

# QFNI

**Loose tube, jelly filled**

**Armoured**

**SHF1**

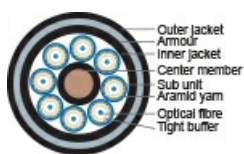
## Application

Fiber optic cable for use in vital communication and emergency systems which needs to be operational during a fire situation (90 min. 950 – 1000°C). The fibers are protected in jelly filled loose tubes stranded around a central strength member to ensure high performance and long endurance. Individual color for each fiber. 62.5, 50 and 9 µm fibers. The cable can be used outdoor and indoor, excellent rodent resistance.



## Construction Fiber

Fibertype	MM or SM 62.5, 50 or 9 µm
Colorcode fiber	1 - red 5 - grey 9 - white 2 - green 6 - violet 10 - pink 3 - blue 7 - brown 11 - black 4 - yellow 8 - orange 12 - turquoise
Sub unit	1 - red 2 - green 3, 4... - natural passive tubes black
Fire barrier	Mica tape over each active tube
Strength member	Reinforced fibreglass yarns (WB) (waterblocking)
Inner jacket	Black LSZH compound
Armour	Corrugated steel
Outer Jacket	Black SHF1
Diameter	15.5 [mm]



## Specifications fiber

Temperature range	-40 – +90 [°C] According to IEC 60794-1-22 F1
Temperaturerange at inst.	-10 – +50 [°C] According to IEC 60794-1-22 F1
Tensile strength	Installed: 1000 [N] @ installation: 1800 [N] (according to IEC 60794-1-21 E1)
Crush resistance	3000 [N/10cm] (according to IEC 60794-1-21 E3)
Impact resistance	5 [ J ] (according to IEC 60794-1-21 E4)
Water penetration	According to IEC 60794-1-22 F5B (3m, 1m. 24h)
Bending radius flexible	20 [x outer diam.]
Bending radius installed	15 [x outer diam.]



## Norms

Halogenfree, max content corrosive and toxic gases	IEC 60754-1 & IEC 60754-2
Flame retardant	IEC 60332-1 and IEC 60332-3
Fire resistant	IEC 60331-25 (90min @ 950 – 1000°C)
Smoke emission	IEC 61034-2
Euroclass	Eca
DoP No.:	DOP01250

## Dimension

No. of fibres	Fibre per tube	Total / Active tubes	Outer diam. [mm]	Weight
12	12	6 / 1	15.5	247
16	8	6 / 2	15.5	248
24	12	6 / 2	15.5	248
32	8	6 / 4	15.5	249
36	12	6 / 3	15.5	249
48	12	6 / 4	15.5	250
72	12	6 / 6	15.5	251