

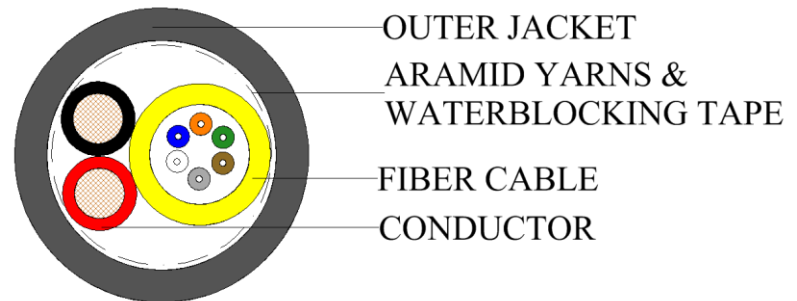


FiberExpress (FX) Hybrid Copper-Fiber Cables allow end-users to take advantage of DC power and fiber in one cable to safely deliver low-voltage power and data over long distances to remote locations where standard power is unavailable or too costly to install. Hybrid cable technology offers installation 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	-40°C to +70°C -40°F to +158°F	-40°C to +70°C -40°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

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
12	2	HD*D0020212RJ	Black	0.364 (9.2)	95 (141)	600 (2700)	180 (810)
12	4	HD*D0040212RJ	Black	0.382 (9.7)	99 (147)	600 (2700)	180 (810)
12	6	HD*D0060212RJ	Black	0.433 (11.0)	105 (156)	600 (2700)	180 (810)
14	2	HD*D0020214RJ	Black	0.364 (9.2)	75 (112)	600 (2700)	180 (810)
14	4	HD*D0040214RJ	Black	0.382 (9.7)	79 (118)	600 (2700)	180 (810)
14	6	HD*D0060214RJ	Black	0.402 (10.2)	82 (122)	600 (2700)	180 (810)

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CMR-OF

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
16	2	HD*D0020216RJ	Black	0.350 (8.9)	65 (97)	600 (2700)	180 (810)
16	4	HD*D0040216RJ	Black	0.367 (9.3)	68 (101)	600 (2700)	180 (810)
16	6	HD*D0060216RJ	Black	0.387 (9.8)	72 (107)	600 (2700)	180 (810)
18	2	HD*D0020218RJ	Black	0.340 (8.6)	59 (88)	600 (2700)	180 (810)
18	4	HD*D0040218RJ	Black	0.355 (9.0)	62 (92)	600 (2700)	180 (810)
18	6	HD*D0060218RJ	Black	0.373 (9.5)	65 (97)	600 (2700)	180 (810)
20	2	HD*D0020220RJ	Black	0.333 (8.5)	52 (77)	600 (2700)	180 (810)
20	4	HD*D0040220RJ	Black	0.349 (8.9)	55 (82)	600 (2700)	180 (810)
20	6	HD*D0060202RJ	Black	0.369 (9.4)	59 (88)	600 (2700)	180 (810)

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CL3R-OF - Aluminum Interlocking Armor

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
12	2	HD*D0020212FJ	Black	0.614 (15.6)	193 (287)	600 (2700)	180 (810)
12	4	HD*D0040212FJ	Black	0.634 (16.1)	201 (299)	600 (2700)	180 (810)
12	6	HD*D0060212FJ	Black	0.684 (17.4)	216 (321)	600 (2700)	180 (810)
14	2	HD*D0020214FJ	Black	0.614 (15.6)	173 (257)	600 (2700)	180 (810)
14	4	HD*D0040214FJ	Black	0.634 (16.1)	181 (269)	600 (2700)	180 (810)
14	6	HD*D0060214FJ	Black	0.654 (16.6)	187 (278)	600 (2700)	180 (810)

¹ Substitute (*) with Fiber Grade Code

Riser - UL Type CMR-OF - Aluminum Interlocking Armor

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
16	2	HD*D0020216FJ	Black	0.604 (15.3)	161 (240)	600 (2700)	180 (810)
16	4	HD*D0040216FJ	Black	0.624 (15.8)	168 (250)	600 (2700)	180 (810)
16	6	HD*D0060216FJ	Black	0.644 (16.4)	175 (260)	600 (2700)	180 (810)
18	2	HD*D0020218FJ	Black	0.594 (15.1)	153 (228)	600 (2700)	180 (810)
18	4	HD*D0040218FJ	Black	0.614 (15.6)	160 (238)	600 (2700)	180 (810)
18	6	HD*D0060218FJ	Black	0.624 (15.8)	165 (246)	600 (2700)	180 (810)
20	2	HD*D0020220FJ	Black	0.584 (14.8)	144 (214)	600 (2700)	180 (810)
20	4	HD*D0040220FJ	Black	0.604 (15.3)	151 (225)	600 (2700)	180 (810)
20	6	HD*D0060220FJ	Black	0.624 (15.8)	159 (237)	600 (2700)	180 (810)

