

## DET NORSKE VERITAS

## PRODUCT CERTIFICATE

Manufacturer:	SKIPPER Electronics AS
	77343
	STX Engine Co., Ltd 446915 Kyeong-Do Korea
Purchaser's order No.:	
The product is intended for	
	(TBD)
Yard No.:	
Name of vessel:	" "
DNV ld. 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-SAX_, DB100-SB, ETNSJB/ETNSLB-100mm The gate valve may be used in conjunction with installation of
Intended purpose: Serial No(s):	speed log or echo sounder 11159
DNV Rules for Classification: Ships HSLC Naval Offshore   Other standards: Remarks (if more than one line, use page 2): Image: Content of the standards of the	
The product was marked: NV-OSL-11-4459 On: GATE VALVE	
This field is only to be filled in when the certification is based on Manufacturing Survey Arrangement (MSA).	<sup>a</sup> This Certificate is only valid when signed by a DNV surveyor.
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: <b>R-1948</b> Quality System Certificate No: <b>TI 151 ISO 9001:20</b>	ard 008
For Manufacturer:	For Det Norske Veritas AS
Place: Oslo	Place: Høvik
Date: <b>12.05.2011</b>	Date: 2011-06-07
Anders Karlstad (title)	Thomas R. Jacobsen 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:  $\ensuremath{\text{DNV}}$  S-6000