACTERISTICS

- Head position can be adjusted to the correct position without interfering with any electrical connections
- Distance tube allows to compensate distance differences between wall/ceiling/floor and door
- Tube available in three different lengths and can also be shortened on site to the required length if necessary
- Interrupter key integrated in the distance tube. If well-accessible, an additional hand release switch is not needed
- Electromagnet with 175 mm distance tube also available without interrupter key, in which case a separate release switch is necessary
- Mounting plate and distance tube in lacquered steel (RAL 9010 pure white), magnet itself of zinc-plated steel, other parts of dust gray plastic (RAL 7037)
- With a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'IE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo

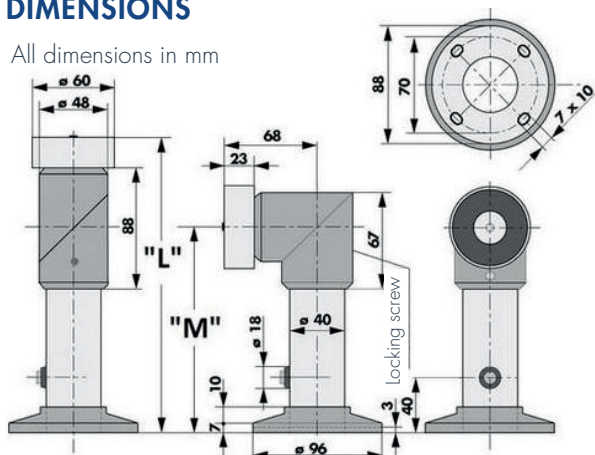


TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 40
Temperature range	-20 °C to +60 °C
Surface	zinc-plated; powder coated RAL 9010
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Power consumption EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)

DIMENSIONS

All dimensions in mm



Type	Length 'L'	Height 'M'	Part no.
EM GD 60 S 175	175	107	040111
EM GD 60 S 175 S	175	107	040164
EM GD 60 S 325	325	257	040112
EM GD 60 S 475	475	407	040113

ORDER INFORMATION

Description	Part no.
EM GD 60 S 175 electromagnet, 700 N, 24 VDC, IE 07016	040111
EM GD 60 S 175 S electromagnet, 1000 N, 24 VDC, IE 07016	040164
EM GD 60 S 175 oT electromagnet, 700 N, 24 VDC, IE 07016	040264
EM GD 60 S 325 electromagnet, 700 N, 24 VDC, IE 07016	040112
EM GD 60 S 475 electromagnet, 700 N, 24 VDC, IE 07016	040113

INSTALLATION



Installation instructions

Electromagnets range K

For wall installation, with plastic base and optional release button



Website

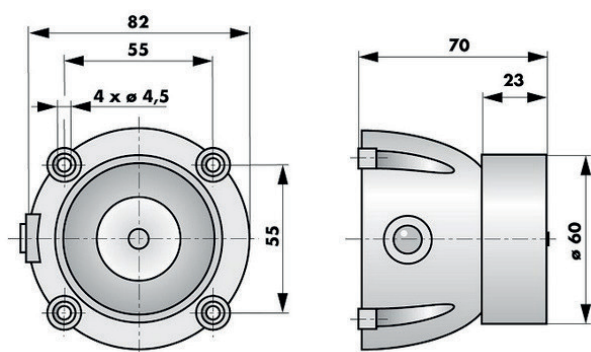
CHARACTERISTICS

- Allows to compensate large distances between door and wall without using a distance tube
- Available with or without integrated release button
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated
Casing	plastics, black
Holding force	700 N
Remanence	0 N
Duty cycle	100 %

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
EM GD 60 K 70 electromagnet, 700 N, 24 VDC, LE 07016	040223
EM GD 60 K 70 oT electromagnet, 700 N, 24 VDC, LE 07016	040224

Electromagnets range Q

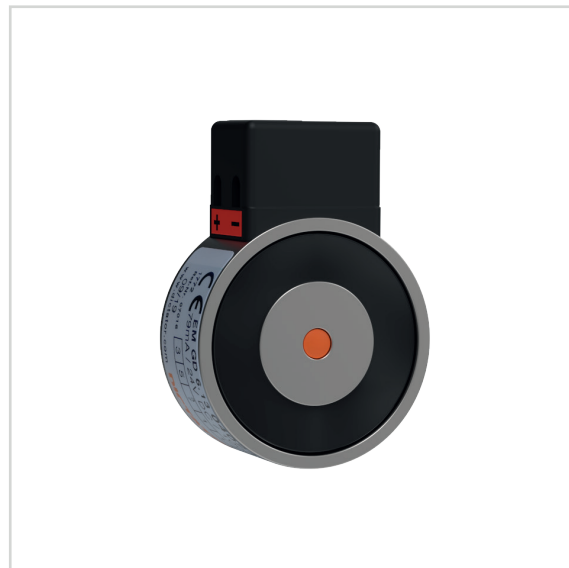
Electromagnets with lateral connection terminal



Website

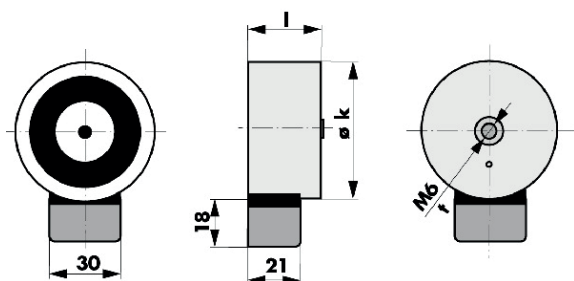
CHARACTERISTICS

- Electromagnets with no fixing plate
- The body of the magnet has an M6 threaded hole in its back for adjusting the magnet individually to each installation situation
- Lateral connection terminal for an easy connection
- Made of zinc-plated steel
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



Type	k	l	t
EM GD 50 Q 23	ø 50	23	10
EM GD 70 Q 35	ø 70	35	15

TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 20
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 70	1450 N
Power consumption EM GD 50	67 mA (1.6 W)
Power consumption EM GD 70	71 mA (1.7 W)

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
EM GD 50 Q 23 electromagnet, 600 N, 24 VDC, LE 07016	040020
EM GD 70 Q 35 electromagnet, 1450 N, 24 VDC, LE 07016	040022



Website

Electromagnets range R

Electromagnets with lateral connection terminal

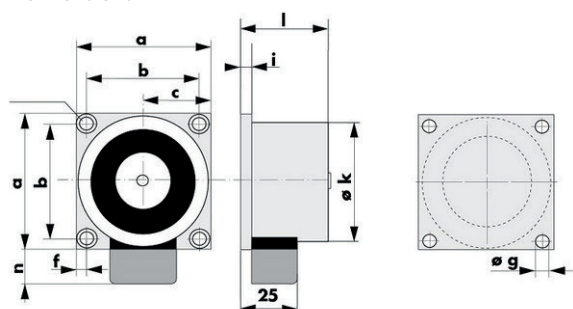
CHARACTERISTICS

- Available with a diameter of 50, 60 and 70 mm; they differ in holding force and size
- Provided with a connection terminal fixed laterally to the magnet for an easy connection
- Magnet and base plate made of zinc-plated steel
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



Type	a	b	c	f	g	i	k	l	n
EM GD 50 R 26	55	44	27,5	5,5	ø 4,5	3	ø 50	26	18
EM GD 60 R 26	65	55	32,5	5,5	ø 4,5	3	ø 60	26	18
EM GD 70 R 39	75	60	37,5	7,5	ø 5,5	4	ø 70	39	18

INSTALLATION



Installation instructions

TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 20
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Holding force EM GD 70	1450 N
Holding force EM GD 70 S	1700 N
Holding force EM GD 70 R	2000 N
Power consumption EM GD 50/EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)
Power consumption EM GD 70	71 mA (1.7 W)
Power consumption EM GD 70 S/EM GD 70R	142 mA (3.4 W)

ORDER INFORMATION

Description	Part no.
EM GD 50 R 26 electromagnet, 600 N, 24 VDC, LE 07016	040021
EM GD 60 R 26 electromagnet, 700 N, 24 VDC, LE 07016	040133
EM GD 60 R 26 S electromagnet, 1000 N, 24 VDC, LE 07016	040134
EM GD 70 R 39 electromagnet, 1450 N, 24 VDC, LE 07016	040023
EM GD 70 R 39 S electromagnet, 1700 N, 24 VDC	040117
EM GD 70 R 39 R electromagnet, 2000 N, 24 VDC	040118

Electromagnets range RI

Electromagnets with IP 65 connection terminal



Website

CHARACTERISTICS

- Connected in the waterproof plastic connection terminal
- In case the magnets are exposed to the sun, they can be manufactured with an UV resistant sealing compound - contains silicone - (part no. 041014)
- Electromagnets EM GD 50 and 60 are designed to be used with 24 VDC as well as 24 VAC
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo

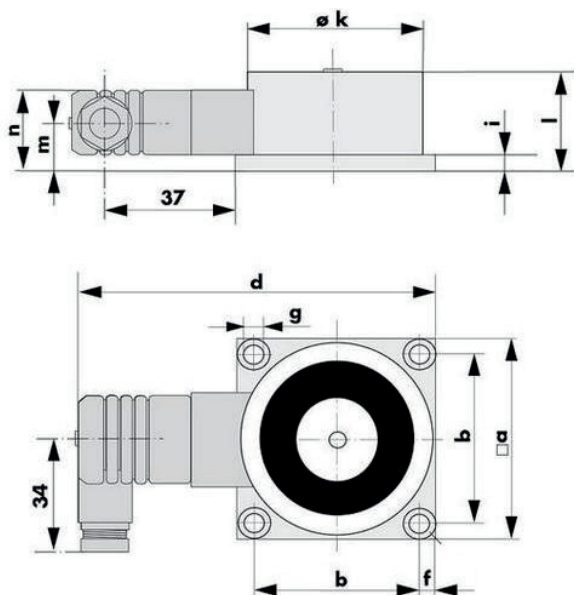


DIMENSIONS

All dimensions in mm

Cable inlet EM GD 50 RI and EM GD 60 RI: PG 9

Cable inlet EM GD 70 RI: PG 11



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Electrical connection	lateral terminals on the magnet
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Holding force EM GD 70	1450 N
Power consumption EM GD 50\EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)
Power consumption EM GD 70	71 mA (2.6 W)

INSTALLATION



Installation instructions

Type	a	b	d	f	g	i	k	l	m	n
EM GD 50 R 26 I	55	44	100	5,5	ø 4,5	3	ø 50	26	14	18
EM GD 60 R 26 I	65	55	110	5	ø 5,5	3	ø 60	26	14	18
EM GD 70 R 39 I	75	60	118	7,5	ø 5,5	4	ø 70	39	20	18

