



# FinishAdapt

FIBRE OPTIC FUSION SPLICE PROTECTOR SLEEVES

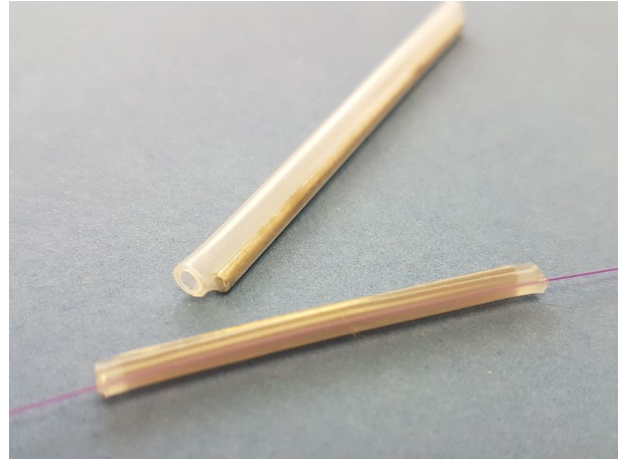
## PS-1A-X40S TECHNICAL DATA SHEET

FinishAdapt PS-1A-X40S are high quality, long-term reliability Bellcore Certified Fibre Optic Fusion Splice Protector Sleeves. Designed to restore the mechanical strength, environmental protection and optical performance of single optical fibre after fusion splicing

Single 250 - 900µm fiber. 3.0mm diameter

### KEY FEATURES

- Tested and Approved high quality and reliability with Industry Standard BELLCORE (Telcordia) GR-1380-CORE CERTIFICATION. Single fiber range.
- Specialist Manufacturer with 24 years proven reliability
- Pre-Shrunk heat bonded design
- Single fibre aperture for easy and quick insertion
- Encapsulated and centred reinforcing pin
- UL Approved high quality materials
- Compatible with most fibers, splice trays and ovens
- 1AS series are held in stock



### CERTIFICATIONS / REGULATORY STANDARDS

Telcordia / Bellcore  
GR-1380-CORE

**CERTIFIED-Single fiber range**  
Bellcore Test Conformance Report TCR-8  
(Replaces Telcordia TA-NWT-001380)

UL224 Approved

YDPU2.E467437

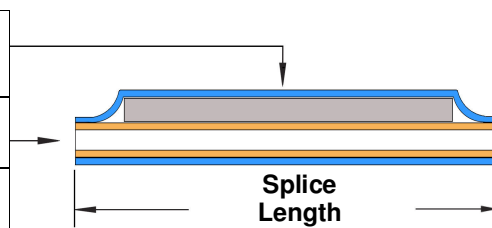
RoHS Compliant  
REACH Compliant  
CENELEC Compliant  
Conflict-Free Minerals

2011/65/EU  
EC 1907/2006  
European Standard EN50411-3-3  
Dodd Frank Act Section 1502 Compliant



### PRODUCT DIMENSIONS

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Sleeve Diameter After Shrinkage | <b>3.0 mm</b><br><b>(0.118 inch)</b> |
| Supplied Internal Diameter      | <b>1.9 mm</b><br><b>(0.075 inch)</b> |
| Fiber size                      | <b>250-900um</b>                     |



- Heat Shrink Outer Tube
- Adhesive Inner Tube
- Stainless Steel Pin

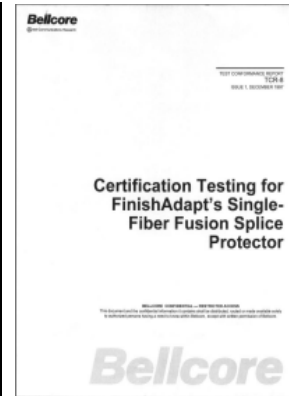
| Part Number | Sleeve Length |        | Inner Length |        | Pin Diameter |        | Pin Length |        |
|-------------|---------------|--------|--------------|--------|--------------|--------|------------|--------|
|             | mm            | inches | mm           | inches | mm           | inches | mm         | inches |
| PS-1A-X40S  | 40.0          | 1.575  | 40.0         | 1.575  | 1.4          | 0.055  | 36.0       | 1.417  |

All information is believed to be correct at time of publication and we reserve the right to make changes without prior notice. All dimensions nominal. The 'Supplied Internal Diameter' refers to the internal diameter of the EVA inner tube through which the fiber is installed. The 'Sleeve Diameter after Shrinkage' refers to the final outside diameter of the heat shrinkable outer of the sleeve after full shrinkage. The internal EVA and external heat shrink tubing are the same length with flush ends. The pin is centred within the splice.



