

CORNING

Charter  
COMMUNICATIONS

# Charter Headend

## Product Ordering Guide



# Trust Your Network to Corning!

We are proud to work with Charter Communications to deliver the best possible experiences to our customers through scalable solutions that optimize the capabilities of each unique headend (HE) network.

To help simplify the design and deployment of the HE, we've created this easy-to-use, customized product ordering guide. Here, you will find our versatile product families that deliver industry-leading density, enable unparalleled scalability, and provide the lowest total cost of ownership.

Thank you for being a valued Corning customer!

## Contents

- Optical Splice Enclosures ..... 3
- Distribution Frames, Housings, and Attenuators ..... 4
- 40 and 100G Breakout Modules and Harnesses ..... 7
- Dense Wavelength Division Multiplexing (DWDM) Modules ..... 16
- Coarse Wavelength Division Multiplexing (CWDM) Modules ..... 18
- Channel Plan ..... 19
- Cable Assemblies ..... 20
- Sales Map ..... 23

## Optical Splice Enclosures

Our universal optical splice enclosures are designed to manage the transition between outside plant cables and fire-retardant indoor riser cables in fiber optic networks. These rugged and versatile enclosures are ideal for use in equipment rooms, splicing vaults, or building entrance terminals in CATV environments.

Optical Splice Enclosure		
Charter Item Number	Corning Part Number	Description
859356-COR	OSE-HD0-WT-1	Splice Enclosure, wall-mountable, indoor, workshelf, 864 F
859344-COR	OSE-LD0-WT-1	Splice Enclosure, wall-mountable, indoor, workshelf, 432 F
859330-COR	OSE-288	Splice Enclosure, wall-mountable, indoor, workshelf, 288 F
871800-COR	OSE-CBL-34	Splice Enclosure Cable Entry Kit, 375 to 500-in diameter
871801-COR	OSE-CBL-35	Splice Enclosure Cable Entry Kit, 500 to 625-in diameter
871803-COR	OSE-CBL-37	Splice Enclosure Cable Entry Kit, 750 to 875-in diameter
891808-COR	OSE-ST-1	Splice Tray, heat-shrink, single-fiber fusion



## Distribution Frames, Housings, and Attenuators

Our hardware solutions include distribution frames and housings that help accelerate deployment, enhance network performance, and minimize total cost of ownership. In addition, we offer in-line, flat wavelength optical attenuators that are easily inserted between the connector and adapter in an “in-line” configuration and are compatible with SC, ST<sup>®</sup> compatible, FC, MU, LC, and angled SC and FC connectors.

Eclipse <sup>®</sup> Distribution Frame and Housings		
Charter Item Number	Corning Part Number	Description
5T1100240-TWC	ECL-BAY-7	Eclipse <sup>®</sup> Bay Frame, 19-in spaced, 7 ft
FHDW1687	ECL-BAY-7	Eclipse Bay Frame, UDF, 7 ft
886453-COR	ECL-IBU-7-1	Eclipse Interbay Unit, 7 ft
873755-COR	ECL-J1U	Eclipse Jumper Management, 1U
873758-COR	ECL-J1U-EL	Eclipse Jumper Management, 1U for use with rear output equipment
873762-COR	ECL-J2U	Eclipse Jumper Management, 2U
873766-COR	ECL-J3U	Eclipse Jumper Management, 3U with storage hubs
877850-COR	ECL-C4U	Eclipse Shelf Empty Housing, holds 12 panels or modules
865645-COR	ECL-S4U	Eclipse Splice Housing, 4U, 12 tray capacity
873774-COR	ECL-CP06-39	Eclipse Panel with six SC simplex insert adapters
873770-COR	ECL-CP06-3C	Eclipse, TWC, and Charter Panel, single-mode with six SC simplex insert adapters
873771-COR	ECL-CP06-6C	Eclipse Panel, single-mode, SC APC insert adapters
877914-COR	ECL7216066C-U7001B	Eclipse Panel, preterminated, indoor, SC APC, 50 ft, 72 F
877916-COR	ECL7231066C-U7001B	Eclipse Panel, preterminated, indoor, SC APC, 100 ft, 72 F
877982-COR	ECL9616086C-U7001B	Eclipse Panel, preterminated, indoor, SC APC, 50 ft, 96 F
878058-COR	ECL41612D9-U7001B	Eclipse Panel, preterminated, indoor, SC APC, 50 ft, 144 F
864012-COR	ED11AA6C06C01018	Coupler Optical 1x8 Balanced Eclipse SC APC
863756-COR	EM11AA6C06C01012	Coupler Optical 1x2 50 50 Eclipse SC APC
863846-COR	EM11AA6C06C01013	Coupler Optical 1x3 Balanced Eclipse SC APC
863927-COR	EM11AA6C06C01014	Coupler Optical 1x4 Balanced Eclipse SC APC
863968-COR	EM11AA6C06C01015	Coupler Optical 1x5 Balanced Eclipse SC APC
863991-COR	EM11AA6C06C01016	Coupler Optical 1x6 Balanced Eclipse SC APC
863788-COR	EM11AA6C06C0F	Coupler Optical 1x2 70 30 Eclipse SC APC
863781-COR	EM11AA6C06C0G	Coupler Optical 1x2 65 35 Eclipse SC APC
863773-COR	EM11AA6C06C0H	Coupler Optical 1x2 60 40 Eclipse SC APC
863765-COR	EM11AA6C06C0J	Coupler Optical 1x2 55 45 Eclipse SC APC



## Closest Connector Housings (CCH)

Charter Item Number	Corning Part Number	Description
6T1036180-TWC	CCH-01U	MDU Connector Housing 1U Closet, two CCH panels
5T1047517-TWC	CCH-CP06-3C	Connector Panel, six SM simplex SC Ultra PC MOQ = 2
5T1036773-TWC	CCH-CP06-6C	CCH Panel, 6 F loaded with simplex SC APC SM AD MOQ = 2
5T1070628-TWC	CCH-CP12-6C	CCH Panel, 12 F with 12 simplex SC APC adapters
5T1094519-TWC	CCH-CP12-A9	CCH Panel with six duplex single-mode UPC adapters with ceramic insulators
5T1056127-TWC	CCS-01U	1U Rack-Mount Connector and Splice Housing
5T1070629-TWC	CCS-03U	Closest Connector and Splice Housing
877851-COR	CH4E43112B3-CF001B	CCH Stubbed Housing 4U 144-port 31 m LC APC SM FREEDM® ribbon riser top-right access
877852-COR	CH4E43112B3-CF001C	CCH Stubbed Housing 4U 144-port 31 m LC APC SM FREEDM ribbon riser top-right access
877853-COR	CH4E43112B3-UF001B	CCH Stubbed Housing 4U 144-port 31 m LC APC SM FREEDM loose tube ribbon riser top-right access
877854-COR	CH4E46112B3-UF001B	CCH Stubbed Housing 4U 144-port 61 m LC APC SM FREEDM loose tube ribbon riser top-right access
857300-COR	CS106P06-3C-3RN1F0	Cabinet Rack MT 6-F Cap, indoor preterminated with SC UPC
857200-COR	CS106P06-6C-3RN1F0	Cabinet Rack MT 6-F Cap, indoor preterminated with SC APC
857523-COR	CS124P12-3C-3RN2F0	Cabinet Rack MT 24-F Cap, indoor preterminated with SC UPC 1RU
857528-COR	CS324P06-3C-3RN2F0	Cabinet Rack MT 24-F Cap, indoor preterminated with SC UPC 3RU
857468-COR	CS112P06-3C-3RN1F0	Cabinet Rack MT 12-F Cap, indoor preterminated with SC UPC 1RU
857470-COR	CS112P06-6C-3RN1F0	Cabinet Rack MT 12-F Cap, indoor preterminated with SC APC with 1RU
857564-COR	CC336P12-3C-3RN000	Cabinet Rack MT 36-F Cap, indoor preterminated with SC UPC 3RU
857595-COR	CC348P12-3C-3RN000	Cabinet Rack MT 48-F Cap, indoor preterminated with SC UPC 3RU



