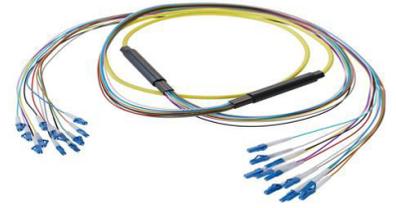


## 12-Fiber LC UPC to LC UPC, OS2 Single Mode Distribution Cable, 6.2mm Plenum, 2.0mm breakout, Yellow-5M



### PE3FCA451-5M

#### Features

- 12X LC UPC to 12X LC UPC
- Indoor single mode OS2
- Plenum (OFNP) rated cable
- 6.2mm 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

High-performance fiber optic cable assemblies, including the PE3FCA451-5M from Pasternack, are designed for modern, high-speed network infrastructures and part of a large selection of same day ship cable assemblies. Whether deploying fiber optic distribution assemblies for enterprise networks, fiber optic breakout assemblies for seamless interconnectivity, or fiber optic patch cord assemblies for structured cabling, our solutions ensure durability and precision. Built for data centers, telecommunications, and industrial applications, our fiber optic distribution breakout assemblies deliver superior performance, ensuring optimal signal integrity and minimal loss.

For long-distance and high-speed transmission, the Pasternack PE3FCA451-5M indoor Single Mode G.657.A1 OS2 fiber optic cable assembly offers ultra-low attenuation over distances up to 10km for 10G Ethernet and beyond. Built with a 9/125µm core size, this 12 fiber LC UPC to LC UPC fiber optic distribution assembly ensures minimal signal loss for campus networks, metro Ethernet, and telecom infrastructure. The yellow Plenum (OFNP) rated jacket, tight-buffered aramid yarn construction, and 42mm (7.5D) minimum bend radius provide maximum durability and performance.

With an operating temperature range of 0°C to 60°C, Pasternack's PE3FCA451-5M OS2 fiber optic cable is designed for indoor environments, supporting wall, ceiling, conduits, and between buildings. The 6.2mm overall cable diameter and 2.0mm breakout diameter allow for flexible routing while maintaining low insertion loss and superior signal integrity. Whether for enterprise backbones, long-haul networking, or high-speed data transmission, this OS2 fiber optic assembly delivers exceptional reliability for critical infrastructure deployments. For further information on similar products, our expert technical support and trained sales team can get you the ideal fiber optic multi-fiber cable assembly as per your requirements.

#### Configuration

Function	Breakout
Cable Type	12-Fiber Single Mode
Mode	Single Mode
Mode Class	OS2
Fiber Diameter	9/125 um
Connection 1 Type	LC
Connection 1 Polish	UPC
Connection 2 Type	LC
Connection 2 Polish	UPC
Cable Color	Yellow

#### Optical Specifications

Description	Minimum	Typical	Maximum	Units
Return Loss	50			dB

12-Fiber LC UPC to LC UPC, OS2 Single Mode Distribution Cable, 6.2mm Plenum, 2.0mm breakout, Yellow-5M



**PE3FCA451-5M**

**Optical Specifications**

Description	Minimum	Typical	Maximum	Units
Insertion Loss			0.3	dB

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	6.2 mm
Weight	127.91 g [0.282 lbs]

**Cable**

Cable Type	Breakout
Static Bend Radius	47 mm
Dynamic Bend Radius	93 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	LC	LC
Connector Polish	UPC	UPC

**Environmental Specifications**

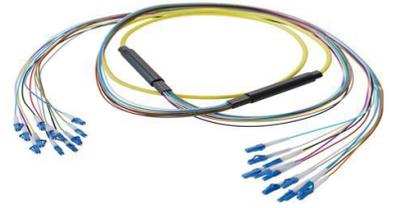
Operating Range Temperature	0 to +60 deg C
Storage Range Temperature	-20 to +60 deg C
Ingress Protection (IP) Rating	Non-Rated

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

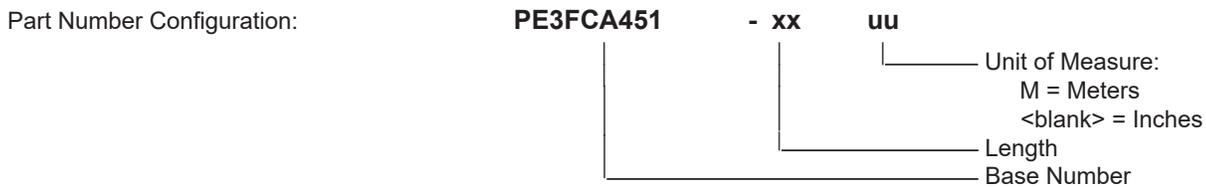
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**PE3FCA451-5M**

**Typical Performance Data**

**How to Order**



Example:    PE3FCA451-12 = 12 inches long cable  
              PE3FCA451-100cm = 100 cm long cable

12-Fiber LC UPC to LC UPC, OS2 Single Mode Distribution Cable, 6.2mm Plenum, 2.0mm breakout, Yellow-5M from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

