



DET NORSKE VERITAS

Certificate No
OSL-11-4386

PRODUCT CERTIFICATE

Manufacturer:	SKIPPER Electronics AS
Manufacturer's order No.:	79624
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):	11086
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-11086**

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: **17.10.2011**

Anders Karlstad
Product Technician

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

For **Det Norske Veritas AS**

Place: **Høvik**

Date: **2011-12-06**

Thomas R. Jacobsen
Senior 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
