

Туре:	FB7442, splice protection sleeve	REV: 00
Date:	25/03/2014	AŁ
Approved:		BK
Modification:		

## Connectivity - fiber optic cabling

## FB7442 Heat-shrink splice protection sleeves



### **OVERVIEW:**

**Fibrain FB7442** heat-shrink splice protection sleeves provide high protection during splicing process. They can be characterized by small inner diameter (diameter after shrink D=2.0mm), optimal length (as standard L=45 mm) and fast installation. Therefore, the heat-shrink sleeve is strengthened with a steel pin of 0.75 mm diameter and the same coefficient of heat expansion as optical fiber. It prevents from longitudinal stresses, which cause an increase of insertion and reflection loss. Fibrain heat-shrink sleeves do not cause any loss of optical power as they protect against mechanical damages, pollution and weather conditions. Therefore, the outer material guarantees sustainability and resistance to stretching and puncture. It also offers optimal air permeability, high gloss and smooth surface. Additionally, the material fulfills the requirements of UL224 and MIL-I-23053 standards. Fibrain FB7442 heat-shrink sleeves can be also characterized by excellent thermal properties, thus they can be used both inside and outside of the buildings.

## **APPLICATIONS**

## ✓ Telecommunications systems,

- ✓ FTTH networks,
- ✓ Access and structured cable networks,
- ✓ FTTx networks,
- ✓ PON networks,
- ✓ CATV networks.

## FEATURES&BENEFITS

- ✓ Small outer diameter,
- ✓ Strengthened by a pin of D<sub>d</sub>=0.75mm diameter,
- ✓ In accordance with UL224, MIL-I-23053,
- GR-1380-CORE, ZN-96 TPSA-006 norms,
- ✓ Transparent sleeve,
- ✓ Min. shrink temperature: 110 °C,
- ✓ Max. shrink time: 40 s,
- ✓ In accordance with RoHS Directive.

#### **TECHNICAL SPECIFICATION:**

250/900 µm heat-shrink splice protection sleeve						
SN	L	L <sub>d</sub>	D	Dd	d	
FB7442	45 mm	41 mm	2 mm	0.75 mm	1.2 mm	

Symbols:

L – Sleeve length after heating,

L<sub>d</sub> – Pin length,

D - Sleeve diameter after heating,

D<sub>d</sub> – Pin diameter,

d - Inner hole diameter before shrink.



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## MATERIALS

The sleeve consists of a pin with 0,75 mm diameter, outer thin tube and inner tube with an 1,2 mm hole. Such solution enable using those sleeves to protect fibers with a 250um cover and a 900um buffer. The internal tube is made of special material with strong adhesion to many materials and low solubility in water. It changes its consistency to semi-liquid when temperature is rising. Therefore, it enables to eliminate air bubbles through filling up the spaces between an inner tube, a pin and an optical fiber. The pin that stiffens the splice is made from steel with heat expansion indicator the same to that of an optic fiber. This prevents from longitudinal stresses on the splice during heating process. Longitudinal stresses of the splice cause the growth of insertion and reflection loss. In extreme cases they may cause breaking the connection, which then makes it necessary to repeat the splicing. Outer tube material guarantees sustainability and resistance to stretching and puncture.

#### PACKAGING:

Fibrain FB7442 heat-shrink splice protection sleeves -100pcs packed to one zip-bag.

## ORDERING INFORMATION:

FB7442 45MM HEAT-SHRINK SPLICE PROTECTION SLEEVES

Important notice

Buyer and/or user of this product has to make sure before using this product that it is suitable for the intended use. All questions of liability relating to this product are subject – in accordance with the prevailing – to the Term of Sale of the selling Fibrain subsidiary.