

# Optical smoke detector with SelfVerify - BH-500/S

Interactive fire detection systems  
Product datasheet

## Features

- Interactive
- Comprises the DYFI+ adaptive and self learning function
- With SelfVerify function for reduced maintenance/testing and increased reliability
- Selective to misleading environmental phenomena that in a traditional system would lead to an unwanted fire alarm
- Detection of visible smoke
- 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
- Immune to electromagnetic disturbance

## Applications

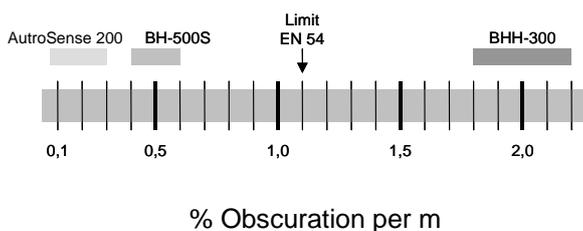
BH-500/S is a point smoke detector for detection of combustion gases mainly consisting of visible particles. The detector has a built in thermistor and is designed for use with Autronica's interactive fire detection systems, which can provide temperature information from the detector point. The SelfVerify function ensures the highest grade of reliability because all units comprising this function are automatically tested with a calibrated test once every 24 hours.

Optionally there is a BH-500/S/N version for use in hazardous area zone 2. It must be connected to the BSD-310/N loop driver, but does not require an isolator/barrier unit.

## Principle

Photoelectric, operating on the light scatter principle.

SelfVerify: the detector's ability to initiate alarm at correct amount of smoke is regularly checked.



## Versions

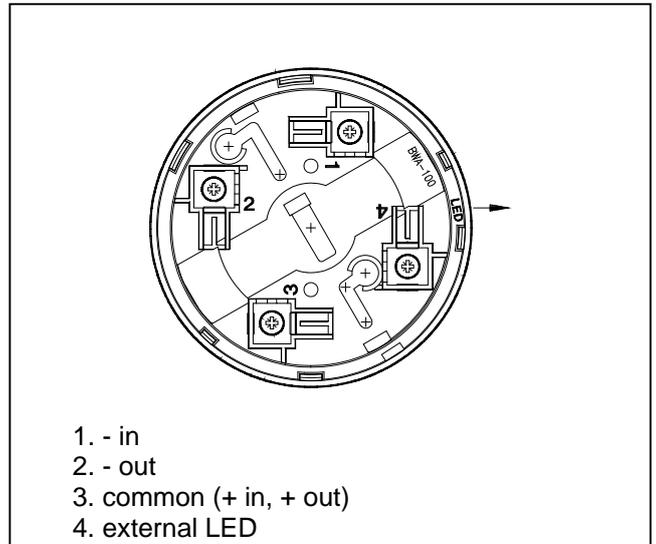
- BH-200\* Smoke detector, standard
- BH-300\* Smoke detector with SelfVerify
- BH-500\* Smoke detector with SelfVerify, environment protected
- BH-500/S Smoke detector with SelfVerify, environment protected, with extra high sensitivity
- BH-500/EX\* Smoke detector with SelfVerify, EExia-version for use in all zones
- BH-500/S/EX\* Smoke detector with SelfVerify, EExia-version for use in all zones, with extra high sensitivity
- BH-500/N Smoke detector with SelfVerify, Eexn-version for use in zone 2 only
- BH-500/S/N Smoke detector with SelfVerify, and extra high sensitivity, Eexn version for use in zone 2 only

\* See separate data sheet

Technical specifications	
Weight	150 g
Material	Polycarbonate macrolon
Colour	White
Voltage	10 - 27 VDC
Current consumption Stand by: External alarm indicator:	< 0,3mA 6mA
Environm. requirement	EN 54-7
Degree of protection	IP44D
Working temperature	- 20 - + 70°C
Humidity (non-condensing)	Max. 95% RH
Maintenance	None
Service	Replace if faulty
Approvals	See website
ATEX certificate for BH-500/S/N	NEMKO 03ATEX217X

Part number	Description
116-BHH-500/S	Detector head, high sensitivity
116-BHH-500/N	Detector head certified for use in zone 2
116-BHH-500/S/N	Detector head, high sensitivity, certified for use in zone 2
116-BWA-100	Detector base
116-BWP-100/20	Optional conduit box for M20 glands
116-BWP-100/25	Optional conduit box for M25 glands

**Connections**

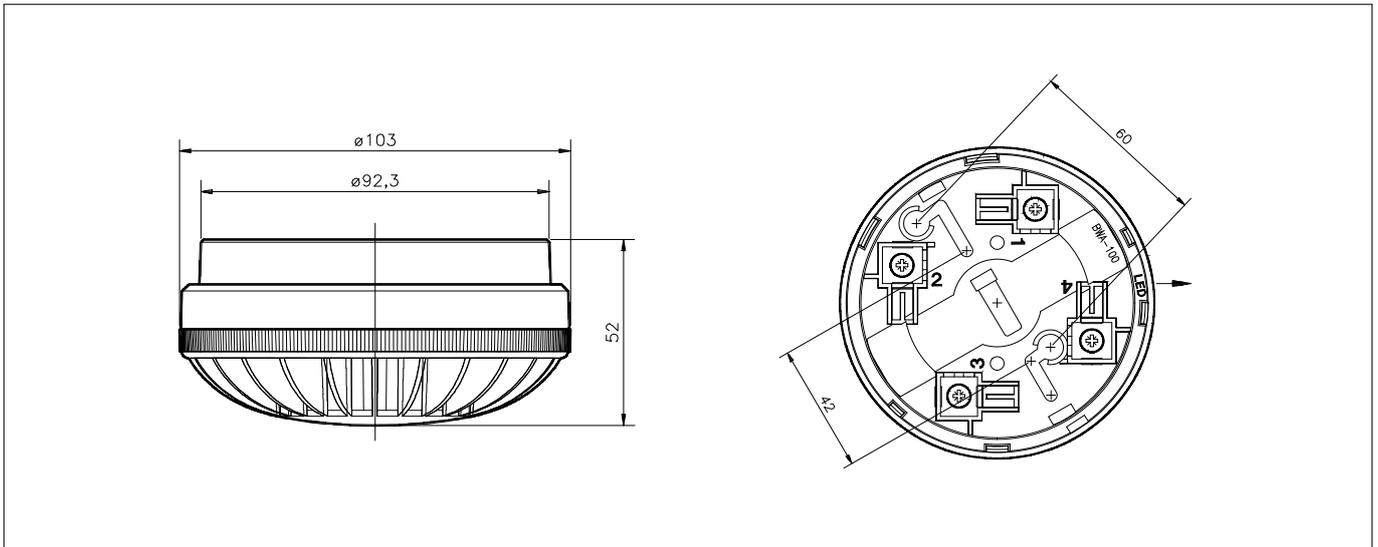


**Use of LED output:**

When LED or other equipment is connected to the LED output, a varistor - Siemens SIOVS07K25 (39V) - Autronica art.no. 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.

**Dimensions**



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