



DET NORSKE VERITAS

Certificate No
OSL-12-4620

PRODUCT CERTIFICATE

| | |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturer: | SKIPPER Electronics AS |
| Manufacturer's order No.: | 84131 |
| Purchaser: | RAYTHEON |
| Purchaser's order No.: | |
| The product is intended for | |
| Yard: | (TBD) |
| Yard No.: | |
| Name of vessel: | " " |
| DNV Id. No.: | P261.1C |
| THIS IS TO CERTIFY: | |
| that the product: | Bottom Penetration for Echo Sounder, Sonar or Log |
| Type designation: | SB-60-SA___, DB-60-SA___, SB-100-SB__X_, DB-100-SB___, ETNSJB/ETNSLB-100mm___ |
| Intended purpose: | The gate valve may be used in conjunction with installation of speed log or echo sounder |
| Serial No(s): | 12320 |
| 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-12-4620**

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: **08.11.2012**

Anders Karlstad
Product Technician

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

For **Det Norske Veritas AS**

Place:

Date:

Håkon Karlsen
Surveyor

Technical data:

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.

Marking and certificate numbers for the different parts:

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

DNV S-6000
