



Verrillon® VSS200 Series—Photosensitive Fiber

Verrillon Harsh Environment Fibers from AFL are available in a number of designs. Starting with fiber design, we offer both single-mode and multimode optical fibers having coatings and coating combinations, including Polyimide, Silicone-PFA and Carbon, which can be applied in conjunction with any of these outer coatings. Typically, these fibers are used in down-hole data logging, distributed sensing and imaging applications.

Verrillon carbon-coated optical fibers provide exceptionally high levels of hermeticity compared to commercial fibers. We provide extensive data that demonstrates the performance of our fiber. In addition, we provide one-stop shopping for customers requiring multi-count cabled hermetic fibers, if required, in metal jacketing tubes.

Consistent with our founding principles, we specialize in application optimized fibers, providing our customers unmatched flexibility in their system design and performance.

Features

- Designed to provide high level of cladding mode suppression
- High level photosensitivity reduces time needed to write gratings
- Acrylate coating strips easily to simplify FBG processing
- Mode-field compatible with standard SMF to decrease splice loss

Specifications—Photosensitive Fiber

PART NO.	PSF-1-A-125-1
Description	125/243 μ m Acrylate coated, Single-mode Fiber, 0.14 NA, 100 kpsi
PARAMETER	VALUE
Material	
Coating	Dual UV Acrylate
Geometry	
Clad Diameter (μ m)	125 \pm 1
Core/Clad Offset (μ m)	\leq 0.3
Combined Coating Diameter (μ m)	243 \pm 3
Optical	
NA (nominal)	0.14
Cutoff Wavelength (nm)	\leq 1300
Mode Field Diameter ¹ @ 1550 nm (μ m)	9.5 \pm 0.2
Mechanical	
Proof Test (kpsi)	\geq 100
Operating Temperature ($^{\circ}$ C)	-40 to +85

¹ Petermann II Definition