

8a 8a MANUAL FIRE ALARM CALL POINT



• Purpose

The Manual Fire Alarm Call Point is a type A call point with direct activation. In terms of its electric system, it can be categorised as a regular switch with passive electrical components that operate in an alarm condition circuit.

In the version with a signaling system, the breaking of a glass panel activates LED, which signifies alarm condition. The connection unit contains two contacts: one NC (Y) and one NO (X), or two NC contacts (Y). The Y (NC) contact is open in the detection status, and closed in the alarm status. The X (NO) contact operates the other way round. External conductors are connected to a 4-way/6-way threaded tube coupling.

The product is in accordance with the Regulation (EU) No 305/2011 of the European Parliament and of the council of 9 March 2011 laying down harmonized conditions for the marketing of construction products and repealing Council Directive 89/106/EEG

• Testing

The alarm status can be simulated in the following way:

- Undo the two collar bolts with triangular heads, and remove the front panel,
- Undo the two sheet-metal screws that fasten the glass panel, and then remove the glass panel.

This method enables the testing of a manual fire alarm call point, without breaking the glass panel. The ROP-A type manual fire alarm call point is additionally equipped with a special spanner for collar bolts.

• Activating and cancelling

The activating of the ROP-AM type manual fire alarm call point is done with a small hammer, which is an integral part of this fire alarm call point. The activating of the ROP-AD type manual fire alarm call point is done with any hard object that is capable of breaking the glass.

Cancelling is possible, when the damaged (broken) glass panel has been replaced with a new one.

Carry out the following to replace the glass panel:

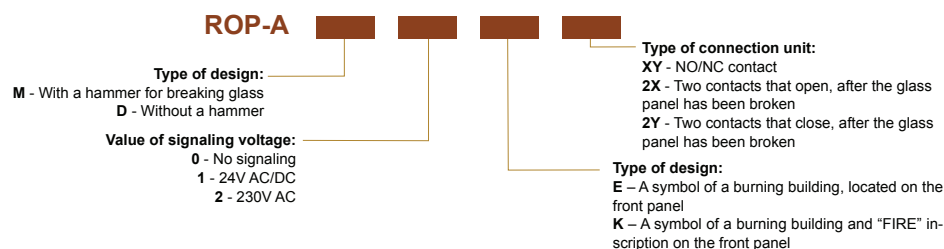
- Undo the two collar bolts with triangular heads, and remove the front panel,
- Undo the two sheet-metal screws that fasten the glass panel,
- Remove glass residues and install a new glass panel.

8a.1 TECHNICAL DATA

Insulation rated voltage (U _i)	500 V	
Rated switching currents (I _b)	AC15 U _e 230V/400V DC13 U _e 24V/110V/220V	6A/4A 4A/1A/0,25A
Signaling rated voltage (U _s)	24V AC, DC 230V AC	
Maximum effective resistance of contacts	10 mΩ	
Cross-section of the connected external conductors	0,28 ... 1,5 mm ²	
Protection class	IP 54	
Range of working temperatures	-25°C to +70°C	
Weight of ROP-A M	315 g	

The product conforms to the following standards PN-EN 54-11

8a.2 TYPES OF MANUAL FIRE ALARM CALL POINTS



8b 8b PD SMOKE VENT BUTTONS



• Purpose

Manual smoke vent button II PD is destined for working as part of Smoke Extraction Systems (control of smoke vents) with local 3-LED light signaling.

Additionally, II PD type vent button is equipped with "RESET" function as well as with terminal for series and terminating resistors.

Pressing the button makes the LEDs emit continuous light and indicate the following: detection (green), failure (yellow), and activation (red). The button is equipped with passive electronic components. The product is in accordance with the Regulation (EU) No 305/2011 of the European Parliament and of the council of 9 March 2011 laying down harmonized conditions for the marketing of construction products and repealing Council Directive 89/106/EEG.

Certified by CNBOP-PIB no AT-0402-0327/2011, issuance 2, Certificate of Approval no. 1227/2012, Certificate of Conformity no. 2804/2012

• Testing

The alarm status can be simulated in the following way:

- Undo the two collar bolts with triangular heads, and remove the front panel,
- Undo the two sheet-metal screws that fasten the glass panel, and then remove the glass panel.

Removal of the glass panel, as well as its breaking make the button work. The above mentioned method enables the testing of II PD without breaking the glass panel. II PD type vent button is equipped with "RESET" function accessible with glass installed and removed front panel. RESET button enables to delate alarm status when being tested.

• Activating and cancelling

The activating of the II PD vent button is done directly upon breaking the glass panel.

Cancelling is possible, when the damaged (broken) glass panel has been replaced with a new one and RESET button has been activated. Carry out the following to replace the glass panel:

- Undo the two collar bolts with triangular heads, and remove the front panel,
- Undo the two sheet-metal screws that fasten the glass panel,
- Remove glass residues and install a new glass panel.

