

Copper LAN Product Inquiry Phone: 717-354-6200 berktek.support@nexans.com

## **HyperPlus 5e Plenum Rated Category 5e UTP**

REF# CS-001

HyperPlus 5e Plenum

→ Part Number: 10032207

Berk-Tek's HYPER PLUS 5e Standard Category 5e UTP Cables are designed for horizontal network and voice applications in a structured cabling network to connect between the user outlet and horizontal cross-connect.

### Description

### Berk-Tek HyperPlus 5e, Performance Guaranteed

Your business demands continuous performance from your IT network, so our specifications aren't simply numbers on the page. They define the way that we do business. This means that you are *guaranteed* industry-leading performance and quality for all Berk-Tek products.

Some other manufacturers talk about "typical" values, at Berk-Tek, we hold ourselves to a higher standard. We won't talk about typicals, we talk about what is true, guaranteed, and independently verified.

Keep your business running by relying on Berk-Tek.

Berk-Tek ... Because Your Business Runs Through Us.

### Construction

24 AWG bare copper wire insulated with thermoplastic. Two insulated conductors twisted together to form a pair and four such pairs cabled to form the basic unit, jacketed with flame-retardant PVC.

### Flame Rating

- Plenum NFPA 262, CMP
- UL Listed

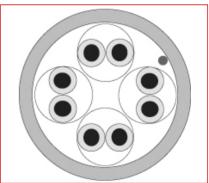
### **Features**

- Supports most data and voice applications
- ETL Verified to TIA/EIA-568-C.2
- · RoHS Compliant

### **Benefits**

- Universally accepted design for global commercial network installations
- · Simplified structured cabling solution preserving long-term network investment
- Characterized to 350 Mhz, 250 Mhz greater than the standard





### Standards

International ISO/IEC 11801 National ANSI/TIA-568-C.2; UL 444

### Characteristics

Construction characteristics	
Type of cable	UTP
Colour	Grey
Dimensional characteristics	
Length per reel	1000.0 ft
Number of pairs	4

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# HyperPlus 5e Plenum Rated Category 5e UTP HyperPlus 5e Plenum

Usage characteristics	
Packaging	Вох
Field of application	Indoor
Category	Cat. 5e
Fire safety	Plenum Rated



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# HyperPlus 5e Plenum Rated Category 5e UTP HyperPlus 5e Plenum

**Part Number:** <u>10032207</u>

### HyperPlus 5e Parametric Data: Electrical

		RL (dB)			NEXT (dB)			PSNEXT (dl	В)
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance
1	20.0	20.0	30.0	65.3	66.3	83.0	62.3	62.3	79.0
4	23.0	23.0	33.9	56.3	57.3	74.0	53.3	53.3	69.3
10	25.0	25.0	32.7	50.3	51.3	67.2	47.3	47.3	63.0
16	25.0	25.0	35.1	47.2	48.3	64.1	44.2	44.3	59.9
20	25.0	25.0	34.6	45.8	46.8	62.8	42.8	42.8	58.8
31.25	23.6	23.6	33.3	42.9	43.9	59.8	39.9	39.9	55.6
62.5	21.5	21.5	30.2	38.4	39.4	55.6	35.4	35.4	51.3
100	20.1	20.1	30.3	35.3	36.3	52.6	32.3	32.3	48.1
150	_	_	29.6	_	_	49.9	_	_	45.8
200	_	_	29.6	_	_	47.9	_	_	43.7
250	_	_	28.4	_	_	46.1	_	_	41.9
300	_	_	28.1	_	_	44.2	_	_	40.2
350	_	_	27.2	_	_	42.9	_	_	38.8

		IL (dB/100m)			ACR (dB/100m	)	F	SACR (dB/100	m)
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance
1	2.0	2.0	1.8	63.3	64.3	78.3	60.3	60.3	77.1
4	4.1	4.1	3.7	52.2	53.3	66.8	49.2	49.3	65.6
10	6.5	6.5	5.9	43.8	44.9	58.3	40.8	40.9	57.0
16	8.2	8.2	7.5	39.0	40.0	53.6	36.0	36.0	52.4
20	9.3	9.3	8.4	36.5	37.6	51.8	33.5	33.6	50.4
31.25	11.7	11.7	10.5	31.2	32.3	46.3	28.2	28.3	45.0
62.5	17.0	17.0	15.1	21.4	22.4	37.1	18.4	18.4	36.0
100	22.0	22.0	19.2	13.3	14.4	30.0	10.3	10.4	28.7
150	_	_	23.8	_	_	23.0	_	_	21.4
200	_	_	27.7	_	_	16.7	_	_	15.3
250	_	_	31.1	_	_	11.5	_	_	9.9
300	_	_	34.3	_	_	5.9	_	_	4.5

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# HyperPlus 5e Plenum Rated Category 5e UTP HyperPlus 5e Plenum

All swept frequency values above 100 MHz are for engineering purposes only.

HyperPlus 5e Parametric Data: Electrical (cont)

		ACRF (dB/100	m)	F	PSACRF (dB/10	00m)	LCL/TCL	EL TCTL
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	Product Guarantee	Product Guarantee
1	63.8	63.8	78.7	60.8	60.8	73.0	40.0	35.0
4	51.8	51.8	66.7	48.8	48.8	61.1	40.0	23.0
10	43.8	43.8	58.7	40.8	40.8	53.1	40.0	15.0
16	39.7	39.7	54.3	36.7	36.7	48.8	38.0	10.9
20	37.8	37.8	52.3	34.8	34.8	46.7	37.0	9.0

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# HyperPlus 5e Plenum Rated Category 5e UTP HyperPlus 5e Plenum

31.25	33.9	33.9	48.6	30.9	30.9	42.3	35.1	5.1
62.5	27.9	27.9	42.0	24.9	24.9	36.3	32.0	_
100	23.8	23.8	37.9	20.8	20.8	32.2	30.0	_
150	_	_	34.8	_	_	29.2	28.2	_
200	_	_	32.1	_	_	26.8	27.0	_
250	_	_	29.9	_	_	25.2	26.0	_
300	_	_	27.9	_	_	23.4	25.2	_
350	_	_	27.1	_	_	22.8	24.6	_

All swept frequency values above 100 MHz are for engineering purposes only.

### HyperPlus 5e Plenum UTP Physical Data

Technical Data - Physical					
Conductor	24 AWG Bare Copper				
Conductor diameter - in. (mm)	0.020	(0.58)			
Insulated conductor diain.(mm)	0.038	(0.97)			
Cable diameter - in. (mm)	0.210	(5.33)			
Nom. cable wtlb./kft. (kg/kft)	25	(11.34)			
Max. installation tension - lb. (N)	25	(110)			
Min. bend radius - in. (mm)	1	(25.4)			

Color Code			
Pair-1	White/Blue	Blue	
Pair-2	White/Orange	Orange	
Pair-3	White/Green	Green	
Pair-4	White/Brown	Brown	

Temperature Rating (degrees C)				
Installation	0 to +50			
Operation	-20 to +60			

### HyperPlus 5e Plenum Technical Data - Parametric Measurements

Mutual Capacitance	5.2 nF/100 m max.
DC Resistance	9.38 Ohms/100 m max.
Skew	45 ns/100 m max.
Pair to Ground Unbalance	330 pF/100 m max.
Velocity of Propagation	66% nom.
DC Resistance unbalance	5% max.

### **Supported Category 5e Applications**

STANDARD	APPLICATION	SPEED
IEEE 802.3	1000BASE-T	1 Gb/s
ATM	155Mb/s	155 Mb/s
IEEE 802.3	100BASE-TX	100 Mb/s
CDDI		100 Mb/s
IEEE 802.3	10BASE-T	10 Mb/s

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Selling delivery information

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Copper LAN Product Inquiry Phone: 717-354-6200 berktek.support@nexans.com

## LANmark-1000 Enhanced Category 6 Plenum Rated

REF# CS-002

LANmark-1000 Plenum
Part Number: 10032026

LANmark-1000 has been improved to offer best-in-class electrical performance. Berk-Tek's engineers completely redesigned LANmark-1000 so that all crosstalk parameters could be improved by four dB. As a result, the Power Sum Attenuation to Crosstalk ratio (PSACR) is nearly 3 times better (at 250 MHz) allowing for much greater signal strength and less vulnerability to noise interference. At Berk-Tek, we understand that your business runs through us.

### Description

### Berk-Tek LANmark-1000, Performance Guaranteed

Before any cable can display the Berk-Tek LANmark-1000 legend, it must pass factory tests with a minimum of 5dB of crosstalk margin beyond the CAT 6 standard for NEXT, PSNEXT, ACR and PSACR. If the margin is missing, so is the legend. That is our guarantee to you.

Your business demands continuous performance from your IT network, so our specifications aren't simply numbers on the page. They define the way that we do business. This means that you are *guaranteed* industry-leading performance and quality for all Berk-Tek products.

Some other manufacturers talk about "typical" values, at Berk-Tek, we hold ourselves to a higher standard. We won't talk about typicals, we talk about what is true, guaranteed, and independently verified.

Keep your business running by relying on Berk-Tek.

Berk-Tek ... Because Your Business Runs Through Us.

### Construction

23 AWG bare copper wire insulated with FEP. Two insulated conductors twisted together to form a pair and four such pairs laid up with crossfiller to form the basic unit, jacketed with flame-retardant PVC.

### Flame Rating

Plenum - NFPA 262, CMP, UL Listed

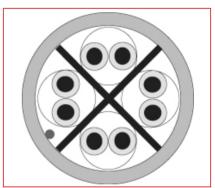
### **Features**

- Full Power Sum Performance
- Documented balance characteristics (LCL, LCTL)
- ETL verified to ANSI/TIA/EIA-568-C.2
- · RoHS Compliant

### **Benefits**

- Optimal support for Gigabit Ethernet with headroom
- Power sum characterization gives highest performance using existing applications
- Provides additional bandwidth required for future applications
- Addition of balance requirements improves overall cable performance and reduces cable emissions which results in reduced transmission errors
- Characterized to 550 MHz, 300 MHz greater than the standard





### Standards

International ISO/IEC 11801 National ANSI/TIA-568c.2 Category 6; UL 444



Copper LAN Product Inquiry Phone: 717-354-6200 berktek.support@nexans.com

# LANmark-1000 Enhanced Category 6 Plenum Rated

LANmark-1000 Plenum Part Number: 10032026

### Characteristics

Construction characteristics	
Type of cable	UTP
Colour	Grey
Dimensional characteristics	
Length per reel	1000.0 ft
Number of pairs	4
Usage characteristics	
Packaging	Box
Field of application	Indoor
Category	Cat. 6
Fire safety	Plenum Rated



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# LANmark-1000 Enhanced Category 6 Plenum Rated

LANmark-1000 Plenum Part Number: 10032026

### LANmark-1000 Parametric Data: Electrical

		RL (dB)		NEXT (dB)		PSNEXT (dB)			
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance
1	20.0	20.0	32.0	74.3	79.3	93.0	72.3	77.3	89.3
4	23.0	23.6	32.9	65.3	70.3	83.5	63.3	68.3	79.8
10	25.0	26.0	35.4	59.3	64.3	77.1	57.3	62.3	73.4
16	25.0	26.0	37.4	56.2	61.3	73.7	54.2	59.3	70.2
20	25.0	26.0	36.8	54.8	59.8	72.8	52.8	57.8	69.0
31.25	23.6	23.5	36.9	51.9	56.9	69.2	49.9	54.9	66.0
62.5	21.5	22.5	34.3	47.4	52.4	65.2	45.4	50.4	61.3
100	20.1	21.6	32.8	44.3	49.3	62.2	42.3	47.3	58.3
150	18.9	21.0	31.5	41.7	46.7	59.2	39.7	44.7	55.3
200	18.0	20.5	31.7	39.8	44.8	57.1	37.8	42.8	53.2
250	17.3	20.1	31.2	38.3	43.4	55.5	36.3	41.4	51.6
300	_	19.8	29.8	_	42.2	54.2	_	40.2	50.4
350	_	_	29.2	_	41.2	52.7	_	39.2	49.0
400	_	_	28.4	_	_	51.7	_	_	47.8
450	_	_	27.4	_	_	49.9	_	_	45.6
500	_	_	26.8	_	_	47.9	_	_	43.6
		IL (dB/100m	1)	A	ACR (dB/100m)		PSACR (dB/100m)		
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance
1	2.0	2.0	1.7	72.3	77.3	89.4	70.3	75.3	87.5
4	3.8	3.8	3.5	61.5	66.6	77.6	59.5	64.6	76.1
10	6.0	5.9	5.6	53.3	58.4	69.2	51.3	56.4	67.7
16	7.6	7.5	7.1	48.7	53.8	64.6	46.7	51.8	62.9
20	8.5	8.4	8.0	46.3	51.4	62.4	44.3	49.4	61.0
31.25	10.7	10.6	10.0	41.2	46.4	57.5	39.2	44.4	55.7
62.5	15.4	15.3	14.4	32.0	37.1	48.2	30.0	35.1	46.7
100	19.8	19.6	18.4	24.5	29.7	41.2	22.5	27.7	39.6
150	24.7	24.5	22.8	16.9	22.2	33.6	14.9	20.2	32.2
200	29.0	28.8	26.7	10.8	16.0	27.8	8.8	14.0	26.1
250	32.8	32.6	30.1	5.5	10.8	22.7	3.5	8.8	21.0
300	_	36.1	33.1	_	6.1	18.3	_	4.1	16.6
350	_	39.4	36.0	_	1.8	14.4	_	-0.2	12.5
400	_	_	38.7	_	_	10.1	_	_	8.4

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# **LANmark-1000 Enhanced Category 6 Plenum Rated**

450	_	_	41.4	_	_	4.9	_	_	3.5
500	_	_	43.9	_	_	0.0	_	_	-1.2

All swept frequency values above 350 MHz are for engineering purposes only.

LANmark-1000 Parametric Data: Electrical (cont)

Guarantee

<u>Performance</u>

FREQ

MHz

**ACRF (dB/100m)** PSACRF (dB/100m) LCL/TCL **EL TCTL** Product Expected Product Product Product Expected TIA Spec TIA Spec Guarantee

<u>Performance</u>

Guarantee

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Guarantee

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# LANmark-1000 Enhanced Category 6 Plenum Rated

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1	67.8	72.8	86.8	64.8	69.8	83.1	40.0	35.0
4	55.8	60.7	74.9	52.8	57.7	71.5	40.0	23.0
10	47.8	52.8	67.1	44.8	49.8	63.5	40.0	15.0
16	43.7	48.7	63.0	40.7	45.7	59.2	38.0	10.9
20	41.8	46.8	61.0	38.8	43.8	57.2	37.0	9.0
31.25	37.9	42.9	57.3	34.9	39.9	53.6	35.1	5.1
62.5	31.9	36.8	51.2	28.9	33.8	47.6	32.0	_
100	27.8	32.8	46.9	24.8	29.8	43.5	30.0	_
150	24.3	29.3	43.3	21.3	26.3	39.6	28.2	_
200	21.8	26.7	40.9	18.8	23.7	37.1	27.0	_
250	19.8	24.8	38.9	16.8	21.8	35.2	26.0	_
300	_	23.2	37.7	_	20.2	33.6	25.2	_
350	_	21.9	36.2	_	18.9	32.6	24.6	_
400	_	_	34.7	_	_	30.9	24.0	_
450	_	_	33.1	_	_	29.4	23.5	_
500	_	_	32.2	_	_	27.8	23.0	_

All swept frequency values above 350 MHz are for engineering purposes only.

### LANmark-1000 Plenum UTP Physical Data

Technical Data - Physical					
Conductor	23 AWG Ba	23 AWG Bare Copper			
Conductor diameter - in. (mm)	0.022	(0.58)			
Insulated conductor diain.(mm)	0.037	(1.04)			
Cable diameter - in. (mm)	0.226	(5.69)			
Nom. cable wtlb./kft. (kg/km)	29	(13.2)			
Max. installation tension - lb. (N)	25	(110)			
Min. bend radius - in. (mm)	1	(25.4)			

Color Code					
Pair-1 White/Blue Blue					
Pair-2	White/Orange	Orange			
Pair-3	White/Green	Green			
Pair-4	White/Brown	Brown			

Temperature	Rating (degrees C)
Installation	0 to +50
Operation	-20 to +60

### LANmark-1000 Plenum Technical Data - Parametric Measurements

Mutual Capacitance	5.6 nF/100 m max.
DC Resistance	9.38 Ohms/100 m max.
Skew	35 ns/100 m max.
Pair to Ground Unbalance	330 pF/100 m max.
Velocity of Propagation	72% nom.
DC Resistance unbalance	5% max.

### **Supported Category 6 Applications**

STANDARD	APPLICATION	SPEED
IEEE 802.3	1000BASE-T	1 Gb/s
TIA/EIA-854	1000BASE-TX	1 Gb/s
ATM	155Mb/s	155 Mb/s

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# **LANmark-1000 Enhanced Category 6 Plenum Rated**

LANmark-1000 Plenum

IEEE 802.3	100BASE-TX	100 Mb/s
CDDI		100 Mb/s
IEEE 802.3	10BASE-T	10 Mb/s

### Selling delivery information

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### Description

Rugged steel frame construction, with rolled edges eliminates flex during termination. Rear cable management bar provides cable strain relief. Write-on label and number designations provide easy identification. Labels provide port numbering and T568A/B color- coding for quick installation. Multiple cable tie locations facilitate cable dressing, moves, adds, and changes.

### **Features**

- Available in 12, 24, and 48 port configurations
- Exceeds Category 5e TIA/EIA-568-B.2 specifications for component performance

### **Specifications**

Wiring: T568A or T568B Insertion: >750 cycles

**Housing:** High impact, UL 94V-0 rated thermoplastic **IDC Blocks:** Tin lead plated connector accepts 22-26

AWG solid UTP cable

Contact Pressure: >100 grams
Insulation Resistance: 500 megaohms
Contact Resistance: <10 milliohms
Voltage/Current: <140 VDC @ 1.5 amps
>1000 VAC RMS @ 60Hz

**Safety:** Complies with Part 68 of the FCC Rules and

requirements adopted by the ACTA

Complies with TIA/EIA Category 6 Specifications

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### Accessories

Cat5e Punchdown Tools

Part NumberDescription814BSingle Wire Punchdown Tool

**Cat 5e Patch Cords** 

 Part Number
 Description

 2-7403-xx
 3-ft Patch Cord

 2-7407-xx
 7-ft Patch Cord

 2-7410-xx
 10-ft Patch Cord

 2-7415-xx
 15-ft Patch Cord

Colors (-xx): (-53) Red, (-56) Yellow, (-62) Blue

### **Product Information**

Suttle

Part Number	Description	<b>\</b>
2-7034-12	12-port, Cat 5e patch panel, 568A/B wiring, 3.25" H x 10"W x 2"D	REF# CS-003
2-7030-24	24-port, Cat 5e patch panel, 568A/B wiring, 1.75"H x 19"W x 3.5"D	x-  REF# CS-004
2-7032-48	48-port, Cat 5e patch panel, 568A/B wiring, 3.5"H x 19"W x 3.5"D	REF# CS-005
	Color: Gray Only	



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### **Detailed Specifications & Technical Data**

### **METRIC MEASUREMENT VERSION**



REF# CS-006

▶9512-1902 Cable Management - Horizontal Cable Manager



For more Information please call

1-800-793-2954



### **General Description:**

19" 2U Horizontal Rack Mount Cable Manager, w/finger stock and cover 3" x 3". Horizontal/Patch Cord Organizers keep wires and cable under control.

### Image

Image:



### **Physical Characteristics (Encl-CM)**

**Dimensions** 

Dimensions:

Mounting/Style Rack Units 19 inch Rack Mount | 2U

### **Applicable Specifications and Agency Compliance (Overall)**

**Applicable Standards & Environmental Programs** 

EU Directive 2002/95/EC (RoHS):

06/01/2006 EU RoHS Compliance Date (mm/dd/yyyy):

**Put Ups and Colors:** 

Item # Putup	Ship Weight	Color	Notes	Item Desc	
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Revision Number: 0 Revision Date: 01-27-2010

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Home / 24 Port Patch Panel Hinged Wall Mount Bracket

# 24 Port Patch Panel Hinged Wall Mount Bracket

103B1-24 ← REF# CS-007



Search

### **Related Products**



24-port Category 6, 19"
Rack Mount Patch Panel



24-port Category 5e, 19" Rack Mount Patch Panel



48 Port Patch Panel
Hinged Wall Mount Bracket

### **Overview**

Hinged wall mount bracket for 24 port patch panels.

**Additional Information** 

Part# 103B1-24

for Use with

24 port patch panels



Home / 48 Port Patch Panel Hinged Wall Mount Bracket

# 48 Port Patch Panel Hinged Wall Mount Bracket

103B1**←** REF# CS-008



Search

### Related Products



48-port Category 6, 19"
Rack Mount Patch Panel



48-port Category 5e, 19" Rack Mount Patch Panel



24 Port Patch Panel Hinged Wall Mount Bracket

### **Overview**

Hinged wall mount bracket for 48 port patch panels.

**Additional Information** 

Part# 103B1

for Use with

48 port patch panels





### **Description**

Suttle Category 5e rated patch cords provide performance that exceeds EIA/TIA-568-C specifications for Category 5e channel, basic link, and component performance.

### **Specifications**

■ **Dielectric Withstand:** >1000 VAC RMS @ 60 Hz

Insulation Resistance: >500 megohmsContact Resistance: <20 millohms</li>

Current Rating:
1.5A at 68 Deg F (20 Deg C) per IEC

Publication 512-3, Test 5b

■ Conductors: 24 AWG 7/32 stranded copper Insulation: Flame retardant polythylene

■ **Jacket:** PVC

■ Wiring: Compatible with T568-C

■ Contacts: Phosphor bronze with 100 microinch

nickel with minimum 50 microinch gold

plating

■ Plastic Plug: High impact, UL 94V-0 rated

thermoplastic



### **Features**

- Plastic plug housing is flame retardant UL rated 94V0 Thermoplastic
- Mechanical, electrical, and clearance specifications meet FCC Rules and Regulations, Part 68 Subpart F
- Meets Category 5e transmission requirements in EIA/TIA 568-C
- Third party certified
- Supports broadband video and high speed ATM applications
- Complies with TIA/EIA Category 5e Specifications

### **Product Information**

 Suttle

 Part Number
 Description

 2-7403-xx
 3-ft Cat 5e Patch Cord
 REF# CS-009

 2-7407-xx
 7-ft. Cat 5e Patch Cord
 REF# CS-010

 2-7410-xx
 10-ft Cat 5e Patch Cord
 REF# CS-011

 2-7415-xx
 15-ft Cat 5e Patch Cord
 REF# CS-012

Colors (-xx): (-53) Red, (-56) Yellow, (-62) Blue

Specifications subject to change without notice. Copyright 2014.

1950414



Length is the only difference between CS-013 and CS-014. CS-015

Copper

Patch Cord Product Identifier

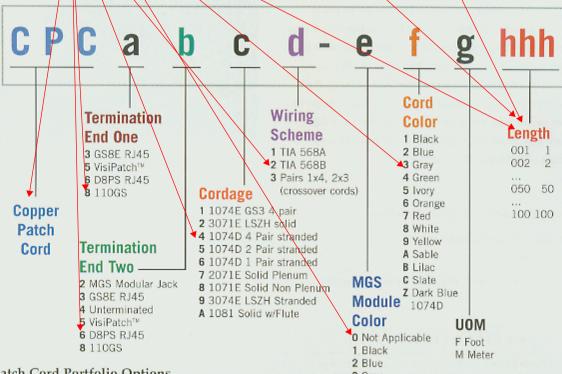
Miscellaneous

**REF# CS-013** 

**REF# CS-014** 

Patch Cord Identifier

The Patch Cord Product Identifier provides for a flexible ordering system. The various patch cords are orderable with a 14-character feature configuration coding system. It allows for many different combinations of plug ends, cordage types, colors and lengths. However, as this product guide is global, regional portfolios differ. To confirm your regions offering please contact your account representative or BusinessPartner.



### Patch Cord Portfolio Options

GS8E	CPC3312 - OXXXXX
GS117	CPC3412 - OXXXXX
GS8MGS-SN	CPC3282 - 0XXXXX blue, gray only
GS8MGS-SP	CPC3272 - OXXXXX blue, white only
GS8E-SND	CPC3382 - OXXXXX blue, gray only
GS8E-SN	CPC3482 - OXXXXX blue, gray only
GS8E-SPD	CPC3372 - OXXXXX blue, white only
GS8E-SP	CPC3472 - OXXXXX blue, white only
110VP8-GS3-B	CPC5512 - OXXXXX
110VP8-GS3-A	CPC5511 - OXXXXX
119VP8-GS3-B	CPC5312 - OXXXXX
119VP8-GS3-A	CPC5311 - OXXXXX
GS8EN	CPC3313 - OXXXXX
110P4UP	CPC5552 - 03XXXX gray only
110P2UP	CPC5562 - 03XXXX gray only
119P8CM*A	CPC8141 - OXXXXX
119P8CM*B	CPC8142 - OXXXXX
110P8GS	CPC8842 - OXXXXX
1 pr VP to RJ45	CPC5162 - 03XXXX gray only
4 pr VP to Unterm	CPC5482 - OXXXXX blue, gray only
GS8L	CPC3322 - OXXXXX
GS8H	CPC3392 - 08XXXX white only
D8PS	CPC6642 - OXXXXX
117PS	CPC6442 - 03XXXX gray only
GS81-SN	CPC33A2 - XXXXX
GS81	CPC33A2 - OXXXXX
GS81-SE	CPC34A2 - OXXXXX white, blue only
GS8E Keved	CPC9912 - OXXXXX

3 Gray 4 Green

5 Ivory 6 Orange

7 Red 8 White

9 Yellow

CORDS









STAR19110C6-24

### STAR19110C6-48

### **Description**

These Category 6 Patch Panels are built with rugged steel construction and rolled edges to eliminate flexing. The 12-port Panel includes a bracket for wall mounting; the 24- and 48-port Panels mount in a 19" rack. Rear input connectors are 110 IDC, front output jacks are RJ-45. Connectors can be wired in either 568A or 568B configurations.

### **Features**

- Exceeds TIA/EIA 568-B.2-1 performance specifications
- Supports bandwidth beyond 250 MHz
- Write-on label and number designations provide easy identification
- Rear cable management bar provides cable strain relief
- Multiple cable tie locations facilitate cable dressing

### Accessories

### **Cat 6 Punchdown Tools**

Part NumberDescriptionSTAR110C6-T4-Wire Punchdown Tool814BSingle Wire Punchdown Tool

### **Cat 6 Patch Cords**

Part Number	Description
STAR661-04-xx	4-ft Patch Cord
STAR661-08-xx	8-ft Patch Cord
STAR661-12-xx	12-ft Patch Cord
Colors (-xx) · (-53) Red (-56)	Yellow (-62)Blue

### **Wire Management**

Part NumberDescription19110RK19" x 84" Relay Rack19WM350Horizontal Trough(19"Wx 3.5"H)

### **Specifications**

Wiring:

T568A or T568B

**Insertion:** >750 cycles **Jack Housing:** High impact, UL 94V-0 rated thermoplastic

IDC Blocks: Tin lead plated connector accepts 22-26

AWG solid UTP cable

Contact Pressure: >100 grams
Insulation Resistance: 500 megohms
Contact Resistance: <10 millohms
Voltage/Current: <140 VDC @ 1.5 amps
>1000 VAC RMS @ 60Hz

**Safety:** Complies with Part 68, FCC Rules

Complies with TIA/EIA Category 6 Specifications

REF# CS-019



### **Product Information**

Suttle

Part Number	Description
STAR19110C6-12	12-port, Cat 6 patch panel, 568A/B wiring, wall-mount (bracket included) - 3.25" H x 10"W x 2"D
STAR19110C6-24	24-port, Cat 6 patch panel, 568A/B wiring, 19" rack-mountable - 1.75"H x 19"W x 3.5"D
STAR19110C6-48	48-port, Cat 6 patch panel, 568A/B wiring, 19" rack-mountable - 3.5"H x 19"W x 3.5"D
	Color: Gray Only





Home / 24 Port Patch Panel Hinged Wall Mount Bracket

## 24 Port Patch Panel Hinged Wall Mount Bracket





Search

### **Related Products**



24-port Category 6, 19"
Rack Mount Patch Panel



24-port Category 5e, 19" Rack Mount Patch Panel



48 Port Patch Panel Hinged Wall Mount Bracket

### **Overview**

Hinged wall mount bracket for 24 port patch panels.

**Additional Information** 

Part# 103B1-24

for Use with

24 port patch panels



Home / 48 Port Patch Panel Hinged Wall Mount Bracket

## 48 Port Patch Panel Hinged Wall Mount Bracket





Search

### **Related Products**



48-port Category 6, 19"
Rack Mount Patch Panel



48-port Category 5e, 19" Rack Mount Patch Panel



24 Port Patch Panel Hinged Wall Mount Bracket

### **Overview**

Hinged wall mount bracket for 48 port patch panels.

**Additional Information** 

Part# 103B1

for Use with

48 port patch panels





UPC Code: 07847738797 Country of Origin: Taiwan - \*Eligible for

ARRA funded projects > \$7,443,000



### **Brand Features**

QuickPort Patch Panels are compatible with all QuickPort modular connectors to maximize versatility with a variety of media applications and enable easy upgrades. The panel fits all industry-standard 19-inch racks and cabinets.

### **Item Description**

QuickPort Patch Panel, 24-Port, 1RU. Cable Management bar included.

### **Features and Benefits**

- Mounts on 19-inch equipment racks
- Accepts all QuickPort-style Connectors
- · Includes port numbers
- 49255-H24 and 49255-H48 include write-on blocks
- Rear cable management bar included
- 24-port panels are compatible with Intact Intelligent Port Management System
- · Magnifying lens ensures visibility of port labels (49255-L24, 49255-L48)

### SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:
JOB NUMBER:	

**Leviton Manufacturing Co., Inc.**201 North Service Road, Melville, NY 11747
Telephone: 1-800-323-8920 · FAX: 1-800-832-9538 · Tech Line (8:30AM-7:30PM E.S.T. Monday-Friday): 1-800-824-3005

**Leviton Manufacturing of Canada, Ltd.**165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 · Telephone: 1-800-469-7890 ·

FAX: 1-800-824-3005 · www.leviton.com/canada

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### PRODUCT SPECIFICATIONS 49255-D48, 49005-DMB

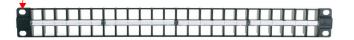


### REF# CS-023

## QuickPort® High-Density Die Cast Flat Patch Panel with Cable Management Bar

### **APPLICATION**

The QuickPort High-Density Patch Panel supports 48 ports while filling only 1RU of rack space. It is available unloaded to support a variety of network requirements, and fit all industry-standard 19" racks and cabinets. An excellent choice for both retrofits and new installations. each kit includes one patch panel, labels, a label holder, and a cable management bar.



### **SPECIFICATION**

Patch panels shall feature a 1RU/48-port design that fits industry-standard 19" equipment rack. Panels shall accommodate most QuickPort connectors. Panels shall be UL Listed. Panel shall be constructed of die-cast aluminum, and feature a durable, powder-coat finish. Label holder shall include magnification feature for port identification.

### **FEATURES**

- 48-port density in only 1RU of rack space
- · Patented design
- · Robust die-cast aluminum construction
- · Includes Cable Management Bar (additional bars available separately)
- · Multi-color card stock for identification options
- · Label holders magnify labels for easy reading

### **DESIGN CONSIDERATIONS**

- · Must follow instruction sheets included with each panel
- Panel supports 48-ports in 1RU of rack space
- Mounts on industry-standard 19" equipment rack
- Available in a variety of category ratings and will accommodate most QuickPort connectors
- · Recommend jacks be terminated prior to installation in panel
- Recommend use of cable management bar to support bulk and weight of cables
- Design allows for front cable management using no additional rack space
- Empty panels available for retrofits
- Orientation of top-row connectors is rotated 180°

### STANDARDS COMPLIANCE

cULus Listed

### PHYSICAL SPECIFICATIONS

Dimensions: See page 2

Materials: Aluminum, powder-coated black

Capacity: 48-port

### **COUNTRY OF ORIGIN**

USA

### WARRANTY INFORMATION

For a copy of Leviton product warranties, visit www.leviton.com/warranty.

Page 1 of 2

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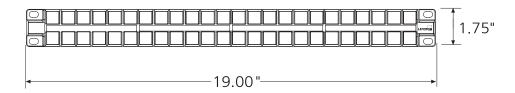
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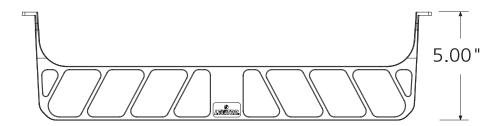
### **ELECTRONIC FILES**

For CAD files, typical specs, or technical drawings (.DXF, .DWG), visit www.leviton.com.





Patch Panel





PART NUMBERS	
Description	Part No.
QuickPort High-Density Die Cast Flat 1RU Patch Panel (Unloaded, includes Cable Management Bar)	
High-Density Cable Management Bar	49005-DMB

Page 2 of 2 E13 4325



2222 - 222nd St. SE Bothell, WA 98021-4416

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### **Description**

Suttle Category 6 rated patch cords offer the higher performance specifications needed for Gigabit Ethernet (1000-Base-T) applications. They feature connectors with improved strain relief and anti-snag latches, and are available in a variety of lengths and colors.

### **Specifications**

Dielectric Withstand: >1000 VAC RMS @ 60 Hz
 Insulation Resistance: >500 megaohms

■ Contact Resistance: <20 millohms

■ Contact Materials: 50 microinch (min) gold over 100 micro

inch (min) nickel

■ Current Rating: 1.5A at 68 Deg F (20 Deg C) per IEC

Publication 512-3, Test 5b

■ **Conductors:** 4 twisted pair, 24 AWG stranded copper

■ **Insulation:** Flame retardant polythylene

■ Jacket: PV

■ Plastic Plug: High impact, UL 94V-0 rated

thermoplastic



### **Features**

- Enhanced strain relief at connectors
- Anti-snag latches
- Supports broadband video and high-speed ATM applications
- Backwards compatible with Cat 5 legacy products
- Meets Cat 6 transmission requirements in EIA/TIA 568-C standard
- Mechanical, electrical and clearance specifications meet FCC Rules and Regulations, Part 68 Subpart F

### **Product Information**

Suttle Part Number	Description	
	REF# CS-024	
STAR661-04-xx	Category 6 Channel 200 Mhz Patch Cord; 4 ft. (1.2 M) length	
STAR661-08-xx	Category 6 Channel 200 Mhz Patch Cord; 8 ft. (2.4 M) length	
STAR661-12-xx	Category 6 Channel 200 Mhz Patch Cord; 12 ft. (3.6 M) length REF# CS-026	
	Colors (-xx): (-53) Red. (-56) Yellow. (-62) Blue	



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### **Product Specifications**

Wiring: 568A or 568B Insertion Life: 750 insertions

**Housing:** High impact, UL 94V-0 rated thermoplastic **Contacts:** 50 microinch hard gold plating minimum with

100 microinch nickel

### **Electrical Specifications**

Contact Pressure: >100 grams
Contact Resistance: <10 milliohms
Insulation Resistance: >500 megohms

**Current/Voltage:** 140 VDC @ 1.5 amps (2-7001)

140 VDC @ 2 amps (STAR600A&B)

**Dielectric Withstand:** 1000 VAC RMS @ 60Hz



### Description

Suttle SpeedStar™ Category 5e modular jacks exceed TIA/EIA-568-C.2 specifications for Category 5e component performance.

SpeedStar™ modules are for use with Suttle's SpeedStar™ faceplates, bezels and surface mount housings. Gel-filled CorroShield® products protect the wiring from contaminants that can affect transmission speeds. Termination requires use of a punch down installation tool.

Available in a white housing, each jack comes with multi-color bezels for your installation.

### **Features**

- Easy installation from rear of faceplate
- Compatible with SpeedStar<sup>™</sup> products (bezels, faceplates, and surface mount housings)
- Terminates with standard 110 termination tools
- Dust covers for IDC terminations
- Jacks equipped with CorroShield® gel protects from dust, moisture, and other components



STAR600A-RC

### **Product Information**

Suttle Part Number	Description
2-7001	8-Position, 8-Conductor Jack, 568A/B, 110 IDC Block
STAR600A-RC	8-Position, 8-Conductor, 568A, with CorroShield <sup>®</sup> , 110 IDC Block
STAR600B-RC	8-Position, 8-Conductor, 568B, with CorroShield <sup>®</sup> , 110 IDC Block

Bezel Colors (-xx): (-51) Green, (-52) Electrical Ivory, (-53) Red, (-56) Yellow, (-62) Blue, (-64) Lt. Almond, (-85) White, (-97) Orange

Gelguard<sup>™</sup> gel in the CorroShield<sup>®</sup> products, is a nonhazardous mixture per OSHA's Hazard Communications Standard (29 CFR 1910.1200). An MSDS is not required. A product safety bulletin is available upon request.









