ESKA™ PE Jacketed and PVC Sheathed Optical Fiber Cord: GHEV4002

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	0.5	
	Unit	Typical
Core Diameter	µm	980
Cladding Diameter	µm	1,000
Jacket Material and Color	Polyethylene, Black	
Jacket Diameter	mm	2.2 x 4.4
Outer Sheath Diameter	mm	4.0 x 5.5
Approximate Weight	g/m	23.0

Packaging	
Spool Length (m)	500
Net weight on spool (kg)	13.5
Spool Weight (kg)	2.0
Carton Size (mm)	470 X 470 X 180
Carton Weight (kg)	14.1
Master Carton	2 spools
Outer Scheath	
Color and Material	Gray, Polyvinylchloride
Indication on Jacket	···ESKA PREMIER···; Pink

Performance		Criteria for Acceptance and/or [Test Conditions]	Unit	Values
Operation Temperature		No deterioration in optical properties* [in a Dry Atmosphere]	°C	-40 ~ 85
Operating Temperature in a Moist Atmosphere		No deterioration in optical properties** [under 95% RH]	°C	Max.75
Optical Properties	Transmission Loss [650nm Collimated Light]	[25°C 50% RH]	dB/km	Max.170
		[Operation Temperature]	dB/km	Max.190
Mechanical Character-istics	Minimum Bend Radius	Loss increment =< 0.5dB [a quarter bend]	mm	Min.40
	Repeated Bending Endurance	Loss increment =< 1 dB [in Conformity to the JIS C 6861]***	Times	Min.5,000
	Tensile Strength	[Tensile force at 5% Elongation; in conformity to the JIS C 6861]	N	Min.195
	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 C6861]	N・m	0.4

Notes: Performance tested in conditions under 25°C unless otherwise indicated.
* Attenuation increase shall be <10% after 1,000 hours.
** Attenuation increase shall be <10% after 1,000 hours, except when due to absorbed water.
*** Bend Angle +/-90° , Bend Radius 15mm, Tension 1,000g.

Applications

GHEV4002 is typically used as data transfer media with added mechanical requirements.

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