



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

**CERTIFICATE NO. E-8344**

This Certificate consists of 3 pages

*This is to certify that the*  
**Low Voltage Cable**  
*with type designation(s)*  
**TXOI 250 V**

*Holder of certificate*

**Draka Marine, Oil & Gas International**  
Houston, TX 77032, United States

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

IEC 60092-3  
IEC 60332-3-22 (2000-10)  
IEC 60754-1 (1994-01)  
IEC 60754-2 (1997-04)  
IEC 61034-2 (2005-04)

*Application*

Instrumentation and communication. Control. Flame retardant. Halogen free. Low smoke.

Voltage class (V)	250
Temp. class (°C)	90

*Place and date*

Høvik, 2007-05-11

for DET NORSKE VERITAS AS

Frode Berntsen  
Head of Section



Local Office  
DNV Oslo

*This Certificate is valid until*

2011-06-30

Ivar Bull  
Surveyor

**Notice: 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.



Cert. No.: E-8344  
File No.: 827.20

### Name and place of manufacturer:

Draka Norsk Kabel AS  
Drammen, Norway

### Product description

Type: TXOI 250 V  
Conductors: Plain, stranded copper  
Core insulation: XLPE  
Inner covering: Tape  
Metal covering: Tinned, Copper wire braid  
Outer sheath: SHF1

Number of cores x conductor cross-section mm <sup>2</sup>	Overall diameter mm
1 x 2 x 0,75	8,5±0,5
2 x 2 x 0,75	9,5±0,5
4 x 2 x 0,75	14,5±0,8

Number of cores x conductor cross-section mm <sup>2</sup>	Overall diameter mm
7 x 2 x 0,75	17,5±0,8
10 x 2 x 0,75	21,5±1,0
14 x 2 x 0,75	23,5±1,0

Number of cores x conductor cross-section mm <sup>2</sup>	Overall diameter mm
19 x 2 x 0,75	26,0±1,0
24 x 2 x 0,75	29,5±1,0

### Application/Limitation

The requirements of SOLAS Amendments Chapter II-1, Part D, Reg. 45, 5.2 (provision to be taken to limit Fire Propagation along Bunches of Cables or Wires) are fulfilled without any additional measures.

### Type Approval documentation

Data sheets: TXOI\_250V.doc dated 2002-08-27  
Test reports:

### Tests carried out

Type tested according to: IEC 60092-3, IEC 60332-3-22, IEC 60754-1/2 and IEC 61034-1/2.



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### Marking of product

To be marked: DRAKA NORSK KABEL or DRAKA 01 - TXOI - size – 250 V.

### Certificate retention survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE