



**EC TYPE EXAMINATION (MODULE B)  
CERTIFICATE No. MED438421CS/001**

***This is to certify*** that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Life-Saving appliances requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2021/1158.

<i>MED Item N°</i>	<b>MED/1.9</b>
<i>USCG Category N°</i>	<b>160.121</b>
<i>Description</i>	<b>Hand flares (pyrotechnics)</b>
<i>Type</i>	<b>ELIOS - FDF</b>
<i>Applicant</i>	<b>F.D.F. SRL</b> VIA FRANCHI PEZZE 18 82017 PANNARANO (BN) ITALY
<i>Testing standards</i>	<b>IMO Res. MSC.81(70), as amended; ISO 15736: 2006.</b>
<i>Reference standards</i>	<b>SOLAS 74 Reg. III/34, IMO Res.MSC.36(63)-(1994 HSC Code) 8, IMO Res.MSC.48(66)-(LSA Code) I, IMO Res.MSC.48(66)-(LSA Code) III, IMO Res.MSC.97(73)-(2000 HSC Code) 8.</b>

*Issued in Genoa on*  
July 26, 2022

*This Certificate is valid until*  
July 25, 2027

*This Certificate consists of this sheet plus an attachment*

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**Giovanni Carratino**

*RINA Services S.p.A.*



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*Manufacturer*

**F.D.F. SRL**

*Place of Manufacturer*

VIA FRANCHI PEZZE 18 82017 PANNARANO (BN) ITALY

*Name & place of Authorised Representative*

Antonello De Renzi

ITALY

**Product description**

Metallic cylindrical case with plastic made handle (fixed or sliding type) having the following dimensions:

Total length with fixed handle	246 ± 1mm
Total length with sliding handle	215/325 ±1mm
Diameter of plastic fixed handle	30 ±1mm
Diameter of plastic sliding handle	32 ±1mm
Weight	0,260 kg
Burning time	more than 60 sec.
Luminous intensity	greater than 15,000 cd
Colour	bright red

**Reference documents**

General Arrangement drawing issued by FDF Srl approved by RINA with n° CSST-20399 (dated 26/07/2022) and CSST-20400 (dated 26/07/2022).

Technical specification issued by FDF Srl and filed by RINA with n° CSST-20402.

**Tests carried out**

Tests carried out in accordance with IMO Res.MSC81(70) as amended and ISO 15736:2006, filed by RINA with n. CSST-20403.

Drop test 3.2.7.1 issued by RINA on 27/04/2009 and filed with n° 2009 NA 741.

**Remarks**

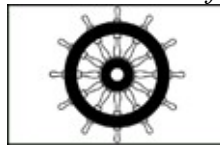
Luminous intensity in compliance with MSC 81(70) as amended by Res MSC.226 (82), par 4.7.2, and ISO 15736-2006, par 5.2.2.

Each signal shall be permanently marked with the date (month and year) of manufacture.



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*The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body*



**XXXX/YYYY**

**"WHEELMARK FORMAT"**

**XXXX**      *Notified Body number undertaking surveillance module*

**YYYY**      *The year in which the mark is affixed*

**USCG Approval marking**

This equipment is covered by the scope of the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment signed February 27th, 2004 and amended by Decision No. 1/2018 dated February 18th, 2019 according to U.S. Coast Guard approval category **160.121**.

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F) as allowed by the MED.

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***General conditions for the approval***

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reappraised prior to it being placed on board vessels to which the amended regulations or standards apply.

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**Giovanni Carratino**