8b.1 TECHNICAL DATA

Insulation rated voltage (U _i)	500 V	
Rated switching currents (I _b)	AC15 U _e 230V/400V DC13 U _e 24V/110V/220V	6A/4A 4A/1A/0,25A
Signaling rated voltage (U _s)	24V DC	
Maximum effective resistance of contacts	10 mΩ	
Cross-section of the connected external conductors	0,28 ... 1,5 mm ²	
Protection class	IP 54	
Range of working temperatures	-25°C to +70°C	

8b.2 TYPES OF PD SMOKE VENT BUTTONS



8c PB LOCK BUTTONS

• Purpose

The lock buttons with a glass panel are intended for industrial halls and public utility buildings. They can also be used outside, under a cover, so as to ensure they are protected from the direct impact of rain and snow.

In terms of the electric system, they can be categorised as regular switches with passive electrical components that operate in an alarm condition circuit.

Lock buttons have been designed in 5 colour versions: yellow, green, red, orange and grey. The product conforms to the standard PN-EN 60947-5-1.

• Testing

The alarm status can be simulated in the following way:

- Undo the two collar bolts with triangular heads, and remove the front panel,

- Undo the two sheet-metal screws that fasten the glass panel, and then remove the glass panel.

Removal of the glass panel, as well as its breaking make the button work. The above mentioned method enables the testing of PB buttons without breaking the glass panel.

• Activating and cancelling

The activating of the PB-M type button is done with a small hammer, which is an integral part of this lock button.

The activating of the PB-D type button is done with any hard object that is capable of breaking the glass. Cancelling is possible, when the damaged (broken) glass panel has been replaced with a new one.

Carry out the following to replace the glass panel:

- Undo the two collar bolts with triangular heads, and remove the front panel,

- Undo the two sheet-metal screws that fasten the glass panel,

- Remove glass residues and install a new glass panel.

8c.1 TECHNICAL DATA

PB-M/D 0/1/2/3XY			
Insulation rated voltage (U _i)	500 V	250 V	
Rated switching currents (I _a)	AC15 U _e 230V/400V DC13 U _e 24V/110V/220V	6A/4A 4A/1A/0,25A	AC15 U _e 230V 2,5A DC13 U _e 220V 0,3A
Signaling rated voltage (U _s)	24V DC		
Maximum effective resistance of contacts	10 mΩ		
Cross-section of the connected external conductors	0,28 ... 1,5 mm ²		
Protection class	IP 54		
Range of working temperatures	-25°C ... +70°C		

The product conforms to the standard PN-EN 60947-5-1

8c.1 TYPES OF PB LOCK BUTTONS

PB-

Colour of enclosure:

Z - Green
C - Red
G - Yellow
R - Grey
P - Orange

Type of design:

M - With a hammer for breaking glass
D - Without a hammer

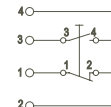
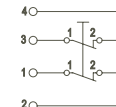
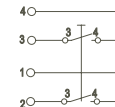
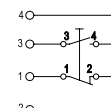
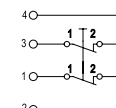
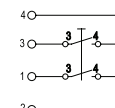
Signaling:

0 - No signaling
1 - 24V AC/DC
2 - 230V AC
3 - 3-LED signaling system 24V AC/DC

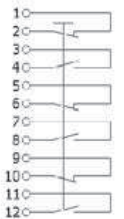
Type of connection unit:

XY - NO/NC contact
2X - Two contacts that open, after the glass panel has been broken
2Y - Two contacts that close, after the glass panel has been broken
3X3Y - 3 x NO and 3 x NC contacts

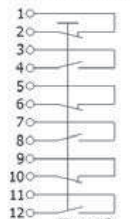
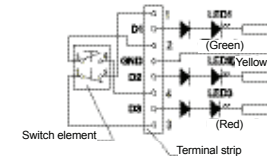
CIRCUIT DIAGRAMS

ROP-A M/D 0 E/K XY
PB-M/D 0 XYROP-A M/D 0 E/K 2Y
PB-M/D 0 2YROP-A M/D 0 E/K 2X
PB-M/D 0 2XROP-A M/D 1/2 E/K XY
PB-M/D 1/2 XYROP-A M/D 1/2 E/K 2Y
PB-M/D 1/2 2YROP-A M/D 1/2 E/K 2X
PB-M/D 1/2 2X

