



A Furukawa Company

## TrueWave® LA Low Water Peak Optical Fiber

Optimized for 10 G networks in metro, regional, and long-haul applications



### Features and Benefits

- Minimizes dispersion compensation costs for metro networks, providing low first channel costs @ 10 Gb/s
- Effective area of 72  $\mu\text{m}^2$
- Low splice loss when spliced to other large effective area G.655 fibers
- Enables use of DWDM
- Compatible with other large area G.655 fibers

### Applications

- Metro Express
- Regional
- Long Haul

### Overview

OFS' TrueWave LA Low Water Peak (LWP) Optical Fiber is a Nonzero Dispersion Fiber (NZDF) that provides exceptional performance for Dense Wavelength Division Multiplexing (DWDM) used in metropolitan, regional, and long haul optical transmission systems.

### Product Description

TrueWave LA LWP Fiber offers low dispersion values and an effective area of 72  $\mu\text{m}^2$  to accommodate today's lower channel count 10 G networks. It is an excellent choice for the extension of networks containing other large area G.655 fibers.

### Engineered Fiber Sets

OFS has the capability to color and splice ocean fibers to meet stringent cable requirements. Fibers are selected to meet customer specifications for numbers of fibers, colors, lengths, and transmission properties. They are then assembled into sets. Final measurements guarantee customer specified performance for all fibers in the set.

For additional information please contact your sales representative.

You can also visit our website at [www.ofsoptics.com](http://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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**TrueWave® LA Low Water Peak Optical Fiber**

Product Specifications	TrueWave LA Low Water Peak Fiber	
<b>Physical Characteristics</b>		
Clad Diameter	125.0 ± 0.7 μm	
Clad Non-Circularity	≤ 0.7 %	
Core/Clad Concentricity Error (Offset)	≤ 0.5 μm, < 0.2 μm typically	
Coating-Clad Concentricity Error (Offset)	≤ 12 μm	
Tensile Proof Test	100 kpsi (0.69 GPa)	
Coating Strip Force	Range: 1.0 N ≤ CSF ≤ 8.9 N	
Fiber Curl Radius	≥ 4 m	
Standard Reel Lengths	Standard as well as customer specific lengths are available up to 50.4 km	
<b>Optical Characteristics (after hydrogen aging)</b>		
<i>Attenuation</i> at 1310 nm at 1383 nm at 1550 nm at 1625 nm	<i>Maximum</i> ≤ 0.4 dB/km ≤ 0.4 dB/km ≤ 0.22 dB/km ≤ 0.24 dB/km	
Attenuation Uniformity / Point Discontinuities at 1550 nm	≤ 0.05 dB	
Macrobending Attenuation: <i>The maximum attenuation with bending does not exceed the specified values under the following deployment conditions:</i>		
Deployment Condition	Wavelength	Induced Attenuation
1 turn, 32 mm (1.2 inch) diameter	1550 nm	≤ 0.5 dB
	1625 nm	≤ 0.5 dB
100 turns, 60 mm (2.4 inch) diameter	1550 nm	≤ 0.05 dB
	1625 nm	≤ 0.05 dB
Chromatic Dispersion C-Band 1530-1565 nm L-Band 1565-1625 nm Dispersion Slope at 1550 nm	2.0 – 6.0 ps/(nm-km) 4.5 – 11.2 ps/(nm-km) ≤ 0.09 ps/nm <sup>2</sup> -km	
Group Refractive Index at 1550 nm at 1625 nm	1.468 1.468	
Mode Field Diameter Effective Area	9.6 ± 0.4 μm @ 1550 nm 72 μm <sup>2</sup> (typical) @ 1550 nm	
Cable Cut-off Wavelength (λ <sub>cc</sub> )	≤ 1450 nm	
Polarization Mode Dispersion (PMD) <sup>1</sup> Fiber PMD Link Design Value (LDV) <sup>2</sup> Maximum Individual Fiber Typical Fiber LMC PMD	≤ 0.04 ps/√km ≤ 0.1 ps/√km ≤ 0.02 ps/√km	
<sup>1</sup> As measured with low mode coupling (LMC) technique in fiber form, value may change when cabled. Check with your cable manufacturer for specific PMD limits in cable form.		
<sup>2</sup> The PMD Link Design Value complies with IEC 60794-3, September 2001 (N = 20, Q = 0.01%). Details are described in IEC 61282-3 TR Ed 2, October 2006.		
<b>Environmental Characteristics (at 1310, 1550 &amp; 1625 nm)</b>		
Temperature Cycling (-60° to +85 °C)	≤ 0.05 dB/km	
High Temperature Aging (85 °C)	≤ 0.05 dB/km	
Damp Heat Aging (85 °C and 85% RH)	≤ 0.05 dB/km	
Water Immersion (23 °C)	≤ 0.05 dB/km	



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OFS Marketing Communications  
Doc ID: fiber-158  
Date: 0617

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