

# ESKA™ MEGA PVC Jacketed Optical Fiber Cord: **MHV4002**

Manufactured by Mitsubishi Chemical Corporation  
Marketed and sold by Mitsubishi International PolymerTrade Corporation

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Structure			Packaging	
Core Material	Polymethyl Methacrylate Resin (PMMA)		Spool Length (m)	500
Cladding Material	Fluorinated Polymer		Net weight on spool (kg)	7.3
Core Refractive Index	1.49		Spool Weight (kg)	1.8
Refractive Index Profile	Step Index		Carton Size (mm)	470 X 470 X 180
Numerical Aperture	0.3		Carton Weight (kg)	7.9
	Unit	Typical	Master Carton	2 spools
Core Diameter	μm	980	Jacket	
Cladding Diameter	μm	1,000	Color and Material	Black, Polyvinylchloride
Number of Fibers	2		Indication on Jacket	E89328-A/B MITSUBISHI RAYON AWM 5237 80C VW-1
Jacket Dimension - Minor Axis	mm	2.2	Fire Rating	UL1581 VW1 Style No.5237
Jacket Dimension – Major Axis	mm	4.4		
Approximate Weight	g/m	11.0		

Performance		Criteria for Acceptance and/or [Test Conditions]	Unit	Values	
Operation Temperature		No deterioration in optical properties [in a dry atmosphere]*	°C	-55 ~ 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.160	
		[Operation Temperature]	dB/km	Max.180	
	Bandwidth	-3dB bandwidth, Launch NA = 0.3, Length 50m@650nm	MHz	Min.170	Typ.200
Mechanical Characteristics	Minimum Bend Radius	Loss increment =< 0.5dB [a quarter bend]***	mm	Min.25	
	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.140	
	Twisting Endurance	Loss Increment =< 1 dB [sample length: 1m, Tensile Force: 4.9N]	Times	Min.2	
	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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\*\*\* In the direction of the minor axis.

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

## Applications

The MH-Series of cables are typically used as data transfer media for high bandwidth and network 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