Light-Seal®

Part # FF-LSSF2.2-A

Old Part # LS-2.2FF-STY1

The **FF-LSSF2.2-A,** 2.2mm outside diameter ferrule "SENSOR FERRULE" was designed to be compatible or a substitution for a typical 2.2mm jacketed cable **Note**[*4] , The idea was to have a ferrule that work on bare 1mm POF fiber[*2] The Sensor ferrule can be field installed and makes it convenient where working space is tight as it is half the size or were cable cost is a factor.

Light-Seal® is a patented technology* that swages the end of the ferrule to secure and align the fiber concentric to the outside of the ferrule, thus assuring minimal lateral fiber offset when the connector is mated to another connector or to an active device. This technology also serves to minimize the probability of contaminates in the connector between the fiber and the connector hole, It also holds the fiber independently from the cable jacket to prevent " Pistioning" so no epoxy or adhesives need not to be used, This insures a very simple field installable connector system. This 2.2mm ferrule will work on some bare fiber couplers or bare fiber transceivers.

Some features of the patented light-seal® connector systems is having the ability to change the swage diameter this allows you to control the amount of tensile force put on the fiber. The swage tools are set up at the factory for the nominal amount of swage[*3] this can be adjusted on the crimp/swage hand tool, this adjustment changes the actual diameter of the ferrule and has direct correlation with the amount of pull off force the ferrule has with the fiber. This is very useful when you're material sizes can change from different manufacturers or when using different grades of POF (polymer optical fiber).

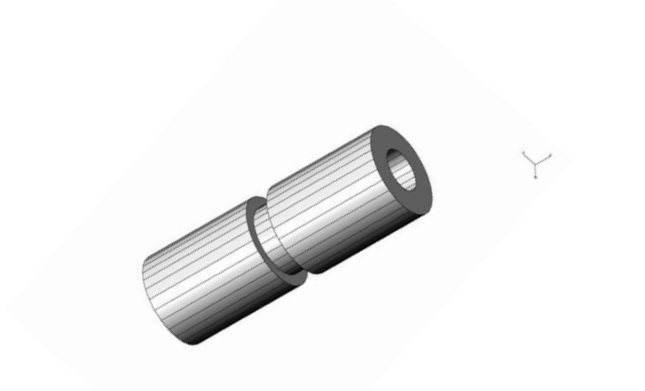
One of the other unique features is the ability to use the swage ferrule as a sleeve onto the bare fiber to use any standard POF connector that would work on 2.2 mm jacketed fiber.

***US Patent 6,517,255**

SENSOR FERRULE

Bare fiber example[*2] 2.2 mm jacket example[*4]

Crimp swage tool FF-HTCSWG-2.2xx



Installation Instructions

Use with 2.2mm Jacketed POF Cable Note*4

1) Cut cable to desired length
2) Strip off 8-10mm of the outer jacketing
3) Insert the fiber into the ferrule (leaving a small portion to finish .5mm to 1mm) **Note*6**
4) Using the Light-Seal Crimp tool FF-HTCSWG-2.2mm swage the ferrule onto the fiber
5) Terminate the fiber end
6) Inspect, test and install dust cap if needed

Installation Instructions

Use with bare fiber, Note*2

1) Cut bare fiber to desired length
2) Insert the fiber into ferrule leaving a small portion to finish or leave it long to use as a collet for a larger connector **Note*5 *1 *6**
3) Using the Light-Seal Crimp tool swage the ferrule onto the fiber. **Note: *1**
4) Terminate the fiber end flush to the ferrule, or install another connector over the top of the swaged ferrule **Note*5**
5) Inspect, test and install dust cap if needed

Reference Notes:

Note: *1 Crimp swage tool: FF-HTCSWG-2.2HP/ used for a sleeve or collet for standard POF connectors
Note*2 Bare 1mm POF fiber, Example=Mitsubishi Eska CK-40, SK-40)
Note*3 Crimp swage tool swage outside diameter to 2.15 mm +/-.01
Note*4 Jacketed 2.2mm POF fiber, Example =Mitsubishi Eska GHCP-4001, GH-4001, SH-4001)
Note*5 Crimp swage tool collect fiber clearance hole depth to 29 mm +/-1.0
Note*6 FF-LSSF2.2-A has a small chamfer on one end, this should be installed inward, the sharp corner should be the side that gets finished.

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