## Alcadon

## Product Description

Ver: EN201901 V3.5

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KC97 (updated edition) cold shrink tube are designed for weatherproofing protection on cell site transmission line, comprising connections between jumper cable and RF devices such as RRU/RRH, Antenna, Combiner etc., through connectors of 7/16 DIN, N type or 4.3-10. Comparing with conventional tape, the cold shrink tube is easy and fast installation (15-30 seconds), conveniently mounting in vertical and horizontal directions, uniform quality and IPX8 performance not effected by workmanship.

## KC97



## Feature

» Multi layers structure designing, improve waterproofing and nick, tear resistance
$\diamond$ IPX8 class, stable, proved long operational life
$\diamond$ Easy to install, three steps (Cover, pull and clench)
> Tool free and fast installation, only 15-30 seconds for one RF ports sealing
$\diamond$ No limitation of spare space, especially design for narrow space, MIMO Antenna etc.,
$\checkmark$ Easy to uninstall, need knife to cut tube open and no sticky mastic left
$\triangleleft$ No skill required by engineers, uniform quality after installation, stable good sealing and weatherproofing performance
$\diamond$ Much time cost, and labor cost saving
« Good operating capability under extremely cold and hot environment, highland, salt-mist situation, heavy windy weather, and anti-UV, anti-ozone

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## Properties

| Item |  | Parameter and | Test Method |
| :---: | :---: | :---: | :---: |
| Waterproof | Class | Pass, IPX8 | IEC 60529: 1989+A1: 1999+A2: 2013 ; <br> 1 meter depth in water, duration: 4 hours |
| Physical and mechanical properties | Shore Hardness | $40 \pm 5$ | ASTM D2240-15 |
|  | Tensile Strength | $>7.0 \mathrm{MPa}$ | ASTM D412-15a Method A |
|  | Elongation | > 800\% | ASTM D412-15a Method A |
|  | Tear Strength | $>25 \mathrm{KN} / \mathrm{m}$ | ASTM D624-00(2012) |
|  | Brittleness temperature by impact | Pass | ASTM D746-14, -60 ${ }^{\circ} \mathrm{C}$ |
|  | Drop Test | No damage, deformation, and the support core could be pulled out normally | Provided by client: <br> Drop height: 1.2 m <br> Drop surface: Tile floor <br> Drop times: 3 |
| Flammability | Horizontal burning | HB | UL 94-2013 Rev.6-2016 Section 7 |
| Electricity | Dielectric Strength | > $22 \mathrm{KV} / \mathrm{mm}$ | ASTM D149-09(2013) Method A |
| Aging test | Light aging testUV exposure | No crack, discoloration, damage or deformation Grey scale: 4-5 IPX8 Pass | ISO 4892-3:2016 Cycle1\& ISO 105- <br> A02:1993/Cor.2:2005 <br> Lamp type: UVA-340, 8 h UV at $(60 \pm 3)^{\circ} \mathrm{C}$ <br> BPT , $0.76 \mathrm{~W} /\left(\mathrm{m}^{2} \times \mathrm{nm}\right) @ 340 \mathrm{~nm}$ <br> 4 h condensation at $(50 \pm 3)^{\circ} \mathrm{C} \mathrm{BPT}$ <br> Exposure duration: 1000 hours |
|  | Ozone aging | No crack, discoloration, damage or deformation, IPX8 Pass | ASTM D1149-16 Method B procedure B1 <br> Temperature: $40 \pm 1^{\circ} \mathrm{C}$ <br> Ozone concentration: $50 \pm 5 \mathrm{pphm}$ <br> Exposure duration: 72 hours |
| Material | Environmental protection | RoHS <br> Reach | IEC 62321 SVHC |

Note: This is typical value under lab test, and refer to Cotran KC97 SGS test report.

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## Dimension



Picture 1. Dimension before shrink


Picture 2. Dimension after shrink

| Mode | I.D <br> $(\mathrm{mm})$ | Relaxed I.D <br> $(\mathrm{mm})$ | Relaxed Length <br> $(\mathrm{mm})$ | Average wall thickness <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: | :---: |
| KC97-4310 | $\geq 25$ | $\leq 10$ | $\geq 140$ | $\geq 2.5$ |
| KC97-RF | $\geq 37$ | $\leq 12$ | $\geq 140$ | $\geq 2.5$ |

## Shelf Life

KC97 (updated edition) cold shrink tube have a 1-year shelf life from date of manufacture when stored in the range of $10^{\circ} \mathrm{C}$ to $28^{\circ} \mathrm{C}$ temperature and $<75 \%$ relative humidity.

