

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Helicopter facility foam fire-fighting appliances

with type designation(s)

BP-R - Balanced Foam Proportioners

Issued to

Matre Maskin AS

Rubbestadneset, Norway

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

Regulation **(EU) 2018/773**,

item No. MED/3.67. SOLAS 74 as amended, Regulation II-2/18 and IMO MSC.1/Circ.1431

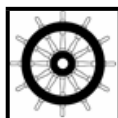
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-01-31**.

Issued at **Høvik** on **2019-02-01**

DNV GL local station:
Haugesund

Approval Engineer:
Helge Bjørnara



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Product description

BP-R – Balanced Foam Proportioner

Matre's Balance Foam Proportioners come in six sizes (BP20R, BP30R, BP40R, BP60R, BP80R and BP100R) and two variants (fixed and adjustable insertion rate).

The proportioners are manufactured at the premises of Matre Maskin AS, Rubbestadneset, Norway.

Application/Limitation

Approved for use as a foam proportioners in helideck foam fire-fighting systems.

Type	Insertion rate	Flow range [l/min]	Working Pressure ¹⁾ [bar]	Item No.
BP20R	1%, 3%, 6%, 1-6%	350 - 1200	5-16	12042, 12043, 12044, 12045
BP30R	1%, 3%, 6%, 1-3%	1000 - 3800	5-16	11570, 11590, 11648, 11591
BP40R	1%, 3%, 6%, 1-3%, 1-6%	1600 - 6500	5-16	11356, 11584, 11649, 11354, 11760
BP60R	1%, 3%, 6%, 1-3%, 1-6%	3500 - 13500	5-16	11562, 11597, 11650, 11598, 11761
BP80R	1%, 3%, 6%, 1-6%	6100 - 23500	5-16	11644, 11645, 11651, 11638, 12121, 12122
BP100R	1%, 3%, 6%, 1-3%	8500 - 33500	5-16	12024, 12025, 12008, 12031

1) Rated pressure for BP-R is 20 bar.

Location and use of foam proportioners are subject to case by case approval. Final acceptance of the foam system, including foam proportioner, is to be made based on full-scale test of the entire foam system.

The housing of each foam proportioner shall be subjected to a hydrostatic pressure test at minimum 1.5 times the design pressure. No leakage is permitted.

Each product supplied is to be accompanied works certificate for the proportioner including materials used in the body, indicating mechanical and chemical properties and heat treatment.

Each product supplied with it manual for installation, use and maintenance.

Site test

Function testing of each foam proportioner shall be performed for each installation. The mixing ratio shall be as specified in each application and within a range of -0% to +30% of this (if the specified mixing ratio is 3.0%, test results between 3.0 and 3.9% will be accepted).

For foam proportioners using foam concentrates of Newtonian type with kinematic viscosity equal to or less than 100 cSt @ 0 °C and density equal to or less than 1.1 kg/dm³, this test can be performed with water instead of foam concentrate. In all other cases, foam and water shall be applied.

The flow used in the test shall be representative for application and within the approved flow range.

Type Examination documentation

Tests carried out

The proportioners are tested as proportioners according to EN 13565-1 (2003) including A1 (2007); Discharge, Accuracy, Corrosion, Leak and Mechanical tests.

Marking of product

The product or packing is to be marked according to EN 13565 (2003) + A.1 (2007) Section 11 and the MED Mark of Conformity.