### MATERIAL SPECIFICATION

|                               |  |
|-------------------------------|--|
| Application Type:             | Single Fiber 250µm and 900µm   |
| Compatibility:                | Most splice trays, ovens and coated fibers   |
| Outer Material:               | Cross-linked Polyolefin Heat Shrinkable Tubing +135°C MIL Spec. UL224 Approved YDPU2.E467437 & SAE-AMS-DTL-23053/5 Class 2 |
| Inner Material:               | Hot-melt adhesive Ethylene Vinyl Acetate (EVA) Copolymer   |
| Reinforcing Pin:              | Stainless Steel 302 BS 2056 with polished and rounded edges  |
| Colours:                      | Clear  |
| Splice Operating Temperature: | -40°C to +70°C (Heat shrink outer rated at -55°C to +135°C)*   |
| Storage Temperature:          | -40°C to +70°C   |
| Package Quantity:             | Bags of 50 or 100. Labelled over bag of 1,000  |



\* The outer Cross-linked Polyolefin heat shrink material meets SAE-AMS-DTL-23053/5 Class 2 and has a continuous operating temperature range of -55°C to +135°C. However, the splice protector is designed so that the inner adhesive melts and flows first around the fiber joint at c. 65-70°C followed by the shrinkage of the outer material. The splice protector is therefore specified with a max operating temperature of +70°C and should not be used above this temperature otherwise it may affect the adhesive liner and damage the long-term integrity of the splice.

### RECOMMENDED INSTALLATION

The product is designed so that the meltable inner melts and flows around the fibre joint followed by the outer material shrinking around the assembly. A splice oven setting of 240°C for a time of 30 seconds is recommended to ensure the correct adhesive material flow and outer shrinkage. An additional 30 seconds cooling time should be allowed to ensure the meltable adhesive is set before handling and inserting into the splice tray.

Caution: Selecting a higher temperature or shorter cycle time may result in insufficient adhesive flow around the fiber required to form a good reliable splice. Oven settings are based on using Fujikura 62S fusion splicers and the 40mm long PS-1A-X40S. Heater temperatures and cycle times must be adjusted to take account of splice protector type and length, splicer oven used and the battery condition, ambient temperature and the operating environment.

### COMPANY BACKGROUND & EXPERIENCE

- FinishAdapt are specialists in the design, manufacture and worldwide distribution of Fusion Splice Protector Sleeves. Recognised as the industry leader with 24 years of proven quality and long-term reliability required for this specialist application. Largest range of splice sleeves available, including 1A, 2A, 3A, 3A US, 5A, 6A, dielectric, pin less, ribbon and custom manufactured.
- As industry leaders we have worked with Bellcore (Telcordia) and British Telecom in defining the generic requirements for fusion splice protector technology. We are also joint authors of the CENELEC European Standard for splice protector product design.
- **FinishAdapt became the first and currently only company to hold Bellcore (Telcordia) GR-1380-CORE Certification.** (Caution: most other manufacturers are not certified and can only claim compliance to this industry standard).
- Widely used for single mode fiber in optical communications network infrastructure, telecommunications broadband networks, outside plant cabling, data centers, utility networks, FTTH, FTTP, FTTC fibre optic installations, CATV networks, lasers, sensors, opto-electronics and photonics applications.

### PRODUCT DESIGN & ADVANTAGES

- Our splice sleeves are manufactured with a Pre-Shrunk heat-bonded assembly along the complete sleeve, encapsulating the reinforcing pin and providing a single fibre aperture. The benefit of this design eliminates fiber misalignment whilst maintaining longitudinal component alignment. The easier fibre insertion and Pre-Shrunk design results in faster installation times.
- Manufactured from high quality UL Approved Irradiation Cross-linked Polyolefin heat shrinkable outer, a unique hot-melt adhesive copolymer inner and a centred and encapsulated stainless steel reinforcing pin with deburred and polished edges that protects the fiber from damage.
- The product is designed so that the adhesive melts and flows around the fiber joint first to provide vibration damping and environmental sealing from dust and moisture. The heat shrinkable outer then drives out any air and provides fiber retention and strain relief. The reinforcing pin provides alignment and mechanical strength. Splice protection sleeves are used as an alternative to fiber recoating.

### CUSTOM & STOCK PRODUCT

A comprehensive range of Single and Mass Ribbon sleeves are available from stock. Full details are on our website. We also design and manufacture splice protector sleeves to customer's requirements and own brand label for leading OEM's and distributor's. Please contact us now for further details.