

fiber optic splices protectors

Aluminium crimp protector
for fiber optic splice

ANT protectors

Fiber optic splice ANT protectors series are applied in nearly all branches optic fibers engineering. They are used to protect fiber welds in fiber optic splice closures as well as 19" rack fiber optical distribution panels, stand and wall box. Small size, tightness of connection and speed of installation are the main advantages of this solution. Excellent climatic and thermal properties make it ideal for use in closed as well as open spaces. The main goals during design phase were: full protection of the fiber optic splices, small size after crimping and short installation time. The final products are checked for compliance with the requirements set out in TS 0338/96 Deutsche Telekom and EN 50411-3-3 European Standard. The sleeves we produce offer full protections the fiber optic splices. They do not cause additional insert losses, and they offer protection against mechanical damage, pollution and weather conditions.



ANT series have small external dimensions (L = 30mm, H = 3.2 mm, W = 1.2 mm). The protector consists of a 0.3mm thick aluminum body and 0.3mm thick butyl strips (PIB mass). This solution allows the use of the protector to fibers with a coating of 250um or smaller. The mass strips are made of butyl mass with very good adhesion to many materials and low solubility in water. Aluminum body reinforcing stiffener connection is made from high quality aluminum strip. When crimping the protector, the optical fiber is tightly immersed in the mass filling the space between the fiber and the aluminum body. This casing design eliminates air bubbles. It also prevents transverse and longitudinal stresses in the weld splice during the clamping process. Stresses significantly increase the insertion and reflection loss of the connection. In extreme cases, they can lead to breaking the connection, which means repeating the welding procedure. The protector guarantees durability and resistance to crushing, stretching and puncture.

▣ Properites

- » Outer dimension after crimping: H=3,2 mm +/- 0,1mm, W=1,2 mm +/- 0,1mm, L=30 mm +/- 0,5mm
- » Outer dimension befor crimping: $\Theta=60^\circ$ +/- 5°
- » Mechanical protection of fiber optic splice
- » Flexible laying of fiber optic splice
- » Waterproof and hermetic protection of fiber optic splice
- » Very short installation time

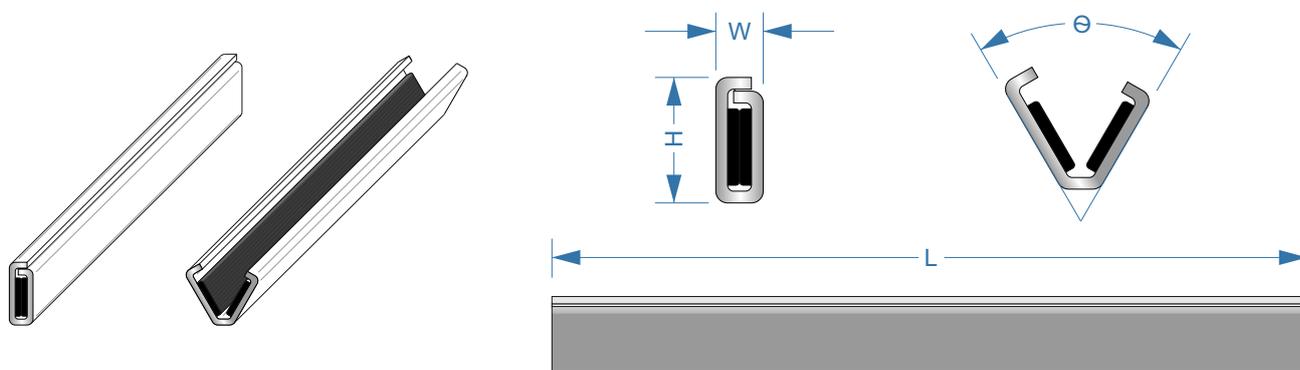
▣ Application

- » Fiber Optic Solution
- » Telecommunication, INTERNET
- » CATV, Cable TV, Monitoring
- » Industry
- » LAN, MAN, WAN

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▣ Drawing



▣ Dimension

Part No.	W	H	L	θ
ANT-30-00	1,2 +/-0,1	3,2 +/-0,1	30 +/-0,5	60° +/-5°

All dimensions in mm. In accordance with the standard EN 50411-3-3:2011

▣ Packing

» Packing: 150 pcs in one paper carton. Carton including five blisters of 30 protectors. One blister is made of five columns that can be separated. Each column contains 6 protectors and is closed with a reusable tape



▣ References

Protectors meet the requirements of the following standards:

EN 50411-3-3 European standard:

- » Criterion 8.3.1: EN 61300-3-3; Change in attenuation: 1310&1550nm $\delta IL \leq \pm 0,1dB$ per circuit of 5 protected fusion splices
- » Criterion 8.3.3: EN 61300-1-1; Vibration: 10-50Hz, amplitude 0,75mm, 15 cycles, 1550nm $\delta IL \leq \pm 0,2dB$ durin -, $\delta IL \leq \pm 0,1dB$ after - per circuit of 5 protected fusion splices
- » Criterion 8.3.8: EN 61300-2-17, Cold: -40°C, 96h, 1310&1550nm $\delta IL \leq \pm 0,2dB$ durin -, $\delta IL \leq \pm 0,1dB$ after - per circuit of 5 protected fusion splices
- » Criterion 8.3.9: EN 61300-2-18, Dry heat: +80°C 96h, 1310&1550nm $\delta IL \leq \pm 0,2dB$ durin -, $\delta IL \leq \pm 0,1dB$ after - per circuit of 5 protected fusion splices
- » Criterion 8.3.10: EN 61300-2-19, Damp heat: from +25°C to +55°C, 93%Rh, 4 cycles, 96h 1310&1550nm $\delta IL \leq \pm 0,2dB$ durin -, $\delta IL \leq \pm 0,1dB$ after - per circuit of 5 protected fusion splices
- » Criterion 8.3.11: EN 61300-2-22, Change of temperature: from -40°C to +70°C, 12 cycles, 68h, 1310&1550nm $\delta IL \leq \pm 0,2dB$ durin -, $\delta IL \leq \pm 0,1dB$ after - per circuit of 5 protected fusion splices

TS 0338/96 Deutsche Telekom standard:

- » Criterion 5.8: Transport simulation: from -40°C to +85°C, 20 cycles, 183h
- » Criterion 5.9.2: DIN EN 61300-2-18, Dry heat: +85°C 96h, 1550nm $IL \leq 0,1$ for 5 crimp protectors
- » Criterion 5.9.3: DIN EN 61300-2-17, Cold: -45°C, 96h, 1550nm $IL \leq 0,1$ for 5 crimp protectors
- » Criterion 5.9.4: DIN EN 61300-2-19, Damp heat: +40°C, 93%Rh, 96h, 1550nm $IL \leq 0,1$ for 5 crimp protectors
- » Criterion 5.9.5: DIN EN 61300-2-22, Change of temperature: from -40°C to +70°C, 12 cycles, 68h, 1550nm $IL \leq 0,1$ for 5 crimp protectors
- » Criterion 5.9.6: EN 60068-2-6 , Vibration: 10-500Hz, 10 cycles, 1550nm $IL \leq 0,1$ for 12 crimp protectors
- » Criterion 5.9.7: EN 60068-2-27, Shock: 11ms, half sine 15G, 1550nm $IL \leq 0,1$ for 12 crimp protectors
- » Criterion 5.10.2: TS 0338/96, Vertical bending: 6N
- » Criterion 5.10.3: TS 0338/96, Horizontal bending: 2N