

Type Approval Certificate Extension

This is to certify that Certificate No. 92/00176(E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

| | | | |
|----------------------------|--|-------------------------------|------------------------------|
| PRODUCER | Draka Norsk Kabel AS | | |
| PLACE OF PRODUCTION | Kjerraten 16 N-3001 Drammen Norway | | |
| DESCRIPTION | Flame retardant and fire resistant, halogen free, low smoke emission, twisted pairs/triples signal cable, individually or collectively screened rated at 250 V | | |
| TYPE | BFXU (i) – Individually screened BFXU (c) – Collectively screened | | |
| APPLICATION | Marine, offshore and industrial where the test specification is satisfactory for the intended operation | | |
| SPECIFIED STANDARD | IEC60092-376 IEC60332-3-22 | IEC60331-21 IEC60754-1 & 2 | IEC60332-1 IEC61034-1 & 2 |

"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 attached Design Appraisal Document No. 92/00176(E3) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 92/00176(E2) to which this extension should be attached.

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|------------------------|------------------|
| Certificate No. | 92/00176(E3) |
| Issue Date | 05 December 2004 |
| Expiry Date | 20 December 2008 |
| Sheet | 1 of 1 |

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

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

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|---------------------------------|
| Page 1 of 1 |
| Document number 92/00176(E3) |
| Issue number 1 |

DESIGN APPRAISAL DOCUMENT

| | |
|--------------------------|---|
| Date 05 December 2004 | Quote this reference on all future communications LPA/DAPP/ECE/TA/W00610562/MHR/O- 53416 |
|--------------------------|---|

LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.**Issued to: DRAKA NORSK KABEL AS****for: FLAME RETARDANT AND FIRE RESISTANT, HALOGEN FREE, LOW SMOKE
EMISSION, TWISTED PAIRS/TRIPLES SIGNAL CABLE, INDIVIDUALLY OR
COLLECTIVELY SCREENED RATED AT 250 V****Type: BFXU****TYPE APPROVAL CERTIFICATE No. 92/00176(E3)**

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.

ADDITIONAL APPROVAL DOCUMENTATION

| | |
|---------------|------------|
| Request form | 11.05.2004 |
| Draka letter | 08.07.2004 |
| LR Oslo email | 19.08.2004 |

Data Sheets

| | |
|---|------------|
| Fire resistant cables, Collectively screen BFXU (c) 250 V | 06.02.2004 |
|---|------------|

TEST REPORTS

| | |
|--|------------|
| DNV Quality Assurance Certificate (97-OSL-SYMI-8009) | 17.12.2003 |
|--|------------|

Also all the documentation listed on Design Approval Documents associated with Type Approval Certificates Nos. 92/00176, 92/00176(E1) & 92/00176(E2)

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.

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.

**M.H.A. RUFAlE**

Senior Electrical Engineer

Electrical and Control Engineering / Type Approval

London Plan Approval / Lloyd's Register EMEA (London)

Tel. +44 (0) 20 7423 1849 Direct line

Part 1B
 Subject: Electrical Equipment (Not Environmentally Tested)
 Product: Cables Control, Telecommunication and Instrumentation (Part 1B)

| Producer /Licence No. | Type | Description of Product | | | Remarks | Cert. No. |
|--|---|--|---|--|---|--------------|
| | | Details of Approval | Application | Application | | |
| Draka Norsk Kabel AS, Kjeratzen 16, N-3001 Drammen, Norway. | BFXU (i) Individually screened BFXU (c) Collectively screened | Flame retardant and fire resistant, halogen free, low smoke emission, twisted pairs/triples signal cable, individually or collectively screened rated at 250 V Conductor size(csa mm ²) 1.0 & 1.5 0.75 to 1.5 Rated voltage: Maximum conductor temperature: | No of pairs 1 to 32 No of Triples 1 to 32 250 V 90°C | Fixed wiring for control, instrumentation and communications on ships and offshore installations. | Expires: 20 December 2008 Complies with: IEC60092-376 IEC60331-21 IEC60332-1 IEC60332-3-22 IEC60754-1 & 2 IEC61034-1 & 2 | 92/00176(E3) |

-5 DEC 2004
MHZ