

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Watertight Door**with type designation(s)
Watertight Hinged Steel Door type BOH.0345

Issued to

BOHAMET S.A.
Biale Blota, Polandis found to comply with
DNVGL-OS-C301 – Stability and watertight integrity
DNV GL rules for classification – Ships**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2019-03-07**This Certificate is valid until **2024-03-06**.for **DNV GL**DNV GL local station: **Gdansk CMC**Approval Engineer: **Tomasz Kapella**

Arild Rogne
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

These watertight doors are made of steel plate, and are hinged doors.

Model name:	Min < Height < Max Min < Breadth < Max	Number of toggles
Model I	$1700 \leq H \leq 2000$ $800 \leq B \leq 1000$	14
Model II	$1700 \leq H \leq 2000$ $600 \leq B < 800$	12
Model III	$1400 \leq H < 1700$ $800 \leq B \leq 1000$	12
Model IV	$1400 \leq H < 1700$ $600 \leq B < 800$	10
Model V	$1000 \leq H < 1400$ $800 \leq B \leq 1000$	10
Model VI	$1000 \leq H < 1400$ $600 \leq B < 800$	8

NOTE: Dimensions of doors can be smaller than shown in the table, as long as distance between cleats and spacing of stiffeners is equal to or less than values shown on provided drawings. "

Application/Limitation

The door has been Type Approved with respect to watertightness only.

The watertight doors are found to comply with DNVGL-RU-SHIP Pt.3 Ch.12 Sec.3 (July 2018) and DNVGL-OS-C301 (January 2018) Ch.2 Sec.2 "3 Watertight integrity" for maximum design pressure of 1.5bar.

The Type Approval does not cover the supporting structure of the doors, which is subject to separate approval. Interface showing door frame and bulkhead shall be submitted for case-by-case approval by yard/end user.

Particular consideration shall be given if located in highly stressed areas or in areas critical to fatigue from global hull loads.

Each door is to be hydraulically tested from the side which is most prone to leakage to design pressure at the manufacturer. (Please note that for offshore structures the door must be tested for a pressure equal to design pressure + 50 kN/m²).

The tests are to be witnessed by a DNV GL surveyor.

The complete door installation is to be operationally tested onboard.

Type Approval documentation

Basis for approval is document numbered BOH.0345 rev.3 and corresponding strength evaluation provided by Bohamet S.A.

Drawing title	Drawing number	Revision
Water tight steel door up to 1.5bar type BOH.0345	BOH.0345	3
Method of welding elements of door leaf	BOH.0345.PS	1
Simulation of watertight door up to 1.5 bar A60 class	Date 2019-02-22	1
Bolt	DU.000.267.02	0

Tests carried out

Prototype test has been carried out on 05.11.2014 in presence of DNV GL surveyor.

Marking of product

Marking of product shall include the following information:

Job Id: **262.1-018713-2**
Certificate No: **TAS00001W8**

- Manufacturer's name or brand
- DNVGL Type Approval Certificate No. TAS00001W8
- Type designation
- Max allowable design pressure as specified above

Periodical assessment

DNV GL' surveyor has the permission to perform Certification Retention Survey at any time during the validity period of this certificate.

Periodical assessment will be required after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.