### Description

SpeedStar™ Category 6 rated data jacks provide performance that exceeds TIA/EIA-568-C.2 channel and link standards. The new jack design provides quicker and easier wire termination. Angled IDC connector pins aid in maintaining maximum Category 6 performance, providing a gas tight connection and improved cable retention.

### **Product Specifications**

Wiring: 568A or 568B Insertion Life: 750 insertions

**Housing:** High impact, UL 94V-0 rated thermoplastic **Contacts:** 100 micro-inch nickel with minimum 50

micro-inch of gold

**IDC Blocks:** Tin lead plated connector accepts 22-26 AWG

solid UTP cable

### **Electrical Specifications**

Contact Pressure:>100 grams.Contact Resistance:<10 milliohms</th>Insulation Resistance:>500 megohmsVoltage/Current:140VDC @ 2.0 ampsDielectric Withstand:1000 VAC RMS @ 60Hz



### **Features**

- Exceeds Category 6 TIA/EIA-568-C.2 specifications for channel and link performance.
- Angled IDC pins aid in maintaining maximum Cat 6 performance, providing a gas tight connection and improved cable retention
- Terminates with standard 110 termination tools
- StarSix modules are compatible with Suttle's SpeedStar or Series 2000 line of bezels, faceplates and surface mount housings
- IDC Cap provides protective strain relief
- 568A/568B color-coded labels facilitate termination
- Easy installation from rear of faceplate
- Complies with Part 68 of the FCC Rules and the requirements adopted by the ACTA

**Product Information** 

**REF# CS-028** 

Suttle Part Number

**Description** 

STAR6000C6

Category 6 jack, 8-position, 8-conductor module

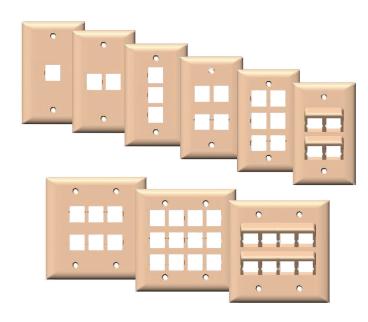
Colors (-xx): (51) Green, (-52) Electrical Ivory, (-53) Red, (-56) Yellow, (-62) Blue, (-64) Lt. Almond, (-85) White, (-97) Orange



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### **Description**

SpeedStar™ surface mount housings are available in several configurations for use with Suttle's line of SpeedStar™ modular multimedia connectors. Each housing provides simple snap-in connector installation with the use of versatile insert plates.

Housings can be screw mounted or mounted with a double-sided adhesive pad.

### **Features**

- Simple, snap-in assembly
- Compatible with all SpeedStar<sup>™</sup> connectors
- Available in multiple sizes and port configurations

### **Product Specifications**

Materials: UL 94 V-O Thermoplastic

**Dimensions:** 

 Single Gang:
 4.57"H x 2.81"W x 0.2"D

 Oversized:
 4.875"H x 3.125"W x 0.2"D

 Double Gang:
 4.57"H x 4.5"W x 0.2"D

c (UL) us

### **Product Information**

Suttle Part Number	Description
2-2501-xx	1-port faceplate, single gang, smooth finish◀ REF# CS-029
2-2502-xx	2-port faceplate, single gang, smooth finish <b>REF# CS-030</b>
2-2503-xx	3-port faceplate, single gang, smooth finish
2-2504-xx	4-port faceplate, single gang, smooth finish ← REF# CS-031
2-2504A-xx	Angled 4-port faceplate, single gang, smooth finish
2-2506-xx	6-port faceplate, single gang, smooth finish
2-2501M-xx	1-port faceplate, oversized, single gang, smooth finish
2-2502M-xx	2-port faceplate, oversized, single gang, smooth finish
2-2503M-xx	3-port faceplate, oversized, single gang, smooth finish
2-2504M-xx	4-port faceplate, oversized, single gang, smooth finish
2-2506M-xx	6-port faceplate, oversized, single gang, smooth finish
2-2506D-xx	6-port faceplate, double gang, smooth finish
2-2508AD-xx	Angled 8-port faceplate, double gang, smooth finish
2-2512D-xx	12-port faceplate, double-gang, smooth finish
	Colors (-xx): (-52) Electrical Ivory, (-64) Light Almond, (-85) White

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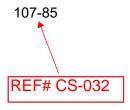


Search



<u>Home</u> / SpeedStar™ Blank, Smooth Faceplate - White (85)

# SpeedStar™ Blank, Smooth Faceplate - White (85)





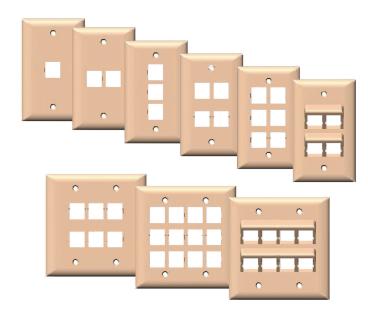
### **Overview**

Blank, single gang, smooth finish

Additional	Inf	orm	ation
Auditional		OHILI	auon

Part#	107-85
Color	White (85)
Suttle Datasheet	technical_literature/Datasheets/Premise_Distribution/Passives/Jacks_Wall_Plates/Plates_Brackets_Boxes/107_108_Flush_Faceplate.pdf
Plate Size	Standard
Box Width	Single Gang
Configuration	Blank
Finish	Smooth
Includes	mounting hardware





### **Description**

SpeedStar™ surface mount housings are available in several configurations for use with Suttle's line of SpeedStar™ modular multimedia connectors. Each housing provides simple snap-in connector installation with the use of versatile insert plates.

Housings can be screw mounted or mounted with a double-sided adhesive pad.

### **Features**

- Simple, snap-in assembly
- Compatible with all SpeedStar<sup>™</sup> connectors
- Available in multiple sizes and port configurations

### **Product Specifications**

**Materials:** UL 94 V-O Thermoplastic

**Dimensions**:

 Single Gang:
 4.57"H x 2.81"W x 0.2"D

 Oversized:
 4.875"H x 3.125"W x 0.2"D

 Double Gang:
 4.57"H x 4.5"W x 0.2"D



### **Product Information**

Suttle Part Number	Description
2-2501-xx	1-port faceplate, single gang, smooth finish
2-2502-xx	2-port faceplate, single gang, smooth finish
2-2503-xx	3-port faceplate, single gang, smooth finish
2-2504-xx	4-port faceplate, single gang, smooth finish
2-2504A-xx	Angled 4-port faceplate, single gang, smooth finish
2-2506-xx	6-port faceplate, single gang, smooth finish
2-2501M-xx	1-port faceplate, oversized, single gang, smooth finish
2-2502M-xx	2-port faceplate, oversized, single gang, smooth finish
2-2503M-xx	3-port faceplate, oversized, single gang, smooth finish
2-2504M-xx	4-port faceplate, oversized, single gang, smooth finish
2-2506M-xx	6-port faceplate, oversized, single gang, smooth finish
2-2506D-xx	6-port faceplate, double gang, smooth finish ← REF# CS-033
2-2508AD-xx	Angled 8-port faceplate, double gang, smooth finish
2-2512D-xx	12-port faceplate, double-gang, smooth finish
	Colors (-xx): (-52) Electrical Ivory, (-64) Light Almond, <mark>(-85) White</mark>

SUTTLE . ...

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Search



<u>Home</u> / SpeedStar™ Blank, Smooth Faceplate - White (85)

# SpeedStar™ Blank, Smooth Faceplate - White (85)





1 / 1

### **Overview**

Includes

Mounting hardware

Blank, duplex, smooth finish

Additional Information

Part#	108-85
Color	White (85)
Suttle Datasheet	technical_literature/Datasheets/Premise_Distribution/Passives/Jacks_Wall_Plates/Plates_Brackets_Boxes/107_108_Flush_Faceplate.pdf
Plate Size	Standard
Box Width	Double Gang
Configuration	Blank - Duplex
Finish	Smooth

Search



Tione / Operation Blank Connector insert - White (03)

# SpeedStar™ Blank Connector Insert - White (85)

SpeedStar™ Blank Connector Insert - (85) White





### **Overview**

Blank Connector insert

Additional Information				
Part#	STAR500B-85 <b>▼ REF# CS-035</b>			
Color	White (85)			
for Use with	All SpeedStar™ Faceplates and Housings			



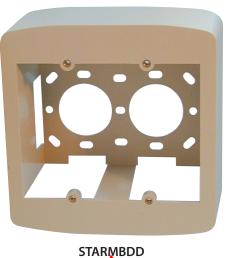




REF# CS-036

### **Features**

- Installer friendly
- Copper, coax and fiber applications
- Race way knockouts (4 sides)
- Faceplate mounting (threaded insert, 2 places)
- Can be mounted on a flat surface
- Cable may be dressed on all sides, or though the back
- Supports STAR500S, STAR5501, STAR500AF, STAR5501MM and 107 Faceplates (NOTE: the outside contour matches SpeedStar™ face plates. However, the box is oversized to fit most conventional rectangular single gang faceplates.)
- Complies with TIA/EIA 568-A Cable Bend Radius
- When mounting to a standard NEMA box, use Suttle part number 43A



REF# CS-037

### Description

The STARMBD and STARMBDD surface mount box is countoured to match SpeedStar™ faceplates, but is oversized to accommodate most faceplates.

They have rear cable entry and mounting holes to fit most brackets and tear outs on top, bottom and sides for raceway entry.

Mounting over a standard outlet box requires a 43A bracket.

### **Specifications**

Height: 5.25 in. (133 mm)

Width: 3.34 in. (85 mm) - STARMBD

5.34 in. (135 mm) - STARMBDD

2.25 in. (57 mm) Depth:

### **Product Information**

Suttle Part Number	Description
STARMBD-xx	SpeedStar™ single gang oversized mounting box; includes (2) mounting screws and (1) adhesive pad
STARMBDD-xx	SpeedStar <sup>™</sup> double gang oversized mounting box; includes (2) mounting screws and (1) adhesive pad
	Colors (-xx): (-52) Electrical Ivory, (-64) Light Almond, (-85) White













STAR558-xx

STAR107SM-xx

STAR108SM-xx

STARMMB-xx

### **Features**

- Simple, snap-in assembly
- Compatible with all SpeedStar<sup>™</sup> connectors
- Available in multiple sizes and port configurations
- Flame retardant engineered thermoplastic

### Description

SpeedStar™ surface mount housings are available in several configurations for use with Suttle's line of SpeedStar™ modular multimedia connectors. Each housing provides simple snap-in connector installation with the use of versatile insert plates.

Housings can be screw mounted or mounted with a double-sided adhesive pad.

### **Product Specifications**

Dimensions:	STAR558-xx	STAR107SM-xx	STAR108SM-xx	STARMMB-xx	
Height:	1.17 in	1.03 in	1.03 in	1.20 in	
Length:	2.70 in	3.25 in	6.17 in	5.60 in	
Width:	2.50 in	2.625 in	2.625 in	6.75 in	
د (ال	s.				

### **Product Information**

Suttle Part Number	Description
STAR558-xx	1- or 2-port surface mount housing REF# CS-038
STAR107SM-xx	Up to 3-port surface mount housing
STAR108SM-xx	Up to 6-port surface mount housing; <i>Not Available in (64) Light Almond</i> <b>← REF# CS-039</b>
STARMMB-xx	Up to 12-port surface mount housing; Not Available in (64) Light Almond
	Colors (-xx): (-52) Electrical Ivory. (-64) Light Almond. (-85) White







### **Product Specifications**

**Mounting:** Zinc-plated mounting screws included

**Housing:** UL 94V-0 rated



### **Description**

Suttle's Modular Mounting Frames fit standard floor and wall J-Box designs and utilize standard electrical faceplates.

Designed for use with Suttle's line of rear-loading snap-in multimedia modules and colored bezels.

### **Features**

- Available in light almond, electrical ivory, and white
- Designed for Suttle's line of snap-in multimedia modules and colored bezels
- Fits standard NEMA boxes and electrical faceplates
- High impact, UL 94V-0 rated thermoplastic
- Write on label designations for easy identification
- Available in 2 or 4-ports
- Modules snap-fit from the rear
- Inserts provide versatile module configuration options

### **Product Information**

Suttle Part Number	Description
STAR1062-xx	2-port mounting frame   REF# CS-040
STAR1064M-xx	4-port duplex insert style mounting frame (includes mounting plate inserts)   REF# CS-041
860A-xx	Duplex electrical style faceplate
	Colors (-xx): (-52) Electrical Ivory, <mark>(-85) White</mark>



# **Customer Premise Cross-Connect Wire Spec. 5006**

### **Product Construction**

### **Conductors:**

22 and 24 AWG solid bare annealed copper

### Insulation:

• Flame-retardant semi-rigid PVC

### Pairing:

- Two twists per foot minimum
- For ease of identification, a variety of different color options are available

REF# CS-042

### Packaging

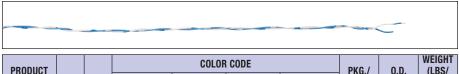
- 1000' spool (SP)
- Other lengths and put-ups are also available

### **Applications**

- Suitable for voice and data transmission up to 4 Mbps
- For cross-connecting between terminals of a distribution frame or other premise equipment

### Compliances

- NEC/CEC Type CM (UL 1685-2000)
- · Category 2 compatible
- RoHS Compliant Directive 2002/95/EC



	PRODUCT			COLOR CODE				PKG./	0.D.	(LBS/
	NUMBER	PAIRS	AWG	PAIR 1	PAIR 2	PAIR 3	PAIR 4		(INCHES)	KFT)
	2114200	1	24	R/G-G/R				8	0.06	3
	2114328	1	24	R/BK-BK/R				8	0.06	3
	2114369	1	24	R/BL-BL/R				8	0.06	3
	2114385	1	24	R/Y-Y/R				8	0.06	3
>	7023708	1	24	BL/W-W/BL				8	0.06	3
	7041916	1	24	BL/Y-Y/BL				8	0.06	3
	7023773	1	24	O/W-W/O				8	0.06	3
	7023781	1	24	G/W-W/G				8	0.06	3
	7036759	1	24	BK/W-W/BK				8	0.06	3
	7023864	1	24	R/W-W/R				8	0.06	3
	7023716	2	24	BL/W-W/BL	O/W-W/O			3	0.09	6
	2114325	2	24	R/BL-BL/R	R/O-O/R			3	0.09	6
	7023724	3	24	BL/W-W/BL	O/W-W/O	G/W-W/G		4	0.10	9
	2114211	4	24	BL/W-W/BL	O/W-W/O	G/W-W/G	BR/W-W/BR	4	0.12	13
	2114363	1	22	W/O-O/W				4	0.08	5
	2114364	1	22	W/G-G/W				4	0.08	5
	7041973	1	22	BL/W-W/BL				4	0.08	5
	7042047	1	22	R/W-W/R				4	0.08	5
	2114212	2	22	BL/W-W/BL	O/W-W/O			4	0.12	10

Data subject to change without notice.

### **Electrical Characteristics**

	22 AWG 1 PR.	24 AWG 1-4 PR.
DC Resistance (max) Ohms/1000 ft @ 20°C	18.0	28.6
Characteristic Impedance Ohms @ 1 MHz (nom)	100	100

# Customer Premise Cross-Connect Wire Type "F" • Spec. 5008

### **Product Construction**

### **Conductors:**

• 24 AWG solid bare annealed copper

### Insulation:

• Flame-retardant semi-rigid PVC

### Pairing:

• Four twists per foot minimum

### **Packaging**

 Supplied on non-returnable spools as shown in table (SP)

### **Applications**

- Suitable for voice and data transmission up to 16 Mbps
- For cross-connecting between terminals of a distribution frame or other premise equipment

### Compliances

- NEC/CEC Type CM (UL 1685-2000)
- Category 3 compatible
- RoHS Compliant Directive 2002/95/EC
- Telcordia (Bellcore) GR-1253 (Bellcore Specification TA-TSY-000130)



PRODUCT		C	OLOR CODE			PKG./	0.D.	WEIGHT
NUMBER	PAIRS	PAIR 1	PAIR 2	PAIR 3	PKG.			(LBS/KFT)
2113055	1	O/W-W/O			1000' SP	8	0.07	3
2134023	1	G/W-W/G			1000' SP	8	0.07	3
2114327	1	BL/R-R/BL			1000' SP	8	0.07	3
2114375	1	R/W-W/R			1000' SP	8	0.07	3
2114374	1	BK/W-W/BK			1000' SP	8	0.07	3
7042500	1	BL/Y-Y/BL			1000' SP	8	0.07	3
7051543	1	BL/Y-BL			600' SP	8	0.07	3
2113054	1	BL/W-W/BL			1000' SP	8	0.07	3
2114355	1	R/W-W/R			600' SP	8	0.07	3
2114408	2	BL/W-W/BL	O/W-W/O		500' SP	8	0.09	7
7042518	2	BL/R-R/BL	0/R-R/0		1150' SP	4	0.09	7
2114307	2	BL/W-W/BL	O/W-W/O		1000' SP	4	0.09	7
7042526	3	BL/W-W/BL	O/W-W/O	G/W-W/G	600' SP	4	0.12	11

Data subject to change without notice.

### **Electrical Characteristics**

	24 AWG
DC Resistance (max) Ohms/1000 ft @ 20°C	28.6
Coaxial Capacitance (max) microfarads/kft @ 23°C	0.15
Insulation Resistance (min) Megohm - kft @ 23°C	300

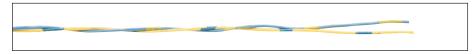






### **Customer Premise Cross-Connect Wire Tight Twist**

Type "F" • Spec. 5008



PRODUCT NUMBER	PAIRS	COLOR CODE PAIR 1			O.D. (INCHES)	WEIGHT (LBS/KFT)	
2113189	1	BL/V-V/BL	500' SP	8	0.67	3.25	
2114410	1	BL/V-V/BL	300' SP	8	0.67	3.25	

Data subject to change without notice.

### **Electrical Characteristics**

	24 AWG
DC Resistance (max) Ohms/1000 ft @ 20°C	28.6
Coaxial Capacitance (max) microfarads/kft @ 23°C	0.15
Insulation Resistance (min) Megohm - kft @ 23°C	300

### **Product Construction**

#### **Conductors:**

• 24 AWG solid bare annealed copper

#### Insulation:

• Flame-retardant semi-rigid PVC

#### Pairing:

• Twelve twists per foot

#### **Packaging**

 Supplied on non-returnable spools as shown in table (SP)

#### **Applications**

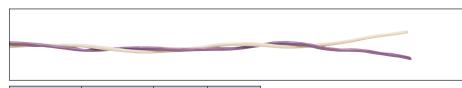
- Suitable for voice and data transmission up to 16 Mbps
- For cross-connecting between terminals of a distribution frame or other premise equipment

### Compliances

- UL and c(UL) Type CM
- Telcordia (Bellcore) GR-1253 (Bellcore Specification TA-TSY-000130)
- Category 5 compatible

### **Network Outdoor Cross-Connect Wire**

Type "G" • Spec. 5010



PRODUCT NUMBER	COLOR CODE PAIR 1	PKG./ CARTON	WEIGHT (LBS/KFT)
7042427	W/V	8	5
2114357	R/W	8	5

Data subject to change without notice.

### **Electrical Characteristics**

	22 AWG
DC Resistance (max) Ohms/1000 ft @ 20°C	17.8
Coaxial Capacitance (max) microfarads/kft @ 23°C	0.09
Insulation Resistance (min) Megohm - kft @ 23°C	2000





### **Product Construction**

#### **Conductors:**

• 1 pair of 22 AWG solid bare annealed copper

### Insulation:

• Dual-insulated polypropylene with a flame-retardant semi-rigid PVC skin

### Pairing:

• Five twists per foot minimum

#### **Packaging**

- 400' spool (SP)
- 8 per carton

### **Applications**

- Suitable for voice and data transmission up to 16 Mbps
- For cross-connecting between feeder and distribution circuits within the confines of outdoor distribution cabinets

#### Compliances

- Category 3 compatible
- RoHS Compliant Directive 2002/95/EC
- Telcordia (Bellcore) GR-126-CORE (Bellcore Specification TA-NWT-000126)







107058901 | 110AA2-100FT

REF# CS-043

110 Field Terminated Cross-Connect System Terminal Blocks, 20 X 110C-5

### **Dimensions**

 Depth
 82.55 mm | 3.25 in

 Height
 91.19 mm | 3.59 in

 Width
 272.29 mm | 10.72 in

### **Electrical Specifications**

ANSI/TIA Category 5 | 6 | When used with 110 Category 5e or 110 Categoy 6 patch cord

### **Environmental Specifications**

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

Safety Standard CUL | UL

### **General Specifications**

Product Design 110
Product Type Block
Color White

Lug Attachment Field attached

Package Quantity 1
Pairs, quantity 100

### **Mechanical Specifications**

Block Type A

Material Type Copper alloy | High-impact, flame retardant, thermoplastic

Plug Insertion Life, minimum 200 times

### **Regulatory Compliance/Certifications**

Agency Classification RoHS 2011/65/EU Compliant







107058935 | 110AA2-300FT

REF# CS-044

110 Field Terminated Cross-Connect System Terminal Blocks, 60 X 110C-5

### **Dimensions**

 Depth
 82.55 mm | 3.25 in

 Height
 274.07 mm | 10.79 in

 Width
 272.29 mm | 10.72 in

### **Electrical Specifications**

ANSI/TIA Category 5 | 6

### **Environmental Specifications**

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

Safety Standard CUL | UL

### **General Specifications**

Product Design 110
Product Type Block

Lug Attachment Field attached

Package Quantity 1
Pairs, quantity 5

### **Mechanical Specifications**

Material Type Copper alloy
Plug Insertion Life, minimum 200 times

### **Regulatory Compliance/Certifications**

**Agency**RoHS 2011/65/EU

Classification
Compliant







107058919 | 110AB2-100FT REF# CS-045

110 Field Terminated Cross-Connect System Terminal Blocks, 4 X 110C-5, 20 X 110C-

### **Dimensions**

 Depth
 82.55 mm | 3.25 in

 Height
 91.19 mm | 3.59 in

 Width
 272.29 mm | 10.72 in

### **Electrical Specifications**

ANSI/TIA Category 5 | 6

### **Environmental Specifications**

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

Safety Standard CUL | UL

### **General Specifications**

Product Design 110
Product Type Block

Lug Attachment Field attached

Package Quantity 1
Pairs, quantity 4

### **Mechanical Specifications**

Material Type Copper alloy Plug Insertion Life, minimum 200 times

### **Regulatory Compliance/Certifications**

**Agency**RoHS 2011/65/EU

Classification
Compliant







107058943 | 110AB2-300FT

**REF# CS-046** 

110 Field Terminated Cross-Connect System Terminal Blocks, 12 X 110C-5, 60 X 110C-4

### **Dimensions**

 Depth
 82.55 mm | 3.25 in

 Height
 274.07 mm | 10.79 in

 Width
 272.29 mm | 10.72 in

### **Electrical Specifications**

ANSI/TIA Category 5 | 6 | When used with 110 Category 5e or 110 Categoy 6 patch cord

### **Environmental Specifications**

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

Safety Standard CUL | UL

### **General Specifications**

Product Design 110
Product Type Block
Color White

Lug Attachment Field attached

Package Quantity 1
Pairs, quantity 300

### **Mechanical Specifications**

Block Type A

Material Type Copper alloy | High-impact, flame retardant, thermoplastic

Plug Insertion Life, minimum 200 times

### **Regulatory Compliance/Certifications**

**Agency**RoHS 2011/65/EU

Classification
Compliant







103801247 | 110C-4

REF# CS-047

110 Connecting Block, 4 pair count, 10 per package

#### **Dimensions**

 Depth
 23.62 mm | 0.93 in

 Height
 6.35 mm | 0.25 in

 Width
 30.48 mm | 1.20 in

### **Environmental Specifications**

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

Safety Standard CUL | UL

### **General Specifications**

Product Design 110
Product Type Block
Color White

Lug Attachment Field attached

Package Quantity 10 Pairs, quantity 4

### **Mechanical Specifications**

Conductor Gauge, stranded 22 AWG | 23 AWG | 24 AWG | 26 AWG

Material Type Copper alloy

Outlet/Module Contact Plating Nickel
Plug Insertion Life, minimum 200 times

### **Regulatory Compliance/Certifications**

**Agency**RoHS 2011/65/EU

Classification
Compliant







103801254 | 110C-5← REF# CS-048

110 Connecting Block, 5 pair count, 10 per package

### **Dimensions**

 Depth
 23.62 mm | 0.93 in

 Height
 6.35 mm | 0.25 in

 Width
 38.10 mm | 1.50 in

### **Environmental Specifications**

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

Safety Standard CUL | UL

### **General Specifications**

Product Design 110
Product Type Block
Color White

Lug Attachment Field attached

Package Quantity 10 Pairs, quantity 5

### **Mechanical Specifications**

Conductor Gauge, stranded 22 AWG | 23 AWG | 24 AWG | 26 AWG

Material Type Copper alloy

Outlet/Module Contact Plating Nickel
Plug Insertion Life, minimum 200 times

### **Regulatory Compliance/Certifications**

Agency Classification RoHS 2011/65/EU Compliant







### **Dimensions**

 Depth
 133.35 mm | 5.25 in

 Height
 67.06 mm | 2.64 in

 Width
 272.29 mm | 10.72 in

### **Environmental Specifications**

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

### **General Specifications**

Product Design 110
Product Type Trough
Color White
Package Quantity 1

### **Mechanical Specifications**

Material Type Flame retardant molded plastic

### **Regulatory Compliance/Certifications**

**Agency**RoHS 2011/65/EU

Classification
Compliant



### **BACKBOARDS**

CS-050 Plywood Backboard, 4' X 4', ea. REF# CS-050

Includes materials and labor to mount a ¾" deep, wolmanized, construction standard type plywood backboard. Backboard will be painted on both sides prior to placement with white fire retardant paint.

### STANDARD RACK

#### KEY FEATURES

- Supports 19" EIA rack-mount equipment designed for two-post panel mounting, like patch panels and network switches.
- Easy positioning of equipment with marked and numbered rack-mount spaces.
- Quick attachment of equipment with threaded equipment mounting holes and included equipmentmounting screws.
- Delivers unassembled in a single carton quick and easy bolt-together assembly takes less than 10 minutes.
- Lightweight aluminum construction for easy transport and positioning during installation.
- Integrated grounding with a built-in attachment point for a ground (earthing) connection.
- Quickly attach any CPI vertical cable manager to the side of the rack through pre-punched web channel holes
- Floor-mount holes on the base angles make it easy to secure the rack to the floor with a concrete, wood or raised floor installation kit.

#### APPLICATIONS

- Use Standard Rack with vertical and horizontal cable managers to support interconnect and network equipment in telecommunications rooms, equipment rooms and data centers.
- Use with shelves to support other equipment.

#### USE WITH

- Velocity® Cable Management
- Rack and Frame Installation Kit
- Raised Floor Rack Support For 3" (80 mm) Channel

### RELATED ACCESSORIES

- 3" (80 mm) Channel Rack-To-Runway Mounting Plate
- Vertical PDUs for Racks
- Rack Shelves



The Standard Rack is a high quality, cost-effective storage solution for patch panels and network switches that use less floor space than a cabinet or a four-post rack. The small  $20.3^{\circ}W \times 15^{\circ}D$  (516.1 mm x 381 mm) footprint makes Standard Rack the best choice in many telecommunications and equipment rooms, especially where floor space is limited.

The Standard Rack meets project specifications, will hold 1,000 lb (453.1 kg) of equipment, has integrated grounding and is UL Listed as a communications circuit accessory. Support 19" EIA wide rack-mount equipment or shelves with the Standard Rack, which is available in three heights. Equipment attaches to the front or rear of the 3" deep (80 mm) vertical mounting channels with screws. Mounting positions are marked and numbered, making it easy to position and install equipment or shelves.

Racks deliver unassembled in a compact carton and are easy to assemble. Components bolt together with included hardware; assembly takes approximately 10 minutes. Two-post racks must be secured to building structure. The Standard Rack has pre-punched base angles, making it easy to attach the rack to the floor using a CPI installation kit for wood, slab or raised floors.

Because most Standard Rack applications require cable management, CPI's vertical cable managers attach directly to the side of the Standard Rack. Vertical cable managers organize cables by rack-mount space simplifying future moves, adds and changes to the network. The best solution includes horizontal managers in-between patch panels and network switches to fan patch cords into individual port connections.

See reverse for product selection. Contact CPI Technical Support for configuration assistance.



#### **SPECIFICATIONS**

- Open floor-mount two-post rack supports 19" EIA wide rack-mount equipment.
- For indoor use only, in environmentally controlled areas; may not be used outdoors, in industrial or harsh environments or in plenum spaces.
- · Available sizes:

Heights: 84" (2.1 m), 96" (2.4 m), 108", (2.7 m)

Width: 20.3" (516.1 mm) Depth: 15" (381 mm)

• Equipment space:

Heights: 45U, 51U, 58U

Width: 19" EIA (17-3/4" clearance)

Depth: 20"D (508 mm)

Note: Double-sided shelves for 26"D (660.4 mm) equipment are available. Use QuadraRack™ 4-Post Frame when rack-mount equipment exceeds 20"D (508 mm).

- Equipment Support:
- 1 pair C-shaped equipment mounting channels fixed in place
- 19"W, EIA-310-D compliant
- Universal hole pattern, 5/8"-5/8"-1/2" (15.9 mm x 15.9 mm x 12.7 mm) vertical hole spacing
- Threaded #12-24 equipment mounting holes; includes 50 each #12-24 equipment mounting screws
- Cable Management:

Use vertical and horizontal cable managers, sold as accessories

Load capacity:
 1,000 lb (453.6 kg) of equipment

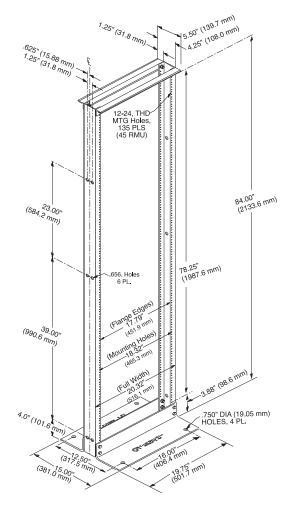
#### · Grounding/Bonding:

- Top angles, base angles and side channels are electrically bonded by assembly hardware
- A masked mounting location for a ground lug with two 1/4-20 threaded studs spaced 5/8" apart is provided inside the side channel, near the top and bottom of the rack
- Use Grounding Jumper (PN 40159-008) as a rack bonding conductor
- Certifications:
- EIA-310-D compliant
- UL and cUL Listed as a communications circuit accessory
- Material:

Aluminum extrusion

- Construction:
- Bolted assembly
- Ships unassembled
- Finish:
- Clear grained aluminum or Epoxy-polyester hybrid powder coat paint
- Available in black, gray, computer beige or glacier white

### DIMENSIONS



7' ( 2.1 m) Rack Shown

### REF# CS-051

### QRDERING INFORMATION

Part Number	Description	Shipping Weight		
55053-X03	7'H (2.1 m) x 19"W, 45U	31 lb (14.1 kg)		
55053-X15	8'H (2.4 m) x 19"W, 52U	37 lb (16.8 kg)		
55053-X08	9'H (2.7 m) x 19"W, 58U	40 lb (18.1 kg)		

X=color: 1=Gray, 2=Computer Beige, 5=Clea, 7=Black, E=Glacier White

### WIREMOLD

### 

# TELE-POWER® POLES

### **Bring Wiring Down to Business**

ropping power and communications – neatly and simply – from up there to down here: that's what Wiremold® Tele-Power Poles are all about. Their sole purpose is to get the business end of your wiring needs down to your office equipment, phones, PCs, and task lighting. Specifically, in away-from-wall locations in open commercial office areas, schools, labs, stores, and other sites.

Whatever kind of power or communications wiring you need to bring down to the desk side, workstations, or cash registers – Wiremold Tele-Power Poles handle all your needs effortlessly. For your modular office furniture – our poles easily provide the hook up to feed office partitions. The poles are available with specialized electrical circuits such as dedicated/isolated ground, and with Sentrex® surge protection modules. Without electrical power; you may devote the vertical drop poles entirely to communications and/or power feeds.



Tele-Power Poles offer a convenient open space solution.

### Features & Benefits

- Wide selection of materials, finishes, wire fill capacities, heights, and devices. Application versatility in commercial open office landscapes, schools, labs, stores, and manufacturing plants.
- Communication twistouts. Allows flexibility and easy access to update wiring.
- Relocatable. Ready for service in 30 minutes or less.
- Dual-channel. Accommodates electrical power circuits plus receptacles and low voltage cabling.
- Furnished with feed fittings, ceiling trim plates, T-bar mounting hardware, and carpet/floor grippers. Includes all components for a complete and stationary installation.
- Add-On compartment. Increase cable capacity for 25DT, NP620, and AMTP Series.
- Dedicated custom capabilities. Modify receptacles, change enamel and powder coat paint finishes, alter pole heights, add fixture whips, and more. Consult your local Wiremold representative.

- Datacom connectivity options. Accepts industry standard and proprietary devices from a wide range of manufacturers to provide a seamless and aesthetically pleasing interface for voice, data, audio, and video applications at the point of use.
- Connectivity pole. Pole comes complete with Category 5e connections.
- Low voltage cabling entrance fitting. 2" [51mm] radius control. For use with 25DT and AMDT Series. UL Listed for use in plenum areas.
- Jumbo poles. Our largest capacity series to accommodate tomorrow's wire and cable requirements.

### **Steel Tele-Power Poles**

- Standard of the industry; combines good looks, economy, and easy installation with sufficient capacity for expansion.
- Ivory enamel finish with matching 20A, 120V NEMA heavy duty duplex receptacles.
- Dedicated circuit pole features separate isolated ground circuit protection.
- Dual channel poles for communication cabling and power wiring accessibility.
- Modular jack knockouts and modular furniture outlets permit direct connections or use "mouse hole" grommet for direct cable feed.



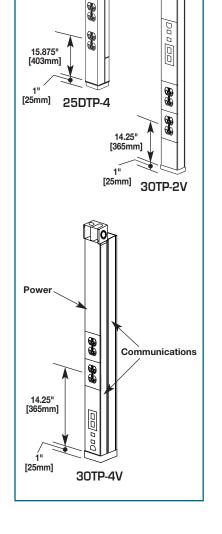
25DTP-4ACT pole with additional inserts.

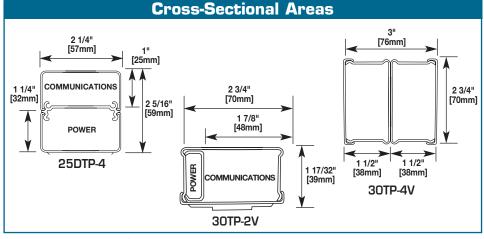
REF# CS-053

Receptacle Heights

REF# CS-052

							CITY	
CATALOG NO.	OUTLETS	HE	IGHT	FINISH	THHN/		4 DD	
25DTP-4 25DTP-412 25DTP-415	Two Duplex Receptacles (20A, 125V)	10'5" 12'5" 15'5"	[3.175m] [3.780m] [4.700m]		#10	#12	4-PR	25-P
25DTP-4ACT	Two Duplex Receptacles (20A, 125V) One Communications Insert Mounting Bezel, One Dual Cat 5e Insert, Two Blank Inserts and Labeling Supplies	10'5"	[3.175m]	lvory	10	15	15	6
25DTP-4D	Two Duplex Receptacles (20A, 125V) One Dedicated/ Isolated and One Standard Branch Circuit	10'5"	[3.175m]	Ivory	10	15	15	6
30TP-2V 30TP-212V	Two Duplex	10'5" 12'5"	[3.175m] [3.780m]	lvory	9	14	22	8
30TP-4V 30TP-412V	Receptacles (20A, 125V)	10'5" 12'5"	[3.175m] [3.780m]	lvory	18	18	30	11
25AM10FO		2" [51r	nm] radius c	ontrol entra	ance fittin	a for 25DT	and AMD	T Seri







### 3.3.3 X-CC Ceiling Clip and Hanger Assemblies

3.3.3.1	Product Description
3.3.3.2	Material Specifications
3.3.3.3	Technical Data
3.3.3.4	Ordering Information



### Listings/Approvals

ICC-ES (International Code Council) ESR-2184

COLA (City of Los Angeles) RR 25651





### 3.3.3.1 Product Description

Ceiling clip assemblies are an economical and recognized method of suspending acoustical ceiling grids and panels from concrete and steel. These pre-assembled ceiling clips consist of a sheet steel clip with a pre-mounted powder-actuated fastener and are typically pre-tied with a single

12 gauge wire of varying lengths depending on ceiling height requirements. When the fastening is made, the clip, fastener and wire are installed in one step. Further productivity can be achieved through the use of a Hilti powder-actuated pole tool.

