

# Multisensor with SelfVerify – BH-320

Interactive fire detection systems  
Product datasheet

## Features

- Interactive
- Ensures fast response to various fire developments
- Smoke detector for detection of combustion gases mainly consisting of visible (large) particles. Heat sensor assisting for early detection of flaming fires.
- With DYFI+ adaptive and self learning function
- With SelfVerify function for reduced maintenance/testing and increased reliability
- Built-in thermistor for reading of temperature at the detector point
- Short circuit isolator in each detector
- Comprises a built-in alarm indicator (LED)
- Automatic addressing
- Proven technology
- EN 54-5/EN 54-7/EN 54-17
- Designed to meet the requirement of the major maritime classification societies

## Application

BH-320 is a multisensor based on an optical point smoke detector combined with a temperature sensor. A rise in temperature will change the detection platform by increasing the smoke sensitivity in order to improve the detection of combustion gases from flaming fires producing barely a minimum of visible smoke particles. The multisensor principle combined with advanced signal processing in the detector ensures an early response to any type of fire development.

BH-320 is designed for use with Autronica's interactive fire detection systems. The DYFI+ intelligence combined with the SelfVerify functions and the allround smoke sensitivity of BH-320 makes this detector the obvious choice for demanding applications such as industrial, maritime and offshore installations where there is a potential flaming or/and smouldering fire hazard.

## Principle

Dual - 2 - sensor detector. Photoelectric, operating on the light scatter principle and temperature measurement by means of a thermistor.

SelfVerify: the detector's ability to initiate alarm is regularly checked.



## Versions

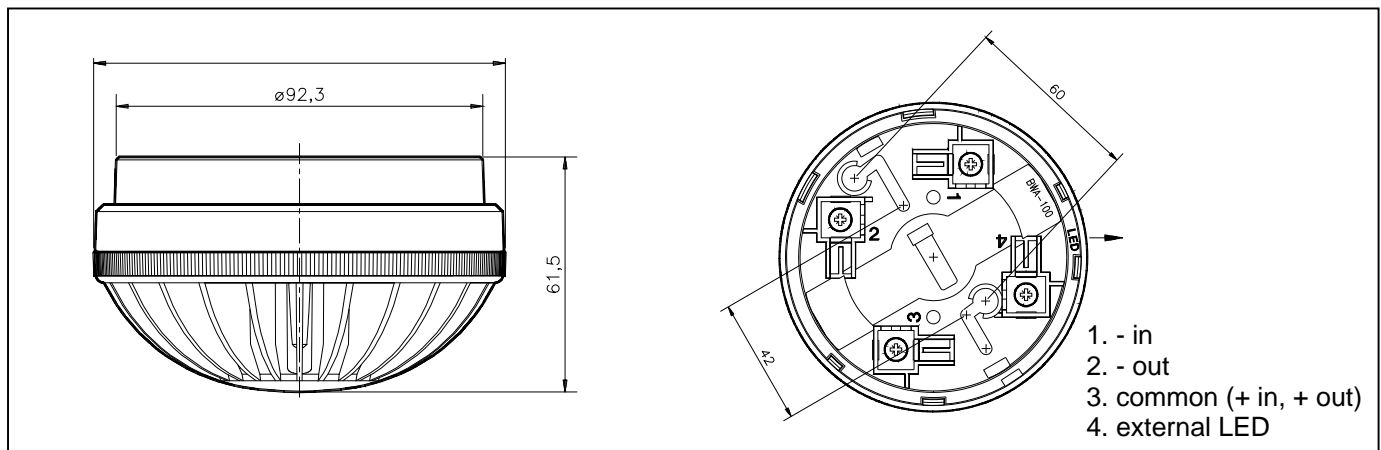
- BH-220\* Multisensor without SelfVerify
- BH-320 Multisensor with SelfVerify
- BH-520\* Multisensor with SelfVerify, environmentally protected.
- BH-520/Ex\* Multisensor with SelfVerify, EExia-version for use in all zones.
- BH-520/N\* Multisensor with SelfVerify, EExn-version for use in zone 2 only.

\*See separate data sheet.

| Technical specifications  |                    |
|---------------------------|--------------------|
| Weight                    | 165 g              |
| Material                  | PC/ABS             |
| Colour                    | White              |
| Sensitivity               | Ref. table 1 and 2 |
| Voltage                   | 10 – 27 VDC        |
| Current consumption       |                    |
| Stand by:                 | < 0,3mA            |
| External alarm indicator: | 6mA                |
| CPD certificate           | 1134-CPD-017       |
| Degree of protection      | IP44D              |
| Working temperature       | - 20 - + 70°C      |
| Humidity (non condensing) | Max. 95% RH        |
| Maintenance               | None               |
| Service                   | Replace if faulty  |
| Approvals                 | See web site       |



## Dimensions/Connections



## Use of LED output

When LED or other equipment is connected to the LED output, a varistor - Siemens SIOVS07K25 (39V) -Autronica part. no. 116-8464-003.5039, is required between terminals 1 and 4 in base.

The LED is connected between terminals 3 and 4, terminal 3 being the positive terminal.

Table 1 – Performance classes

| Performance class | Typical application |
|-------------------|---------------------|
| Clean             | Computer rooms      |
| Normal            | Offices             |
| Normal 2          | Restaurants         |
| Industry          | Workshops           |

Table 2 – Operation classes

| Operation class    | Alarm type                  |
|--------------------|-----------------------------|
| Multisensor w/heat | Smoke alarm and heat alarm  |
| Multisensor        | Smoke alarm (heat assisted) |
| Heat only          | Heat alarm (class A1)       |

| Part number    | Description                              |
|----------------|--|
| 116-BWA-100    | Detector base                            |
| 116-BHH-320    | Detector head                            |
| 116-BWP-100/20 | Optional conduit box for M20 glands      |
| 116-BWP-100/25 | Optional conduit box for M25 glands      |
| 116-BBR-52     | Optional audible indicator – SmartBuzzer |

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