



DET NORSKE VERITAS

Certificate No  
**OSL-12-4454**

PRODUCT CERTIFICATE

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| Manufacturer:  | <b>SKIPPER Electronics AS</b>  |
| Manufacturer's order No.:  | <b>79733</b>   |
| Purchaser:   | <b>RAYTHEON</b>  |
| Purchaser's order No.:   |  |
| The product is intended for  |  |
| Yard:  | <b>( TBD )</b>   |
| Yard No.:  |  |
| Name of vessel:  | <b>" "</b>   |
| DNV Id. No.:   | <b>P261.1C</b>   |
| THIS IS TO CERTIFY:  |  |
| that the product:  | <b>Bottom Penetration for Echo Sounder, Sonar or Log</b>   |
| Type designation:  | <b>SB-60-SA___, DB-60-SA___, SB-100-SB__x_, DB-100-SB___, ETNSJB/ETNSLB-100mm___</b>   |
| Intended purpose:  | <b>The gate valve may be used in conjunction with installation of speed log or echo sounder</b>  |
| Serial No(s):  | <b>12154</b>   |
| Has been built and tested in accordance with the relevant requirements of: |  |
| DNV Rules for Classification:  | <input checked="" type="checkbox"/> Ships <input checked="" type="checkbox"/> HSLC <input type="checkbox"/> Naval <input checked="" type="checkbox"/> Offshore |
|  | <input type="checkbox"/> Other standards:  |

Remarks (if more than one line, use page 2):

The product was marked: **NV-OSL-12-4454**

On: **Gate Valve**

This field is only to be filled in when the certification is based on a Manufacturing Survey Arrangement (MSA).

The undersigned manufacturer declares that the product/system has been built and tested in accordance with the specification/standard stated above and the conditions referred to in

Manufacturing Survey Arrangement No: **R-1948**

Quality System Certificate No: **TI 151 ISO 9001:2008**

For Manufacturer:

Place: **Oslo**

Date: **03.05.2012**

**Anders Karlstad**  
Product Technician

This Certificate is only valid when signed by a DNV surveyor.

For **Det Norske Veritas AS**

Place:

Date:

**Jørn Henrik Pedersen**  
Surveyor

Technical data:

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Remarks:

**The valve housing has been subjected to a hydrostatic pressure test, and the valve assembly to a seat leakage test to 5 bar. Holding time 5 minutes.**

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Marking and certificate numbers for the different parts:

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Drawings with dates of approval and/or type approval certificate number:

**DNV S-6000**

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