

DET NORSKE VERITAS

PRODUCT CERTIFICATE

Manufacturer:	SKIPPER Electronics AS
Manufacturer's order No.:	80572
Purchaser:	ELSE
Purchaser's order No.:	
The product is intended for	
Yard:	(TBD)
Yard No.:	
Name of vessel:	" 33
DNV Id. No.:	P261.1C
THIS IS TO CERTIFY:	
that the product:	Bottom Penetration for Echo Sounder, Sonar or Log
Type designation: Intended purpose:	SB-60-SA, DB-60-SAX_, SB-100-SB, DB-100-SB, ETNSJB/ETNSLB-100mm The gate valve may be used in conjunction with installation of speed log or echo sounder
Serial No(s):	11420
Has been built and tested in accordance with the relevant requirements of:	
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-11-4720	On: Gate Valve
This field is only to be filled in when the certification is based on Manufacturing Survey Arrangement (MSA).	This Certificate is only valid when signed by a DNV surveyor.
The undersigned manufacturer declares that the product/systen been built and tested in accordance with the specification/stand stated above and the conditions referred to in Manufacturing Survey Arrangement No: R-1948 Quality System Certificate No: TI 151 ISO 9001:2	lard
For Manufacturer:	For Det Norske Veritas AS
Place: Oslo	Place: Høvik
Date: 16.12.2011	Date: 2012-01-30
Anders Karlstad	Thomas R. Jacobsen
Product Technician	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: $\ensuremath{\text{DNV}}$ S-6000