



## DOD-220A-B

## DOD-220A-B-I

### Addressable optical smoke detector (black color)

#### Description

The 200 series of addressable detectors has been developed using the most innovative technical advances. Its completely new design makes the 200 series one of the most elegant on the market, ideal for facilities in which the balance between functionality and aesthetics is necessary.

Detnov's 200 series of addressable detectors is made up of 4 detector types, all of them available with and without isolator. There are a 58°C rise-of-rate detector, a 78°C heat detector, an optical detector and an optical-heat detector. All of them are compatible with Detnov's CAD-150 and CAD-250 families of addressable control panels.

The detectors' addresses are assigned through the PGD-300 programmer (Isolator version support auto addressing). The use of this tool saves double address mistakes, because the programmer automatically handles the address to be assigned.

Connections between the addressable system detectors, manual call points, sounders and modules are recommended to be done using a 2 x 1.5 mm<sup>2</sup> twisted and shielded cable with an estimated length of 2 km (although changing the section of the cable, from 0,5 mm<sup>2</sup> to 2,5 mm<sup>2</sup> the number of elements and cable distance may change reaching sometimes 3,5 kms and therefore we provide a system calculator to check it).

In order to meet the EN-54-14 requirements, the wiring must be done in a closed loop. Precise short-circuit isolators must be installed to facilitate the location of possible faults. The loop allows up to 250 addresses.

The DOD-220A smoke detector is based in an optical dark chamber, which, thanks to its design, avoids unwanted air flows and facilitates the guidance of the smoke to the optical sensor. The detection principle is based on the Tyndall effect; the detector goes into alarm status due to the scattered light caused by the smoke particles being received by the optical sensor. The camera is protected to avoid the entrance of dirt and insects. This detector also incorporates compensation algorithms which avoid false alarms due to the dirtiness of the optical chamber, postponing equipment maintenance.

The 200 series detectors require the Z-200 base in order to connect. This connection base includes a blocking option which avoids it being tampered with. A tool is needed to remove the detector from the base.

Detectors in this series have non-polarity technology, facilitating system wiring and saving a huge amount of time in commissioning the system.

#### Features

- Elegant design and low profile
- Dirtiness compensation
- Dirtiness and insect protection
- Two-wire connection without polarity (DOD-220A)
- DOD-220A-I with isolator. Connection with polarity
- Remote indicator port
- Full compatible with addressable Detnov panels.
- EN54-7 (Both) and EN54-17 (DOD-220A-I) approved.
- Up to 250 addresses per loop

## Applications

Detnov's complete range of 200 series detectors allow reliable fire detection thanks to its advanced analysis technology. Depending on the risk to be protected, you will have to choose the topology of the sensor of the detector, you can choose between: optical, thermal, thermovelocimetric or the combination of said sensors. Detnov's fire detector has been developed to ensure a quick reaction to fires, meeting the highest quality standards and certification required in the market. A unique reliability when detecting and protecting installations to reduce false alarms, being suitable for the most demanding applications.

## Technical features

<b>Detector</b>	
Loop features:	
Operating voltage:	From 22 to 38VDC
Quiescent current consumption :	< 300 $\mu$ A
Alarm current consumption:	< 11 mA
<b>Connections</b>	
2 x 1,5 mm <sup>2</sup> twisted and shielded cable to a Z-200 base	
<b>Environment</b>	
Operating temperature:	From -10°C to +70°C
Relative humidity:	95% without condensation
IP Index:	IP40
<b>Physical features</b>	
Head (height x Ø):	42 mm x 100 mm
Base (height x Ø):	5 mm x 100 mm
Material:	ABS Black color
<b>Approvals</b>	
EN 54-7 and EN 54-17 (DOD-220A only EN 54-7)	
DOD-220A Certificate number:	0370-CPR-0881
DOD-220A-I Certificate number:	0370-CPR-1859

## Dimensions