ORDER INFORMATION

Description	Part no.
EM GD 50 R 26 I electromagnet, 600 N, 24 VDC/AC, LE 07016	040107
EM GD 60 R 26 I electromagnet, 700 N, 24 VDC/AC, LE 07016	040131
EM GD 60 R 26 IS electromagnet, 1000 N, 24 VDC/AC, LE 07016	040132
EM GD 60 R 26 IS electromagnet, 1000 N, 24 VDC/AC, UV resistant execution, grey sealing compound with silicone, LE 07016	041014
EM GD 70 R 39 I electromagnet, 1450 N, 24 VDC, LE 07016	040108
EM GD 70 R 39 I electromagnet, 1450 N, 230 VDC	040208
EM GD 70 R 39 I electromagnet, 1450 N, 230 VAC	040259

Electromagnets range F

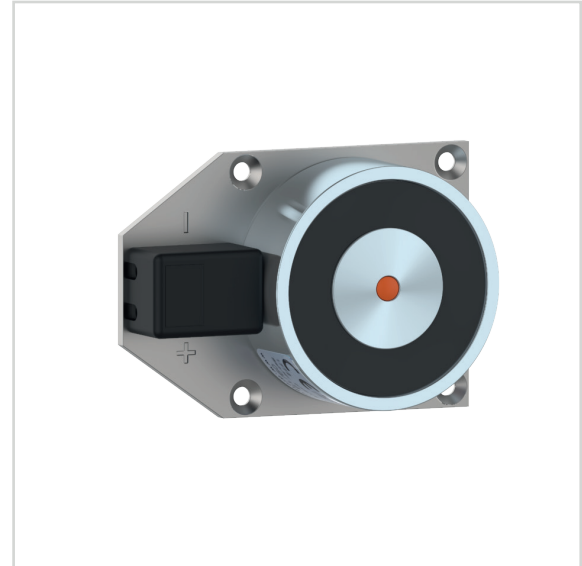
Electromagnets with connection terminal on the mounting plate



Website

CHARACTERISTICS

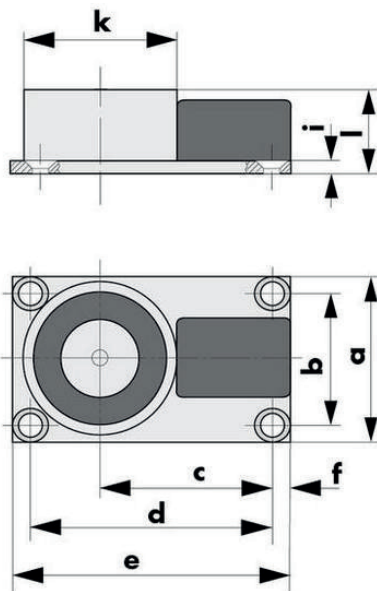
- Includes electromagnets EM GD 40, EM GD 50, EM GD 60 and EM GD 70 (different holding force and size)
- Connection terminal on the mounting plate of the magnet
- Magnet and base plate of zinc-plated steel as standard
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 11557
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm

EM GD 40 F23 and EM GD 50 F 26 magnets



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 40	300 N
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 60 S	1000 N
Holding force EM GD 70	1450 N
Holding force EM GD 70 S	1700 N
Holding force EM GD 70 R	2000 N
Power consumption EM GD 40	75 mA (1.8 W)
Power consumption EM GD 50/EM GD 60	67 mA (1.6 W)
Power consumption EM GD 60 S	79 mA (1.9 W)
Power consumption EM GD 70	71 mA (1.7 W)
Power consumption EM GD 70 S/EM GD 70 R	142 mA (3.4 W)

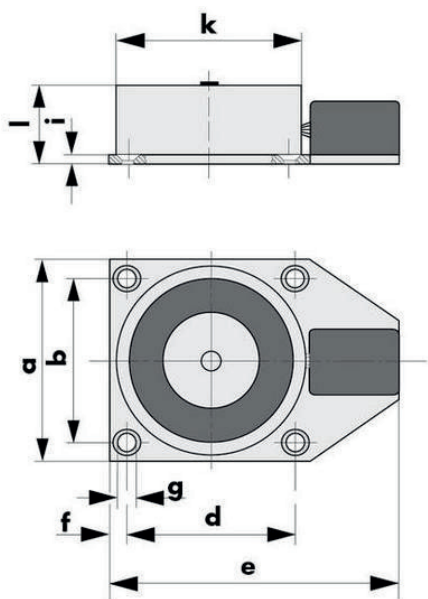
Type	a	b	c	d	e	f	g	i	k	l
EM GD 40 F 23	45	35	45	63	73	5	ø 4,5	3	ø 40	23
EM GD 50 F 26	55	44	51	74	83	4,5	ø 4,5	3	ø 50	26

INSTALLATION



Installation instructions

EM GD 60 F 26 and EM GD 70 F 39 magnets



Type	a	b	d	e	f	g	i	k	l
EM GD 60 F 26	65	55	55	93	5	ø 4,5	3	ø 60	26
EM GD 70 F 39	75	60	60	103	7,5	ø 5,5	4	ø 70	39

ORDER INFORMATION

Description	Part no.
EM GD 40 F 23 electromagnet, 300 N, 24 VDC	040085
EM GD 50 F 26 electromagnet, 600 N, 24 VDC, LE 07016	040106
EM GD 60 F 26 electromagnet, 700 N, 24 VDC, LE 07016	040049
EM GD 60 F 26 S electromagnet, 1000 N, 24 VDC, LE 070016	040163
EM GD 70 F 39 electromagnet, 1450 N, 24 VDC, LE 07016	040037
EM GD 70 F 39 S electromagnet, 1700 N, 24 VDC	040115
EM GD 70 F 39 R electromagnet, 2000 N, 24 VDC	040122

Electromagnets range FT

Electromagnets with plastic casing and interrupter key



Website

CHARACTERISTICS

- Cased in plastic for high aesthetic requirements
- Casing can be removed for an easy installation
- On the base plate there is a connection terminal for easy wiring
- With an interrupter key on top of the casing
- Two models available, depending on the cable insertion:
 - Insertion of the connection cable via a boring in the mounting plate (EM GD 60 F 26 T)
 - Insertion of the connection cable via a lateral PG 7 cable inlet (EM GD 60 F 26 TK), either on the left or right side
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'IE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated
Electrical connection	connection terminal on base plate
Casing	white plastic casing
Holding force	700 N
Remanence	0 N
Duty cycle	100 %

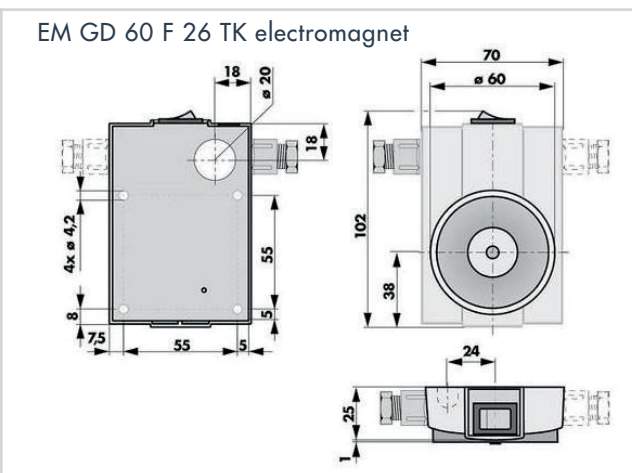
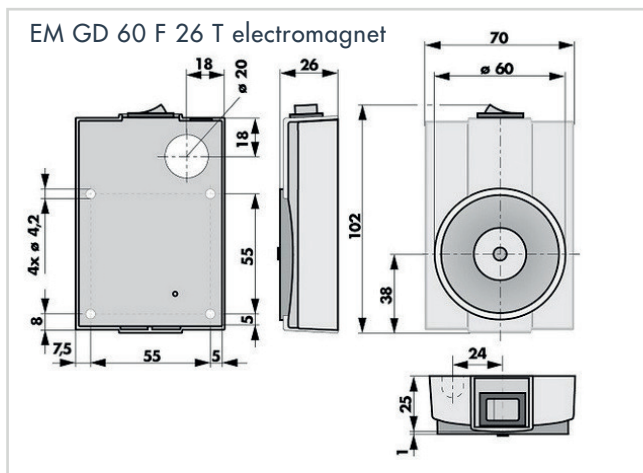
INSTALLATION



Installation instructions

DIMENSIONS

All dimensions in mm



ORDER INFORMATION

Description	Part no.
EM GD 60 F 26 T, 700 N, 24 VDC, IE 07016	040097
EM GD 60 F 26 TK electromagnet, 700 N, 24 VDC, IE 07016	040045

Electromagnets range U

Electromagnet for flush installation



Website

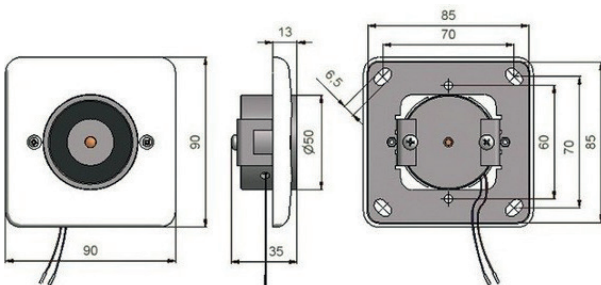
CHARACTERISTICS

- For use when there is not much space available between door and wall or when the magnet should be as discrete as possible
- Installed in a standard flush box (provided by the customer). The white plastic front plate covers the flush box completely
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated
Casing	white plastic cover
Holding force	600 N
Remanence	0 N
Duty cycle	100 %

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
Electro magnet EM GD 50 U 35, LE 07016	041011

Electromagnets range FB

Electromagnets for installation on the floor



Website

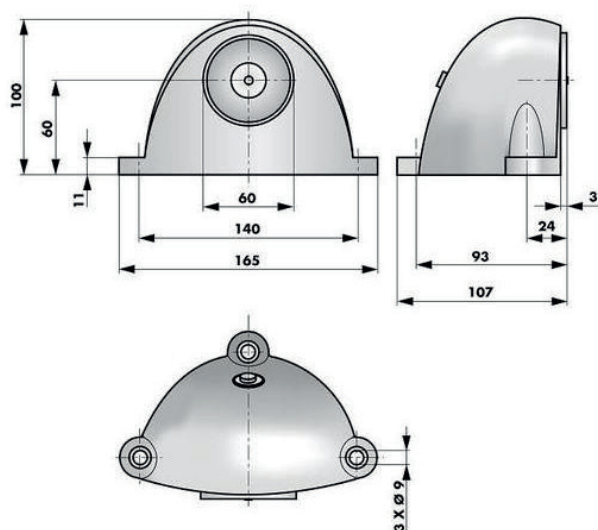
CHARACTERISTICS

- Sturdy and robust cast aluminum casing, perfect for this installation position, as the electromagnet can be exposed to impacts or water
- Rust-free material
- Can be furnished either with or without release key on the back of the casing
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet a counter plate has to be fixed on the door
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Power consumption	67 mA (1.6 W)
Temperature range	-20 °C to +60 °C
Surface	zinc-plated; aluminum
Holding force	700 N
Remanence	0 N
Duty cycle	100 %

