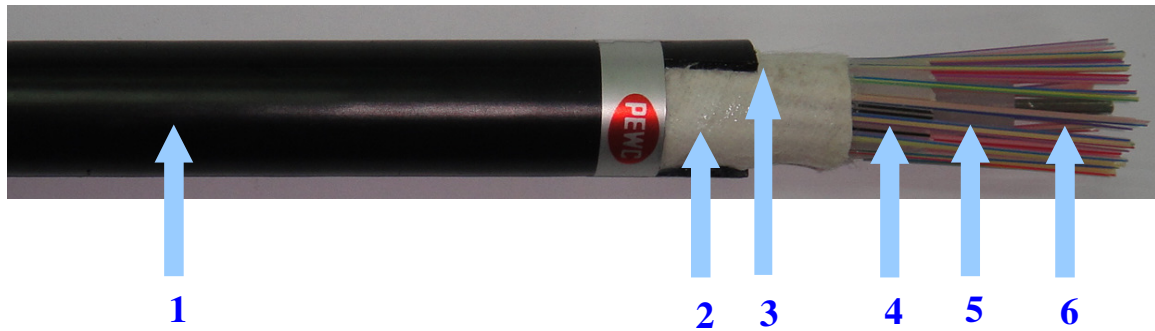


## Slotted Ribbon Type Fiber Optic Cables

**Application :** Primarily for carrier-class fixed line, mobile communications networks, CATV fiber-optic backbone network, used for the core and aggregation network and access network for base stations connected.

**Construction :**



- ❶ LAP sheath
- ❶ Water blocking tape
- ❸ Ripcord
- ❷ 4-fiber ribbon
- ❺ Slotted core
- ❻ Center strength member(CSM)

**Features and Benefits :**

- ◆ CSM: Could provide efficient tension for cable.(Option)
  - Galvanized steel wire
  - FRP Rod (Non-metallic type for power line system)
- ◆ PE Slotred Core: HD Polyethylene extrusion.
- ◆ Stranding: Accomodate the 4-fiber ribbon into grooves of slotted core.
- ◆ Longitudinal Water Tightness: Water blocking tape be used, totally dry core enhance operation for splicing.
- ◆ Ripcord: Aramid yarn thread allows easy sheath removal.
- ◆ Sheath: (Option)
  - LAP sheath: Laminated Aluminum sheath for moisture berry.
  - PE sheath

**Specification :** 4C~300C , Detail specification

## 1. Configuration

No. of Fibers	Unit	4~100	200	300
Ribbon No.	NO	25	50	75
CSM- $\phi$	mm	2.6	2.6	2.6
Slotted Core- $\phi$	mm	9	14	16
Slotted No.	mm	5	10	15
LAP Outer sheath	mm	1.7	1.7	1.7
Cable Diameter	mm	14	19	21
Cable weight(App.)	kg/m	0.12	0.25	0.33

## 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- $\phi$ Without Tension: 10×Cable- $\phi$

3. Mechanical and Environmental Characteristics :

Test	Test Standard	Specified Value	Acceptance Criteria
Tensile Performance	IEC 60794-1-2E1	Mandrel diameter: 20D (D = cable diameter) Tensile load: 100C: 200kgf for 30 minutes 200C/300C:273 kgf for 30 minutes	(1) Attenuation Increment $\leq 0.2$ 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: 4.54kgf/mm Duration of loading: 10 minutes Load length: more than 100 mm Compressive speed: 2.54 mm/min.	
Water Penetration	IEC 60794-1-2F5A	Length of specimen: 100C: 3.1m 200/300C: 6.1m Height of pressure head: 1m Test time: 24 hours	No leakage through the open cable ends

This section shall be performed at 1550nm.

#### 4. Optical Characteristics

##### 4.1 Maximum Attenuation

Wavelength	Attenuation(dB/km)
1260nm	$\leq 0.45$
1310nm	$\leq 0.40$
1383nm $\pm$ 3nm	$\leq 0.35$
1550nm	$\leq 0.25$ (90%) $\leq 0.30$ (100%)
1625nm	$\leq 0.35$

##### 4.2 Chromatic Dispersion

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

##### 4.3 Polarization Mode Dispersion , PMD

Individual Polarization Mode Dispersion	0.2 ps / $\sqrt$ km
Linked Polarization Mode Dispersion , PMD <sub>Q</sub> 20 Cables(M= 20) 0.01% Probability level(Q=0.01%)	0.1ps / $\sqrt$ km

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

##### 4.5 Mode Field Diameter

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

## 5. Identification

### 5.1 Ribbon code

Fiber No. Ribbon No.	Fiber NO. Colour			
	1	2	3	4
I	Blue	White	White	Pink
II	Yellow	White	White	Pink
III	Green	White	White	Pink
IV	Red	White	White	Pink
V	Violet	White	White	Pink

### 5.2 Configuration of Ribbons

4~100

Slot No. Fiber Count	Ribbon No.				
	1	2	3	4	5
4	I				
8	I	II			
12	I	II	III		
16	I	II	III	IV	
24	I~II	III	IV	V	I
48	I~V	I~V	I~II		
72	I~V	I~V	I~V	I~III	
100	I~V	I~V	I~V	I~V	I~V

200・300

Slot No. Fiber Count	Ribbon No.														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
200	I	I	I	I	I	I	I	I	I	I					
	~	~	~	~	~	~	~	~	~	~					
	V	V	V	V	V	V	V	V	V	V					
300	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V

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.