



# FinishAdapt

FIBRE OPTIC FUSION SPLICE PROTECTOR SLEEVES

## 1-12 Way Mass Ribbon Series TECHNICAL DATA SHEET

FinishAdapt 1-12 Way Mass Ribbon (Ceramic) Series are high quality, long-term reliability Fibre Optic Fusion Splice Protector Sleeves. Designed to restore the mechanical strength, environmental protection and optical performance of multiple optical ribbon fiber after fusion splicing

### KEY FEATURES

- Specialist Manufacturer with 24 years proven reliability
- Pre-Shrunk heat bonded design along entire length
- Single fiber entry hole for faster insertion
- Heat bonded Ceramic reinforcing pin
- UL Approved high quality materials
- Compatible with most fibers, splice trays and ovens
- Mass Ribbon series held in stock



### CERTIFICATIONS / REGULATORY STANDARDS

Telcordia / Bellcore  
GR-1380-CORE

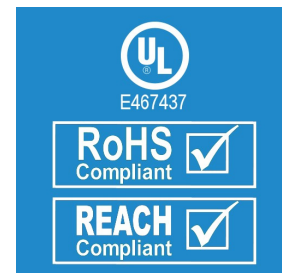
**CERTIFIED-Single fiber range**  
Bellcore Test Conformance Report TCR-8  
(Replaces Telcordia TA-NWT-001380)

UL224 Approved

YDPU2.E467437

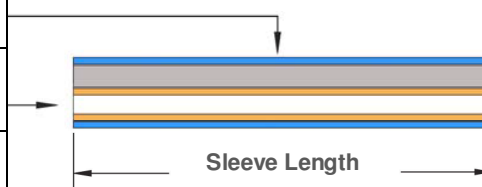
RoHS Compliant  
REACH Compliant  
CENELEC Compliant  
Conflict-Free Minerals

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



### PRODUCT DIMENSIONS

Sleeve Diameter After Shrinkage	<b>3.75 x 4.75 mm</b> <b>(0.15 x 0.19 inch)</b>
Supplied Internal Diameter	<b>3.5 x 1.0 mm</b> <b>(0.14 x 0.04 inch)</b>
Fiber size	<b>4-12 way ribbon</b>



- Heat Shrink Outer Tube
- Adhesive Inner Tube
- White Ceramic Pin

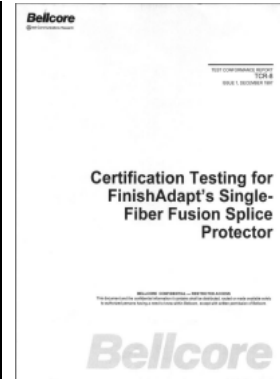
Part Number	Sleeve Length		Inner Length		Pin Diameter		Pin Length	
	mm	inches	mm	inches	mm	inches	mm	inches
PS-99-X25C	25.0	0.984	25.0	0.984	3.9 x 1.85	0.15 x 0.073	25.0	0.984
PS-99-X30C	30.0	1.181	30.0	1.181	3.9 x 1.85	0.15 x 0.073	30.0	1.181
PS-99-X40C	40.0	1.575	40.0	1.575	3.9 x 1.85	0.15 x 0.073	40.0	1.575

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:	Mass Ribbon Multi fibre
Compatibility:	Most ribbon 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:	White Ceramic
Colours:	Clear for easy visual inspection
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 and 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 235-240°C for a time of 40-45 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 the Fujikura 62S fusion splicer oven and PS-99-X40C. Heater temperature and cycle time must be adjusted to suit the splice protector type and length, splicer oven used and the condition of the battery, ambient temperature and the environmental conditions. There are dedicated Fujikura 70R, 19R and 12R fusion splicers for use with ribbon sleeves.

### 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.
- We 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.** Mass ribbon sleeves are manufactured from the same materials and stringent design, manufacturing and quality processes demanded of our single sleeve products. (*Caution: most other manufacturers are not certified and can only claim compliance to this industry standard*).
- Applications: multiple fibre installations in fiber optic communications network infrastructure, utility networks, outside plant cabling and photonics applications.

### PRODUCT DESIGN & ADVANTAGES

- Our splice sleeves are manufactured with a Pre-Shrunk heat-bonded assembly along the complete sleeve, encapsulating the ceramic reinforcing pin and providing a single fibre aperture. The benefit of this design eliminates fiber misalignment whilst maintaining longitudinal component alignment. The single fibre aperture 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 heat bonded white ceramic reinforcing pin with flattened fibre surface to prevent fibre 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.

### CUSTOM & STOCK PRODUCT

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