

## Certificate No OSL-11-4441

## PRODUCT CERTIFICATE

Manufacturer:	SKIPPER Electronics AS
Manufacturer's order No.:	76630
Purchaser:	L-3 Communications Valmarine AS 3027 Drammen
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: Intended purpose: Serial No(s):	SB-60-LA_X_, DB-60-SA, SB-100-SB, DB100-SB, ETNSJB/ETNSLB-100mm The gate valve may be used in conjunction with installation of speed log or echo sounder 11141
Has been built and tested in accordance with the releva	ant requirements of:
DNV Rules for Classification: Ships	
☐ Other standards:	
Remarks (if more than one line, use page 2):  The product was marked: NV-OSL-11-4441	On: <b>Gate valves</b>
This field is only to be filled in when the certification is based on Manufacturing Survey Arrangement (MSA).	The detailed only tails men eighes by a zero
The undersigned manufacturer declares that the product/system been built and tested in accordance with the specification/standa stated above and the conditions referred to in Manufacturing Survey Arrangement No: R-1948 Quality System Certificate No: TI 151 ISO 9001:20	ard
For Manufacturer:	
Place: Oslo	Place: <b>Høvik</b>
Date: <b>04.05.2011</b>	Date: <b>2011-05-12</b>
Anders Karlstad	Thomas R. Jacobsen
(title)	Surveyor

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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	

DET NORSKE VERITAS AS, Veritasveien 1, NO-1322 Høvik, Norway, Tel.: +47 67 57 99 00, Fax: +47 67 57 99 11, Org.No. NO 945 748 931 MVA www.dnv.com Form No.: 20.92a Issue: October 2010 Page 2 of 2