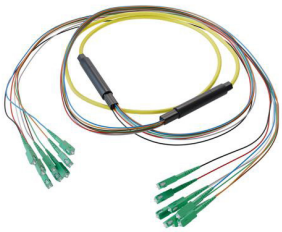
8-Fiber SC APC to SC APC, OS2 Single Mode Distribution Cable, 5.6mm Plenum, 2.0mm breakout, Yellow-25M



FCA-8S2SCASCAPK2-25

Features

- 8X SC APC to 8X SC APC
- Indoor single mode OS2
- Plenum (OFNP) rated cable
- 5.6mm with tight buffer and aramid yarn strength member
- 2mm TIA 598 color coded, .5M breakout
- Suitable for wall, ceiling, conduits, and between buildings

Applications

- Data centers
- Passive Optical Networks (PON)
- Local Area Networks (LAN)
- Enterprise Networking
- Storage and cloud based services
- AI data storage and communications
- Headend termination to a fiber backbone
- Terminations of data center fiber rack system

Description

L-com's FCA-8S2SCASCAPK2-25 fiber optic distribution cable is engineered to provide reliable single mode fiber connectivity for indoor network environments. This cable assembly features an 8-fiber SC APC to SC APC configuration, using OS2 single mode fiber with a 9/125 µm core size. Designed with a breakout structure, it ensures organized fiber distribution, making it an ideal choice for data centers, enterprise networks, and LAN applications where multi-fiber routing and consistent signal performance are critical. The 8-fiber single mode breakout cable comes with a 5.6 mm overall diameter yellow plenum (OFNP)-rated PVC jacket, meeting indoor fire safety standards. Each breakout fiber measures 2.0 mm and follows TIA-598 color coding for easy identification and termination, with a 0.5 m breakout length.

This 25-meter fiber optic distribution cable is constructed with tight-buffered fiber and reinforced with aramid yarn, providing excellent mechanical durability. The cable also features controlled bend radii, with a one-time bend radius of 1.654 inches and a repeated bend radius of 3.307 inches, ensuring optimal optical performance during installation and routing. The cable offers crush resistance values of 1000 N/100 mm (short-term) and 300 N/100 mm (long-term), making it highly suitable for robust indoor deployments.

The FCA-8S2SCASCAPK2-25 OS2 single mode fiber optic assembly uses SC APC to SC APC connectors, which ensure low insertion loss and superior return loss performance. The maximum insertion loss is 0.30 dB, with a minimum return loss of 60 dB. This OS2 single mode fiber assembly is perfect for applications such as Passive Optical Networks (PON), storage and cloud-based services, AI data storage and communications, headend termination to a fiber backbone, and data center fiber rack systems. With an operating temperature range from 0 °C to 60 °C, this plenum (OFNP)-rated cable is designed for installation in walls, ceilings, conduits, and between buildings. It does not carry an ingress protection (IP) rating.

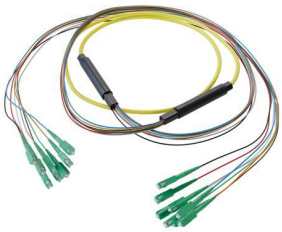
L-com offers one of the most extensive in-stock selections of single mode distribution cables, with same-day shipping available for both domestic and international orders. Order today to take advantage of same-day shipping, and our expert technical support and knowledgeable sales team are available to help you select the 8-fiber SC APC to SC APC OS2 single mode distribution cable that fits your needs.

Configuration

Function	Breakout
Cable Type	Base-8 Single Mode
Mode	Single Mode
Mode Class	OS2
Fiber Diameter	9/125 µm
Connection 1 Type	SC
Connection 1 Polish	APC
Connection 2 Type	SC
Connection 2 Polish	APC
Cable Color	Yellow

© 2026 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.

8-Fiber SC APC to SC APC, OS2 Single Mode Distribution Cable, 5.6mm Plenum, 2.0mm breakout, Yellow-25M



FCA-8S2SCASCAPK2-25

Optical Specifications

Description	Minimum	Typical	Maximum	Units
Return Loss - LC, ST, SC, FC	60			dB
Insertion Loss - LC, ST, SC, FC			0.3	dB

Mechanical Specifications

Cable Assembly

Length	25 m [984.25 in]
Width/Diameter	5.6 mm
Weight	243.13 g [0.536 lbs]

Cable

Cable Type	Breakout
Static Bend Radius	42 mm
Dynamic Bend Radius	84 mm
Max Crush Resistance, Short Term (N/100mm)	1,000
Max Crush Resistance, Long Term (N/100mm)	300

Connectors

Description	Connector 1	Connector 2
Type	SC	SC
Connector Polish	APC	APC

Environmental Specifications

Operating Range Temperature	0 to +60 deg C
Storage Range Temperature	-20 to +60 deg C
Ingress Protection (IP) Rating	Non-Rated

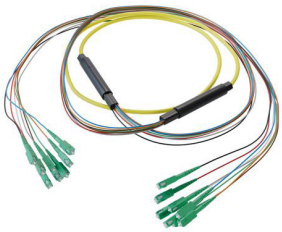
Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

© 2026 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.