### 3.3.3.2 Material Specifications

Item	Material	Steel Diameter/Thickness	Plating
X-C Fastener	Carbon Steel	0.138"	5 μm Zinc¹
X-U Fastener	Carbon Steel	0.157"	5 μm Zinc¹
CC27 Clip	Carbon Steel	13 GA	5 μm Zinc¹
Wire <sup>2</sup>	Carbon Steel	12, 9 or 8 GA	5 μm Zinc¹

- 1 ASTM B633, SC 1, Type III. Reference Section 2.3.3.1 for more information.
- 2 Pre-mounted ASTM A641/A641M Class 1 wires come attached with a minimum of three tight turns in 1-1/2" length.

### 3.3.3.3 Technical Data

Allowable Loads for Hilti Ceiling Clip Assemblies Installed in Normal Weight Concrete<sup>1,2,3,4</sup>

					Concr	ete Comp	ressive S	trength				
Ceiling Clip		4000 psi (27.6 MPa)					6000 psi (41.4 MPa)					
Oeiling Onp	Ter	nsion	Sh	near	45 D	egree	Ter	sion	Sh	ear	45 D	egree
	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)
X-CC27 C27	160	(0.71)	205	(0.91)	210	(0.93)		-		_		_
X-CC27 C32	220	(0.98)	270	(1.20)	260	(1.16)		_		_		_
X-CC27 U22		_		_		_	80	(0.36)	175	(0.78)	90	(0.40)
X-CC27 U27	160	(0.71)	205	(0.91)	210	(0.93)	125	(0.56)	205	(0.91)	150	(0.67)

- 1 The tabulated allowable load values apply to the powder-actuated ceiling clip assemblies only, using a safety factor that is greater than or equal to 5.0, calculated in accordance with ICC-ES AC70. Connected components, including wires\*, must be investigated separately.
- 2 Allowable values are for fasteners installed in concrete having the designated compressive strength at the time of installation.
- 3 Concrete thickness at the point of penetration must be a minimum of the fastener embedment depth plus 1-1/2".
- 4 Multiple fasteners are recommended for any attachment.
- \* Note: For Hilti supplied wire, the recommended allowable load capacities of 12, 9 and 8 gauge wire are 210, 400 and 500 lb, respectively.



### X-CC Ceiling Clip and Hanger Assemblies 3.3.3

### Allowable Loads for Hilti Ceiling Clip Assemblies Installed in Lightweight Concrete Over Metal Deck 1.2.3.4

		f' <sub>c</sub> = 3000 psi Concrete Compressive Strength										
Ceiling Clip Assembly	Lower Flute						Upper Flute					
Centring Only Assembly	Ter	sion	Sh	ear	45 D	egree	Ter	sion	Sh	ear	45 D	egree
	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)
X-CC27 C27	50	(0.22)	275	(1.22)	120	(0.53)	105	(0.47)	285	(1.27)	240	(1.07)
X-CC27 C32	65	(0.29)	325	(1.45)	130	(0.58)	130	(0.58)	325	(1.45)	265	(1.18)
X-CC27 U27	150	(0.69)	275	(1.22)	160	(0.71)	170	(0.76)	285	(1.27)	240	(1.07)

- 1 The tabulated allowable load values apply to the powder-actuated ceiling clip assemblies only, using a safety factor that is greater than or equal to 5.0, calculated in accordance with ICC-ES AC70. Connected components, including wires\*, must be investigated separately.
- 2 Allowable values are for fasteners installed in concrete having the designated compressive strength at the time of installation.
- 3 Testing completed in 3" deep composite floor deck having a minimum steel deck thickness of 20 gauge (0.0358") and a minimum yield strength F<sub>y</sub> = 38 ksi. Lower and upper flute width must be a minimum of 3-7/8". Figure 3 in Section 3.3.1.3 shows nominal flute dimensions, fastener locations and load orientations for the steel deck profile. Concrete thickness at the point of penetration must be a minimum of the fastener embedment plus 1-1/2".
- 4 Multiple fasteners are recommended for any attachment.
- \* Note: For Hilti supplied wire, the recommended allowable load capacities of 12, 9 and 8 gauge wire are 210, 400 and 500 lb, respectively.

### Allowable Loads for Hilti Ceiling Clip Assemblies in Minimum ASTM A36 (F<sub>v</sub> ≥ 36 ksi, F<sub>m</sub> ≥ 58 ksi)<sup>1,2</sup>

		Steel Thickness (in.)										
Ceiling Clip Assembly		1/	/4		3/8				1/2			
Celling Clip Assembly	Tension		Shear		Tension		Shear		Tension		Shear	
	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)	lb	(kN)
X-CC27 U19 X-CC27 U22	375	(1.62)	410	(1.82)	375	(1.62)	410	(1.82)	375	(1.62)	410	(1.82)

- 1 The tabulated allowable load values apply to the powder-actuated ceiling clip assemblies only, using a safety factor that is greater than or equal to 5.0, calculated in accordance with ICC-ES AC70. Connected components, including wires\*, must be investigated separately.
- 2 Multiple fasteners are recommended for any attachment.
- \* Note: For Hilti supplied wire, the recommended allowable load capacities of 12, 9 and 8 gauge wire are 210, 400 and 500 lb, respectively.

### 3.3.3.4 Ordering Information

Fastener Description¹	Fastener Length in. (mm)	Shank Ø in. (mm)	Washer Ø	Packaging Qty <sup>1</sup>
X-CC27 C27P8T	<b>1</b> (27)	<b>0.138</b> (3.5)	8 mm metal tophat	100 or 1000 pcs
X-CC27 C32P8T	1-1/4 (32)	<b>0.138</b> (3.5)	8 mm metal tophat	100 or 1000 pcs
X-CC27 U22P8T 🔪	7/8 (22)	<b>0.157</b> (4.0)	8 mm metal tophat	100 or 1000 pcs
X-CC27 U27P8T	<b>1</b> (27)	<b>0.157</b> (4.0)	8 mm metal tophat	100 or 1000 pcs

1 Ceiling clip and fastener combinations can be assembled with pre-tied wire lengths of 4', 6', 8', 10' and 12'.

REF# CS-054



### **CADDY CAT HP J-Hook with Multi-Function Clip**





- · Quick attachment to threaded rod or wire
- Fully adjustable and easy to relocate to accommodate changes once installed
- Provides optimal support for high-performance data cable, up to and including Cat 5e, Cat 6A, Cat 6A, Cat 7 and fibre optic
- · Provides superior fill capacity and load rating over most other non-continuous cable support alternatives
- Rounded edges on J-Hooks provide proper bend radius support for high performance data cables
- Cost effective alternative to expensive cable tray
- Complies with EN 50174-2
- Meets ISO<sup>®</sup>/IEC 14763-2, ANSI<sup>®</sup>/TIA 568 and ANSI<sup>®</sup>/TIA 569

### **REF# CS-056**



### **REF# CS-055**

Material: Steel, Spring Steel

Finish: Pregalvanized, CADDY ARMOUR



Part Number	Diameter Ø	Area	Cable Capacity, Cat 5e	Cable Capacity, Cat 6	Cable Capacity, Cat 6A	Rod Size RS	Wire Size	Static Load F
CAT16HP4Z34	1"	1.07 in²	20	15	10	1/4"	#12 - #8	30 lb
CAT16HP6Z34	1"	1.07 in²	20	15	10	3/8"	-	30 lb
CAT21HP4Z34	1 5/16"	2.29 in²	50	40	25	1/4"	#12 - #8	30 lb
CAT21HP6Z34	1 5/16"	2.29 in²	50	40	25	3/8"	-	30 lb
CAT32HP4Z34	2"	3.97 in²	90	60	35	1/4"	#12 - #8	30 lb
CAT32HP6Z34	2"	3.97 in²	90	60	35	3/8"	-	30 lb
CAT48HP4Z34	3"	9.26 in²	200	150	80	1/4"	#12 - #8	30 lb
CAT48HP6Z34	3"	9.26 in²	200	150	80	3/8"	-	30 lb
CAT64HP4Z34	4"	15.48 in²	330	220	140	1/4"	#12 - #8	30 lb
CAT64HP6Z34	4"	15.48 in²	330	220	140	3/8"	-	30 lb

Non-continuous supports may not exceed spacing of 5' (1.5 m) per TIA 569-C.9.7 and EN 50174-2. Cable capacity is calculated based on a 70% fill rate.







## **CABLECAT Capacity Guide**

Area (sq. in.)	Capacity Cat. 5e	(4-pair) Cat. 6		Part Number	Area (sq. mm)	Capacity (4- ScTP/FTP	pair) STP
0.60	16	10		CAT12	390	7	5
2.16	50	32		CAT21	1.395	25	17
3.17	80	50	REF#	CS-057 → CAT32	2.040	40	25
2 x 1.58	80	50		CAT100CM	2 x 1.020	40	25
15.28	300	185	REF#	€ CS-058 ►CAT64	9.860	180	120
20.43	425	265		CAT425	13.180	240	165
21.00	500	315		CAT200CMLN	13.550	250	170
32.00	750	470		CAT300CMLN	20.645	375	250
32.00	750	470		CATTRAX	20.645	375	250
3.14	75	47		CAT600	2.025	38	25

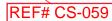




### CAT-BC200 J-Hook with Beam Clamp - CAT21BC200 (181410)



- Beam clamp with attached CADDY® CABLECAT J-hook
- Supports low voltage cables





Part Number	CAT21BC200
Article Number	181410
Material	Steel
Finish	Pre-galvanized
Diameter	1 5/16" 33 mm
Flange Thickness	1/8" – 1/2" 3 – 12 mm
Standard Packaging Quantity	40 pc
UPC	78285630234
UNSPSC	39131709
EAN-13	8711893118902
ETIM	EC000754
Approvals	cULus

 $\,$  cULus is a registered certification mark of UL LLC.

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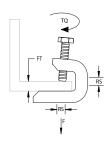


### BC200/BC400 Beam Clamp





• Threaded hole on back and bottom



Material: Steel

Finish: Electrogalvanized



Part Number	Rod Size RS	Flange Thickness FT	Torque TQ	Static Load F
BC200	1/4"	1/2" Max	20 in lb	123 lb
BC400	3/8"	3/4" Max	20 in lb	200 lb

Setscrew must be tightened and torqued onto the sloped side of the I-beam.

**REF# CS-060** 

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### ATR All Threaded Rod

- Available in 36" (91.4 cm), 72" (182.9 cm), 120" (304.8 cm), 144" (365.7 cm) lengths
- Safety Factor of 5 on recommended load
- Standard finish: Zinc-Plated, Stainless Steel Type 304

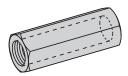
Part I	Vo.	Threads	Recomme	nded Load	Wt./C Ft.	(3048.0 cm)
& Si	ze	Per Inch	Lbs.	kN	Lbs.	kg
ATR <sup>1</sup>	/4"	20	240	(1.07)	12	(5.44)
ATR <sup>5</sup>	/16"	18	400	(1.78)	19	(8.62)
ATR 3	8/8"	16	730	(3.24)	29	(13.15)
/ ATR <sup>1</sup>	/2"	13	1350	(6.00)	53	(24.04)
ATR <sup>5</sup>	/8"	11	2160	(9.60)	89	(40.37)
ATR <sup>3</sup>	3/4"	10	3230	(14.37)	123	(55.79)
ATR <sup>7</sup>	'/8 <b>"</b>	9	4480	(19.93)	170	(77.11)
ATR 1	<b>"</b>	8	5900	(26.24)	225	(102.06)



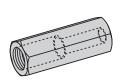
### **REF# CS-061**

### B655 Rod Coupling B656 Reducer Rod Coupling

- Load rating for each coupler meets All Threaded Rod value
- Standard finish: Zinc-Plated, Stainless Steel Type 304



		Recommended		
Part No.	Size	Load	Length	Wt./C
		Lbs. kN	In. mm	Lbs. kg
B655-1/4	1/4"-20	240 (1.07)	7/8" (22.2)	1.9 (.86)
B655- <sup>5</sup> /16	<sup>5</sup> /16"-18	380 (1.69)	<sup>7</sup> /8" (22.2)	1.8 (.81)
B655-3/8	<sup>3</sup> /8"-16	730 (3.24)	1 <sup>1</sup> /8" (28.6)	3.6 (1.63)
B655-1/2	<sup>1</sup> /2"-13	1350 (6.00)	1 <sup>3</sup> /4" (44.4)	11.3 (5.12)
B655- <sup>5</sup> /8	<sup>5</sup> /8"-11	1810 (8.05)	21/8" (54.0)	17.6 (7.98)
B655-3/4	<sup>3</sup> /4"-10	2710 (12.05)	2 <sup>1</sup> /4" (57.1)	28.1 (12.74)
B655-7/8	<sup>7</sup> /8"-9	3770 (16.77)	21/2" (63.5)	57.2 (25.94)
B655-1	1"-8	4960 (22.06)	23/4" (69.8)	73.7 (33.43)

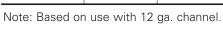


Part No.	Size	Recommended Load	Length	Wt./C
		Lbs. kN	ln. mm	Lbs. kg
B656-3/8 x 1/4	<sup>3</sup> /8"-16 & <sup>1</sup> /4"-20	240 (1.07)	1" (25.4)	3.7 (1.68)
$B656-1/2 \times 3/8$	<sup>1</sup> /2"-13 & <sup>3</sup> /8"-16	730 (3.24)	1 <sup>1</sup> /4" (31.7)	6.6 (2.99)
B656- <sup>5</sup> /8 x <sup>1</sup> / <sub>2</sub>	<sup>5</sup> /8"-11 & <sup>1</sup> /2"-13	1350 (6.00)	1 <sup>1</sup> /4" (31.7)	11.6 (5.26)
B656- <sup>3</sup> /4 x <sup>5</sup> /8	<sup>3</sup> /4"-10 & <sup>5</sup> /8"-11	1810 (8.05)	1 <sup>1</sup> /2" (38.1)	20.6 (9.34)
B656- <sup>7</sup> /8 x <sup>3</sup> /4	<sup>7</sup> /8"-9 & <sup>3</sup> /4"-10	2710 (12.05)	1 <sup>3</sup> /4" (44.4)	39.4 (17.87)

### BHR Series Hot Rods for Trapeze Hangers

- 12" length of threaded rod completely assembled with rod coupling, locking hex nuts, square washer, and channel nut.
- Standard finish: Zinc-Plated

		Recomi	mended			
Part No.	Rod Size	Lo	ad	Wt./C		
		Lbs.	kN	Lbs.	kg	
BHR1225ZN	<sup>1</sup> /4"-20	240	(1.07)	41	(18.6)	
BHR1238ZN	<sup>3</sup> /8"-16	730	(3.24)	63	(28.6)	
BHR1250ZN	<sup>1</sup> /2"-13	1350	(6.00)	98	(44.4)	
BHR1262ZN	<sup>5</sup> /8"-11	1500	(6.67)	148	(67.1)	





(BHR1225, BHR1238, and BHR1250 use combo nut washers instead of square washers and channel nuts)



Eaton

REF# CS-

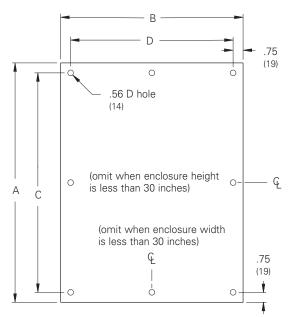
## Panels & Panel Accessories Type 1 Medium Enclosure & NEMA Flat Panels

**Illustration Sheet and Catalog Number** 

Type 1 Medium Enclosure Flat Panel	ı	A		ВС		D		Fits Enclosure Height x Width			
Catalog Number	in.	mm	in.	mm	in.	mm	in.	mm	Gauge	in.	mm
AW1612-1P	13.00	330	10.50	267	11.50	292	9.00	228	14	16.00x12.00	406X305
AW1616-1P	13.00	330	14.50	368	11.50	292	13.00	330	14	16.00x16.00	406X406
AW1620-1P	13.00	330	18.50	470	11.50	292	17.00	432	14	16.00x20.00	406X508
AW2016-1P	17.00	432	14.50	368	15.50	394	13.00	330	14	20.00x16.00	508X406
AW2020-1P	17.00	432	18.50	470	15.50	394	17.00	432	14	20.00x20.00	508X508
AW2024-1P	17.00	432	22.50	572	15.50	394	21.00	533	14	20.00x24.00	508X610
AW2416-1P	21.00	533	14.50	368	19.50	495	13.00	330	14	24.00x16.00	610X406
AW2420-1P	21.00	533	18.50	470	19.50	495	17.00	432	14	24.00x20.00	610X508
AW2424-1P	21.00	533	22.50	572	19.50	495	21.00	533	14	24.00x24.00	610X610
AW3020-1P	26.00	660	18.50	470	24.50	622	17.00	432	14	30.00x20.00	762X508
AW3024-1P	26.00	660	22.50	572	24.50	622	21.00	533	14	30.00x24.00	762X610
AW3030-1P	26.00	660	28.50	724	24.50	622	27.00	686	14	30.00x30.00	762X762
062 →AW3624-1P	32.00	813	22.50	572	30.50	775	21.00	533	14	36.00x24.00	914X610
AW3630-1P	32.00	813	28.50	724	30.50	775	27.00	686	14	36.00x30.00	914X762
AW4224-1P	38.00	965	22.50	572	36.50	927	21.00	533	14	42.00x24.00	1067X610

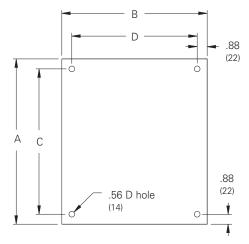
NEMA Painted	Flat Panel Galvanized	Catalog Nu	ımber	,	١	E	3	C	;	D	)		Fits Encl Height x	
Steel	Steel	Stainless	Aluminum	in.	mm	in.	mm	in.	mm	in.	mm	Gauge	in.	mm
AW1612P	AW1612GP	AW1612SP	AW1612AP	13.00	330	9.00	229	11.25	286	7.25	184	12	16.00x12.00	406x305
AW1616P	AW1616GP	AW1616SP	AW1616AP	13.00	330	13.00	330	11.25	286	11.25	286	12	16.00x16.00	406x406
AW2012P	-	-	-	17.00	432	9.00	229	15.25	387	7.25	184	12	20.00x12.00	508x305
AW2016P	AW2016GP	AW2016SP	AW2016AP	17.00	432	13.00	330	15.25	387	11.25	286	12	20.00*x16.00*	508x406
AW2020P	AW2020GP	AW2020SP	AW2020AP	17.00	432	17.00	432	15.25	387	15.25	387	12	20.00x20.00	508x508
AW2412P	-	AW2412SP	-	21.00	533	9.00	229	19.25	489	7.25	184	12	24.00*x12.00*	610x305
AW2416P	AW2416GP	AW2416SP	AW2416AP	21.00	533	13.00	330	19.25	489	11.25	286	12	24.00x16.00	610x406

\* Panel also fits these enclosures when height and width dimensions are reversed.



Type 1 medium enclosure panels can be installed in Type 1 medium panel enclosures. Panels are only available in steel and have a white powder paint finish.

**Type 1 Medium Enclosure Panels** 



**Discount Schedule: C2** 

**Subclass: DS0** 

NEMA flat panels can be installed in Type 4X, Type 4 and Type 12 NEMA Enclosures. Panels are available in steel, galvanized steel, stainless steel, and aluminum. Painted steel panels have a white powder paint finish. Stainless steel and aluminum panels have a smooth brushed finish on one side and protected with PVC film.

### **NEMA Flat Panels**

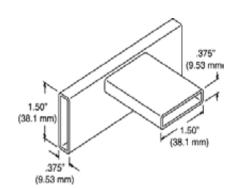
Notes: Dimensions are in inches. Millimeters shown are for reference only. Data subject to change without notice.

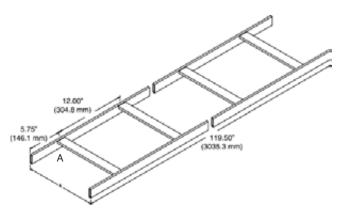
### **Product Cut Sheet**

### **UNIVERSAL CABLE RUNWAY**

Our most popular cable runway is designed for value conscious customers. The Universal Cable Runway offers the industry standard features you've come to expect. With the runway supported every 5' (1.5 m), maximum load with minimal deflection is 132 lb/ft (59.9 kg).

- Made of 3/8" x 1-1/2" x .065" (9.53 mm x 38 mm x 1.65 mm) wall rectangular steel tubing
- Cross members welded at 12" (300 mm) intervals
- Individually boxed to prevent scratches and damage
- Standard length is 9'-11 1/2"/119.5" (3035 mm)
- Underwriters Laboratory Classified for suitability as an equipment grounding conductor only (must remove paint or use ground straps)
- Installation Best Practices includes Runway Elevation Kit





Part Number	Width (Dim. A) in (mm)	Shipping Weight Ib (kg)
10250-X04	4 (100)	18 (8.2)
10250-X06	6 (150)	19 (8.6)
10250-X09	9 (230)	20 (9.1)
7 10250-X12	12 (300)	25 (11.3)
10250-X15	15 (380)	27 (12.2)
10250-X18	18 (460)	29 (13.2)
10250-X24	24 (610)	32 (14.5)

30 (760)

35 (15.7)

38 (17.2)

REF# CS-063

10250-X37 36 (910) *X=color; 1=Gray, 2=Computer Beige, 7=Black, E=Glacier White.* 

10250-X31

800-834-4969 in U.S. & Canada • www.chatsworth.com



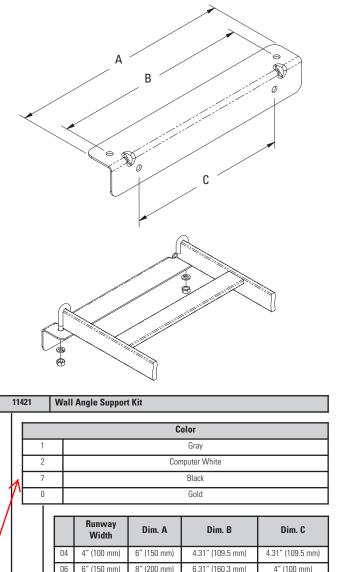
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### **Product Information Sheet**

### WALL ANGLE SUPPORT KIT

 $2^{\circ}$  x  $2^{\circ}$  x .105" (50 mm x 50 mm x 2.67 mm) steel support angle is designed for wall mounting specific widths of Cable Runway.

- Kit consists of:
  - 1 each wall angle
  - 2 each 5/16-18 x 2 1/4" J-bolts
  - 2 each 5/16-18 hex nuts
  - 2 each 5/16 lock washers

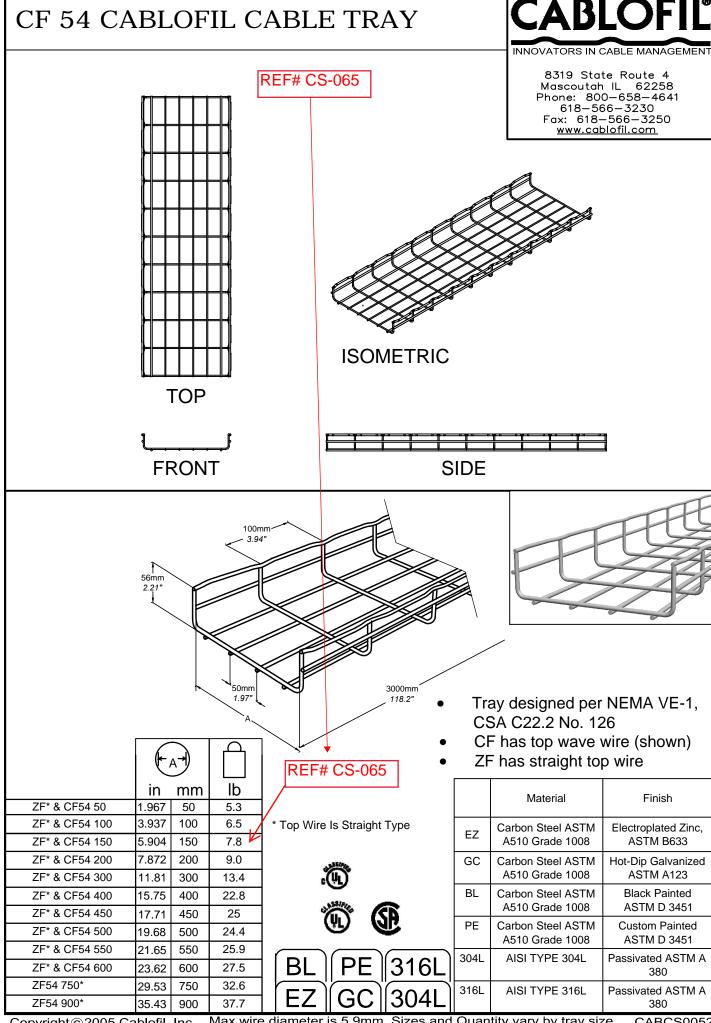


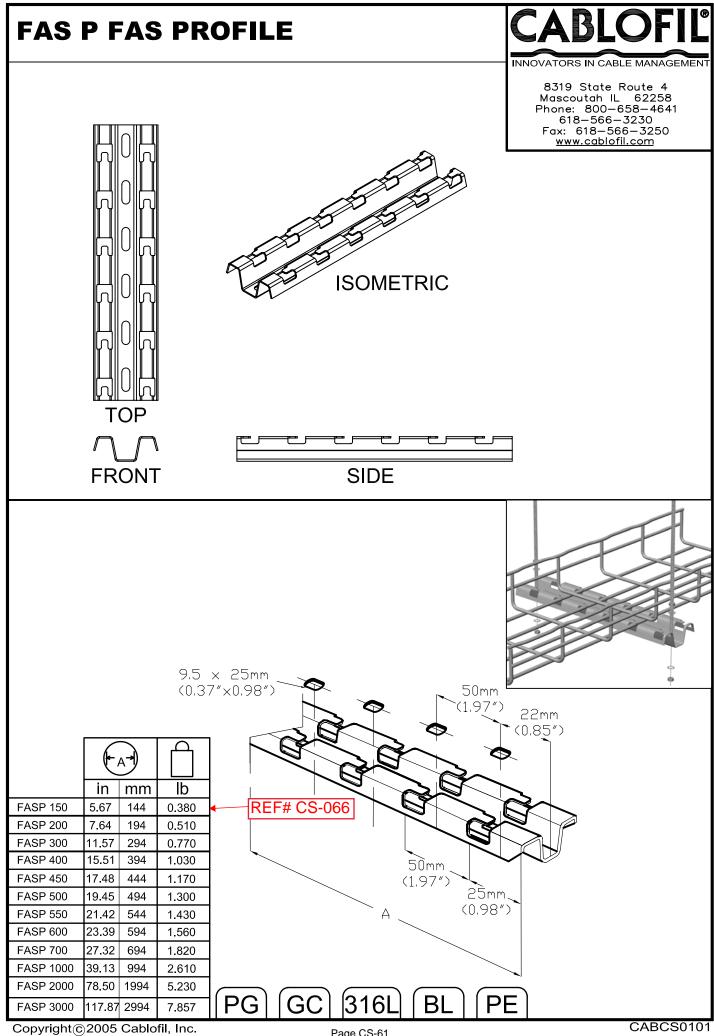
9" (230 mm) 11" (280 mm) 9.31" (236.5 mm) 7" (180 mm) 8" (200 mm) 10" (250 mm) 12" (300 mm 10.31" (261.9 mm) 12" (300 mm) 14" (360 mm) 12.31" (312.7 mm) 10" (250 mm) 15 15" (380 mm) 17" (430 mm 15.31" (388.9 mm) 13" (330 mm) 16" (410 mm) 18 18" (460 mm) 20" (510 mm 18.31" (465.1 mm) **REF# CS-064** 20" (510 mm) 22" (560 mm 20.31" (515.9 mm) 18" (457 mm) 24" (610 mm) 22" (558 mm) 26" (660 mm 24.31" (617.5 mm) 30" (760 mm) 32" (810 mm) 30.31" (769.9 mm) 28" (710 mm) - X

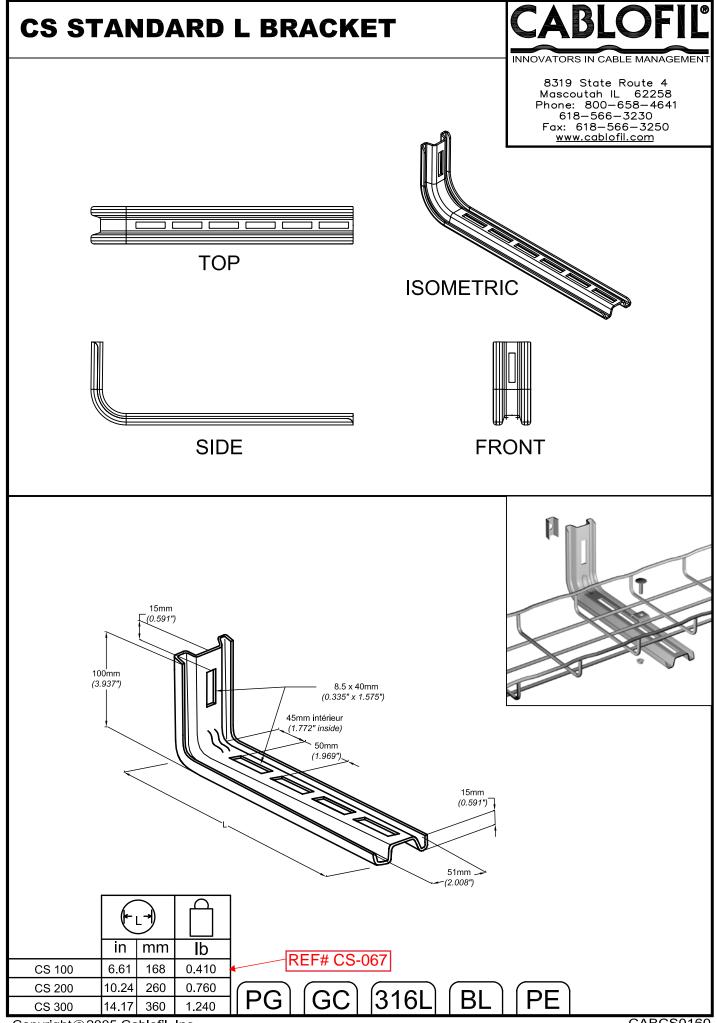
Note: Gray and black kits include black J-Bolts and hardware. White and gold kits include gold J-Bolts and hardware.

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### HellermannTyton **REF# CS-068** 111-01332 Article Number: 111-01332 RoHS HellermannTyton Download drawing Download spec sheet **Base Data** Local Order Number 111-01332 Type T120R Color Red (RD) Features and Benefits HellermannTyton manufactures a full line of high quality cable ties in a variety of styles, sizes, materials, and colors. HellermannTyton cable ties are engineered and manufactured for maximum performance and quality. Product Description HellermannTyton heavy duty cable ties offer a higher tensile strength for heavy load applications. The head design guarantees high tensile strength, as well as a low insertion force. The bent tail design allows quick and simple installations by hand. For high volume applications, tensioning tools are available to ensure consistent and safe installation. **Product Dimensions** Minimum Tensile Strength (Imperial) 120.0 lbs Minimum Tensile Strength (Metric) 535.0 N Length L (Imperial) 15.2 " Length L (Metric) 387.0 mm Fixation Method None Identification Plate Position none Releasable Closure No Tie Closure plastic pawl Variant Inside Serrated Width W (Imperial) 0.3 " Width W (Metric) 7.4 mm Bundle Diameter Min. (Imperial) 0.59 " Bundle Diameter Min. (Metric) 15.0 mm Bundle Diameter Max. (Imperial) 4.1 " Bundle Diameter Max. (Metric) 105 mm **Logistics and Packaging** Package Quantity (Metric) 50 **Material and Specifications** Material Polyamide 6.6 (E/CTFE) Material Shortcut PA66E/CTFE Flammability UL94 V0

Operating Temperature  $-103^{\circ}F$  to  $+302^{\circ}F$  (-75°C to +150°C)

ROHS Compliant Yes

UL Recognized (US and Canada) Yes

© HellermannTyton 2015

REF# CS-069



Article Number:

111-03517



Description:

Standard Cable Tie, 11.4" Long, 30lb Tensile Strength, PA66, Natural, 1000/pkg

Base Data		
	Local Order Number	T30LL9M4
	Туре	T30LL
	Color	Natural (NA)
	Features and Benefits	<ul> <li>Inside serrations allow for strong hold on cables and wire bundles.</li> <li>Head design provides high tensile strength with very low insertion force.</li> <li>Bent tail ensures a quick and simple installation.</li> </ul>
	Quantity Per	bag
	Product Description	HellermannTyton standard cable ties feature inside serrations providing a positive hold onto wire and cable bundles. The head design guarantees high tensile strength, as well as a low insertion force. The bent tail design allows quick and simple installations by hand. For high volume applications, tensioning tools are availableto ensure consistent and safe installation.
	Short Description	Standard Cable Tie, 11.4" Long, 30lb Tensile Strength, PA66, Natural, 1000/pkg
Product Dimensions		
	Minimum Tensile Strength (Imperial)	30.0lbs
	Minimum Tensile Strength (Metric)	135N
	Length L (Imperial)	11.4"
	Length L (Metric)	290.0mm
	Fixation Method	None
	Identification Plate Position	none
	Releasable Closure	No
	Tie Closure	plastic pawl
	Variant	Inside Serrated
	Width W (Imperial)	0.14"
	Width W (Metric)	3.5mm
	Bundle Diameter Min. (Imperial)	0.06"
	Bundle Diameter Min. (Metric)	1.5mm
	Bundle Diameter Max. (Imperial)	3.2"

generated on: 11/22/2016

### 111-03517

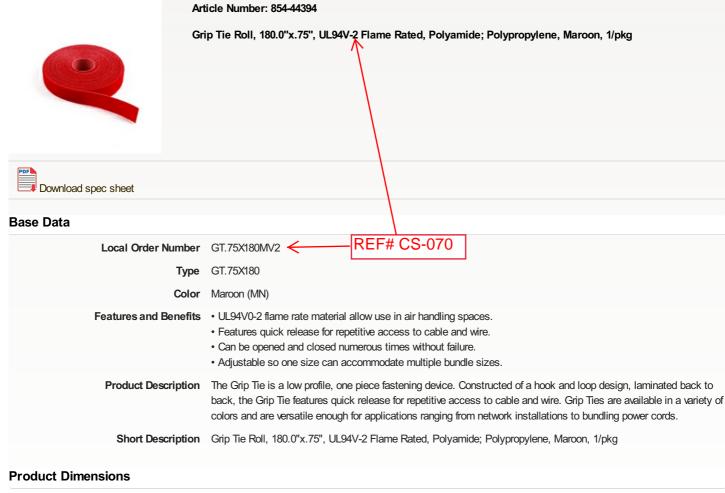


Product Dimensions	Bundle Diameter Max. (Metric)	80.0mm
Material and Specifications		
	Material	Polyamide 6.6 (PA66)
	Material Shortcut	PA66
	Flammability	UL94 V2 REF# CS-069 Continued Details -
	Halogenfree	Yes PLENUM RATING
	Operating Temperature	-40°F to +185°F (-40°C to +85°C)
	ROHS Compliant	Yes
	Certification/Specification	UL-ZODZ2.E64139
	UL Listed (US and Canada)	Yes
	UL Recognized (US and Canada)	Yes
Logistic and Packaging		
	Package Quantity (Metric)	1000
	Customs Number(Schedule B)	3926909987

generated on: 11/22/2016

### HellermannTyton

### GT.75X180MV2



Minimum Tensile Strength (Imperial) 50.0 lbs

Minimum Tensile Strength (Metric) 222.41 N

Length L (Imperial) 15.0 ft

Length L (Metric) 4.5 m

Width W (Imperial) 0.75 "

Width W (Metric) 19.05 mm

### **Logistics and Packaging**

Quantity Per bag
Package Quantity 1
Package Quantity (Metric) 1
Carton Quantity 200

### **Material and Specifications**

Material Polyamide 6 (PA6)

Polypropylene (PP)

Material Shortcut PA66

PP

### Pan-Way® LD Surface Raceway System



### specifications

LD non-metallic series low voltage, one-piece hinged design, single channel surface raceway shall include adhesive backing and shall be made of impact resistant material with a smooth finish that shall not scratch, peel or corrode. The raceway shall include an assortment of bend radius and standard fittings that complement the offering to help route, protect and conceal low voltage data, voice and video cabling. LD raceway shall be available in three sizes and four standard colors that shall be optimized with the Panduit® Pan-Net® communication system.

