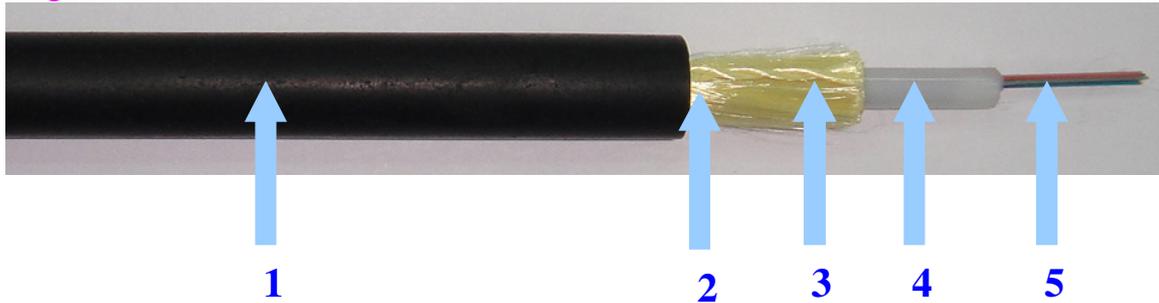


FTTH Drop Fiber Optic Cable

Application : The cable are intended for operation under conditions normally encountered in the last portion of all-optical networks. Designed to run from the Network Access Point (NAP) to the subscriber premises. Available in 1 to 12 fiber counts. LSZH (Low Smoke Zero Halogen); flame retardant; customizable to any requested specifications.

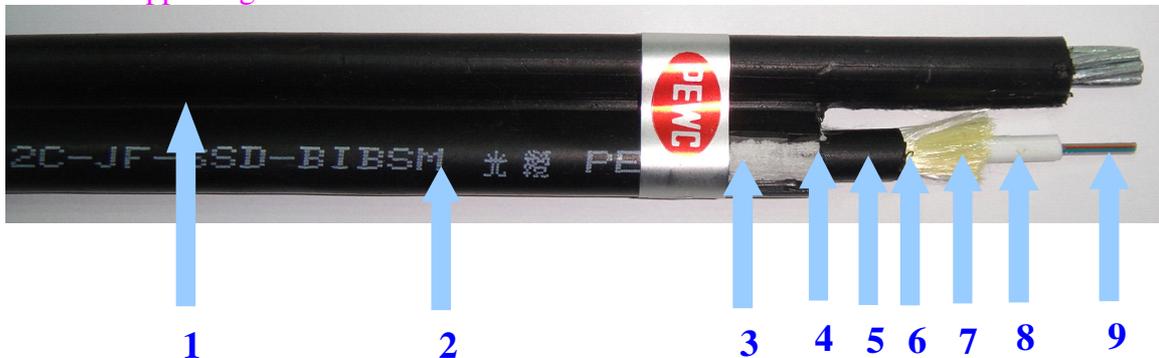
Construction :

For Underground Conduit Installation



- ❶ Outer sheath
- ❷ Ripcord
- ❸ Waterblocking & Peripheral Strength Elements: aramid yarns.
- ❹ Central loose tube
- ❺ Fibers

For Aerial/Self-supporting Installation



- ❶ Self-support wire with overshath
- ❷ Outer sheath
- ❸ Water blocking element
- ❹ Ripcord
- ❺ Inner sheath
- ❻ Ripcord & water blocking element
- ❼ Peripheral Strength Elements: aramid yarns
- ❽ Central loose tube
- ❾ Fibers

Features and Benefits :

- ◆ Central Loose Tube: thermoplastic material (PBT), containing optical fibers and filled with a suitable water tightness jelly compound.
- ◆ Peripheral Strength Elements: aramid yarns.
- ◆ Longitudinal water tightness : Water blocking element used for eliminates the need for traditional flooding compound and provides efficient and craft-friendly cable preparation.
- ◆ Ripcord:Nylon thread or Aramid yarn for the sheath can be easily strip.
- ◆ Outer Sheath: (Option)
 - PE sheath
 - LSZH PE sheath: Low Smoke Zero Halogen sheath for Flame retardant characteristics.

Specification : 6C~12C , Detail specification

1. Configuration

For Underground Conduit Installation

No. of Fibers	Unit	2	4	6	8	12
Loose Tube- ϕ	mm	3.1				
Sheath	mm	1.4				
Cable Diameter	mm	8.0				
Cable weight(App.)	kg/m	0.05				

For Aerial/Self-supporting Installation

No. of Fibers	Unit	2	4	6	8	12
Loose Tube- ϕ	mm	3.1				
Sheath	mm	1.4				
Self-support- ϕ	NO/mm	7/1.6				
Cable Diameter(H×W)	mm	20.5×11.5				
Cable weight(App.)	kg/m	0.21				

2. Application

Temperature Range	Minimum Bending Radius
Transportation&Storage: -30~+60°C Installation: 0~+60°C Operation: -30~+60°C	Under Maximum Tension : 20×Cable- ϕ Without Tension: 10×Cable- ϕ

3. Mechanical and Environmental Characteristics :

Test	Test Standard	Specified Value	Acceptance Criteria
Tensile Loading and Bending Test	EIA-455-33A	Mandrel diameter: 20D (D = cable diameter) Tensile load: 182kgf for 10 minutes	(1) Attenuation Increment ≤ 0.2 dB (2) No jacket cracking and fiber breakage
Cyclic Flexing Test	TIA/EIA-455-104A	Sheave diameter: 20D (D=cable diameter) No. of flexing cycles: 25 cycles Flexing speed: 30 cycles/minute	
Repeated Impact Test	TIA/EIA-455-25B	Height of impact: 150mm No. of impact cycles: 20 cycles Cycle speed: 30 \pm 1 cycle / min.	
Cable Twist Test	TIA/EIA-455-85A	Cable length twisted: 4m No. of twist cycles: 10 cycles for 10 min. Twist angle: $\pm 180^\circ$ /cycle	
Compressive Loading Resistance Test	TIA/EIA-455-41A	Applied load: 2kgf/mm Duration of loading: 10 minutes Load length: more than 100 mm Compressive speed: 2.54 mm/min.	
Water Penetration	TIA/EIA-455-82B/ IEC 60794-1-2F5B	Length of specimen: 1m Height of pressure head: 1m Test time: 4 hours	No leakage through the open cable end
Fire Performance	IEEE 383 or JIS C 3521	Ribbon burner	The maximum flame extends should less than 1.8m

This section shall be performed at 1550nm.

4. Optical Characteristics

4.1 Maximum Attenuation

Wavelength	Attenuation(dB/km)
1260nm	≤ 0.45
1310nm	≤ 0.40
1383nm ± 3 nm	≤ 0.35
1550nm	≤ 0.25 (90%) ≤ 0.30 (100%)
1625nm	≤ 0.35

4.2 Chromatic Dispersion

Wavelength	Specification (ps/km-nm)
1260nm	≤ 6.21
1310nm	≤ 1.14
1383nm	≤ 7.05
1550nm	≤ 18.21
1625nm	≤ 22.31

4.3 Polarization Mode Dispersion , PMD

Individual Polarization Mode Dispersion	0.2 ps / $\sqrt{\text{km}}$
Linked Polarization Mode Dispersion , PMD _Q 20 Cables(M= 20) 0.01% Probability level(Q=0.01%)	0.1ps / $\sqrt{\text{km}}$

4.4 Cut-off Wavelength of Cabled : Less than 1260nm ◦

4.5 Mode Field Diameter

1310nm	9.0~9.4 $\mu\text{m} \pm 0.4\mu\text{m}$
1550nm	10.0~10.7 $\mu\text{m} \pm 0.7\mu\text{m}$

5. Identification

5.1 Fiber Colours

Fiber No.	1	2	3	4	5	6	7	8	9	10	11	12
Colour	Blue	Yellow	Green	Red	Violet	White	Brown	Black	Aqua	Orange	Pink	Grey

5.2 Loose Tube Colours : White

5.3 Sheath Colour: Black

5.4 Sheath Marking

PACIFIC 《year of manufacture》 《Cable type and fiber count》 《length marking in meter》

6. Packing

Metal or Wooden drums with protection.

7. Delivery Lengths

Standard delivery length are 2000 meters.

