



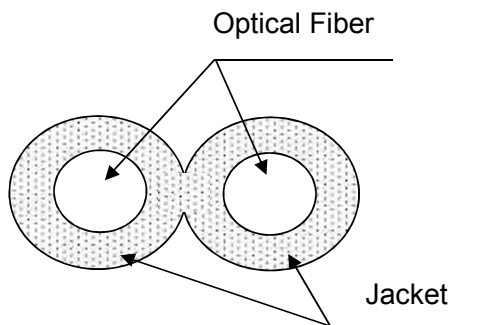
1. Scope
This specification covers basic requirements for the structure and optical performances of MH-4002.
2. Structure

Table 1

MH-4002

Item		Specification				
		Unit	Min.	Typ.	Max.	
Optical Fiber	Core Material	—	Polymethyl-Methacrylate Resin			
	Cladding Material	—	Fluorinated Polymer			
	Core Refractive Index	—	1.49			
	Refractive Index Profile	—	Step Index			
	Numerical Aperture	—	0.3			
	Core Diameter	μm	920	980	1,040	
	Cladding Diameter	μm	940	1,000	1,060	
Number of Fibers		—	2			
Jacket	Material	—	Polyethylene			
	Color	—	Black			
	Dimension	Minor Axis	mm	2.13	2.20	2.27
		Major Axis	mm	4.30	4.40	4.50
	Indication on the Jacket		—	One of the pair  ESKA MEGA  ;Pink		
Approximate Weight		g/m	8			

Sectional View



3. Performances

Table 2

MH-4002

Item		Acceptance Criterion and/or [Test Condition]	Specification			
			Unit	Min.	Typ.	Max.
Maximum Rating	Storage Temperature	No Physical Deterioration [in a Dry Atmosphere]	°C	-55	—	+85
	Operation Temperature	No Deterioration in Optical Properties* [in a Dry Atmosphere]	°C	-55	—	+85
		No Deterioration in Optical Properties** [under 95%RH condition]	°C	—	—	+75
Optical Properties	Transmission Loss [650nm Collimated Light]	[25°C 50%RH]	dB/km	—	—	160
		[Operation Temperature]	dB/km	—	—	180
	Bandwidth	-3dB bandwidth Launch NA = 0.3 Length 50m@650nm	MHz	170	200	—
Mechanical Characteristics	Minimum Bend Radius	Loss Increment ≤ 0.5 dB [A Quarter Bend]***	mm	25	—	—
	Repeated Bending Endurance	Loss Increment ≤ 1 dB [in Conformity to the JIS C 6861]****	Times	5,000	—	—
	Tensile Strength	Tensile Force at 5% Elongation [in Conformity to the JIS C 6861]	N	140	—	—
	Twisting Endurance	Loss Increment ≤ 1 dB [Sample Length : 1m Tensile Force : 4.9N]	Times	2	—	—
	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.

** Attenuation change shall be within +/- 10% after 1,000 hours, except that due to absorbed water.

*** In the direction of the minor axis

**** Bend Angle +/-90° ,Bend Radius 15mm,Tension 1,000g

The specifications is subject to change without notice.

The information contained herein is presented as guide for the product selection.

Please contact our business department for the issue of an official specification sheet.