REF# CS-071 -	
REF# CS-073 -	
REF# CS-074 -	_
REF# CS-077	
REF# CS-075	
REF# CS-078	
REF# CS-079	
REF# CS-072	7
REF# CS-076	

#### LD Raceway Raceway: LD3IW\*\*-A LD5IW\*\*-A LD10IW\*\*-A

### LD Raceway Fittings

Coupler: CF\*IW-E Inside corner: ICFC\*IW-X Outside corner: OCFC\*IW-X Right angle: RAFC\*IW-X End cap: ►ECF\*IW-X TFC\*IW-X Tee: Four-way cross: CRFC5IW-X Drop ceiling/ entrance end: DCF\*IW-X

Right angle/ RAEFXIW-X entrance end:

LD5 to LD3 RF5X3IW-E reducer: LD10 to LD5 RF10X5IW-X

LD10 to LD3 reducer: LD5 fire box

reducer:

adapter: FBA5IW-X LD10 fire box adapter:

RF10X3IW-X

FBA10IW-X

### LD Raceway Installation

Installation tool: LDW\*-V

### LD Raceway Surface Mount **Outlet/Junction Boxes**

Low Voltage:

Single gang, one-piece : JB1IW-A

Single gang,

one-piece, deep: JB1DIW-A

Single gang,

two-piece: JBX3510IW-A

Single gang, two-piece,

JB1FSIW-A fast snap: In-wall box adapter: JBA-X

Power rated: Single gang,

JBP1IW two-piece:

Single gang,

two-piece, deep: JBP1DIW

Single gang,

two-piece, extension: JBP1EIW

Single gang, two-piece,

JBP1IIW intermediate:

Single gang, two-piece,

JBP1FSIW snap on:

Single gang,

two-piece, round: RJBX3510IW

Double gang, two-piece:

JBP2IW

Double gang, two-piece, deep:

JBP2DIW

Double gang, two-piece, divided: Double gang.

JBP2SIW

two-piece, snap on: JBP2FSIW

\* Insert raceway size of 3, 5, or 10 \*\* Insert raceway length of 6 8', or 10'

All parts listed in International White (IW) color. To order other colors substitute Electrical Ivory (EI), International Gray (IG), and Wh

### technical information

Material:	Rigid PVC		
Flammability:	UL94V-0; FT4		
Capacity:	Single Channe	el	
Voltage Rating:	50V or less		7
Operating and Storage Temperature:	0 to 50° C	WH (White) has been substituted in model numbers per manufacturers directions for White	

### key features and benefits

KCy ICULUICS C	did beliefits
1" bend radius control fittings:	Cables in the raceway will satisfy the minimum 1" bend radius requirement, preventing the potential degradation of cable performance; meets TIA/EIA standards
One-piece hinged design:	Cables can be laid into the raceway, speeding installation and preventing damage to cables
Adhesive backing:	Full length adhesive strip allows easy tool free installation and works well for temporary mounting
Available in different sizes & lengths:	Accommodates varying cable types and capacities. Available sizes - LD3, LD5,LD10; Available lengths - 6',8',10' (2m length available in Europe only)
Non-metallic construction:	Lightweight, reducing installer fatigue and labor required to install the raceway; solid color throughout will not chip, peel, rust or corrode; easy to cut with standard saws and saw blades, eliminating the need for special cutting devices
Distinct colors:	Available in four standard colors- IW,EI,IG,WH. AW available in Europe only. Raceway is field paintable to match walls and surrounding décor
Full selection of fittings and surface mount boxes:	Wide variety of fittings and surface mount boxes available for various LD raceway applications

### applications

Pan-Way® LD Surface Raceways are designed to provide easy and economical solutions for routing any low voltage cable along smooth and clean perimeter walls,

baseboards or ceilings. This raceway is a perfect solution for schools, hospitals, offices, homes or anywhere a small, secure, low profile raceway is needed.

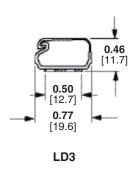
www.panduit.com

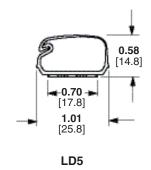
### **Pan-Way® LD Surface Raceway System**

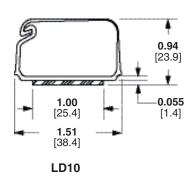
### Wire Fill

	Fill Area (in²)	Elect	trical Ca	ables	Data Grade Cables							Audio/Video		Flber Optic Cable			
Raceway Type		AWG	AWG	AWG	24 AWG/UTP CM												
and Configuration		Т	HHN/T9	90	Cat 5e – Plenum		Ca	Cat. 6		Cat. 6A		Cat. 6A (SD)		RG6		2 Strand	
and Configuration		0.111	0.130	0.164	DIA. =	0.193	DIA. =	0.24	DIA. =	= 0.30	DIA. =	0.24	DIA. =	0.275	DIA. =	0.175	
		FILL		FILL		FILL		FILL		FILL		FILL		FILL			
		MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	
		(UL Te	mp Rise	e Test)	40%	60%	40%	60%	40%	60%	40%	60%	40%	60%	40%	60%	
LD3	0.21	**	**	**	2	4	1	2	1	1	1	2	1	2	3	5	
LD5	0.38	**	**	**	5	7	3	5	2	3	3	5	2	3	6	9	
LD10	1.00	**	**	**	13	20	8	13	5	8	8	13	6	10	16	24	

### LD Raceway







### Fittings



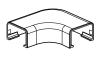
CF



ICFC



**OCFC** 



**RAFC** 



**ECF** 



TFC



CRFC5



DCF



**RAEFX** 



RF



**FBA** 



LDW

www.panduit.com

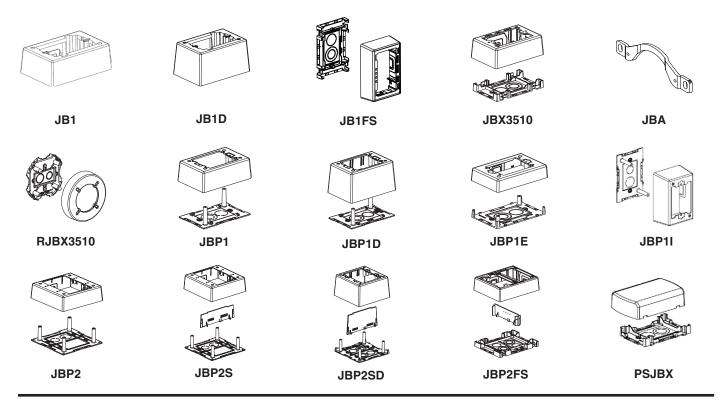
### Pan-Way® LD Surface Raceway System

### Compatible LD Raceway Surface Mount Outlet/Junction Boxes

Low Voltage or	Low Voltage or Fiber Optic ONLY					
JB1**-A	Single gang one-piece outlet box with adhesive backing.					
JB1D**-A	Single gang one-piece deep outlet box with adhesive backing					
JB1FS**-A	Fast-Snap™ Single Gang Two-Piece Snap Together Outlet Box with adhesive backing.					
JBX3510**-A	Single gang two-piece snap together outlet box with adhesive backing					
JBA-X	In-wall box adapters adapt single gang surface mount outlet boxes to in-wall conduit boxes.					
Power, Low Vo	tage or Fiber Optic					
RJBX3510**	Single gang two-piece screw together round outlet box.					
JBP1**	Single gang two-piece screw together outlet box.					
JBP1D**	Single gang two-piece screw together deep outlet box.					
JBP1E**	Single gang two-piece screw together extvension outlet box.					
JBP1I**	Single gang two-piece screw together intermediate outlet box.					
JBP2**	Double gang two-piece screw together deep outlet box					
JBP2S**	Double gang two-piece screw together divided outlet box					
JBP2D**	Double gang two-piece screw together deep outlet box					
JBP2FS**	Fast-Snap™ Double Gang Power Rated Two-Piece Snap Together Outlet Box					
PSJBX**	Single gang two-piece snap together power source box.					

<sup>\*\* =</sup> Available colors: International White (IW), Electrical Ivory (EI), International Gray (IG), White (WH) or Arctic White (AW).

### Surface Mount Outlet/Junction Boxes



### **WORLDWIDE SUBSIDIARIES AND SALES OFFICES**

PANDUIT CANADA Markham, Ontario cs-cdn@panduit.com Phone: 800.777.3300 PANDUIT EUROPE LTD. London, UK cs-emea@panduit.com Phone: 44.20.8601.7200 PANDUIT SINGAPORE PTE. LTD. Republic of Singapore cs-ap@panduit.com Phone: 65.6305.7575 PANDUIT JAPAN Tokyo, Japan cs-japan@panduit.com Phone: 81.3.6863.6000 PANDUIT LATIN AMERICA Guadalajara, Mexico cs-la@panduit.com Phone: 52.33.3777.6000 PANDUIT AUSTRALIA PTY. LTD. Victoria, Australia cs-aus@panduit.com Phone: 61.3.9794.9020

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

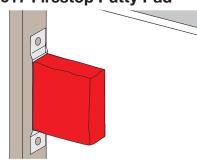


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SRSP21--WW-ENG
Replaces WW-SRSP10
6/2015



### **CP 617 Firestop Putty Pad**



### **Features and Applications**

- A moldable firestop putty designed to help protect electrical outlet boxes
- Applied by hand
- Fast installation



WALL OPENING PROTECTIVE MATERIAL FIRE RESISTANCE CLASSIFICATION SEE PRODUCT CATEGORY IN

UL FIRE RESISTANCE DIRECTORY 66Y7



- Total Control of the Control of th	Partition contributes 1 feet against contribute 2 contributes contribute
网络阿拉拉	
MANAGEMENT STREET, STR	
Charles and the second	AND THE REAL PROPERTY.
DESCRIPTION DESCRIPTION	
Effect annualities minute	
	-

Description	Qty	Item No.
CP 617 Putty Pad 6" x 7"	20	00309760
CP 617L Putty Pad 7" x 7"	20	00333583
CP 617XL Putty Pad 9" x 9"	20	00373387

#### **Technical Data** CP 617, CP 617L and CP 617XL

#### **Dimensions**

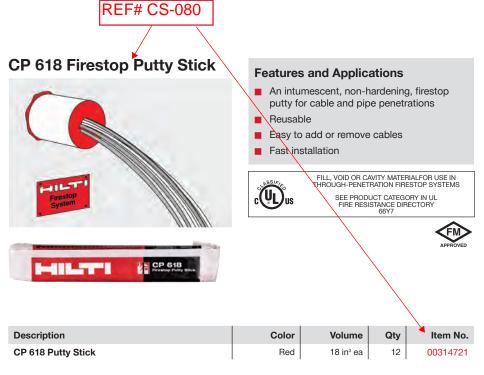
CP 617: 6" x 7" x 1/8" (15 x 18 x 0.3 cm) CP 617L: 7" x 7" x 1/8" (18 x 18 x 0.3 cm) CP 617XL: 9" x 9" x 1/8" (23 x 23 x 0.3 cm)

Consistency	Moldable putty			
Color	Red			
Application temperature	40 to 95° F (5 to 35° C)			
Storage temperature	40 to 104° F (5 to 40° C)			
Cure	Non-curing			
Density	1.48 g/cm <sup>3</sup>			
Volatile solvents	None			
Asbestos fibers	None			
Surface burning characteristics (ASTM E84-08)	Flame Spread: 15 Smoke Development: 10			
Sound transmission classification (ASTM E90-97)	59 (Relates to specific construction)			
	·			

• California State Fire Marshal - No. 4485-1200:129

### Tested in accordance with

- UL 263
- ASTM E84
- CAN/ULC-S115



Technical Data	CP 618
Dimensions	18 in³ ( Approx. 10-1/4" x 1-1/2" round)
Consistency	Moldable putty
Color	Red
Application temperature	40 to 95° F (5 to 35° C)
Cure	Non-curing
Density	Approx. 1.48 g/cm <sup>3</sup>
Surface burning characteristics (ASTM E84-08)	Flame Spread: 15 Smoke Development: 10
Sound transmission classification (ASTM E90-97)	49 (Relates to specific construction)

#### **Approvals**

California State Fire Marshal - No. 4485-1200:111

#### Tested in accordance with

- UL 1479 ASTM E814
- ASTM E84
- CAN/ULC-S115



REF# CS-081 and CS-082 (see below for model numbers) Hilti Cable Management ELECTRICAL FIRESTOP SOLUTIONS

Hilti. Outperform. Outlast.

#### **Hilti Cable Management**

# LEADING THE INDUSTRY IN FIRE PROTECTION PRODUCTS, SERVICES AND SOFTWARE



#### **Standard Applications**



#### **Speed Sleeve CP 653**

Just squeeze and twist for an effortless custom fit, with powerful smoke control you'll have to see to believe. Ask us for a demo.

- Don't be misled by imitators and marketing ploys. Jobsite install is different than lab optimized results.
- No Screws, rubber bands, sealant or putty needed
- 2- and 4-inch sleeves, up to 100% fill
- Fully functional immediately after installation



#### Sleeve Kit CFS-SL SK

Satisfies most requirements for sleeved openings — so instead of wasting time making sleeves, you can move on to the next job.

- Prefabricated 2- or 4-inch sleeve
- Cut-and-mold firestop included
- Meets BICSI requirements for cable fill rates



#### Cable Collar CFS-CC

The industry's only surface mounted solution for cable bundles up to 4" diameter and up to 100% fill.

- · Pre-cured, preformed
- · No sealant needed
- Never expires
- For use with exisiting and new cable runs, independent of wall/ floor thickness



#### Plugs (Muffins) CFS-PL

It's simple and cost-effective to firestop small openings with this reusable intumescent plug.

- Pre-cured, preformed
- · No electric tools or dispensers needed
- Up to 4-inch diameter and 60 % fill

#### Large Openings and Gang Solutions



#### **Block CFS-BL**

Pillows are for sleeping. Blocks are for building.

- · Noncuring, dust-free
- · One-sided, one-person installation
- No compression or special tools needed
- · May be cut to size



#### **Composite Sheet CFS-COS**

Firestop large openings without wasting time on anchor methods — this intumescent sheet fastens directly to the surface.

- Customizable multiboard systems
- Fasten with Hilti DX/GX/BX tools no drilling or anchors needed
- #304 stainless steel construction for good weatherability
- Nonmagnetic no inductive loss in cables
- · Compatible with Hilti Speed Sleeve and gangplate



#### Gangplate

This gangplate is ready to mount, right out of the package — on a stud or on the surface, before or after drywall.

- Integrated smoke seals no need for additional firestop materials
- Fits 4-inch Hilti cable sleeves and stud distances of 16 and 24 inches

#### **Conduits and Small Bundles**



#### Cable Disc CFS-D 1"

Firestop small penetrations in 10 seconds or less with no sealant or backfill. Peel. Stick. Done.

- Surface-mounted
- · No sealant or backfill needed
- Up to 1 inch in diameter and 100% fill
- UL systems for a wide variety of base materials and penetrations



#### **FS ONE MAX**

This premium firestop sealant is highly intumescent and water-based, so it's easy to dispense and trowel to a smooth finish before painting.

- · Smoke-, gas- and water-resistant after curing
- Seals most common penetrations in a variety of materials
- "Buy American"-compliant
- LEED compliant VOC results

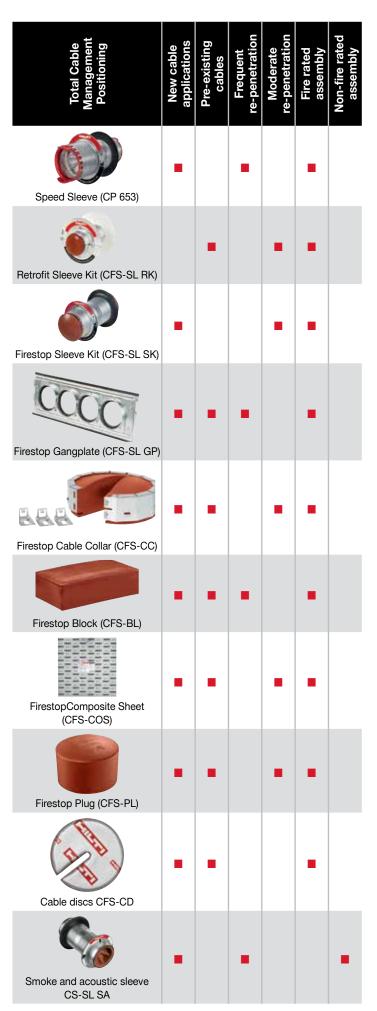
#### Non-Fire-Rated Walls

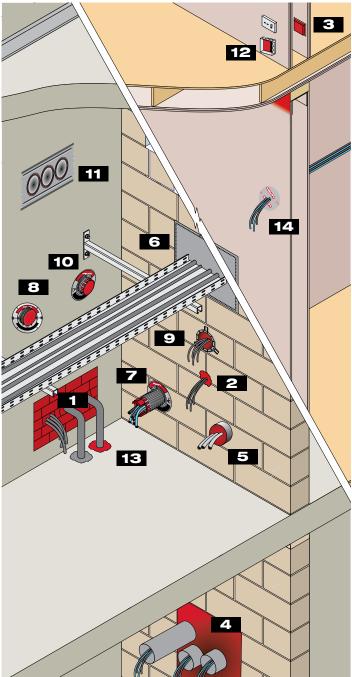


#### Smoke and Acoustic Sleeve CS-SL SA

Need sleeves for non-fire-rated walls, too? These lead the industry in air and sound ratings, and self-closing technology makes installation effortless.

- 2- and 4-inch options
- Excellent in-use sound and smoke ratings
- Self-closina
- Electrical, low-voltage/mid-voltage installations and telecom
- "Buy American"-compliant





- Firestop Block (CFS-BL)
- Firestop Putty Stick (CP 618)
- Firestop Putty Pad (CFS-P PA)
- Fire Foam (CP 620)
- Firestop Plug (CFS-PL)
- 6 Composite sheet CFS-COS
- Speed Sleeve (CP 653)
- Retrofit Sleeve Kit (CFS-SL RK)
- 9 Cable Collar (CFS-CC 4")
- Sleeve Kit (CFS-SL SK)
- Gangplate (CFS-SL GP)
- 12 Firestop Box Insert
- 13 FS ONE MAX
- 14 Cable Discs (CFS D 1")

# Why is Hilti no. 1 for firestop solutions?

#### **Software**

Automate the most time-consuming tasks.

- Hilti Button for Firestop Automatically identify penetrations, get firestop recommendations and generate reports. Get a free trial at hiltibutton.us.hilti.com (U.S.) or hiltibutton.hilti.ca (Canada)
- Firestop Documentation Manager (CFS-DM) Plan and document every stage of your firestop project in a single application, generating progress reports and work permits at the click of a button. Get a free trial at us.hilti.com/cfs-dm

#### Website

Connect to support and countless resources.

- Hilti Online Create an account to track your purchases and generate personalized product suggestions at us.hilti.com
- Firestop Design Center Access all of Hilti's firestop resources, from products to software to support, at us.hilti.com/firestop

#### People

Our experts in the field and in the office have a collective approximate 30,000 years of experience in firestop — and we're here to help. Just call 1-800-879-8000 or contact us at us.hilti.com.

- Field Engineers Consultants for designers and contractors on project specific applications
- Account Managers Highly trained product and application experts
- Fire Protection Specialists Quality assurance/quality control through firestop consultation, job site walkthroughs and accredited trainings
- Cable Management Specialists Fire-rated cable pathway experts specializing in air movement reduction
- Product Managers Identifying market needs and meeting them with innovation
- Fire Protection Engineers Engineering Judgments for your unique applications

#### **Education**

Maintain your license and stay current by keeping yourself and your team educated.

- Webinars Accrue professional-development hours at us.hilti.com/webinar
- Continuing Education Seminars Invite us to host your lunch-and-learn at us.hilti.com/continuing-education

#### Compliance

Hilti helps you keep up with codes, standards and best practices across North America.



















Order designation	Package content	Legend	Sales pack quantity	Item numbe
Speed Sleeve CP 653 2"	1x Speed sleeve with integrated firestop and smoke seal, 2x flanges, 2x adhesive firestop labels	1	1 pc	209788
Speed Sleeve CP 653 4"	1x Speed sleeve with integrated firestop and smoke seal, 2x flanges, 2x adhesive firestop labels	1	1 pc	209788
Gangplate CFS-SL GP 16"	2x FS gangplate CFS-SL GP 16"	2	1 pc	206427
Gangplate CFS-SL GP 24"	2x FS gangplate CFS-SL GP 24"	2	1 pc	206427
Sleeve Kit CFS-SL SK 2"	1x Firestop sleeve, 2x flanges, 2x 2" CFS-PL Firestop plugs, 2x adhesive firestop labels	3	1 pc	206427
Sleeve Kit CFS-SL SK 4"	1x Firestop sleeve, 2x flanges, 2x 4" CFS-PL Firestop plugs, 2x adhesive firestop labels	3	1 pc	206427
Composite Sheet CFS-COS	4x sheets 36" x 36"	4	1 pc	213588
Cable Collar CFS-CC 4" (qty 2)	2x CFS-CC Firestop collar, 2x Firestop system adhesive labels	5	1 pc	206542
Retrofit Sleeve Kit CFS-SL RK 2"	1x Firestop sleeve, 2x retrofit flanges, 2x 2" CFS-PL firestop plugs, 2x adhesive firestop labels	6	1 pc	206408
Retrofit Sleeve Kit CFS-SL RK 4"	1x Firestop sleeve, 2x retrofit flanges, 2x 4" CFS-PL firestop plugs, 2x adhesive firestop labels	6 # CS-	1 pc	206427
Cable Disc CFS-D 1"	32x discs	# C3-	1 pc	211624
Block CFS-BL MC	20x CFS-BL Firestop block	8	20 pc	348411
Plug CFS-PL 2" case of 10	1x CFS-PL 2" Firestop plug	9	10 pc	203002
Plug CFS-PL 4" case of 6	1x CFS-PL 4" Firestop plug	9	6 pc	203002
Putty Stick CP 618	12x Firestop putty sticks	10	12 pc	31472
Sealant FS-ONE MAX 10 oz tube 1 case	12x FS-ONE MAX tubes	m	12 pc	21015
Sealant FS-ONE MAX 20 oz foil 1 case	25x FS ONE MAX 20 oz foil	S-082	25 pc	21015
Sealant FS-ONE MAX 5 gal pail	1x / pail		1 pc	210153
Putty Tape CP 619T 1"x12'	1x CP 619T 1"x12' Firestop putty tape	12	1 pc	30507
Putty Pad CFS-P PA 6" x 7"	20x putty pads	13	20 pc	208228
Putty Pad CFS-P PA 7-1/4" x 7-1/4"	20x putty pads	13	20 pc	208224
Putty Pad CFS-P PA 9-1/4" x 9-1/4"	20x putty pads	13	20 pc	208224
Box Insert 4" x 4" 50 pk	50x Firestop box insert	(4)	50 pc	341718
Box box Insert 4-11/16" x 4-11/16" 50 pk	50x Firestop box insert	14)	50 pc	341718
Box Insert (2" x 4")	50x Firestop box Insert	(4)	50 pc	341677
dentification Labels	100x adhesive labels per roll	15	1 pc	33961
Plastic Label	10x plastic identification plates per order (5-3/4" W x 4-1/8" H)	16	1 pc	345066
Smoke & Acoustic Sleeve CS-SL SA 2"	1x self-sealing sleeve with integrated smoke and acoustic seal, 2x flanges	177	1 pc	211886
Smoke & Acoustic Sleeve CS-SL SA 4"	1x self-sealing sleeve with integrated smoke and acoustic seal, 2x flanges	Ø	1 pc	211886
Hilti Button for Firestop	Software plug in for BIM modeling	18	1 yr	212361

Please check with your local Hilti representative for bulk orders and combo items.











**INDOOR - 110 CONNECTOR SERIES - BET** 

1880ECA1-25 **4** 

REF# CS-083

25 PAIR - INDOOR BET - 110/110 - COVER & SPLICE CHAMBER



#### **Product Specifications**

#### **UL497 Primary Protector for Communication Circuits**

NAFTA Country of Origin: CANADA - All Models are "Buy America Act" Approved.

These 16 AWG steel building entrance terminals feature an industry standard 110 - style connector for both the input and output terminals. Also included are multiple external and internal ground lugs. UL approved standard on all terminals. Standard 5-pin protection modules, available in gas tube, solid state and hybrid versions, can be purchased separately. Call for more detailed information on RDUP/RUS-listed units.

# Features & Benefits

- 16 AWG Powder Coated Steel Construction
- Equipped with an Internal 26 AWG Fuse Link
- External Ground Connectors Accept 6 14 AWG Wire
- Industry Standard 5 Pin Design
- Exceeds UL497 Primary Protection Standards
- Stackable with Connection Grommets Included
- 110 Connector Accepts 22 26 AWG Wire



#### 1880ECA1-25

#### **Ordering Information**

Model Number	Stock Code	Pair Count	Input	Output	Dimensions (H" x W" x D")	Weight (lbs)
1880ECA1-25	304004	25	110	110	9.20 x 15.25 x 4.75	14



INDOOR - 110 CONNECTOR SERIES - BET

#### 1880ECA1-25

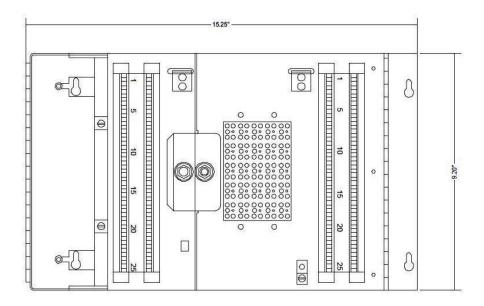
25 PAIR - INDOOR BET - 110/110 - COVER & SPLICE CHAMBER

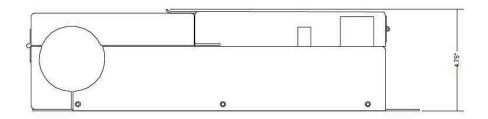


#### **Physical Dimensions**

#### **UL497 Primary Protector for Communication Circuits**

9.20 x 15.25 x 4.75 (H" x W" x D")





#### **Notes**

Installation:

Indoor Wall Mount

Previous Model Number: 1880ECA1-25G

Splice Chamber: Separate enclosure and cover for OPS gel filled Input cable

Circa Telecom, Inc ® 2013 - Version 1.03

6914 W. Linebaugh Ave - Tampa, FI 33625
Phone 800.783.6556 - Fax 813.676.2060 - Email circatech@circatelecom.com - www.circatelecom.com



INDOOR - 110 CONNECTOR SERIES - BET

1880ECA1-50←

REF# CS-084

50 PAIR - INDOOR BET - 110/110 - COVER & SPLICE CHAMBER



#### **Product Specifications**

#### **UL497 Primary Protector for Communication Circuits**

NAFTA Country of Origin: CANADA - All Models are "Buy America Act" Approved.

These 16 AWG steel building entrance terminals feature an industry standard 110 - style connector for both the input and output terminals. Also included are multiple external and internal ground lugs. UL approved standard on all terminals. Standard 5-pin protection modules, available in gas tube, solid state and hybrid versions, can be purchased separately. Call for more detailed information on RDUP/RUS-listed units.

# Features & Benefits

- 16 AWG Powder Coated Steel Construction
- Equipped with an Internal 26 AWG Fuse Link
- External Ground Connectors Accept 6 14 AWG Wire
- Industry Standard 5 Pin Design
- Exceeds UL497 Primary Protection Standards
- Stackable with Connection Grommets Included
- 110 Connector Accepts 22 26 AWG Wire



#### 1880ECA1-50

#### **Ordering Information**

Model Number	Stock Code	Pair Count	Input	Output	Dimensions (H" x W" x D")	Weight (lbs)
1880ECA1-50	316016	50	110	110	9.20 x 15.25 x 4.75	15



**INDOOR - 110 CONNECTOR SERIES - BET** 

#### 1880ECA1-50

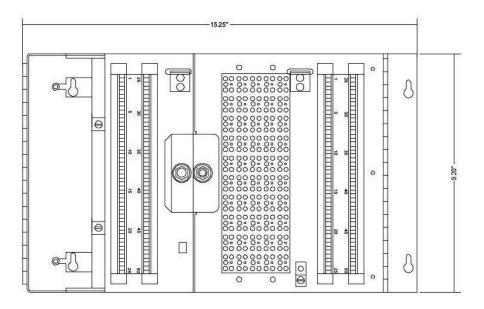
50 PAIR - INDOOR BET - 110/110 - COVER & SPLICE CHAMBER

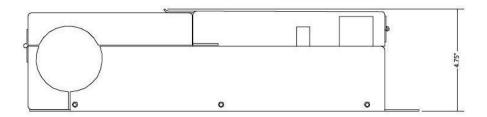


#### **Physical Dimensions**

#### **UL497 Primary Protector for Communication Circuits**

9.20 x 15.25 x 4.75 (H" x W" x D")





#### **Notes**

Installation:

Indoor Wall Mount

Previous Model Number: 1880ECA1-50G

Splice Chamber: Separate enclosure and cover for OPS gel filled Input cable



**INDOOR - 110 CONNECTOR SERIES - BET** 

1880ECA1-100 ←

REF# CS-085

100 PAIR - INDOOR BET - 110/110 - COVER & SPLICE CHAMBER



#### **Product Specifications**

#### **UL497 Primary Protector for Communication Circuits**

NAFTA Country of Origin: CANADA - All Models are "Buy America Act" Approved.

These 16 AWG steel building entrance terminals feature an industry standard 110 - style connector for both the input and output terminals. Also included are multiple external and internal ground lugs. UL approved standard on all terminals. Standard 5-pin protection modules, available in gas tube, solid state and hybrid versions, can be purchased separately. Call for more detailed information on RDUP/RUS-listed units.

# Features & Benefits

- 16 AWG Powder Coated Steel Construction
- Equipped with an Internal 26 AWG Fuse Link
- External Ground Connectors Accept 6 14 AWG Wire
- Industry Standard 5 Pin Design
- Exceeds UL497 Primary Protection Standards
- Stackable with Connection Grommets Included
- 110 Connector Accepts 22 26 AWG Wire



#### 1880ECA1-100

#### **Ordering Information**

Model Number	Stock Code	Pair Count	Input	Output	Dimensions (H" x W" x D")	Weight (lbs)
1880ECA1-100	329029	100	110	110	11.00 x 14.75 x 6.25	15



INDOOR - 110 CONNECTOR SERIES - BET

#### 1880ECA1-100

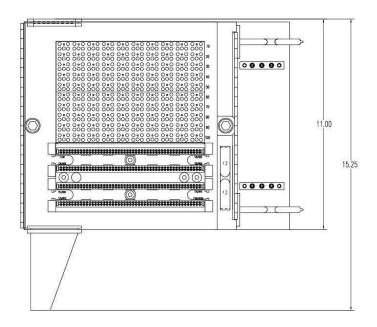
100 PAIR - INDOOR BET - 110/110 - COVER & SPLICE CHAMBER

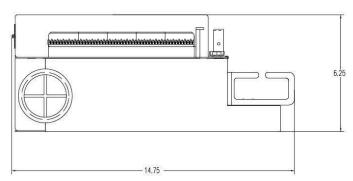


#### **Physical Dimensions**

#### **UL497 Primary Protector for Communication Circuits**

11.00 x 14.75 x 6.25 (H" x W" x D")





#### **Notes**

Installation:

Indoor Wall Mount

Previous Model Number: 1880ECA1-100G

Splice Chamber: Separate enclosure and cover for OPS gel filled Input cable



#### **SURGE PROTECTION MODULES**

**5 PIN - SOLID STATE MODULE SERIES** 

3BIS-300 & 4B1S-300

**REF# CS-086** 

5 PIN - Solid State - Surge Protection Module



#### **Product Specifications**

#### **UL 497 Primary Protector for Communication Circuits**

The 3B1S-300 is a premium series 5 PIN solid state protector module that is designed to provide superior transient and power fault protection for most standard telephone line applications.

These solid state modules are suited to applications that require the protection of sensitive telephone equipment due to their nanosecond reaction time.

The characteristics of the solid state protector are far superior to gas tube technology in speed and are virtually immune to overshoot, aging and failure due to repeated tripping.

The 4 - Series features PTC (positive temperature coefficient) technology. These optional self-resetting current limiters provide effective protection from 'sneak current' faults. The PTC is vastly superior to the heat coil solution, which requires that the module be replaced after each 'sneak current' event.

Nanosecond Response Time

Internal Failsafe Mechanism that Permanently Grounds the Module Under Sustained High Current Conditions

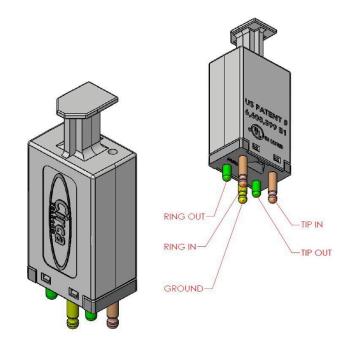
**Balanced Operation** 

UL Listed and RUS Approved

Design to Exceed Telcordia Standards

Integrated Test Points

ISO 9001 Certified Manufacturer



#### **Ordering Information**

Model Number	Stock Code	Application	Color	Clamping Voltage
3BIS-300	770131	Low Impedance for Long Cable Runs   REF# CS-086	Black	300V
4B1S-300	770135	Low Impedance for Long Cable Runs (4 Series has PTC)	Black	300V
3B3S-300	770133	Low Impedance for Long Cable Runs	Red	300V

RUS Approved Material - 2011 Edition RUS Publication 344-2 - Section 4.1.3 and 4.2.1



#### **SURGE PROTECTION MODULES**

**5 PIN - SOLID STATE MODULE SERIES** 

#### 3BIS-300 & 4B1S-300

5 PIN - Solid State - Surge Protection Module

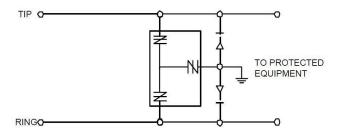


#### **Product Specifications**

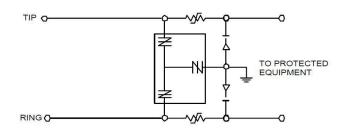
#### **UL 497 Primary Protector for Communication Circuits**

Module	3BIS-300	4B1S-300
DC Break Over - @ 100V/µS	300V	300V
Peak Pulse Current (1)		
@ 8 x 20 μS	250A	250A
@ 10 x 160 μS	150A	150A
@ 10 x 1000 μS	100A	100A
Response Time	< 5 nanoseconds	< 5 nanoseconds
Holding Current	200 mA	200 mA
Surge Life (2)		
@ 10A @ 10 x 1000/μS	Unlimited Operations	Unlimited Operations
@ 100A @ 10 x 1000/μS	> 300 Operations	> 300 Operations
@ 65A rms, 11 cycles, 130A	> 60 Operation	> 60 Operation
@ 10A rms, 1 sec, 20A	> 20 Operations	> 20 Operations
Capacitance		
1V rms @ 1Khz, 50V DC	< 45 pF	< 45 pF
Insulation Resistance		
@ 50V DC	$100M~\Omega$	100M Ω
Fail-Safe Operation		
@ 1.0A rms	< 50 Seconds	< 50 Seconds
@ 5.0A rms	< 15 Seconds	< 15 Seconds
@20A rms	< 10 Seconds	< 10 Seconds
@ 60A rms	< 3 Seconds	< 3 Seconds
Current Limiters (4 Series with PTC)		
Hold Current @ 20° C	N/A	145 mA
Line Series Resistance	N/A	4 - 6 Ω

#### 3BIS-300 - Symmetrical



#### 4B1S-300 - Symmetrical





#### **SURGE PROTECTION MODULES**

**5 PIN - SOLID STATE MODULE SERIES** 

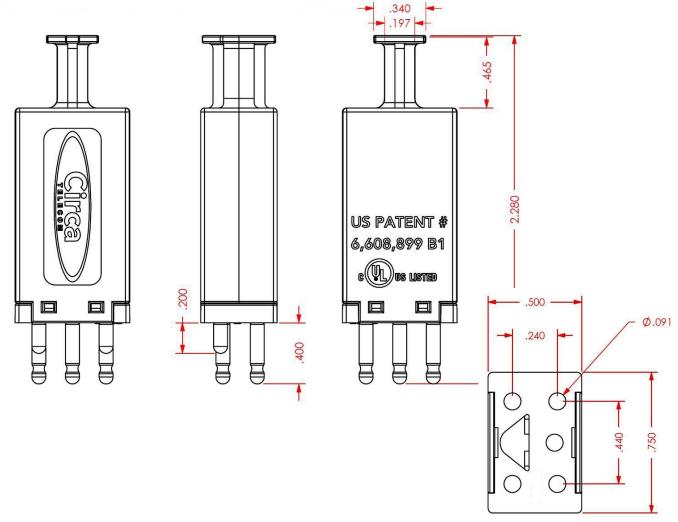
#### 3BIS-300 & 4B1S-300

5 PIN - Solid State - Surge Protection Module



#### **Physical Dimensions**

#### **UL 497 Primary Protector for Communication Circuits**



#### **Notes**

Pin alloy refers to tip and ring pins. Unless otherwise noted, all ground pins are tin.

