

Conventional Manual Call Points for Ex Areas



- ▶ For manually activating the alarm in zones 1 and 2 at risk of explosion
- ▶ Suitable for applications with Ex detectors
- ▶ Especially robust, weatherproof housing
- ▶ Adjustment of the manual call point after alarm triggering

The Conventional Manual Call Points for Ex Areas are used to manually activate the alarm in zones 1 and 2 at risk of explosion.

The K type call points are encapsulated, intrinsically safe call points and do not require any safety barriers. The DM 1103 B-Ex Manual Call Points for ex zones must be connected via a Safety Barrier SB 3 incl. Input/Output Module DCA1192 (see system overview).

Functions

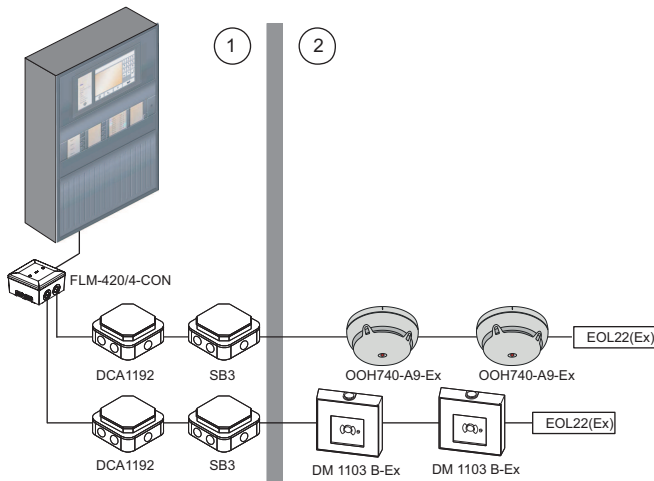
In the event of an alarm, the glass pane (2) is broken first, then the pushbutton (3) is pressed hard. Thus the switch triggers the alarm.

A locking mechanism holds the pressed manual call point.

The pushbutton can be reset with the reset lever. This does not reset the alarm on the fire panel.

Certifications and approvals

System overview



Region	Regulatory compliance/quality marks	
Europe	Ex	97 ATEX 3197 DKM 2014/2 / DKM 2014/2-GLU
Germany	VdS	G 297060 DKM 2014/2-ex/-GLU
	VdS	G 295036 DM 1103 B-Ex
Europe	CE	DM 1103
	CE	DKM2014
	BASEEFA	Ex 98E2304 DM 1103 B-Ex

Pos. Description

- | | |
|---|---|
| 1 | Non-Ex area |
| 2 | Ex area: zone 0, 1 or 2 for OOH740-A9-Ex zone 1 or 2 for DM 1103 B-Ex |

Installation/configuration notes

- Manual call points must be illuminated sufficiently with daylight or another light source (including emergency lighting, if present).
- An installation height of 1400 mm ±200 mm, measured from the middle of the manual call point to the floor, must be maintained.

- Manual call points must be installed along escape and rescue routes (e.g. exits, passageways, stairwells).
- Further standards, guidelines and planning recommendations regarding the installation location etc., should also be taken into consideration (see Fire Detection manual).
- Regulations of local fire departments must be observed.

Installation/configuration notes in accordance with VdS/VDE

- The distance between manual call points should not exceed 100 m according to DIN 14675 or 80 m according to VdS.
- In high risk areas, manual call points should be installed at a distance of max. 40 m (VDE 0833 Part 2, Point 7.2.6).
- According to VdS, up to 10 manual call points can be connected to a primary line.

DKM 2014/2-ex Manual Call Point Type K

- For connection to the LSN, an NBK 100 LSN Fire Interface is required.
- Can be connected directly to the following conventional control panels:
 - BZ 1012
 - BZ 1060
 - UEZ 1000 GLT.
- With an NBK 100 LSN Fire Interface, can be connected to the following control panels:
 - BZ 500 LSN
 - UEZ 1000 LSN
 - UEZ 2000 LSN
 - UGM 2020 LSN