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
EM GD 60 FB electromagnet, 700 N, 24 VDC, LE 07016	040370
EM GD 60 FB oT electromagnet, 700 N, 24 VDC, LE 07016	040371

Electromagnets range RM

Electromagnets with feed-back contact and connection terminal block



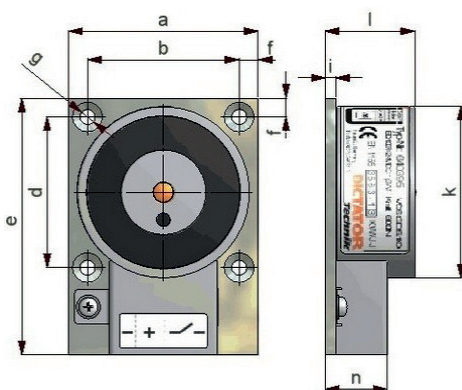
Website

CHARACTERISTICS

- Used when it is necessary to know remotely whether the counter plate is in contact with the electromagnet, e.g. on fire doors in transport vehicles, machines or central monitoring systems
- When the counter plate adheres to the magnet and the latter is energized, this is registered by an integrated contact (NO) which passes on the information
- Equipped with a terminal block on the mounting plate, to which power supply and feed-back contact are connected
- Due to its exposed connection terminal its IP rating is IP 20. If higher protection is required, we recommend the ST range
- Electromagnets EM GD RM allow a very wide range of switching voltages and switching currents
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- All electromagnets with 'IE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo

DIMENSIONS

All dimensions in mm



Type	a	b	d	e	f	g	i	k	l	n
EM GD 50 F 26 RM	55	44	44	75	5,5	ø 4,5	3	ø 50	26	18
EM GD 60 F 26 RM	65	55	55	85	5	ø 4,5	3	ø 60	26	18
EM GD 70 F 39 RM	75	60	60	95	7,5	ø 5,5	4	ø 70	39	18

ORDER INFORMATION

Description	Part no.
EM GD 50 F 26 RM electromagnet, 600 N, 24 VDC, IE 07016	040395
EM GD 60 F 26 RM electromagnet, 700 N, 24 VDC, IE 07016	040396
EM GD 70 F 39 RM electromagnet, 1450 N, 24 VDC, IE 07016	040397



TECHNICAL DATA

Voltage	24 VDC +/-15 %
Power consumption EM GD 50/EM GD 60	67 mA (1.6 W)
Power consumption EM GD 70	71 mA (1.7 W)
Temperature range	-20 °C to +60 °C
Protection	IP 20
Surface	zinc-plated
Switching capacity	max. 10 VA (for every combination current/voltage)
Switchable load	max. 180 V DC/AC; max. 0.5 A DC/AC
Remanence	0 N
Duty cycle	100 %
Holding force EM GD 50	600 N
Holding force EM GD 60	700 N
Holding force EM GD 70	1450 N
Feedback contact	1 make contact (NO)

INSTALLATION



Installation instructions

Electromagnets range ST

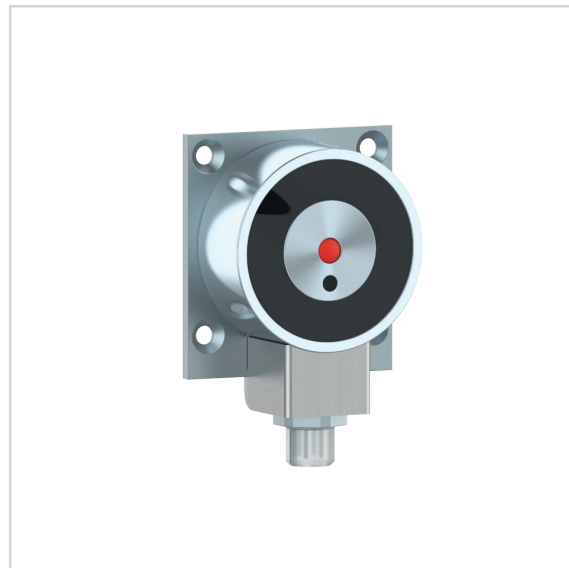
Electromagnets with feed-back contact and 4-pole plug-in termination



Website

CHARACTERISTICS

- Used when it is necessary to know remotely whether the counter plate is in contact with the electromagnet, e.g. on fire doors integrated in conveyor systems assigned to determined paths, central monitoring systems and certain machines
- With a 4-pole plug-in termination, which reduces the installation time on site, avoids errors when connecting the magnet and increases the IP rating of the magnet with the connection cable plugged-in (IP 53)
- Corresponding connector available as accessory (part no. 040187)
- Equipped with a spark extinction diode as standard: in case of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- When the counter plate adheres to the magnet and whether it is energized is registered by an integrated contact (NO) which passes on the information
- All electromagnets with 'LE 07016' in their description have been tested according to EN 1155
- Some articles may differ from the photo



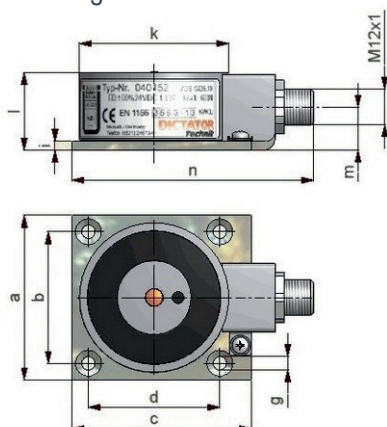
TECHNICAL DATA

Voltage	24 VDC +/-15 %
Power consumption EM GD 50	67 mA (1.6 W)
Power consumption EM GD 70	71 mA (1.7 W)
Temperature range	-20 °C to +60 °C
IP rating	IP 53 (with connection cable plugged in)
Surface	zinc-plated
Switching capacity	max. 10 VA (for each combination current/voltage)
Switchable load	max. 180 V DC/AC; max. 0.5 A DC/AC
Holding force EM GD 50	600 N
Holding force EM GD 70	1450 N
Duty cycle	100 %
Remanence	0 N
Feedback contact	1 make contact (NO)

DIMENSIONS

All dimensions in mm

Electromagnet



Type	a	b	c	d	g	i	k	l	m	n
EM GD 50 F 26 ST	55	44	60	44	ø 4,5	3	ø 50	26	14,5	81
EM GD 70 F 39 ST	75	60	80	60	ø 5,5	4	ø 70	39	19,5	102

INSTALLATION

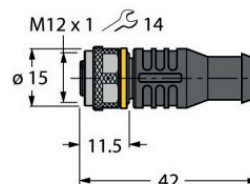


Installation notes



Installation instructions

Circular connector M 12 x 1



ORDER INFORMATION

Description	Part no.
EM GD 50 F 26 ST electromagnet, 600 N, 24 VDC, with feedback contact, LE 07016	040152
EM GD 70 F 39 ST electromagnet, 1450 N, 24 VDC, with feedback contact, LE 07016	040153

Bar magnet EM FH

High holding force - small size



Website

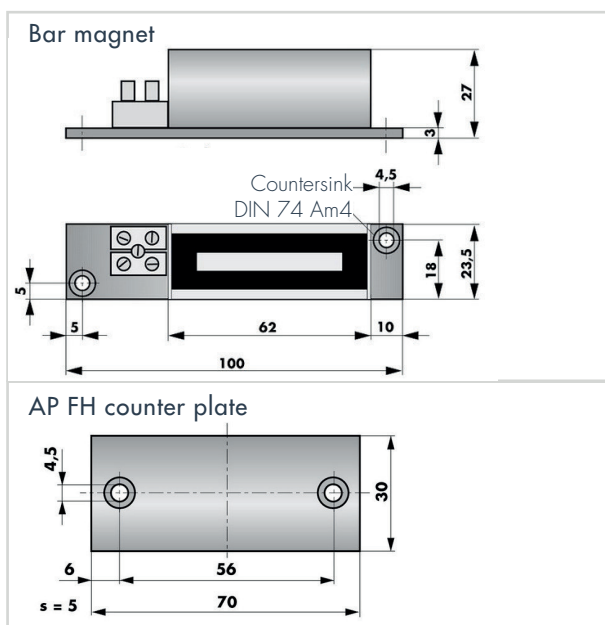
CHARACTERISTICS

- Perfect solution when a standard electromagnet (round) with a comparable holding force does not fit because of its larger dimensions
- With a width of only 24 mm, it can be placed discreetly in applications with limited space (e.g. smoke vents in window frames)
- High holding force of 400 N corresponds to that of a round electromagnet with a diameter of at least 40 mm
- Placed on a mounting plate along with a connection terminal to facilitate installation
- Equipped with a spark extinction diode. In the event of faulty connection, the integrated polarity protection prevents the spark extinction diode from being destroyed
- Some articles may differ from the photo



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-10 %
Protection	IP 20
Temperature range	-20 °C to +40 °C
Surface	zinc-plated
Casing	casing, powder-coated in pure white (RAL 9010)
Remanence	0 N
Duty cycle	100 %
Holding force	without feedback contact 5100 N, with feedback contact 4850 N
Power consumption	without feedback contact 438 mA (10.3 W), with feedback contact 355 mA (8,5 W)

INSTALLATION



Installation instructions

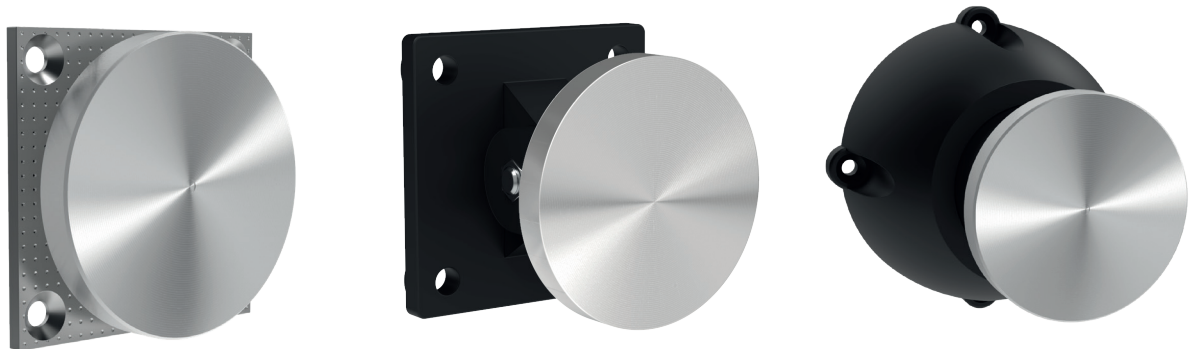
ORDER INFORMATION

Description	Part no.
EM FH 100X24X27 electromagnet, 400 N, 24 VDC	040273

ACCESSORIES

Description	Part no.
AP FH70X30X5 for EM FH 100X24X27	040291

COUNTER PLATES






The holding forces indicated in the technical data of the electromagnets can only be ensured when corresponding counter plates are used as counterparts.

Manufactured with high quality materials.

