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|------------------|-------------------------|--------------------|-------------------|
| Customer Name    | SKIPPER ELECTRONICS A/S | Purchase Order No. | PWO 110973/110974 |
| Attending Office | Oslo                    | Report Number      | OS3682338         |
| First Visit Date | 05-Jun-2019             | Last Visit Date    | 10-Jun-2019       |

**Certification Of:** Shell Valve Diam. 65 mm Quantity: One(1)  
Manufacturer: SKIPPER ELECTRONICS A/S

**Survey Location:** Oslo, Norway

## Equipment Data

Manufacturer Number(S. No.) 19158  
Model Number SB-60-SA

## Design Details

Design State Product Design Assessed  
ABS Reviewing Organization London Engineering Department  
Drawing Number 17-LD1648327-PDA

## Additional Data

ABS Stamping ✕ OS3682338-A  
Valve Size 65  
Valve Material Stainless Steel - High Strength Steel - NOT SPECIFIED - NOT SPECIFIED  
Design Pressure 5 bar

**This is to Certify** that the undersigned surveyor(s) to this Bureau did, at the request of the customer, carry out the following survey and report as follows:

Traceability of materials used on this project has been verified.

The principal data has been verified in accordance with the applicable Rules/specifications and applicable approved plans, and confirmed to be within acceptable tolerances.

All testing (pressure/load/operational/etc.) has been carried out as applicable and verified in accordance with the applicable Rules/specifications.

Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.

Final markings for identification confirmed.

## Side shell valves intended for Echosounder Transducer Installation

Hydrostatic pressure test was carried out at 5 bar with closed valve.

No leakage or plastic deformation were noted during testing.

The valves were found covered by ABS Product Design Assessment no. 17-LD1648327-PDA.

NOTE: This report evidences that the survey reported herein was carried out in compliance with one or more of the Rules, guides, standards or other criteria of the American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Report is a representation only that the vessel, structure, item or material equipment, machinery or any other item covered by this Report has been examined for compliance with, or has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping. The validity, applicability and interpretation of this report is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Report or in any notation made in the contemplation of this Report shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

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**Surveyor(s) to The American Bureau of Shipping**  
**Attending Surveyors**

Silvestro Francesco

Electronically Signed on 11-Jun-2019

**Reviewed By**  
Fuglei, Tor Brodde

Electronically Signed on 11-Jun-2019, Oslo Port



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