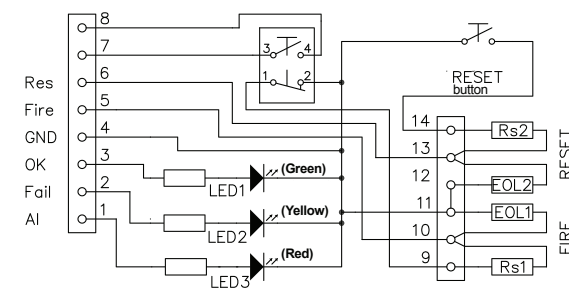
PB M/D 0 3X3Y



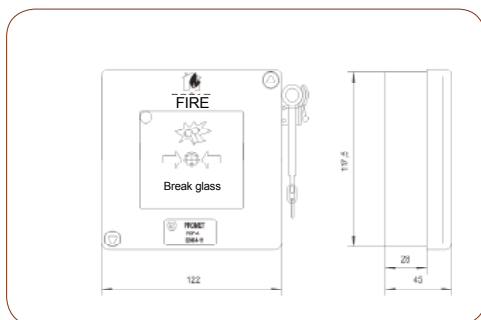
PB M/D 1/2 3X3Y

Important: x1, x2 - 24V AC, DC
x3, x4 - 230V ACPD M/D 3XY
PB M/D 3XY

PD M/D 3XY



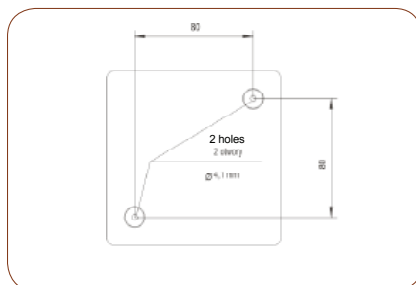
OVERALL DIMENSIONS



ASSEMBLY

"Break glass" type buttons can be either flush-mounted or surface-mounted.

The rear side of the enclosure for a "break glass" type button contains two hole plugs (under screw shields), intended for 4.1 mm assembly openings. The two hole plugs must be forced open. When installed, cover the screws with shields.



SPARE PARTS

SN PROMET offers the following products:

- A complete set of glass panels
- A hammer with a chain
- A spanner with a pin (for service purposes).

8d SPD OPTICAL SMOKE DETECTORS



PURPOSE

SPD type optical point smoke detectors are intended for detecting visible smoke that accompanies fire in closed rooms, in various types of buildings and structures, and transferring this signal to a cooperating fire alarm control panel. The detector has been designed for an uninterrupted 24-hour operation. The SPD-3.1M detector has been designed to work with fire alarm control panels or fire/burglary control panels, using a two-conductor direct current detection circuit that operates under the rated supply voltage of 12V.

The SPD-3.2 detector has been designed to work with fire alarm control panels or fire/burglary control panels, using a 4-conductor direct current detection circuit that operates under the rated supply voltage of 12V.

DESIGN AND PRINCIPLE OF OPERATION

The detector operates according to the principle of controlling the optical density in the surrounding. The detector is comprised of a proper detector and a socket. The detector is connected to the socket with a 4-contact connector. The plastic enclosure for the connector contains an optical system and an electronic block that processes signals and controls status signals.

When there is no smoke in the optical system's detection area, the detector connected to a fire alarm control panel will remain in the stand-by mode. This mode is indicated by red flashing of the optical signalling device. When smoke is detected in the optical system's detection area, the electronic systems generates a "FIRE" signal, in the form of a sudden change of internal resistance, which is translated into an increase of current in the detection circuit.

In the FIRE mode, the red optical signalling device emits continuous light. When power has been disconnected for at least 3s and then reconnected, detectors return to the stand-by mode (Reset). Place a protective cap on the detector's body, in order to protect the optical system of the detector against dirt, during transport and assembly work. When installing or removing detectors, follow the rules related to working at heights.

ARRANGEMENT AND ASSEMBLY

When arranging detectors, select locations that ensure the following:

- Minimum vibrations of building structures;
- Minimum lighting;
- Maximum distance to sources of electromagnetic interferences (wiring system, etc.), infrared radiations (thermal devices);
- No possibility of water falling on the detector's body or leaking from the rosette's side;
- No gases, vapours, or aerosols that can cause corrosion.

Detectors are connected to the detection circuit, using sockets. The sockets are mounted in the same locations where detectors were installed, using two $\varnothing 6 \times 25$ mm wall bolts and two $\varnothing 3 \times 30$ mm self-tapping screws. The distance between centres of holes should be 70 ± 0.2 mm.

8d.1 TECHNICAL DATA

Sensitivity	0,05-0,2 dB/m
Inertia	10 s ≤
Range of supply voltage	10-30 V
Method of forming an output signal	contactless
Method of connecting a fire alarm control panel	conductor signaling line
Detection current	0,095 mA
Alarm current	6-30 mA
Internal resistance in the alarm condition (under current input of 20mA)	500 Ω
Overall dimensions	Ø100x48 mm
Weight	0,15 kg
Range of working temperatures	-30 to +55 C°
Average lifetime approx.	10 years