Different models available to facilitate installation and to assure an optimal function of the hold-open system.

When selecting the counter plate it is important that the diameter of the anchor plate is slightly larger than that of the electromagnet.

TABLE OF CONTENTS - COUNTER PLATES

	Page
 Counter plates range G 07.04.04 Flexible counter plate with rubber bearing	07.04.04
 Counter plates range W 07.04.05 Model with angular joint	07.04.05
 Counter plates range T 07.04.06 Telescopic counter plate with damping	07.04.06

Subject to technical changes. No claim for compensation in case of errors.

Range G counter plates

Flexible counter plate with rubber bearing



Website

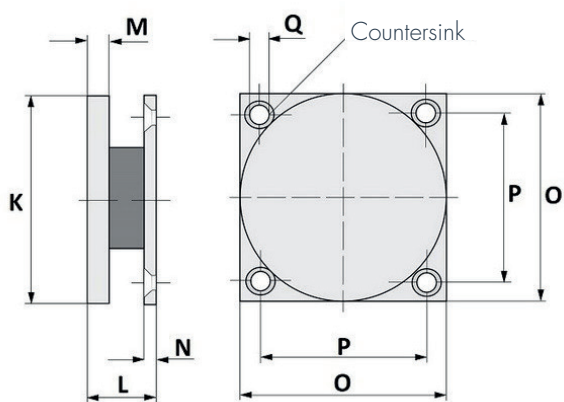
CHARACTERISTICS

- DICTATOR counter plates are adapted to DICTATOR electromagnets in such a way that the full magnetic force is always ensured
- The counter plate must have at least the same diameter as the magnet face of the electromagnet
- Consist of a zinc-plated mounting plate, an elastic joint and a smooth, zinc-plated anchor plate
- The elastic joint between anchor and mounting plate compensates for an angle of up to 10° between door and magnet
- The counter plate must lie flat on the magnetic pole face of the electromagnet
- Tested in combination with DICTATOR electromagnets



DIMENSIONS

All dimensions in mm



	K	L	M	N	O	P	Q
AP GD 40 G 14	∅ 44	14	5,5	3	50	40	∅ 4,5
AP GD 50 G 16	∅ 54	16	7	3	55	44	∅ 4,5
AP GD 60 G 16	∅ 64	16	7	3	65	55	∅ 4,5
AP GD 60 G 30	∅ 64	30	7	3	65	55	∅ 4,5
AP GD 60 G 60	∅ 64	60	7	3	65	55	∅ 4,5
AP GD 70 G 20	∅ 74	20	10	4	75	60	∅ 5,5

TECHNICAL DATA

Surface	zinc-plated
Compensation angle	up to 10°

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
AP GD 40 G 14 counter plate	040089
AP GD 50 G 16 counter plate with flexible joint	040025
AP GD 60 G 16 counter plate	040039
AP GD 60 G 30 counter plate	040096
AP GD 60 G 60 counter plate	040084
AP GD 70 G 20 counter plate	040026



Range W counter plates

Model with angular joint

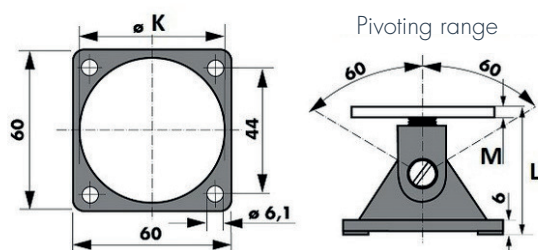
CHARACTERISTICS

- DICTATOR counter plates are adapted to DICTATOR electromagnets in such a way that the full magnetic force is always ensured
- The counter plate must have at least the same diameter as the magnetic side of the electromagnet and lie flat against its surface
- Consist of a zinc-plated anchor plate, an angular joint and a black plastic mounting plate
- Due to its angular joint, the counter plate allows for an angle compensation of max. 60° in each direction between door and magnet
- The counter plate must lie flat on the magnetic pole face of the electromagnet
- Tested in combination with DICTATOR electromagnets



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Surface	anchor plate zinc-plated steel
Mounting plate and angular joint	black plastic
Compensation angle	up to 60°

INSTALLATION



	K	L	M
AP GD 40 W50	ø 44	50	5,5
AP GD 50 W50	ø 54	51	7
AP GD 60 W50	ø 64	51	7
AP GD 70 W54	ø 74	54	10

ORDER INFORMATION

Description	Part no.
AP GD 40 W 50 counter plate	040072
AP GD 50 W 50 counter plate	040027
AP GD 60 W 50 counter plate	040070
AP GD 70 W 54 counter plate	040068

Range T counter plates

Telescopic counter plate with damping



Website

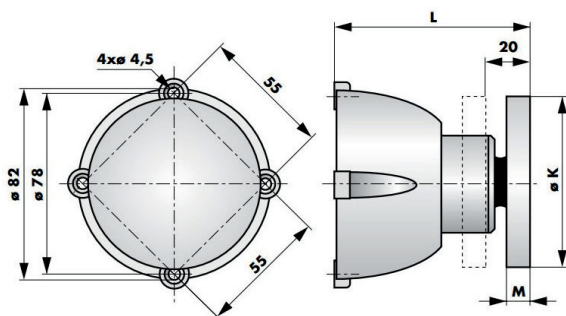
CHARACTERISTICS

- DICTATOR counter plates are adapted to DICTATOR electromagnets so that full magnetic force is always ensured
- Robust with fiber-glass reinforced plastic casing
- Recommended for big, heavy doors
- Integrated spring dampens the impact of the doors on the magnet and prevents the door from springing back
- Spring force of around 100 N on a stroke of 20 mm
- It can compensate angles up to 10°
- They ensure the magnet remains on the counter plate even when the door slams against it. They also reduce unnecessary wear and tear on the door and magnet
- The counter plate must lie flat on the magnetic pole face of the electromagnet
- Tested in combination with DICTATOR electromagnets



DIMENSIONS

All dimensions in mm



	K	L	M
AP GD 50 T 80	Ø 54	80	7
AP GD 60 T 80	Ø 64	80	7
AP GD 70 T 84	Ø 74	84	10

TECHNICAL DATA

Surface	anchor plate zinc-plated steel
Casing	PA 66, fiber-glass reinforced, anthracite
Compensation angle	up to 10°
Spring force	approx. 100 N (at 20 mm stroke)

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
AP GD 50 T 80 counter plate	040071
AP GD 60 T 80 counter plate	040028
AP GD 70 T 84 counter plate	040029

DOOR SEQUENCE SELECTORS





Essential for the correct and safe closing of double-leaf hinged fire and smoke doors. Ensures that both door leaves close in the correct order.

Two different models:

- the affordable SR 90 model with telescopic arm
- the aesthetically appealing SR 2000 model which discreetly sits below the door frame

TABLE OF CONTENTS - DOOR SEQUENCE SELECTORS

	Page
 Door sequence selector SR 90 07.05.04 Double-leaf doors closed in the correct order	
 Door sequence selector SR 2000 07.05.05 The unobtrusive door sequence selector	

Subject to technical changes. No claim for compensation in case of errors.

Door sequence selector SR 90

Double-leaf doors closed in the correct order

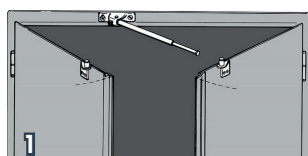


Website

CHARACTERISTICS

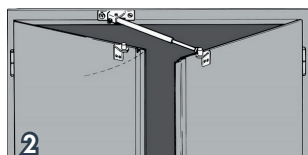
- It is mandatory to equip double-leaf hinged fire and smoke doors with a door sequence selector
- They ensure that the door leaves close in the right order and thus reliably prevent the spreading of fire or smoke
- Affordable model with lever arm and two support brackets which are mounted as counterparts for the door sequence selector on the door leaves
- Tested and approved according to DIN EN 1158 for its use on double-leaf fire doors.

FUNCTIONING

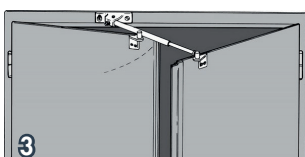


The SR 90 door sequence selector remains unfolded when only the finally locking leaf is opened. Every time both door leaves are opened, the telescopic arm

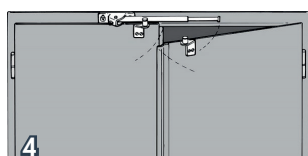
of the SR 90 door sequence selector is automatically set in an upright position by the integrated spring.



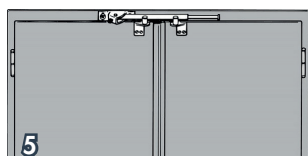
The SR 90 door sequence selector now controls the correct closing sequence of both door leaves: The door leaf to close finally (locking door leaf) hits the cushioned arm of the door sequence selector with the pin of the support bracket mounted on the door leaf and is kept in this position...



... until the latching leaf with support bracket moves laterally across the arm of the door sequence selector and...



... during closing takes the telescopic arm back with it to the closed position. When the arm lies flat against the frame, the locking leaf is released and...



... can now close.

ORDER INFORMATION

Description	Part no.
SR 90 door sequence controller, with 2 support brackets and screws, packed in plastic bag, LE 02001	500420P

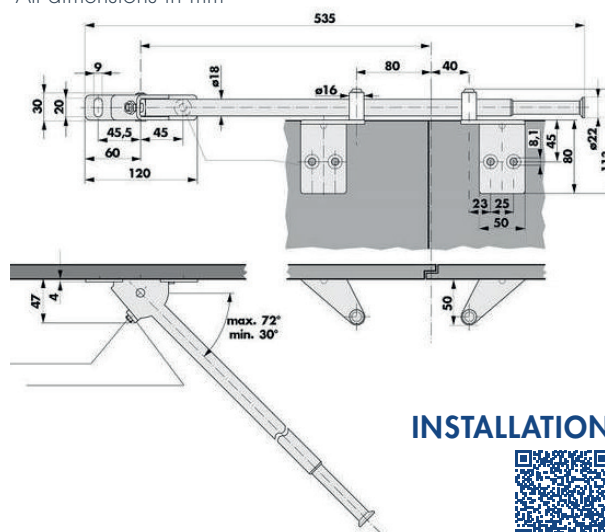


TECHNICAL DATA

Surface	zinc-plated steel
Weight of door leaf	max. 200 kg per door leaf
Width of door leaf	up to 1.60 m per door leaf
Space required above the door	minimum 30 mm
Righting angle	30° to 70°

DIMENSIONS

All dimensions in mm



INSTALLATION



Installation instructions

Door sequence selector SR 2000

The unobtrusive door sequence selector



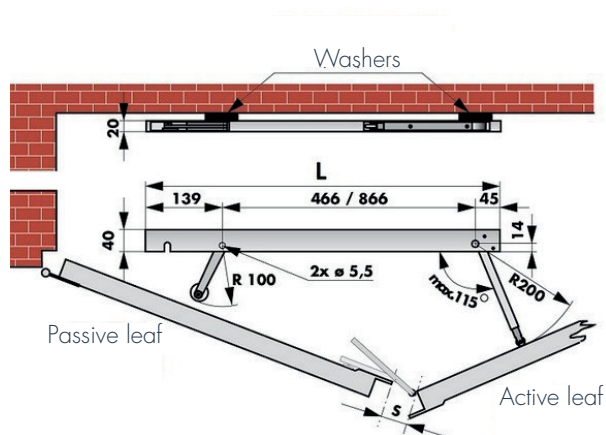
Website

CHARACTERISTICS

- Especially designed for double-leaf fire doors which should meet high aesthetic requirements
- Can be mounted discreetly below the door frame behind the door leaves
- No need for separate support brackets on the door leaves
- Tested and approved according to DIN EN 1158 for their use on double-leaf hinged fire doors

DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Surface	zinc-plated steel
Weight	max. 160 kg per door leaf
Door leaf width	0.75 m to 1.50 m per door leaf
Space required below the frame	20 mm
Righting angle	max. 115°

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
SR 2000 L door sequence selector, length 1050 mm, LE 02005	500430
SR 2000 K door sequence selector, length 650 mm, LE 02004	500435

HOLD-OPEN SYSTEMS FOR HAZARDOUS AREAS



In hazardous areas it is not possible to use the normal hold-open systems. DICTATOR supplies explosion-proof hold-open systems for this purpose.

