

Specifier's Reference
Project
Type
Model No.
Comments or Special Instructions

ILLUMINATI'S SHEATHED SINGLE CORE END LIT POLYMER FIBER

SINGLE STRAND OPTICAL FIBER WITH A BLACK SHEATH

Illuminati supplies high quality sheathed single core fibre for supply on reels. The sheathing protects the fibre in arduous conditions. Suitable for use in indoor, outdoor and submersible applications.

FIBER SPECIFICATIONS

Core material: Polymethyl Methacrylate
 Cladding material: Fluorinated Polymer
 Refractive index: 1.49
 Numerical aperture: 0.5
 Refractive index profile: step index
 Operation temperature range: -55°C to +70°C in low humidity; <60°C at 95% RH (attenuation change is within 10% after 1000 hours except for that due to absorbed water). Please note that fibre can become brittle at lower temperatures.

SHEATHING SPECIFICATIONS

Outer sheathing material TP519 is a thermoplastic low-smoke halogen-free flame retardant compound with low toxic fume emission.

TP519 toxicity index NES713: 1.3
TP519 halogen acid gas evolution BS EN 50267-2-1: <0.5%
TP519 smoke emission 3m cube test BS 7622: Pass



Size	Approximate active diameter	Approximate outer diameter	Max. no. of tails per light source	Minimum Bend Radius	*Approx. Weight	Min. Bend Radius
CK30S	0.25mm	±0.023mm	12000m	0.06g/m	5mm	350 dB/km
CK40S	0.50mm	±0.030mm	6000m	0.4g/m	10mm	250 dB/km
CK60S	0.75mm	±0.045mm	2700m	0.9g/m	15mm	200 dB/km
CK80S	1.00mm	±0.060mm	1500m	1.5g/m	20mm	200 dB/km

*without packaging