

# VCA - Variable Attenuators

## Connector type

### Description:

The fiber optical variable connector type attenuators are fully compliance with FC, ST and SC types optical connector requirements. Fiber attenuators can be applied to adjust power level of signal in the optical communication at the output of light sources, E/O converters and for the of linear or dynamic range of power meter. Furthermore, they can be used in optical amplifier systems to balance the gain across the different operating wavelengths. The VCA series attenuator uses standard fibers currently deployed in optical systems. No special fibers, filters nor optical elements are used.

Attenuators are compatible with standard fiber optic connectors and adapters allowing the user to quickly and easily introduce a variable insertion loss into the optical network. Attenuation variation is achieved by controlling longitudinal offset. Ultra polished ferrules provide excellent optical performance.

### Features :

- Fully compatible with FC/PC, ST/PC and SC/PC connectors
- Attenuation stability
- Perfect environmental stability and reliability
- Wavelength stability
- Wide attenuation range
- High resolution
- Excellent return loss
- Easy installation & well package
- Air gap style
- Continuous variation
- Patchcord or pigtail variants



VCA Attenuator FC Connector Type

### Applications :

- Telecommunications networks, CATV
- Local area networks
- Optical fiber sensors
- Test equipment
- Fiber to the home
- Power Equalizers
- Optical Sensors
- Light Transmission Systems
- Laboratory Test
- Dynamic Gain Flattening



VCA-USL/UPC-28SM-002

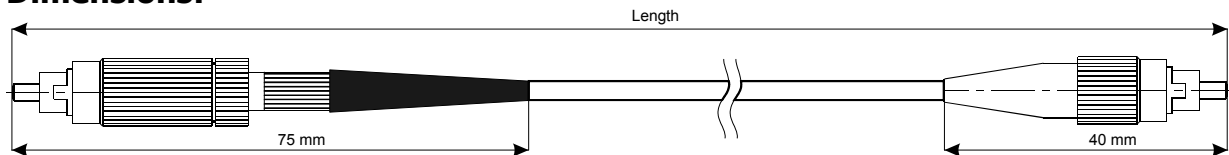


VCA-USC/USC-28SM-J-1

### Specifications:

Fiber type	SM 9/125 $\mu\text{m}$ , Flexcor 1060 nm MM 50/125 $\mu\text{m}$ , MM 62.5/125 $\mu\text{m}$
Operation Wavelength:	Singlemode 1300 nm - 1620 nm Multimode 800 nm - 1300 nm
Variable Range:	UPC Singlemode 0.5 dB to 28 dB PC Multimode 0.5 dB to 20 dB
Resolution	0.1 dB
Return Loss:	UPC, PC 15 dB
Max. Input Optical Power	+20 dBm
Retention Force	200 to 600 grams
Temperature Coefficient	0.002 (dB/°C)
Operation Temperature	-25 °C to +70 °C
Storage Temperature	-40 °C to +85 °C

### Dimensions:



### Ordering Code:

**VCA - XXX / AAA\* - XX XX - XXX**

<b>attenuator type:</b> Multimode <b>PC</b> FC/PC <b>SL</b> ST/PC <b>SC</b> SC/PC Singlemode <b>UPC</b> FC/UPC <b>USL</b> ST/UPC <b>USC</b> SC/UPC	<b>cable type:</b> <b>XX</b> <b>XX</b> <b>24</b> $\varnothing$ 2.4 mm <b>SM</b> SM 9/125 <b>28</b> $\varnothing$ 2.8 mm <b>FX</b> Flexcor 1060 <b>M5</b> MM 50/125 <b>M6</b> MM 62.5/125	<b>length:</b> (m)																
<b>connector type:</b> see patchcord ordering code: CON_13-01_EN  *) Note: <b>P</b> – for pigtail variant		<b>Typical connectors:</b> <table border="1"> <thead> <tr> <th>Code</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td><b>PC</b></td> <td>FC/PC</td> </tr> <tr> <td><b>UPC</b></td> <td>FC/UPC</td> </tr> <tr> <td><b>USC</b></td> <td>SC/UPC</td> </tr> <tr> <td><b>SL</b></td> <td>ST/PC</td> </tr> <tr> <td><b>UE2</b></td> <td>LSH (E2000)/UPC</td> </tr> <tr> <td><b>LC</b></td> <td>LC/PC</td> </tr> <tr> <td><b>ULC</b></td> <td>LC/UPC</td> </tr> </tbody> </table>	Code	Description	<b>PC</b>	FC/PC	<b>UPC</b>	FC/UPC	<b>USC</b>	SC/UPC	<b>SL</b>	ST/PC	<b>UE2</b>	LSH (E2000)/UPC	<b>LC</b>	LC/PC	<b>ULC</b>	LC/UPC
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### Samples of Variable Attenuator :

VCA – UPC /...



VCA – USL /...



VCA – USC /...