As an experienced partner, we are happy to assist you with our expertise. We will advise you on the right components and work out a suitable solution for your application. Just contact us.

TABLE OF CONTENTS - HOLD-OPEN SYSTEMS FOR HAZARDOUS AREAS

Page



General information	07.06.04
Hold-open systems for hazardous areas	



Smoke detector RM 3000IS EX & heat detector WM 3000IS EX	07.06.05
for use in ATEX areas	



ATEX electromagnets for ATEX zones 2 & 22	07.06.06
for use in hazardous zones 2 (gas) and 22 (dust)	



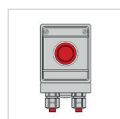
ATEX electromagnets with connection terminal box	07.06.08
Encapsulated, for hazardous zones 1 & 2, 21 & 22	



ATEX electromagnets with connection cable	07.06.10
Encapsulated, for hazardous zones 1 & 2, 21 & 22	



Zener barrier Z779	07.06.12
Safety barrier for intrinsically safe smoke detectors in the hazardous area	



Explosion-proof hand switch	07.06.13
For explosion-proof hold-open systems	

Subject to technical changes. No claim for compensation in case of errors.

DICTATOR hold-open systems for hazardous areas

ATEX-proof hold-open systems



Website

DESCRIPTION

DICTATOR also offers hold-open systems especially for hazardous areas that meets the requirements of the ATEX directive 2014/34/EU. There is a general type approval (no. Z-6.500-2443) for the hold-open system.

COMPONENTS

- RZ-24 central unit with power supply
- Shunt safety barrier: Zener barrier Z779
- RM 3000IS EX smoke detector (or WM 3000IS EX heat detector) with base
- 3.9 kΩ resistor (included with central unit RZ-24)
- Explosion-proof magnet
- Hand switch (part no. 700232)
- Gas warning system: Whether a gas warning system (to be provided by the customer) is required must be checked by the EX representative on the basis of the explosion protection documents (requires a potential-free contact with a switching capacity of 24 VDC/100 mA).

TYPES

- Hold-open system without door operator
- Hold-open system with door operator



TECHNICAL DATA

Application area	hazardous zones 1 and 2
Operating temperature	-20 °C to +40 °C
Igniton protection type of fire detector	Ex II 1G Ex ia II C T5 (at max. 40 °C), only in combination with a safety barrier
Igniton protection type electromagnets Model with cable	Ex II 2G Ex mb IIC T6 Gb or Ex II 2D Ex mb IIIC T85°C Db
Igniton protection type electromagnets Model with terminal box	Ex II 2G Ex mb e IIC T6 Gb or Ex II 2D Ex mb e IIIC T85°C Db



Questionnaire



Website

Smoke detector RM 3000IS EX & heat detector WM 3000IS EX

For use in hazardous areas

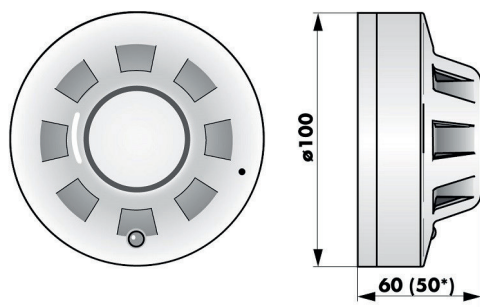
CHARACTERISTICS

- The RM 3000IS EX smoke detector is a stray light detector with integrated thermal sensor
- The RM 3000IS EX smoke detectors and WM 3000IS EX heat detectors are intrinsically safe
- In hazardous areas they may only be used in combination with a shunt safety barrier
- Important: They must be replaced after a maximum of 8 years of operational life to ensure the correct functioning of the hold-open system
- In Germany, the DIN 14677 regulates the replacement obligation of fire detectors in hold-open systems



DIMENSIONS

All dimensions in mm



*: WM3000IS EX

INSTALLATION



Installation
instructions

TECHNICAL DATA

Voltage	14 to 28 VDC
Protection	IP 23
Casing	polycarbonate, white
Ex-rating	EX II 1G EEx ia IIC T5 (at max. 40 °C)
Average quiescent current	85 µA at 24 VDC
Starting current	105 µA at 24 VDC
Alarm load	325 Ω in series with 1.0 V voltage drop
Operating temperature	-40 °C to +60 °C (class T4) -40 °C to +40 °C (class T5) (Protect against condensation and icing!)
Heat detector	rate-of-rise detector
Response grade according to EN 54-5:2000	AR1, max. room temperature 50 °C
Alarm indicator	red luminous diode on the detector

ORDER INFORMATION

Description	Part no.
RM 3000IS EX smoke detector, II 1G Ex ia IIC, scattered light photo-electric detection principle, with base, LE	040881SET
WM3000IS EX heat detector, II 1G Ex ia IIC (rate-of-rise detector A1R) with base, LE	040886SET

ACCESSORIES

Description	Part no.
3,9 kOhm resistor	040893

ATEX electromagnets for zones 2 & 22

For use in hazardous zones 2 and 22 exclusively



Website

CHARACTERISTICS

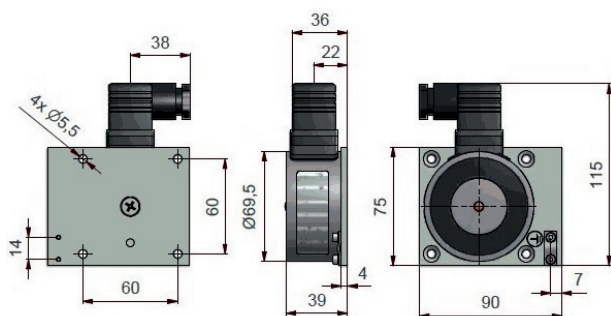
- Three features distinguish it from the standard EM GD 70 R39I:
 - Connection terminal for the prescribed equipotential bonding
 - Larger base plate
 - Special label for hazardous areas
- Equipped by default with diodes to suppress the induced current on opening (spark extinction diodes) and polarity protection
- As counter piece for the electromagnet a counter plate needs to be fixed
- Some articles may differ from the photo

CERTIFICATES AND APPROVALS

- Tested according to EN 1155
- Conformity according to ATEX directive 2014/34/EU

DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Voltage	24 VDC +/-15 %
Power consumption	71 mA (1.7 W)
Protection	IP 65
Temperature range	-20 °C to +60 °C
Surface	zinc-plated steel
Holding force	1450 N
Remanence	0 N
Duty cycle	100 %
Electrical connection	Cable box GDML 2001 GE 1 G, PG 11
Marking according to ATEX	EX II 3G Ex nC IIC T6 Gc X / EX II 3D Ex nC IIIC T85°C Dc X

INSTALLATION



Installation notes

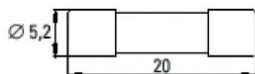


Installation instructions

FUSE / FUSE CARRIER FOR EXPLOSION-PROOF MAGNETS

The fuse carrier with the prescribed fuse is placed directly into the feeding line to the ex-proof magnet. There are available two different types of fuse carriers:

Fuse for ex-proof magnets,
medium time lag, 200 mA



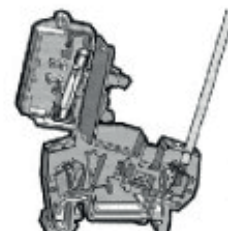
Fuse carrier for soldering directly into
the feeding line

with bayonet catch. Dimensions of the
fuse carrier: L = 43,2 mm, Ø 14,2 mm
(suitable for cables with a cross section
of max. 4 mm) (part no. 040587)



Fuse carrier for mounting on top
hat rails

with pivoting retaining bracket (part no.
040588)



ORDER INFORMATION

Description	Part no.
EM GD 70 R 39 I electromagnet, 1450 N, 24 VDC, Ex2, for use in hazardous zones 2 and 22, IE 07016	040190

ACCESSORIES

Description	Part no.
Fuse 5 x 20, semi-timelag, 200 mA	040586
Fuse carrier with bayonet catch	040587
Fuse carrier	040588

ATEX electromagnets

Encapsulated, with connection terminal box, for hazardous zones 1 & 2, 21 & 22



Website

CHARACTERISTICS

- Belong to group II of explosion-proof devices
- Authorized for use in hazardous areas of classification zones 1 & 2, 21 & 22 (according to VDE 0165)
- Compact devices composed of magnet and ATEX-proof terminal box with own terminals
- Easy mounting by electrical connection to top-hat rail in the housing
- Produced with encapsulated protection "m" and the terminal box with increased safety "e"
- Equipped as standard with diodes (spark extinction diodes) for suppressing the induced current on opening and with polarity protection
- For a safe and stable mounting directly to the wall we recommend using a mounting plate
- As counter piece for the electromagnet, a counter plate has to be fixed on the door
- Some articles may differ from the photo

CERTIFICATES AND APPROVALS

- Tested according to both EN 1155 & directive 2014/34/EU (ATEX)
- Type examination certificate IBExU14ATEX1211X/PTB 03 ATEX 2174 X



TECHNICAL DATA

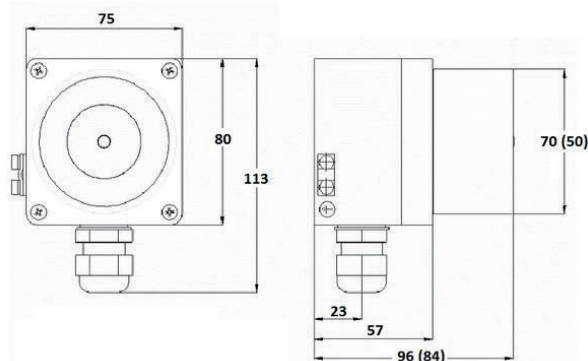
Voltage	24 VDC +/-15 %
Protection	IP 66
Temperature range	-20 °C to +40 °C
Surface	zinc-plated steel
Electrical connection	terminal box
Remanence	0 N
Duty cycle	100 %
Force EM GD 50 Ex..m	600 N
Force EM GD 70 Ex..m	1450 N
Power consumption EM GD 50 Ex..m	67 mA (1.6 W)
Power consumption EM GD 70 Ex..m	70 mA (1.7 W)
Marking according to ATEX	Ex II 2G Ex mb e IIC T6 Gb / Ex II 2D Ex mb e IIC T85°C Db

