

# Specification Sheet

## GH 4002

ESKA PREMIER

Polyethylene Jacketed

Optical Fiber Cord

High - Performance Plastic Optical Fiber

**E s k a**<sup>™</sup>

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## 1.Scope

This specification covers basic requirements for the structure, optical and mechanical performances of GH4002.

## 2.Structure

Item		Specification				
		Unit	Min.	Typ.	Max.	
Optical Fiber	Core Material	—	Polymetyl - Methacrylate Resin			
	Cladding Material	—	Fluorinated Polymer			
	Core Refractive Index	—	1.49			
	Refractive Index Profile	—	Step Index			
	Numerical Aperture	—	0.5			
	Core Diameter	$\mu$ m	920	980	1,040	
	Cladding Diameter	$\mu$ m	940	1,000	1,060	
Number of Fibers		—	2			
Jacket	Material and Color	—	Polyethylene			
	Dimension	Minor Axis	mm	2.13	2.20	2.27
		Major Axis	mm	4.3	4.4	4.5
Indication on the Jacket		—	ESKA PREMIER :Pink color			
Approximate Weight		g / m	8			

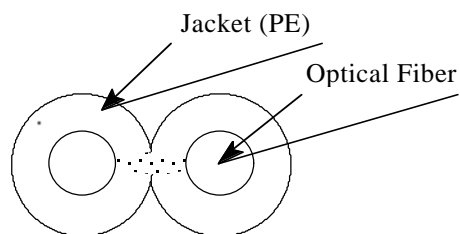
Sectional View

Table2

GH 4002

Item		Acceptance Criterion and / or [Test Condition ]	Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration	°C	- 55	—	+ 85
	Operation Temperature	No Deterioration in Optical Properties*	°C	- 55	—	+ 85
	Operation Temperature under 95 %RH	No Deterioration in Optical Properties**	°C	—	—	+ 75
Optical Properties	Transmission Loss	[ 650 nm Collimated Light ]	dB / km	—	—	170
	Transmission Loss under 95 %RH	[ 650 nm Collimated Light ]	dB / km	—	—	190
Mechanical Characteristics	Minimum Bend Radius	Loss Increment =< 0.5 dB [ Quarter bend ]	mm	25	—	—
	Repeated Bending Endurance	Loss Increment =< 1dB [90° 25 mmR Dead Weight : 500 g ]	Times	10,000	—	—
	Tensile Strength	[Tensile Force at 5% Elongation; in Conformity to the JIS C 6861 ]	N	140	—	—
	Twisting Endurance	Loss Increment =< 1 dB [ Sample Length : 1 m Tensile Force : 4.9 N ]	Times	5	—	—
	Impact Endurance	Loss Increment =< 1 dB [ in Conformity to the JIS C 6861 ]	N.m	0.4	—	—

All tests are carried out under temperature of 25°C unless otherwise specified.

\* Attenuation change shall be within 10 % after 1,000 hours.

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The specification is subject to change without notice.

The information contained herein is presented as a guide for the product selection. Please contact our business department for the issue of an official specification sheet.