



Confirmation of Product Type Approval

Company Name: ALFAGOMMA INDUSTRIAL S.P.A.

Address: NUCLEO INDUSTRIALE S. ATTO TERAMO 64020 Italy

Product: Flexible Hose

Model(s): 230 AH

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	24-2484122-PDA	25-JAN-2024	24-JAN-2029
Manufacturing Assessment (MA)	21-5045270	29-NOV-2021	01-DEC-2026
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

Fire main system, water delivery system, fuel and oil systems.

Description

Black rubber tube with high tensile steel cords covered by fiberglass fabric, abrasion, ozone and hydrocarbon resistant.

Treaded or flanged stainless steel or carbon steel fittings.

Ratings

Internal Diameters. 32 mm, 38 mm, 51 mm, 76 mm, 102 mm, 127 mm, 152 mm, 203 mm

Maximum Working Pressure: 20 bar

Fluid Working Temperature: from -30°C to +100 °C

Service Restrictions

- 1) Unit Certification is not required for this product. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- 2) Hoses are to be complete with factory assembled end fittings or factory supplied end fittings installed in accordance with manufacturer's specifications.
- 3) End connections are to comply with applicable requirements and limitation of ABS Marine Vessels Rules (4-6-2/5.5.4, 4-6-2/5.5.5, 4-6-7/3.5.1, and 4-6-7/5.3.2).

- 4) Hose assemblies are to be installed only where flexibility is required, in clearly visible and readily accessible locations, and are not to be subject to torsional deflection under normal conditions; hose length is to be limited to that required by flexibility only.
- 5) Not to be used in high pressure fuel oil injection systems, steam systems or oil supply lines to boilers.
- 6) Not to be used for installations where repeated and/or frequent flexing is expected.
- 7) Marking for Flexible hoses are to be permanently marked by the manufacturer with the following details as per 4-6-2/5.7.6 of the ABS Marine Vessel Rules:
 - a) Hose manufacturer's name or trademark.
 - b) Date of manufacture (month/year).
 - c) Designation type reference
 - d) Nominal diameter
 - e) Pressure rating
 - f) Temperature rating.
- 8) The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006

Comments

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. Flexible hoses are to be completed with factory assembled end fittings or factory supplied end fittings installed in accordance with Manufacturer's specifications.

Notes, Drawings and Documentation

Drawing No. AG Fittings_ABS TypeAppr_230AH_WaterSysFireR_Nov2018, AG Fittings_ABSTypeAppr_230AH_WaterSysFireR_Nov2018, Revision: 0, Pages: 1

Drawing No. AG_ASA150FlangedFitt_SubcompCodes_230AH_nov2018., AG_ASA150FlangedFitt_SubcompCodes_230AH_nov2018., Revision: 0, Pages: 1

Drawing No. Data sheet 230AH rev 1 27-11-2018, Data sheet 230AH rev 1 27-11-2018, Revision: 1, Pages: 1

Drawing No. Fittings carbon steel, Fittings carbon steel, Revision: 0, Pages: 1

Drawing No. Program test prop, Program test prop, Revision: 0, Pages: 1

Drawing No. REQUESTED STANDARDS, REQUESTED STANDARDS, Revision: 0, Pages: 1

Drawing No. TEC 5-U-TA-01 - Material Equivalence specification_97128821_98157114_revisionato, TEC 5-U-TA-01 - Material Equivalence specification_97128821_98157114_revisionato, Revision: 0, Pages: 1

Drawing No. fittings_stainless steel, fittings_stainless steel, Revision: 0, Pages: 1

Drawing No. flanged fittings_subcomponents carbon steel, flanged fittings_subcomponents carbon steel, Revision: 0, Pages: 1

Drawing No. flanged fittings_subcomponents_stainless steel, flanged fittings_subcomponents_stainless steel, Revision: 0, Pages: 1

Test report No. 1042-18 at LAPI Laboratory dated 31 May 2018

Test report No. 1043-18 at LAPI Laboratory dated 31 May 2018

Test report No. 1044-18 at LAPI Laboratory dated 31 May 2018

Test report No. 1045-18 at LAPI Laboratory dated 31 May 2018

Test report No. COMP14122018 at ALFAGOMMA Plant dated 14 Dec 2018

Test report No. 230A-H032-03256 at ALFAGOMMA Plant dated 10 Jan 2019

Test report No. 230AH102-10232 at ALFAGOMMA Plant dated 10 Jan 2019

Test report No. 230AH203-20343 at ALFAGOMMA Plant dated 10 Jan 2019

Data Sheet 230 AH, Revision: 0

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 24/Jan/2029 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules

2024 Rules for Conditions of Classification, 1A-1-4/7.7, 1A-1-A3, 1A-1-A4, which covers the following:

2024 Marine Vessel Rules: 4-6-2/5.7, 4-6-7/3.5.2

2024 Yachts : 4-4-1/9.19

2024 Rules for Conditions of Classification, 1B-1-4/9.7, 1B-1-A2, 1B-1-A3, which covers the following:

2024 Mobile Offshore Units Rules: 4-2-1/11.29

2024 Facilities on Offshore Installations Rules: 3-8/5.1.1(b)vi and 4-8/5.1.1(b)vi

2024 Rules for Conditions of Classification, 1C-1-4/11.9, 1C-1-A2 and A3, which covers the following:

2024 High Speed Craft Rules: 4-4-1/9.19

International Standards

ISO 15540:2016

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



A handwritten signature in blue ink, appearing to read "Joseph W. White".

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 30-Jan-2024 5:03

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 is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. 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.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

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.

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.