DIMENSIONS

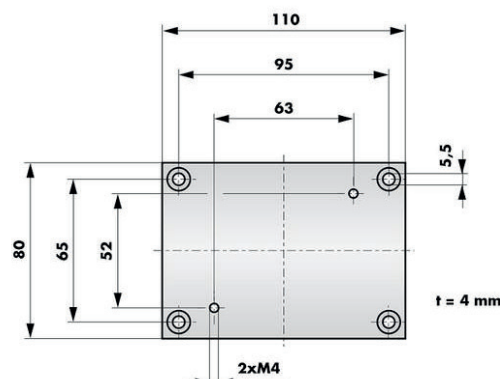
All dimensions in mm

ATEX-proof electromagnet with terminal box

(The dimensions in brackets apply to type EM GE 50 Ex 85m)



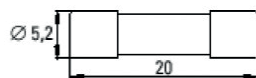
Mounting plate for EM GD Ex with terminal box



FUSE / FUSE CARRIER FOR EXPLOSION-PROOF MAGNETS

The fuse carrier with the prescribed fuse is placed directly into the feeding line to the ex-proof magnet. There are available two different types of fuse carriers:

Fuse for ATEX-proof magnets,
medium time lag, 200 mA



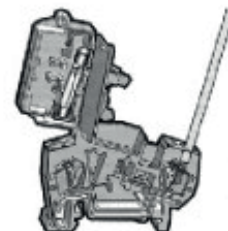
Fuse carrier for soldering directly into
the feeding line

with bayonet catch. Dimensions of the
fuse carrier: L = 43,2 mm, Ø 14,2 mm
(suitable for cables with a cross section
of max. 4 mm) (part no. 040587)



Fuse carrier for mounting on top
hat rails

with pivoting retaining bracket (part no.
040588)



INSTALLATION



Installation
notes



Installation
instructions

ORDER INFORMATION

Description	Part no.
EM GD 50 Ex 85 m electromagnet, 600 N, 24 VDC, with connection box, II 2G Ex mb e IIC T6 Gb/II 2D Ex mb e IIIC T85°C Db, LE 07016	040157
EM GD 70 Ex 99 m electromagnet, 1450 N, 24 VDC, with connection box, II 2G Ex mb e IIC T6 Gb/II 2D Ex mb e IIIC T85°C Db, LE 07016	040159
Fuse carrier	040588

ACCESSORIES

Description	Part no.
Mounting plate for EM GD 70 Ex 99	205252
Fuse 5 x 20, semi-timelag, 200 mA	040586
Fuse carrier with bayonet catch	040587
Fuse carrier	040588

ATEX electromagnets

Encapsulated, with connection cable, for hazardous zones 1 & 2, 21 & 22



Website

CHARACTERISTICS

- They belong to group II of explosion-proof devices
- Authorized for use in hazardous zones of classification 1 & 2, 21 & 22
- Provided with different length connection cables (indicated in the corresponding part number, other cable lengths available on demand)
- As standard, equipped with diodes (spark extinction diodes) for suppressing the induced current on opening and with polarity protection
- As counter piece for the electromagnet a counter plate has to be fixed on the door
- Some articles may differ from the photo

CERTIFICATES AND APPROVALS

- Tested according to both EN 1155 and directive 2014/34/EU (ATEX)
- Type examination certificate IBExU14ATEX1211X/PTB 03 ATEX 2174 X



TECHNICAL DATA

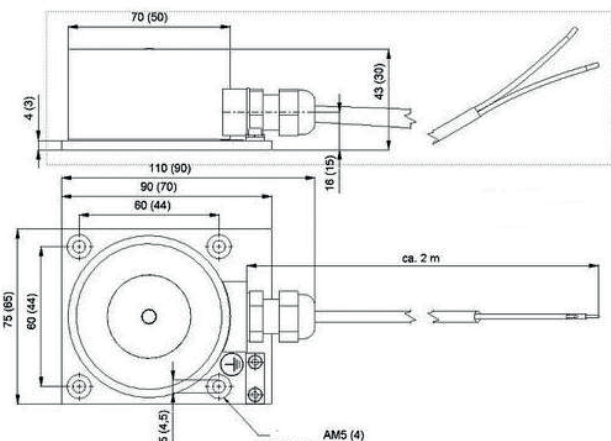
Voltage	24 VDC +/-15 %
Temperature range	-20 °C to +40 °C
Surface	zinc-plated steel
Remanence	0 N
Duty cycle	100 %
Protection	IP 66
Electrical connection	connection cable
Holding force EM GD 50 Ex..m	600 N
Holding force EM GD 70 Ex..m	1450 N
Power EM GD 50 Ex..m	67 mA (1,6 W)
Power EM GD 70 Ex..m	70 mA (1,7 W)
Marking according to ATEX	Ex II 2G Ex mb IIC T6 Gb or Ex II 2D Ex mb IIIC T85°C Db

DIMENSIONS

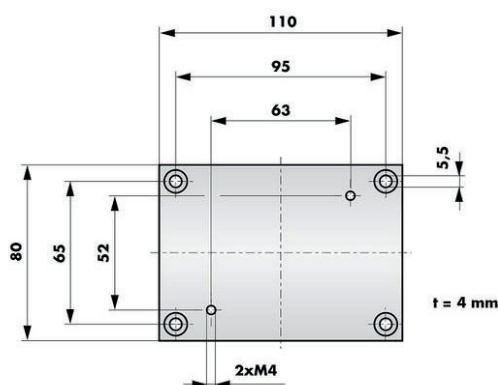
All dimensions in mm

Ex-proof electromagnet

(The dimensions in brackets apply to type EM GE 50 Ex 85m)



Mounting plate for EM GD Ex with terminal box



FUSE / FUSE CARRIER FOR EXPLOSION-PROOF MAGNETS

The fuse carrier with the prescribed fuse is placed directly into the feeding line to the ex-proof magnet. There are available two different types of fuse carriers:

<p>Fuse for ATEX-proof magnets, medium time lag, 200 mA</p> 	<p>Fuse carrier for soldering directly into the feeding line</p> <p>with bayonet catch. Dimensions of the fuse carrier: L = 43,2 mm, Ø 14,2 mm (suitable for cables with a cross section of max. 4 mm) (part no. 040587)</p> 	<p>Fuse carrier for mounting on top hat rails</p> <p>with pivoting retaining bracket (part no. 040588)</p> 
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INSTALLATION



ORDER INFORMATION

Description	Part no.
EM GD 50 Ex 30 m electromagnet, 600 N, 24 VDC, with 5 m of ex-certified connection cable, II 2G Ex mb IIC T6 Gb/II 2D Ex mb IIIC T85°C Db, IE 07016	040154-05
EM GD 50 Ex 30 m electromagnet, 600 N, 24 VDC, with 10 m connection cable, II 2G Ex mb IIC T6 Gb/II 2D Ex mb IIIC T85°C Db, IE 07016	040154-10
EM GD 50 Ex 30 m electromagnet, 600 N, 24 VDC, with 15 m connection cable, II 2G Ex mb IIC T6 Gb/II 2D Ex mb IIIC T85°C Db, IE 07016	040154-15
EM GD 70 Ex 43 m electromagnet, 1450 N, 24 VDC, with 2 m connection cable, II 2G Ex mb IIC T6 Gb/II 2D Ex mb IIIC T85°C Db, IE 07016	040156
EM GD 70 Ex 43 m electromagnet, 1450 N, 24 VDC, with 5 m connection cable, II 2G Ex mb IIC T6 Gb/II 2D Ex mb IIIC T85°C Db, IE 07016	040156-05
EM GD 70 Ex 43 m electromagnet, 1450 N, 24 VDC, with 10 m connection cable, II 2G Ex mb IIC T6 Gb/II 2D Ex mb IIIC T85°C Db, IE 07016	040156-10
EM GD 70 Ex 43 m electromagnet, 1450 N, 24 VDC, with 15 m connection cable, II 2G Ex mb IIC T6 Gb/II 2D Ex mb IIIC T85°C Db, IE 07016	040156-15

ACCESSORIES

Description	Part no.
Fuse 5 x 20, semi-timelag, 200 mA	040586
Fuse carrier with bayonet catch	040587
Fuse carrier	040588

Zener barrier Z779

Shunt safety barrier for intrinsically safe smoke detectors in the hazardous area



Website

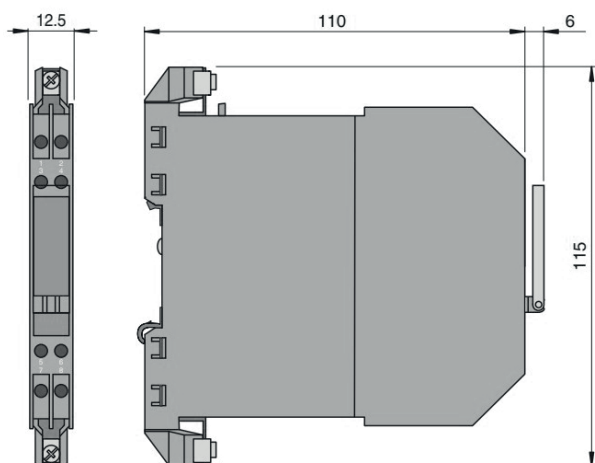
CHARACTERISTICS

- Must be installed between the RZ-24 central unit and the intrinsically safe smoke detectors in the hazardous area
- It prevents excessive electrical energy from entering the hazardous area in the event of a fault in the non ATEX area, which could ignite explosive gases or dusts
- ATEX Certificate: BAS 01 ATEX7 005
- For its installation, there is the casing CI-K available

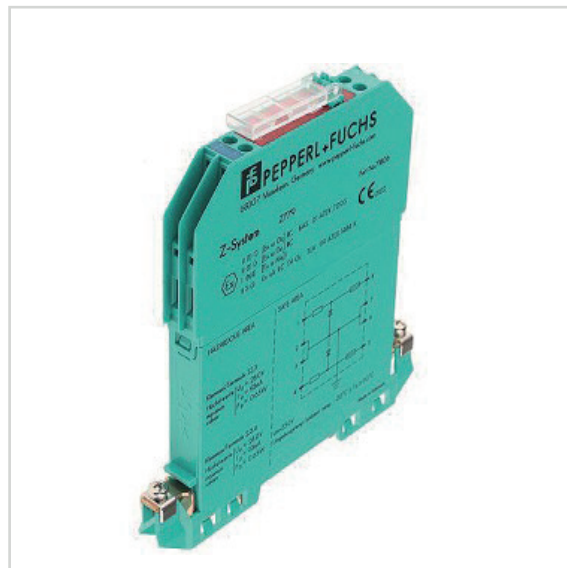
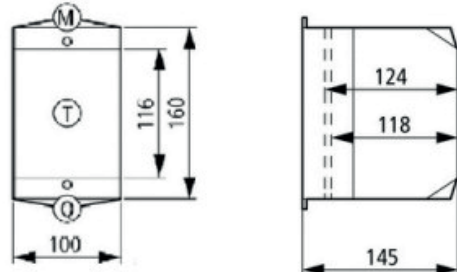
DIMENSIONS

