



Marine & Offshore

Certificate number: 04795/G0 BV

File number: AP 1014

Product code: 3741H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

Delta Mobrey Ltd
Farnham - UNITED KINGDOM

for the type of product

LEVEL TRANSMITTERS

S01**B/F, S03**BL/F, S179**B/F, S183**BL/F, S187**BL/F, S189**B/F, S195**BL/F, S163*L/F, S181*/F.

Requirements:

BV Rules for the Classification of Steel Ships.

EC Code : 31

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 21 Feb 2027

For Bureau Veritas Marine & Offshore,

At BV LONDON, on 21 Feb 2022,

Spencer Yule



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=dupapgilxq>

BV Mod. Ad.E 530 June 2017

This certificate consists of 4 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation :

S01B/F, S03**BL/F, S179**B/F, S183**BL/F, S187**BL/F, S189**B/F, S195**BL/F, S163*L/F, S181*/F**

Legend:

*Indicates if Single Pole Single Throw switch (D) is fitted with either Silver or Gold Plated Silver contacts (P)

**Indicates if Single Pole Single Throw switch (D) or Double Pole Changeover switch (D6) is fitted with either Silver or Gold Plated Silver contacts (P or P6).

/= Any one of the following Float assemblies can be fitted to the above switches - F21 ; F68 ; F84 ; F93 ; F96 ; F98 ; F101; F104 ; F106 ; F107 ; F185 ; or F264.

- Product description:

Float Level Switches

1.1 - Technical Specification

Aluminium Bronze Wetside Models

Enclosure and Wetside	Aluminium bronze to BS1400 - AB1 maximum iron content 2.5%
S01 End Cap	Aluminium to BS1490 LM24 or BS1400 DCB3
Maximum Process Temperature	210°C
IP	66/68 (30 Meters)
Switch Mechanism Specifications	
D and D6	
Contact Material:	Fine Silver
P and P6	
Contact Material:	Gold Plated
D and D6, P and P6	
Process Temperature:	-30 to 400°C
Ambient Temperature:	-30 to 70°C
Maximum Voltage V:	440V AC / 240V DC
Maximum Current A:	5 A AC / 1A DC
Maximum Power:	2000VA / 35 Watts

Types: S183, S187,189 Range of Flameproof Level Switches

Classification: Ex db T6...T2 Ga/Gb

2. DOCUMENTS AND DRAWINGS:

2.1 - Drawings:

For F0 version:

- Drawing 71097/641 issue 2, dated Feb 28, 2013 (supersedes 71097 / 794)
- Drawing 71097/836 issue 4, dated Feb 28, 2013 (supersedes 71097 / 795)
- Drawing 71097/633 issue 4, dated Feb 28, 2013 (supersedes 71097 / 796)
- Drawing 71097/837 issue 4, dated Feb 28, 2013 (supersedes 71097 / 966)
- Drawing 71097/642 issue 3, dated Feb 28, 2013
- Drawing 71097/1171 issue AE, dated Feb 29, 2016
- Drawing 71097/1172 issue AG, dated Feb 29, 2016
- Drawing 71097/1173 issue 2, dated Feb 28, 2013
- Drawing 71097/1171 issue AG, dated Sept 06, 2017
- Drawing 71097/633 issue E, dated Feb 28, 2013
- Drawing 71097/1172 issue AH, dated April 04, 2017
- Drawing 71097/836 issue AE, dated Aug 12, 2019
- Drawing 71097/641 issue AC, dated Aug 12, 2019
- Drawing 71097/1173 issue E, dated Aug 12, 2019

For G0 version:

- Drawing No. 71097/633, dated 21/01/2021.
- Drawing No. 71097/642, dated 25/01/2021.
- Drawing No. 71097/1173, dated 21/01/2021.

2.2 - Documents:

- Specification sheet dated Feb. 2006.
- Mobrey Instruction Leaflet - M310-1
- Mobrey Safety Instructions - M3101/SI
- Mobrey Sales Leaflet -IP101
- Mobrey Sales Leaflet - IP101 Supplement

For F1 version:

- Product Data Sheet No. IP101, Rev EC, dated Mar. 2019.
- IACS UR-E10 Rev.7 Compliance, dated Nov. 05, 2019.

For G0 version:

- Technical Data Sheet- MHL5W, Rev A, dated April, 2021.
- Technical Data Sheet- MHL5M, Rev A, dated April, 2021.
- IACS-UR, Test Specification for Type Approval, 14/02/2022.

3. TEST REPORTS:

- 3.1 - Test report N° 2407 from Bestobell.
- 3.2 - Mobrey Test report N° 4402 dated 12/01/06
- 3.3 - SIRA Ex certificate N°06ATEX1115X Issue 2 dated July 2011.
- 3.4 - SIRA Assessment report N°: R51A14409A
- 3.5 - SIRA Assessment report N°: R24918A/00 dated July 2011.

For F0 version:

- SIRA Assessment report No: R70055264A, dated Mar 2016.
- SIRA Assessment report No: R70011346A, dated Sep 2014.

For F1 version:

- SIRA Ex certificate N°06ATEX1115X Issue 8 dated 15 Oct 2019.

For G0 version:

- Approval Report No. AR1047, dated 21 Jan 2010.

4. APPLICATION / LIMITATION:

- 4.1 - BV Rules for the Classification of Steel Ships.
- 4.2 - Approval also valid for ships to be granted with the notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3- BUREAU VERITAS, Environmental Category, **EC Code: 31**
- 4.4 - Above magnetic Level Switches, may not be used for oil and liquid fuel tanks on board passenger ships where penetration below tank top would be necessary.
- 4.5 - Ex-certification is not covered by this certificate, Applications in hazardous areas are to be approved in each case according to the Rules and Conditions for Safe Use specified in a valid Ex-Certificate issued by a Notified or Recognised Certification Body.
- 4.6 - The equipment complies with the test requirements of IACS E10 Rev.7.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **Delta Mobrey Ltd** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 - **Delta Mobrey Ltd** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 - **Delta Mobrey Ltd** has declared to Bureau Veritas the following production site(s):

Delta Mobrey Ltd
158 Edinburgh Avenue
Slough
Berkshire
UNITED KINGDOM

6. MARKING OF PRODUCT:

- 6.1 - Trade name.
- 6.2 - Year of manufacture, if not, part of serial number.

6.3 - Equipment type or model identification under which it was type-tested.

6.4 - Ex marking as relevant.

7. OTHERS:

7.1 - It is **Delta Mobrey Ltd**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No.: 04795/F1 BV issued on 02 Jan 2020 by the Society.

***** END OF CERTIFICATE *****