



Certificate No:
TAS000037R

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Watertight Door

with type designation(s)
SWT sliding door

Issued to

Parmarine Oy
LEPPÄVIRTA, Finland

is found to comply with

DNV rules for classification – Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2021-10-18**

This Certificate is valid until **2024-06-30**.

DNV local station: **Finland NB**

for **DNV**

Approval Engineer: **Xiaolu Wu**

.....
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Form code: TA 251

Revision: 2021-03

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Product description

These watertight doors are made of mild steel and they are sliding doors.

Application/Limitation

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

Door size:

Height (mm)	Width (mm)	Design pressure (kN/m ²)
2000	1400	26
2000	1500	17,5
2000	1600	14,5
2000	2300	12

The watertight doors are found to comply with DNV-RU-SHIP Pt.3 Ch.12 Sec.3 (July 2021) for the maximum design pressures specified above.

The door is not to be used in exposed positions. Indoor use only.

The Certificate is valid for doors located above the bulkhead deck and within the residual stability range on passenger ships.

The Certificate is also valid for doors that becomes immersed by the intermediate or final damage waterline and that are located above the bulkhead deck on passenger ships, provided the doors are kept normally closed at sea.

Type Approval does not cover the support of the doors in the bulkheads, which is to be submitted by yard/end user for a case-by-case approval. Particular consideration shall be given if located in highly stressed areas or in areas critical to fatigue.

Indication showing whether the door is open/closed shall be fitted on the bridge of the vessel.

The hydraulic system, control system and fire safety of the watertight door are to be approved on a case by case basis, unless a valid DNV type approval certificate/product certificate for these items is presented by the manufacturer.

Installation procedures to be in accordance with manufacturer's procedures for the door specified.

Type Approval documentation

Drawing no. LA60LWT_0002.

Tests carried out

Test report dated 2010-04-27 and 2021-06-29 witnessed by DNV local station in Helsinki.

The test is accepted as a prototype test in accordance with DNV-RU-SHIP Pt.3 Ch.12. Sec. 1, 3.3.3 with the reference to SOLAS chapter II-1 regulation 16.2.

Marking of product

- Manufacturer's name or brand
- DNV Type Approval Certificate No. **TAS000037R**
- Product Certificate Number
- Maximum Allowable Pressure

Certificate retention survey

DNV 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 DNV-CP-0338.