All dimensions in mm

Zener barrier Z779



Casing CI-K



TECHNICAL DATA

Characteristics Zener barrier Z779	2-channel, DC version, positive polarity
Supply voltage	max. 27 VDC
Fuse rating	50 mA
Series resistance	min. 301 Ω / max. 327 Ω
Number of ex-proof detectors that can be connected	max. 20 pieces of intrinsically safe detectors
IP rating	IP 20 / casing IP 65
Operating temperature	-20 °C to +60 °C
Dimensions Zener barrier Z779	12.5 x 115 x 110 mm
Material casing CI-K	glassfiber reinforced polycarbonate, bottom black, upper part grey, RAL 9005/7035

INSTALLATION



Installation instructions

ORDER INFORMATION

Description	Part no.
CI-K casing for the safety barrier, not ex-proof	040585
Z779 Zener barrier, 2-channel	040589



Website

Explosion proof hand switch

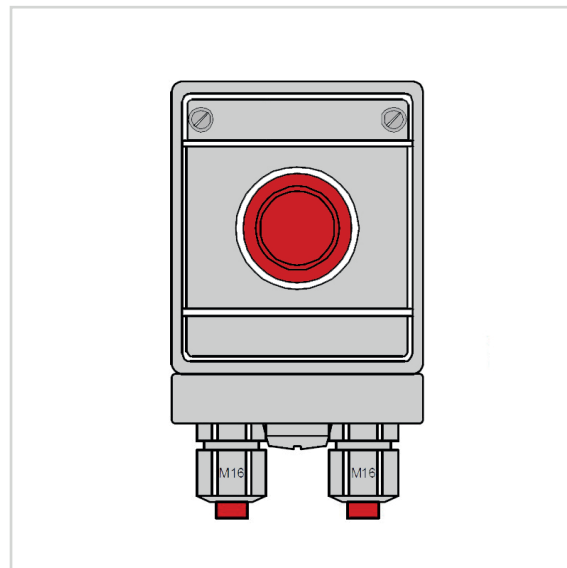
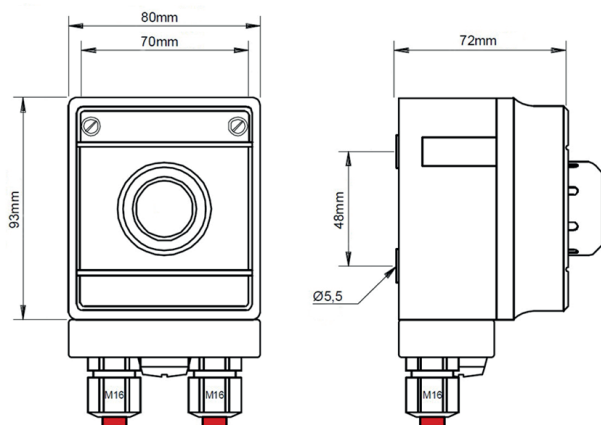
for explosion-proof hold-open systems

CHARACTERISTICS

- According to fire protection standard EN 14637, a manual release button is required for hold-open systems for fire and smoke closures
- For hold-open systems in hazardous areas, DICTATOR furnishes an ex-proof hand switch
- ATEX test certificate: PTB 01 ATEX 1105

DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Protection	IP 66
Casing	fibreglass reinforced polyester resin
Ex-rating	Ex II 2 G EEx dem IIC T6 (zones 1 and 2)

ORDER INFORMATION

Description	Part no.
Ex-proof push button for hand release, for fire protection (break contact, NC)	700232




ACCESSORIES FOR HOLD-OPEN SYSTEMS



An important component of a hold-open system is the hand release switch. It allows to manually interrupt the power supply of the electromagnets on a fire door.

For mounting the electromagnets there are additional brackets available to facilitate a safe installation, even in difficult mounting situations.

TABLE OF CONTENTS - ACCESSORIES FOR HOLD-OPEN SYSTEMS

	Page
 Hand switch	07.07.04
For hold-open systems, for surface and flush installation	
 Telescopic bracket	07.07.05
Extremely robust, adjustable bracket for DICTATOR electromagnets	
 Bracket for electromagnets	07.07.06
With swivel head, for DICTATOR electromagnets	

Subject to technical changes. No claim for compensation in case of errors.



Website

Hand switch

For surface & flush installation on hold-open systems

CHARACTERISTICS

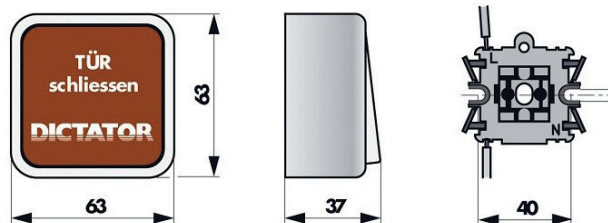
- According to fire protection standard EN 14637, a manual release button is required for hold-open systems for fire and smoke closures
- Pressing the button releases a fire or a smoke door
- The push-button surface must be red and have the inscription "close door" or similar

DIMENSIONS

All dimensions in mm

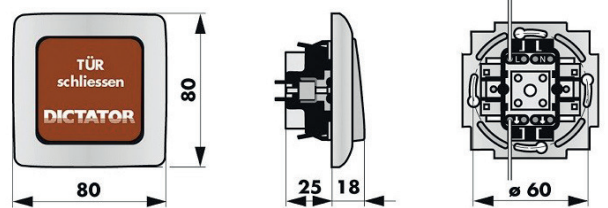
Hand switch for surface installation

Part no. 040005



Hand switch for flush installation

Part no. 040053



INSTALLATION NOTICE

- Must be clearly visible and easy to operate
- Must be in the immediate vicinity of the closure and must not be covered by the open door
- It is recommended to install it at a height of approx. 1.40 m +/- 0.2 m above the floor

ORDER INFORMATION

Description	Part no.
Emergency hand switch, flush mounting	040053
Emergency hand switch, surface type, red rocker	040005



Website

Telescopic bracket

Extremely robust, adjustable bracket for electromagnets

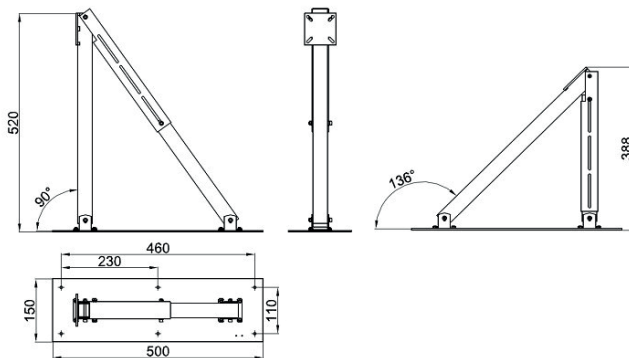
CHARACTERISTICS

- Thanks to its large adjusting range, the telescopic bracket for electromagnets allows to easily adapt the installation position of the magnets on site
- Extremely robust and therefore a perfect solution also for rough operating conditions, such as in schools
- Due to the oblong holes in the fixing plate for the magnet, it can be used for the magnet diameter series 50, 60 and 70



DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Surface	powder coated RAL 9010
Adjustment range	arm till between 90° - 136°
Height adjustment range	388 - 520 mm
Suitable magnet diameters	EM GD 50, 60 and 70

ORDER INFORMATION

Description	Part no.
Telescopic bracket, adjustable, for DICTATOR electromagnets EM GD 50, 60 and 70, powder coated in RAL 9010 white	040147

Bracket for electromagnets

With swivel head



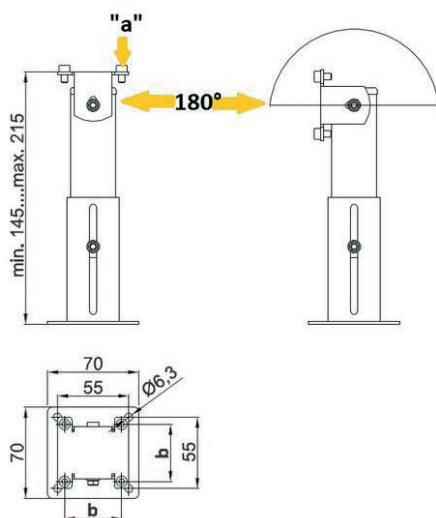
Website

CHARACTERISTICS

- Facilitates the installation of electromagnets on the floor or the wall
- Available for the diameter series 50 and 60
- The head of the bracket can be swiveled up to 180° and thus adapted to the most different hitting angles of the door
- The height of the console can be adjusted up to 70 mm between 145 to 215 mm
- When choosing the appropriate bracket the distance and the diameter of the fixing borings in the mounting plate of the electromagnet must be taken into consideration

DIMENSIONS

All dimensions in mm



TECHNICAL DATA

Surface	powder coated RAL 9010
Adjustment range	head swivels up to 180°
Height adjustment range	145 - 215 mm
Suitable magnet diameters	EM GD 50 & 60

Bracket	Dimension a	Dimension b	Suitable for magnets (e.g.)
040124	M4	44 mm	EM GD 50 R26, R26I, F26
040126	M5	44 mm	special types such as EM GD 50 F25T
040127	M4	55 mm	EM GD 60 R26, R26I, F26

ORDER INFORMATION

Description	Part no.
Distance bracket for EM GD 60 R26, R26I, F26, electromagnets, white, distance of bores: 55 mm, M4	040127
Distance bracket for e.g. EM GD 50 F25T electromagnets, white, distance of bores: 44 mm, M5	040126
Distance bracket for EM GD 50 R26, R26I, F26 electromagnets, white, distance of bores: 44 mm, M4	040124



ACCESSORIES FOR FIRE DOORS



Fire doors often don't close completely despite having a closing device, possibly because a second door near this door is closed. The air in this 'interlock' functions as an air cushion and thus prevents the door from completely closing. However, in case the second door is open, the fire door usually closes with a loud bang. DICTATOR door dampers are the solution.

During a fire it can happen that large door leaves, although safely closed at first, are pushed open in some places due to high temperatures and the subsequent pressure difference. Through the forming gap the fire may expand in spite of the fire protection door. The thermal bolt HLS takes care of this.

TABLE OF CONTENTS - ACCESSORIES FOR FIRE DOORS

	Page
 Door damper V 1600 / V 1600F for fire doors 07.06.04 The approved solution for fire and smoke doors	07.06.04
 Thermal bolt HLS 07.06.08 Safely closed fire doors – without gap	07.06.08

Subject to technical changes. No claim for compensation in case of errors.

