

Certificate No OSL-08-4349



PRODUCT CERTIFICATE

Manufacturer:			ER Electro	onics AS		
Manufacturer's order No.:						
The product is intended for		TRANS	SAS			
Purchaser's order No.: The product is intended for Yard: Yard No.: Name of vessel: DNV Id. No.:						
The product is intended for		Botto SB-60 ETNS. The ga speed 08049 In the relevant required Hardwards: :				
Yard:		(TBD)			
		" "				
THIS IS TO CERTIFY:						
that the product: Type designation: Intended purpose: Serial No(s):		Bottom Penetration for Echo Sounder, Sonar or Log				
		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 08049				
Has been built and tested in ac DNV Rules for Classification:	s been built and tested in accordance with the relevant requ V Rules for Classification: Ships SHS			f: □ Naval	⊠ Offshore	
Remarks (if more than one line The product was marked: NV-O			On: 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 do been built and tested in accordan stated above and the conditions r Manufacturing Survey Arr. Quality System Certificate	ce with the specification/standa eferred to in angement No: R-1948	ard	Suive	For Det Norsk e	e Veritas AS	
For Manufacturer: Place: Oslo				To But Notoko Voltka Ac		
			Place: Høvik			
Date: 23.03.2012			Date	: 2012-05-02		
Anders Karlstad Product Technician		Thomas R. Jacobsen Senior Surveyor				

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Remarks: The valve housing has been subjected to a hydrostatic pressure test, and the valve assembly to a seat leakage te 5 bar. Holding time 5 minutes.	t to
Marking and certificate numbers for the different parts:	
Drawings with dates of approval and/or type approval certificate number: DNV S-6000	

DET NORSKE VERITAS AS, Veritasveien 1, NO-1322 Høvik, Norway, Tel.: +47 67 57 99 00, Fax: +47 67 57 99 11, Org.No. NO 945 748 931 MVA www.dnv.com Form No.: 20.92a Issue: October 2010 Page 2 of 2