



Oil & Gas - Cable Solutions

Exploration & Production - Offshore

Fiber Optic Cables

AICI-I/O/RM-W

Armoured and Flame retardant optical fibre cable, AICI - code F104 NEK TS 606:2016 (available also in MUD protected version).

Indoor and outdoor. Flame Retardant halogen free. Loose Tube.

APPLICATION

Optical cable for industrial environments.

The cable is suitable for both indoor and outdoor installation. The outer sheath is made from black UV-stabilized and weather resistant material which is SHF1 classified, and may be exposed for shorter periods to fluids such as diesel and mineral oils. The resistance to these fluids is according to IEC60811-404. The cable is reinforced with a steel wire braiding between the two sheaths.

Strength elements of glass yarn around the cable core allow easy installation of long

lengths. The 0.9 mm tight buffer is easy to strip allowing fast and reliable splicing and connector mounting. Each fibre is colour coded for easy identification. The outer sheath is marked to show fibre type and cable type.

Also available in Mud Resistant version: in this case, an additional outer sheath is added to improve protection.

STANDARDS & APPROVALS

IEC/EN 60794 Optical Fibre Cables (test procedures)

IEC 60794-1-21-E1 Tensile Performance

IEC 60794-1-21-E3 Abrasion

IEC 60794-1-21-E4 Crush

IEC 60794-1-21-E7 Torsion

IEC 60794-1-21-E8 Flexing

IEC 60794-1-2-E11 Bend

IEC 60794-1-21-F1 Temperature Cycling

IEC 60794-1-21-F5B Water penetration

IEC 60332-1 Flame Retardance

IEC 60332-3-22 or 24 Fire retardance

IEC 60811-404 Electrical and optical fibre cables - Test methods for materials - Test in oil

NEK 606:2016 Design guidelines for Mud Resistant cables for offshore installations

IEC 60754-1 & 60754-2 - Halogen free properties

IEC 61034-1 & 61034-2 Smoke emission properties

Det Norske Veritas (DNV)

DESIGN & CONSTRUCTION

1 SECONDARY COATED FIBRE

Tight buffered fibers (0,9mm)

2 WATER SWELLABLE MATERIAL

For longitudinal watertightness of the cable core

3 GLASS YARN

Tensile strength elements

4 INNER JACKET

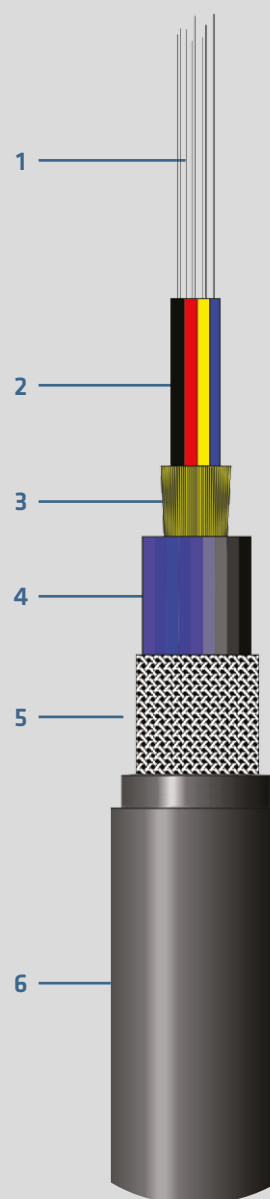
Inner LSHF sheath

5 ARMOURING

Galvanized steel wire braid (GSWB)

6 SHEATH

SHF1



CONTACT INFO:

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www.prysmiangroup.com/contact-us



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PERFORMANCES/RATINGS

FIRE BEHAVIOUR



IEC 60332-1
IEC 60332-3-22 or 24

CHEMICAL RESISTANCE



VERY GOOD
EXCELLENT (MUD RES)

IMPACTS



GOOD

SMOKE DENSITY, CORROSIVITY AND TOXICITY



LOW
LOW EMISSION

QUALITY & TESTING

Prysmian has a built-in multi-step quality assurance program, covering the production process from cable design and raw material purchases to final inspection and testing documentation.

The ISO 9001 quality system of Prysmian Group (together with ISO 14001 and OHSAS 18001) has been assessed, approved and is currently audited by SGS.

This product information sheet is provided for reference only.
Please consult the factory or your representative to confirm all engineering information or refer to the related catalogues available in the local countries website.

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TECHNICAL DATA

Weight and dimensions

F104 type

| NUMBER OF FIBRES | SECONDARY COATING (mm) | OUTER DIAMETER (mm) | WEIGHT (kg/km) | TENSILE STRENGTH* [Inst./oper.] (N) |
|------------------|------------------------|---------------------|----------------|-------------------------------------|
| 4 | 0,9 | 9.0 | 98 | 700/250 |
| 8 | 0,9 | 9.8 | 132 | 800/350 |
| 12 | 0,9 | 10.7 | 150 | 1200/500 |
| 24 | 0,9 | 12.5 | 202 | 1700/750 |

MUD Protected version

| NUMBER OF FIBRES | SECONDARY COATING (mm) | OUTER DIAMETER (mm) | WEIGHT (kg/km) | TENSILE STRENGTH* [Inst./oper.] (N) |
|------------------|------------------------|---------------------|----------------|-------------------------------------|
| 4 | 0,9 | 11.0 | 140 | 700/250 |
| 8 | 0,9 | 11.8 | 177 | 800/350 |
| 12 | 0,9 | 12.7 | 200 | 1200/500 |
| 24 | 0,9 | 14.5 | 250 | 1700/750 |

| FIBRE NO. | COLOUR | FIBRE NO. | COLOUR | FIBRE NO. | COLOUR |
|-----------|--------|-----------|-----------------|-----------|---------------------|
| 1 | White | 9 | Violet | 17 | Blue + marker |
| 2 | Red | 10 | Turquoise | 18 | Grey + marker |
| 3 | Yellow | 11 | Orange | 19 | Brown + marker |
| 4 | Green | 12 | Pink | 20 | Light Blue + marker |
| 5 | Blue | 13 | White + marker | 21 | Violet + marker |
| 6 | Grey | 14 | Red + marker | 22 | Turquoise + marker |
| 7 | Brown | 15 | Yellow + marker | 23 | Orange + marker |
| 8 | Black | 16 | Green + marker | 24 | Pink + marker |

Standard colour of outer sheath is black.
We reserve the right to alter this specification without notice.

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