Previous Model Numbers: C3B1S, CT3B1S, CT3B1S-BAL, CT3B1S/HD, CT4B1S-PTC/BAL, 3C1S, 4C1S

RUS Approved Material - 2011 Edition RUS Publication 344-2 - Section 4.1.3 and 4.2.1

<sup>&</sup>lt;sup>(1)</sup> Total surge rating is 2x listed with respect to ground during simultaneous surge.

<sup>&</sup>lt;sup>(2)</sup> Meets Bellcore TR-NWT-000974 service life requirements.

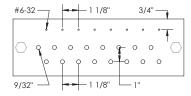
# **Grounding Busbar - EGBA14410FF**



REF# CS-087

Proper bonding is essential to create an equipotential plane between service grounds and equipment during fault and transient conditions. This equipotential plane provides a near-zero voltage differential, and serves to protect people and equipment during these events. The grounding busbar is the most popular bonding product in use today.

- Provides a convenient, single-point grounding and bonding location
- Conductors are welded to the bar using a ERICO CADWELD exothermic connection or are mechanically fastened by using lugs
- Custom bars can be designed and manufacturerd to customer specifications





Part Number	EGBA14410FF
Material	Copper
Busbar Configuration	Busbar, Insulators and Brackets
Hole Pattern	FF
Mounting Hole Size	0.438"
Length	10"
Width	4"
Thickness	1/4"
Tin Plating	No
Pigtail Included	No
Certifications	cULus
Standard Packaging Quantity	1 pc
UPC	78285646526

Diagrams are representative of the hole pattern. The number of holes is dependent on the length of the grounding busbar. Additional configurations are available by special order. Note special orders may incur additional lead time.

UL, UR, cUL, cUR, cULus and cURus are registered certification marks of UL LLC.

#### WARNING

Pentair products shall be installed and used only as indicated in Pentair's product instruction sheets and training materials. Instruction sheets are available at erico.pentair.com and from your Pentair customer service representative. Improper installation, misuse, misapplication or other failure to completely follow Pentair's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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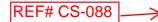
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Catalog Number	Item No	Description	Approx. Net Lbs.	Size		Per 1000 Ft.		
			Per 1000 Ft.		Col. A	Col. B	Col. C	
10	23031		38	10	284.08	156.24	142.04	
8	23104		63	8	462.20	254.21	231.10	
6	13151	-	95	6	730.58	401.82	365.29	
4	13201		152	4	1108.14	609.48	554.07	
3	23257	-	188	3	1372.04	754.62	686.02	
2	23307	-	234	2	1720.00	946.00	860.00	+
1	23351		299	1	2174.62	1196.04	1087.31	
1/0	23401		371	1/0	2626.40	1444.52	1313.20	
2/0	23406		461	2/0	3225.74	1774.16	1612.87	
3/0	23411		574	2/0	3988.88	2193.88	1994.44	
4/0	23416		717	4/0	5032.62	2767.94	2516.31	
250KCM	23421		850	250KCM	6149.46	3382.20	3074.73	
300KCM	23426		1011	300KCM	7259.68	3992.82	3629.84	
350KCM	23431		1172	350KCM	8403.24	4621.78	4201.62	
400KCM	23436		1333	400KCM	9958.26	5477.04	4979.13	
500KCM	23441		1653	500KCM	11697.38	6433.56	5848.69	
600KCM <sup>1</sup>	23446		1985	600KCM	1420.86	781.47	710.43	
750KCM <sup>1</sup>	23451		2462	750KCM	1895.26	1042.39	947.63	
1000KCM <sup>1</sup>	23458		3255	1000KCM	2632.14	1447.68	1316.07	

<sup>&</sup>lt;sup>1</sup> Price Per 100 Ft.

#### XHHW-CROSS-LINKED POLYETHYLENE 90 DEGREE C DRY/75 DEGREE C WET - SOLID

Catalog Number	Item No	Description	Approx. Net Lbs.	Size	Per 1000 Ft.			
			Per 1000 Ft.		Col. A	Col. B	Col. C	
14	23501			14	209.92	115.46	104.96	
12	23601			12	253.88	139.63	126.94	
10	23701	-		10	349.64	192.30	174.82	

#### XHHW-CROSS-LINKED POLYETHYLENE 90 DEGREE C DRY/75 DEGREE C WET - STRANDED

Catalog Number	Item No	Description	Approx. Net Lbs.	Size	Per 1000 Ft.			
			Per 1000 Ft.		Col. A	Col. B	Col. C	
14	23801		18	14	234.16	128.79	117.08	
12	23901		26	12	294.44	161.94	147.22	
10	24001		40	10	420.28	231.15	210.14	
8	24051		66	8	690.72	379.90	345.36	
6	24101		100	6	971.20	534.16	485.60	
4	24151		150	4	1459.06	802.48	729.53	
3	24171		186	3	1746.62	960.64	873.31	
2	24181		231	2	2153.34	1184.34	1076.67	
1	24201		292	1	2741.24	1507.68	1370.62	
1/0	24226		363	1/0	2870.54	1578.80	1435.27	
2/0	24231		452	2/0	3595.02	1977.26	1797.51	
3/0	24236		565	3/0	4486.26	2467.44	2243.13	
4/0	24241		706	4/0	5548.44	3051.64	2774.22	
250KCM	24246		835	250KCM	6816.40	3749.02	3408.20	
300KCM	24251		995	300KCM	7855.82	4320.70	3927.91	



#### Contact

Copper LAN Product Inquiry Phone: 717-354-6200 berktek.support@nexans.com

# Multi-Pair Category 3

REF# CS-089 and CS-090 (see below for model numbers)

Berk-Tek's Category 3 UTP Power Sum cables are designed for use in voice applications. These cables are used to support building backbone service. They also can be used for interconnecting satellite wiring closets.

#### Description

#### Construction

24 AWG) bare copper wire insulated with thermoplastic. Three layer core construction jacketed in flame retardant PVC.

#### **Standards**

- North American: ANSI/TIA/EIA-568-C.2, UL 444 and C22.2 No.214-02
- International: ISO/IEC 11801, EU Directive 2002/95/EC (RoHS)

#### Flame Rating

- Non-plenum-UL 1666, CMR, CMG, IEC 332-1
- Plenum-NFPA 262, CMP
- ELT Listed

#### **Applications**

Berk-Tek's Multi-Pair Category 3 UTP Power Sum Backbone cables are intended for data and voice applications including:

- Ethernet 10BASE-T
- Voice

#### **Features**

- ANSI/TIA/EIA-568-B.2 Category 3 Backbone Cable
- Supports 10BASE-T and Voice
- · Ideally suited for backbone, cross-connect and pre-connectorized assemblies

#### **Benefits**

- Assurance that every link will meet the most demanding transmission requirements
- Simplified structured cabling solution preserving long-term network investment



Standards

National ANSI/TIA-568-C.2



#### Contact

Copper LAN Product Inquiry Phone: 717-354-6200 berktek.support@nexans.com

# **Multi-Pair Category 3**

#### Characteristics

Construction characteristics							
Type of cable	UTP						
Dimensional characteristics							
Length per reel	1000.0 ft						
Usage characteristics							
Field of application	Indoor						
Category	Cat. 3						

# REF# CS-089

					•	
	Part Number	Description	Colour	Number of pairs	Packaging	Fire safety
品	10032113	100 Pair Category 3 Plenum	Grey	100	Reel	Plenum Rated
品	10032472	100 Pair Category 3 Riser	Grey	100	Reel	Riser Rated
品	10032123	200 Pair Category 3 Plenum	Grey	200	Reel	Plenum Rated
量	10032493	200 Pair Category 3 Riser	Grey	200	Reel	Riser Rated
	10032036	25 Pair Category 3 Plenum	Blue	25	Reel	Plenum Rated
盟	10032111	25 Pair Category 3 Plenum	Grey	25	Reel	Plenum Rated
晶	10032396	25 Pair Category 3 Riser	Grey	25	Reel	Riser Rated
品	10032124	300 Pair Category 3 Plenum	Grey	300	Reel	Plenum Rated
晶	10032494	300 Pair Category 3 Riser	Grey	300	Reel	Riser Rated
晶	10032112	50 Pair Category 3 Plenum	Grey	50	Reel	Plenum Rated
品	10032471	50 Pair Category 3 Riser	Grey	50	Reel	Riser Rated
	\  DEE+	+ CS-000		<b>%</b> =	Make to order,	= Make to stock

REF# CS-090

#### Technical Data - Electrical

Frequency (MHz)	Insertion Loss (dB/100m max)	SRL (dB min)	PS-NEXT (dB min)
1	2.6	12	41.3
4	5.6	12	32.3
10	9.8	12	26.3
16	13.1	10	23.3

#### Technical Data - Physical

	25 PR	25 PR	50 PR	50 PR	100 PR
	(CMR)	(CMP)	(CMR)	(CMP)	(CMR)
Mutual Capacitance, nF/100 m nom.	6.6	6.6	6.6	6.6	6.6
DC Resistance, Ohms/100 m max.	9.4	9.4	9.4	9.4	9.4
Conductor diameter—in. (mm)	0.02	0.02	0.02	0.02	0.02
	(0.51)	(0.51)	(0.51)	(0.51)	(0.51)
Cable diameter—in. (mm)	.390	.382	.525	.496	.895
	(9.9)	(9.7)	(13.3)	(12.59)	(22.72)

#### Version V2.1 Generated 7/5/12 - http://www.nexans.us

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All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

50 µm multimode (QM3/OM4 compatible)

REF# CS-091

CORNING

Corning UniCam® SC connectors offer optical performance in a fast, easy field-termination solution ideal for fiber-to-the-workstation applications where setup and teardown time is critical. The high-precision mechanical splice technology enables fiber optic networks to be installed quickly and cost effectively. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam High-Performance Tool Kit.

The lightweight, handheld installation tool and high-performance precision cleaver virtually eliminate human variability during installation, ensuring terminations are right the first time, every time. This kit was designed with consideration for network installers, from the cleaver, with its intuitive, hand-held precision design and dual-clamp precision hold, to the installation tool, with its immediate go/no-go feedback signal indicating proper mating of the field fiber to the fiber stub. Installation is as easy as strip, clean, cleave, cam and crimp, with exceptional optical performance assured. Every UniCam® connector is assured to meet the published specification at the time of installation or Corning will replace it.

Corning UniCam® high-performance connectors offer best-in-class optical performance in a fast, easy field-termination solution. These high-precision zirconia ceramic ferrule connectors assured exceptional insertion loss – 0.1 dB typical/0.5 dB maximum per connector pair for multimode, 0.2 dB typical/0.5 dB maximum per connector pair for single-mode. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam high-performance tool kit.

The lightweight, hand-held installation tool and high-performance precision cleaver virtually eliminate human variability during installation, ensuring terminations are right the first time, every time. This kit was designed with consideration for network installers, from the cleaver, with its intuitive, hand-held precision design and dual-clamp precision hold, to the installation tool, with its immediate go/no-go feedback signal indicating proper mating of the field fiber to the fiber stub. Installation is as easy as strip, clean, cleave, cam and crimp, with exceptional optical performance assured. Every UniCam® connector is assured to meet the published specification at the time of installation or Corning will replace it.





#### **Features and Benefits**

Performance guaranteed 100 percent yield guarantee

50 µm multimode (OM3/OM4 compatible)



#### **Features and Benefits**

Broad operating temperature (-40° to +75°C)

Utility and flexibility

Factory-polished end face

Consistent optical performance

Fast termination and no consumables

Low installation cost

Minimum insertion loss

Optimum optical performance

#### **Standards**

Approvals and Listings Passed EIA/TIA 568-B.3

Intermateability Connectors are FOCIS

compliant with TIA/EIA 604-10A and IEC61754-20

# **Specifications**

General Specifications	
Product Type	Field-Installable Connectors
Technology	No-Epoxy/No-Polish
Keyed	No
Corning Logo	Yes
Packaging	Single Pack
Fiber Category	50 μm MM (OM3/OM4 compatible)

Temperature Range	
Operation	-40 °C to 75 °C exceeding EIA/TIA 568-B.3 (-40 °F to 167 °F exceeding EIA/TIA 568-B.3)

Design - Connector	
Connector Type	SC
Ferrule Material	Ceramic
Housing Material	Composite



50 µm multimode (OM3/OM4 compatible)



Design - Connector	
Housing Color	Black
Boot Color	Aqua

Mechanical Specifications - Connector	
Durability	≤ 0.2 dB change by 500 rematings, FOTP-21
Temperature Cycling	≤ 0.3 dB IL, -40° to +75°C, 21 cycles
Nominal Fiber Outer Diameter	125 μm
Tensile Strength Jacketed Cable	50 N, change $\leq$ 0.2 dB, FOTP-6 (11 lb, change $\leq$ 0.2 dB, FOTP-6)
Tensile Strength 900 μm Cable	4.9 N, change $\leq$ 0.2 dB, FOTP-6 (1.1 lb, change $\leq$ 0.2 dB, FOTP-6)

Optical Specifications - Connector	
Insertion Loss, Typical	0.1 dB
Insertion Loss, Maximum	0.5 dB
Reflectance	≤ -26 dB

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

# Ordering Information REF# CS-091

Part Number	95-050-41-X
Product Description	UniCam® High-Performance Connector, SC, 50 µm multimode (OM3/OM4 compatible), ceramic ferrule, logo, single pack, black housing, aqua boot
EAN Code	4042673619451

# **Shipping Information**

Units per Delivery	1/1
Package Contents	Connector, shroud, crimp band, boot (900 µm), boot (3.0 mm)



# **Anaerobic Connector, SC**

50 µm multimode (OM3/OM4/OM4 extended 10G distance)





Corning anaerobic-cured connectors offer optical performance in a fast, easy field-termination solution designed for fiber-to-the-workstation applications for single-mode and multimode connections. This connector combines the quick-cured convenience of anaerobic adhesive with the performance of epoxy-and-polish connectors. Ideal for enterprise networks and any installations requiring field-installed connectors, the anaerobic-cured technology enables fiber optic networks to be installed cost effectively with minimal tools. Installation of the connector can be accomplished in minutes with the anaerobic adhesive two-part epoxy process. The adhesive is first injected into the connector ferrule, and then the fiber is dipped into the primer and inserted into the connector. Curing takes only one minute without the use of lamps or ovens. With the hand-polish process, an average insertion loss of 0.2 dB is achieved.

#### **Features and Benefits**

**Quick-cure epoxy** 

No lamps or ovens needed

Minimal tools and no index-matching gel

Low installation cost

Hand polished for minimum insertion loss

Reliability and optical performance

#### **Standards**

Intermateability Compliant with TIA/EIA

604-3

# **Specifications**

General Specifications	
Technology	Field Polish (anaerobic)
Keyed	No
Packaging	Single Pack
Product Type	Field-Installable Connectors
Corning Logo	Yes
Fiber Category	50 µm MM (OM3/OM4/OM4 extended 10G distance)



# **Anaerobic Connector, SC**

50 μm multimode (OM3/OM4/OM4 extended 10G distance)



Design - Connector	
Connector Type	SC
Ferrule Material	Ceramic
Housing Material	Composite
Housing Color	Black
Boot Color	Aqua

Mechanical Specifications - Connector	
Temperature Cycling	≤ 0.3 dB IL, -40° to +75°C, 21 cycles

Optical Specifications - Connector	
Insertion Loss, Typical	≤ 0.2 dB
Insertion Loss, Maximum	≤ 0.75 dB
Reflectance	≤ -26 dB

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

# Ordering Information REF# CS-092

Part Number	95-051-41-SP-X
Product Description	SC Connector, 50 µm multimode (OM3/OM4/OM4 extended 10G distance), ceramic ferrule, composite hardware, single pack, black housing, aqua boot
EAN Code	4056418183152

# **Shipping Information**

Units per Delivery	1/1
Package Contents	Connector, Shroud, Crimp Band (1.6/2.0 mm), Crimp Band (3.0 mm), Boot (900 µm), Boot (2.0 mm), Boot (3.0 mm)



50 µm multimode (OM3/OM4 compatible)



Corning UniCam® LC connectors offer optical performance in a fast, easy field-termination solution ideal for fiber-to-the-workstation applications where setup and teardown time is critical. The high-precision mechanical splice technology enables fiber optic networks to be installed quickly and cost effectively. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam High-Performance Tool Kit. The lightweight, handheld installation tool and high-performance precision cleaver virtually eliminate human variability during installation, ensuring terminations are right the first time, every time. This kit was designed with consideration for network installers, from the cleaver, with its intuitive, hand-held precision design and dual-clamp precision hold, to the installation tool, with its immediate go/no-go feedback signal indicating proper mating of the field fiber to the fiber stub. Installation is as easy as strip, clean, cleave, cam and crimp, with exceptional optical performance assured. Every UniCam connector is assured to meet the published specification at the time of installation or Corning will replace it.

Corning UniCam® high-performance connectors offer best-in-class optical performance in a fast, easy field-termination solution. These high-precision zirconia ceramic ferrule connectors assured exceptional insertion loss – 0.1 dB typical/0.5 dB maximum per connector pair for multimode, 0.2 dB typical/0.5 dB maximum per connector pair for single-mode. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam high-performance tool kit.

The lightweight, hand-held installation tool and high-performance precision cleaver virtually eliminate human variability during installation, ensuring terminations are right the first time, every time. This kit was designed with consideration for network installers, from the cleaver, with its intuitive, hand-held precision design and dual-clamp precision hold, to the installation tool, with its immediate go/no-go feedback signal indicating proper mating of the field fiber to the fiber stub. Installation is as easy as strip, clean, cleave, cam and crimp, with exceptional optical performance assured. Every UniCam® connector is assured to meet the published specification at the time of installation or Corning will replace it.

# CORNING





#### Features and Benefits

Performance guaranteed 100 percent yield guarantee

50 µm multimode (OM3/OM4 compatible)



#### **Features and Benefits**

Broad operating temperature (-40° to +75°C)

Utility and flexibility

Factory-polished end face

Consistent optical performance

Fast termination and no consumables

Low installation cost

**Minimum insertion loss** 

Optimum optical performance

#### **Standards**

**Approvals and Listings** Passed EIA/TIA 568-B.3

Intermateability Connectors are FOCIS

compliant with TIA/EIA 604-10A and IEC61754-20

# **Specifications**

General Specifications	
Technology	No-Epoxy/No-Polish
Keyed	No
Product Type	Field-Installable Connectors
Corning Logo	Yes
Packaging	Single Pack
Fiber Category	50 μm MM (OM3/OM4 compatible)

Temperature Range	
Operation	-40 °C to 75 °C exceeding EIA/TIA 568-B.3 (-40 °F to 167 °F exceeding EIA/TIA 568-B.3)

Design - Connector	
Connector Type	LC
Ferrule Material	Ceramic
Housing Material	Composite



50 µm multimode (OM3/OM4 compatible)



Design - Connector	
Housing Color	Black
Boot Color	Aqua

Mechanical Specifications - Connector	
Durability	≤ 0.2 dB change by 500 rematings, FOTP-21
Temperature Cycling	≤ 0.3 dB IL, -40° to +75°C, 21 cycles
Nominal Fiber Outer Diameter	125 µm
Tensile Strength Jacketed Cable	50 N, change $\leq$ 0.2 dB, FOTP-6 (11 lb, change $\leq$ 0.2 dB, FOTP-6)
Tensile Strength 900 μm Cable	4.9 N, change $\leq$ 0.2 dB, FOTP-6 (1.1 lb, change $\leq$ 0.2 dB, FOTP-6)

Optical Specifications - Connector	
Insertion Loss, Typical	0.1 dB
Insertion Loss, Maximum	0.50 dB
Reflectance	≤ -26 dB

<b>Chemical Characteristics</b>	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

# **Ordering Information**

REF# CS-093

Part Number	95-050-99-X
Product Description	UniCam® High-Performance Connector, LC, 50 µm multimode (OM3/OM4 compatible), ceramic ferrule, logo, single pack, black housing, aqua boot
EAN Code	4042673619420

# **Shipping Information**

Units per Delivery	1/1
Package Contents	Connector, Trigger, Crimp Band, Boot (900 $\mu$ m), Boot (3.0 mm,), Boot (2.0 mm)



# **Anaerobic Connector, LC**

50 µm multimode (OM3/OM4/OM4 extended 10G distance)





Corning anaerobic-cured connectors offer optical performance in a fast, easy field-termination solution designed for fiber-to-the-workstation applications for single-mode and multimode connections. This connector combines the quick-cured convenience of anaerobic adhesive with the performance of epoxy-and-polish connectors. Ideal for enterprise networks and any installations requiring field-installed connectors, the anaerobic-cured technology enables fiber optic networks to be installed cost effectively with minimal tools. Installation of the connector can be accomplished in minutes with the anaerobic adhesive two-part epoxy process. The adhesive is first injected into the connector ferrule, and then the fiber is dipped into the primer and inserted into the connector. Curing takes only one minute without the use of lamps or ovens. With the hand-polish process, an average insertion loss of 0.2 dB is achieved.

#### **Features and Benefits**

**Quick-cure epoxy** 

No lamps or ovens needed

Minimal tools and no index-matching gel Low installation cost

Hand polished for minimum insertion loss

Reliability and optical performance

#### **Standards**

Intermateability

Compliant with TIA/EIA 604-10





# **Anaerobic Connector, LC**

50 μm multimode (OM3/OM4/OM4 extended 10G distance)



# **Specifications**

General Specifications	
Technology	Field Polish (anaerobic)
Keyed	No
Packaging	Single Pack
Product Type	Field-Installable Connectors
Corning Logo	Yes
Fiber Category	50 μm MM (OM3/OM4/OM4 extended 10G distance)

Design - Connector	
Connector Type	LC
Ferrule Material	Ceramic
Housing Material	Composite
Housing Color	Black
Boot Color	Aqua

Mechanical Specifications - Connector	
Temperature Cycling	≤ 0.3 dB IL, -40° to +75°C, 21 cycles

Optical Specifications - Connector	
Insertion Loss, Typical	≤ 0.2 dB
Insertion Loss, Maximum	≤ 0.75 dB
Reflectance	≤ -26 dB

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG



# **Anaerobic Connector, LC**

50 µm multimode (OM3/OM4/OM4 extended 10G distance)



### **Ordering Information**

REF# CS-094

Part Number	95-051-98-SP-X
Product Description	LC Connector, 50 µm multimode (OM3/OM4/OM4 extended 10G distance), ceramic ferrule, ceramic hardware, single pack, black housing, aqua boot
EAN Code	4056418183169

# **Shipping Information**

Units per Delivery	1/1
Package Contents	Connector, Trigger, Crimp Band (1.6/2.0 mm), Crimp Band (3.0 mm), Boot (900 µm), Boot (2.0 mm), Boot (3.0 mm)

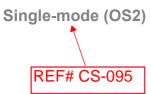


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CORNING

Corning UniCam® SC connectors offer optical performance in a fast, easy field-termination solution ideal for fiber-to-the-workstation applications where setup and teardown time is critical. The high-precision mechanical splice technology enables fiber optic networks to be installed quickly and cost effectively. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam High-Performance Tool Kit.

The lightweight, handheld installation tool and high-performance precision cleaver virtually eliminate human variability during installation, ensuring terminations are right the first time, every time. This kit was designed with consideration for network installers, from the cleaver, with its intuitive, hand-held precision design and dual-clamp precision hold, to the installation tool, with its immediate go/no-go feedback signal indicating proper mating of the field fiber to the fiber stub. Installation is as easy as strip, clean, cleave, cam and crimp, with exceptional optical performance assured. Every UniCam® connector is assured to meet the published specification at the time of installation or Corning will replace it.

Corning UniCam® high-performance connectors offer best-in-class optical performance in a fast, easy field-termination solution. These high-precision zirconia ceramic ferrule connectors assured exceptional insertion loss – 0.1 dB typical/0.5 dB maximum per connector pair for multimode, 0.2 dB typical/0.5 dB maximum per connector pair for single-mode. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam high-performance tool kit.

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#### Features and Benefits

Performance guaranteed 100 percent yield guarantee

Single-mode (OS2)



#### **Features and Benefits**

Broad operating temperature (-40° to +75°C)

Utility and flexibility

Factory-polished end face

Consistent optical performance

Fast termination and no consumables

Low installation cost

Minimum insertion loss

Optimum optical performance

#### **Standards**

**Approvals and Listings** Passed EIA/TIA 568-B.3 Intermateability Connectors are FOCIS

compliant with TIA/EIA 604-10A and IEC61754-20

# **Specifications**

General Specifications	
Product Type	Field-Installable Connectors
Technology	No-Epoxy/No-Polish
Keyed	No
Corning Logo	Yes
Packaging	Single Pack
Fiber Category	Single-mode (OS2)

Temperature Range	
Operation	-40 °C to 75 °C exceeding EIA/TIA 568-B.3 (-40 °F to 167 °F exceeding EIA/TIA 568-B.3)

Design - Connector	
Connector Type	SC
Ferrule Material	Ceramic
Housing Material	Composite



Single-mode (OS2)



Design - Connector	
Housing Color	Blue
Boot Color	Blue

Mechanical Specifications - Connector	
Durability	≤ 0.2 dB change by 500 rematings, FOTP-21
Temperature Cycling	≤ 0.3 dB IL, -40° to +75°C, 21 cycles
Nominal Fiber Outer Diameter	125 µm
Tensile Strength Jacketed Cable	44 N, change $\leq$ 0.2 dB, FOTP-6 (11 lb, change $\leq$ 0.2 dB, FOTP-6)
Tensile Strength 900 μm Cable	4.9 N, change $\leq$ 0.2 dB, FOTP-6 (1.1 lb, change $\leq$ 0.2 dB, FOTP-6)

Optical Specifications - Connector	
Insertion Loss, Typical	0.2 dB
Insertion Loss, Maximum	0.5 dB
Reflectance	≤ -55 dB
Polish	UPC

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

# **Ordering Information**

REF# CS-095

Part Number	95-200-41
Product Description	UniCam® High-Performance Connector, SC, Single-mode (OS2), ceramic ferrule, logo, single pack, blue housing, blue boot
EAN Code	4042673619468

# **Shipping Information**

Units per Delivery	1/1
Package Contents	Connector, shroud, crimp band, boot (900 $\mu$ m), boot (3.0 mm)



Single-mode (OS2)

REF# CS-096

CORNING

Corning UniCam® LC connectors offer optical performance in a fast, easy field-termination solution ideal for fiber-to-the-workstation applications where setup and teardown time is critical. The high-precision mechanical splice technology enables fiber optic networks to be installed quickly and cost effectively. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam High-Performance Tool Kit. The lightweight, handheld installation tool and high-performance precision cleaver virtually eliminate human variability during installation, ensuring terminations are right the first time, every time. This kit was designed with consideration for network installers, from the cleaver, with its intuitive, hand-held precision design and dual-clamp precision hold, to the installation tool, with its immediate go/no-go feedback signal indicating proper mating of the field fiber to the fiber stub. Installation is as easy as strip, clean, cleave, cam and crimp, with exceptional optical performance assured. Every UniCam connector is assured to meet the published specification at the time of installation or Corning will replace it.

Corning UniCam® high-performance connectors offer best-in-class optical performance in a fast, easy field-termination solution. These high-precision zirconia ceramic ferrule connectors assured exceptional insertion loss – 0.1 dB typical/0.5 dB maximum per connector pair for multimode, 0.2 dB typical/0.5 dB maximum per connector pair for single-mode. Installation of an LC, SC or ST® compatible connector can be accomplished in about 50 seconds to one minute with the UniCam high-performance tool kit.

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# Part Number: 95-200-99

#### Features and Benefits

Performance guaranteed 100 percent yield guarantee

Single-mode (OS2)



#### **Features and Benefits**

Broad operating temperature (-40° to +75°C)

Utility and flexibility

Factory-polished end face

Consistent optical performance

Fast termination and no consumables

Low installation cost

**Minimum insertion loss** 

Optimum optical performance

#### **Standards**

Approvals and ListingsPassed EIA/TIA 568-B.3

Intermateability Connectors are FOCIS

compliant with TIA/EIA 604-10A and IEC61754-20

# **Specifications**

General Specifications	
Technology	No-Epoxy/No-Polish
Keyed	No
Product Type	Field-Installable Connectors
Corning Logo	Yes
Packaging	Single Pack
Fiber Category	Single-mode (OS2)

Temperature Range	
Operation	-40 °C to 75 °C exceeding EIA/TIA 568-B.3 (-40 °F to 167 °F exceeding EIA/TIA 568-B.3)

Design - Connector	
Connector Type	LC
Ferrule Material	Ceramic
Housing Material	Composite



Single-mode (OS2)



Design - Connector	
Housing Color	Blue
Boot Color	Blue

Mechanical Specifications - Connector	
Durability	≤ 0.2 dB change by 500 rematings, FOTP-21
Temperature Cycling	≤ 0.3 dB IL, -40° to +75°C, 21 cycles
Nominal Fiber Outer Diameter	125 µm
Tensile Strength Jacketed Cable	44 N, change $\leq$ 0.2 dB, FOTP-6 (11 lb, change $\leq$ 0.2 dB, FOTP-6)
Tensile Strength 900 μm Cable	4.9 N, change $\leq$ 0.2 dB, FOTP-6 (1.1 lb, change $\leq$ 0.2 dB, FOTP-6)

Optical Specifications - Connector	
Insertion Loss, Typical	0.2 dB
Insertion Loss, Maximum	0.5 dB
Reflectance	≤ -55 dB
Polish	UPC

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU

# Ordering Information REF# CS-096

Part Number	95-200-99
Product Description	UniCam® High-Performance Connector, LC, Single-mode (OS2), ceramic ferrule, logo, single pack, blue housing, blue boot
EAN Code	4042673619437

# **Shipping Information**

Units per Delivery	1/1
Package Contents	Connector, Trigger, Crimp Band, Boot (900 µm), Boot (3.0 mm,), Boot (2.0 mm)



# MIC® Tight-Buffered Cable, Riser

12 F, 50 µm multimode (OM3)





Corning MIC® riser cables are designed for use in riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900  $\mu m$  buffered fibers to enable easy, consistent stripping and facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding, making these cables ideal for routing inside buildings including riser shafts, to the telecommunications rooms and workstations. The MIC Riser Cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and the ICEA S-83-596 test criteria. They are OFNR and FT-4 listed for riser and general-purpose use.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

# Features and Benefits

900 µm Buffered Fibers
Easy, consistent stripping

All-dielectric construction
Requires no grounding or bonding

Flame-retardant jacket Rugged and durable

#### **Standards**

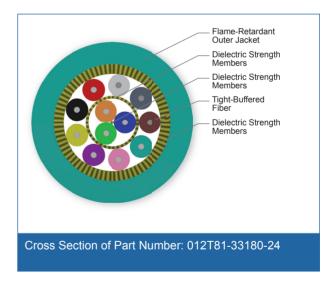
Listings National Electrical Code® (NEC®) OFNR, FT-4

Design and Test Criteria UL-1666 and CSA FT-4 (for

riser and general building applications); ICEA S-83-

596





12 F, 50 µm multimode (OM3)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Riser (OFNR)
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-20 °C to 70 °C (-4 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	12
Tight Buffer Color	Blue, Orange, Green
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term, ≤12F	660 N (150 lbf)
Max. Tensile Strength, Short-Term, >12F	1320 N (300 lbf)
Max. Tensile Strength, Long-Term, ≤12F	200 N (45 lbf)
Max. Tensile Strength, Long-Term, >12F	400 N (90 lbf)
Nominal Outer Diameter	6.10 mm (0.24 in)
Weight	30.1 kg/km (20.23 lb/1000 ft)
Min. Bend Radius Installation	91.5 mm (3.60 in)
Min. Bend Radius Operation	61 mm (2.40 in)



12 F, 50 µm multimode (OM3)



### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

# **Ordering Information**

REF# CS-097

Part Number	012T81-33180-24
Product Description	MIC $^{\circ}$ Tight-Buffered Cable, Riser, 12 F, 50 $\mu m$ multimode (OM3)
EAN Code	4056418180441



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24 F, 50 μm multimode (OM3)

REF# CS-098



Corning MIC® riser cables are designed for use in riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900  $\mu m$  buffered fibers to enable easy, consistent stripping and facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding, making these cables ideal for routing inside buildings including riser shafts, to the telecommunications rooms and workstations. The MIC Riser Cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and the ICEA S-83-596 test criteria. They are OFNR and FT-4 listed for riser and general-purpose use.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

### **Features and Benefits**

900 µm Buffered Fibers

Easy, consistent stripping

All-dielectric construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable

### **Standards**

Listings National Electrical Code®

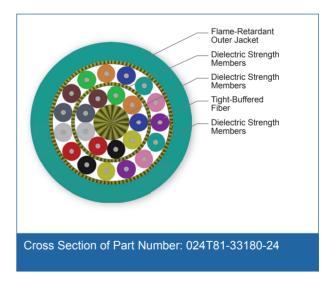
(NEC®) OFNR, FT-4

Design and Test Criteria UL-1666 and CSA FT-4 (for

riser and general building applications); ICEA S-83-

596







24 F, 50 µm multimode (OM3)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Riser (OFNR)
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-20 °C to 70 °C (-4 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	24
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Black*, Yellow*, Violet*, Rose*, Aqua*
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term, ≤12F	660 N (150 lbf)
Max. Tensile Strength, Short-Term, >12F	1320 N (300 lbf)
Max. Tensile Strength, Long-Term, ≤12F	200 N (45 lbf)
Max. Tensile Strength, Long-Term, >12F	400 N (90 lbf)
Nominal Outer Diameter	7.35 mm (0.29 in)
Weight	47.0 kg/km (28.88 lb/1000 ft)
Min. Bend Radius Installation	110.25 mm (4.34 in)
Min. Bend Radius Operation	73.5 mm (2.89 in)



24 F, 50 µm multimode (OM3)



### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

# **Ordering Information**

REF# CS-098

Part Number	024T81-33180-24
Product Description	MIC® Tight-Buffered Cable, Riser, 24 F, 50 $\mu m$ multimode (OM3)
EAN Code	4056418179124

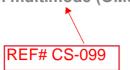


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12 F, 50 µm multimode (OM3)





Corning MIC® plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900 µm buffered fibers to allow easy, consistent stripping and to facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding. MIC plenum cables are ideal for routing inside buildings, within plenum areas and riser shafts, to the telecommunications rooms and workstations. The MIC plenum cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and are OFNP and FT-6 listed.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



### Features and Benefits

900 µm Buffered Fibers

Easy, consistent stripping

All-dielectric construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable

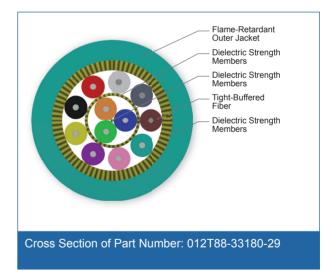
### **Standards**

Listings National Electrical Code® (NEC®) OFNP, FT-6

Design and Test Criteria NFPA 262 and CSA FT-6

(for plenum, riser and general building applications);

ICEA S-83-596





12 F, 50 µm multimode (OM3)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Plenum (OFNP)
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	0 °C to 60 °C (32 °F to 140 °F)
Operation	0 °C to 70 °C (32 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	12
Tight Buffer Color	Blue, Orange, Green
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term, ≤12F	440 N (100 lbf)
Max. Tensile Strength, Short-Term, >12F	660 N (150 lbf)
Max. Tensile Strength, Long-Term, ≤12F	132 N (30 lbf)
Max. Tensile Strength, Long-Term, >12F	200 N (45 lbf)
Nominal Outer Diameter	6.0 mm (0.24 in)
Weight	33.8 kg/km (23 lb/1000 ft)
Min. Bend Radius Operation	60 mm (2.4 in)
Min. Bend Radius Installation	92 mm (3.6 in)



12 F, 50 µm multimode (OM3)



### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

# Ordering Information REF# CS-099

Part Number	012T88-33180-29
Product Description	MIC $^{\circ}$ Tight-Buffered Cable, Plenum, 12 F, 50 $\mu$ m multimode (OM3)
EAN Code	4056418181424



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24 F, 50 µm multimode (OM3)





Corning MIC® plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900 µm buffered fibers to allow easy, consistent stripping and to facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding. MIC plenum cables are ideal for routing inside buildings, within plenum areas and riser shafts, to the telecommunications rooms and workstations. The MIC plenum cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and are OFNP and FT-6 listed.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



### Features and Benefits

900 µm Buffered Fibers

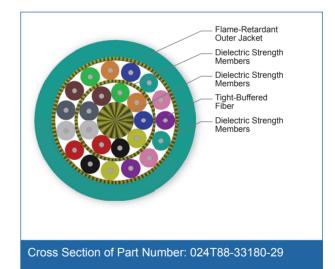
Easy, consistent stripping

All-dielectric construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable



### **Standards**

Listings National Electrical Code® (NEC®) OFNP, FT-6

**Design and Test Criteria** 

NFPA 262 and CSA FT-6 (for plenum, riser and general building applications); ICEA S-83-596



24 F, 50 µm multimode (OM3)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Plenum (OFNP)
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	0 °C to 60 °C (32 °F to 140 °F)
Operation	0 °C to 70 °C (32 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	24
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Black*, Yellow*, Violet*, Rose*, Aqua*
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term, ≤12F	440 N (100 lbf)
Max. Tensile Strength, Short-Term, >12F	660 N (150 lbf)
Max. Tensile Strength, Long-Term, ≤12F	132 N (30 lbf)
Max. Tensile Strength, Long-Term, >12F	200 N (45 lbf)
Nominal Outer Diameter	7.7 mm (0.31 in)
Weight	58.3 kg/km (39 lb/1000 ft)
Min. Bend Radius Operation	77 mm (3.1 in)
Min. Bend Radius Installation	117 mm (4.6 in)



24 F, 50 µm multimode (OM3)



### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

# **Ordering Information**

**REF# CS-100** 

Part Number	024T88-33180-29
Product Description	MIC $^{\circ}$ Tight-Buffered Cable, Plenum, 24 F, 50 $\mu$ m multimode (OM3)
EAN Code	4056418181479



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12 F, 50 µm multimode (OM3)



Corning MIC® interlocking armored plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use individually jacketed TBII® buffered fibers enabling easy, consistent stripping and facilitating termination. The fibers are grouped into jacketed subunits and surrounded by a dielectric central member.