DKM 2014/2-ex-UGM Manual Call Point Type K, for Connection to UGM Conventional

- Can be connected directly to the UGM-GLT Universal Danger Detection System

DM 1103 B-Ex manual call point for ex area

- For connection to the LSN, an NBK 100 LSN interface is required.
- For use in explosive areas of zones 1 and 2, a safety barrier and an input/output module are required, which must be mounted in front of the ex area.
- Cables can be inserted surface-mounted or flush-mounted
- For planning an intrinsically safe detector line for Ex areas, you have to consider:
 - the number n of devices connected to the SB3 Safety Barrier’s detector line
 - the cable length l of the SB3 Safety Barrier’s detector line

The following inequation must be fulfilled to achieve an intrinsically safe detector line:

$$C_0 (SB3) > C_i$$

resulting

$$C_0 > (n \times C_i) + (l \times C_c)$$

$$L_0 (SB3) > L_i$$

resulting

$$L_0 > (n \times L_i) + (l \times L_c)$$

Legend:

Abbreviation (unit)	Description
C_0 (nF)	maximum external capacity
C_i (nF)	maximum internal capacity
C_c (nF)	cable capacitance
l (km)	length of entire detector line
L_0 (mH)	maximum external inductivity
L_i (mH)	maximum internal inductivity
L_c (mH)	cable inductance
n	total number of detectors

Technical specifications

**DKM 2014/2-ex Manual Call Point Type K
DKM 2014/2-ex-UGM Manual Call Point Type K, for Connection to UGM Conventional**

Operating voltage	20 - 26.5 V DC
Switch contact	Type 366 (encapsulated), II 2 G EEx d II C
Maximum contact load	5 A / 250 V AC 0,25 A / 250 V DC
Cable entry	<ul style="list-style-type: none"> • 1x M16 x 1.5 tightening diameter 4-8 mm, EEx e II • Blind plug: 1x M16 x1.5 EEx e II
Housing material	Polyester, glass fiber reinforced
Colors	Red, RAL 3001

Dimensions (W x H x D)	136 x 138 x 88 mm
Weight	Approx. 1800 g
Protection class as per EN 60529	IP 66
Permissible operating temperature	-25 °C to +40 °C
Ex classification	Eex emd IIC T6
Test certificate / PTB No.	97-37001
ATEX approval no.	PTB 97 ATEX 3197

DM 1103 B-Ex Manual Call Point

Operating voltage	16V DC to 28V DC
Cable duct	PG11 screws (2x)
Connection terminals	0.2 mm to 1.5 mm
Housing material	Plastic, PC
Color	Red, RAL 3000
Dimensions (W x H x D)	134.4 x 134.4 x 43.5 mm
Weight	Approx. 200 g
Protection class as per EN 60529	IP 54
Permissible operating temperature	-25 °C to +60 °C
Permissible storage temperature	-30 °C to +75 °C
Permissible relative humidity	≤100% at T≤34 °C
Ex classification	EEx ib IIC T4

DM 1103 B-Ex Characteristics for intrinsically safety

Input voltage U_i (V)	≤ 28
Input current I_i (mA)	≤ 100
Input power P_i (mW)	≤ 700
Internal inductivity L_i (mH)	0
Internal capacity C_i (nF)	0

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Ordering information

2014/2 Manual call point ex area

for ex area, surface-mounted, indirect alarm triggering, conventional technology
 Order number **2014/2 | 4.998.010.933**

FMX-7743.0.0500 Key for manual call point

Three-square socket wrench for opening the Manual Call Point Type K
 Order number **FMX-7743.0.0500 | 2.799.290.160**

DKM 2014/2-EX-UGM Manual call point ex area UGM

for ex area, surface-mounted, indirect alarm triggering
 Order number **DKM 2014/2-EX-UGM | 4.998.010.934**

FMX-7743.0.0500 Key for manual call point

Three-square socket wrench for opening the Manual Call Point Type K
 Order number **FMX-7743.0.0500 | 2.799.290.160**

DM1103B-EX Manual call point ex area

for zone 1 and 2 areas at risk of explosion, conventional technology
 Order number **DM1103B-EX | 4.998.112.084**

SB3 Safety barrier

limits the electrical energy between non-inherently safe and inherently safe circuits
 Order number **SB3 | 4.998.112.085**

Accessories

FMC-SPGL-DEIL Spare glass

For manual call points of series DM, DKM, SKM, FMC-120 and FMC-210, 1 unit = 5 spare glasses
 Order number **FMC-SPGL-DEIL | F.01U.025.845**