多模光缆分支组件

QFAI-FR-4C-OS2-4SC/PC-Lxxm(0.5m)

产品示意图 Product Drawing

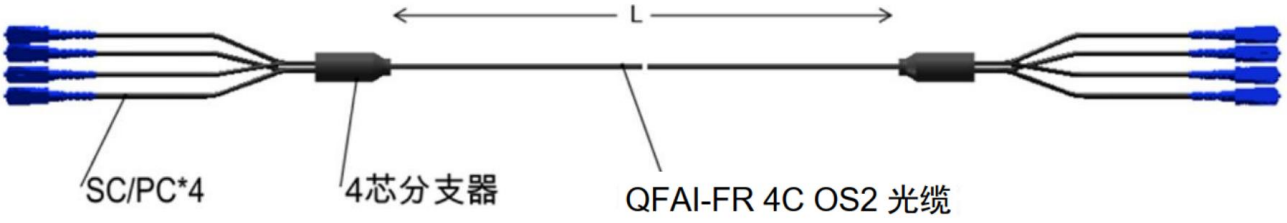


图 1　4 芯 QFAI-FR-4C-OS2 单模光缆分支组件

Figure 1: 4-Core QFAI-FR-4C-OM3 Multi-Mode Optical Fiber Cable Branch Assembly

产品规格 Product Specs

型号 Type	长度 Length（m）
QFAI-FR-4C-OS2-4SC/PC-Lxxm（0.5m）	xx(±1%)m

产品组成 Product Components

分支缆 A 端	SC/PC -3.0 连接器散件*4、 3.0 直径黑色分支光缆 0.5m*4、4 芯分支器*1
Branch Cable End A	SC/PC -3.0 Connector Spare Parts *4、 3.0mm Diameter Black Branch Optical Cable (0.5m) *4、 4-Core Branch Splitter *1
连接器 B 端	SC/PC -3.0 连接器散件*4、3.0 直径黑色分支光缆 0.5m*4、4 芯分支器*1
Connector End B	SC/PC -3.0 Connector Spare Parts *4、 3.0mm Diameter Black Branch Optical Cable (0.5m) *4、 4-Core Branch Splitter *1

分支端参数 Branch End Parameters

光缆直径 Cable Diameter	OD:3.0	OD:3.0 mm
光缆护套 Cable Sheath	低烟无卤	LSZH
弯曲半径 Bend radius（min）	10D（D 为光缆外径）	10D（D:Cable Diameter ）
光缆抗压 Pressure Resistance	2000N/100mm	2000N/100mm
分支缆结构 Branch Cable Structure	见图 2	See Figure 2

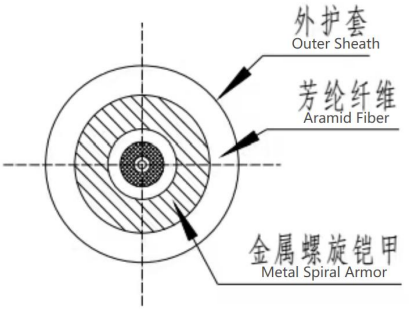


图 2 分支缆结构

Figure 2:Branch Cable Structure

标签 Label

线缆标识 Cable Identification	两端打印线缆型号+长度加以标识 Mark both ends by printing the cable model and length 标识示例：“QFAI-FR-4C-OS2-4SC/PC-Lxxm” Identification Example:“QFAI-FR-4C-OS2-4SC/PC-Lxxm”
分支缆标识 Branch Cable Identification	分支缆连接器尾部号码管标识光纤顺序。 The number tube at the tail of the branch cable connector identifies the fiber sequence.

