

Marine & Offshore Division

Certificate number: 37395/A0 BV File number: ACI 5000/37/1

Product code: 5700l

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

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

Unifire AB

KUNGÄLV - SWEDEN

for the type of product

WATER FIRE MONITORS

UNIFIRE FORCE 50, UNIFIRE FORCE 80

Requirements:

SOLAS 74, as amended, Consolidated edition 2009 chapter II-2 Bureau Veritas Rules Part C Chapter 4 and Part D Capter 16 section 3

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 11 Apr 2021

For BUREAU VERITAS,

At BV GOTHENBURG, on 11 Apr 2016, Magne MOLLER

Mayer H



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. 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. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division 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 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.

Certificate number: 37395/A0 BV

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Water/foam monitor UNIFIRE FORCE 50, remote control operated. Water/foam monitor UNIFIRE FORCE 80, remote control operated.

Foam Monitor type manufacturer ref.	UNIFIRE FORCE 50	UNIFIRE FORCE 80
Max working Pressure	12 bar	12 bar
Nominal operating pressure	10 bar	10 bar
Maximum operating capacity	2100 l/min	5500 l/min
Maximum throw length /operating pressure/ capacity	47 m/10 bar/2000 l/min at 9° elevation	70 m/10 bar/5000 l/min at 33,5° elevation
Horizontal range of rotation	340°	340°
Vertical range of rotation	- 90° / + 90°	- 90° / + 90°
Base flange connection	DN 65	DN80 or 100
Weight (approx.)	19 kg	30 kg

The body of monitors, screws and bolts are built with stainless steel material.

2. DOCUMENTS AND DRAWINGS:

Foam Monitor type	UNIFIRE FORCE 50	UNIFIRE FORCE 80
Drawing - Chassis udv Assembly	3900302-Gsheet 1 to 3	5800302-G sheet 1 to 3
Drawing - Helical Gear	INTEG 50 Nozzle 3800402-G sheet 1 to 3	INTEG 80 Nozzle 3800401-G sheet 1 to 3
Manual and operating instruction	(2013-Rev1)	(2013-Rev1)

3. TEST REPORTS:

Manufacturer test report n°4P02373 issued by society "UNIFIRE AB" dated 20/05/2014, as per in-house tests under witness of BVsurveyor.

4. APPLICATION / LIMITATION:

- 4.1- The UNIFIRE FORCE monitor is approved for installation on ships built with the additional class notation "Fire fighting ship E"in water system.
- 4.2- The monitor is capable of remote and local control.
- 4.3- The control system is to comply with the relevant provisions of BV Rules Part C Chapter 3 Section 1 and Section 2.
- 4.4- The monitor supports onboard are to be of robust construction and capable of withstanding the reaction forces of the water jet.
- 4.5- Monitors shall be tested when fitted and characteristics found in compliance with BV Rules Chapter 16.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The "UNIFIRE FORCE 50" and "UNIFIRE FORCE 80" are to be supplied by "UNIFIRE AB" in compliance with the type and the requirements described in this certificate.
- 5.2 This type of product is within the category IBV of Bureau Veritas Rule Note NR320.
- 5.3 BV product certificate is required.

Certificate number: 37395/A0 BV

6. MARKING OF PRODUCT:

The product is to be permanently marked with the following information:

- Trade name and serial number.
- BV marking, and as far as practicable, the reference to the approval number.

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 methods of fitting and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***