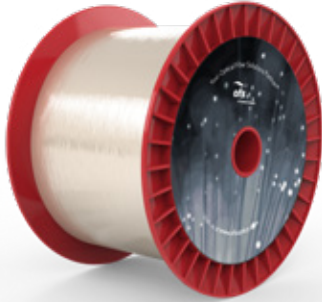




A Furukawa Company

Standard Highly Non-Linear Optical Fiber

P/N: HNLF Standard



Overview

OFS Highly-Non-Linear Optical Fiber (HNLF) combines a high non-linear coefficient with numerical small group velocity dispersion. The fiber design includes a high delta core, surrounded by a deeply depressed ring and is doped with Fluorine.

HNLF is available in four versions: a version with a slope of $0.019 \text{ ps}/(\text{nm}^2 \cdot \text{km})$, a zero dispersion slope version, a PM version, and a version with aluminum-doped core for increased SBS threshold. All are available with wide range dispersion values.

Typical Applications

- Non-Linear Loop Mirror
- Optical Regeneration
- Optical Sampling
- Parametric Amplification
- Photosensitive Fiber for Writing of UV-Gratings
- Pulse Compression
- Supercontinuum Generation
- Wavelength Conversion



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Product Specifications	
Product Description	Standard Highly-Non-Linear Optical Fiber
Optical Characteristics	
Type	Non-Standard
Fiber Length	50 to 2000 m
Fiber Length Tolerance	± 3
Cutoff Wavelength	< 1300 nm
Effective Area (Typical)	11.6 μm ²
Dispersion	-2.5 to +2.0 ps/(nm·km)
Dispersion Slope	0.019 ± 0.004 ps/(nm ² ·km)
PMD	≤ 0.20 ps/√km
Attenuation	≤ 0.90 dB/km
Typical Attenuation	0.8
Splice Loss to SSMF Pigtail	≤ 0.20 dB
Splice Loss to SSMF Pigtail (Typical)	0.10 dB
PM or non-PM	non-PM
SBS Threshold x Effective Length	18 (typical) W·m
Non-Linear Coefficient (Typical)	11.5 W ⁻¹ ·km ⁻¹

Ordering Information for HNFL Standard Module	
Short (1-2 meter) Standard Single-Mode (SSMF) pigtails with connectors are spliced to the HNFL. The fiber with pigtails is delivered on a 29 x 175 mm spool covered with a protective layer of silicone glue.	
Ordering Code: HNFL-ST-LLLL-P-M-DD	
Length Code (LLLL)	Length in step of 50 meters (0050, 0100, 0150, .. 2000)
Pigtail Option (P)	Pigtail Type 1 = SSMF with FC/APC Connectors 2 = SSMF with FC/PC Connectors
Mechanical Option (M)	Mechanical Package 1 = 29x175 mm spool with silicone glue 2 = 29x175 mm spool without silicone glue
Dispersion Code (DD)	Dispersion at 1550 nm (ps/nm*km) m2 = -2.0 ± 1.0 m1 = -1.0 ± 1.0 z0 = 0.0 ± 1.0 p1 = 1.0 ± 1.0 p2 = 2.0 ± 1.0

Ordering Information for HNFL Standard Module	
The HNFL fiber can also be delivered without pigtails on a 105 x 265 mm spool without any silicone. However, please note that splice loss of about 1 dB from HNFL to SSMF must be expected when using standard fusion splicers.	
Item Number	Dispersion at 1550 nm (ps/nm*km)
80412m2	-2.0 ± 1.0
80412m1	-1.0 ± 1.0
80412z0	0.0 ± 1.0
80412p1	1.0 ± 1.0
80412p2	2.0 ± 1.0

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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OFS Marketing Communications
Date: 11/19

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