

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class A Door

with type designation(s)
A-0 Fire Door (Type: 124YS01-20-00)

Issued to

Nanjing Lishui YiSheng Ship Fittings Factory
NANJING, JIANGSU, China

is found to comply with
DNV GL offshore standards
DNV GL rules for classification – Ships
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations

Application :

Approved for use as an integrated part of fire retarding divisions of class A-0.

This certificate is recognized by Transport Canada.

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

Issued at **Hamburg** on **2018-04-24**

This Certificate is valid until **2023-04-23**.

DNV GL local station: **Nanjing**

for **DNV GL**

Approval Engineer: **Timo Linn**

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Jörg Kallies
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

"A-0 Fire Door (Type: 124YS01-20-00)"

consisting of a single leafed hinged door. The door leaf is composed of 3 mm steel plate, 50 mm ceramic wool insulation of type TG-II from Yixing City Yunlun Insulation Material Co., and 8 mm steel plate. The door leaf is made with a continuous 38 mm wide and 32 mm deep groove around the door leaf, and the groove is fitted with sealing rubber strips. Four evenly distributed stiffeners is fitted inside the door leaf. The door is fitted with three hinges, and a hand wheel interlocked to 6 pcs of latch locks.

The frame is made of 10 mm and 6 mm thick steel, and is welded to the bulkhead. Fire proof sealing strips is fitted inside the frame.

The door may be fitted with a 12 mm thick window of type Cesium Potassium glass from Yixing Yushi Special Glass Co. Maximum size of door leaf: 1064 mm x 2164 (w x h).

Maximum size of clear opening of window: 300 mm x 400 mm (w x h).

Total door leaf thickness is 61 mm.

For further details, see drawings in test report listed under Type Approval documentation below.

Application/Limitation

The door is approved for installation in steel bulkheads of class A-0. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Max. clear opening: 1000 mm x 2100 mm (w x h).

Note that this is a fire safety certificate which only covers fire technical properties (i.e. not to cover strength evaluations related to watertightness, weathertightness, etc.).

Any surface materials used on door leaf and door frame have to be approved for smoke and toxicity and low flame-spread characteristics (IMO FTP Code Annex 1 Parts 2 and 5) when required according to relevant rules.

External windows to comply with ISO 3903 (Ref. DNV Rules Pt. 3, Ch. 3, Sec. 6 L201).

Door with window shall not be installed in the boundaries of category A machinery spaces.

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

Type Approval documentation

Certification in accordance with Standard for Certification No. 1.2, Type Approval, April 2009.

Test Report No. FT12288 dated 23 November 2012 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing No. 124YS01-20-00 Rev. A, 124YS01-20-01 Rev. A, 124YS01-20-02 Rev. A, 124YS01-20-03 Rev A.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product is to be marked with name of manufacturer, type designation and fire-technical rating.

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the products listed in this certificate are in accordance with Transport Canada's requirements.



Job Id: **262.1-014239-2**
Certificate No: **TAF00000WA**

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.