分支缆组件参数 Branch Cable Assembly Parameters

连接器损耗 Connector Loss	≤0.3dB@1550nm（不含缆 Excluding Cable） （GB/T 18311.4-2003 插入法 B）
端面检测 End Face Inspection	200X（IEC-61300-35）
分支缆抗拉 Branch Cable Tensile Resistance	＞50N
重复性 Repeatability	≤0.2dB

包装方式 Packaging Style

包装方式 Packaging Method	单根气泡膜缠绕。 Single piece wrapped with bubble film.
标签信息 Label Information	

检验项目 Inspection Items

产品外观检验

1.插芯无破损、无划痕、无胶水残留，端面清洁无污迹；（满足 YD/T 1198.1）

2.散件无毛刺、无划痕、无其他可见缺陷，颜色要求与标准一致；（满足 YD/T 1272.1-2018）

光学性能指标

1.IL≤0.3dB@850nm（GB/T 18311.4-2003 插入法 B）

2.互换性 IL≤0.2dB； (IEC 61300-3-34;)

3.测试完毕后端面进行二次端检（200 X）（IEC 61300-3-35）

产品标识：

1.标签内容是否完备；

2.标签信息是否正确；

内外包装：

1.内包装有无散乱脱落现象；

2.外包装空隙处有无填充物；

3.测试报告以及合格证是否完善。

Product Appearance Inspection：

1.The ferrule shall be free of damage, scratches, and adhesive residue, with a clean and stain-free end face; (Complies with YD/T 1198.1)

2.The spare parts shall be free of burrs, scratches, and other visible defects, and their color shall be consistent with the standard; (Complies with YD/T 1272.1-2018)

Optical Performance Indicators:

1.IL≤0.3dB@850nm（GB/T 18311.4-2003（Insertion Method B） ）

2.Interchangeability: IL ≤ 0.2dB; (IEC 61300-3-34;)

3.After the test, a secondary end face inspection (200× magnification) shall be conducted on the end face (IEC 61300-3-35)

Product Identification:

1.Whether the label content is complete;

2.Whether the label information is correct;

Inner and Outer Packaging:

1.Whether the inner packaging has scattering or falling-off issues;

2.Whether there are fillers in the gaps of the outer packaging;

3.Whether the test report and qualification certificate are complete.

Marine Fiber Optic cable

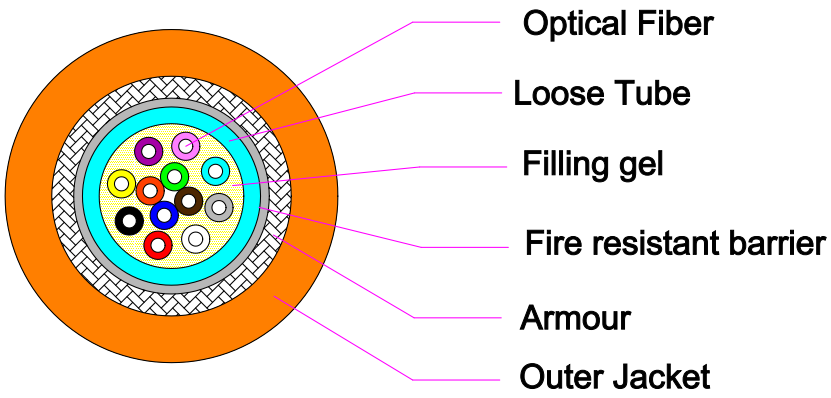
HF Flame Oil Cold UV Fire

QFAI-FR UNI

Application

Fiber Resistant Optical fiber cable for ships, onshore and offshore environments. The cable is suitable for both indoor and outdoor use and for shorter periods to fluids such as diesel and mineral oils. This cable provide continuous operation also in the case of fire as required by Standard IEC60331-25.

Construction



Fiber	Fiber in Loose Tube (OM1 , OM2 ,OM3 , OM4, OM5,OS2）
Loose tube	PBT
Max. No. of fiber in	24
Filling gel	Jelly Compound
Fire resistant barrier	Tube is protected by fire resistant mica tape
Armour	Glass Yarn around the loose tube
Outer Jacket	Material :SHF1 Min.Thickness :1.0mm OD :10.5±1.0 mm
Outer Jacket Color	Color ： Orange or per request
Marking	Hysin□MARINE□Cable□QFAI□FR□(No of fibers)□(fiber type) □ IEC60331-25□IEC60332-3-22□****m□xxxxxx□WW/YY Note：□ means blank；****m means meters；xxxxxx means batch number； WW/YY means week/year

Fiber Optical Cable data table

Fiber Type		SM 9/125 OS2 B1.3	MM 62.5/125 OM 1 A1b	MM 50/125 OM 2 A1a.1	MM 50/125 OM 3 A1a.2	MM 50/125 OM 4 A1a.3	MM 50/125 OM 5 A1a.4
Core Diameter(μm)		9.2 ±.0.4	62.5 ± 2.5	50 ± 2.5	50 ± 2.5	50 ± 2.5	50 ± 2.5
Attenuation (dB/km)	@1310 nm	<0.4	-	-	-		-
	@1550 nm	<0.3	-	-	-		-
	@ 850 nm	-	<3.00	<3.00	<3.00	<3.00	<3.00
	@ 1300 nm	-	<1.00	<1.00	<1.00	<1.00	<0.70
Bandwidth (MHz*km)	@ 850 nm	-	>200	>500	>1500	>3500	>3500
	@ 1300 nm	-	>500	>500	>500	>500	>500
Fiber capacity 1GBase	SR 1310nm	10000m	-	-	-		-
	LX 1550nm	40000m	-	-	-		-
	SX 850nm	-	275 m	1000 m	1100 m	1100 m	1100 m
	LX 1300nm	-	550 m	550 m	550 m	550 m	550 m
Fiber capacity 10GBase	SR 850nm	-	33 m	300 m	550 m	550 m	600m
	LX 1300nm	-	300 m	300 m	550 m	550 m	550 m
Fiber capacity 40GBase	SR 850nm	-	-	-	100 m	150 m	200 m
Proof test(kpsi)		>100	>100	>100	>100	>100	>100

Performances

Attenuation	IEC60793-1-40 & IEC60794-2
Mechanical and particular characteristic	IEC60092-360
Tensile strength	IEC60794-1-2 E1
Crush	IEC60794-1-2 E3
Impact	IEC60794-1-2 E4
Torsion	IEC60794-1-2 E7
Cable bend	IEC60794-1-2 E11
Flame Resistance	IEC 60332-3-22 Cat A
Fire Resistance	IEC 60331-25
Oil Resistance (SHF1)	IRM902, 70℃×4H
Acid Gas Release Mounts	≤5mg/g （IEC 60754-1）
Burning Occur Gas Acidity	PH≥4.3 （IEC 60754-2）

Fiber Color code

Fiber cores	2	4	6	8	12	16	24
Color of fibers	BL OR	BL/OR GR/BN	BL/OR/GR BN/GY/WH	BL/OR/GR/BN GY/WH/RD/BK	BL/OR/GR/BN GY/WH/RD/BK YL/VI/RS/AQ	BL/OR/GR/BN GY/WH/RD/BK YL/VI/RS/AQ *BL/*OR/*GR/*BN	BL/OR/GR/BN GY/WH/RD/BK YL/VI/RS/AQ *BL/*OR/*GR/*BN *GY/*WH /*RD/*BK *YL/*VI/*RS/*AQ

※ The color with * means a black or white tracer. (For example, *BL means Blue with a black tracer)

※ The other color of fiber may be applicable when purchaser required.

Technical Parameters

Type	Max. No. of fiber in tube	Diameter（mm）	Tensile Strength Long/Short Term (N)	Crush Resistance Long/Short Term (N/100mm)	Bending Radius Static/Dynamic (mm)	Storage/Operating Temperature
QFAI-FR UNI	2~24	10.5±1.0	600/1500	1000/3000	10D/20D	-40℃ to + 85℃

※ Flame retardant properties：

FA： Flame retardant、Low Smoke、Zero Halogen；FI： is Fire-resisting、Flame retardant、Low Smoke、Zero Halogen