

# Heat detector with SelfVerify - BD-500/EXE

Interactive fire detection systems  
Product datasheet

## Declaration of conformity and instructions

### Features

- Interactive
- Plug in detector head
- Heat detector intended for use in humid areas
- Short circuit isolator in each detector
- Conforms to EMC directive
- No hardware addressing required
- Additional coating of PCB circuit for environmental protection
- Automatic addressing
- Proven technology
- Configurable to class A1, A1R, A2S, B, C
- Immune to electromagnetic disturbance
- SelfVerify function for reduced maintenance/testing and increased reliability
- The BD-500/EXE is not influenced by dust, humidity, exhaust gases, electromagnetic fields i.e.:
  - Radio transmitters, cellular phones, etc.
- RIME approved
- EN 54 pt. 5
- Designed to meet the requirement of the major maritime classification societies

### Applications

BD-500/EXE is a point heat detector for use in hazardous area zone 1 or 2. The detector is designed for use with Autronica's interactive fire detection systems. SelfVerify function ensures the highest grade of reliability. All units comprising this function are automatically tested with a calibrated test once every 24 hours. Additional coating of PCB and sealing of the sensing element makes this detector suitable for maritime applications.

BD-500/EXE is often used in areas where the environment is likely to produce false/unwanted alarms from smoke detectors.

The BD-500/EXE detector is tested by RIME for increased safety "e" according to Japanese standards JIS F8009-1998 and JIS C0934-1993.

### Principle

Temperature measurement by means of a thermistor for registration and reading of temperature at the detector point. Alarms at temperature according to configured class (Ref. table 1).

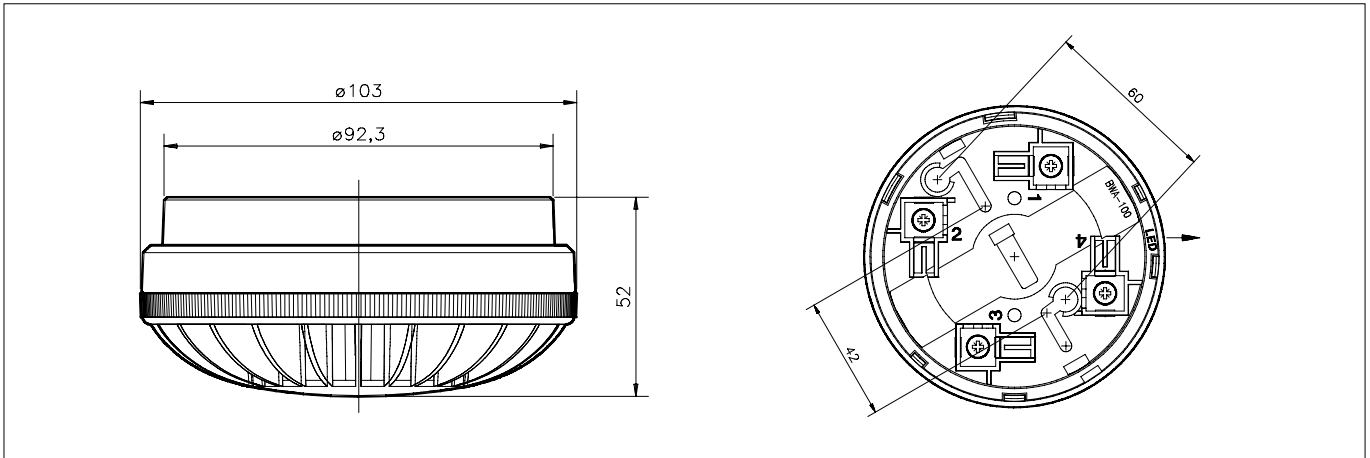
SelfVerify: the detector's ability to initiate alarm at correct temperature is regularly checked.



Technical specifications	
Weight	140 g
Material	Polycarbonate / ABS
Colour	Light grey
Sensitivity	Acc. to EN 54-5
Voltage	10 - 27 VDC
Current consumption Stand by:	< 0,3mA
Environm. requirement	EN 54-5
Degree of protection	IP44D
Working temperature	-20 - +80°C
Max. application	Ref. table 1
Storage temperature	- 55 - + 80°C
Humidity (non condensing)	Max. 95% RH
Maintenance	None
Service	Replace if faulty
Certificate	DNV A-7762 NK 4EQ150N
Directives and standards	JIS F8009-1998 JIS C0934-1993 89/336/EEC (EMC) Emission: EN 50081-1: 1992 Immunity: EN 50130-4: 1995 EN: 61000-6-2: 1999



## Dimensions



**Table 1**

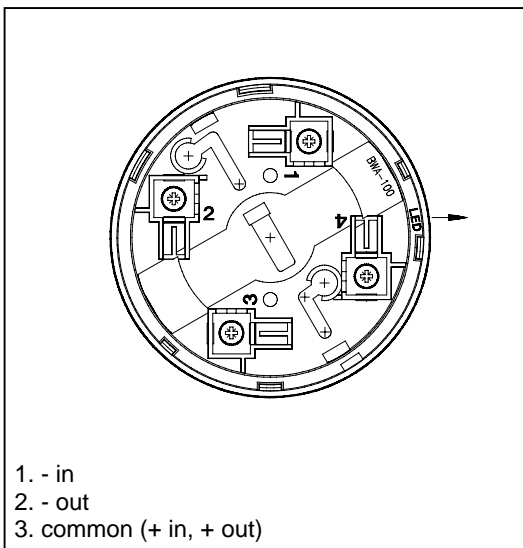
Detector class	Typical application temperature °C	Maximum application temperature °C	Minimum static response temperature °C	Maximum static response temperature °C
A1	25	50	54	65
A1R*	5	50	54	65
A2S*	25	50	54	70
B	40	65	69	85
C	55	80	84	100

\* R= Rate of rise.

\* S= (Slow) Does not respond below the minimum static response temperature.

*Note: The detector may give prewarning on a temperature below the max. application temperature.*

## Connections



Part number	Description
116-BWA-100	Detector base
116-BDH-500/EXE	Detector head
116-BWP-100/20	Optional conduit box for M20 glands
116-BWP-100/25	Optional conduit box for M25 glands

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