DNV·GL

Certificate No:
TAE000016D

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Data transmission cables and systems

with type designation(s)
AICI F6 (NEK 606)

Issued to
Draka Norsk Kabel - part of the Prysmian Group
DRAMMEN, Norway

is found to comply with
DNV GL rules for classification – Ships and offshore units
DNV GL class programme DNVGL-CP-0402 – Type approval – Optical fibre cables

Application :

Fiber optic cable.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2021-06-29**.

Issued at **Høvik** on **2016-08-02**

for **DNV GL**

DNV GL local station: **Station Oslo Maritime and CAP**

Approval Engineer: **Ivar Bull**

Andreas Kristoffersen
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.

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Job Id: **262.1-002558-9**
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Product description

Type AICI F6 (NEK 606)

Optical fibres

Fibre type	9/125	50/125-OM2	50/125-OM3	62.5/125-OM1
Fiber data sheet	C03	C34	C31	C02
IEC60793-2-10, 20, 50 cat.	B.1.3	A1a.1	A1a.2	A1b
IEC11801 classification	OS2	OM2	OM3	OM1
ANSI/TIA/EIA classification	CAAB	AAAB	AAAC	AAAA
ITU-T type	G652.D	G651.1	G651.1	-
Core diameter	See mode field diameter	50 ± 2.5 µm	50 ± 2.5 µm	62.5 ± 2.5 µm
Mode field diameter	1310 nm 9.0 ± 0.4 µm 1550 nm 10.1 ± 0.5 µm			
Cladding diameter	125 ± 0.7 µm	125 ± 1.0 µm	125 ± 1.0 µm	125 ± 1.0 µm
Primary coating diameter (nominal)	242 ± 7 µm	242 ± 5 µm	242 ± 5 µm	242 ± 7 µm
Attenuation (Maximum values) 850 nm 1300 nm 1310 nm 1550 nm	 ≤ 0.39 dB/km ≤ 0.25 dB/km	 ≤ 2.7 dB/km ≤ 0.8 dB/km	 ≤ 2.5 dB/km ≤ 0.8 dB/km	 ≤ 3.2 dB/km ≤ 1.0 dB/km
Bandwidth(OFL) 850 nm 1300 nm		>500 MHz·km >500 MHz·km	>1500 MHz·km >500 MHz·km	>200 MHz·km >600 MHz·km
Chromatic Dispersion 1285-1330 nm 1550 nm 1625 nm	 ≤ 3 ps/nm·km ≤ 18 ps/nm·km ≤ 22 ps/nm·km			
Polarization Mode Disp. Max. Individual Fibre PMD_Q Link Design Value	 ≤ 0.5 ps/√km ≤ 0.2 ps/√km			
Group index of refraction 850 nm 1300/1310 nm(MMF/SMF) 1550 nm 1625 nm	 1.467 1.468 1.468	 1.482 1.477	 1.482 1.477	 1.496 1.491

Minimum bending diameter of cable: 15 x outer diameter

Application/Limitation

Temperature window

Operation:	-40°C to +60°C
Installation:	-10°C to +60°C
Storage:	-40°C to +70°C

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

Tests carried out

Tested according to IEC 60794-1/-2, IEC 60332-3-22, IEC 60332-3-24, IEC 60754-1/2 and IEC 61034-1/2

Marking of product

DRAKA NORSK KABEL or DRAKA 01 - part no. - AICI - fibre type

Periodical assessment

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

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to 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.

Assessment to be performed at least every second year.

END OF CERTIFICATE