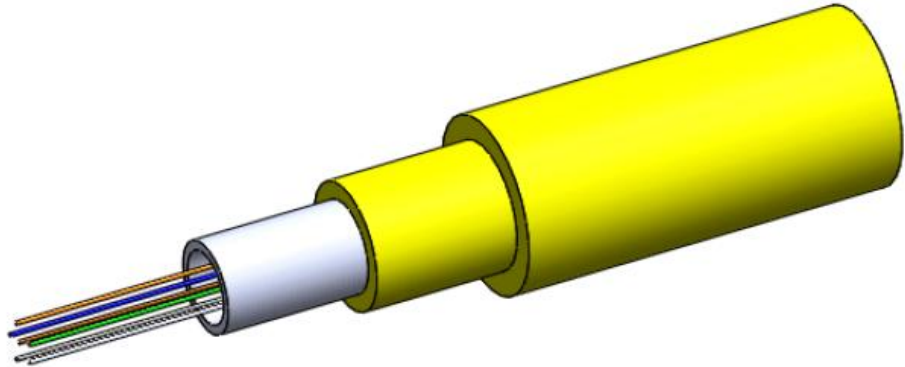


Fiber Optic Cable Jelly Filled Central Loose Tube



Description

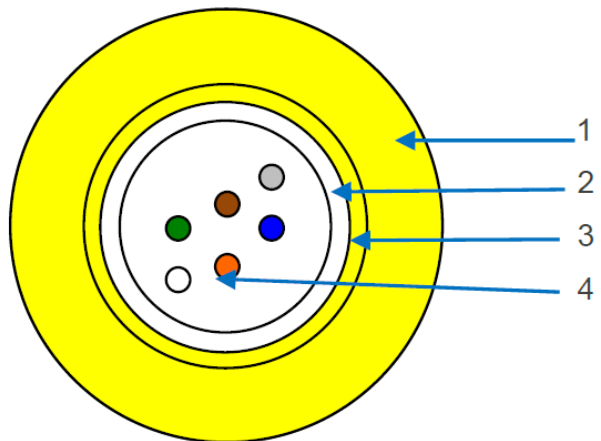
DME PROLINK's Central Jelly filled loose tube cable is designed specifically for Campus/Backbone and also for indoor where there is increased mechanical requirements and the risk of damage by rodents. This cable can be used in outdoor dry conduits (duct installable cable) and house lead-ins without additional transfer points (splices). The unique extruding technology provides the fibers in the tube with good flexibility and bending endurance.

Features & Benefits

- ✓ Central Jelly Filled loose tube for up to 24 fibers
- ✓ Strain relief and rodent protection is glass roving
- ✓ Sheath made of Halogen free compound
- ✓ Jacketing is Yellow color
- ✓ Multiple water blocking function
- ✓ Provide good crush resistance

Cable Construction

1. Outer Sheath – LSZH , Anti-rodent
2. Loose tube
3. Strength member (Aramid yarns)
4. Fiber and jelly



Fiber Optic Cable

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Dimensions and Properties

Physical	Fiber count	G.652D
	Strength member	Aramid yarns
	Cable OD	6.0 mm \pm 5%
	Cable weight:	40kg/km \pm 15%
	Operation temperature range	-20°C to + 70°C
	Installation temperature range	-10°C to + 70°C
	Transport and storage temperature	-20°C to + 70°C
Mechanical	Max. tensile load	400N
	Crush resistance	500 N/10cm
	Minimal installation bending radius	20 x OD
	Minimal operation bending radius	10 x OD