The core is protected by a flexible, spirally wrapped, aluminum interlocking armor that offers easy, one-step installation and up to seven times the crush protection of unarmored cables. With a flame-retardant outer jacket, this cable is particularly useful for heavy traffic or more challenging mechanical exposure conditions and applications requiring extra rugged cables.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

### **Features and Benefits**

### Flexible, interlocking armor design

Seven times crush protection compared to unarmored cables

### TBII buffered fibers

Easy, consistent stripping

### Flame-retardant jacket

Rugged and durable

### **Standards**

**Approvals and Listings** 

National Electrical Code® (NEC®) OFCP, CSA FT-6,

ICEA S-83-596

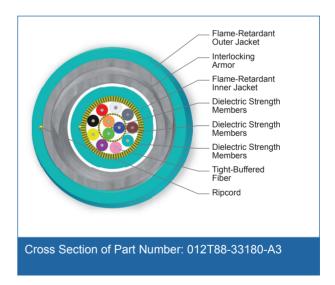
Flame Resistance

NFPA 262 (for plenum, riser and general building appli-

cations)







12 F, 50 μm multimode (OM3)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Tight-Buffered
Product Type	Interlocking armor
Flame Rating	Plenum (OFCP)
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	0 °C to 60 °C (32 °F to 140 °F)
Operation	0 °C to 70 °C (32 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	12
Tight Buffer Color	Blue, Orange, Green
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Number of Ripcords	2
Inner Jacket Material	Flame-retardant
Tensile Strength Elements and/or Armoring - Layer 3	Interlocking armor
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Nominal Outer Diameter	0.50 in (12.6 mm)
Nominal Inner Cable Diameter	6.1 mm (0.24 in)
Min. Bend Radius Operation	5.0 in (126 mm)
Weight	151 kg/km (105 lb/1000 ft)
Max. Tensile Strength, Short-Term	440 N (100 lbf)



12 F, 50 µm multimode (OM3)



Mechanical Characteristics Cable	
Max. Tensile Strength, Long-Term	132 N (30 lbf)
Min. Bend Radius Installation	189 mm (7.4 in)

### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

# Ordering Information REF# CS-101

Part Number	012T88-33180-A3
Product Description	MIC® Tight-Buffered, Interlocking Armored Cable, Plenum, 12 F, 50 $\mu m$ multimode (OM3)
EAN Code	4056418181462



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24 F, 50 µm multimode (OM3)



Corning MIC® interlocking armored plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use individually jacketed TBII® buffered fibers enabling easy, consistent stripping and facilitating termination. The fibers are grouped into jacketed subunits and surrounded by a dielectric central member.

The core is protected by a flexible, spirally wrapped, aluminum interlocking armor that offers easy, one-step installation and up to seven times the crush protection of unarmored cables. With a flame-retardant outer jacket, this cable is particularly useful for heavy traffic or more challenging mechanical exposure conditions and applications requiring extra rugged cables.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

### **Features and Benefits**

### Flexible, interlocking armor design

Seven times crush protection compared to unarmored cables

### TBII buffered fibers

Easy, consistent stripping

### Flame-retardant jacket

Rugged and durable

### **Standards**

**Approvals and Listings** 

National Electrical Code<sup>®</sup> (NEC<sup>®</sup>) OFCP, CSA FT-6,

ICEA S-83-596

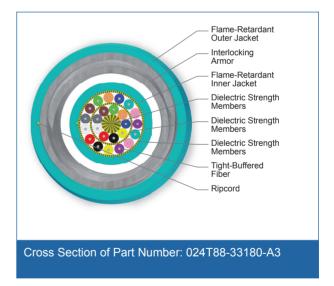
Flame Resistance

NFPA 262 (for plenum, riser and general building appli-

cations)









24 F, 50 μm multimode (OM3)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Tight-Buffered
Product Type	Interlocking armor
Flame Rating	Plenum (OFCP)
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	0 °C to 60 °C (32 °F to 140 °F)
Operation	0 °C to 70 °C (32 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	24
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Black*, Yellow*, Violet*, Rose*, Aqua*
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Number of Ripcords	2
Inner Jacket Material	Flame-retardant
Tensile Strength Elements and/or Armoring - Layer 3	Interlocking armor
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Nominal Inner Cable Diameter	7.8 mm (0.31 in)
Nominal Outer Diameter	14.3 mm (0.56 in)
Weight	197 kg/km (136 lb/1000 ft)
Max. Tensile Strength, Short-Term	660 N (150 lbf)
Max. Tensile Strength, Long-Term	200 N (45 lbf)



24 F, 50 µm multimode (OM3)



Mechanical Characteristics Cable	
Min. Bend Radius Installation	215 mm (8.5 in)
Min. Bend Radius Operation	143 mm (5.6 in)

### Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	T
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

# Ordering Information REF# CS-102

Part Number	024T88-33180-A3
Product Description	$\mbox{MIC}^{\mbox{\scriptsize \$}}$ Tight-Buffered, Interlocking Armored Cable, Plenum, 24 F, 50 $\mu\mbox{\scriptsize m}$ multimode (OM3)
EAN Code	4056418181554



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12 F, 50 µm multimode (OM4)





Corning MIC® plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900 µm buffered fibers to allow easy, consistent stripping and to facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding. MIC plenum cables are ideal for routing inside buildings, within plenum areas and riser shafts, to the telecommunications rooms and workstations. The MIC plenum cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and are OFNP and FT-6 listed.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



### Features and Benefits

900 µm Buffered Fibers

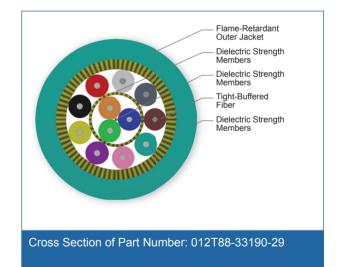
Easy, consistent stripping

All-dielectric construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable



### **Standards**

**Listings** National Electrical Code®

(NEC®) OFNP, FT-6

Design and Test Criteria NFPA 262 and CSA FT-6

(for plenum, riser and general building applications);

ICEA S-83-596



12 F, 50 µm multimode (OM4)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Plenum (OFNP)
Fiber Category	50 μm MM (OM4)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	0 °C to 60 °C (32 °F to 140 °F)
Operation	0 °C to 70 °C (32 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	12
Tight Buffer Color	Blue, Orange, Green
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term, ≤12F	440 N (100 lbf)
Max. Tensile Strength, Short-Term, >12F	660 N (150 lbf)
Max. Tensile Strength, Long-Term, ≤12F	132 N (30 lbf)
Max. Tensile Strength, Long-Term, >12F	200 N (45 lbf)
Nominal Outer Diameter	6.0 mm (0.24 in)
Weight	33.8 kg/km (23 lb/1000 ft)
Min. Bend Radius Operation	60 mm (2.4 in)
Min. Bend Radius Installation	92 mm (3.6 in)



12 F, 50 µm multimode (OM4)



### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM4
Fiber Code	Т
Performance Option Code	90
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -

# Ordering Information

REF# CS-103

Part Number	012T88-33190-29
Product Description	MIC $^{\circ}$ Tight-Buffered Cable, Plenum, 12 F, 50 $\mu$ m multimode (OM4)
EAN Code	4056418180786



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24 F, 50 µm multimode (OM4)



CORNING

Corning MIC® plenum cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900  $\mu m$  buffered fibers to allow easy, consistent stripping and to facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding. MIC plenum cables are ideal for routing inside buildings, within plenum areas and riser shafts, to the telecommunications rooms and workstations. The MIC plenum cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and are OFNP and FT-6 listed.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.



### Features and Benefits

900 µm Buffered Fibers

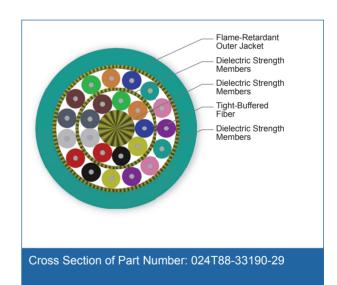
Easy, consistent stripping

All-dielectric construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable



### **Standards**

Listings National Electrical Code®

(NEC®) OFNP, FT-6

Design and Test Criteria NFPA 262 and CSA FT-6

(for plenum, riser and general building applications);

ICEA S-83-596

24 F, 50 μm multimode (OM4)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser, Plenum
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Plenum (OFNP)
Fiber Category	50 μm MM (OM4)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	0 °C to 60 °C (32 °F to 140 °F)
Operation	0 °C to 70 °C (32 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	24
Tight Buffer Color	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Violet, Rose, Aqua, Blue*, Orange*, Green*, Brown*, Slate*, White*, Red*, Black*, Yellow*, Violet*, Rose*, Aqua*
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Aqua

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term, ≤12F	440 N (100 lbf)
Max. Tensile Strength, Short-Term, >12F	660 N (150 lbf)
Max. Tensile Strength, Long-Term, ≤12F	132 N (30 lbf)
Max. Tensile Strength, Long-Term, >12F	200 N (45 lbf)
Nominal Outer Diameter	7.7 mm (0.31 in)
Weight	58.3 kg/km (39 lb/1000 ft)
Min. Bend Radius Operation	77 mm (3.1 in)
Min. Bend Radius Installation	117 mm (4.6 in)



24 F, 50 µm multimode (OM4)



### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM4
Fiber Code	Т
Performance Option Code	90
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	2.8 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	550 m / -
Min. Overfilled Launch (OFL) Bandwidth	3500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	4700 MHz*km / -

### Ordering Information REF# CS-104

Part Number	024T88-33190-29
Product Description	MIC® Tight-Buffered Cable, Plenum, 24 F, 50 $\mu$ m multimode (OM4)
EAN Code	4056418180366



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12 F, 50 µm multimode (OM3)





Corning ALTOS® all-dielectric gel-free cables are designed for outdoor and limited indoor use for campus backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swellable materials, which means cable access is simple and no clean up is required. The flexible craft-friendly buffer tubes are easy to route in closures, and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy mid-span access. The all-dielectric cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

### **Features and Benefits**

**Gel-free waterblocking technology** Craft-friendly cable preparation

### Medium-density polyethylene jacket

Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

### All-dielectric construction

Requires no grounding or bonding

### **Standards**

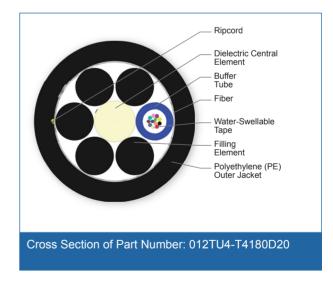
Common Installations Outdoor lashed aerial and

duct; indoor when installed according to National Electrical Code® (NEC®)

Article 770

Design and Test Criteria ANSI/ICEA S-87-640





General Specifications	
Environment	Outdoor
Application	Aerial, Duct
Cable Type	Loose Tube



12 F, 50 μm multimode (OM3)



General Specifications	
Product Type	Dielectric
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	12
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	1
Buffer Tube Color Coding	Blue
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	5
Tape	Water-swellable
Number of Ripcords	1
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black
Maximum Fibers per Tube	12

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Weight	73 kg/km (49 lb/1000 ft)
Nominal Outer Diameter	10.5 mm (0.41 in)
Min. Bend Radius Installation	158 mm (6.2 in)
Min. Bend Radius Operation	105 mm (4.1 in)



12 F, 50 µm multimode (OM3)



Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/EG

### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

- 2) Improved attenuation and bandwidth options available.
- Bend-insensitive single-mode fibers available on request.
- 4) Contact a Corning Customer Care Representative for additional information.

# **Ordering Information**

REF# CS-105

Part Number	012TU4-T4180D20
Product Description	ALTOS® Loose Tube, Gel-Free Cable, 12 F, 50 µm multimode (OM3)
EAN Code	4056418177199



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24 F, 50 µm multimode (OM3)





Corning ALTOS® all-dielectric gel-free cables are designed for outdoor and limited indoor use for campus backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swellable materials, which means cable access is simple and no clean up is required. The flexible craft-friendly buffer tubes are easy to route in closures, and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy mid-span access. The all-dielectric cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

### **Features and Benefits**

**Gel-free waterblocking technology** Craft-friendly cable preparation

### Medium-density polyethylene jacket

Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

### All-dielectric construction

Requires no grounding or bonding

### **Standards**

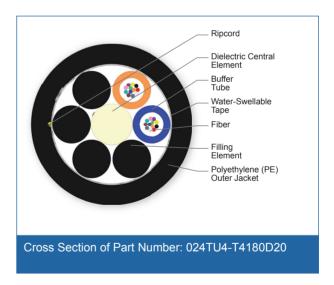
Common Installations

Outdoor lashed aerial and duct; indoor when installed according to National Electrical Code® (NEC®) Article 770

Article /

Design and Test Criteria ANSI/ICEA S-87-640





24 F, 50 μm multimode (OM3)



General Specifications	
Environment	Outdoor
Application	Aerial, Duct
Cable Type	Loose Tube
Product Type	Dielectric
Fiber Category	50 μm MM (OM3)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	24
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	2
Buffer Tube Color Coding	Blue, Orange
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	4
Tape	Water-swellable
Number of Ripcords	1
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black
Maximum Fibers per Tube	12

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term	2700 N (600 lbf)
Max. Tensile Strength, Long-Term	890 N (200 lbf)
Weight	73 kg/km (49 lb/1000 ft)
Nominal Outer Diameter	10.5 mm (0.41 in)



24 F, 50 µm multimode (OM3)



Mechanical Characteristics Cable	
Min. Bend Radius Installation	158 mm (6.2 in)
Min. Bend Radius Operation	105 mm (4.1 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

# Fiber Specifications

Optical Characteristics (cabled)	
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Code	Т
Performance Option Code	80
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Serial 1 Gigabit Ethernet	1000 m / 600 m
Serial 10 Gigabit Ethernet	300 m / -
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -

<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

- 2) Improved attenuation and bandwidth options available.
- 3) Bend-insensitive single-mode fibers available on request.
- 4) Contact a Corning Customer Care Representative for additional information.

# Ordering Information REF# CS-106

Part Number	024TU4-T4180D20
Product Description	ALTOS® Loose Tube, Gel-Free Cable, 24 F, 50 $\mu m$ multimode (OM3)
EAN Code	4056418176192



12 F, Single-mode (OS2)





Corning MIC® riser cables are designed for use in riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900  $\mu m$  buffered fibers to enable easy, consistent stripping and facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding, making these cables ideal for routing inside buildings including riser shafts, to the telecommunications rooms and workstations. The MIC Riser Cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and the ICEA S-83-596 test criteria. They are OFNR and FT-4 listed for riser and general-purpose use.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

# Part Number: 012E81-33131-24

### Features and Benefits

900 µm Buffered Fibers

Easy, consistent stripping

All-dielectric construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable

# Flame-Retardant Outer Jacket Dielectric Strength Members Dielectric Strength Members Tight-Buffered Fiber Dielectric Strength Members Tight-Buffered Fiber Dielectric Strength Members

### **Standards**

Listings National Electrical Code® (NEC®) OFNR, FT-4

Design and Test Criteria UL-1666 and CSA FT-4 (for

riser and general building applications); ICEA S-83-

596

12 F, Single-mode (OS2)



General Specifications	
Environment	Indoor
Application	General Purpose Horizontal, Vertical Riser
Cable Type	Tight-Buffered
Product Type	Distribution
Flame Rating	Riser (OFNR)
Fiber Category	Single-mode (OS2)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-10 °C to 60 °C (14 °F to 140 °F)
Operation	-20 °C to 70 °C (-4 °F to 158 °F)

Cable Design	
Central Element	Yarn
Fiber Count	12
Tight Buffer Color	Blue, Orange, Green
Tensile Strength Elements and/or Armoring - Layer 1	Dielectric strength members
Tight Buffer Color, Layer 2	Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Tensile Strength Elements and/or Armoring - Layer 2	Dielectric strength members
Outer Jacket Material	Flame-retardant
Outer Jacket Color	Yellow

Mechanical Characteristics Cable	
Max. Tensile Strength, Short-Term, ≤12F	660 N (150 lbf)
Max. Tensile Strength, Short-Term, >12F	1320 N (300 lbf)
Max. Tensile Strength, Long-Term, ≤12F	200 N (45 lbf)
Max. Tensile Strength, Long-Term, >12F	400 N (90 lbf)
Nominal Outer Diameter	6.10 mm (0.24 in)
Weight	30.1 kg/km (20.23 lb/1000 ft)
Min. Bend Radius Installation	91.5 mm (3.60 in)
Min. Bend Radius Operation	61 mm (2.40 in)



12 F, Single-mode (OS2)



### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Name	SMF-28e <sup>®</sup> fiber
Fiber Category	G.652.D
Fiber Code	E
Performance Option Code	31
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.65 dB/km / 0.65 dB/km / 0.50 dB/km

# Ordering Information REF# CS-107

Part Number	012E81-33131-24
Product Description	MIC® Tight-Buffered Cable, Riser, 12 F, Single-mode (OS2)
EAN Code	4056418191010



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24 F, Single-mode (OS2)

**CORNING** 

REF# CS-108

Corning MIC® riser cables are designed for use in riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use 900 µm buffered fibers to enable easy, consistent stripping and facilitate termination. The fibers are surrounded by dielectric strength members and protected by a flame-retardant outer jacket.

The all-dielectric cable construction requires no grounding or bonding, making these cables ideal for routing inside buildings including riser shafts, to the telecommunications rooms and workstations. The MIC Riser Cables meet the application requirements of the National Electrical Code® (NEC®) Article 770 and the ICEA S-83-596 test criteria. They are OFNR and FT-4 listed for riser and general-purpose use.

This cable is available in 12 different jacket colors – blue, orange, green, brown, slate, white, red, black, yellow, violet, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.

### **Features and Benefits**

900 µm Buffered Fibers

Easy, consistent stripping

All-dielectric construction

Requires no grounding or bonding

Flame-retardant jacket

Rugged and durable

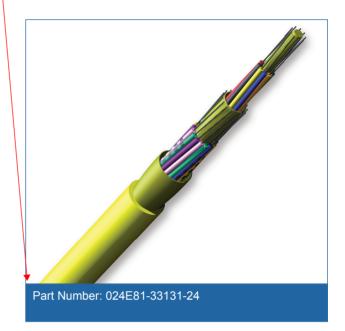
### **Standards**

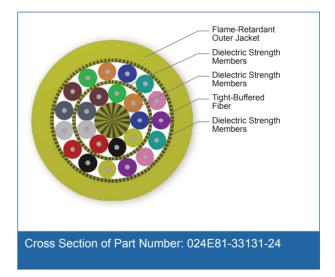
Listings National Electrical Code® (NEC®) OFNR, FT-4

Design and Test Criteria UL-1666 and CSA FT-4 (for

riser and general building applications); ICEA S-83-

596







12 F, Single-mode (OS2)

**REF# CS-109** 



Corning ALTOS® all-dielectric gel-free cables are designed for outdoor and limited indoor use for backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swellable materials, which means cable access is simple and no clean up is required. The flexible craft-friendly buffer tubes are easy to route in closures, and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy mid-span access. The all-dielectric cable construction requires no bonding or grounding, and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

### Features and Benefits

**Gel-free waterblocking technology** Craft-friendly cable preparation

### Medium-density polyethylene jacket

Rugged, durable and easy to strip (while providing superior protection against UV radiation, fungus, abrasion and other environmental factors)

### **All-dielectric construction**

Requires no grounding or bonding

### **Standards**

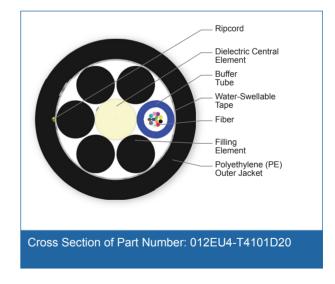
Common Installations Outdoor lashed aerial and

duct; indoor when installed according to National Electrical Code® (NEC®)

Article 770

Design and Test Criteria ANSI/ICEA S-87-640





General Specifications	
Environment	Outdoor
Application	Aerial, Duct
Cable Type	Loose Tube



24 F, Single-mode (OS2)

CORNING

**REF# CS-110** 

Corning Cable Systems ALTOS® All-Dielectric Gel-Free Cables are designed for outdoor and limited indoor use for campus backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swellable materials, which means cable access is simple and no clean up is required. The flexible craft-friendly buffer tubes are easy to route in closures and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy midspan access. The all-dielectric cable construction requires no bonding or grounding and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

### **Features and Benefits**

**Gel-free waterblocking technology** Craft-friendly cable preparation

### Medium-density polyethylene jacket

Rugged, durable and easy to strip while providing superior protection against UV radiation, fungus, abrasion and other environmental factors

### All-dielectric construction

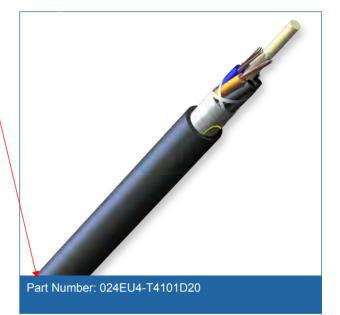
Requires no grounding or bonding

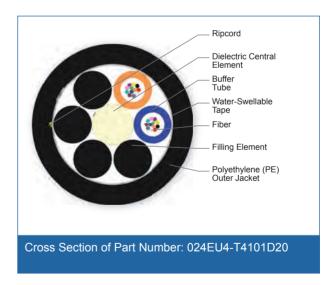
### **Standards**

**Common Installations** 

Outdoor lashed aerial and duct; indoor when installed according to National Electrical Code® (NEC®) Article 770

Design and Test Criteria ANSI/ICEA S-87-640





24 F, Single-mode (OS2)



General Specifications	
Environment	Outdoor
Application	Aerial, Duct
Cable Type	Loose Tube
Product Type	Dielectric
Fiber Category	Single-mode (OS2)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Central ElementDielectricFiber Count24Fiber ColoringBlue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, AquaFibers per Tube12Number of Tube Positions6Number of Active Tubes2Buffer Tube Color CodingBlue, OrangeBuffer Tube Diameter2.5 mm (0.1 in)Number of Filling Elements4TapeWater-swellableNumber of Ripcords1Outer Jacket MaterialPolyethylene (PE)	Cable Design	
Fiber Coloring  Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua  Fibers per Tube  12  Number of Tube Positions  6  Number of Active Tubes  2  Buffer Tube Color Coding  Blue, Orange  Buffer Tube Diameter  2.5 mm (0.1 in)  Number of Filling Elements  4  Tape  Water-swellable  Number of Ripcords	Central Element	Dielectric
Fiber Coloring  Violet, Rose, Aqua  Fibers per Tube  12  Number of Tube Positions  6  Number of Active Tubes  2  Buffer Tube Color Coding  Buffer Tube Diameter  2.5 mm (0.1 in)  Number of Filling Elements  4  Tape  Water-swellable  Number of Ripcords	Fiber Count	24
Number of Tube Positions 6 Number of Active Tubes 2 Buffer Tube Color Coding Blue, Orange Buffer Tube Diameter 2.5 mm (0.1 in) Number of Filling Elements 4 Tape Water-swellable Number of Ripcords 1	Fiber Coloring	
Number of Active Tubes       2         Buffer Tube Color Coding       Blue, Orange         Buffer Tube Diameter       2.5 mm (0.1 in)         Number of Filling Elements       4         Tape       Water-swellable         Number of Ripcords       1	Fibers per Tube	12
Buffer Tube Color Coding Buffer Tube Diameter 2.5 mm (0.1 in) Number of Filling Elements 4 Tape Water-swellable Number of Ripcords 1	Number of Tube Positions	6
Buffer Tube Diameter 2.5 mm (0.1 in)  Number of Filling Elements 4  Tape Water-swellable  Number of Ripcords 1	Number of Active Tubes	2
Number of Filling Elements     4       Tape     Water-swellable       Number of Ripcords     1	Buffer Tube Color Coding	Blue, Orange
Tape Water-swellable Number of Ripcords 1	Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Ripcords 1	Number of Filling Elements	4
	Tape	Water-swellable
Outer Jacket Material Polyethylene (PE)	Number of Ripcords	1
	Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color Black	Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strengths, Short-Term	2700 N (600 lbf)
Max. Tensile Strengths, Long-Term	890 N (200 lbf)
Weight	73 kg/km (49 lb/1000 ft)
Nominal Outer Diameter	10.5 mm (0.41 in)



24 F, Single-mode (OS2)



Mechanical Characteristics Cable	
Min. Bend Radius Installation	158 mm (6.2 in)
Min. Bend Radius Operation	105 mm (4.1 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

## Fiber Specifications

Optical Characteristics (cabled)		
Fiber Type	Single-mode	
Fiber Core Diameter	8.2 µm	
Fiber Category	OS2	
Fiber Code	E	
Performance Option Code	01	
Wavelengths	1310 nm / 1383 nm / 1550 nm	
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km	
Serial 1 Gigabit Ethernet	5000 m / - / -	
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m	

<sup>\*</sup> ITU-T G.652 D compliant.

Notes: 1) Improved attenuation and bandwidth options available.

- 2) Bend-insensitive single-mode fibers available on request.
- 3) Contact a Corning Cable Systems Customer Care Representative for additional information.

Ordering Information	REF# CS-110 - Continued information		
		*	024EU4-T4101D20
Product Description	-		ALTOS® Loose Tube, Gel-Free Cable, 24 F, Single-mode (OS2)



<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

24 F, Single-mode (OS2)



**Notes** 



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48 F, Single-mode (OS2)

CORNING

REF# CS-111

Corning Cable Systems ALTOS® All-Dielectric Gel-Free Cables are designed for outdoor and limited indoor use for campus backbones in lashed aerial and duct installations. The loose tube gel-free design is fully waterblocked using craft-friendly, water-swellable materials, which means cable access is simple and no clean up is required. The flexible craft-friendly buffer tubes are easy to route in closures and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy midspan access. The all-dielectric cable construction requires no bonding or grounding and these cables have a medium-density polyethylene jacket that is rugged, durable and easy to strip.

#### **Features and Benefits**

**Gel-free waterblocking technology** Craft-friendly cable preparation

#### Medium-density polyethylene jacket

Rugged, durable and easy to strip while providing superior protection against UV radiation, fungus, abrasion and other environmental factors

#### All-dielectric construction

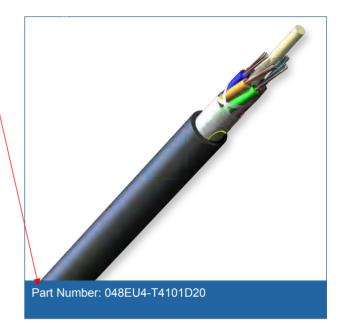
Requires no grounding or bonding

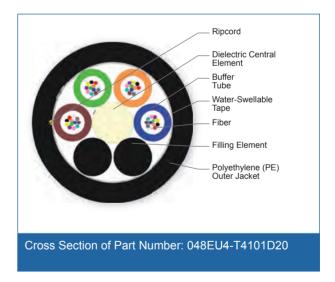
#### **Standards**

**Common Installations** 

Outdoor lashed aerial and duct; indoor when installed according to National Electrical Code® (NEC®) Article 770

Design and Test Criteria ANSI/ICEA S-87-640





48 F, Single-mode (OS2)



General Specifications		
Environment	Outdoor	
Application	Aerial, Duct	
Cable Type	Loose Tube	
Product Type	Dielectric	
Fiber Category	Single-mode (OS2)	

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	48
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	4
Buffer Tube Color Coding	Blue, Orange, Green, Brown
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	2
Таре	Water-swellable
Number of Ripcords	1
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

Mechanical Characteristics Cable		
Max. Tensile Strengths, Short-Term	2700 N (600 lbf)	
Max. Tensile Strengths, Long-Term	890 N (200 lbf)	
Weight	73 kg/km (49 lb/1000 ft)	
Nominal Outer Diameter	10.5 mm (0.41 in)	



48 F, Single-mode (OS2)



Mechanical Characteristics Cable	
Min. Bend Radius Installation	158 mm (6.2 in)
Min. Bend Radius Operation	105 mm (4.1 in)

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

## Fiber Specifications

Optical Characteristics (cabled)		
Fiber Type	Single-mode	
Fiber Core Diameter	8.2 µm	
Fiber Category	OS2	
Fiber Code	E	
Performance Option Code	01	
Wavelengths	1310 nm / 1383 nm / 1550 nm	
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km	
Serial 1 Gigabit Ethernet	5000 m / - / -	
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m	

<sup>\*</sup> ITU-T G.652 D compliant.

•

- Notes: 1) Improved attenuation and bandwidth options available.
  2) Bend-insensitive single-mode fibers available on request.
  - 3) Contact a Corning Cable Systems Customer Care Representative for additional information.

Ordering Information	REF# CS-111 - Continued		
Part Number	information	,	048EU4-T4101D20
Product Description			ALTOS® Loose Tube, Gel-Free Cable, 48 F, Single-mode (OS2)



<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

48 F, Single-mode (OS2)



**Notes** 



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# Carlon Riser-Gard®

Applications: Riser and General Purpose Applications per Articles 770 and 800. Suitable for vertical runs in a shaft or between floors **UL Listed to 2024** • Maximum Flame Propagation 6.0 ft. Max. Value

#### **Standard Stock - Reels**

### **REF# CS-112**

#### Standard Stock - Coils

(Overnight Shippable)

	Color	Part No.	Nom. I.D.	Nom. O.D.	Pull Tape	Reel Size (F x W)	Reel Length (ft.)	Wt. per 100 ft. (lbs.)
3/4"	Orange	DE4X1-1000	.83"	1.05"	Empty	36" x 24"	1000	9
74	Orange	DE4X1-1000S	.83"	1.05"	Empty	36" x 24"	1000/Split	9
	Orange	DF4X1C-500R	1.03"	1.31"	900 lb.	48" x 24"	500	14
	Orange	DF4X1C-1000	1.03"	1.31"	900 lb.	48" x 32"	1000	14
	Orange	DF4X1-1500	1.03"	1.31"	Empty	48" x 32"	1500	14
	Orange	DF4X1C-1500	1.03"	1.31"	900 lb.	48" x 32"	1500	14
1"	Orange	DF4X1-1500S	1.03"	1.31"	Empty	48" x 32"	1500/Split	14
	Orange	DF4X1C-2700	1.03"	1.31"	900 lb.	48" x 48"	2700	14
	Orange	DF4X1C-5200	1.03"	1.31"	900 lb.	65" x 46"	5200	14
	Orange	DF4X1C-7000	1.03"	1.31"	900 lb.	72" x 44"	7000	14
	Orange	DF4X1C-8000	1.03"	1.31"	900 lb.	82" x 41"	8000	14
	Orange	DF4X1C-9400	1.03"	1.31"	900 lb.	84" x 44"	9400	14
	Orange	DG4X1C-500R	1.38"	1.66"	900 lb.	48" x 32"	500	17
	Orange	DG4X1-900	1.38"	1.66"	900 lb.	48" x 32"	900	17
	Orange	DG4X1C-900	1.38"	1.66"	900 lb.	48" x 32"	900	17
	Orange	DG4X1-900S	1.38"	1.66"	Empty	48" x 32"	900/Split	17
11/4"	Orange	DG4X1C-1600	1.38"	1.66"	900 lb.	48" x 48"	1600	17
	Orange	DG4X1C-3200	1.38"	1.66"	900 lb.	65" x 48"	3200	17
	Orange	DG4X1C-4500	1.38"	1.66"	900 lb.	72" x 44"	4500	17
	Orange	DG4X1C-5600	1.38"	1.66"	900 lb.	84" x 44"	5600	17
	Orange	DG4X1C-6500	1.38"	1.66"	900 lb.	82" x 41"	6500	17
	Orange	DH4X1-750S	1.57"	1.90"	Empty	48" x 32"	750/Split	22
11/2"	Orange	DH4X1C-1200	1.57"	1.90"	900 lb.	48" x 48"	1200	22
1 '/2	Orange	DH4X1C-4000	1.57"	1.90"	900 lb.	82" x 41"	4000	22
	Orange	DH4X1C-4500	1.57"	1.90"	900 lb.	84" x 44"	4500	22
	Orange	DJ4X1-500S	2.02"	2.37"	Empty	48" x 32"	500/Split	26
2"	Orange	DJ4X1C-700	2.02"	2.37"	900 lb.	48" x 48"	700	26
_	Orange	DJ4X1C-2000	2.02"	2.37"	900 lb.	82" x 41"	2000	26
	Orange	DJ4X1C-2800	2.02"	2.37"	900 lb.	96" x 44"	2800	26

						_		
		Color	Part No.	Nom. I.D.	Nom. O.D.	Pull Tape	Coil Length (ft.)	Wt. per 100 ft. (lbs.)
	3/4"	Orange	DE4X1-350	.83"	1.04"	Empty	350	9
	74	Orange	DE4X1-350S	.83"	1.04"	Empty	350/ Split	9
		Orange	DF4X1-250	1.05"	1.31"	Empty	250	14
<u>/</u>	1"	Orange	DF4X1C-250	1.05"	1.31"	900 lb.	250	14
	'	Orange	DF4X1-250S	1.05"	1.31"	Empty	250/ Split	14
		Orange	DF4X1C-500	1.05"	1.31"	900 lb.	500	14
		Orange	DG4X1-200	1.38"	1.65"	Empty	200	17
	<b>1</b> <sup>1</sup> / <sub>4</sub> "	Orange	DG4X1C-200	1.38"	1.65"	900 lb.	200	17
	1 /4	Orange	DG4X1-200S	1.38"	1.65"	Empty	200/ Split	17
		Orange	DG4X1C-500	1.38"	1.65"	900 lb.	500	17
	1 <sup>1</sup> /2"	Orange	DH4X1C-150	1.55"	1.88"	900 lb.	150	22
	. /2	Orange	DH4X1-150S	1.55"	1.88"	Empty	150/ Split	22
	2"	Orange	DJ4X1C-100	2.04"	2.35"	900 lb.	100	26
		Orange	DJ4X1-100S	2.04"	2.35"	Empty	100/ Split	26

- **Custom Orders** \* Custom Orders are not returnable
  - \* Custom lengths are available in minimum order quantities of 1000 ft.
  - \* Custom color runs are available in minimum order quantities of 10,000 ft.