## Miscellaneous Housings and Accessories

Charter Item Number	Corning Part Number	Description
850742-000	ATN-65-01	SC APC In-Line Optical Attenuator, flat wavelength, male-female, 1 dB
850747-000	ATN-65-02	SC APC In-Line Optical Attenuator, flat wavelength, male-female, 2 dB
850753-000	ATN-65-03	SC APC In-Line Optical Attenuator, flat wavelength, male-female, 3 dB
850765-000	ATN-65-05	SC APC In-Line Optical Attenuator, flat wavelength, male-female, 4 dB
850771-000	ATN-65-06	SC APC In-Line Optical Attenuator, flat wavelength, male-female, 6 dB
850776-000	ATN-65-07	SC APC In-Line Optical Attenuator, flat wavelength, male-female, 7 dB
850782-000	ATN-65-08	SC APC In-Line Optical Attenuator, flat wavelength, male-female, 8 dB
865640-000-BHN	LDC7231126C-C7001B	Housing Stub LDC-CMH, 72 F
865649-000-BHN	LHSE461126C-C7001B	Housing LHD 144 F STB with SC APC
874160-000-TWC	PCH-01U	Pretium™ 1U Rack-Mountable Housing
5T1089699-TWC	SPH-01P	Single-Panel Wall-Mountable Housing, holds one CCH panel
5T1038427-TWC	FDC-005-F	Rack-Mountable Enclosure for .4 splice trays
2T1014176-TWC	FDC-CP1P-06-6C	Connector Panel FDCCP1P066C SC APC (MOQ = 2)
5T1103057-TWC	FDM06P06-6C-3RH000	Connector Module with six SC APC, 3 m pigtail
861672-COR	FCC-Cleaner-Fiber	Micro-Care Fiber Optic Cleaning Fluid, one can
898252-COR	FCC-Wipes	Micro-Care Fiber Optic Wipes, 90 sheets



# 40 and 100G Breakout Modules and Harnesses

Our 40 and 100G breakout modules are designed on an LGX platform and are optimized for use in your headend applications. These robust modules are supported by 24-F MPO harnesses to make installs quick and easy.

## Charter 40G SMF and MMF Interconnect Application

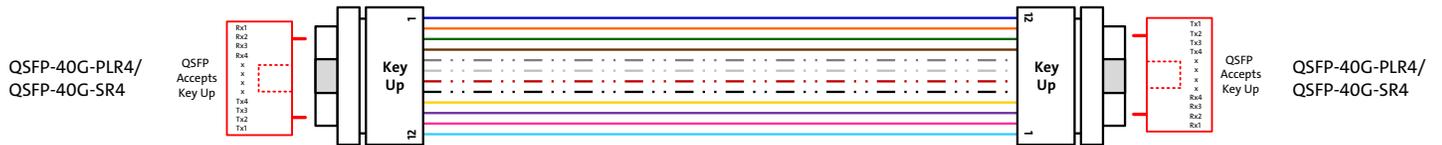
### MMF Interconnect Jumper



### SMF Interconnect Jumper



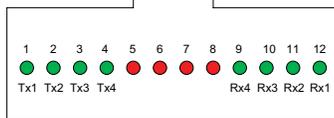
## Polarity Wiring and Pin Assignment



Type B Polarity

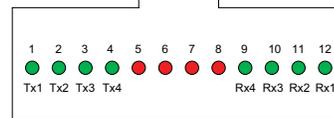
J7575A12QEE-NBxxxMS  
1-12, OM4  
Jumper

QSFP-40g-sr4



Fiber Numbers Looking at the MTP® Connector  
Note: Fibers 5, 6, 7, and 8 are not used.

QSFP-40G-PLR4



Fiber Numbers Looking at the MTP Connector  
Note: Fibers 5, 6, 7, and 8 are not used.

### Harnesses

Charter Item Number	Corning Part Number	Description
XXXXXXXX	J7575A12QEE-NB001MS	40G MPO Type B Jumper, 12 F, 50 μm multimode (OM4), orange jacket, 1 m
XXXXXXXX	J7575A12QEE-NB002MS	40G MPO Type B Jumper, 12 F, 50 μm multimode (OM4), orange jacket, 2 m
XXXXXXXX	J7575A12QEE-NB003MS	40G MPO Type B Jumper, 12 F, 50 μm multimode (OM4), orange jacket, 3 m

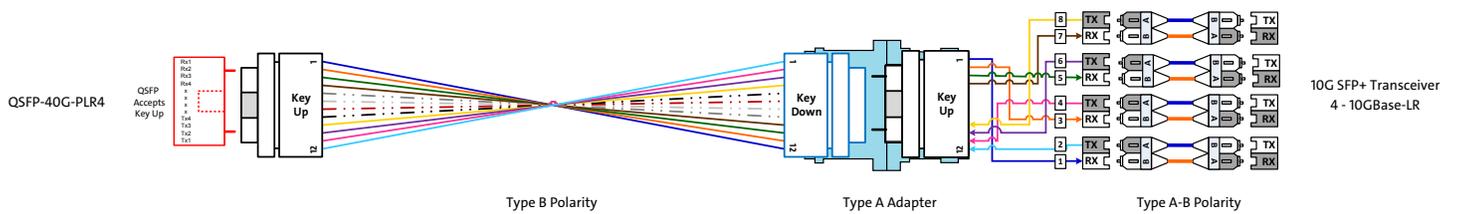
### Cable Assemblies

Charter Item Number	Corning Part Number	Description
XXXXXXXX	J909012GE8-NB001M	40G MPO Type B Jumper, 12 F, single-mode, yellow jacket, 1 m
XXXXXXXX	J909012GE8-NB002M	40G MPO Type B Jumper, 12 F, single-mode, yellow jacket, 2 m
XXXXXXXX	J909012GE8-NB003M	40G MPO Type B Jumper, 12 F, single-mode, yellow jacket, 3 m

# Charter 40G SMF Breakout Application



## Polarity Wiring and Pin Assignment



**40G Pinout**

1	2	3	4	5	6	7	8	9	10	11	12
Tx1	Tx2	Tx3	Tx4					Rx4	Rx3	Rx2	Rx1

Fiber Numbers Looking at the MTP® Connector  
 Note: Fibers 5, 6, 7, and 8 are not used.

Breakout Module		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	LDK08B3-E71RFB	Corning 40G to 4x 10G Breakout Module, LC APC, single-mode

Harnesses		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	J909012GE8-NB001M	40G MPO Type B Jumper, 12 F, single-mode, yellow jacket, 1 m
XXXXXXXX	J909012GE8-NB002M	40G MPO Type B Jumper, 12 F, single-mode, yellow jacket, 2 m
XXXXXXXX	J909012GE8-NB003M	40G MPO Type B Jumper, 12 F, single-mode, yellow jacket, 3 m

Cable Assemblies		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	041802G9120001M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 1 m
XXXXXXXX	041802G9120002M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 2 m
XXXXXXXX	041802G9120003M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 3 m

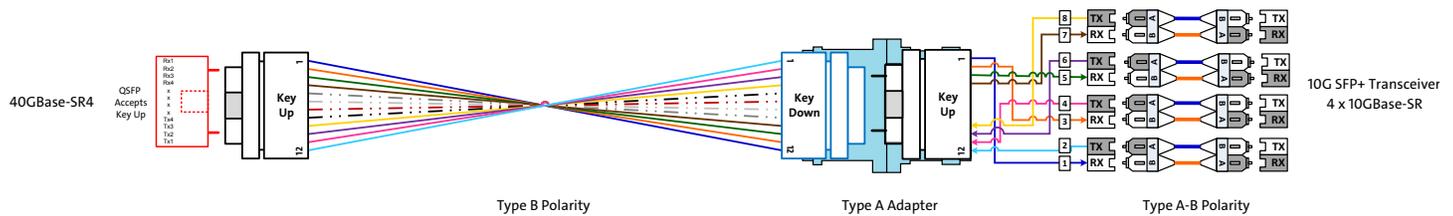
  

TVC Kitted Part Number		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	ISPAK-SMF-40G-MPO-LCA-1M	Kitted Part consisting of (1) LDK08B3-E71RFB breakout module and (1) J909012GE8-NB001M 12 F 40G MPO SM yellow jacketed assembly, 1 m

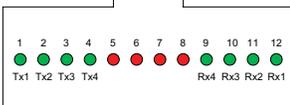
# Charter 40G OM4 MMF Breakout Application



## Polarity Wiring and Pin Assignment



### 40G Pinout



Fiber Numbers Looking at the MTP® Connector  
Note: Fibers 5, 6, 7, and 8 are not used.

