

DET NORSKE VERITAS

PRODUCT CERTIFICATE

Manufacturer:	SKIPPER Electronics AS
Manufacturer's order No.:	85019
Purchaser:	L-3 Korea
Purchaser's order No.:	
The product is intended for	
Yard:	(TBD)
Yard No.:	
Name of vessel:	۰٬۶۶۶ ۲۶ ۱۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹ ۱۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ - ۲۹۹۰ -
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-SA, DB-60-SA, SB-100-SBX_, DB-100-SB, ETNSJB/ETNSLB-100mm The gate valve may be used in conjunction with installation of speed log or echo sounder 12249
Has been built and tested in accordance with the relevent	
DNV Rules for Classification: Ships	☐ HSLC ☐ Naval ☐ Offshore
Other standards:	
Remarks (if more than one line, use page 2):	
The product was marked: NV-OSL-12-4549	On: Gate Valve
This field is only to be filled in when the certification is based or Manufacturing Survey Arrangement (MSA).	This Certificate is only valid when signed by a DNV surveyor.
The undersigned manufacturer declares that the product/syster been built and tested in accordance with the specification/stance stated above and the conditions referred to in Manufacturing Survey Arrangement No: R-1948 Quality System Certificate No: TI 151 ISO 9001:2	2008
For Manufacturer:	For Det Norske Veritas AS
Place: Oslo	Place:
Date: 24.10.2012	Date:
Anders Karlstad	Håkon Karlsen
Product Technician	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