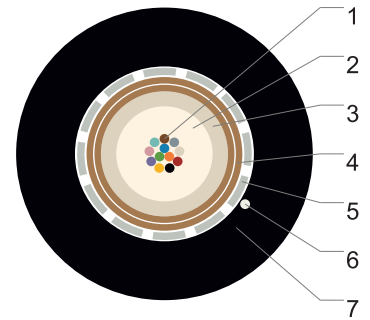
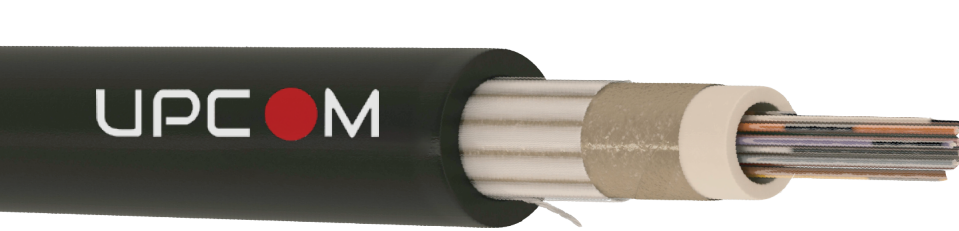


Fiber Optic Cables

U-DQ(ZN)H (FR-FE180PH120)

RoHS REACH CE

Single loose tube, non-metallic armor, fire resistant fiber optic cable.



Application

- Easy and fast installation due to its small diameter and light construction.
- Suitable for pushing, blowing method.
- Indoor and duct type applications; low smoke, zero halogen.
- In network systems, MAN, WAN, LAN applications.
- Rodent protection.
- Due to its fire resistance, in applications where human life needs to be protected.

Cable Construction

- 1 - Optical fiber core¹
- 2 - Waterproof thixotropic jelly
- 3 - PBT Tube
- 4 - Mica tape
- 5 - Non-metallic strength member (Glass yarn)
- 6 - Ripcord
- 7 - UV resistant halogen-free (LSOH) outer jacket

Mechanical and Environmental Characteristics

	Test Standard	Specified Value	Acceptance Criteria
Maximum Installation Tension ²	IEC 60794-1-2-E1	1.5 x W(N), min. 1500 N	Fiber strain ≤ 0.33 %
Maximum Operation Tension	IEC 60794-1-2-E1	0.5 x W(N), min. 300 N	Δα ≤ 0.05 dB, No fiber strain
Crush Strength	IEC 60794-1-2-E3	2500 N / 100 mm, max. 15 min.	Δα ≤ 0.05 dB, No damage
Impact	IEC 60794-1-2-E4	10 Nm, 3 impacts, R= 300 mm	Δα ≤ 0.05 dB after the test
Torsion	IEC 60794-1-2-E7	1 m. 100N, +/- 180°, 10 cycles	Δα ≤ 0.05 dB, No damage
Repeated Bending	IEC 60794-1-2-E6	R=20x D, 100 N, 35 cycles	No damage
Bending Radius	IEC 60794-1-2-E11	R=20x D, 4 turns, 3 cycles	Δα ≤ 0.05 dB, No damage
Temperature Cycling	IEC 60794-1-2-F1	-20°C to +70°C	Δα ≤ 0.05 dB/km
Waterproofness	IEC 60794-1-2-F5B	Sample= 3 m, water column= 1 m	No water leakage in 24 hours.

Application

	Minimum Bending Radius		Temperature Range		
Operation	20 x cable Ø	Storage	0°C to +70°C	Installation	-30°C to +60°C
Fixed	10 x cable Ø	Transport	0°C to +70°C	Operating	-20°C to +70°C

Marking, Packing, Delivery Lengths

Marking	UPCOM <Date of Manufacture> <Fiber Count and Type> <Length Marking>
Packing	Wooden drum with protection
Delivery Lengths	2 km, 4 km ± %5 tolerance

Test Standards

Low Smoke Test	Non-corrosiveness Test	Fire Performance Test	Flame Retardancy Test
IEC 61034, EN 50268	IEC 60754, EN 50267	IEC 60331-25	IEC 60332-1

Notes

¹ Optical fiber core could be applied as G.652.D, G.655, G.657.A1, G.657.A2, OM1, OM2, OM3, OM4 according to customer demand.

² Maximum tensile strength could be changed according to customer demand.

Manufacturing Standard: TS EN 60794-3-12

(FR-FE180PH120)

Part Number	Core Type	Core Count	Tube Diameter (mm)	Cable Diameter (mm)	Cable Weight (kg/km)
3.207.0.6.6.0900.0.0002	SM G.652.D	2	3.4	8.0	84
3.207.0.6.6.0900.0.0004	SM G.652.D	4	3.4	8.0	84
3.207.0.6.6.0900.0.0006	SM G.652.D	6	3.4	8.0	84
3.207.0.6.6.0900.0.0008	SM G.652.D	8	3.4	8.0	84
3.207.0.6.6.0900.0.0012	SM G.652.D	12	3.4	8.0	84
3.207.0.6.6.0900.0.0024	SM G.652.D	24	4.2	8.8	97