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## **OPTICAL DROP CABLE**

### **900 MICRON FIBER PUSHABLE BLOWABLE LT CABLE**

#### **Cable application**

Simple construction shall provide easy-installation inside mini-duct by hand-push, hand-pull, and air-jetting.

#### **Feature and Benefit**

P.B.T tube cable shall provide high elastic strength, durability and crush resistance.

Simple design: Lightweight and small diameter.

Color-coded fiber: Easy and quick identification.

Tube design: Compatibility with all common fiber type.

#### **Construction**

Fiber: Max. 2F (900micron Tight buffer)

Jacket: P.B.T. Tube

W/B material inside tube: Gel-free

Additional strength material: Aramid yarn

#### **Standard and Reference**

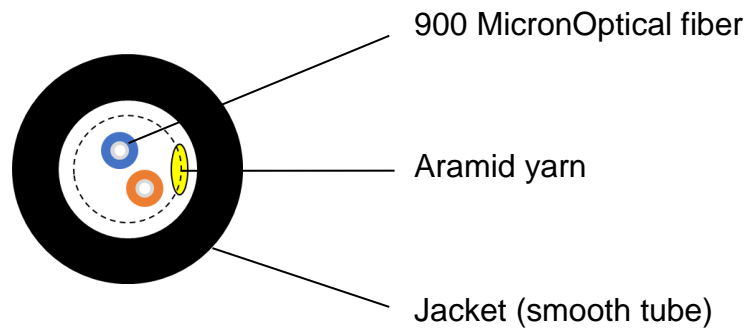
ITU-T G.650, G.652.D, G.657.A1, G.657.A2

IEC 60793, 60794.

TIA 598-D.

ISO 9001, 14001. OHSAS 18001.

**Fig. Cross Section**



- Not to scale

**Table 1. Color Coding of Optical Fiber**

No. of tube	1	2										
Color	Blue	Orange										

\* Mean: ring marking on the fiber

**Table 2. Cable Construction and Information**

Item	Value & description
Total optical fiber count	1 ~ 2F
Jacket material (tube)	PBT (Polybutylene Terephthalate)
W/B material	Dry blocking
Additional strength material	Aramid yarn
Color of jacket	Black

Nominal cable diameter		O.D: 3.0mm; I.D.: 2.2mm (Thickness: 0.4mm)
Nominal cable weight		8.0 kg/km
Installation strength		100N
Temperature range	Operating	-40°C to +80°C
	Installation	-20°C to +60°C

**Table 3. Optical Fiber Characteristics - Single mode**

Characteristics of fiber		Description and value						
Type of Fiber		G.652.D		G.657.A1		G.657.A2		
Mode Field Diameter @ 1310nm		9.2 ± 0.4 μm		8.9 ± 0.4 μm		8.6 ± 0.4 μm		
Mode Field Concentricity Error		≤ 0.6 μm		≤ 0.6 μm		≤ 0.6 μm		
Cladding Diameter		125 ± 0.7 μm		125 ± 0.7 μm		125 ± 0.7 μm		
Cladding Non Circularity		≤ 1%		≤ 1%		≤ 1%		
Coating Diameter	Uncolored	245 ± 10 μm		245 ± 10 μm		245 ± 10 μm		
	Colored	250 ± 10 μm		250 ± 10 μm		250 ± 10 μm		
Attenuation	@ 1310nm	≤ 0.35 dB/km		≤ 0.35 dB/km		≤ 0.35 dB/km		
	@ 1383nm	≤ 0.35 dB/km		≤ 0.35 dB/km		≤ 0.35 dB/km		
	@ 1550nm	≤ 0.25 dB/km		≤ 0.25 dB/km		≤ 0.25 dB/km		
Dispersion	@ 1285~1330nm	≤ 3.5 ps/(nm.km)		≤ 3.5 ps/(nm.km)		≤ 3.5 ps/(nm.km)		
	@ 1550nm	≤ 18 ps/(nm.km)		≤ 18 ps/(nm.km)		≤ 18 ps/(nm.km)		
Zero Dispersion Wavelength		1300nm - 1324nm		1300nm - 1324nm		1300nm - 1324nm		
Cable Cut off Wavelength		≤ 1260nm		≤ 1260nm		≤ 1260nm		
Zero Dispersion Slope		≤ 0.092 ps/(nm <sup>2</sup> .km)		≤ 0.092 ps/(nm <sup>2</sup> .km)		≤ 0.092 ps/(nm <sup>2</sup> .km)		
Fiber Proof Test Level		100kpi (0.69Gpa)		100kpi (0.69Gpa)		100kpi (0.69Gpa)		
Uncabled fiber macrobending loss	Radius (mm)	30	25	15	10	15	10	7.5
	Number of turns	100	100	10	1	10	1	1
	dB @ 1550nm	-	0.05	0.25	0.75	0.03	0.1	0.5
	dB @ 1625nm	0.05	-	1.0	1.5	0.1	0.2	1.0