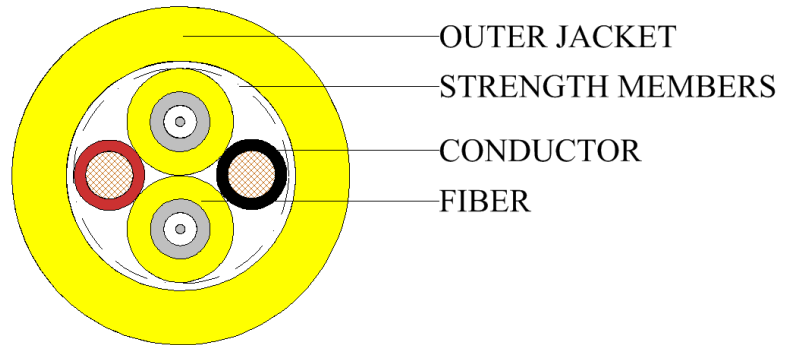


FiberExpress (FX) Hybrid Copper-Fiber Cables allow end-users to take advantage of DC power and fiber in one cable to safely deliver low-voltage power and data over long distances to remote locations where standard power is unavailable or too costly to install. Hybrid cable technology offers installation and labor savings by requiring just a single cable pull. Various cable constructions offer unlimited application flexibility.

Standards:

- ICEA S-120-742
- RoHS
- ANSI/TIA-568-C.3



	Temperature Range	
	Riser	Plenum
Operating	-20°C to +70°C -4°F to +158°F	0°C to +70°C 32°F to +158°F
Storage	-40°C to +70°C -40°F to +158°F	-40°C to +70°C -40°F to +158°F
Installation	-10°C to +60°C 14°F to +140°F	0°C to +60°C 32°F to +140°F

Glass Type	Fiber Grade Code (*)	Subunit and Jacket Color	Operating Wavelength (nm)	Max Attenuation (dB/km)	Min. OFL Bandwidth (MHz-km)	Min. Laser Bandwidth (MHz-km)	1 Gigabit Ethernet Min. Link Length (meters)	10 Gigabit Ethernet Min. Link Length (meters)
OS2 - Single Mode	S	Yellow	1310/1550	0.5/0.5	-	-	5000/-	10,000/40,000
OM3 - 50/125mm Multi-Mode	3	Aqua	850/1300	3.0/1.0	1500/500	2000/-	1000/550	300/-
OM4 - 50/125mm Multi-Mode	4	Erika Violet	850/1300	3.0/1.0	3500/500	4700/-	1100/550	400/-
OM5 - 50/125mm Multi-Mode	5	Lime Green	850/1300	3.0/1.0	3500/500	4700/-	1100/550	400/-

OM1 Fiber available upon Request

Riser - UL Type CL3R-OF – 3mm Sub Units

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212RC	0.327 (8.3)	76 (113)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
14	2	HI*B0020214RC	0.327 (8.3)	76 (113)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CMR-OF – 3mm Sub Units

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216RC	0.300 (7.6)	48 (71)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
18	2	HI*B0020218RC	0.300 (7.6)	43 (64)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
20	2	HI*B0020220RC	0.318 (8.1)	38 (57)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CL3R-OF – 3mm Sub Units – Aluminum Interlocked Armor

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212FC	0.584 (14.8)	168 (250)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
14	2	HI*B0020214FC	0.584 (14.8)	168 (250)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CMR-OF – 3mm Sub Units – Aluminum Interlocked Armor

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216FC	0.554 (14.1)	135 (201)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
18	2	HI*B0020218FC	0.554 (14.1)	130 (193)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
20	2	HI*B0020220FC	0.574 (14.6)	128 (190)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CL3R-OF – 2mm Sub Units								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212RB	0.304 (7.7)	70 (104)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
14	2	HI*B0020214RB	0.267 (6.8)	49 (73)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CMR-OF – 2mm Sub Units								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216RB	0.252 (6.4)	38 (57)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
18	2	HI*B0020218RB	0.246 (6.2)	32 (48)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
20	2	HI*B0020220RB	0.219 (5.6)	29 (43)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CL3R-OF – 2mm Sub Units – Aluminum Interlocked Armor								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212FB	0.554 (14.1)	157 (234)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
14	2	HI*B0020214FB	0.524 (13.3)	130 (193)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CMR-OF – 2mm Sub Units – Aluminum Interlocked Armor								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216FB	0.504 (12.8)	115 (171)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
18	2	HI*B0020218FB	0.504 (12.8)	109 (162)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
20	2	HI*B0020220FB	0.474 (12.0)	101 (150)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

