



Marine &amp; Offshore

Certificate number: 11446/D0 MED

File number: ACI 2200/002/03

Item number: MED/3.29

This certificate is not valid when presented without the full attached schedule  
composed of 7 sections  
www.veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

## EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2019/1397 of 06 Aug. 2019

This certificate is issued to:

**FENNER MANDALS A/S**

Mandal - NORWAY

for the type of product

**NON PERCOLATING LAY FLAT FIRE-FIGHTING HOSES (RANGE OF THE INSIDE  
DIAMETER FROM 25 MM TO 52 MM)**

Mandals Mertex

### Requirements:

- SOLAS 74 Convention as amended, Regulation II-2/10, X/3
- IMO Res. MSC.36(63)-(1994 HSC Code) as amended, 7
- IMO Res. MSC.97(73)-(2000 HSC Code) as amended, 7
- EN 14540:2014

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

**This certificate will expire on: 09 Apr 2025**


For Bureau Veritas Marine & Offshore Notified Body 2690,

At BV OSLO, on 09 Apr 2020,

Rune MARSTEIN

*Rune Marstein*



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION

#### **Fire hose Mandals Mertex**

#### **Design (uncovered fire hoses only, and over a range of inside diameters from 25 mm to 52 mm)**

- Non-percolating layflat fire hose for fire fighting purposes
- Uncovered, fully synthetic polyester fire hose with a thermoplastic polyurethane (TPU) inner lining

#### **Mandals Mertex**

Inner Diameter (inch)	Inner Diameter (mm)	Mass per Unit Length (Kg/m)	Max. Working Pressure (MPa)	Bursting Pressure (Min. 4.5 MPa)
1-1/2	38,1 + 1.6	0.19	1.5	6.0
2	51,5 + 2.0	0.27	1.5	5.5

### 2. DOCUMENTS AND DRAWINGS

- Manufacturer's technical specifications as provided on 31/03/2020
- Instruction manual dated July 2019

*No departure from the above documents shall be made without the prior consent of the notified body named on this certificate. The manufacturer must inform the notified body of any modification or changes to these documents and drawings.*

### 3. TEST REPORTS

- 3.1 Fire hose type-tested in accordance with EN 14540, witnessed by the notify body.  
 3.2 Test reports dated 09/07/2009 and 02/02/2015 (hot surface resistance test).

### 4. APPLICATION / LIMITATION

- 4.1 Approved as fire hoses of fire fighting for ships having to comply with SOLAS 74 Convention as amended.  
 4.2 The supplier supplying the ship/unit will have to comply with the Rules and the applicable regulations acceptable by the National Authorities of the country in which the ship/unit is registered with respect to the maximum length of the fire hoses and the assembly couplings. The supplier shall make available its instruction manual for installation, use and maintenance.

### 5. PRODUCTION SURVEY REQUIREMENTS

- 5.1 This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.  
 5.2 The manufacturer shall institute quality control procedure in order to ensure that the fire hose is produced to the same standard as the prototype approved one, and to keep records of any production tests carried out in accordance with Regulations stated on the front page of this certificate.  
 5.3 Each fire hose shall be delivered with a declaration of conformity to type issued by the manufacturer.  
 5.4 Each fire hose is to be supplied with its instructions for installation, use and maintenance.

5.2 - For information concerning the production phase modules, **FENNER MANDALS A/S** has declared the following manufacturing site(s):

**FENNER MANDALS A/S: P.O.B.101, Nordre Banegt 26, 4502 Mandal, NORWAY**

## **6. MARKING OF PRODUCT**

Each length of hose shall be clearly and indelibly marked with the following information, at least twice per length:

- Manufacturer's name or logo
- EN standard (number and date)
- Inside diameter
- Maximum working pressure
- Quarter and year of manufacture

Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

## **7. OTHERS**

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper method of fittings and general maintenance of the product and of the conditions of this approval.

*This certificate supersedes the EC Type-Examination Certificate No. 11446/C0 EC issued by the Society.*

**\*\*\* END OF CERTIFICATE \*\*\***