



DET NORSKE VERITAS

Certificate No  
OSL-11-4574

PRODUCT CERTIFICATE

Manufacturer: **SKIPPER Electronics AS**  
Manufacturer's order No.: **77407**  
Purchaser: **SAM Taihang Electronics Co 511 Weihai RD 200041 Shanghai**  
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-LB\_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): **11274**  
  
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-11-4574**

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: **27.07.2011**

**Anders Karlstad**  
Product Technician

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

For Det Norske Veritas AS

Place: **Høvik**

Date: **2011-08-12**

**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**