Door damper V 1600/V 1600F for fire doors

Universal model with the widest range of executions



Video



Website

CHARACTERISTICS

- Thanks to its cased cylinder the fixing screws are not visible
- Available in different colors and finishes: chrome-plated, color-coated, stainless steel
- The models V 1600F with 80 N and V 1600 with 50 N are approved for use on fire and smoke doors. More information can be found under 'Fire doors'

MOUNTING OPTIONS

- Normally installed vertically on the pull side of the door
- Different hooks allow its installation on overlapping, flush and recessed doors (more information available under 'Choice of hook')
- Installation on glass doors possible with additional mounting plates
- Before installing it on fire doors it is necessary to check whether mounting plates are required for the installation on your fire or smoke door. For more information, see section 'Fire doors'



TECHNICAL DATA

Type of doors	left opening and right opening hinged doors, flush, overlapping or recessed doors
Closing force	50 N; 80 N
Damping characteristics	progressive
Closing speed	adjustable
Damping fluid	silicone oil
Material	steel; stainless steel AISI 304
Finish (steel)	bright chrome; satin chrome; coated in RAL colors
Components included	door damper, hook, fixing screws for wooden doors

FIRE DOORS

Door damper V 1600/V1600F for the use on fire and smoke doors

Depending on your country's regulations, it is possible that the door damper may only be used on fire and smoke doors for which there is an existing approval that allows its installation. On many fire and smoke doors, it is necessary to use mounting plates for the installation of the door damper and the hook.

Please check which mounting plates you need for your particular door before ordering. Should you have any questions, we'll be happy to help.



Installation
instructions
V 1600F

CHOICE OF HOOK

- Hook 1009: for flush doors (-4 to +14 mm)



- Hook 1013: for overlapping doors (+15 to +30 mm)

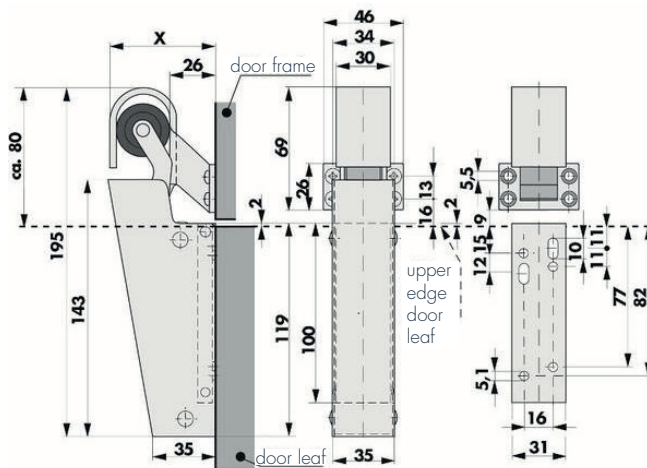


- Hook 1011: for recessed doors (-5 to -20 mm)



DIMENSIONS

All dimensions in mm



Dimension of X with

- Hook 1009 for flush doors: $X = 59$
- Hook 1013 for overlapping doors: $X = 78$
- Hook 1011 for recessed doors: $X = 39$

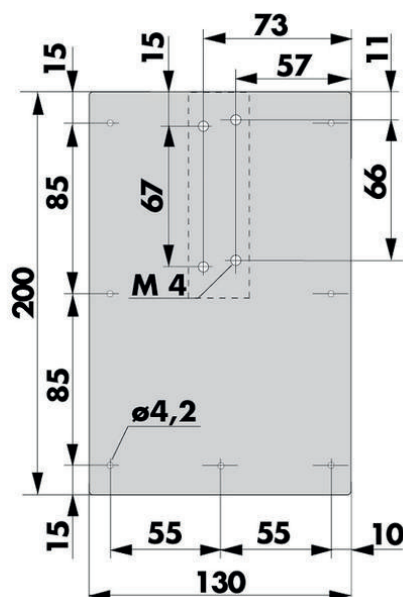
Further information on the dimensions of all mounting plates and brackets can be found under 'Installation accessories'.

INSTALLATION ACCESSORIES

All dimensions in mm

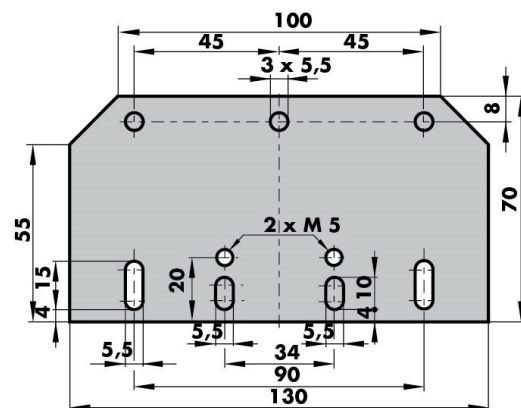
Mounting plate for installation on fire doors

Part no. 205212



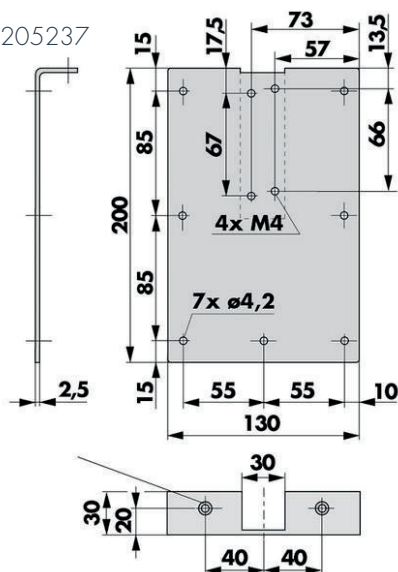
Mounting plate for installation on fire doors

Part no. 205231XL



Mounting plate for installation on fire doors without rebate

Part no. 205237



ORDER INFORMATION

Description	Installation	Hook 1009	Hook 1011	Hook 1013
V 1600 50 N chromium plated	vertical	300460	300629	300461
V 1600 50 N satin chrome	vertical	300460X	300457	300461X
V 1600 50 N RAL 9010 pure white	vertical	300466	*	300965
V 1600 50 N RAL 8017 chocolate brown	vertical	300454	300979	300966
V 1600 50 N RAL 9005 jet black	vertical	300456	-	-
V 1600 50 N RAL 9006 white aluminium (grey)	vertical	300467	*	300964
V 1600 50 N AISI 304	vertical	300612	-	-
V 1600 80 N chromium plated	vertical	300480	*	300951
V 1600 80 N satin chrome	vertical	300480X	*	*
V 1600 80 N RAL 9010 pure white	vertical	300954	*	300968
V 1600 80 N AISI 304	vertical	300614	-	-
V 1600F 80 N chromium plated	vertical	300960	300963	300973

For large quantities, other colours are also available on request.
 *: Available on request

ACCESSORIES

Description	Part No.
Mounting plate for hooks type 1009, 1011 and 1013, with 4 screws M5 x 6, zinc-plated steel	205231XL
Mounting plate for door damper V 1600 on flush fire doors, with 4 screws M4 x 6, zinc-plated steel	205237
Mounting plate for door damper V 1600 on fire doors, including 4 screws M4 x 6, zinc-plated steel	205212

Thermal bolt HLS-catch

Safely closed fire doors – without gap



DESCRIPTION

Perfectly functioning fire and smoke doors are an indispensable requirement for preventing or limiting damage. In the case of hinged doors in particular, the high heat of a fire might cause the door to warp, which can create gaps and thus the fire could spread despite the fire door. The **Hot-Locking-Safe** thermal bolting offers protection for these cases.

CHARACTERISTICS

- Available in two different models, which differ only in their counter plate:
 - Standard model: the counter plate features just a countersunk bore as intake for the bolting pin
 - Model for doors that warp more easily: here the bore in the counter plate is molded as a funnel to enable the locking pin to enter the boring in the counter plate easily, even when the door has already deformed a little.
- **IMPORTANT:** The HLS thermal bolt may only be installed in agreement with the respective door manufacturer.



FUNCTION

- Installed in the frame or the door at those places where there is the highest danger that a gap might occur.
- Normally the bolt is retracted in the casing and locked there by the soldered strut.
- Only when the surrounding temperature rises to about 600 °C and the HLS itself has reached about 65 °C, the soldered strut melts and the spring in the back of the cylinder can push out the bolt.
- This fixes the door securely to the frame and the door leaf cannot be distorted.

TECHNICAL DATA

Casing	zinc-plated steel
Material soldered strut	Hotmelt
Melting point	at a surrounding temperature of about 600 °C, the soldered strut itself at about 65 °C
Spring force	approx. 11 N
Stroke	23 mm
Application area	hinged fire protection doors T30 and T60
Door types	timber and steel doors with timber or steel frames
Test	DIN EN 1634-1:2000

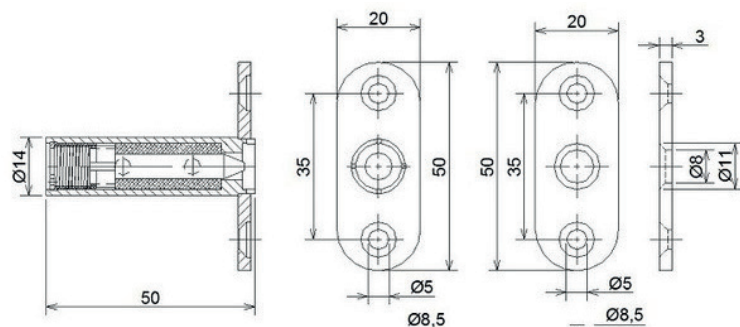
MONTAGE



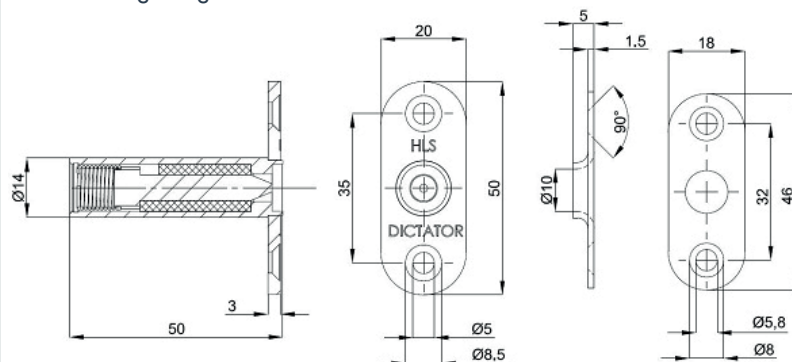
DIMENSIONS

All dimensions in mm

Standard model



HLS-Verriegelung mit Einlaufrichter



ORDER INFORMATION

Description	Part no.
Thermal bolting TV2003-50, granulate material, bolt 23 mm stroke	710715
Thermal bolting TV2003-50, granulate material, bolt 23 mm stroke, counterplate with intake guide	710717