



Other Specialty Cables

GJYFU-1PM Polarization-maintaining Outdoor Optical Cable

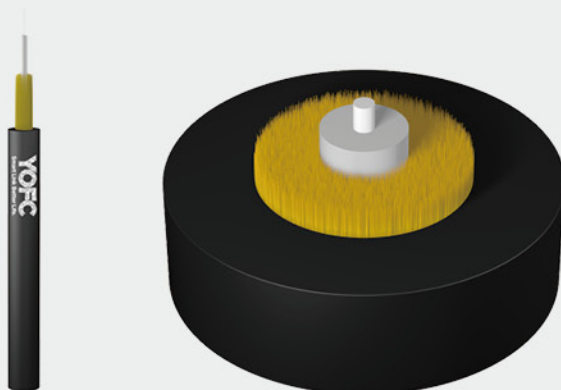
The all dielectric field optical cable is a kind of communication cable, which is designed for rapid routing and repeated deployment in the field and complex environment. The large-area aramid fibre reinforced optical cable provides the optical cable with extremely high mechanical strength and compact all-dielectric wiring structure, which enables the optical cable to have extremely high strength-to-weight ratio and facilitate rapid wiring. As the high modulus aramid yarn is adopted as the reinforcing material and special structure design, High strength and full dielectric structure of the cable which greatly improves the strength of optical cable, and meets the requirement of fast wiring. The optical cable characterized as follows: light weight, high tensile strength, strong compressive strength, excellent flexibility, easy bending, oil resistance, wear resistance, flame retardant and the like, and it is suitable for following rapid wiring occasions: harsh conditions of field communication systems, the sensor head of the transformer and the host computer, radar application, aviation and ships, and emergency repair of communication lines.

Characteristics

- High mechanical strength and high tensile strength
- Light weight and good softness
- Oil resistant, wear resistant, flame retardant and corrosion resistant
- Low induced attenuation and high stability

Applications

- Wiring of field communication system
- Transformer sensing head and host wiring
- Radar, aviation and ship wiring



Specifications

Parameters	Description			
Fibre Type	PM1016-A	PM1016-B	PM1017-A	PM1017-B
Operating Wavelength (nm)	1310	1310	1550	1550
Mode Field Diameter (μm)	$6.0 \pm 0.5@1310\text{nm}$	$6.0 \pm 0.5@1310\text{nm}$	$6.5 \pm 0.5@1550\text{nm}$	$6.5 \pm 0.5@1550\text{nm}$
Attenuation (dB/km)	≤ 0.6	≤ 0.6	≤ 0.5	≤ 0.8
Beat Length (mm)	≤ 3.0	≤ 3.0	≤ 3.5	≤ 3.5
Crosstalk @100m (dB)	≤ -30	≤ -30	≤ -30	≤ -30
Cladding Diameter (μm)	125.0 ± 1.0	80.0 ± 1.0	125.0 ± 1.0	80.0 ± 1.0
Coating Layer Diameter (μm)	245.0 ± 5.0	165.0 ± 5.0	245.0 ± 5.0	165.0 ± 5.0

Structural Dimensions of Optical Cable

Item	Description			
Fibre Type	PM1016-A	PM1016-B	PM1017-A	PM1017-B
Fibre Color	Natural color			
Tensile Element	Aramid yarns			
Outer Jacket Diameter (mm)	2.9 ± 0.1			
Outer Jacket Wall Thickness (mm)	0.9 ± 0.1			
Outer Jacket Material	TPU			
Outer Jacket Color	Black			

Mechanical Properties

Item	Description	
Minimum Bending	Static	10D, D is the cable diameter
	Dynamic	20D, D is the cable diameter
Tension	Long-term	80N
	Short-term	150N
Crush Resistance	Long-term	100N/10cm
	Short-term	500N/10cm

Other

Item	Description	
Operating Temperature ($^{\circ}\text{C}$)	-	-40 to +70
Storage Temperature ($^{\circ}\text{C}$)	-	-40 to +60
Package	Drum	Wooden drum
Mark	Cable skin	YOFC+Contract No.+Model+number of meters
Weight	-	Reference value 6.5kg/km