



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 14-FEB-2024. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Flame Detector
Model Name(s): BG-201, BG-21

Presented to:

AUTRONICA FIRE AND SECURITY AS
P.O. BOX 5620
7483 TRONDHEIM
7483
Norway

Intended Service:	ABS Classed Vessels and Offshore Installations in accordance with the listed ABS Rules and International Standards.
Description:	Interactive and conventional flame detectors for use with Autronica Fire Detection and Fire Alarm Systems, AutoSafe4 and Autoprime. BG-201: Interactive point flame detector for detection of fires involving combustion of carbonaceous materials. BG-21: Conventional point flame detector for detection of fires involving combustion of carbonaceous materials.
Tier:	3
Ratings:	Degree of Protection: IP66 and IP67, Working Temperature: -40 to +70C Voltage: BG-201: Supplied by loop; BG-21: 10-26 VDC
Service Restrictions:	Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
Comments:	The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
Notes / Documentation:	Drawing No. 001-0v1-BG-201, Unit test SW1_4, 27-Mar-2012, Autronica, Revision: 1, Pages: - Drawing No. 001-1v0-BG-201, Unit test SW1_5, 27-Sep-2012,

Autronica, Revision: 1, Pages: - Drawing No. 001-1v1-BG-201, Unit test SW1_6, 29-Jan-2013, Autronica, Revision: 1.1, Pages: - Drawing No. 001-1v2-BG-201, Unit test SW1_7, 24-Oct-2014, Autronica, Revision: 1.2, Pages: - Drawing No. 001-1v3-BG-201, Unit test SW1_8, Date: 07-Apr-2015, Revision: 1.3, Pages: - Drawing No. 358298, TRF EMC ENV, 15-Nov-2018, NEMKO, Revision: -, Pages: - Drawing No. 200051 TRF MAR E12044_00, 200051 TRF MAR E12044_00, Revision: -, Pages: - Drawing No. 20121106 ABS TA request form, 20121106 ABS TA request form, Revision: -, Pages: - Drawing No. 20121106 ABS Type Approval Documents, 20121106 ABS Type Approval Documents, Revision: -, Pages: - Drawing No. TE276617 BG-201 IR Flame Detector, BG-201 IR Flame Detector Manual, Revision: -, Pages: - Drawing No. TE276617-SW-A1 BG-201 IR Flame Detector, BG-201 IR Flame Detector Manual-Tec evaluations of Autron Fire n Sec BG201 EN 54-10 2002 N 17-2005, Revision: -, Pages: - Drawing No. bg201_cgb_2012-10-10, AutoFlame IR flame detector BG-201, Revision: -, Pages: - Drawing No. bg201_wgb_2012-10-10, AutoFame IR Flame detector BG201-Interactive fire detection systems Mounting Instructions, Revision: -, Pages: - Drawing No. bg201bg21_dgb_2012-10-10, Instructions BG201-BG21 Table of contents, Revision: -, Pages: - Drawing No. bg21_cgb_2012-10-10, AutoFlame IR flame detector BG21 Conventional fire detection sys Product Datasheet, Revision: -, Pages: - Drawing No. bg21_wgb_2012-10-10, AutoFame IR Flame detector BG21-Interactive fire detection systems Mounting Instructions, Revision: -, Pages: - Drawing No. iso_9001_2008_Nemko, Certificate- Autronica Fire n Security AS --NS-EN 150 9001-2008, 11-Oct-2012, BREGlobal, Revision: -, Pages: -

Term of Validity:

This Product Design Assessment (PDA) Certificate 19-LD1819625-PDA, dated 15/Feb/2019 remains valid until 14/Feb/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules:

- Marine Vessel Rules (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4.7.3/11.3.3 (a), 4-8-3/13.3.1, 4-8-4/27.5.1, 4-9-8/3, 4-9-8/7, 4-9-8/13, 4-9-8 Table 1; - Facilities on Offshore Installations (2018): 1-1-4/9.7, 1-1-A2, 1-1-A3 - Mobile Offshore Units (2019): 1-1-4/9.7, 1-1-A2, 1-1-A3, 6-1-1/9, 6-1-1/13; 4-3-1/15, 4-3-1/17, 4-3-1/3.15, 4-3-3/9.1.2 - Steel Vessels for Service on Rivers and Intracoastal Waterways (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-5-1/17, 4-5-1/19, 4-5-1/3.21, 4-5-3/11.1.1 (a) - High Speed Crafts (2019): 1-1-4/11.9, 1-1-A2, 1-1-A3, 4-6-1/15, 4-6-1/17, 4-6-1/3.21, 4-6-3/9.1.1 (a), 4-7-9/Table 9 and Table 10 - Steel Barge Rules (2019): 1-1-4/7.9, 1-1-A3, 1-1-A4

National Standards:

International Standards:

IACS UR E10 Rev.6:2014 SOLAS (Consolidated Edition 2014), II-2/13 IMO FSS Code (2015) Chapter 9 IEC 60092-504:2016 IEC 60533:2015 EN54-10:2002 EN54-17:2005

Government Authority:

EUMED:

Others:

Model Certificate

Model Certificate No

Issue Date

Expiry Date

PDA

19-LD1819625-PDA

15-FEB-2019

14-FEB-2024

ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS

cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.