



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, Wiltshire, SN12 8SB, United Kingdom
Type	Gas Inflation System
Description	Gas Inflation System for inflatable lifesaving appliance in conjunction with D912101 Standard Operating Head with plastic clamp and a 30mm pull cable.
Trade Name	0140000 and 1205005 Servo Operating Head Assembly
Specified Standard	ISO 15738:2019

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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

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.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Marina Borglin

Fire & Safety - Assistant Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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DESIGN APPRAISAL DOCUMENT

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Certificate No:

LR26158882SS

Reference: UKITSO/LSA/TA/MB/TSO/26-058630/PRJ111005121250

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR26158882SS

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 Supersedes and is a Renewal of Certificate Number LR21181324SS

APPROVAL DOCUMENTATION

User Manual for Gas Inflation System with Servo Operating Head System Clamp Type, M-07-UM-GISSERVO(C) Rev 02, dated March 2013.

User Manual for Gas Inflation System with Servo Operating Head System Thread Mounted Type, M-07-UM-GISSERVO(T) Rev 05, dated 17/03/2015.

<u>Plan/Doc No.</u>	<u>Rev</u>	<u>Date</u>	<u>Title or Description</u>
0140000	06b	26/04/2013	Servo Head assembly
0201002	01d	26/04/2013	Servo Operating Head Assembly (Type A)
D91-210-SERIES	2b	14/04/2005	Operating Head Assembly (D912101)
0912001	01	03/12/2009	Servo Adapter Assembly
0912002	01a	23/04/2013	GIS Servo system (Ungauged – 2 x 4 Bottle Systems)
0912003	01a	12/06/2012	Servo Operating Head Assembly (Type B)
1205005	01a	11/03/2013	Servo Operating Head Assembly – Thread Mount
17123	04a	20/03/2009	Cylinder (Machined)
17124	02	02/04/2002	Piston
17125	01	18/04/2001	Collar
17126	02a	23/03/2010	Spring
17147	04	04/04/2002	Cylinder (plated)
17163	01b	09/03/2011	Servo Adapter Body (Machined)
17167	01a	23/12/2010	Servo Adapter Body (Plated)
18933	01c	07/07/2020	Cylinder - Servo
18934	01	12/06/2012	Piston - Servo
18935	01	14/05/2012	Collar Servo
19014	01	14/03/2013	Label

TEST REPORTS

<u>Report Title or Report Author</u>	<u>Report No.</u>	<u>Date</u>
Test Procedure for Statutory Approval Testing of LML Sero Head Assembly (Part No. 0140000)	M-07-TP-7GIS REV 02	16/11/2010
Test Report for Statutory Approval Testing of LML Sero Head Assembly (Part No. 0140000)	M-07-TR-7GIS REV 01	16/05/2011

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR26158882SS

Report on the Statutory Approval Testing Leaffield Marine Ltd. Servo
Operating Head Assembly (Part no. 1205005)

M-07-TR-14GIS REV 01

29/05/2013

CONDITIONS OF CERTIFICATION

1. The Maximum working pressure for the Servo is 450 bar.
2. The Minimum capacity of the master cylinder to be 2.7 litre water capacities.
3. The servo operating head is not to be used as a standalone operating head, but only to be used in conjunction with Leaffield Marine Limited operating head (part no D912101) as shown in drawing no D91-210-SERIES, the system is approved only for use in inflatable lifesaving arrangements on ships.
4. The Servo Heads are only approved for use on inflatable marine lifesaving appliance.
5. The Servo Heads are only to be used and maintained in accordance with the user Manual M-07-UM-GISSERVO(C) for the head with clamp and M-07-UM-GISSERVO(T) for the Servo head with thread. The Manual will be supplied to each customer and will clearly state limitations.
6. If more than 4 servo's are to be used on the system, then design advice should be sought from Leaffield Marine Ltd.
7. 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.
8. The final determination of suitability of a system shall be made on the basis of testing the end product in which the system is to be used. The suitability of any component covered by this certificate is generally dependent upon its relationship to the size, number and arrangement of the other components of the system in the end product.
9. If the specified standards be amended during the validity of this certificate, this product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
10. 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.



ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR26158882SS

PLACE OF PRODUCTION

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

Marina Borglin
Technical Assistant 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)