8-Fiber SC APC to SC APC, OS2 Single Mode Distribution Cable, 5.6mm Plenum, 2.0mm breakout, Yellow-25M



FCA-8S2SCASCAPK2-25

Typical Performance Data

How to Order

Part Number Configuration: **FCA-8S2SCASCAPK2** **-XX** **UU**

- UU — Unit of Measure:
  F = Feet
  <blank> = Meters
- XX — Lengths
- FCA-8S2SCASCAPK2 — Base Number

Example: FCA-8S2SCASCAPK2-12 = 12 meters long cable
FCA-8S2SCASCAPK2-10F = 10 feet long cable

8-Fiber SC APC to SC APC, OS2 Single Mode Distribution Cable, 5.6mm Plenum, 2.0mm breakout, Yellow-25M from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

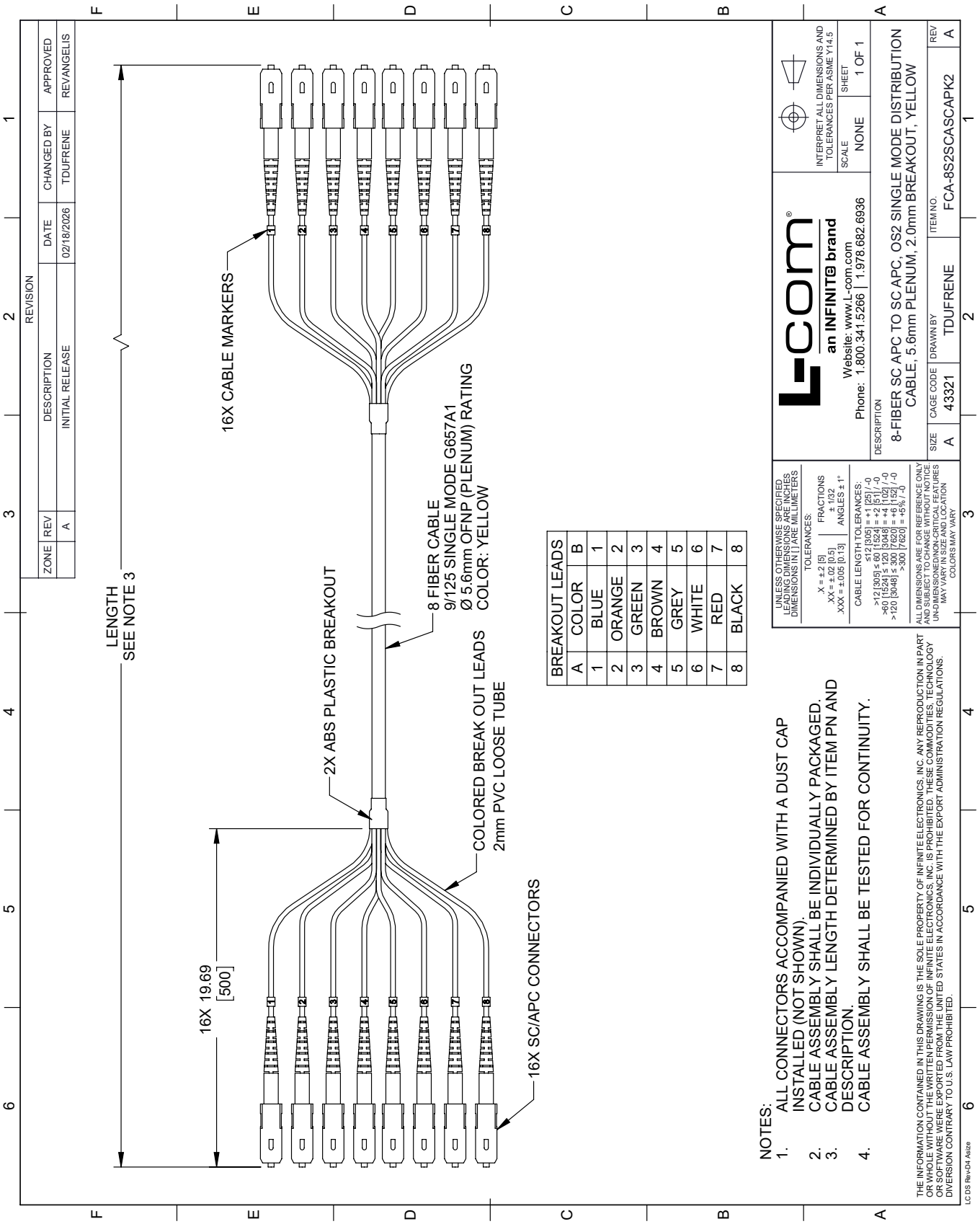
URL: https://www.l-com.com/8-fiber-sc-apc-sc-apc-os2-single-mode-distribution-cable-5.6mm-plenum-2.0mm-breakout-yellow-25m-fca-8s2scascapk2-25

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

© 2026 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.

FCA-8S2SCASCAPK2-25 CAD Drawing

8-Fiber SC APC to SC APC, OS2 Single Mode Distribution Cable, 5.6mm Plenum, 2.0mm breakout, Yellow-25M



© 2025 Infinite Electronics, Inc. L-com is a registered trademark of Infinite Electronics, Inc.