MULTISENSOR WITH SELFVERIFY – BH-520

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.
- Additional PCB coating, ideal in humid environments
- 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-520 is a multisensor detector 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.

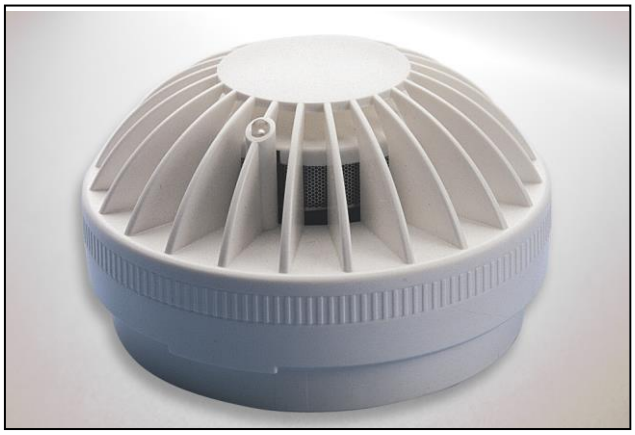
BH-520 is designed for use with Autronica's interactive fire detection systems. The DYFI+ intelligence combined with the SelfVerify functions and the allround smoke sensitivity of BH-520 makes this detector the obvious choice for demanding applications such as industrial, maritime and offshore installations where there is a potential flaming or/and smouldering fire hazard. The additional PCB coating makes this detector ideal in corrosive and humid environments.

Optionally there is a BH-520/N version for use in hazardous area zone 2. It must be connected to the BS-310/N loop driver. Does not require an isolator or a barrier unit.

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.



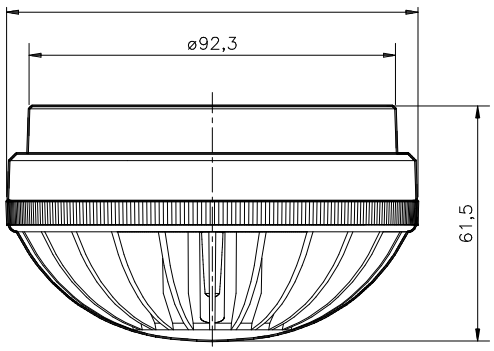
Versions

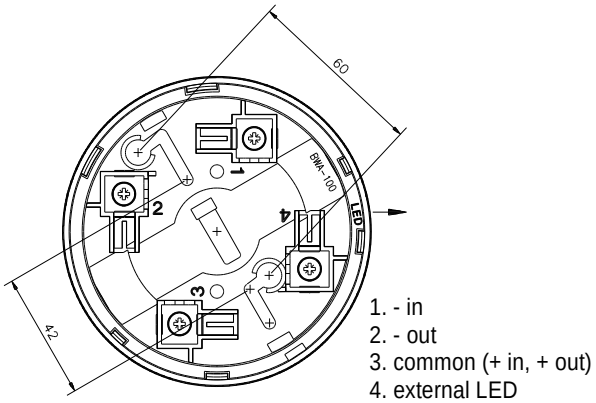
BH-220*	Multisensor without SelfVerify
BH-320*	Multisensor with SelfVerify
BH-520	Multisensor with SelfVerify, environmentally protected.
BH-520/Ex*	Multisensor with SelfVerify, EExia-version for use in all zones.
BH-520/N	Multisensor with SelfVerify, EExn-version for use in zone 2 only.

*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: External alarm indicator:	 < 0,3mA 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-520	Detector head
116-BHH-520/N	Detector head certified for use in hazardous area zone 2
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