

# 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 Dual-purpose type nozzles (spray/jet type)**with type designation(s)  
**QD12, QD16, QD19**

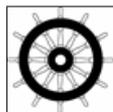
Issued to

**Nantong Haizhou Marine Equipment Co.,Ltd.  
Haimen, China**

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

Regulation **(EU) 2015/559,****Annex A.1, item No. A.1/3.55 and Annex B, Module B in the Directive; SOLAS 74 as amended  
Regulation II-2/10 & X/3, 1994 HSC code 7 & 2000 HSC code 7**

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

This Certificate is valid until **2021-11-20**.Issued at **Hamburg** on **2016-11-21**DNV GL local station:  
**Nantong CMC**Approval Engineer:  
**Michael Kämpf**Notified Body  
No.: **0098**for **DNV GL SE**.....  
**Sven Dudzus**  
**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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

Job Id:  
Certificate No: **MEDB00001RZ**

## Product description

Dual-purpose spray/jet nozzles of type QD12, QD16 and QD19 for discharging water from the ship's fire main by using fire hoses.

The maker's designation for the nozzles is "water fog / water column dual-use nozzles".

Material: Aluminium alloy (nozzle), brass (coupling)

Max. working pressure: 16 bar (1.6 MPa)

Performance data @ 2.7 bar (0.27 MPa):

Type	QD12	QD16	QD19
Flow rate [m <sup>3</sup> /h]	13.2	18	27
Ejection distance of water jet [m]	18	21	23

## Application/Limitation

Approved for discharging water from the fire main when coupled to fire hoses (SOLAS II-2/10.2.3.3.4 and 2000 HSC Code, 7.7.5.6).

## Type Examination documentation Tests carried out

Tested according to EN 15182-1 (2007) incl. A1(2009) and EN 15182-3 (2007) incl. A1(2009).

## Marking of product

The products are to be marked with the MED Mark of Conformity (wheel mark). This mark shall be followed by our identification number 0098 and by the number of the year in which the mark is affixed. Besides, all data required by paragraph 8.2 of EN 15182-1 should be marked on the products.