#### **Options:**

- Two, three, or four way parallel
- Custom print line

#### How to Build a Part Number:

Position 1 - Product	Position 2 - Size	Position 3 - Configuration	Position 4 - Wall	Position 5 - Color	Position 6 - Pull Line	Position 7 - Length
D = Riser-Gard	E = 3/4" F = 1" G = 1-1/4" H = 1-1/2" J = 2"	4 = Corrugated	X = Standard  Page CS-151	1 = Orange 2 = Blue 3 = Gray 4 = White 5 = Green 6 = Black 7 = Yellow 8 = Red 9 = Brown	C = 900 lb. Tape	Example -1000 = Feet -1000S = 1000 Feet Split
			1 490 00 101			

# Carlon Plenum-Gard®

**Applications:** Plenum, Riser and General Purpose Applications per Articles 770 and 800

- **UL Listed to 2024 Standard**
- Maximum flame propagation distance is less than 5.0 ft.
- The peak optical density of smoke is less than 0.50
- The average optical density of smoke is less than 0.15

#### Standard Stock - Reels

### REF# CS-113

### Standard Stock - Coils

(Overnight Shippable)

	Color	Part No.	Nom. I.D.	Nom. O.D.	Pull Tape	Reel Size (F x W)	Reel Length (ft.)	Wt. per 100 ft. (lbs.)
	Orange	CE4X1-1000	.83"	1.04"	Empty	36" x 24"	1000	8
3/4"	Orange	CE4X1-1000S	.83"	1.04"	Empty	36" x 24"	1000/Split	8
	White	CE4X4-1000	.83"	1.04"	Empty	34" x 28"	1000	8
	Orange	CF4X1C-500	1.05"	1.31"	900 lb.	36" x 24"	500	10
	Orange	CF4X1C-1000	1.05"	1.31"	900 lb.	48" x 32"	1000	10
	Orange	CF4X1C-1500	1.05"	1.31"	900 lb.	48" x 32"	1500	10
1"	Orange	CF4X1-1500S	1.05"	1.31"	Empty	48" x 32"	1500/Split	10
1	Orange	CF4X1C-5200	1.05"	1.31"	900 lb.	65" x 48"	5200	10
	Orange	CF4X1C-8000	1.05"	1.31"	900 lb.	82" x 41"	8000	10
	White	CF4X4C-500	1.05"	1.31"	900 lb.	36" x 24"	500	10
	White	CF4X4C-1500	1.05"	1.31"	900 lb.	48" x 32"	1500	10
	White	CF4X4C-5200	1.05"	1.31"	900 lb.	65" x 46"	5200	10
	Orange	CG4X1C-500	1.38"	1.65"	900 lb.	36" x 24"	500	16
	Orange	CG4X1C-900	1.38"	1.65"	900 lb.	48" x 32"	900	16
	Orange	CG4X1-900S	1.38"	1.65"	Empty	48" x 32"	900/Split	16
11/4"	Orange	CG4X1C-1600	1.38"	1.65"	900 lb.	48" x 46"	1600	16
1 74	Orange	CG4X1C-3200	1.38"	1.65"	900 lb.	65" x 48"	3200	16
	Orange	CG4X1C-6500	1.38"	1.65"	900 lb.	96" x 41"	6500	16
	White	CG4X4C-900	1.38"	1.65"	900 lb.	48" x 32"	900	16
	White	CG4X4C-3200	1.38"	1.65"	900 lb.	65" x 46"	3200	16
	Orange	CH4X1C-350	1.55"	1.88"	900 lb.	48" x 32"	350	20
11/2"	Orange	CH4X1C-1200	1.55"	1.88"	900 lb.	48" x 46"	1200	20
1 /2	Orange	CH4X1C-4000	1.55"	1.88"	900 lb.	82" x 41"	4000	20
	White	CH4X4C-1200	1.55"	1.88"	900 lb.	48" X 46"	1200	20
	Orange	CJ4X1C-225	2.04"	2.35"	900 lb.	48" x 32"	225	23
	Orange	CJ4X1C-700	2.04"	2.35"	900 lb.	48" x 46"	700	23
2"	Orange	CJ4X1C-1400	2.04"	2.35"	900 lb.	72" x 41"	1400	23
	Orange	CJ4X1C-2000	2.04"	2.35"	900 lb.	82" x 41"	2000	23
	White	CJ4X4C-700	2.04"	2.35"	900 lb.	48" x 46"	700	23

Т								
		Color	Part No.	Nom. I.D.	Nom. O.D.	Pull Tape	Coil Length (ft.)	Wt. per 100 ft. (lbs.)
		Orange	CE4X1-350	.83"	1.04"	Empty	350	8
	3/4"	Orange	CE4X1-350S	.83"	1.04"	Empty	350/ Split	8
		White	CE4X4-350	.83"	1.04"	Empty	350	8
		Orange	CF4X1C-100	1.05"	1.31"	900 lb.	100	10
1	<del>/ &gt;</del>	Orange	CF4X1C-250	1.05"	1.31"	900 lb.	250	10
	1"	Orange	CF4X1-250	1.05"	1.31"	Empty	250	10
		Orange	CF4X1-250S	1.05"	1.31"	Empty	250/ Split	10
		White	CF4X4C-250	1.05"	1.31"	900 lb.	250	10
		Orange	CG4X1C-200	1.38"	1.65"	900 lb.	200	16
	1 <sup>1</sup> / <sub>4</sub> "	Orange	CG4X1-200S	1.38"	1.65"	Empty	200/ Split	16
	. /4	White	CG4X4C-200	1.38"	1.65"	900 lb.	200	16
		White	CG4X4C-500	1.38"	1.65"	900 lb.	500	16
		Orange	CH4X1C-150	1.55"	1.88"	900 lb.	150	20
	<b>1</b> <sup>1</sup> / <sub>2</sub> "	Orange	CH4X1-150S	1.55"	1.88"	Empty	150/ Split	20
		White	CH4X4C-150	1.55"	1.88"	900 lb.	150	20
		Orange	CJ4X1C-100	2.04"	2.35"	900 lb.	100	23
	2"	Orange	CJ4X1-100S	2.04"	2.35"	Empty	100/ Split	23
		White	CJ4X4C-100	2.04"	2.35"	900 LBS.	100	23

#### **Custom Orders**

- \* Custom Orders are not returnable
- \* Custom lengths are available in minimum order quantities of 1000 ft.
- \* Custom color runs are available in minimum order quantities of 10,000 ft.

#### **Options:**

- Two, three, or four way parallel
- Custom print line

#### How to Build a Part Number:

Position 1 - Product	Position 2 - Size	Position 3 - Configuration	Position 4 - Wall	Position 5 - Color	Position 6 - Pull Line	Position 7 - Length
C = Plenum-Gard	E = 3/4" F = 1" G = 1-1/4" H = 1-1/2" J = 2"	4 = Corrugated	X = Standard	1 = Orange 2 = Blue 3 = Gray 4 = White 5 = Green	C = 900 lb. Tape	Example -1000 = Feet -1000S = 1000 Feet Split
				6 = Black 7 = Yellow 8 = Red 9 = Brown		

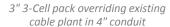
# **Product Type - 3" 3-Cell**

#### 3" 3-Cell

For use in 3" or larger conduits, the 3" 3-Cell product is designed to hold cables up to 1.05" in diameter in each cell. Up to 3 packs can be placed in a 4" conduit.

- Standard colors are black, blue and red
- Color-coded pull tapes are pre-installed
- Factory lubricated







3" 3-Cell packs holding 9 cables in 4" conduit

## 3" 3-Cell Application Guide

General Guidelines When Using MaxCell in Various Applications

**MaxCell 3" 3-Cell (Equivalent to three 1.25" I.D. innerducts)** This product was designed for use in 3" or larger ducts. Multiple combinations of large, medium and smaller cable sizes are applicable and anticipated.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Maximum Cable Diameter per Cell	Rec. Pull Length*	Max Pull Length*
3"	MaxCell 3" 3 Cell	2	6	1.05"	1250'	2000'
4"	MaxCell 3" 3 Cell	3	9	1.05"	1250'	2000'
5"	MaxCell 3" 3 Cell	4	12	1.05"	1250'	2000'
6"	MaxCell 3" 3 Cell	5	15	1.05"	1250'	2000'

<sup>\*</sup>Use of OFNR cable may result in reduced pulling lengths. Exceeding more than two 90 degree bends or a total of 180 degrees of bends between any two pulling points or installation into trenched duct may also result in reduced recommended pulling lengths.

## 3" 3-Cell Part Numbers

Product	Footage	Standard	Detectable	Plenum	Riser
(Std. Color)	(Feet)	Product (MXC)	Product (MXD)	Product (MXP)	Product (MXR)
3" 3-Cell Product Standard colors are either Black (BK) or Blue (BL) or Red (RD)	250 500-999 1,000-2,649 2,650-5,299 5,300-9,999 10,000-13,000	MXC3456XX250 MXC3456XX500 MXC3456XX1000 MXC3456XX2650 MXC3456XX5300 MXC3456XX10000	MXD3456XX250 MXD3456XX500 MXD3456XX1000 MXD3456XX2650 MXD3456XX5300 MXD3456XX10000	MXP3456XX250 MXP3456XX500 MXP3456XX1000 MXP3456XX2650 MXP3456XX5300 MXP3456XX10000	MXR3456XX250 MXR3456XX500 MXR3456XX1000 MXR3456XX2650 MXR3456XX5300 MXR3456XX10000

REF# CS-114

# 3" 3-Cell Reel Sizes and Weights

Description	Reel Size	Type of Reel	Tare Weight of Reel	Std. Product Length	Reel Wt. w/ Std. Product Length	Max Product on Reel
Reel information for 3" 3-Cell Standard	33" H x 15" W	Wood	24 lbs	500 ft	65 lbs	1,500 ft
	33" H x 15" W	Wood	24 lbs	1,000 ft	105 lbs	1,500 ft
	48" H x 15" W	Wood	55 lbs	2,650 ft	260 lbs	2,800 ft
	72" H x 15" W	Steel	86 lbs	5,300 ft	500 lbs	7,900 ft
	72" H x 30" W	Steel	106 lbs	10,000 ft	880 lbs	10,000 ft

1 rack unit, holds 2 CCH connector panels



**REF# CS-115** 

Designed based on thousands of hours of customer feedback, Corning Cable Systems Closet Connector Housings (CCHs) offer more than two dozen innovative features that make installation and troubleshooting of fiber optic connectivity faster, easier and more cost effective

From fiber and cable routing and strain relief, to port labeling and termination, these housings reduce the risk of error that can disrupt networks.

Closet Connector Housings (CCHs) provide interconnect or cross-connect capabilities between outside plant, riser or distribution cables and opto-electronics. Like all LANscape Solutions hardware, the housings accept CCH connector panels. In addition, the housings accept CCH cassettes and CCH modules.

The units are designed for rack mounting in 19-in (48 cm) racks or optional 23-in (58 cm) equipment racks (1.75-in EIA hole spacing). They are available in rack space options of 1U (two panels, cassettes or modules), 2U (four panels, cassettes or modules), 3U (six panels, cassettes or modules) and 4U (twelve panels, cassettes or modules). The 1U, 2U and 3U options feature a slide -out tray and see-through, removable top covers. The CCH-04U features a clear door, removable front and rear enclosures and a platinum-painted interior for maximum visibility and access.

Every CCH housing is shipped complete with strain relief brackets, routing clips and guides, and mounting brackets for proper installation. Documentation labels are provided and components can be added as needed to construct a fiber distribution frame for any application. All housings include a removable tinted polycarbonate front door. All size housings have field-installable lock kits available for both front and rear doors.

All CCH housings can also be upgraded for pigtail splicing to full fiber capacity and easy, modular fiber management through the use of CCH Splice Cassettes (CCH-CS), or for easy, modular fiber management when using field-installable connectors through the use of CCH Slack Cassettes (CCH-CF).

#### **Features and Benefits**

Interconnect and cross-connect capability Ideal for field connectorization

Removable, translucent top covers (1U, 2U, 3U), removable rear cover (4U)

Visibility and ease of access for installation, testing and troubleshooting



1 rack unit, holds 2 CCH connector panels



#### **Features and Benefits**

Internal and external strain-relief options

Flexibility for installation and moves, adds and changes (MACs)

Accepts panels, modules and cassettes

Variety of field termination options

Adaptable to use as a modular splice housing

Splices are stored and protected in same footprint

#### **Standards**

Approval and Listings Meets ANSI/TIA/EIA-568A

and 606

General Specifications	
Application	Enterprise Networks, Data Center
Mounting Type	Rack 19-in, Rack 23-in, Cabinet-mount
Product Type	Fiber Optic Hardware

Design - Hardware				
Housing Color	Black			
Housing Type	CCH			
Height Unit	1U			
Locking Availability	Front or rear			
Maximum Number of Panels per Housing	2			
Panel or Module Type	CCH			
Splice Tray Options	Use CCH Splice Cassette (CCH-CS)			

Mechanical Characteristics	
Dimensions (HxWxD)	4.4 cm x 48.3 cm x 43 cm (1.75 in x 19 in x 17 in)



1 rack unit, holds 2 CCH connector panels



Chemical Characteristics		
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG	
Ordering Information REF# Continu	d	
Product Description	Closet Connector Housing (CCH), 1 rack unit, holds 2 CCH connector panels	
Shipping Information		
Units per Delivery	1/1	



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two rack units, holds four CCH connector panels



**REF# CS-116** 

Closet connector housings (CCHs) provide interconnect or cross-connect capabilities between outside plant, riser or distribution cables and opto-electronics. Like other LANscape solutions hardware, the housings accept CCH connector panels. In addition, the housings accept CCH cassettes and CCH modules.

From fiber and cable routing and strain relief, to port labeling and termination, these housings reduce the risk of error that can disrupt networks.

The units are designed for rack mounting in 19-in (48 cm) racks or optional 23-in (58 cm) equipment racks (1.75-in EIA hole spacing). They are available in rack space options of 1U (two panels, cassettes or modules), 2U (four panels, cassettes or modules), 3U (six panels, cassettes or modules) and 4U (12 panels, cassettes or modules). The 1U, 2U and 3U options feature a slide-out tray and see-through, removable top covers. The CCH-04U features a clear door, removable front and rear enclosures and a platinum-colored interior for maximum visibility and access.

Every CCH housing is shipped complete with strain relief brackets, routing clips and guides, and mounting brackets for proper installation. Documentation labels are provided and components can be added as needed to construct a fiber distribution frame for any application. All housings include a removable tinted polycarbonate front door. All size housings have field-installable lock kits available for both front and rear doors.

All CCH housings can also be upgraded for pigtail splicing to full fiber capacity and easy, modular fiber management through the use of CCH Splice Cassettes (CCH-CS), or for easy, modular fiber management when using field-installable connectors through the use of CCH Slack Cassettes (CCH-CF).

#### **Features and Benefits**

Interconnect and cross-connect capability Ideal for field connectorization

Removable, translucent top covers (1U, 2U, 3U), removable rear cover (4U)

Visibility and ease of access for installation, testing, and troubleshooting

Internal and external strain-relief options

Flexibility for installation and moves, adds, and changes (MACs)

Accepts panels, modules, and cassettes

Variety of field-termination options



two rack units, holds four CCH connector panels



#### **Features and Benefits**

Adaptable to use as a modular splice housing Splices are stored and protected in same footprint

## **Standards**

Approvals and Listings	Meets ANSI/TIA/EIA-568A and 606
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
UL-Listed	United States and Canadian safety standards

General Specifications	
Application	Enterprise Networks, Data Center, Carrier Networks
Mounting Type	Rack 19-in, Rack 23-in, Cabinet-mount
Product Type	Fiber Optic Hardware
Environment	Indoor
Mounting Technology	Flush mount, Protruding, Recessed
Access Type	Front and rear access slidable
Lockable	Yes

Design - Hardware	
Housing Type	ССН
Housing Color	Black
Height Unit	2U
Locking Availability	Front or rear
Number of Panels per Housing	4
Panel or Module Type	CCH
Splice Tray Options	CCH Splice Cassette (CCH-CS)

Mechanical Characteristics	
Dimensions (HxWxD)	8.9 cm x 48.3 cm x 43 cm (3.5 in x 19 in x 17 in)



two rack units, holds four CCH connector panels



Ordering Information	REF# CS-116 - Continued		
Part Number	Information	X	CCH-02U
Product Description			Closet Connector Housing (CCH), two rack unit, holds four CCH connector panels
EAN Code			4056418169453

## **Shipping Information**

Units per Delivery	1/1
Shipping Weight	5.4 kg (12 lb)
Dimensions (HxWxD)	54.61 cm x 57.15 cm x 19.05 cm (21.5 in x 22.5 in x 7.5 in)



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four rack units, holds 12 CCH connector panels



**REF# CS-117** 

Closet connector housings (CCHs) provide interconnect or cross-connect capabilities between outside plant, riser or distribution cables and opto-electronics. Like other LANscape solutions hardware, the housings accept CCH connector panels. In addition, the housings accept CCH cassettes and CCH modules.

From fiber and cable routing and strain relief, to port labeling and termination, these housings reduce the risk of error that can disrupt networks.

The units are designed for rack mounting in 19-in (48 cm) racks or optional 23-in (58 cm) equipment racks (1.75-in EIA hole spacing). They are available in rack space options of 1U (two panels, cassettes or modules), 2U (four panels, cassettes or modules), 3U (six panels, cassettes or modules) and 4U (12 panels, cassettes or modules). The 1U, 2U and 3U options feature a slide-out tray and see-through, removable top covers. The CCH-04U features a clear door, removable front and rear enclosures and a platinum-colored interior for maximum visibility and access.

Every CCH housing is shipped complete with strain relief brackets, routing clips and guides, and mounting brackets for proper installation. Documentation labels are provided and components can be added as needed to construct a fiber distribution frame for any application. All housings include a removable tinted polycarbonate front door. All size housings have field-installable lock kits available for both front and rear doors.

All CCH housings can also be upgraded for pigtail splicing to full fiber capacity and easy, modular fiber management through the use of CCH Splice Cassettes (CCH-CS), or for easy, modular fiber management when using field-installable connectors through the use of CCH Slack Cassettes (CCH-CF).

#### **Features and Benefits**

Interconnect and cross-connect capability Ideal for field connectorization

Removable, translucent top covers (1U, 2U, 3U), removable rear cover (4U)

Visibility and ease of access for installation, testing, and troubleshooting

Internal and external strain-relief options

Flexibility for installation and moves, adds, and changes (MACs)

Accepts panels, modules, and cassettes

Variety of field-termination options



four rack units, holds 12 CCH connector panels



#### **Features and Benefits**

Adaptable to use as a modular splice housing Splices are stored and protected in same footprint

## **Standards**

Approvals and Listings	Meets ANSI/TIA/EIA-568A and 606
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
UL-Listed	United States and Canadian safety standards

General Specifications	
Application	Enterprise Networks, Data Center, Carrier Networks
Mounting Type	Rack 19-in, Rack 23-in, Cabinet-mount
Product Type	Fiber Optic Hardware
Environment	Indoor
Mounting Technology	Flush mount, Protruding, Recessed
Access Type	Front and rear access slidable
Lockable	Yes

Design - Hardware	
Housing Type	CCH
Housing Color	Black
Height Unit	4U
Locking Availability	Front or rear
Number of Panels per Housing	12
Panel or Module Type	CCH
Splice Tray Options	CCH Splice Cassette (CCH-CS)

Mechanical Characteristics	
Dimensions (HxWxD)	17.8 cm x 48.3 cm x 43 cm (7 in x 19 in x 17 in)



four rack units, holds 12 CCH connector panels



Ordering Information	REF# CS-117 - Continued Information	
		CCH-04U
Product Description		Closet Connector Housing (CCH), four rack units, holds 12 CCH connector panels
EAN Code		4056418169439

## **Shipping Information**

Units per Delivery	1/1
Shipping Weight	7.5 kg (17 lb)
Dimensions (HxWxD)	58.42 cm x 58.42 cm x 30.48 cm (23 in x 23 in x 12 in)



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Holds 2 CCH connector panels/cassettes



**REF# CS-118** 

Corning wall-mountable connector housing (WCH) product family offers enhanced innovative features that make installation and troubleshooting of fiber optic connectivity faster, easier and more cost-effective. From fiber and cable routing and strain-relief to port labeling and termination, these housings reduce the risk of error that can disrupt networks.

The WCH housing provides interconnect or cross-connect capabilities between the outside plant, riser or distribution cables and the opto-electronics. With the WCH-02P (two panels, cassettes or modules), WCH-04P (four panels, cassettes or modules), and WCH-06P (six panels, cassettes or modules) capacity, the rugged metal housings can be wall mounted in main cross-connects, telecommunication rooms or other areas where space is a premium. Units accept standard closet connector housing (CCH) cassettes, connector panels and modules for a variety of connectivity options.

The WCH product family features a clear, transparent jumper side door for easy visibility during installation and testing, easy-to-use recessed mounting holes with mounting screws, documentation labels, removable strain-relief brackets, routing clips and guides, improved latches, as well as a preinstalled bubble level for simple and accurate installation. All housings also have field-installable lock kits available for both cable entry and jumper side doors.



Interconnect and cross-connect capabilities Ideal for field splicing and connectorization

Accepts CCH cassettes, panels and modules Variety of preterminated and field-installable capabilities

Lockable, transparent jumper side door Visibility and ease of access for installation, testing and troubleshooting

Removable strain-relief bracket Flexibility for installation and moves, adds and changes (MACs)

Segregated cable and fiber slack routing Fiber protection



Holds 2 CCH connector panels/cassettes



### Standards

**RoHS** Free of hazardous substances according to RoHS

2002/95/EG

General Specifications		
Application	Enterprise Networks	
Mounting type	Wall-Mountable	
Product Type	Wall-Mountable Hardware	

Design - Hardware		
Housing Color	Black	
Housing Type	WCH	
Locking Availability	Provider door and jumper door	
Number of Panels/Cassettes per Housing	2	
Panel or Cassette Type	CCH	
Splice Tray/Splice Cassette Options	Up to 2 CCH cassettes	
Maximum Fiber Capacity	48	

Mechanical Characteristics	
Dimensions (HxWxD)	18.8 cm x 42.2 cm x 10.7 cm (7.4 in x 16.1 in x 4.2 in)

Ordering Information	REF# CS-118 - Continued	
Part Number	Information	WCH-02P
Product Description		Wall-Mountable Closet Housing (WCH), holds 2 CCH connector panels/cassettes
EAN Code		4042673249221



Holds 2 CCH connector panels/cassettes



## **Shipping Information**

Units per Delivery	1/1
Shipping Weight	3.6 kg (8.0 lb)
Package Contents	Housing; installation guide; 2 blank panels; 2 panel ID labels; hardware kit; internal strain-relief bracket; intermediate strain-relief bracket; 4 x 4-in tie wraps; 4 x 8-in tie wraps; dust brushes; 4 mounting screws; bubble level



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Holds 4 CCH connector panels/cassettes



#### REF# CS-119

Corning wall-mountable connector housing (WCH) product family offers enhanced innovative features that make installation and troubleshooting of fiber optic connectivity faster, easier and more cost-effective. From fiber and cable routing and strain-relief to port labeling and termination, these housings reduce the risk of error that can disrupt networks.

The WCH housing provides interconnect or cross-connect capabilities between the outside plant, riser or distribution cables and the opto-electronics. With the WCH-02P (two panels, cassettes or modules), WCH-04P (four panels, cassettes or modules), and WCH-06P (six panels, cassettes or modules) capacity, the rugged metal housings can be wall mounted in main cross-connects, telecommunication rooms or other areas where space is a premium. Units accept standard closet connector housing (CCH) cassettes, connector panels and modules for a variety of connectivity options.

The WCH product family features a clear, transparent jumper side door for easy visibility during installation and testing, easy-to-use recessed mounting holes with mounting screws, documentation labels, removable strain-relief brackets, routing clips and guides, improved latches, as well as a preinstalled bubble level for simple and accurate installation. All housings also have field-installable lock kits available for both cable entry and jumper side doors.



Interconnect and cross-connect capabilities Ideal for field splicing and connectorization

Accepts CCH cassettes, panels and modules Variety of preterminated and field-installable capabilities

Lockable, transparent jumper side door Visibility and ease of access for installation, testing and troubleshooting

Removable strain-relief bracket Flexibility for installation and moves, adds and changes (MACs)

Segregated cable and fiber slack routing Fiber protection



Holds 4 CCH connector panels/cassettes



### Standards

RoHS Free of hazardous sub-

stances according to RoHS 2002/95/EG

General Specifications		
Application	Enterprise Networks	
Mounting type	Wall-Mountable	
Product Type	Wall-Mountable Hardware	

Design - Hardware		
Housing Color	Black	
Housing Type	WCH	
Locking Availability	Provider door and jumper door	
Number of Panels/Cassettes per Housing	4	
Panel or Cassette Type	CCH	
Splice Tray/Splice Cassette Options	Up to 4 CCH Cassettes	
Maximum Fiber Capacity	96	

Mechanical Characteristics	
Dimensions (HxWxD)	35.8 cm x 42.2 cm x 10.7 cm (14.1 in x 16.1 in x 4.2 in)

Ordering Information		
Part Number	Information	WCH-04P
Product Description		Wall-Mountable Closet Housing (WCH), holds 4 CCH connector panels/cassettes
EAN Code		4042673249207



Holds 4 CCH connector panels/cassettes



## **Shipping Information**

Units per Delivery	1/1
Shipping Weight	4.6 kg (10.0 lb)
Package Contents	Housing; installation guide; 4 blank panels; 4 panel ID labels; hardware kit; internal strain-relief bracket; intermediate strain-relief bracket; 4 x 4-in tie wraps; 4 x 8-in tie wraps; dust brushes; 4 mounting screws; bubble level



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# **Closet Connector Housing (CCH) Panel, SC Adapters**

Duplex, 12 F, 50 µm multimode (OM3/4)



**REF# CS-120** 

Corning closet connector housing panels (CCH-CP) are offered in a variety of fiber counts for use with LANscape® solutions hardware products for a "one-size -fits-all" approach. Used with factory-installed or field-installable connectors, these panels provide interconnect or cross-connect capability in a housing at main cross-connects, intermediate cross-connects, telecommunication rooms or work areas. Available with a variety of industry-standard adapter types, the CCH-CP provides an efficient way to securely mate two connectors and offers multimode and single-mode applications.

#### Features and Benefits

Universal design approach

One-size-fits-all LANscape® Solutions housings

Broadest range of fiber count and adapter types

Solutions for all needs

Colored icon labeling

Easy connector identification



General Specifications		
Application	Enterprise Networks, Data Center LAN/SAN	
Product Type	Panels & Modules	
Fiber Category	50 μm MM (OM3)	

Design - Hardware	
Fiber Count	12
Number of Adapters per Panel	6

Design Adapter	
Adapter Housing Color	Aqua
Adapter Housing Material	Composite
Adapter Type	SC duplex
Insert Material	Ceramic



# **Closet Connector Housing (CCH) Panel, SC Adapters**

Duplex, 12 F, 50 µm multimode (OM3/4)



<b>Chemical Characterist</b>	ics		
RoHS			Free of hazardous substances according to RoHS 2011/65/EU
Ordering Information	REF# CS-120 - Continued		
Part Number	Information	*	CCH-CP12-E7
Product Description	imormation		Closet Connector Housing (CCH) Panel, SC adapters, Duplex, UPC, 12 F, 50 µm multimode (OM3)
EAN Code			4042673805885

## **Shipping Information**

Units per Delivery	1/1
Package Contents	CCH Adapter Panel with installation guide



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# Closet Connector Housing (CCH) Panel, LC Adapters

Duplex, 12 F, 50 µm multimode (OM3/4)



#### **REF# CS-121**

Corning Cable Systems Closet Connector Housing Panels (CCH-CP) are offered in a variety of fiber counts for use with LANscape® Solutions hardware products for a "one-size-fits-all" approach. Used with factory-installed or field-installable connectors, these panels provide interconnect or cross-connect capability in a housing at main cross-connects, intermediate cross-connects, telecommunication rooms or work areas. Available with a variety of industry-standard adapter types, the CCH-CP provides an efficient way to securely mate two connectors and offers multimode and single-mode applications.

#### **Features and Benefits**

Universal design approach

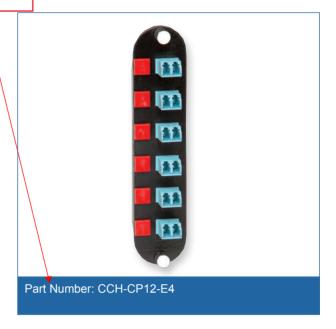
One-size-fits-all LANscape® Solutions housings

Broadest range of fiber count and adapter types

Solutions for all needs

Colored icon labeling

Easy connector identification



General Specifications	
Application	Enterprise Networks, Data Center LAN/SAN
Product Type	Panels & Modules
Fiber Category	50 μm MM (OM3)

Design - Hardware	
Fiber Count	12
Number of Adapters per Panel	6

Design Adapter	
Adapter Housing Color	Aqua
Adapter Housing Material	Composite
Adapter Type	LC duplex
Insert Material	Ceramic



# **Closet Connector Housing (CCH) Panel, LC Adapters**

Duplex, 12 F, 50 µm multimode (OM3/4)



Chemical Characteristics			
RoHS			Free of hazardous substances according to RoHS 2002/95/ EG
Ordering Information	REF# CS-121 - Continued		
Part Number	Information		CCH-CP12-E4
Product Description			Closet Connector Housing (CCH) Panel, LC adapters, Duplex, 12 F, 50 µm multimode (OM3/4)

## **Shipping Information**

Units per Delivery	1/1
Package Contents	CCH Adapter Panel with installation guide



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# Closet Connector Housing (CCH) Panel, LC Adapters

Duplex, 24 F, 50 µm multimode (OM3/4)



REF# CS-122

Corning closet connector housing panels (CCH-CP) are offered in a variety of fiber counts for use with LANscape® solutions hardware products for a "one-size -fits-all" approach. Used with factory-installed or field-installable connectors, these panels provide interconnect or cross-connect capability in a housing at main cross-connects, intermediate cross-connects, telecommunication rooms or work areas. Available with a variety of industry-standard adapter types, the CCH-CP provides an efficient way to securely mate two connectors and offers multimode and single-mode applications.

#### **Features and Benefits**

Universal design approach

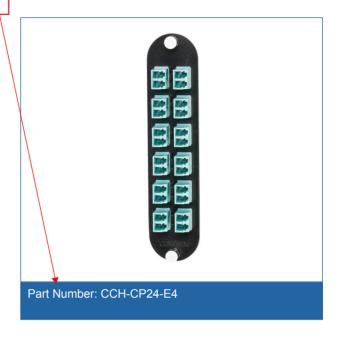
One-size-fits-all LANscape® Solutions housings

Broadest range of fiber count and adapter types

Solutions for all needs

Colored icon labeling

Easy connector identification



General Specifications	
Application	Enterprise Networks, Data Center LAN/SAN
Product Type	Panels & Modules
Fiber Category	50 μm MM (OM3)

Design - Hardware	
Fiber Count	24
Number of Adapters per Panel	12

Design Adapter		
Adapter Housing Color	Aqua	
Adapter Housing Material	Composite	
Adapter Type	LC duplex	
Insert Material	Ceramic	



# **Closet Connector Housing (CCH) Panel, LC Adapters**

Duplex, 24 F, 50 µm multimode (OM3/4)



<b>Chemical Characterist</b>	ics		
RoHS			Free of hazardous substances according to RoHS 2011/65/EU
Ordering Information	REF# CS-122 - Continued		
Part Number	Information	*	CCH-CP24-E4
Product Description			Closet Connector Housing (CCH) Panel, LC adapters, Duplex, 24 F, 50 µm multimode (OM3/4)
EAN Code			4056418202310

## **Shipping Information**

Units per Delivery	1/1
Package Contents	CCH Adapter Panel with installation guide

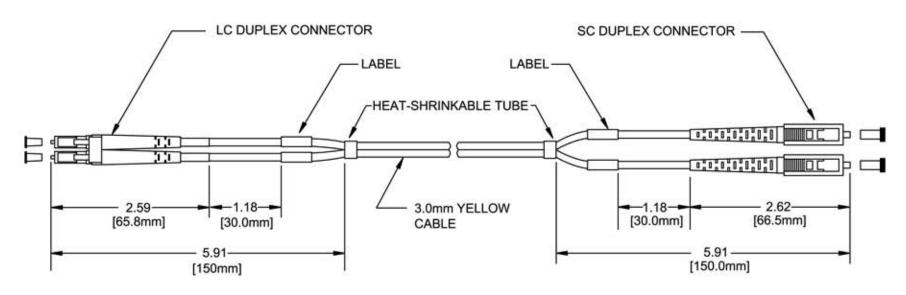


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NOTE: 175
DIMENSIONS IN INCHES [mm]

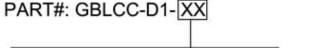


## **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	125
INSERTION LOSS	dB	<0.2
RETURN LOSS	dB	>50
DURABILITY (500 TIMES)	dB	<0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø3.0

#### **FEATURES**

- \* SC CONNECTORS ARE COMPLIANT IEC 60874-14; F04 (JIS C5973); TIA/EIA-604-3A
- \* LC CONNECTORS ARE COMPLIANT TIA/EIA-640-10; LUCENT: 640-252-256
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE



## LENGTH (METERS)

01, 02<del>, 03, 04, 05, 06, 07, 08, 09, 10, 15, 20, 25, 30</del>

REF# CS-123

Page CS-175



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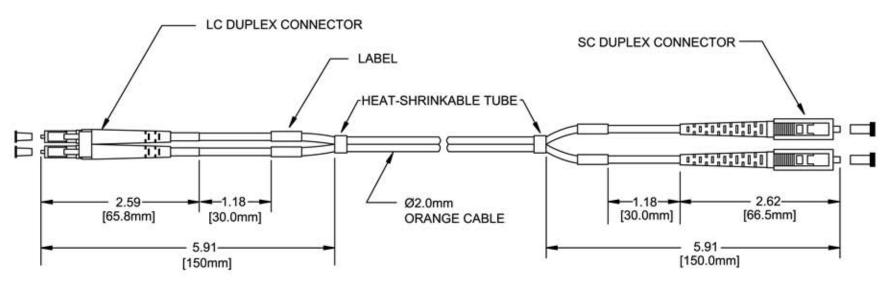
30 TV5 DRIVE . HENDERSON, NV . 89014

GBLCC-D1-XX LC TO SC DUPLEX SINGLEMODE 9/125 (YELLOW JACKET)



NOTE: 176
DIMENSIONS IN INCHES [mm]

REF# CS-124



REF# CS-124

Page CS-176

## **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	127
INSERTION LOSS	dB	<0.3
DURABILITY (500 TIMES)	dB	<0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø2.0

#### **FEATURES**

- \* SC CONNECTORS ARE COMPLIANT IEC 60874-14; F04 (JIS C5973); TIA/EIA-604-3A
- \* LC CONNECTORS ARE COMPLIANT TIA/EIA-640-10;
  - LUCENT: 640-252-256
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE

PART#: GBLCC-D2-XX

LENGTH (METERS)

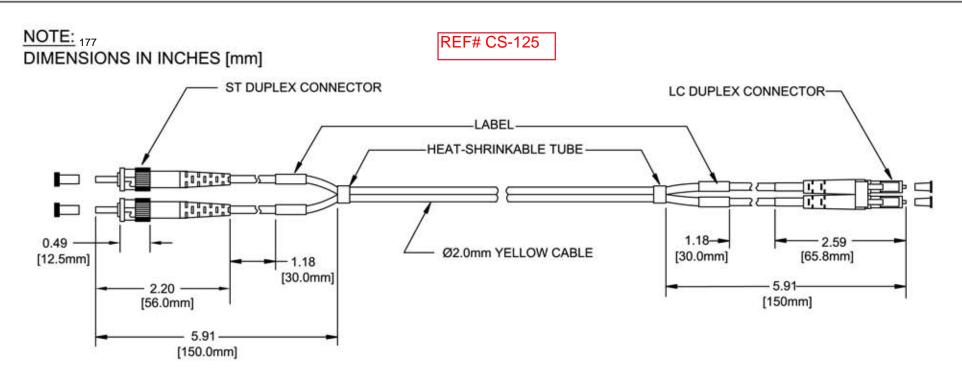
01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 15, 20, 25, 30



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GBLCC-D2-XX LC TO SC DUPLEX MULTIMODE 62.5/125 (ORANGE JACKET)





## **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	125
INSERTION LOSS	dB	<0.2
RETURN LOSS	dB	>50
DURABILITY (500 TIMES)	dB	<0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø2.0

## **FEATURES**

- \* ST CONNECTORS ARE COMPLIANT IEC 60874-10; TIA/EIA-604-2A
- \* LC CONNECTORS ARE COMPLIANT TIA/EIA-640-10; LUCENT: 640-252-256
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE

PART#: GBLCT-D1-XX

LENGTH (METERS)

