

## technical information

MPO-16 Interconnect Cable Assemblies shall allow for rapid deployment of high-density permanent links in a single assembly for data center applications requiring quick infrastructure deployment, such as main, horizontal, and zone distribution areas. MPO-16 trunk cable assemblies are factory terminated and tested to deliver verified optical performance and reliability to support all MPO-16 applications including 400G-SR8, 800G-SR8 as well as 800GBASE-DR8. These ultra high bandwidth applications are used for high speed switch to switch links, and to support artificial intelligence (AI) and machine learning (ML) applications. MPO-16 Interconnect cable assemblies shall allow for rapid deployment and breakout of parallel applications such as 400GBASE-SR8 to duplex 8x50GBASE-SR.



## applications

Allows system designers to tailor configuration and reach to application requirements; to minimize waste, optimize cable management, speed deployment, and improve flexibility and manageability for lower installation costs.

## construction

<b>Cable type:</b>	Indoor	
<b>Cable jacket ratings:</b>	Optical Fiber Nonconductive Plenum (OFNP) Low Smoke Zero Halogen (LSZH) Euroclass B2ca	
<b>Fiber types:</b>	Singlemode:	OS2 9/125µm
	Multimode:	OM4 50/125µm OM5 50/125µm
	Signature Core™: OM4+ 50/125µm	
<b>Connector types; end 'A':</b>	MPO-16 APC Female or Male	
<b>Connector types; end 'B':</b>	MPO-16 APC Female or Male, PanMPO-8 Female or Male, MPO-8 Female or Male	
<b>Fiber count:</b>	16	
<b>Jacket color:</b>	OS2:	Yellow
	OM4:	Aqua
	OM4+:	Aqua
	OM5:	Lime

## optical properties

<b>Maximum connector insertion loss:</b>	Multimode:	0.50dB (Standard IL) 0.35dB (Optimized IL)
	Singlemode:	0.75dB (Standard IL) 0.50dB (Optimized IL)
<b>Connector return loss:</b>	Multimode:	OM4: >26dB OM4+: >30dB OM5: >26dB
	Singlemode:	OS2>55dB

## physical properties

<b>Cable outside diameter (OD):</b>	16-fiber:	3.8mm
<b>Minimum bend radius:</b>	Under load:	20 x cable OD
	Static:	10 x cable OD
<b>Cable tensile strength:</b>	220N	
<b>Cable compressive load:</b>	35N/cm	
<b>Cable flex:</b>	25 cycles	
<b>Cable twist:</b>	10 cycles	
<b>Connector durability:</b>	500 mating cycles	

## environmental properties

<b>Storage and shipping temperature:</b>	-40°C to 70°C -40°F to 158°F
<b>Installation temperature:</b>	0°C to 40°C 32°F to 104°F
<b>Operating temperature:</b>	0°C to 70°C 32°F to 158°F

## standards

<b>Meets or exceeds:</b>	ISO/IEC 11801, TIA/EIA-568-C.3, TIA-604-5 (FOCIS-5), TIA/EIA-568-C.1 RoHS Compliant
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# MPO-16 APC Interconnect Cable Assemblies

## part number configurator

Example: FRZCPOJY023F030 - OM4 16-Fiber Interconnect, Plenum, MPO-16 Female APC to PanMPO-8 Female, with 24" (60cm) Breakout Polarity B, Optimized IL, 30 feet.

<b>Character</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
<b>Example</b>	F	R	Z	C	P	O	J	Y	0	2	3	F	0	3	0

### 1 – Fiber

F = Fiber

### 2 – Cable Type

R = Indoor, round

### 3 – Fiber Type

9 = OS2 Singlemode 9/125µm  
 Z = OM4 50/125µm  
 S = OM4+ 50/125µm  
 W = OM5 50/125µm

### 4 – Fiber Count

C = 16 fibers

### 5 – Jacket Type

P = Plenum (OFNP)  
 L = LSZH  
 B = LSZH, Euroclass B2ca

### 6 – Connector Type (End A)

O = MPO-16 APC Female (SM & MM)  
 M = MPO-16 APC Male (SM & MM)

### 7 – Connector Type (End B)

G = MPO-8 Female (MM)  
 H = MPO-8 Male (MM)  
 J = PanMPO-8 Female (MM)  
 K = PanMPO-8 Male (MM)  
 O = MPO-16 Female APC (SM & MM)  
 M = MPO-16 Male APC (SM & MM)  
 X = MPO-8 Female APC (SM)  
 Y = MPO-8 Male APC (SM)  
 V = PanMPO-8 Female APC (SM)  
 W = PanMPO-8 Male APC (SM)

### 8 – Construction/Performance

A = Method A, Standard IL (SM)  
 B = Method B, Standard IL  
 X = Method A, Optimized IL (SM)  
 Y = Method B, Optimized IL

### 9 – 11 – Serial

See Table Below

### 12 – Unit of Measure

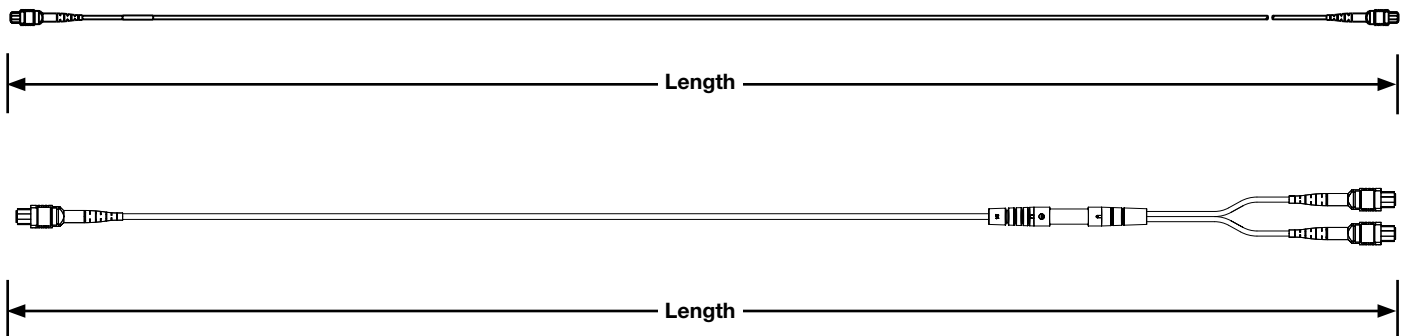
F = Feet  
 M = Meters

### 13, 14, 15 – Cable Assembly Length

1 – 300 Feet  
 0.5 – 100 Meters

Serial	Breakout – End A	Breakout – End A
021	None	None
022	24-inch (60 cm)	24-inch (60 cm)
023	None	24-inch (60 cm)

## QuickNet™ MPO Interconnect Round Cable Assembly Detail



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