QFXI

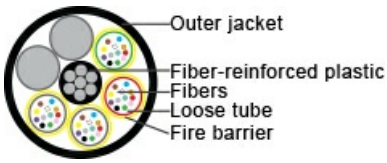
Loose tube
SHF1, UV
DNV

Application

Fiberoptical cable for the oil- and offshore industry and other harsh environments, with Mica-tape for use in vital communication and emergency systems, which needs to be operational during a fire situation (90 min. 1000°C).The cable has excellent communication properties and is tested to be operative in high temperatures which means that it can maintain vital communication in case of a fire situation. The fibers are protected in jelly filled loose tubes stranded around a central strength member to ensure optimum performance and long life. Each fiber and loose tube is color coded for easy identification during splicing and termination.

Construction Fiber

Fibertype	MM or SM
Colorcode fiber	(EIA 598) 1 - Blue 5 - Grey 9 - Yellow 2 - Orange 6 - White 10 - Violet 3 - Green 7 - Red 11 - Pink 4 - Brown 8 - Black 12 -Turquoise
Fiber tube	Lose tube jelly filled, each tube reinforced by fire barrier
Colorcode fiber tube	1 - Blue 2 - Orange 3 - Green 4 - Brown
Fire resistant barrier	Mica tape over each active tube
Strength member	Reinforced fibreglass yarns (WB)
Jacket	Black SHF1
Diameter	10.8 ± 0.5 [mm]
Weight	130 [kg/km]



Specifications fiber

Temperature range	-40 – +90 [°C]
Temperaturerange at inst.	-20 – +60 [°C]
Temperaturrange storage	-40 – +90 [C°]
Tensile strength	1500 [N] (IEC 60794-1)
Crush resistance	1000 [N/10cm] (IEC 60794-1)
Impact resistance	1 [J] 20 times (IEC 60794-1)
Torsion	@ 50N, 20 cycles (IEC 60794-1)
Note	Cable bend (IEC 60794-1): Mandrel 5 turn, 3 cycles, T:-15°C
Bending radius flexible	25 [x outer diam.] (IEC 60794-1)
Bending radius installed	12.5 [x outer diam.] (IEC 60794-1)

Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Flame resistance	IEC 60332-3-22 and IEC 60332-1-2
Fire resistant	IEC 60331-25
Smoke emission	IEC 61034-1 & IEC 61034-2
UV-resistant	ISO 4892-2-A: 720hours
Euroclass	Eca
DoP No.:	DOP01050
Certification	DNV

CE RoHS

Fiber Optical Cable Data Table

Standard designation	Unit	MM 62.5/125 OM1	MM 50/125 OM2	MM 50/125 OM3	MM 50/125 OM4	SM 9/125 OS2
ANSI/TIA/EIA		AAAA	AAAB	AAAC	AAAD	CAAB
IEC 60793-2-10,50		A1-OM1	A1-OM2	A1-OM3	A1-OM4	B-652.D
ITU-T type		-	G651.1	G651.1	G651.1	G652.D
Core diameter	µm	62.5 ± 2.5	50 ± 2.5	50 ± 2.5	50 ± 2.5	See mode field diameter
MFD@1310 nm	µm	-	-	-	-	9.2 ± 0.4
MFD@1550 nm	µm	-	-	-	-	10.4 ± 0.5
Cladding diameter	µm	125 ± 1.0	125 ± 1.0	125 ± 1.0	125 ± 1.0	125 ± 0.7
Primary coating diameter(nominal)	µm	242 ± 7	242 ± 7	242 ± 7	242 ± 7	245 ± 7
Attenuation	dB/km	≤ 3.5 @ 850nm	≤ 3.0 @ 850nm	≤ 3.0 @ 850nm	≤ 3.5 @ 850nm	≤ 0.4 @1310nm
Attenuation	dB/km	≤ 1.0 @1300nm	≤ 1.0 @1300nm	≤ 1.0 @1300nm	≤ 1.0 @1300nm	≤ 0.3 @1550nm
Bandwidth (OFL) 850nm	MHz.km	≥ 200	≥ 500	≥ 1500	≥ 3500	-
Bandwidth (OFL) 1300nm	MHz.km	≥ 500	≥ 500	≥ 500	≥ 500	-
Chromatic dispersion 1285-1330 nm	-	-	-	-	-	3 ps/nm.km
Chromatic dispersion1550 nm	-	-	-	-	-	18 ps/nm.km
Chromatic dispersion1625 nm	-	-	-	-	-	22 ps/nm.km

Prod.no.	12 core SM : 5400100 48 core SM : 5400101 12 core OM3 : 5400102 48 core OM3 : 5400103

Updated

Date	Rev.	Description
25.09.2023	1	Colourcode (EIA 598)
13.12.2024	2	Additional info