01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 15, 20, 25, 30

REF# CS-125

Page CS-177



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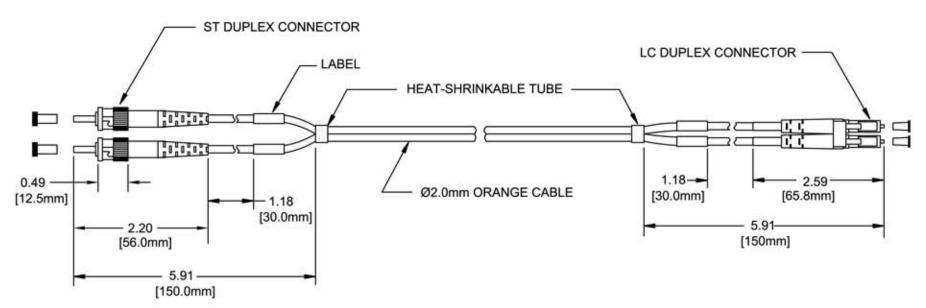
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GBLCT-D1-XX LC TO ST DUPLEX SINGLEMODE 9/125 (YELLOW JACKET)



NOTE: 178
DIMENSIONS IN INCHES [mm]

REF# CS-126



## **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	127
INSERTION LOSS	dB	<0.3
DURABILITY (500 TIMES)	dB	<0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø2.0

## **FEATURES**

- \* ST CONNECTORS ARE COMPLIANT IEC 60874-10; F04 (JIS C5973); TIA/EIA-604-2A
- \* LC CONNECTORS ARE COMPLIANT TIA/EIA-640-10; LUCENT: 640-252-256
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE



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ROHS (UL) (SP

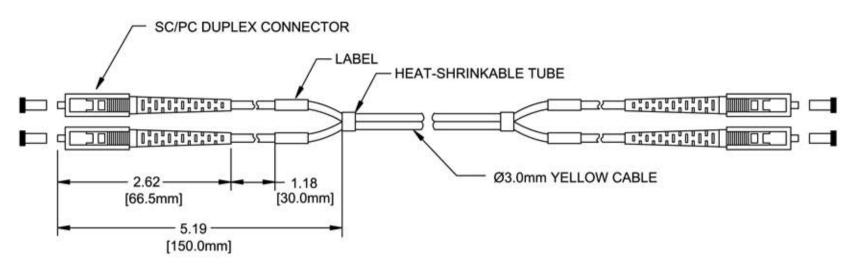
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PART#: GBLCT-D2-XX

REF# CS-126

Page CS-178

GBLCT-D2-XX LC TO ST DUPLEX MULTIMODE 62.5/125 (ORANGE JACKET)



## **SPECIFICATIONS**

No.		
PARAMETER	UNITS	
FERRULE ID	um	125
INSERTION LOSS	dB	≤0.2
RETURN LOSS	dB	≥50
DURABILITY (500 TIMES)	dB	≤0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø3.0

## **FEATURES**

- \* SC CONNECTORS ARE COMPLIANT IEC 60874-14; F04 (JIS C5973); TIA/EIA-604-3A
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE

PART#: GBSC2-D1-XX

LENGTH (METERS)

01, 02, <del>03</del>, 04, 05, 06, 07, 08, 09, 10, 15, 20, 25, 30

REF# CS-127

Page CS-179

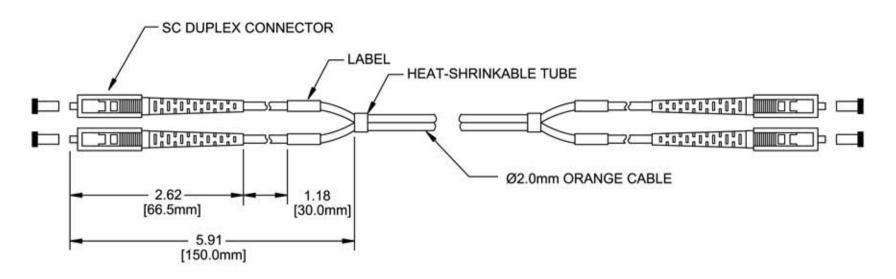


## Allen Tel Products, Inc.

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GBSC2-D1-XX SC TO SC DUPLEX SINGLEMODE 9/125 (YELLOW JACKET)





## **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	127
INSERTION LOSS	dB	<0.3
DURABILITY (500 TIMES)	dB	<0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø2.0

### **FEATURES**

\* SC CONNECTORS ARE COMPLIANT IEC 60874-14; F04 (JIS C5973); TIA/EIA-604-3A

\* PRODUCT QUALITY COMPLY WITH GR-326-CORE

PART#: GBSC2-D2-XX

LENGTH (METERS)

01, 02<del>, 03, 04, 05, 06, 07,</del>

08, 09, 10, 15, 20, 25, 30

REF# CS-128

Page CS-180



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30 TV5 DRIVE @HENDERSON, NV @89014

GBSC2-D2-XX SC TO SC DUPLEX MULTIMODE 62.5/125 (ORANGE JACKET)



## **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	125
INSERTION LOSS	dB	<0.2
RETURN LOSS	dB	>50
DURABILITY (500 TIMES)	dB	<0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø3.0

#### **FEATURES**

- \* SC CONNECTORS ARE COMPLIANT IEC 60874-14; F04 (JIS C5973); TIA/EIA-604-3A
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE



PART#: GBSC2-S1-XX

LENGTH (METERS)

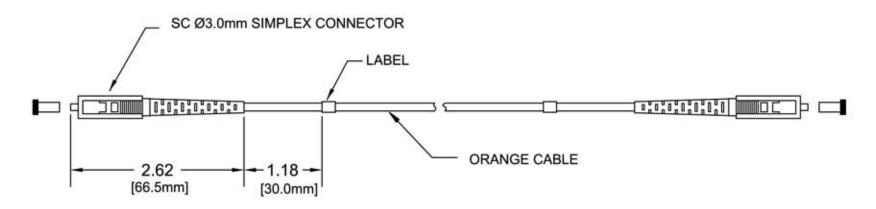
01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 15, 20, 25, 30

**REF# CS-129** 



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→GBSC2-S1-XX SC TO SC SIMPLEX SINGLEMODE 9/125 (YELLOW JACKET) REF# CS-130



## **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	127
INSERTION LOSS	dB	≤0.3
DURABILITY (500 TIMES)	dB	≤0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø3.0

## **FEATURES**

- \* SC CONNECTORS ARE COMPLIANT IEC 60874-14; F04 (JIS C5973); TIA/EIA-604-3A
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE



PART#: GBSC2-S2-XX

LENGTH (METERS)

01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 15, 20, 25, 30

**REF# CS-130** 

Page CS-182



Allen Tel Products, Inc. 30 TV5 DRIVE OHENDERSON, NV 089014

→ GBSC2-S2-XX SC TO SC SIMPLEX MULTIMODE 62.5/125 (ORANGE JACKET)

# Patch Cords



# **Fiber Optic Cable Assemblies**

- Full line of high quality single mode and multimode fiber optic cable assemblies
- All cables are 100% tested for insertion loss and back reflection
- Test results come with each cable
- Insertion loss <0.2dB (single mode) <0.3dB (multimode)
- Typical back reflection <-55dB



# **Connector to Connector Configurations**

FC2	FC to FC
FCC	FC to SC
FCT	FC to ST
LC2	LC to LC
LCC	LC to SC
LCT	LC to ST
MF2	MTRJ Female to MTRJ Female
MFC	MTRJ Female to SC
MFL	MTRJ Female to LC
MFT	MTRJ Female to ST
MM2	MTRJ Male to MTRJ Male
MMC	MTRJ Male to SC
MMF	MTRJ Male to MTRJ Female
MMT	MTRJ Male to ST
SC2	SC to SC

#### Length

01 - 1 Meter	08 - 8 Meter
02 - 2 Meter	09 - 9 Meter
03 - 3 Meter	10 - 10 Meter
04 - 4 Meter	15 - 15 Meter
05 - 5 Meter	20 - 20 Meter
06 - 6 Meter	25 - 25 Meter
07 - 7 Meter	30 - 30 Meter

#### **Fiber**

- 1 Single Mode 9/125 (Yellow Jacket)
- 2 Multi Mode 62.5/125 (Orange Jacket)
- 3 Multi Mode (Only) 50/125 (Blue Jacket)

#### Cable Type

- S Simplex
- D Duplex

# **Ordering Example**

ST to ST <

ST to SC

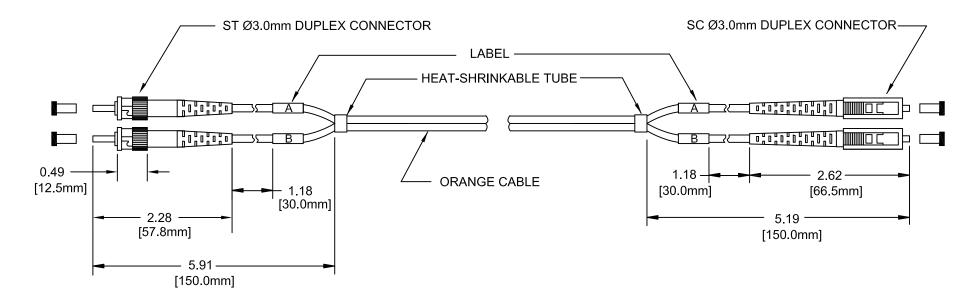
**GBSC2-D2-03** 

ST2

STC

SC to SC duplex 62.5/125 microns multimode - 3 Meters

#### REF# CS-132



#### **SPECIFICATIONS**

PARAMETER	UNITS	
FERRULE ID	um	127
INSERTION LOSS	dB	<0.3
DURABILITY (500 TIMES)	dB	<0.3
OPERATING TEMPERATURE	°C	-40~+85
STORAGE TEMPERATURE	°C	-40~+85
TYPICAL CABLE OD	mm	Ø2.0

#### **FEATURES**

- \* ST CONNECTORS ARE COMPLIANT IEC 60874-10; TIA/EIA-604-2
- \* SC CONNECTORS ARE COMPLIANT IEC 60874-14; F04 (JIS C5973); TIA/EIA-604-3A
- \* PRODUCT QUALITY COMPLY WITH GR-326-CORE
- \* RoHS COMPLIANCE

PART#: GBSTC-D2-XX

LENGTH (METERS)

01, 02, <del>03</del>, <del>04</del>, <del>05</del>, <del>06</del>, <del>07</del>, 08, 09, 10, 15, 20, 25, 30 **REF# CS-132** 

Page CS-184



Allen Tel Products, Inc.

30 TV5 DRIVE ● HENDERSON, NV ● 89014

GBSTC-D2-XX ST TO SC DUPLEX MULTIMODE 62.5/125 (ORANGE JACKET)



# Patch Cords



# **Fiber Optic Cable Assemblies**

- Full line of high quality single mode and multimode fiber optic cable assemblies
- All cables are 100% tested for insertion loss and back reflection
- Test results come with each cable
- Insertion loss <0.2dB (single mode) <0.3dB (multimode)
- Typical back reflection <-55dB
  - Available in industry standard lengths in meters



# SC2 -

Length **Connector to Connector Configurations** FC2 FC to FC 01 - 1 Meter 08 - 8 Meter FC to SC **FCC** 02 - 2 Meter 09 - 9 Meter FC to ST **FCT** 03 - 3 Meter 10 - 10 Meter LC to LC · LC<sub>2</sub> 04 - 4 Meter 15 - 15 Meter REF# CS-133 LCC LC to SC 05 - 5 Meter 20 - 20 Meter LC to ST LCT 06 - 6 Meter 25 - 25 Meter MTRJ Female to MTRJ Female MF2 07 - 7 Meter 30 - 30 Meter MFC MTRJ Female to SC MTRJ Female to LC **Fiber** MFL **MFT** MTRJ Female to ST MM2 MTRJ Male to MTRJ Male 1 - Single Mode 9/125 (Yellow Jacket) MMC MTRJ Male to SC 2 - Multi Mode 62.5/125 (Orange Jacket) MTRJ Male to MTRJ Female **MMF** 3 - Multi Mode (Only) 50/125 (Blue Jacket) **MMT** MTRJ Male to ST SC2 SC to SC Cable Type ST to ST ST2 STC ST to SC S - Simplex D - Duplex

# **Ordering Example**

**GBSC2-D2-03** 

SC to SC duplex 62.5/125 microns multimode - 3 Meters

Accessories

# Patch Cords



# **Fiber Optic Cable Assemblies**

- Full line of high quality single mode and multimode fiber optic cable assemblies
- All cables are 100% tested for insertion loss and back reflection
- Test results come with each cable
- Insertion loss <0.2dB (single mode) <0.3dB (multimode)
- Typical back reflection <-55dB
  - Available in industry standard lengths in meters



#### SC2 -D

Length

FC2 FC to FC 01 - 1 Meter 08 - 8 Meter FC to SC **FCC** 02 - 2 Meter 09 - 9 Meter FC to ST **FCT** 10 - 10 Meter 03 - 3 Meter LC to LC LC<sub>2</sub> 04 - 4 Meter 15 - 15 Meter REF# CS-134 LC to SC LCC 05 - 5 Meter 20 - 20 Meter LC to ST LCT 06 - 6 Meter 25 - 25 Meter MTRJ Female to MTRJ Female MF2 07 - 7 Meter 30 - 30 Meter MFC MTRJ Female to SC MTRJ Female to LC **Fiber** MFL **MFT** MTRJ Female to ST MM2 MTRJ Male to MTRJ Male 1 - Single Mode 9/125 (Yellow Jacket) MMC MTRJ Male to SC 2 - Multi Mode 62.5/125 (Orange Jacket) MTRJ Male to MTRJ Female **MMF** 3 - Multi Mode (Only) 50/125 (Blue Jacket) **MMT** MTRJ Male to ST SC2 SC to SC Cable Type ST to ST ST2 STC ST to SC S - Simplex

# **Ordering Example**

**Connector to Connector Configurations** 

**GBSC2-D2-03** 

SC to SC duplex 62.5/125 microns multimode - 3 Meters

D - Duplex

MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs,

**CORNING** 

**REF# CS-135** 

Pretium EDGE® Solutions trunk cables utilize the MTP® Connector, a 12-fiber push/pull optical connector with a footprint similar to the SC simplex connector. These high-density connectors are used to significantly accelerate the network installation process, minimize errors and reduce space. Pretium EDGE Solutions trunks utilizing MTP Connectors support 12 to 144 fibers.

pulling grip one side, 70 ft

Pretium EDGE® Solutions trunk cables utilize a high-density cable solution, which results in up to 65 percent space savings. Five to six times the fiber tray capacity can be achieved over traditional bulkier cabling solutions while minimizing cable tray weight and cooling air impediment. The trunk cables contain Corning® ClearCurve® optical fiber, which enables a bend radius of five times the cable outside diameter and allows for smaller slack storage coils or loops. The cables feature a 2.0 mm round furcation leg which provides easy routing and improved slack storage.

Pretium EDGE® Solutions trunks feature a furcation plug design that offers stress-free strain-relief of the cable, and a small-profile furcation plug allows installation of all fiber counts inside a 1U housing. All trunks are shipped with appropriate strain-relief brackets for integrating into both Pretium EDGE Solutions housings and Plug & Play™ Systems housings. The trunk furcation features a transition boot for smooth transition out of rack/floor hardware. The flexibility of the grip allows easy installation around the corners of tray and ladder racks, while its robust design allows the trunk to be pulled through conduit using up to 100 lb of pulling tension while providing complete protection for the connectors. All trunks are packaged on a plastic corrugated reel for easy installation. This reel can be easily broken down for cost-effective disposal. Pretium EDGE Solutions trunks have been tested and meet the skew criteria to ensure the system is 100G Ready.



#### High-density trunk cables

Allow tighter trunk cable bends for slack storage and routing

#### Low insertion loss performance

Allows for more connections in a link when deploying a TIA-942-compliant system

#### Universal wired components

Enable moves, adds and changes without polarity concerns; provide a simple migration path between 2-fiber and parallel optic applications



MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 70 ft



#### **Features and Benefits**

#### **Factory-terminated solutions**

Provide consistent quality, ensure system performance and reduce installation time

#### **Standards**

**Approval and Listings** 

NFPA 262, National Electrical Code® (NEC®), OFNP, CSA FT-6

## **Specifications**

General Specifications		
Application	Data Center LAN/SAN	
Cable Type	Indoor; ANSI/ICEA S-83-596	
Flame Rating	Plenum (OFNP)	
Fiber Category	50 μm MM (OM3)	
Cable Assembly Type	Pretium EDGE® Trunk	

Temperature Range	
Operation	-10 °C to 60 °C (14 °F to 140 °F)

Design - Connector A	
Connector Type	MTP® (non-pinned)
Ferrule	Composite

Optical Specifications - Connector A	
Reflectance, Typical	< -20 dB
Insertion Loss, Max.	0.35 dB



MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 70 ft



Design - Connector B	
Connector Type	MTP® (non-pinned)
Ferrule	Composite

Optical Specifications - Connector B	
Reflectance, Typical	< -20 dB
Insertion Loss, Max.	0.35 dB

Cable Design	
Fiber Count	24
Outer Jacket Color	Aqua
Polarity	Universal; TIA-568 Type-B

Mechanical Characteristics Cable	
Nominal Outer Diameter	7.7 mm (± 0.3 mm)
Min. Bend Radius Installation	115.5 mm (4.55 in)
Min. Bend Radius Operation	38.5 mm (1.52 in)
Max. Tensile Strength for Installation	660 N
Weight	50 kg/km (110 lb/1000 ft)

Furcation - Connector A	
Leg Length	838 mm (-0 mm/+76 mm) (33 in (-0 in/+3 in))
Leg Color	Aqua
Leg Diameter	2.0 mm
Furcation Type - A	Pretium EDGE® Size 1; 14.7 mm x 14.7 mm x 108.6 mm

Furcation - Connector B	
Leg Length	838 mm (-0 mm/+76 mm) (33 in (-0 in/+3 in))
Leg Color	Aqua
Leg Diameter	2.0 mm
Furcation Type - B	Pretium EDGE® Size 1; 14.7 mm x 14.7 mm x 108.6 mm



MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 70 ft



Pulling Grip - Connector A	
Pulling Grip - Connector A	Yes
Outer Diameter	41 mm (1.6 in)
Min. Duct Size Diameter	64 mm (2.5 in)
Tensile Strength	440 N (100 lb)

Pulling Grip - Connector B	
Pulling Grip - Connector B	No

Chemical Characteristics	
DODG	Free of hazardous substances according to RoHS 2002/95/ EG



MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 70 ft



## **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Name	G50/125 Pretium 300 ULTRA-BEND 7.5
Fiber Type	Multimode
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Compliance	IEC 60793-2-10 for A1a class 50/125 multimode fibers; TIA/ EIA 492AAAC-A (OM3); ITU-T Recommendation G.651; ISO/ IEC 11801 Grade OM3
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -
Serial 1 Gigabit Ethernet	1000 m / 600 m / -
Serial 10 Gigabit Ethernet	300 m / -
Standards in Compliance	TIA/EIA 492AAAC-A, Tested with minEMBc method to TIA/EIA 455-220, IEC 60793-2-10 Type A1a.2 Ed.2.0 and IEC 60793-1-49 Ed.2.0, ITU-T G651, ISO/IEC 11801 Cat. OM3
Fiber Code	Т
Induced Attenuation @ 7.5 mm Radius	< 0.2 dB / -

- Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
  - 2) Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.
  - 3) Improved attenuation and bandwidth options available.
  - 4) Bend-insensitive single-mode fibers available on request.
  - 5) Contact a Corning Cable Systems Customer Care Representative for additional information.

## **Ordering Information**

Part Number	G757524TPNDDU070F
Product Description	Pretium EDGE® Solutions Trunk Cable, 50 µm multimode (OM3), MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 70 ft
Length	70 ft (-0 ft/+2 ft) (21.34 m (-0 m/+0.61 m))



MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 70 ft



#### **Shipping Information**

Units per Delivery	1/1
Reel A	Diameter 23.5 in Width 5 in



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50 µm multimode (OM3), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 120 ft



**REF# CS-136** 

The Pretium EDGE® MTP® Trunks provide the backbone of the Pretium EDGE Solution. With nonpinned MTPs on both ends of the cable, these trunks are designed to interface with the Pretium EDGE or Plug & Play™ modules. All trunks are shipped with strain-relief clips that allow for the tool-less installation in both Pretium EDGE and Plug & Play housings. These trunks conform to TIA-568 Type-B polarity.

#### **Features and Benefits**

#### High-density trunk cables

Allow tighter trunk cable bends for slack storage and routing

#### Low insertion loss performance

Allows for more connections in a link when deploying a TIA-942-compliant system

#### Universal wired components

Enable moves, adds and changes without polarity concerns; provide a simple migration path between 2-fiber and parallel optic applications

#### **Factory-terminated solutions**

Provide consistent quality, ensure system performance and reduce installation time

#### **Standards**

**Approval and Listings** 

NFPA 262, National Electrical Code® (NEC®), OFNP, CSA FT-6





50  $\mu$ m multimode (OM3), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 120 ft



# **Specifications**

General Specifications	
Application	Data Center LAN/SAN
Cable Type	Indoor; ANSI/ICEA S-83-596
Flame Rating	Plenum (OFNP)
Cable Assembly Type	Pretium EDGE® Trunk
Fiber Category	50 μm MM (OM3)

Temperature Range	
Operation	-10 °C to 60 °C (14 °F to 140 °F)

Design - Connector A	
Connector Type	MTP® (non-pinned)
Ferrule	Composite

Optical Specifications - Connector A	
Reflectance, Typical	< -20 dB
Insertion Loss, Max.	0.35 dB

MTP® (non-pinned)
Composite

Optical Specifications - Connector B	
Reflectance, Typical	< -20 dB
Insertion Loss, Max.	0.35 dB



50  $\mu m$  multimode (OM3), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 120 ft



Cable Design	
Fiber Count	48
Outer Jacket Color	Aqua
Polarity	Universal; TIA-568 Type-B

Mechanical Characteristics Cable	
Nominal Outer Diameter	8.5 mm (± 0.3 mm)
Min. Bend Radius Installation	127.5 mm (5.02 in)
Min. Bend Radius Operation	42.5 mm (1.67 in)
Max. Tensile Strength for Installation	660 N
Weight	62 kg/km (137 lb/1000 ft)

Furcation - Connector A	
Leg Length	838 mm (-0 mm/+76 mm) (33 in (-0 in/+3 in))
Leg Color	Aqua
Leg Diameter	2.0 mm
Furcation Type - A	Pretium EDGE® Size 2; 20 mm x 20 mm x 108.6 mm

Furcation - Connector B	
Leg Length	838 mm (-0 mm/+76 mm) (33 in (-0 in/+3 in))
Leg Color	Aqua
Leg Diameter	2.0 mm
Furcation Type - B	Pretium EDGE® Size 2; 20 mm x 20 mm x 108.6 mm

Pulling Grip - Connector A	
Pulling Grip - Connector A	Yes
Outer Diameter	56 mm (2.2 in)
Min. Duct Size Diameter	89 mm (3.5 in)
Tensile Strength	440 N (100 lb)



50 µm multimode (OM3), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 120 ft



Pulling Grip - Connector B	
Pulling Grip - Connector B	No

Chemical Characteristics	
RoHS Free of haz EG	ardous substances according to RoHS 2002/95/

#### **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Name	G50/125 Pretium 300 ULTRA-BEND 7.5
Fiber Type	Multimode
Fiber Core Diameter	50 μm
Fiber Category	OM3
Fiber Compliance	IEC 60793-2-10 for A1a class 50/125 multimode fibers; TIA/ EIA 492AAAC-A (OM3); ITU-T Recommendation G.651; ISO/ IEC 11801 Grade OM3
Wavelengths	850 nm / 1300 nm
Maximum Attenuation	3.0 dB/km / 1.0 dB/km
Min. Overfilled Launch (OFL) Bandwidth	1500 MHz*km / 500 MHz*km
Minimum Effective Modal Bandwidth (EMB)	2000 MHz*km / -
Serial 1 Gigabit Ethernet	1000 m / 600 m / -
Serial 10 Gigabit Ethernet	300 m / -
Standards in Compliance	TIA/EIA 492AAAC-A, Tested with minEMBc method to TIA/EIA 455-220, IEC 60793-2-10 Type A1a.2 Ed.2.0 and IEC 60793-1-49 Ed.2.0, ITU-T G651, ISO/IEC 11801 Cat. OM3
Fiber Code	Т
Induced Attenuation @ 7.5 mm Radius	< 0.2 dB / -

Notes: 1) 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.

- 2) Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.
- 3) Improved attenuation and bandwidth options available.
- 4) Bend-insensitive single-mode fibers available on request.
- 5) Contact a Corning Cable Systems Customer Care Representative for additional information.



50 µm multimode (OM3), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 120 ft



## **Ordering Information**

Part Number	G757548TPNDDU120F
Product Description	Pretium EDGE® Solutions Trunk Cable, 50 µm multimode (OM3), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 120 ft
Length	120 ft (-0 ft/+2 ft) (36.58 m (-0 m/+0.61 m))

## **Shipping Information**

Units per Delivery	1/1
Reel A	Diameter 23.5 in Width 5 in



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MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 80 ft

**REF# CS-137** 

Pretium EDGE® Solutions trunk cables utilize the MTP® Connector, a 12-fiber push/pull optical connector with a footprint similar to the SC simplex connector. These high-density connectors are used to significantly accelerate the network installation process, minimize errors and reduce space. Pretium EDGE Solutions trunks utilizing MTP Connectors support 12 to 144 fibers.

Pretium EDGE® Solutions trunk cables utilize a high-density cable solution, which results in up to 65 percent space savings. Five to six times the fiber tray capacity can be achieved over traditional bulkier cabling solutions while minimizing cable tray weight and cooling air impediment. The trunk cables contain Corning® ClearCurve® optical fiber, which enables a bend radius of five times the cable outside diameter and allows for smaller slack storage coils or loops. The cables feature a 2.0 mm round furcation leg which provides easy routing and improved slack storage.

Pretium EDGE® Solutions trunks feature a furcation plug design that offers stress-free strain-relief of the cable, and a small-profile furcation plug allows installation of all fiber counts inside a 1U housing. All trunks are shipped with appropriate strain-relief brackets for integrating into both Pretium EDGE Solutions housings and Plug & Play™ Systems housings. The trunk furcation features a transition boot for smooth transition out of rack/floor hardware. The flexibility of the grip allows easy installation around the corners of tray and ladder racks, while its robust design allows the trunk to be pulled through conduit using up to 100 lb of pulling tension while providing complete protection for the connectors. All trunks are packaged on a plastic corrugated reel for easy installation. This reel can be easily broken down for cost-effective disposal. Pretium EDGE Solutions trunks have been tested and meet the skew criteria to ensure the system is 100G Ready.

#### **Features and Benefits**

#### High-density trunk cables

Allow tighter trunk cable bends for slack storage and routing

#### Low insertion loss performance

Allows for more connections in a link when deploying a TIA-942-compliant system

#### Universal wired components

Enable moves, adds and changes without polarity concerns; provide a simple migration path between 2-fiber and parallel optic applications





MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 80 ft



#### **Features and Benefits**

#### **Factory-terminated solutions**

Provide consistent quality, ensure system performance and reduce installation time

#### **Standards**

**Approval and Listings** 

NFPA 262, National Electrical Code® (NEC®), OFNP, CSA FT-6

## **Specifications**

General Specifications	
Application	Data Center LAN/SAN
Cable Type	Indoor; ANSI/ICEA S-83-596
Flame Rating	Plenum (OFNP)
Fiber Category	Bend-Improved SM (OS2)
Cable Assembly Type	Pretium EDGE® Trunk

Temperature Range	
Operation	-10 °C to 60 °C (14 °F to 140 °F)

Design - Connector A	
Connector Type	MTP® (non-pinned)
Ferrule	Composite

Optical Specifications - Connector A	
Reflectance, Typical	<-55 dB
Insertion Loss, Max.	0.75 dB



MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 80 ft



Design - Connector B	
Connector Type	MTP® (non-pinned)
Ferrule	Composite

Optical Specifications - Connector B	
Reflectance, Typical	< -55 dB
Insertion Loss, Max.	0.75 dB

Cable Design	
Fiber Count	24
Outer Jacket Color	Yellow
Polarity	Universal; TIA-568 Type-B

Mechanical Characteristics Cable	
Nominal Outer Diameter	7.7 mm (± 0.3 mm)
Min. Bend Radius Installation	115.5 mm (4.55 in)
Min. Bend Radius Operation	38.5 mm (1.52 in)
Max. Tensile Strength for Installation	660 N
Weight	50 kg/km (110 lb/1000 ft)

Furcation - Connector A	
Leg Length	838 mm (-0 mm/+76 mm) (33 in (-0 in/+3 in))
Leg Diameter	2.0 mm
Leg Color	Yellow
Furcation Type - A	Pretium EDGE® Size 1; 14.7 mm x 14.7 mm x 108.6 mm

Furcation - Connector B	
Leg Length	838 mm (-0 mm/+76 mm) (33 in (-0 in/+3 in))
Leg Diameter	2.0 mm
Leg Color	Yellow
Furcation Type - B	Pretium EDGE® Size 1; 14.7 mm x 14.7 mm x 108.6 mm



 $\mbox{MTP}^{\mbox{\tiny @}}$  Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 80 ft



Pulling Grip - Connector A	
Pulling Grip - Connector A	Yes
Outer Diameter	41 mm (1.6 in)
Min. Duct Size Diameter	64 mm (2.5 in)
Tensile Strength	440 N (100 lb)

Pulling Grip - Connector B	
Pulling Grip - Connector B	No

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2002/95/ EG

## **Fiber Specifications**

Optical Characteristics (cabled)	
Fiber Type	Single-Mode Ultra-Bendable Fiber
Fiber Core Diameter	8.2 µm
Fiber Category	OS2
Fiber Compliance	ITU-T G.652.D and ITU-T G.657.A1
Fiber Code	G
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Serial 1 Gigabit Ethernet	5000 m / - / -
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m
Induced Attenuation @ 10 mm Radius	0.5 dB (1 turn; 10 mm radius; 1550 nm)

<sup>\*</sup> ITU-T G.652 D compliant.

Notes: 1) Improved attenuation and bandwidth options available.



<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.

<sup>2)</sup> Bend-insensitive single-mode fibers available on request.

<sup>3)</sup> Contact a Corning Cable Systems Customer Care Representative for additional information.

MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 80 ft



## Ordering Information REF# CS-137

Part Number	G909024GPNDDU080F)
Product Description	Pretium EDGE® Solutions Trunk Cable, Bend-improved Single-mode (OS2), MTP® Connector to MTP Connector, 24 F, with 33/33 inch legs, pulling grip one side, 80 ft
Length	80 ft (-0 ft/+2 ft) (24.38 m (-0 m/+0.61 m))

#### **Shipping Information**

Units per Delivery	1/1
Reel A	Diameter 23.5 in Width 5 in



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Bend-improved Single-mode (OS2), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 100 ft



**REF# CS-138** 

EDGE™ MTP® trunks provide the backbone of the EDGE Solution. With non-pinned MTP connectors on both ends of the cable, the trunks are designed to interface with EDGE or Plug & Play™ modules. All trunks are shipped with strain-relief clips that allow for tool-less installation in both EDGE and Plug & Play housings. The trunks conform to TIA-568 Type-B polarity.

#### Features and Benefits

#### High-density trunk cables

Allow tighter trunk cable bends for slack storage and routing

#### Low insertion loss performance

Allows for more connections in a link when deploying a TIA-942-compliant system

#### Universal wired components

Enable moves, adds and changes without polarity concerns; provide a simple migration path between 2-fiber and parallel optic applications

#### **Factory-terminated solutions**

Provide consistent quality, ensure system performance, and reduce installation time

# Part Number: G909048GPNDDU100F

#### **Standards**

**Approvals and Listings** 

NFPA 262, National Electrical Code® (NEC®), OFNP, CSA FT-6

#### **Specifications**

General Specifications	
Application	Data Center LAN/SAN
Cable Type	Indoor; ANSI/ICEA S-83-596
Flame Rating	Plenum (OFNP)
Cable Assembly Type	EDGE™ Trunk
Fiber Category	Bend-improved SM (OS2)



Bend-improved Single-mode (OS2), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 100 ft



Temperature Range	
Operation	-10 °C to 60 °C (14 °F to 140 °F)

Design - Connector A	
Connector Type	MTP® (non-pinned)
Ferrule Material	Composite

Optical Specifications - Connector A	
Insertion Loss, Max.	0.75 dB
Reflectance	< -55 dB

Design - Connector B	
Connector Type	MTP® (non-pinned)
Ferrule Material	Composite

Optical Specifications - Connector B	
Insertion Loss, Max.	0.75 dB
Reflectance	< -55 dB

Cable Design	
Fiber Count	48
Outer Jacket Color	Yellow
Polarity	Universal; TIA-568 Type-B
Strain-Relief Bracket Type	2

Mechanical Characteristics Cable	
Nominal Outer Diameter	8.5 mm ± 0.3 mm (0.33 in)
Min. Bend Radius Installation	127.5 mm (5.02 in)
Min. Bend Radius Operation	42.5 mm (1.67 in)
Max. Tensile Strength for Installation	660 N



Bend-improved Single-mode (OS2), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 100 ft



Mechanical Characteristics Cable	
Weight	63 kg/km (42 lb/1000 ft)
Minimum Conduit Size with 18-in Elbow	3.0 in

Furcation - Connector A	
Leg Length	838 mm (-0 mm/+76 mm) for EDGE <sup>™</sup> housings (33 in (-0 in/+3 in))
Leg Color	Yellow
Leg Diameter	2.0 mm
Furcation Type - A	EDGE™ Size 2; 20 mm x 20 mm x 108.6 mm

Furcation - Connector B	
Leg Length	838 mm (-0 mm/+76 mm) for EDGE™ housings (33 in (-0 in/+3 in))
Leg Color	Yellow
Leg Diameter	2.0 mm
Furcation Type - B	EDGE™ Size 2; 20 mm x 20 mm x 108.6 mm

Pulling Grip - Connector A	
Pulling Grip - Connector A	Yes
Pulling Grip Outer Diameter	56 mm (2.2 in)
Min. Duct Size Diameter	89 mm (3.5 in)
Tensile Strength	440 N (100 lb)

Pulling Grip - Connector B	
Pulling Grip - Connector B	No

Chemical Characteristics	
RoHS	Free of hazardous substances according to RoHS 2011/65/EU



Bend-improved Single-mode (OS2), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 100 ft



# Fiber Specifications

Optical Characteristics (cabled)	
Fiber Type	Single-Mode Ultra-Bendable Fiber
Fiber Core Diameter	8.2 µm
Fiber Category	OS2
Fiber Compliance	ITU-T G.652.D and ITU-T G.657.A1
Fiber Code	G
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.4 dB/km / 0.4 dB/km / 0.3 dB/km
Serial 1 Gigabit Ethernet	5000 m / - / -
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m
Induced Attenuation @ 10 mm Radius	0.5 dB (1 turn; 10 mm radius; 1550 nm)

<sup>\*</sup> ITU-T G.652 D compliant.

- Notes: 1) Improved attenuation and bandwidth options available.
  - 2) Bend-insensitive single-mode fibers available on request. 3) Contact a Corning Customer Care Representative for additional information.

# **Ordering Information**

**REF# CS-138** 

Part Number	G909048GPNDDU100F)
Product Description	EDGE™ Solutions Trunk Cable, Bend-improved Single-mode (OS2), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 100 ft
EAN Code	4056418146478
Weight	2.9 kg (6.4 lb)
Length	100 ft (-0 ft/+2 ft) (30 m (-0 m/+0.61 m))

## **Shipping Information**

Units per Delivery	1/1
Reel Diameter	23.5 in
Reel Width	5 in



<sup>\*</sup> Meets 0.75 ns optical skew when used in all Corning Plug and Play™/EDGE™ systems solutions.

Bend-improved Single-mode (OS2), MTP® Connector to MTP Connector, 48 F, with 33/33 inch legs, pulling grip one side, 100 ft



Notes



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#### **CABLING ONLY - CABLING & SUPPORT STRUCTURE**

#### **Other Miscellaneous Charges**

#### CS-139 Air Travel Expense for Neighbor Islands

Air Travel expenses for Technicians traveling to or from Neighbor Islands will not be necessary in most cases as on-island Technicians will be used on projects and only during extenuating circumstances may Technicians travel to and from Neighbor Islands be required (ie..emergencies or if requested by the state to meet unforeseen rgetnt dead-lines). Travel expenses will be airfare.

#### CS-140 Lodging Expense for Neighbor Islands, day

Lodging expenses for Technicians traveling to or from Neighbor Islands will not be necessary in most cases as on-island Technicians will be used and only during extenuating circumstances may Technicians travel to and from Neighbor Islands be required (ie..emergencies or if requested by the state to meet dead-lines). Travel expenses will be lodging.

## **CS-141** Shipping Expense for Neighbor Islands

Shipping expedited air freight is used to offset any additional air freight incurred to expedite delivery of materials required for emergency or customer expedite due date requirements and may only occur in rare situations and can only be assessed when needed due to weight and time variations.