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TECHNICAL DATA



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Fiber Optic Cable

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Optical Fiber G.652D Fiber

Category	Description	Specifications	
		Before cabling	After cabling
Optical Specifications	Attenuation @1310 nm	≤0.34 dB/km	≤0.36 dB/km
	Attenuation @1550 nm	≤0.20 dB/km	≤0.22 dB/km
	Zero Dispersion Wavelength	1300~1324 nm	
	Zero Dispersion Slope	≤ 0.092 ps/nm ² ·km	
	Chromatic dispersion @1285~1330nm	≤ 3.5 ps/nm·km	
	@1270~1340nm	≤ 5.3 ps/nm·km	
	@1550nm	≤ 18 ps/nm·km	
	PMD Individual value	≤0.2 ps/√km	
	Cable Cutoff Wavelength (λ _c)	≤1260 nm	
	Macro bending Loss (100 turns; Φ60 mm)@1550nm (100 turns; Φ60 mm)@165 nm	≤ 0.05 dB ≤ 0.10 dB	
Mode Field Diameter@1310 nm	9.2± 0.4μm		
Dimensional Specifications	Cladding Diameter	125 ±1μm	
	Core/clad concentricity error	≤0.6μm	
	Cladding Non-Circularity	≤1.0%	
Mechanical Specifications	Proof stress	≥0.69Gpa	

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Routine Tests for Single Mode Fiber Cable

Mode field diameter	IEC 60793-1-45
Cladding diameter	IEC 60793-1-20
Cladding non-circularity	IEC 60793-1-20
Attenuation coefficient	IEC 60793-1-40
Chromatic dispersion	IEC 60793-1-42
Cable cut-off wavelength	IEC 60793-1-44

Tension Loading Test

Test Standard	IEC 60794-1-2-E1
Sample length	No less than 50 meters
Load	Max. tension load
Duration time	1 minute
Test results	Fiber strain: $\leq 0.60\%$
	Additional attenuation: $\leq 0.1\text{dB}$
	No damage to outer jacket and inner elements

Crush/Compression Test

Test Standard	IEC 60794-1-2-E3
Load	Crush resistance
Duration time	1 minute
Test number	1 point at 1 place
Test results	Additional attenuation: $\leq 0.1\text{dB}$;
	No damage to outer jacket and inner elements

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Impact Resistance Test

Test Standard	IEC 60794-1-2-E4
Impact energy	1J
Radius	300.0mm
Impact points	3
Impact number	1
Test result	Additional attenuation: $\leq 0.1\text{dB}$; No damage to outer jacket and inner elements

Repeated Bending Test

Test Standard	IEC 60794-1-2-E6
Bending radius	20 X diameter of cable
Cycles	30 cycles
Test result	Additional attenuation: $\leq 0.1\text{dB}$; No damage to outer jacket and inner elements

Torsion/Twist Test

Test Standard	IEC 60794-1-2-E7
Sample length	2m
Angles	± 90 degree
Cycles	10
Test result	Additional attenuation: $\leq 0.1\text{dB}$; No damage to outer jacket and inner elements

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Bending Test

Test Standard	IEC 60794-1-2-E11B
Mandrel diameter	20 X diameter of cable
Turn number	4
Number of cycles	1 cycle
Test result	Additional attenuation: $\leq 0.1\text{dB}$ No damage to outer jacket and inner elements

Temperature Cycling Test

	IEC 60794-1-2-F1
Temperature step	$+20^{\circ}\text{C} \rightarrow -20^{\circ}\text{C} \rightarrow +70^{\circ}\text{C} \rightarrow -20^{\circ}\text{C} \rightarrow +70^{\circ}\text{C} \rightarrow +20^{\circ}\text{C}$
Time per each step	12 hrs
Cycles	2
Test result	Attenuation variation for reference value (the attenuation to be measured before test at $+20 \pm 3^{\circ}\text{C}$) $\leq 0.1\text{dB} / \text{km}$

Water Penetration Test

Test Standard	IEC 60794-1-2-F5
Height of water column	1m
Sample length	3m
Test time	24 hour
Test result	No water leakage from the opposite of the sample

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D	1	1	8	x	-	n	m	j	p	s	c
x				Pin assigned by ECS							
0-9				Inventory Management Index							
n				Number of Fibers							
02 - 24				02 - 24 Fibers							
m				Mode							
0				OM1							
1				OM2							
2				OM3							
3				OM4							
6				OS1							
7				OS2							
j				Sheath Construction							
PV				PVC							
LS				LSZH							



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D 1 1 8 x - n m j p s c

p	Physical Construction
JF	Jelly-Filled
ST	Steel-Tape Armored
RP	Rodent-Proof
FR	Fire-Retardant
0	Not Applicable

s	Specification (for SM)
2D	G.652D
7A	G.657A
7B	G.657B

c	Sheath Color
GR	Grey
BU	Blue
OR	Orange
YW	Yellow
BK	Black

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