Breakout Module		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	LDK20E4-A71QFB	Breakout Module, 20 F, CPAK 100G, MPO(M) to LC, OM4

Harnesses		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	JA6A6A24QPE-NA001MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 1 m
XXXXXXXX	JA6A6A24QPE-NA002MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 2 m
XXXXXXXX	JA6A6A24QPE-NA003MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 3 m

Cable Assemblies		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	030302Q5120001M-OR	Jumper Fiber, riser-rated duplex, multimode 2.0 mm legs, OM4 50 μm bend-insensitive fiber, LC to LC, orange jacket, 1 m
XXXXXXXX	030302Q5120002M-OR	Jumper Fiber, riser-rated duplex, multimode 2.0 mm legs, OM4 50 μm bend-insensitive fiber, LC to LC, orange jacket, 2 m
XXXXXXXX	030302Q5120003M-OR	Jumper Fiber, riser-rated duplex, multimode 2.0 mm legs, OM4 50 μm bend-insensitive fiber, LC to LC, orange jacket, 3 m

TVC Kitted Part Number		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	ISPAK-OM4-100G-MPO-LC-1M	Kitted Part consisting of (1) LDK20E4-A71QFB breakout module and (1) JA6A6A24QPE-NA001MS 24 F 100G MPO MM orange jacketed assembly, 1 m

# Charter 3 x 40G SMF MPO Breakout Application

Juniper QFX10k  
Data Center Switch

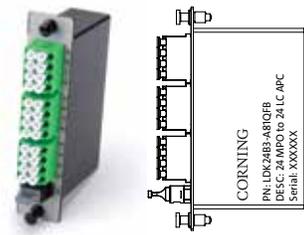


40G PLR4 Transceivers  
3 x QSFP-40GBase-PLR4

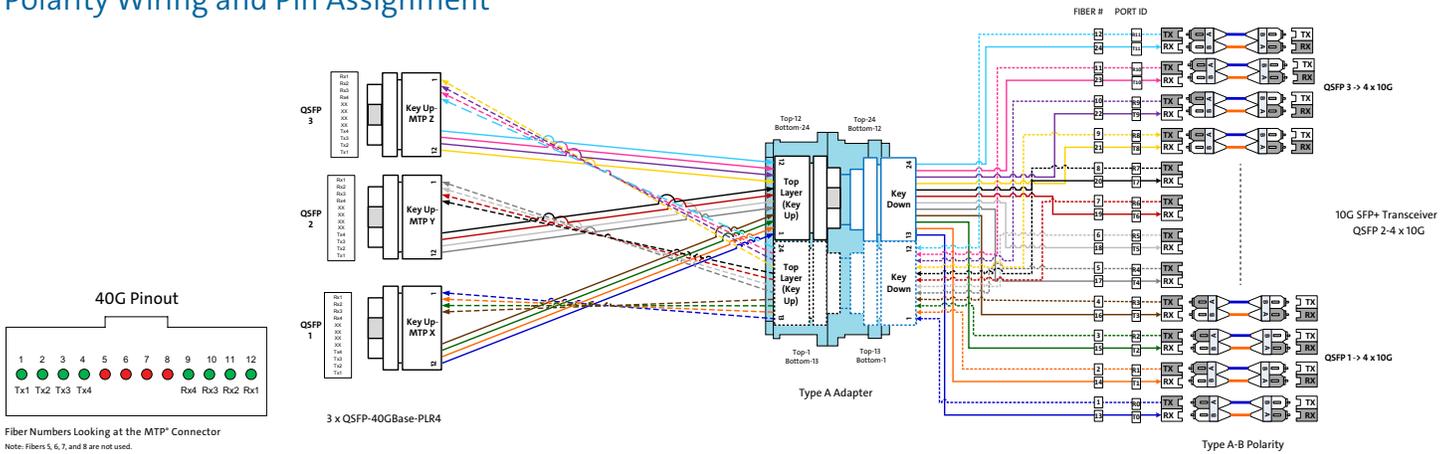
HA99024GPH-KA001M  
Method A Polarity  
(3) 8 F MPO to (1) 24 F MPO



LDK24B3-A81QFB  
24 MPO to 24 LC APC  
Mini LGX Cassette



## Polarity Wiring and Pin Assignment



Breakout Module		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	LDK24B3-A81QFB	Corning 3 x 40G to 12 x 10G Breakout Module, MPO, single-mode, 24 F

Harnesses		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	HA99024GPH-KA001M	MPO Type A to (3) 8 F MPO Type A, plenum-rated cable, single-mode, 24-in breakout, yellow jacket, 1 m
XXXXXXXX	HA99024GPH-KA002M	24 F MPO Type A to (3) 8 F MPO Type A, plenum-rated cable, single-mode, 24-in breakout, yellow jacket, 2 m
XXXXXXXX	HA99024GPH-KA003M	24 F MPO Type A to (3) 8 F MPO Type A, plenum-rated cable, single-mode, 24-in breakout, yellow jacket, 3 m

Cable Assemblies		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	041802G9120001M	Jumper Fiber, riser-rated duplex, single-mode 1.6 mm, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 1 m
XXXXXXXX	041802G9120002M	Jumper Fiber, riser-rated duplex, single-mode 1.6 mm, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 2 m
XXXXXXXX	041802G9120003M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 3 m

TVC Kitted Part Number		
Charter Item Number	Corning Part Number	Description
XXXXXXXX	ISPAK-SMF-3X40G-MPO-LCA-1M	Kitted Part consisting of (1) LDK24B3-A81QFB breakout module and (1) HA99024GPH-KA001M 40G (3) 8 F MPO to (1) 24 F MPO SM yellow jacketed assembly, 1 m

# Charter 100G SMF and MMF Interconnect Application

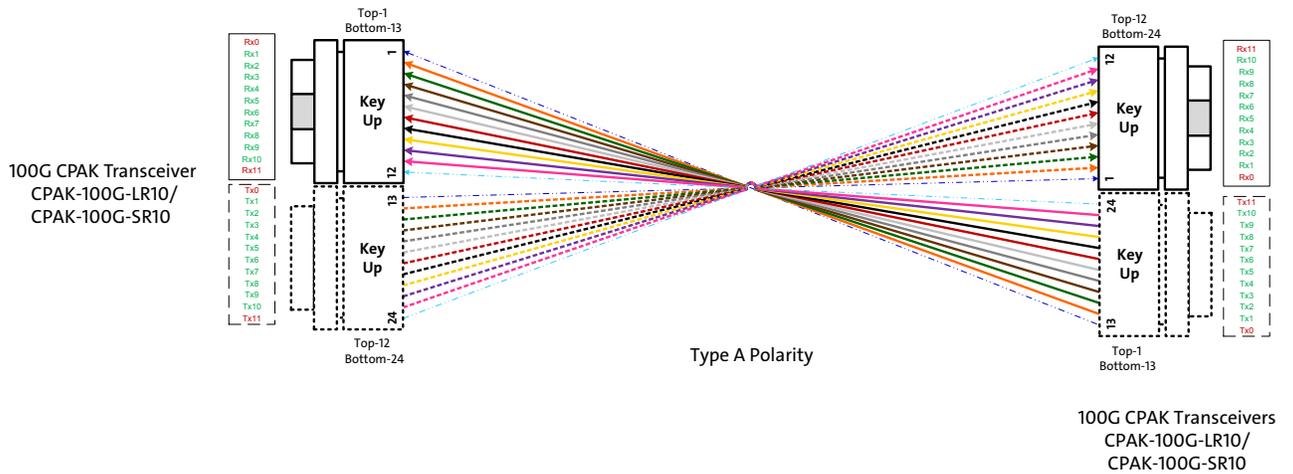
## SMF Interconnect Jumper



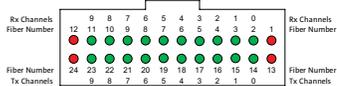
## MMF Interconnect Jumper



## Polarity Wiring and Pin Assignment

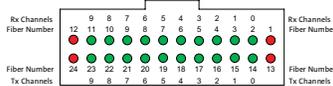


### CPAK 10x10G LR Pinout



Fiber Numbers and Channel Assignments When Looking Into MTP® Receptacle  
Note: Fibers 1, 12, 13, and 24 are not used.

### CPAK-100G-SR10 Pinout



Fiber Numbers and Channel Assignments When Looking Into MTP® Receptacle  
NOTE: Fibers 1, 12, 13, and 24 are not used.

