



CERTIFICATE OF TYPE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer Leaffield Marine Limited

Address 9 Atworth Business Park
Bath Road
Atworth
SN12 8SB
United Kingdom (UK)

Product Type **A10B** Pressure Relief Valve, Pressure Range 1 to 4 psi
A10B Non-return/Transfer Valve, Pressure Range 0.25 to 4 psi
B10 Pressure Relief Valve, Pressure range 1 to 4 psi
B10 Non-return/Transfer Valve, Pressure range 0.25 to 4 psi

Product Description **Pressure Relief Valve covering the pressure relief range 1 to 4 psi -**
Type: "B10PG-XXX" and non-plug Type "B10ST-XXX"
Type: "A10BPG-XXX" and non-plug Type "A10BST-XXX"
Non Return/Transfer Valve covering the pressure range 0.25 to 4 psi -
Type: "B10PG-XXX", non-plug type "B10ST-XXX" and non-plug type "A10BST-XXX"

Specified Standards IMO Resolution MSC.81 (70), Part 1 as amended
ISO 15738:2002, ISO 9650-1:2005, ISO 9650-2:2005.

The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Date of issue 18 March 2019

Expiry date 17 March 2024

Certificate No. SAS S190060

Signed

Sheet No 1 of 3

Name

L. Thomas
Surveyor to Lloyd's Register EMEA
A Member of the Lloyd's Register Group

Note:

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid certificate.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



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DESIGN APPRAISAL DOCUMENT

Date 16 July 2019	Quote this reference on all future communications UKITSO/LSA/TA/LT/WP35180973
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S190060

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

This Certificate is a renewal of Certificate No SAS S140023

EXAMINED DOCUMENTATION

<u>Title:</u>	<u>Reference:</u>	<u>Rev.:</u>	<u>Date:</u>
B10 Valve Section Chart	0802003	3b	03/04/17
Instruction Sheet for the B10 Pressure Relief Valve	0901003	1c	18/07/18
A10B Valve Standard Type Selection Chart	1110002	1	24/11/11
A10B valve Low Profile Type Selection Chart	1110003	1	24/11/11
A10B Valve Plug Type Selection Chart	1110005	1	24/11/11
Instruction Sheet for Pressure Relief Valve A10B Standard	1208001	1	2012
Instruction Sheet for Pressure Relief Valve A10B Low Profile	1208002	2	2014

Test procedure for statutory approval of Pressure Relief Valve and Non-Return/Transfer Valve Assemblies, Type B10 Series, Report No M-07-TP-1B10 Rev. 02 dated November 2008.

Test procedure for statutory approval of Leaffield Marine Ltd Type A10B-Series Pressure Relief Valves, Report No M-07-TP-1A10B Rev. 02 dated January 2012.

TEST REPORTS

<u>Report Title:</u>	<u>Report No.:</u>	<u>Date:</u>
Test Report for statutory approval of B10 Pressure Relief and Non Return/Transfer Valve Assemblies, Type B10 Series witnessed by Lloyd's Register Surveyor.	M-07-TR-1B10, Rev. 01	Dec./08
Report of Statutory Approval Testing "M-07-TR-1A10B" Rev. 01 of Leaffield Marine Ltd. Type A10B-Series Pressure Relief Valves and B10 Diaphragm 18670, dated 02.02.2012 as witnessed by Lloyd's Register Surveyor.	M-07-TR-1A10B, Rev. 01	02.02.2012

CONDITIONS OF CERTIFICATION

1. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply
2. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5



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- Production tests are to be conducted in accordance with the applicable requirements of IMO Resolution MSC.81 (70), Part 2 and each item, batch, or lot be delivered with an LR Certificate of SOLAS Production Testing issued by the attending LR Surveyors following their witness of the tests. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration
- Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained

NOTE: Valves suitable for inflatable liferafts for small crafts used for leisure activities are tested to ensure compliance with BS ISO 9650-1:2005, 9650-2:2005.

PLACE OF PRODUCTION

Leaffield Marine Limited.
9 Atworth Business Park
Bath Road
Atworth
SN12 8SB
United Kingdom (UK)



Lijo Thomas
Senior Specialist
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).