¹ Substitute (*) with Fiber Grade Code

Plenum - UL Type CL3P-OF – 3mm Sub Units								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212PC	0.327 (8.3)	83 (124)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
14	2	HI*B0020214PC	0.327 (8.3)	63 (94)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
1 Substitute (*) with Fiber Grade Code								

Plenum - UL Type CMP-OF – 3mm Sub Units								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216PC	0.300 (7.6)	52 (77)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
18	2	HI*B0020218PC	0.300 (7.6)	47 (70)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
20	2	HI*B0020220PC	0.318 (8.1)	42 (63)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
1 Substitute (*) with Fiber Grade Code								

Plenum - UL Type CL3P-OF – 2mm Sub Units								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212PB	0.304 (7.7)	74 (110)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
14	2	HI*B0020214PB	0.267 (6.8)	53 (79)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
1 Substitute (*) with Fiber Grade Code								

Plenum - UL Type CMP-OF – 2mm Sub Units								
AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216PB	0.252 (6.4)	43 (64)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
18	2	HI*B0020218PB	0.246 (6.2)	37 (55)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
20	2	HI*B0020220PB	0.220 (5.6)	29 (43)	300 (1330)	90 (400)	15x Cable OD	10x Cable OD
1 Substitute (*) with Fiber Grade Code								

Plenum - UL Type CL3P-OF – 2mm Sub Units – Aluminum Interlocked Armor

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212AB	0.584 (14.8)	182 (271)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
14	2	HI*B0020214AB	0.584 (14.8)	162 (241)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

1 Substitute (*) with Fiber Grade Code

Plenum - UL Type CMP-OF – 3mm Sub Units – Aluminum Interlocked Armor

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216AC	0.554 (14.1)	145 (216)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
18	2	HI*B0020218AC	0.554 (14.1)	140 (208)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
20	2	HI*B0020220AC	0.574 (14.6)	139 (207)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

1 Substitute (*) with Fiber Grade Code

Plenum - UL Type CMP-OF – 2mm Sub Units – Aluminum Interlocked Armor

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
16	2	HI*B0020216AB	0.504 (12.8)	126 (188)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
18	2	HI*B0020218AB	0.504 (12.8)	120 (179)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
20	2	HI*B0020220AB	0.474 (12.0)	106 (158)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

1 Substitute (*) with Fiber Grade Code

Plenum - UL Type CL3P-OF – 3mm Sub Units – Aluminum Interlocked Armor

AWG Size	Fiber Count	Part Number ¹	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)	Min. Bend Radius Load	Min. Long Term Bend Radius
12	2	HI*B0020212AC	0.554 (14.1)	167 (249)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD
14	2	HI*B0020214AC	0.524 (13.3)	140 (208)	300 (1330)	90 (400)	20x Cable OD	10x Cable OD

1 Substitute (*) with Fiber Grade Code



STANDARD															
FX Fiber Cable		Fiber Type		Family		Fiber Count		Conductor Count		Copper Type		Flammability & Protection		Subunit Type / Configuration	
HD		3		B		002		02		12		R		B	
HI	IndoorHybrid Cable	3	OM3	B	Breakout	001	1 Fiber	01	1 Conductor	12	12 AWG	P	Plenum	B	COPPER: Stranded or Category Cable FIBER: 2.0mm Sub, 1 x 900um Fiber / Sub
		4	OM4			002	2 Fibers	02	2 Conductors	14	14 AWG	R	Riser	C	COPPER: Stranded or Category Cable FIBER: 3.0mm Sub, 1 x 900um Fiber / Sub
		S	OS2 (G.657.A1)							16	16 AWG	F	Riser Interlocked Aluminum Armor		
										18	18 AWG	A	Plenum Interlocked Aluminum Armor		
										20	20 AWG				