

DET NORSKE VERITAS

PRODUCT CERTIFICATE

Purchaser's order No.:	ine Co., Ltd Kyeong-Do KOREA
Purchaser's order No.:	
The product is intended for Yard: (TBD) Yard No.: Name of vessel: ""	
Yard: (TBD) Yard No.: Name of vessel: ""	
Yard No.:	
Name of vessel: ""	
Name of vessel:	
DNV Id. No.: P261.1C	
THIS IS TO CERTIFY:	
that the product: Bottom F	Penetration for Echo Sounder, Sonar or Log
SB-60-S	A, DB-60-SA, SB-100-SB_X_, DB100-SB,
Type designation: ETNSJB/	ETNSLB-100mm valve may be used in conjunction with installation of
Intended purpose: speed log	g or echo sounder
Serial No(s): 11161	
Has been built and tested in accordance with the relevant require	ments of:
DNV Rules for Classification: Ships HSLC	C 🗌 Naval 🛛 Offshore
□ Other standards:	
Remarks (if more than one line, use page 2): The product was marked: NV-OSL-11-4461 O	m: GATE VALVE
This field is only to be filled in when the certification is based on a Manufacturing Survey Arrangement (MSA).	This Certificate is only valid when signed by a DNV surveyor.
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:	For Det Norske Veritas AS
Place: Oslo	Place: Høvik
Date: 13.05.2011	Date: 2011-06-07
Anders Karlstad	Thomas R. Jacobsen
(title)	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