## Harnesses

Charter Item Number	Corning Part Number	Description
XXXXXXX	JA9A924GPH-NA001M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 1 m
XXXXXXX	JA9A924GPH-NA002M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 2 m
XXXXXXX	JA9A924GPH-NA003M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 2 m

## Cable Assemblies

Charter Item Number	Corning Part Number	Description
XXXXXXX	JA6A6A24QPE-NA001MS	100G MPO Type A Jumper, 24 F, 50 µm multimode (OM4), orange jacket, 1 m
XXXXXXX	JA6A6A24QPE-NA002MS	100G MPO Type A Jumper, 24 F, 50 µm multimode (OM4), orange jacket, 2 m
XXXXXXX	JA6A6A24QPE-NA003MS	100G MPO Type A Jumper, 24 F, 50 µm multimode (OM4), orange jacket, 3 m

# Charter 100G SMF Breakout Application

## Commercial Edge Router (CER)



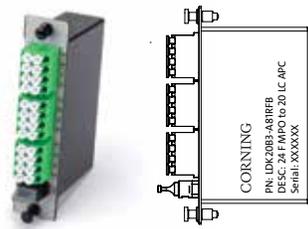
100G CPAK Transceiver  
CPAK-100G-LR4

## JA9A924GPH-NA00xM Method A Polarity (1-12,13-24), SMF G.657.A1 Jumper



24 F MPO Key-Up Female

## LDK20B3-A81RFB 24 F MPO to 20 LC APC SMF Mini LGX Cassette



## Type A-B SMF G.657.A1 Jumper



LC APC

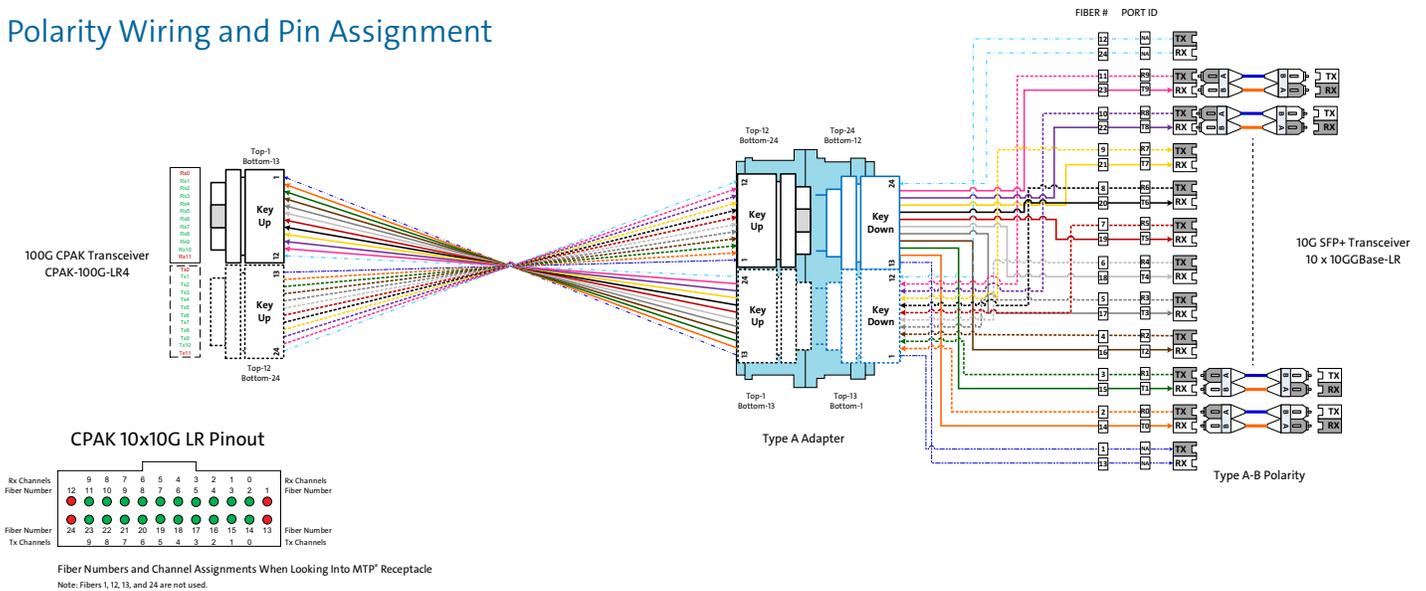
LC UPC

## Commercial Edge PON (OLT)



10G SFP+ Transceiver  
10 x 10GBase-LR

## Polarity Wiring and Pin Assignment



## Breakout Module

Charter Item Number	Corning Part Number	Description
XXXXXXXX	LDK20B3-A81RFB	Breakout Module, 20 F, CPAK 100G, single-mode, MPO(M) to LC APC

## Harnesses

Charter Item Number	Corning Part Number	Description
XXXXXXXX	JA9A924GPH-NA001M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 1 m
XXXXXXXX	JA9A924GPH-NA002M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 2 m
XXXXXXXX	JA9A924GPH-NA003M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 3 m

## Cable Assemblies

Charter Item Number	Corning Part Number	Description
XXXXXXXX	041802G9120001M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 1 m
XXXXXXXX	041802G9120002M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 2 m
XXXXXXXX	041802G9120003M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 3 m

## TVC Kitted Part Number

Charter Item Number	Corning Part Number	Description
XXXXXXXX	ISPAK-SMF-100G-MPO-LCA-1M	Kitted Part consisting of (1) LDK20B3-A81RFB breakout module and (1) JA9A924GPH-NA001M 12 F 100G MPO SM yellow jacketed assembly, 1 m

# Charter 100G OM4 MMF Breakout Application

Commercial Edge Router (CER)

JA6A6A24QPE-NA00xMS  
Method A Polarity  
(1-12,13-24), OM4 Jumper, Orange

LDK20E4-A71QFB  
24 F MPO to 20 LC/PC OM4  
Mini LGX Cassette

Type A-B  
OM4 Jumper

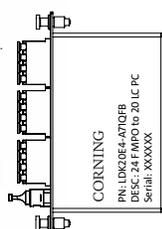
10G MMF



100G CPAK Transceiver  
CPAK-100G-SR10



24 F MPO Key-Up Female



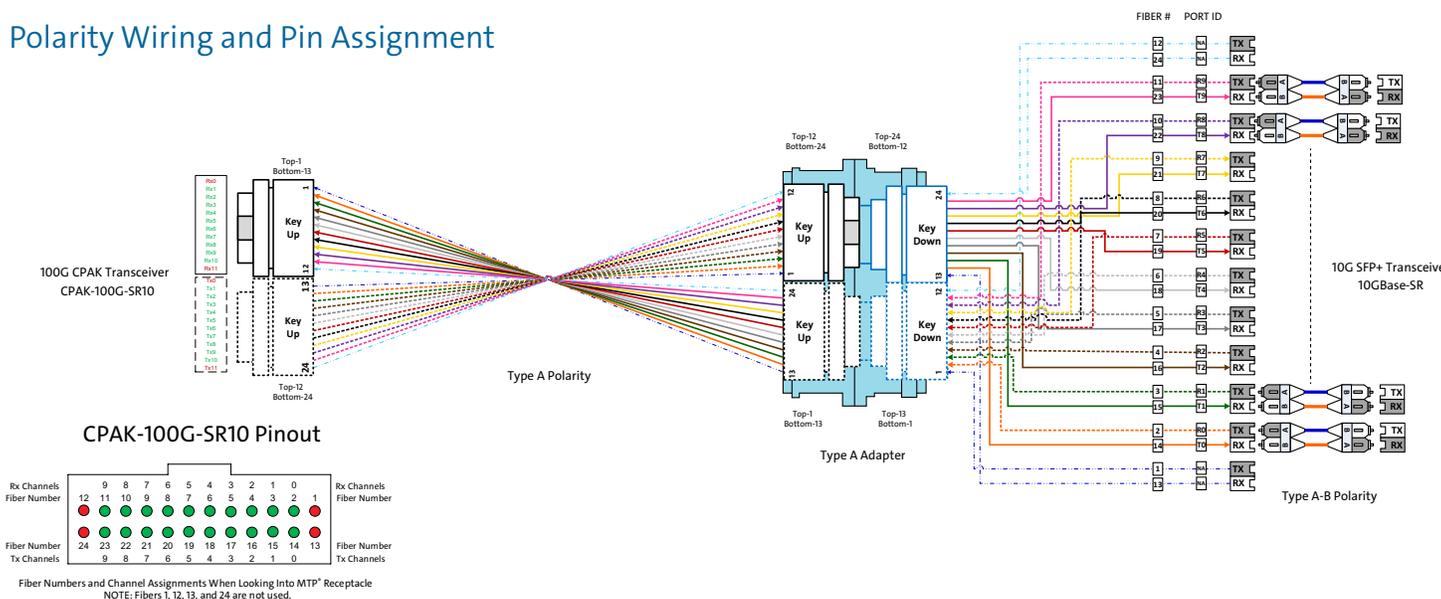
LC

LC



10G SFP+ Transceiver

## Polarity Wiring and Pin Assignment



### Breakout Module

Charter Item Number	Corning Part Number	Description
XXXXXXXX	LDK20E4-A71QFB	Breakout Module, 20 F, CPAK 100G, MPO(M) to LC, OM4

### Harnesses

Charter Item Number	Corning Part Number	Description
XXXXXXXX	JA6A6A24QPE-NA001MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 1 m
XXXXXXXX	JA6A6A24QPE-NA002MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 2 m
XXXXXXXX	JA6A6A24QPE-NA003MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 3 m

