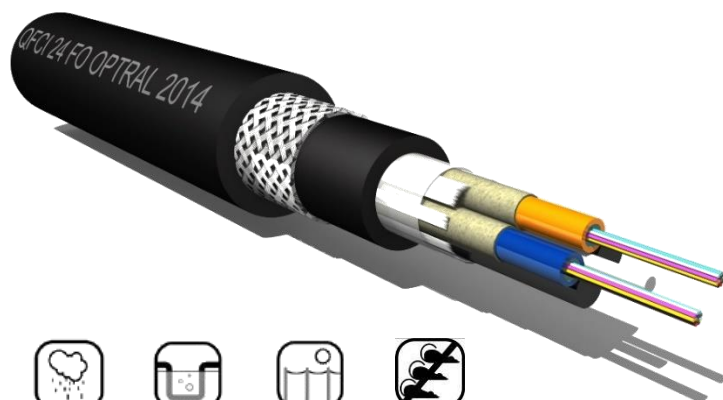
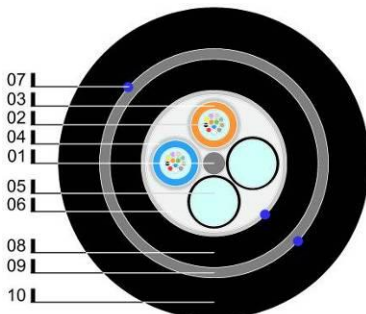


Cable Description

01. Central Element
02. Fibre Optics
03. Loose Tube (Jelly Filled)
04. Fire Protection (in active tubes)
05. Fillers
06. Reinforced Fiberglass yarns – WB
07. Ripcords
08. Inner Jacket
09. Metallic Armour
10. Outer Jacket



MOISTURE
PROTECTED



WATERTIGHT



ULTRAVIOLET
RESISTANCE



RODENT
PROTECTION



FLAME
RETARDANT



LOW SMOKE
EMISSION



FIRE
RESISTANCE



HALOGEN FREE

Applications

Emergency systems
Marine and Offshore applications
Commercial marine vessels
Harsh environments

Norms / Approvals

NEK606 – Type F1 QFCI
TAE00000UH – DNV-GL Type Approval

Fire Performance

Flame Propagation (IEC60332-1)
Fire Propagation (IEC60332-3)
Fire Resistance (IEC60331-25) – 90' @ 750°C
Halogen free (IEC 60754-1/-2)
Low smoke emission (IEC 61034-1/-2)
Emergency Circuits (EN50200 - PH120 @ 830°C)

Features

Superior resistance to moisture and sunlight
Excellent mechanical resistance
Excellent Rodent Protection
Mineral oils IRM 902 (IEC60811-2-1) - 4h@70°C

Options

Outer sheath available with SHF2 or MUD
Armour: Tinner copper (TCW) or bronze wire braid

SPECIFICATIONS (QFCI-MICA)

Fibre Count	4	6	8	12	16	24	36	48	72	96
Fibres per Tube	4	6	8	12	8	12	12	12	18	24
Total Tubes / Active Tubes	4 / 1	4 / 1	4 / 1	4 / 1	4 / 2	4 / 2	4 / 3	4 / 4	4 / 4	4 / 4
Fire Protection (in active tubes)	Mica Tape									
Strength Members	Reinforced Fiberglass Yarns WB (Water Blocking)									
Inner Sheath	LSZH ¹ - Black (IEC 60092 – 359 / SHF1)									
Armour	Galvanized steel wire braid									
Outer Sheath	LSZH ¹ – Black (IEC 60092 – 359 / SHF1)									
Weight (Kg/Km)	275									
Outer Ø (mm)	15.0 ±0.5									
Max. Tensile Load (N)	800 (Operation) / 1500 (Installation) – (IEC 60794-1-21 E1)									
Crush (N/10cm)	3000 (IEC 60749-1-21 E3)									
Impact (J)	5 (IEC 60794-1-21 E4)									
Temperature Range	-40°C ~ +70°C (Operation) / -10°C ~ +70°C (Installation) / -40°C ~ +70°C (Storage)									
Min. Bending Radius (mm)	20 x Outer Ø (IEC 60794-1-21 E11)									

OPTRAL

SPECIFICATIONS (QFCI-FV)										
Fibre Count	4	6	8	12	16	24	36	48	72	96
Fibres per Tube	4	6	8	12	8	12	12	12	18	24
Total Tubes / Active Tubes	4 / 1	4 / 1	4 / 1	4 / 1	4 / 2	4 / 2	4 / 3	4 / 4	4 / 4	4 / 4
Fire Protection (in active tubes)	Fiberglass Wire braid									
Strength Members	Reinforced Fiberglass Yarns WB (Water Blocking)									
Inner Sheath	LSZH ¹ - Black (IEC 60092 – 359 / SHF1)									
Armour	Galvanized steel wire braid									
Outer Sheath	LSZH ¹ - Black (IEC 60092 – 359 / SHF1)									
Weight (Kg/Km)	238	238	238	238	241	241	244	248	248	248
Outer Ø (mm)	15.0 ±0.5									
Max. Tensile Load (N)	500 (Operation) / 1500 (Installation) – (IEC 60794-1-21 E1)									
Crush (N/10cm)	3000 (IEC 60794-1-21 E3)									
Impact (J)	5 (IEC 60794-1-21 E4)									
Temperature Range	-40°C ~ +70°C (Operation) / -10°C ~ +70°C (Installation) / -40°C ~ +70°C (Storage)									
Min. Bending Radius (mm)	20 x Outer Ø (IEC 60794-1-21 E11)									

¹ LSZH – Halogen free, low smoke and flame retardant thermoplastic compound (IEC 60092 – 359 / SHF1).

Standards

Mechanical and Environmental tests according to IEC 60794-1-21 and IEC 60794-1-22.

Colours

Fibres colour code (TIA/EIA 598): Blue – Orange – Green – Brown – Grey – White – Red – Black – Yellow – Violet – Pink – Turquoise. **With one ring:** Blue – Orange – Green – Brown – Grey – White – Red – Natural – Yellow – Violet – Pink – Turquoise.

Tubes colour code (TIA/EIA 598): Blue – Orange – Green – Brown. Passive tubes = Black

Fibre Types

Type	Definition IEC	Definition ISO 11801	Definition ITU-T	TIA/EIA
E9/125	60793-2-50 B1.3	OS2	G.652D	-
E9/125	60793-2-50 B1.2	-	G.654	-
E9/125	60793-2-50 B4/B5	-	G.655/G.656	-
E9/125	60793-2-50 B6.A&B	-	G.657A1/A2/B2/B3	-
G50/125	60793-2-10 A1a.1	OM2	G.651.1	-
G50/125	60793-2-10 A1a.2	OM3	G.651.1	492AAAC
G50/125	60793-2-10 A1a.3	OM4	G.651.1	492AAD
G50/125	60793-2-10 A1a.4	OM5	G.651.1	492AAAE
G62.5/125	60793-2-10 A1b	OM1	-	492AAAA