Technical specifications and instructions

Features

- Interactive
- Multisensor detectors ensure fast response to various fire developments
- Smoke detector for detection of combustion gases mainly consisting of visible (large) particles. Heat sensor assisted for early detection of flaming fires
- Comprises 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
- Selective towards misleading environmental phenomena that in a traditional system would lead to an unwanted fire alarm
- Short circuit isolator in each detector
- Additional coating of PCB
- Automatic addressing
- Proven technology
- Designed to meet the requirement of the major maritime classification societies
- Comprises a built in indicator (LED)

Description / Application

BH-520/N is designed for use with Autronica's interactive fire detection systems. 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.

The detector is for use in hazardous area zone 2. It must be connected to a loop driver approved for zone 2.

Additional coating of PCB combined with the adaptivity and the allround smoke sensitivity of BH-520/N makes this detector suitable for industrial, maritime and offshore applications 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 at correct amount of smoke is regularly checked.

Versions

- BH-220*   MultiSensor, standard
- BH-320*   MultiSensor with SelfVerify
- BH-520*   MultiSensor with SelfVerify, environmentally protected
- BH-520/EX* MultiSensor with SelfVerify, Ex ia version for use in zone 0, 1 and 2
- BH-520/N   MultiSensor with SelfVerify, Ex ic version for use in zone 2

* See separate datasheet.

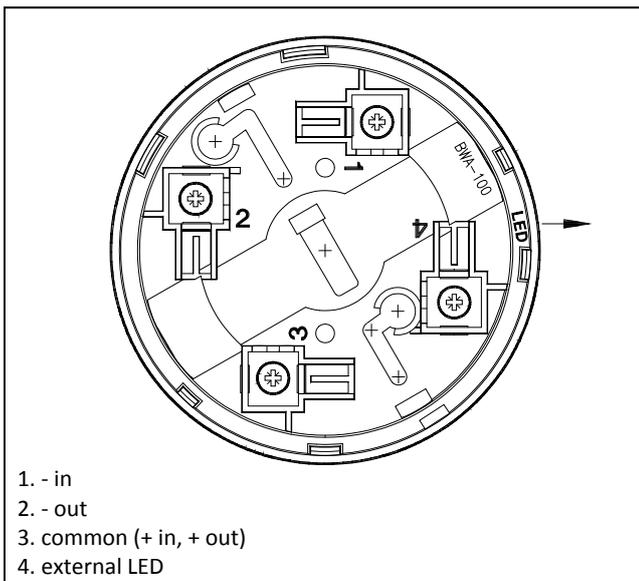| Technical specifications	
Weight	165 g
Material	Polycarbonate/ABS
Colour	White
Sensitivity	See Performance Classes table
Voltage	10 - 27 VDC
Current consumption stand by:	< 0,3 mA
Environm. requirement	EN 54-7
Degree of protection	IP44D*
Working temperature (Ta)	- 20 - + 70 °C
Storage temperature	- 55 - + 70 °C
Humidity (non condensing)	Max. 95% RH
Maintenance	None
Service	Replace if faulty
CPD certificate	1134-CPD-017
Certificates	See website
Notified body	Nemko ID No. 0470 CSA
Type examination certificate	NEMKO 03ATEX217X IECEx NEM 11.0017X
Directives and standards	2014/34/EU (ATEX) EN 60079-0:2012 EN 60079-11:2012 IEC 60079-0:2011 IEC 60079-11:2011 2014/30/EU (EMC) Immunity: EN 50130-4:2011 Emission: EN 61000-6-3:2001 CAN/CSA-C22.2 No. 0-10 CAN/CSA-C22.2 No. 205-12 CAN/CSA-60079-0-11 CAN/CSA-60079-1-11 CAN/CSA-60079-11-11 CAN/CSA-C22.2 No. 60529-05 UL 464, 9th Edition UL 60079-0, 5th Edition UL 60079-1, 6th Edition UL 60079-11, 5th Edition ANSI/IEC 60529:2004 ANSI/ISA-60079-26: 2011
Ex parameters	⟨Ex⟩ II 3G Ex ic IIB T4 Gc Class I, Zone 2, AEx ic IIB T4 Gc **Warning**: *Do not rub.*

*requires approved cable glands and/or plugs of minimum the same IP level.

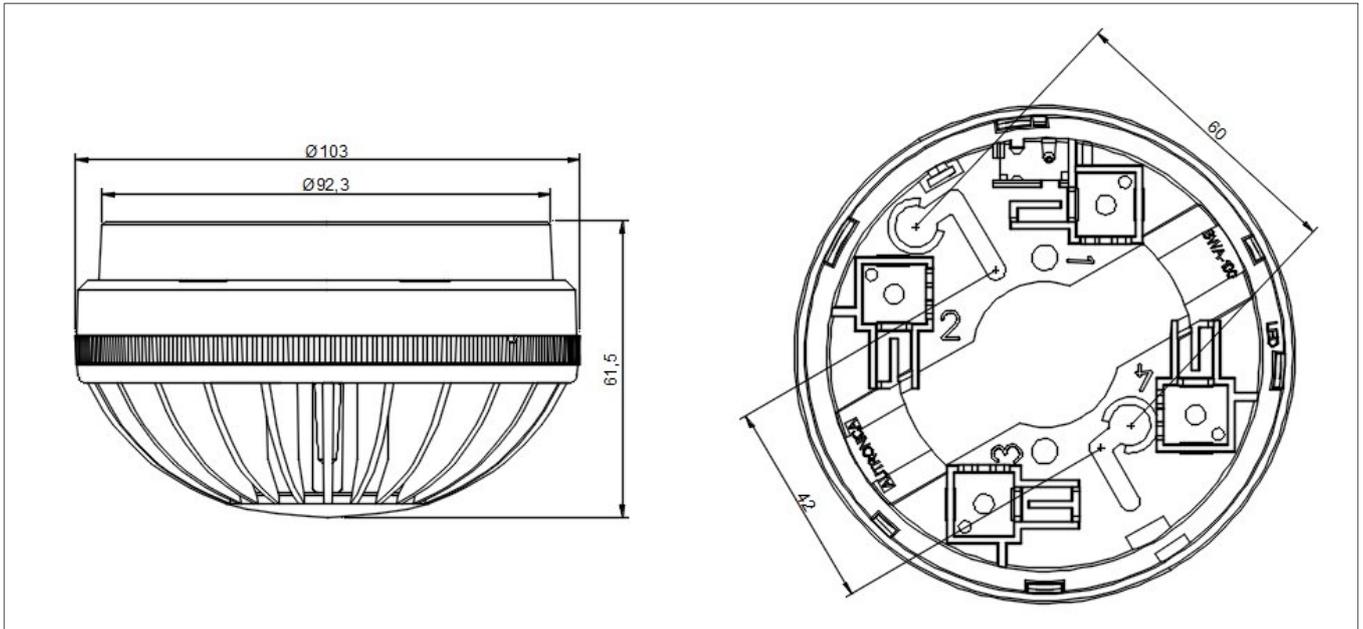| Product Name	Part number	Description
BWA-100	116-BWA-100	Detector base
BDH-500/N	116-BHH-520/N	Detector head
BWP-100/20	116-BWP-100/20	Optional conduit box for M20 glands
BWP-100/25	116-BWP-100/25	Optional conduit box for M25 glands

Performance classes

Performance class	Typical application
Clean	Computer rooms
Normal 1	Offices
Normal 2	Restaurants
Industry	Workshops

Connections

1. - in
2. - out
3. common (+ in, + out)
4. external LED

CE

Dimension Drawing (mm)

Control Drawing