### Cable Assemblies

Charter Item Number	Corning Part Number	Description
XXXXXXXX	030302Q5120001M-OR	Jumper Fiber, riser-rated duplex, multimode 2.0 mm legs, OM4 50 μm bend-insensitive fiber, LC to LC, orange jacket, 1 m
XXXXXXXX	030302Q5120002M-OR	Jumper Fiber, riser-rated duplex, multimode 2.0 mm legs, OM4 50 μm bend-insensitive fiber, LC to LC, orange jacket, 2 m
XXXXXXXX	030302Q5120003M-OR	Jumper Fiber, riser-rated duplex, multimode 2.0 mm legs, OM4 50 μm bend-insensitive fiber, LC to LC, orange jacket, 3 m

### TVC Kitted Part Number

Charter Item Number	Corning Part Number	Description
XXXXXXXX	ISPAK-OM4-100G-MPO-LC-1M	Kitted Part consisting of (1) LDK20E4-A71QFB breakout module and (1) JA6A6A24QPE-NA001MS 24 F 100G MPO MM orange jacketed assembly, 1 m

# Charter 100G to 2 x 40G OM4 MMF Breakout Application

Commercial Edge Router



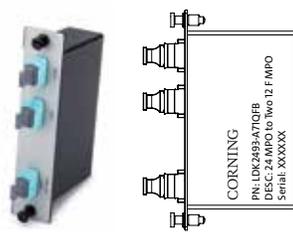
CPAK Transceiver  
CPAK-100G-SR10

JA6A6A24QPE-NA00xMS  
Method A Polarity  
(1-12, 13-24), OM4 Jumper, Orange



24 F MPO Key-Up Female

LDK2493-A71QFB  
24 MPO to Two 12 F MPO  
Mini LGX Cassettes



J7575A12QEE-NB00xMS  
Method B Polarity  
OM4 Jumper, Orange



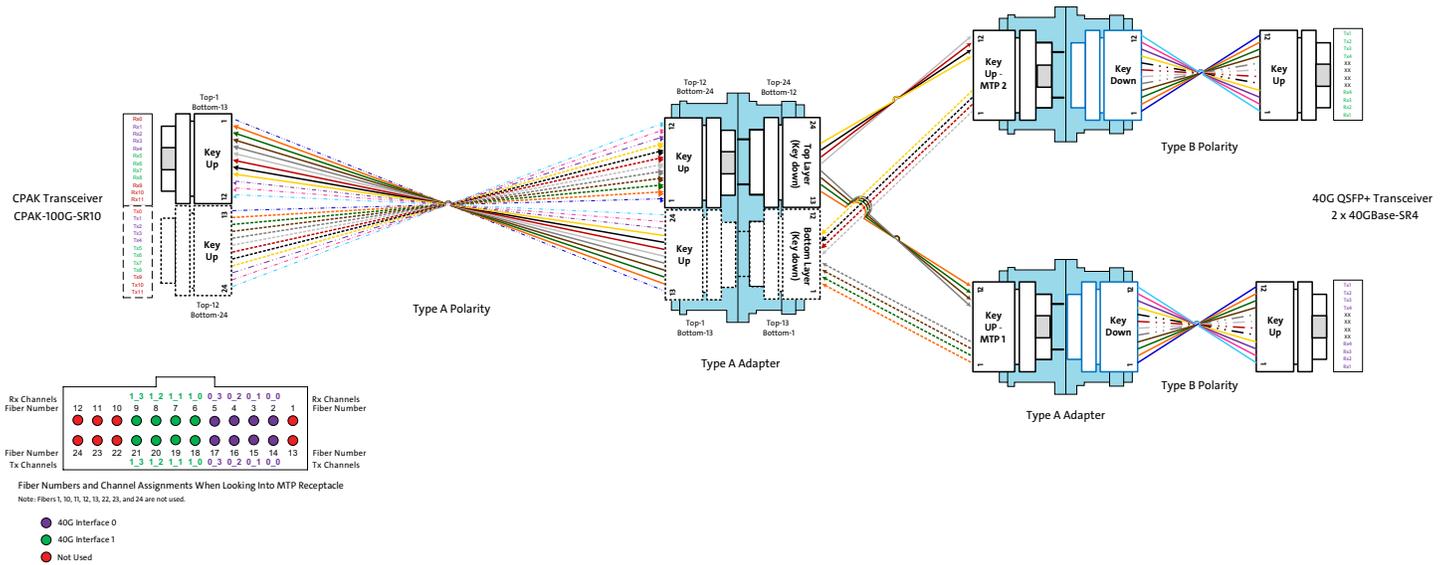
12 F MPO Key-Up Female

Commercial Edge Switch (CES)



40G QSFP+ Transceiver  
2 x 40GBase-SR4

## Polarity Wiring and Pin Assignment



### Breakout Module

Charter Item Number	Corning Part Number	Description
XXXXXXX	JA6A6A24QPE-NA001MS	Breakout Module, 24 F, CPAK 100G, MPO(M) to 2-12 F MPO, OM4

### Harnesses

Charter Item Number	Corning Part Number	Description
XXXXXXX	JA6A6A24QPE-NA001MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 1 m
XXXXXXX	JA6A6A24QPE-NA002MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 2 m
XXXXXXX	JA6A6A24QPE-NA003MS	100G MPO Type A Jumper, 24 F, 50 μm MM (OM4), orange jacket, 3 m

### Cable Assemblies

Charter Item Number	Corning Part Number	Description
XXXXXXX	J7575A12QEE-NB001MS	MTP Jumper, 12 F, 50 μm multimode (OM4), orange jacket, 1 m
XXXXXXX	J7575A12QEE-NB002MS	MTP Jumper, 12 F, 50 μm multimode (OM4), orange jacket, 2 m
XXXXXXX	J7575A12QEE-NB003MS	MTP Jumper, 12 F, 50 μm multimode (OM4), orange jacket, 3 m

### TVC Kitted Part Number

Charter Item Number	Corning Part Number	Description
XXXXXXX	ISPAK-OM4-100G-2X40G-MPO-MPO-1M	Kitted Part consisting of (1) LDK2493-A71QFB breakout module and (1) JA6A6A24QPE-NA001MS 24F 100G MPO MM orange jacketed assembly, 1 m

# Charter 100G SMF COLO Application

Commercial Edge Router (CER)

JA9A924GPH-NA00xM  
Method A Polarity  
(1-12,13-24), SMF G.657.A1 Jumper

LDK20B3-A81RFB  
24 F MPO to 20 LC APC SMF  
Mini LGX Cassette

Type A-B  
SMF G.657.A1 Jumper

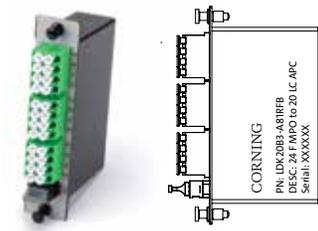
Commercial Edge PON (OLT)



100G CPAK Transceiver  
CPAK-100G-LR4



24 F MPO Key-Up Female



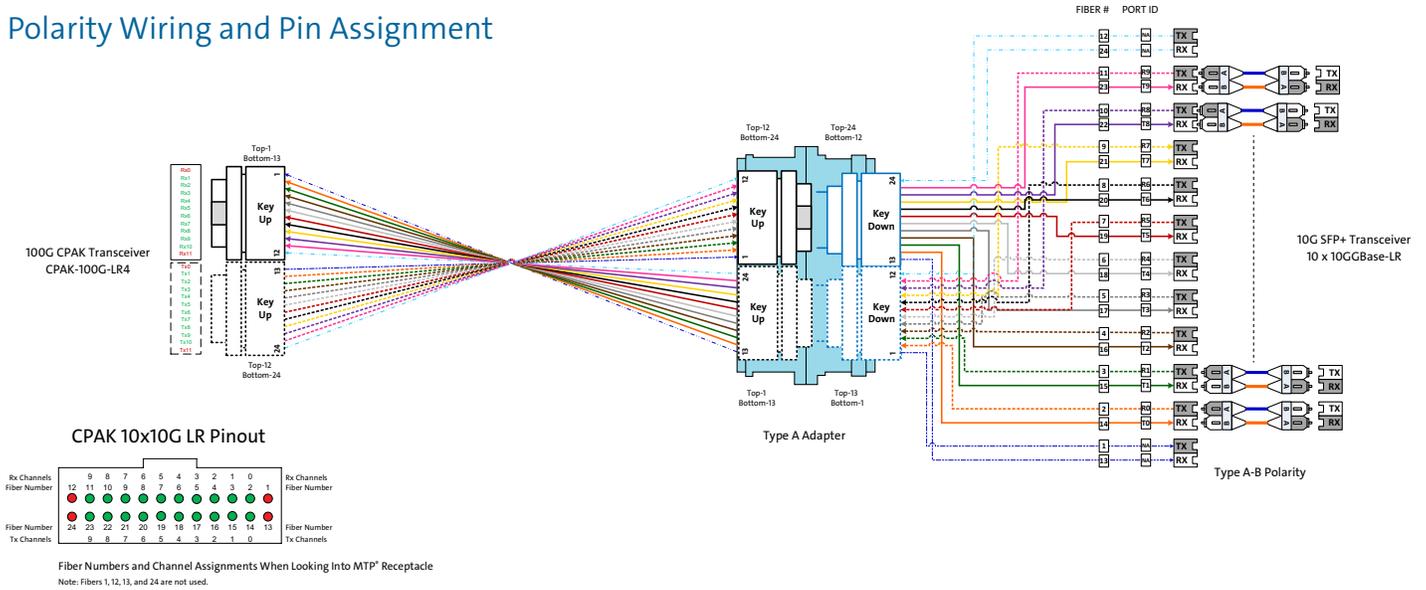
LC APC

LC UPC



10G SFP+ Transceiver  
10 x 10GBase-LR

## Polarity Wiring and Pin Assignment



## Breakout Module

Charter Item Number	Corning Part Number	Description
XXXXXXXX	LDK20B3-A81RFB	Breakout Module, 20 F, CPAK 100G, single-mode, MPO(M) to LC APC

## Harnesses

Charter Item Number	Corning Part Number	Description
XXXXXXXX	JA9A924GPH-NA001M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 1 m
XXXXXXXX	JA9A924GPH-NA002M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 2 m
XXXXXXXX	JA9A924GPH-NA003M	100G MPO Type A Jumper, 24 F, SM, non-pinned, yellow jacket, 3 m

## Cable Assemblies

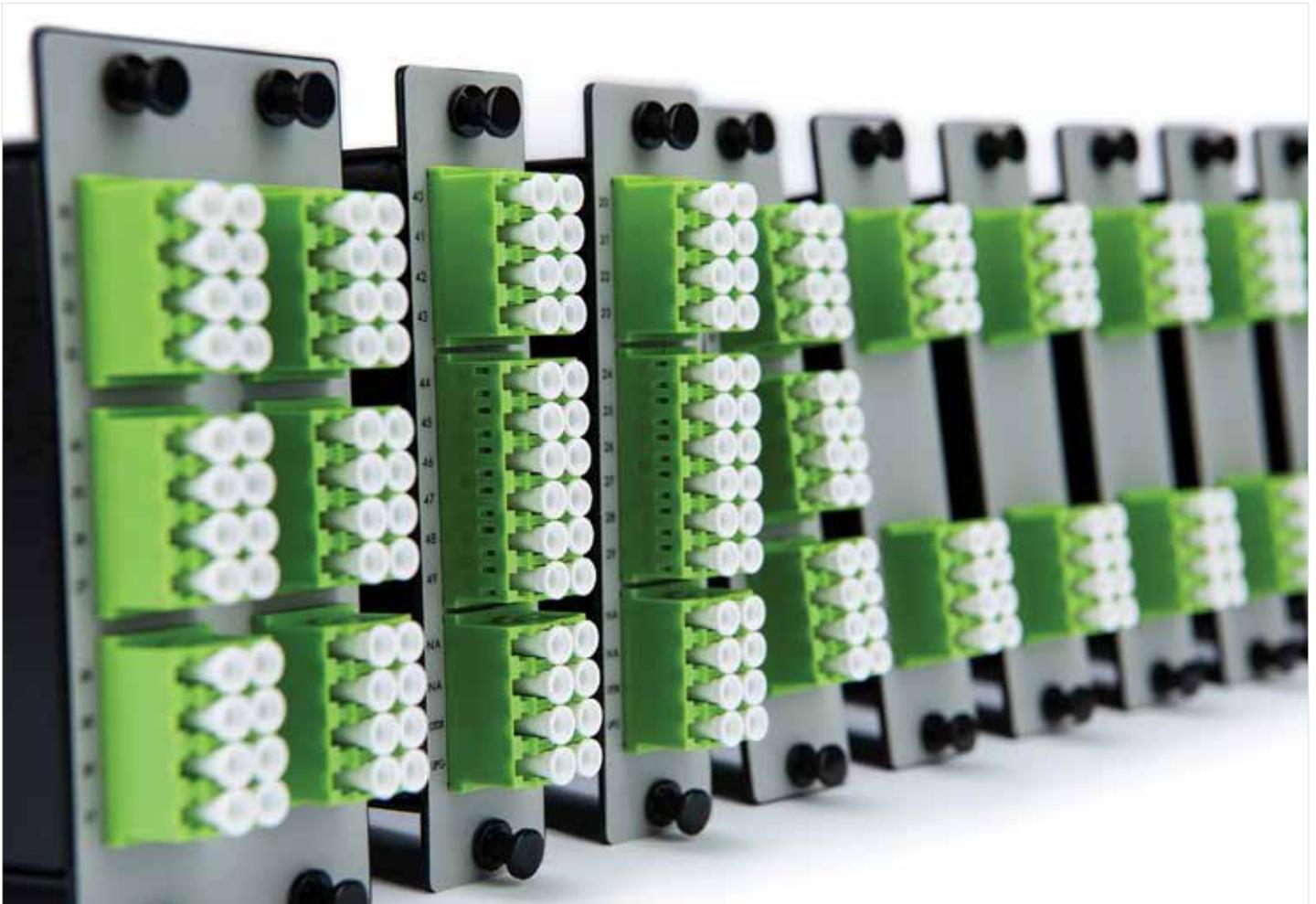
Charter Item Number	Corning Part Number	Description
XXXXXXXX	041802G9120001M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 1 m
XXXXXXXX	041802G9120002M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 2 m
XXXXXXXX	041802G9120003M	Jumper Fiber, riser-rated duplex, single-mode 2.0 mm legs, 9/125 bend-insensitive fiber, LC APC to LC UPC, yellow jacket, 3 m

## TVC Kitted Part Number

Charter Item Number	Corning Part Number	Description
XXXXXXXX	ISPAK-SMF-100G-MPO-LCA-1M	Kitted Part consisting of (1) LDK20B3-A81RFB breakout module and (1) JA9A924GPH-NA001M 12 F 100G MPO SM yellow jacketed assembly, 1 m

## Dense Wavelength Division Multiplexing (DWDM) Modules

Corning's dense wavelength division multiplexers are integrated optical modules that combine, or multiplex, and separate, or demultiplex, multiple optical signals of different wavelengths in a single fiber.



### 4-Channel Mux

Charter Item Number	Corning Part Number	Description
726788-COR	DKXB31A041600ZZB5N	DWDM, LGX module, 4 channel, mux, 16-19 DTPUPG, LC APC
726789-COR	DKXB31A046000ZZB5N	DWDM, LGX module, 4 channel, mux, 60-63 DTPUPG, LC APC

## DWDM Modules (Continued)

8-Channel Mux		
Charter Item Number	Corning Part Number	Description
726790-COR	DKXB31A082000ZZB5N	DWDM, LGX module, LC APC, 100 GHz, mux, 8 channel, ITU 20-27, express port, upgrade port, test TX port, test RX port
726791-COR	DKXB31A082800ZZB5N	DWDM, LGX module, LC APC, 100 GHz, mux, 8 channel, ITU 28-35, express port, upgrade port, test TX port, test RX port
726792-COR	DKXB31A083600ZZB5N	DWDM, LGX module, LC APC, 100 GHz, mux, 8 channel, ITU 36-43, express port, upgrade port, test TX port, test RX port
726794-COR	DKXB31A085200ZZB5N	DWDM, LGX module, LC APC, 100 GHz, mux, 8 channel, ITU 44-51, express port, upgrade port, test TX port, test RX port
726793-COR	DKXB31A084400ZZB5N	DWDM, LGX module, LC APC, 100 GHz, mux, 8 channel, ITU 52-59, express port, upgrade port, test TX port, test RX port

12-Channel Mux		
Charter Item Number	Corning Part Number	Description
726795-COR	DKXB31A125000ZZE5N	DWDM, LGX module, LC APC, 100 GHz, mux, 12 channel, ITU 50-61, express port, upgrade port, test TX port, test RX port

16-Channel Mux		
Charter Item Number	Corning Part Number	Description
726796-COR	DKXB31A162500ZZE5N	DWDM, LGX module, LC APC, 100 GHz, mux, 16 channel, ITU 25-40, express port, upgrade port, test TX port, test RX port

20-Channel Mux		
Charter Item Number	Corning Part Number	Description
726797-COR	DKXB31A202000ZZB5O	DWDM, LGX module, LC APC, 100 GHz, mux, 20 channel, ITU 20-39, express port, upgrade port, test TX port, test RX port, OTDR
726798-COR	DKXB31A204000ZZB5O	DWDM, LGX module, LC APC, 100 GHz, mux, 20 channel, ITU 40-59, express port, upgrade port, test TX port, test RX port

40-Channel Mux		
Charter Item Number	Corning Part Number	Description
726799-COR	DKXB31A402000ZZB5O	DWDM, LGX module, LC APC, 100 GHz, mux, 40 channel, ITU 20-59, express port, upgrade port, test TX port, test RX port, OTDR

Contact a Corning Customer Care Representative for additional channels at 800-743-2675.

## Coarse Wavelength Division Multiplexing (CWDM) Modules

Corning's coarse wavelength division multiplexers are integrated optical modules that combine, or multiplex, and separate, or demultiplex, multiple optical signals of different wavelengths in a single fiber.

4-Channel Mux		
Charter Item Number	Corning Part Number	Description
7T1063791-TWC	C2ANC44JF-ZZUN	Mux/Demux CWDM 4 Channel 1610-1550 nm
864302-COR	CAX6C04BEYZZUN	CWDM Eclipse® 4 Channel Mux/Demux SC APC 1470 1530 with 1310 plug-in
864312-COR	CAX6C04FJ-ZZUN	CWDM Eclipse 4 Channel Mux/Demux SC APC 1550 1610 with upgrade port
7T1038417-TWC	CCX6C04UCYZZUN	LDC CWDM Mux for headend 04L
7T1085599-TWC	CXANC01BZ-ZZUN	Mux/Demux CWDM Single-Channel 1470 nm Bare Filter 250U colored
7T1085600-TWC	CXANC01CZ-ZZUN	Mux/Demux CWDM Single-Channel 1490 nm Bare Filter 250U colored
7T1085609-TWC	CXANC01JZ-ZZUN	Demux CWDM Single-Channel 1610 nm Bare Filter 250U colored
7T1085610-TWC	CXANC04BEYZZNN	Mux/Demux 4 Channel CWDM Compact Device 1471/1491/1511/1531
7T1085611-TWC	CXANC04FJYZZNN	Mux/Demux 4 Channel CWDM Compact Device 1551/1571/1591/1611



# Channel Plan

Channel	THz	nm	CWDM	4 CH	8 CH	20 CH	40 CH	IWDM 8 & 16	Coexistence	OSP Only
15	191.5	1565.5	1551 CWDM	A						
16	191.6	1564.68								
17	191.7	1563.86								
18	191.8	1563.05								
19	191.9	1562.23								
20	192.0	1561.42		B						
21	192.1	1560.61								
22	192.2	1559.79		C	B-C					
23	192.3	1558.98								
24	192.4	1558.17								
25	192.5	1557.36		D						
26	192.6	1556.55								
27	192.7	1555.75								
28	192.8	1554.94								
29	192.9	1554.13								
30	193.0	1553.33								
31	193.1	1552.52								
32	193.2	1551.72		E	D-E					
33	193.3	1550.92								
34	193.4	1550.12	F							
35	193.5	1549.32								
36	193.6	1548.51								
37	193.7	1547.72								
38	193.8	1546.92								
39	193.9	1546.12								
40	194.0	1545.32								G
41	194.1	1544.53								
42	194.2	1543.73	1531 CWDM	H						
43	194.3	1542.94								
44	194.4	1542.14								
45	194.5	1541.35								
46	194.6	1540.56								
47	194.7	1539.77		I	H-I					
48	194.8	1538.98								
49	194.9	1538.19		J						
50	195.0	1537.4								
51	195.1	1536.61								
52	195.2	1535.82								
53	195.3	1535.04								
54	195.4	1534.25								
55	195.5	1533.47								
56	195.6	1532.68								
57	195.7	15231.9		L						
58	195.8	1531.12								
59	195.9	1530.33								
60	196.0	1529.55								
61	196.1	1528.77								
62	196.2	1527.99								
63	196.3	1527.22								
64	196.4	1526.44								

## Cable Assemblies

Corning specializes in providing Charter Communications with high-performance, custom cable assemblies to serve in conjunction with our optical interconnection solutions at all interface points in the communications networks.

Simplex Cable Assemblies		
Charter Item Number	Corning Part Number	Description
5T1036249-TWC	004401R4131003M	Fiber Patch Cables, pigtail to SC APC, 900 μm, 3 m
5T1062022-TWC	214401R3131006M	Fiber Patch Cables, single-mode, FC ACP to SC APC, 6 m
5T1062668-TWC	215801R2131006M	Fiber Patch Cables, FC APC to SC UPC, 6 m
5T1092788-TWC	444401G2131015M	Fiber Jumper, simplex, riser, single-mode, 2 mm, 15 m
5T1031565-TWC	444401R3131001M	Fiber Jumper, simplex, riser, single-mode, 3 mm, 15 m
5T1042334-TWC	444401R3131002M	Fiber Jumper, single-mode, SC APC to SC APC, 3 mm, 2 m
5T1013673-TWC	444401R3131003M	Fiber Jumper, simplex, riser, single-mode, 3 mm, 3 m
5T1060727-TWC	444401R2131006M	Fiber Jumper, simplex, single-mode, SC APC to SC APC, 6 m
5T1009635-TWC	444401R3131010M	Fiber Jumper, simplex, riser, single-mode, SC APC to SC APC, 3 mm, 10 m
5T1004754-TWC	444401R3131015M	Fiber Jumper, simplex, riser, single-mode, SC APC to SC APC, 3 mm, 15 m
5T1014506-TWC	444401R3131020M	Fiber Jumper, simplex, riser, single-mode, SC APC to SC APC, 3 mm, 20 m
5T1038413-TWC	445801R3131001M	Fiber Jumper, simplex, riser, single-mode, SC APC to SC UPC, 3 mm, 1 m
5T1004749-TWC	445801R3131003M	Fiber Jumper, simplex, riser, single-mode, SC APC to SC UPC, 3 mm, 3 m
5T1038412-TWC	445801R3131007M	Fiber Jumper, simplex, 1 F riser, single-mode, SC APC to SC UPC, 2 mm, 7 m
5T1014532-TWC	445801R3131010M	Fiber Jumper, simplex, riser, single-mode, SC APC to SC UPC, 3 mm, 10 m
5T1004751-TWC	445801R3131015M	Fiber Jumper, simplex, riser, single-mode, SC APC to SC UPC, 3 mm, 15 m
7T1013669-TWC	585801R3131001M	Fiber Jumper, single-mode, riser, SC Ultra to PC, 1 m
5T1101819-TWC	585801R3131002M	Fiber Jumper, simplex, OFNR, SC UPC to SC UPC, 2 m
5T1023919-TWC	585801R3131005M	Fiber Jumper, SC UPC to SC UPC, 5 m
5T1061172-TWC	445401R3131065F	Fiber Jumper, single-mode, SC APC to FC UPC, 65 ft
5T1101818-TWC	585801R3131001F	Fiber Jumper, Corning® SMF-28e® riser, SC single-mode to SC single-mode, 1 ft
7T1015330-TWC	585801R3131050F	Fiber Jumper, simplex, riser, single-mode, SC UPC to SC UPC, 50 ft

Jumper-in-a-Box		
Charter Item Number	Corning Part Number	Description
868944-COR	2222SR2B5007M	1-F Ultra Fiber 1.6 mm LC APC to LC APC, 7 m, Qty: 50
868946-COR	2222SR2B5010M	1-F Ultra Fiber 1.6 mm LC APC to LC APC, 10 m, Qty: 50
868947-COR	0222SR2B7001M	1-F Ultra Fiber 1.6 mm LC APC to LC APC, 1 m, Qty: 70
868949-COR	2222SR2B7005M	1-F Ultra Fiber 1.6 mm LC APC to LC APC, 5 m, Qty: 50
868950-COR	2222SR2B7002M	1-F Ultra Fiber 1.6 mm LC APC to LC APC, 2 m, Qty: 50
868945-COR	2222SR2B7001M	1-F Ultra Fiber 1.6 mm LC APC to LC APC, 1 m, Qty: 50
868948-COR	2222SR2B7003M	1-F Ultra Fiber 1.6 mm LC APC to LC APC, 3 m, Qty: 50

## Duplex Cable Assemblies

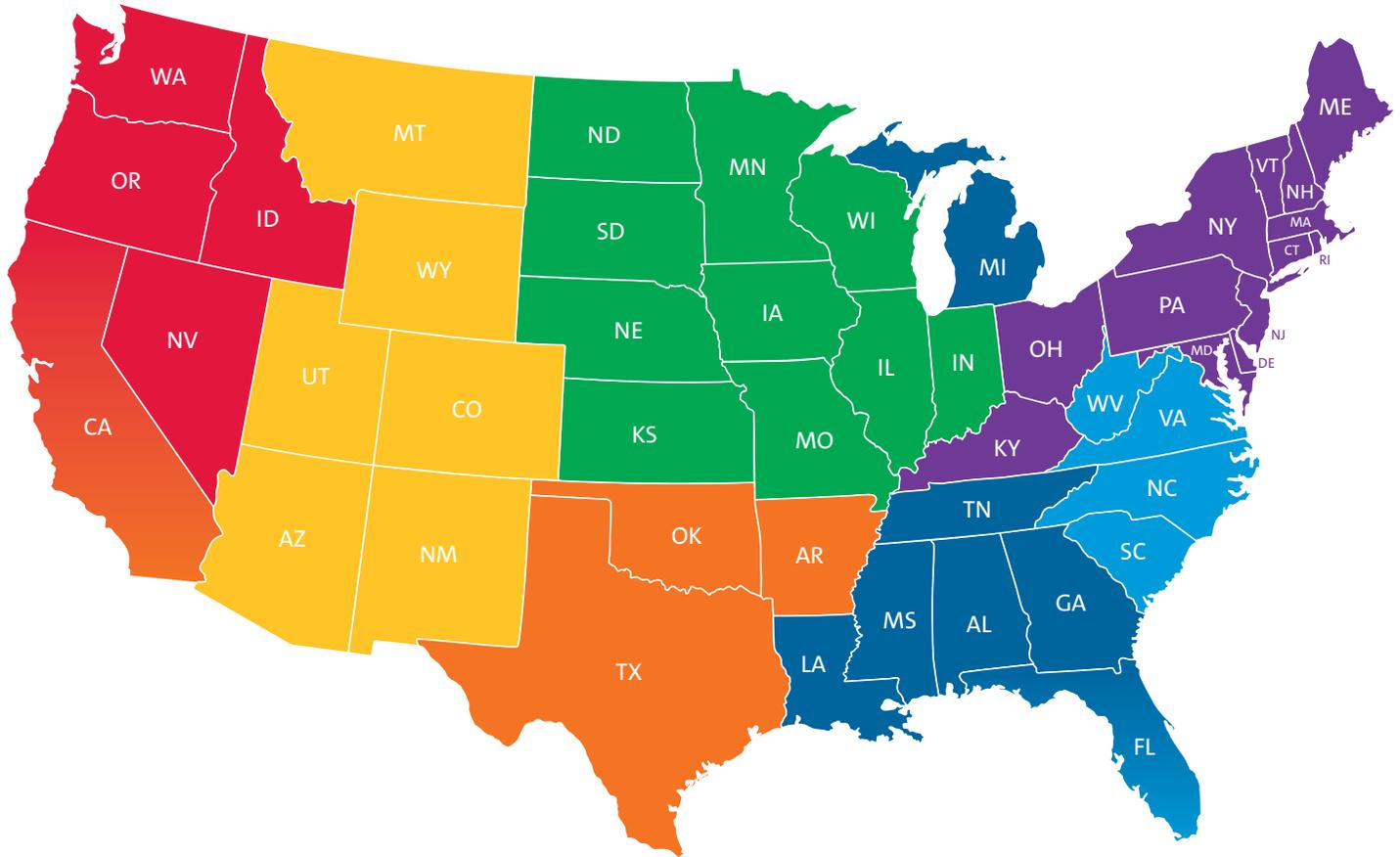
Duplex Cable Assemblies		
Charter Item Number	Corning Part Number	Description
5T1071263-TWC	025802R5120015M	Fiber Jumper, riser duplex, single-mode, LC UPC to SC UPC, 2 mm, 15 m
870025-CRN	025802R8120050M	Fiber Jumper, single-mode, simplex, LC UPC to SC UPC, yellow, 50 m, 2 F
870026-CRN	025802R8120075M	Fiber Jumper, single-mode, simplex, LC UPC to SC UPC, yellow, 75 m, 2 F
870027-CRN	025802R8120100M	Fiber Jumper, single-mode, simplex, LC UPC to SC UPC, yellow, 100 m, 2 F
5T1093518-TWC	040402R5116003M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 3 m
5T1093517-TWC	040402R5116004M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 4 m
5T1093466-TWC	040402R5116005M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 5 m
5T1093515-TWC	040402R5116006M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 6 m
5T1093514-TWC	040402R5116007M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 7 m
5T1093513-TWC	040402R5116008M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 8 m
5T1094097-TWC	040402R5116009M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 9 m
5T1093512-TWC	040402R5116010M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 10 m
5T1093510-TWC	040402R5116012M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 12 m
5T1093509-TWC	040402R5116017M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 17 m
5T1093507-TWC	040402R5116023M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 23 m
5T1093506-TWC	040402R5116025M	Fiber Jumper, riser duplex, single-mode, 9/125 bend-insensitive fiber, LC UPC to LC UPC, yellow, 1.6 mm, 25 m
5T1061548-TWC	046602R5120003M	Fiber Jumper, duplex, single-mode, LC APC to SC APC, 3 m
5T1101749-TWC	667202R5120040M	Fiber Jumper, Corning® SMF-28e®, SC duplex, angled single-mode to SC duplex single-mode, 40 m, 2 F
5T1101750-TWC	667202R5120050M	Fiber Jumper, SMF-28e cable, SC duplex, angled single-mode to SC duplex single-mode, 50 m, 2 F

## Pigtailed Assemblies

Pigtailed Assemblies		
Charter Item Number	Corning Part Number	Description
5T1103262-TWC	004412R61XD005M	Fiber Ribbon, pigtail to SC APC, fan-out riser, simplex, single-mode, 5 m, 12 F
5T1013676-TWC	004406R8131003M	Fiber Ribbon, pigtail to SC APC, 6 count, 3 m
5T1098474-TWC	004401G3116100F	Fiber Ribbon, pigtail, riser, single-mode, 1 count, SC APC, GR-326, yellow, 100 ft
5T1098475-TWC	004401G3116150F	Fiber Ribbon, pigtail, riser, single-mode, 1 count, SC APC, GR-326, BOA yellow, 150 ft
5T1099106-TWC	004401G3116200F	Fiber Ribbon, pigtail, riser, single-mode, SC APC, GR-326, BOA yellow, 200 ft, 1 F
5T1098476-TWC	004401G3116250F	Fiber Ribbon, pigtail, riser, 1 count, single-mode, SC APC, GR-326, BOA yellow, 250 ft
5T1098477-TWC	004401G3116300F	Fiber Ribbon, pigtail, riser, 1 count, single-mode, SC APC, GR-326, BOA yellow, 300 ft
5T1094855-TWC	004406RSF25300F	Fiber Ribbon, pigtail, Corning® SMF-28e®, FREEDM®, SC angled, single-mode, GR-326, 300 ft, 6 F
5T1094856-TWC	004406RSF25500F	Fiber Ribbon, pigtail, SMF-28e, FREEDM, SC angled, single-mode, GR-326, 500 ft, 6 F
873801-000-TWC	004412RC725050F	Fiber Ribbon, pigtail, SMF-28e, ribbon riser, SC angled, single-mode, GR-326, 50 ft, 12 F
5T1102828-TWC	004424R8120100F	Fiber Ribbon, pigtail, MIC®, riser, SC angled, single-mode, GR-326 (R Type), 100 ft, 24 F
5T1102829-TWC	004424R8120500F	Fiber Ribbon, pigtail, MIC, riser, SC angled, single-mode, GR-326 (R Type), 500 ft, 24 F
5T1102830-TWC	004424R8820100F	Fiber Ribbon, pigtail, MIC, plenum, SC angled, single-mode, GR-326 (R Type), 100 ft, 24 F
5T1102831-TWC	004424R8820500F	Fiber Ribbon, pigtail, MIC, plenum, SC angled, single-mode, GR-326 (R Type), 500 ft, 24 F (MOQ 3)
5T1031728-TWC	005801R3131005F	Fiber Ribbon, pigtail, SC UPC, 5 ft
873797-000-TWC	37R00228277-120F	Fiber Ribbon, pigtail, SST-Drop™ dielectric, 12 count, LC APC, single-mode, 120 ft
874151-000-TWC	37R00651499-100F	Fiber Ribbon, pigtail, Lite, armored, 6 SC APC, GRP 1-3525, 6 F, 100 ft



# Charter Team Coverage



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