

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

ILLUMINATI'S SHEATHED MULTI-STRANDED END LIT POLYMER FIBER

MULTI-STRANDED OPTICAL FIBER WITH A BLACK SHEATH

Strands of fibre in a black plastic coating which holds the bundle together and protects the fibre in arduous conditions. The fiber can be terminated with ferrules for use with end fittings. For starry effects the sheathing can be stripped back and the individual fibres fanned out to give small points of light.

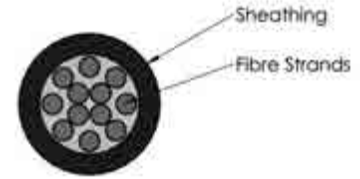
FIBER SPECIFICATIONS

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



Number of fiber strands varies by product

Product Code	Number of Strands	Individual Strand Diameter	Approximately Active Diameter	Approximately Outer Diameter	Minimum Bend Radius	Full Reel Length
4EG075	4	0.75mm	1.9mm	3.0mm	20mm	500m
7EG075	7	0.75mm	2.3mm	4.5mm	25mm	500m
12EG075	12	0.75mm	3.1mm	4.5mm	25mm	300m
25EG075	25	0.75mm	4.3mm	6.3mm	30mm	300m
33EG075	33	0.75mm	5.0mm	7.1mm	50mm	200m
50EG075	50	0.75mm	6.0mm	8.7mm	60mm	150m
75EG075	75	0.75mm	7.5mm	10.5mm	80mm	100m
88EG075	88	0.75mm	8.0mm	10.5mm	90mm	100m
100EG075*	100	0.75mm	8.4mm	12.0mm	100mm	100m