

## Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER	Draka Comteq Norway AS
PLACE OF PRODUCTION	Folmoveien NO-2150 Arnes Norway
DESCRIPTION	Halogen free, <b>low</b> smoke emission, LSFROH (SHF1) sheathed, oil resistant, <b>individually foil screened twisted pairs data transmission cable.</b>
TYPE	ToughCat S-STP
APPLICATION	Marine, Offshore and Industrial use.
SPECIFIED STANDARDS	Low & High frequency measurement : EN 50288 Mechanical properties: EN 50288 & EN 50289 Ozone resistance: IEC 60092-350 & IEC 60811 Flame retardance: IEC 60332-3-24 Halogen free: IEC 60754-1 / IEC 60754-2 Low smoke emission: IEC 61034-2 Oil resistance: Norm CEI 20.34
RATINGS	Voltage: 75 V Configuration: 4x2 / 0.22 mm <sup>2</sup>

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 05/00074 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	05/00074
Issue Date	21 September 2005
Expiry Date	20 September 2010
Sheet	1 of 1

  
M.H.A. Rufaie  
London Plan Approval  
Lloyd's Register EMEA

Lloyd's Register EMEA  
71 Fenchurch Street, London EC3M 4BS

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**DESIGN APPRAISAL DOCUMENT**

Date 21 September 2005	Quote this reference on all future communications LPA/DAPP/ECE/TA/W00800520/MHR/O- 63737
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**LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.**

**Issued to: DRAKA COMTEQ NORWAY AS**

**for: DATA TRANSMISSION CABLE**

**Type: TOUHCAT S-STP**

**TYPE APPROVAL CERTIFICATE No. 05/00074**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

**APPROVAL DOCUMENTATION**

Request form	16.08.2005
LR Oslo email message	19.08.2005
LR Oslo memo	04.05.2005
LR Oslo memo	07.06.2005
Draka Comteq letter	22.06.2005
LR Oslo memo	02.07.2005
Draka email	04.09.2005

**Data Sheets**

Draka Comteq (ToughCat)	03.02.2004
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**TEST REPORTS**

Draka Norsk Kabel (test report summary)	30-01.2004
DNV report No. 6-827.50-2	06.2003
Draka Norsk Kabel (Batch E729941)	08.09.2003
Draka Norsk Kabel (Batch E729941) 8 reports	30.01.2004
Draka Norsk Kabel (Tough Cat S-STP)	30.11.2004
Third Party Testing (3P) No. 4963PV	08.12.2003
DNV Quality Certificate No. 2004-OSL-SYMI-8231	17.06.2005

**Supplementary Type Approval Terms and Conditions**

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

## DESIGN APPRAISAL DOCUMENT

Date  
21 September 2005

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LPA/DAPP/ECE/TA/W00800520/MHR/O- 63737

### Supplementary Type Approval Terms and Conditions (cont.)

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.



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