



Lloyd's
Register

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate supersedes certificate number 15/20101 issued on 29.09.2015 which is hereby cancelled.

This certificate is issued to:

PRODUCER	Autronica Fire and Security AS Bromstadtveien 59 7047 Trondheim Norway	
DESCRIPTION	Fire alarm detectors	
TYPE	BH-500/N ^①	Optical smoke detector
	BH-500/EX ^①	Optical smoke detector
	BH-520/N ^①	Multi sensor
	BH-520/EX ^①	Multi sensor
	BD-500/N ^①	Heat detector
	BD-500/EX ^①	Heat detector
	BD-501/EX ^①	Heat detector
	BWP-143A	Adapter for ventilation duct
	BWP-143A-SS	Adapter for ventilation duct

① with SelfVerify

APPLICATION	Marine, offshore and industrial applications suitable for use in environmental categories ENV1, and ENV2 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - July 2015
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Certificate No.	15/20101 (E1)
Issue Date	23 May 2017
Expiry Date	31 May 2019
Sheet	1 of 2



for Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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This is a copy of an electronic document. In the event of any conflict or ambiguity between the copy and the electronic document, which is retained and published by Lloyd's Register, the original electronic and certified version shall always prevail.

STANDARD IEC 60092-504:2001
EN 54-7:2000 / A1:2002 / A2:2006
EN-54-5:2000 / A1:2002

OTHER CONDITIONS Ratings for application in hazardous areas are to be obtained from applicable Ex Certificates. Systems comprising the components described above are subject to a separate plan appraisal according to applicable Rules and Regulations when installed on LR classed vessels.

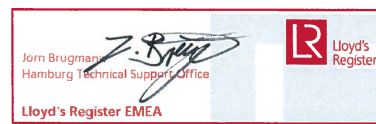
The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 35299-17 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 15/20101 (E1)
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Sheet 2 of 2

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Design Appraisal Document

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Date
23 May 2017

Please quote this reference number on all future communications
HPC1562136/35299-17/AHB/TW/KW

THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2015
ISSUED TO: AUTRONICA FIRE AND SECURITY AS
FOR: FIRE ALARM DETECTORS
TYPE APPROVAL CERTIFICATE NO. 15/20101 (E1)

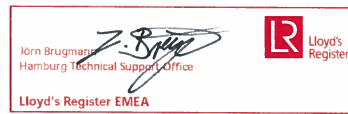
The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System Procedure TA14 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Unnumbered	Application Checklist-Appendix to Form 2502TA/2502TA MR	06.12.2016
Form 2502 (2016.05)	Request for Marine Services	29.03.2017
900776	ISO 9001:2008 Certificate, Autronica Fire and Security AS	27.05.2014
OSLI1700003	Production Quality Assessment, Autronica	06.01.2017
HTS/ETS 32454-15	LR Marine Design Appraisal Document, 2 pages	29.09.2015



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FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

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