ESKA[™] Polyethylene Jacketed Optical Fiber Cord: BH4001

Manufactured by Mitsubishi Chemical Corporation

Marketed and sold by Mitsubishi International PolymerTrade Corporation

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Structure					
Core Material	Polymethyl Methacrylate Resin (PMMA)				
Cladding Material	Fluorinated Polymer				
Core Refractive Index	1.49				
Refractive Index Profile	Step Index				
Numerical Aperture	0.58				
	Unit	Typical			
Core Diameter	μm	980			
Cladding Diameter	μm	1,000			
Jacket Diameter	mm	2.18			
Approximate Weight	g/m	g/m 3.8			

Packaging				
Spool Length (m)	500			
Net weight on spool (kg)	3.1			
Spool Weight (kg)	1.2			
Carton Size (mm)	370 X 370 X 170			
Carton Weight (kg)	3.8			
Master Carton	5 spools			
Jacket				
Color and Material	Black, Cross-linked PE			
Indication on Jacket	None			

Performance		Criteria for Acceptance and/or [Test Conditions]	Unit	Values
Operation Temperature		No deterioration in optical properties [in a dry atmosphere]*	°C	- 55 ~ 105
Operating Temperature in a Moist Atmosphere		No deterioration in optical properties [under 95% RH]**	°C	Max.85
Optical Properties	Transmission Loss [650nm Collimated Light]	[25°C 50% RH]	dB/km	Max.200
		[Operation Temperature]	dB/km	Max.250
Mechanical Character- istics	Minimum Bend Radius	Loss increment =< 0.5dB [a quarter bend]	mm	Min.15
	Repeated Bending Endurance	Loss increment =< 1 dB [in conformity to the JIS C 6861]***	Times	Min.1,000
	Tensile Strength	[Tensile force at 5% elongation; in conformity to JIS C 6861]	Ν	Min.70
	Twisting Endurance	Loss Increment =< 1 dB [sample length: 1m, Tensile Force: 4.9N]	Times	Min.5
	Impact Endurance	Loss Increment =< 1 dB [in Conformity to the JIS C 6861]	N·m	Min.0.4

Notes: Performance tested in conditions under 25°C unless otherwise indicated.

- * Attenuation increase shall be <10% after 1,000 hours.
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except when due to absorbed water.

*** Bend Angle +/-90 $^\circ\,$, Bend Radius 15mm, Tension 500g.

Applications

The BH-Series of single-jacketed cables are typically used as data and sensor media for higher temperature requirements.

The information contained herein is presented as a guide to product selection. It is subject to change without notice, and should not be regarded as a representation, warranty or guarantee with regard to the quality, characteristics or use of this product

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