



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **A-13789**

This is to certify that the  
**Level Transmitter**

with type designation(s)  
**USE3000**

Issued to  
**Barksdale GmbH**  
**REICHELSCHEIM, WETTERAU, Germany**

is found to comply with  
**Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards**

Application  
**Location classes:**

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	B

This Certificate is valid until **2018-06-30**.

Issued at **Høvik** on **2014-05-28**

DNV local station: **Essen CMC Southern Germany**

Approval Engineer: **Nils Jarem**

for **Det Norske Veritas AS**  
Digitally Signed By: Sneen, Ståle  
Location: DNV Høvik, Norway  
Signing Date: 2014-05-28, on behalf of

**Odd Magne Nesvåg**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

### Product description

Level sensor USE3000 with/without transmitter MU3L.  
MU3L: 8-35 VDC, 4-20 mA (Manufacturers spec.)

Level sensor USE3200 with/without transmitter MUEX  
MUEX: See Ex certificate for 5343B.

### Approval Conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

### Application/Limitation

To limit vibration resonance amplification the following sensor lengths should be adhered to:

Type	Float type	Max. length without support	Max free length between supports
USE3000	BN30, VA44, VA52, VA80	23 cm	77 cm
USE3200	VX44, VX52, VX80		

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

### Type Approval documentation

Data sheets : Tank level Indicating Systems Type USE 3000; 12 / 04 TLI US 01/1  
Type MU3L; 12 / 04 TLI US 01/1  
Tank Level Indicating Systems Type USE 3200; 12 / 04 TLI US 01/1  
Type MUEX; 12 / 04 TLI US 01/1

Manuals: Operating Manual USE3000, 923-1103, dated 2003-07-25

Test reports: Nr. 04-04/2005 dated 2005-04-29  
No. 4-11/95, dated 1995-11-30  
No. 6622/09 dated 2009-03-31

Other: EC Type Examination Certificate for PR electronics type for 5343B: KEMA 03ATEX1538 X issue 3.

### Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.

### Marking of product

The products to be marked with model name, manufacturer name and serial number.

### Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer s product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE