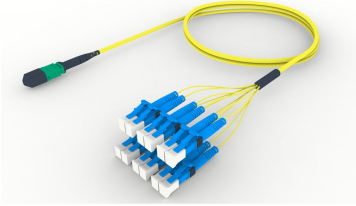


# FRWMXLCGD

## Base Product



Singlemode MPO (Pinned) to LC/UPC, InstaPATCH® 360 Array Cord, 12-Fiber, Low Smoke Zero Halogen

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   Europe   Latin America   Middle East /Africa   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber array cable assembly
<b>Product Brand</b>	SYSTIMAX InstaPATCH® 360
<b>Ordering Note</b>	Minimum length may vary based on cable configuration   Not available in the United States or Canada

## General Specifications

<b>Color, boot A</b>	Black
<b>Color, connector A</b>	Green
<b>Color, boot B</b>	Blue
<b>Color, connector B</b>	Blue
<b>Construction Type</b>	Stranded
<b>Furcation Color</b>	Yellow
<b>Interface, Connector A</b>	MPO-12/APC Male
<b>Interface, Connector B</b>	LC/UPC
<b>Jacket Color</b>	Yellow
<b>Polarity</b>	Method B (LL)
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fibers, quantity</b>	12

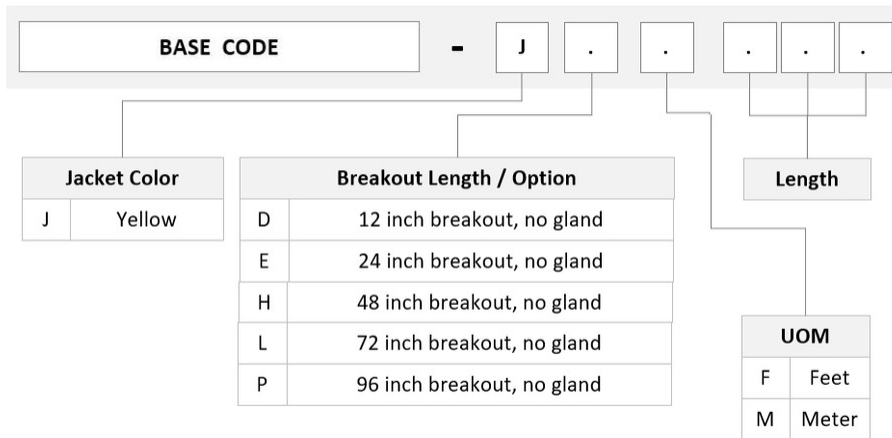
## Dimensions

<b>Cable Assembly Length Range (m)</b>	1 – 61
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# FRWMXLCD

Cable Assembly Length Range (ft) 2 – 200

## Ordering Tree



## Mechanical Specifications

**Cable Retention Strength, maximum** 11.24 lb @ 0° | 4.40 lb @ 90°

## Optical Specifications

**Fiber Mode** Singlemode

**Fiber Type** G.652.D | G.657.A1, TeraSPEED®

## Environmental Specifications

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

**Environmental Space** Indoor | Low Smoke Zero Halogen (LSZH)

## Regulatory Compliance/Certifications

Agency	Classification
ANATEL	Compliant
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

# FRWMXLCD

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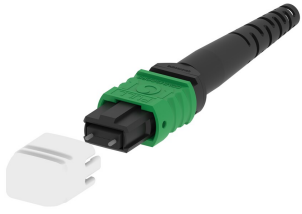


## Included Products

- 860366178 – MP012, LOW LOSS, MALE, Singlemode, GREEN, 3mm
- 860637435 – LC/UPC Connector, Singlemode, Blue, Short Boot
- N-012-MP-8W-F30 – Fiber indoor cable, TeraSPEED® Low Smoke Zero Halogen Riser Light Duty for MPO Patchcords, 12 fiber, Singlemode G.652.D and G.657.A1, Gel-free, Feet jacket marking, Dca Flame rating

# 860366178

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MPO12, LOW LOSS, MALE, Singlemode, GREEN, 3mm

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber connector
<b>Product Brand</b>	TeraSPEED®

## General Specifications

<b>Color</b>	Green
<b>Color, boot</b>	Black
<b>Ferrule Geometry</b>	Angled
<b>Interface</b>	MPO/APC Male
<b>Interface Feature</b>	Pinned
<b>Total Fiber Count</b>	12

## Dimensions

<b>Length</b>	60.1 mm   2.366 in
<b>Compatible Cable Diameter</b>	3 mm   0.118 in

## Material Specifications

<b>Ferrule Material</b>	Polymer
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## Mechanical Specifications

<b>Cable Retention Strength, maximum</b>	11.24 lb @ 0 °
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## Optical Specifications

<b>Fiber Mode</b>	Singlemode
<b>Fiber Type</b>	G.652.D and G.657.A1, TeraSPEED®   OS2
<b>Insertion Loss Change, mating</b>	0.3 dB
<b>Optical Components Standard</b>	ANSI/TIA-568-C.3

# 860366178

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<b>Insertion Loss Change, temperature</b>	0.3 dB
<b>Insertion Loss, maximum</b>	0.67 dB
<b>Return Loss, minimum</b>	55 dB

## Packaging and Weights

<b>Packaging quantity</b>	1
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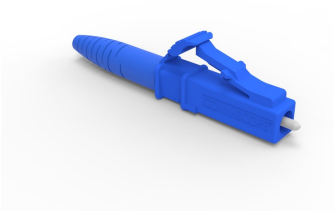
## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant/Exempted
UK-ROHS	Compliant



## \* Footnotes

<b>Insertion Loss Change, mating</b>	TIA-568: Maximum insertion loss change after 500 matings
<b>Insertion Loss Change, temperature</b>	Maximum insertion loss change from -10 °C to +60 °C (+14 °F to +140 °F)



LC/UPC Connector, Singlemode, Blue, Short Boot

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber connector

## General Specifications

<b>Color, boot</b>	Blue
<b>Color, housing</b>	Blue
<b>Interface</b>	LC/UPC

## Dimensions

<b>Length</b>	41.6 mm   1.638 in
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## Material Specifications

<b>Ferrule Material</b>	Zirconia
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## Mechanical Specifications

<b>Cable Retention Strength, maximum</b>	11.24 lb @ 0 °
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## Optical Specifications

<b>Fiber Mode</b>	Singlemode
<b>Insertion Loss Change, mating</b>	0.2 dB
<b>Optical Components Standard</b>	ANSI/TIA-568. 3-D   IEC 61753-1
<b>Insertion Loss Change, temperature</b>	0.3 dB
<b>Insertion Loss, maximum</b>	0.25 dB
<b>Return Loss, minimum</b>	55 dB

## Regulatory Compliance/Certifications

# 860637435

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**Agency**

CHINA-ROHS

ROHS

UK-ROHS

**Classification**

Below maximum concentration value

Compliant

Compliant

**\* Footnotes****Insertion Loss Change, mating** TIA-568: Maximum insertion loss change after 500 matings**Insertion Loss Change, temperature** Maximum insertion loss change from -10 °C to +60 °C (+14 °F to +140 °F)

# N-012-MP-8W-F30

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Fiber indoor cable, TeraSPEED® Low Smoke Zero Halogen Riser Light Duty for MPO Patchcords, 12 fiber, Singlemode G.652.D and G.657.A1, Gel-free, Feet jacket marking, Dca Flame rating

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber indoor cable
<b>Product Series</b>	N-MP

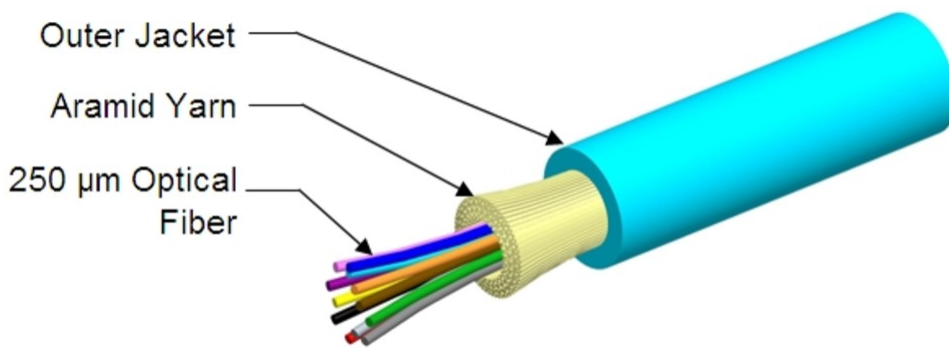
## General Specifications

<b>Cable Type</b>	MPO trunk cable
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Jacket Marking</b>	Feet
<b>Total Fiber Count</b>	12

## Dimensions

<b>Diameter Over Jacket</b>	3 mm   0.118 in
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## Representative Image



## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	45 mm   1.772 in
<b>Minimum Bend Radius, unloaded</b>	24 mm   0.945 in



# N-012-MP-8W-F30

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<b>Tensile Load, long term, maximum</b>	100 N   22.481 lbf
<b>Tensile Load, short term, maximum</b>	334 N   75.086 lbf
<b>Compression</b>	4 N/mm   22.841 lb/in
<b>Compression Test Method</b>	FOTP-41   IEC 60794-1 E3
<b>Flex</b>	300 cycles
<b>Flex Test Method</b>	FOTP-104   IEC 60794-1 E6
<b>Impact</b>	0.74 N-m   6.55 in lb
<b>Impact Test Method</b>	FOTP-25   IEC 60794-1 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	FOTP-33   IEC 60794-1 E1
<b>Twist</b>	10 cycles
<b>Twist Test Method</b>	FOTP-85   IEC 60794-1 E7
<b>Vertical Rise, maximum</b>	500 m   1,640.42 ft

## Optical Specifications

<b>Fiber Type</b>	G.652.D and G.657.A1, TeraSPEED®   OS2   OS2
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## Environmental Specifications

<b>Installation temperature</b>	0 °C to +60 °C (+32 °F to +140 °F)
<b>Operating Temperature</b>	0 °C to +70 °C (+32 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Cable Qualification Standards</b>	ANSI/ICEA S-83-596   Telcordia GR-409
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	Dca
<b>EN50575 CPR Cable EuroClass Smoke Rating</b>	s1a
<b>EN50575 CPR Cable EuroClass Droplets Rating</b>	d1
<b>EN50575 CPR Cable EuroClass Acidity Rating</b>	a1
<b>Environmental Space</b>	Low Smoke Zero Halogen (LSZH)   Riser
<b>Flame Test Listing</b>	NEC OFNR-ST1 (ETL) and c(ETL)
<b>Flame Test Method</b>	IEC 60332-3   IEC 60754-2   IEC 61034-2   UL 1666   UL 1685

## Environmental Test Specifications

<b>Heat Age</b>	0 °C to +85 °C (+32 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1 F9

# N-012-MP-8W-F30

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<b>Low High Bend</b>	0 °C to +70 °C (+32 °F to +158 °F)
<b>Low High Bend Test Method</b>	FOTP-37   IEC 60794-1 E11
<b>Temperature Cycle</b>	0 °C to +70 °C (+32 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

<b>Cable weight</b>	8.5 kg/km   5.712 lb/kft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable