

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Fire-fighting hoses – Non-percolating lay flat firefighting hoses (range of the inside diameter from 25 mm to 52 mm)

with type designation(s)
HIGHFLOW

Issued to

Shanghai PengChen Fire-Fighting Equipment Co., Ltd.
Shanghai, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2020/1170**,
item No. MED/3.29. SOLAS 74 as amended, Regulation II-2/10 & X/3, 2000 HSC Code 7 and EN 14540:2014

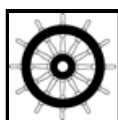
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-11-22**.

Issued at **Hamburg** on **2020-11-23**

DNV GL local station:
Nantong

Approval Engineer:
Andrii Pishchanskyi



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Uncovered non-percolating lay flat fire-fighting hose consist of the following:

Item	Description
Jacket	Polyester
Lining	Polyvinyl chloride (PVC)

The fire-fighting hose has the following specification:

Parameter	Value
Inside diameter	38 mm 45 mm 52 mm
Normal working pressure	1.0 MPa
Maximum working pressure	1.5 MPa
Proof pressure	2.25 MPa
Burst pressure	4.5 MPa

Application/Limitation

Approved for discharging water from the fire main by using the fire hoses (SOLAS II-2/10.2.3 and 2000 HSC Code/7.7.8.5) except for hose reels.

The fire-fighting hose is intended for use at ambient temperature range -30 °C up to + 60 °C.

Production and batch tests to be performed in accordance with EN 14540:2014 §7.

Each product is to be supplied with its manual for installation, maintenance and use.

Type Examination documentation

- Test reports Nos.:
 - 0018\DC\EST\14 Rev.2 dated 2014-11-03 from CSI;
 - 0018\DC\EST\14\2 Rev.2 dated 2014-11-03 from CSI;
 - 0025\DC\EST\14_3 dated 2014-11-03 from CSI;
 - Survey report dated 2020-11-10;
- CSI statement of compliance (email confirmation dated 2015-10-13);
- Product data sheet dated 2020-11-09.

Tests carried out

Tested according to EN 14540:2014.

Marking of product

The products are to be marked according to EN 14540 (2014) §8 and with the MED Mark of Conformity (see page No. 1).