DESCRIPTION

The 420090 is a permanent, crimp-type splice specifically engineered for use with the industry standard jacketed 1000 μm core plastic communication fiber optic cable with a 2.2 mm outside diameter. The splice is composed of aluminum for rigidity but also for flexibility, to accomodate the expansion coefficents of the fiber core and jacket. Within the splice the optical cores have tapered apertures for easy fiber insertion. They also are concentrically aligned with a precisely bored optical chamber.

Overall splice size is 25.4 × 3.25 mm (1.0 × .128 in) which makes it the smallest diameter device of any available on the commercial market. Fiber splices can be completed with any fiber cutter and a .128 hex crimping tool. (Both are availabe from Industrial Fiber Optics. Fiber cutter is part number IF-FC1 and the crimper IF-370045.) The splice can be used with index-matching gel for low loss connections or without for quick and simple connections.

APPLICATIONS

➤ Repairing Damaged Fiber Cables

➤ Adding Additional Fiber Length

➤ Utilizing Otherwise Wasted Ends of Spool Fiber Lengths

➤ Joining Dissimilar Fibers for Specific Design Solutions

FEATURES

◆ Easy To Use

◆ Low Loss

◆ Quick Field Installation Possible

◆ Permanent Connection

◆ Operating Temperature Range, -55° to 100ºC

◆ Mates with All Standard 1000 μm Core, 2.2 mm Jacketed Plastic Fiber Optic Cable

◆ No Internal Optics or Design Required

◆ Economically Priced

INSTRUCTIONS

1. Cut off the end of the first optical fiber cable with a single-edge razor blade or sharp knife. Try to obtain a precise 90-degree angle (square).

2. Use a stripping tool to remove 4.8 to 5.3 mm (3/16 to 7/32 inch) of jacket from the end of the fiber cable.

3. (Optional) Dip the end of the fiber into index-matching gel.

4. Insert the fiber cable into the splice until the jacket seats.

5. Insert the body of the splice containing the fiber cable into the hex crimp die.

6. Crimp the splice to the fiber cable, securing the fiber into place.

7. Repeat Steps 1 through 6.

2 x 2.34 mm (.092 in.)

1.04 mm (.04 in.)

3.56 mm (.140 in.)

25.4 mm (1.000 in.)

A   A

SECTION A-A

7.0 mm 2 PLCS (.276 in.)

NOTE: This area is where the crimp needs to be made

strip length

4.83 mm (.190 in.)

Inserted fiber