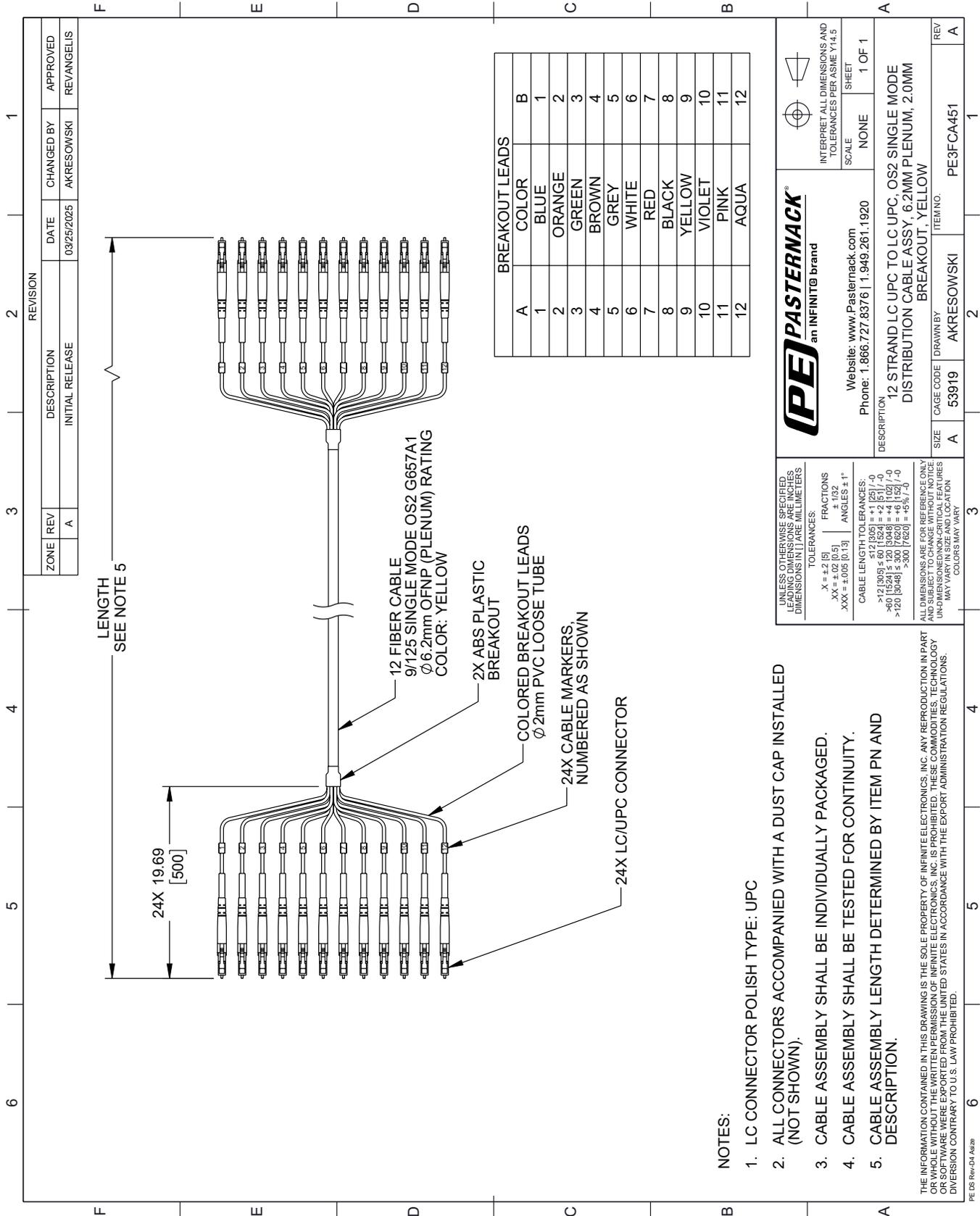
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [12-Fiber LC UPC to LC UPC, OS2 Single Mode Distribution Cable, 6.2mm Plenum, 2.0mm breakout, Yellow-5M PE3FCA451-5M](#)

URL: <https://www.pasternack.com/lc-lc-single-mode-os2-fiber-optic-cable-assembly-pe3fca451-5m-p.aspx>

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. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3FCA451-5M CAD Drawing

12-Fiber LC UPC to LC UPC, OS2 Single Mode Distribution Cable, 6.2mm Plenum, 2.0mm breakout, Yellow-5M



A	COLOR	B
1	BLUE	1
2	ORANGE	2
3	GREEN	3
4	BROWN	4
5	GREY	5
6	WHITE	6
7	RED	7
8	BLACK	8
9	YELLOW	9
10	VIOLET	10
11	PINK	11
12	AQUA	12

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an INFINITE brand

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Phone: 1.866.727.8376 | 1.949.261.1920

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]      FRACTIONS ± 1/32  
 .XX = ±.02 [0.5]      ANGLES ± 1°  
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
 >12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 >120 [3048] ≤ 300 [7620] = ±.5 [12.7] / -0  
 >300 [7620] = ±.5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

REVISIONS:

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	03/25/2025	AKRESOWSKI	REVANGELIS

SCALE: NONE      SHEET: 1 OF 1

DESCRIPTION: 12 STRAND LC UPC TO LC UPC, OS2 SINGLE MODE DISTRIBUTION CABLE ASSY, 6.2MM PLENUM, 2.0MM BREAKOUT, YELLOW

SIZE: A      CAGE CODE: 53919      DRAWN BY: AKRESOWSKI      ITEM NO.: PE3FCA451

REV: A

- NOTES:
1. LC CONNECTOR POLISH TYPE: UPC
  2. ALL CONNECTORS ACCOMPANIED WITH A DUST CAP INSTALLED (NOT SHOWN).
  3. CABLE ASSEMBLY SHALL BE INDIVIDUALLY PACKAGED.
  4. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
  5. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 Add2