

GiHCS[®] 50 µm Industrialized Optical Fibers



Overview

50 µm GiHCS optical fiber from OFS combines the renowned high mechanical strength characteristics of HCS[®] Fluroacrylate optical fiber with the enhanced bandwidth of a Graded-Index core profile. This design supports the trend toward Ethernet-based protocols in industrial networking with high reliability optical fibers for harsh environmental conditions.

A distinct advantage of GiHCS optical fiber is the OFS Crimp & Cleave termination method. Our durable polymer enables field technicians to connectorize fibers and cables by crimping connectors directly onto the fiber's coating and then cleaving the glass fiber. Like electrical connections, reliable handheld tools are used; no power, no epoxies, no polishing. Quick, easy, and durable.

Typical Applications

Factory Automation Short-to-Medium Distance Communications Avionics Communications Wind Turbines



Product Specifications	
Product Description	GiHCS 50 µm Optical Fiber
Physical Characteristics	
Core Diameter	50 ± 3 μm
Cladding Diameter	200 ± 4 μm
Coating Diameter	230 +0/-10 μm
ETFE Buffer Diameter	500 ± 30 μm
Core/Coating Offset	< 5.0 μm
Core/Clad Offset	< 3.0 µm
Crimp & Cleave Compatible	Yes
Cladding Material	Silica
Coating Material	HCS [®] Fluoroacrylate
Buffer Material	ETFE
Optical Characteristics	
Туре	Multimode Graded-Index
Numerical Aperture	0.20
Bandwidth @ 850 nm	≥ 400 MHz-km
Bandwidth @ 1300 nm	≥ 400 MHz-km
Attenuation @ 850 nm	≤ 2.8 dB/km
Attenuation @ 1300 nm	≤ 1.0 dB/km
Mechanical and Environmental	
Operating Temperature	-65 to +125 °C
Short-Term Bend Radius	≥ 10 mm
Long-Term Bend Radius	≥ 16 mm
Proof Test Level	≥ 150 kpsi (1.03 GPa)
Order by Part Number	F16496
OPTIONS: Buffer Color, Buffer Diamete Proof Test	r, Cabling, Crimp & Cleave Connectorization,

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.



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