OFS Instruction Sheet

# **General Instructions** EZ Bend<sup>®</sup> Assembly Instructions

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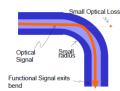
# Instruction for Use

WARNING!

User should be aware of possible hazards due to presence of invisible (infrared) radiation when examining connectors with the naked eye or a microscope. A laser IR detection card (Edmund Industrial Optics #NT55-292 or equivalent) may be used to allow visualization of invisible IR light

Material used in cleaning (isopropyl alcohol, Electro-Wash, and canned air) should be used in a well ventilated area and not near an open flame. Follow all of the manufacturer's safety and disposal instructions. KEEP OUT OF REACH OF CHILDREN.

# Maintain Minimum Bending Radius



EZ Bend® Optical Fiber must not exceed a 5.0 mm (0.20 in.) bend radius throughout the installation.

### Cable Attachment



EZ-Bend cable, 4.8 mm only, can be stapled in place with a standard stapler and Arrow T25™ staples. T25 staples are recommended due to the rounded top profile, as shown in the circle above. The rounded top profile minimizes the crushing force placed on the cable

### **Cable Properties**

EZ Bend Cable Properties for OFNR Riser-Rated Cables

Part No.	Cable OD	Max Tensile	Nominal Weight
DRW DHW 4.8 indoor	4.8 mm	440 N	19.5 kg/km
DRK 4.8 indoor/outdoor	4.8 mm	440 N	21.0 kg/km
DRW DDW DHW 3.0 indoor	3.0 mm	310 N	7.45 kg/km

EZ-Bend cable contains solid-core fiber with macro-bending performance beyond ITU G.657B requirements. EZ Bend 3.0 mm cable is intended for use in applications where the cable will be installed in micro-duct, raceways, or behind protective moldings. Bend limiters are not required.



EZ Bend 4.8 mm cable is intended for use in applications where the cable will be stapled in place. There isn't a required limit of staples or distance for typical indoor applications, but staples are commonly placed roughly 50 cm (18 inches) apart. Additional staples may be placed to maintain bends around corners as needed. EZ Bend may be installed in studs through drilled holes.

# Installation Instructions

- Remove Assembly from packaging. Lengths less than 20M are shipped in a zip lock bag. Multiple assemblies are shipped in a cardboard shipping container. Remove one at a time 1 opening the packaging. Remove the assembly and the tape, keeping the coil in place. Holding one end, release the cable, letting gravity straighten the cable. When the lengths are longer and are shipped on a spool, remove the tape on the outside end
- 2. connector. You may uncoil from the spool or utilize a rod in the hub to unspool the fiber as it is pulled.
- 3. Route the assembly by pulling the cable, not the connectorized end, not to exceed 60 lb. tension.
- Remove the dust cap and inspect the end prior to installing the connector in the adapter. 5. Install each connector into the coupling by aligning the key on the connector body with the keyway on the coupling. The SC UPC or SC APC connector is properly installed when the key is completely seated inside the coupling.
- 6. If a high-loss condition exists, use the SC cleaning procedures and reinstall the connectors as described in Step 1.
- When doing rearrangements or reinsertions of the SC connectors, use the SC cleaning 7. procedures at the end of this practice to clean all components and reinstall the connectors. Some pictures of completed installations are shown below.

## **Splicing Information**

The fiber in EZ-Bend cables is fully compatible with standard ITU G.652D, G.657A, and G.657B fiber when any type of splicing is used: core-aligned, clad-aligned, or V-groove splicing. No special tools, software, or procedures are required for fusion splicing of EZ-Bend cables. If a fusion splice machine offers a program on the menu for splicing EZ-Bend® to standard single-mode fiber, that program should be used. If no specific program is offered, the following simple guidelines should enable splice losses within expected levels.

Fusion Splicer Type

Program and Settings

Clad Alignment in V-Groove - passive alignment Clad Alignment – active alignment Core Alignment – active alignment

Standard Single-mode Standard Single-mode Multimode

OFS EZ Bend ® cables are compatible with fusion splice-on or mechanical splice-on connectors, mechanical splices, and standard connector end face polishing procedures.

More information can be found in the OFS White Paper, "OFS Bend-Insensitive Single-Mode Fibers: Application and Splicing Guidelines". Contact OFS at 1-888-FIBER-HELP for specific information.

#### Loss Measurement Information

OFS recognizes that bi-directional measurements in some applications such as MDU deployments may be difficult because access to the fiber inside the residence may be impractical. As a result, some technicians qualify optical loss using a one way (uni-directional) OTDR measurement. One way OTDR measurements inherently involve large errors and are not recommended. However, if this method is to be used, please consult the OFS White Paper, "OFS Bend-Insensitive Single-Mode Fibers: Application and Splicing Guidelines" for OTDR result interpretation guidelines. Assemblies can be measured with a light source and power meter prior to installation and after installation.



OFS FIBER OPTIC TECHNICAL ASSISTANCE 1-888-FIBER HELP (1-888-342-3743)

\* For cleaning, always use isopropyl alcohol (>91% 2-propanol + water).