¹ Substitute (*) with Fiber Grade Code

Plenum - UL Type CL3P-OF

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
12	2	HD*D0020212PJ	Black	0.389 (9.9)	90 (134)	600 (2700)	180 (810)
12	4	HD*D0040212PJ	Black	0.380 (9.7)	88 (131)	600 (2700)	180 (810)
12	6	HD*D0060212PJ	Black	0.396 (10.1)	90 (134)	600 (2700)	180 (810)
14	2	HD*D0020214PJ	Black	0.358 (9.1)	68 (101)	600 (2700)	180 (810)
14	4	HD*D0040214PJ	Black	0.35 (8.9)	66 (98)	600 (2700)	180 (810)
14	6	HD*D0060214PJ	Black	0.361 (9.2)	68 (101)	600 (2700)	180 (810)

1 Substitute (*) with Fiber Grade Code

Plenum - UL Type CMP-OF

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
16	2	HD*D0020216PJ	Black	0.345 (8.8)	58 (86)	600 (2700)	180 (810)
16	4	HD*D0040216PJ	Black	0.336 (8.5)	56 (83)	600 (2700)	180 (810)
16	6	HD*D0060216PJ	Black	0.349 (8.9)	58 (86)	600 (2700)	180 (810)
18	2	HD*D0020218PJ	Black	0.333 (8.5)	52 (77)	600 (2700)	180 (810)
18	4	HD*D0040218PJ	Black	0.324 (8.2)	50 (74)	600 (2700)	180 (810)
18	6	HD*D0060218PJ	Black	0.341 (8.7)	52 (77)	600 (2700)	180 (810)
20	2	HD*D0020220PJ	Black	0.325 (8.3)	45 (67)	600 (2700)	180 (810)
20	4	HD*D0040220PJ	Black	0.316 (8.0)	43 (64)	600 (2700)	180 (810)
20	6	HD*D0060220PJ	Black	0.332 (8.4)	45 (67)	600 (2700)	180 (810)

1 Substitute (*) with Fiber Grade Code

Plenum - UL Type CL3P-OF - Aluminum Interlocking Armor

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
12	2	HD*D0020212AJ	Black	0.644 (16.4)	193 (287)	600 (2700)	180 (810)
12	4	HD*D0040212AJ	Black	0.634 (16.1)	190 (283)	600 (2700)	180 (810)
12	6	HD*D0060212AJ	Black	0.654 (16.6)	195 (290)	600 (2700)	180 (810)
14	2	HD*D0020214AJ	Black	0.614 (15.6)	166 (247)	600 (2700)	180 (810)
14	4	HD*D0040214AJ	Black	0.604 (15.3)	162 (241)	600 (2700)	180 (810)
14	6	HD*D0060214AJ	Black	0.614 (15.6)	166 (247)	600 (2700)	180 (810)

1 Substitute (*) with Fiber Grade Code

Plenum - UL Type CMP-OF - Aluminum Interlocking Armor

AWG Size	Fiber Count	Part Number ¹	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbf (N)	Max. Long Term Load lbf (N)
16	2	HD*D0020216AJ	Black	0.604 (15.3)	161 (240)	600 (2700)	180 (810)
16	4	HD*D0040216AJ	Black	0.594 (15.1)	157 (234)	600 (2700)	180 (810)
16	6	HD*D0060216AJ	Black	0.604 (15.3)	161 (240)	600 (2700)	180 (810)
18	2	HD*D0020218AJ	Black	0.584 (14.8)	151 (225)	600 (2700)	180 (810)
18	4	HD*D0040218AJ	Black	0.574 (14.6)	147 (219)	600 (2700)	180 (810)
18	6	HD*D0060218AJ	Black	0.594 (15.1)	153 (228)	600 (2700)	180 (810)
20	2	HD*D0020220AJ	Black	0.584 (14.8)	144 (214)	600 (2700)	180 (810)
20	4	HD*D0040220AJ	Black	0.574 (14.6)	140 (208)	600 (2700)	180 (810)
20	6	HD*D0060220AJ	Black	0.584 (14.8)	144 (214)	600 (2700)	180 (810)

1 Substitute (*) with Fiber Grade Code

STANDARD															
FX Fiber Cable		Fiber Type		Family		Fiber Count		Conductor Count		Copper Type		Flammability		Subunit Type / Configuration	
HD	Indoor/Outdoor Hybrid Cable	3	OM3	D	Distribution	002	2 Fibers	02	2 Conductors	12	12 AWG	P	Plenum (OFNP)	J	COPPER: Stranded or Category Cable FIBER: Up to 6 x 900um Fibers / Sub
		4	OM4			004	4 Fibers			14	14 AWG	R	Riser (OFNR)		
		S	OS2 (G.657.A1)			006	6 Fibers			16	16 AWG	F	Riser Interlocked Aluminum Armor (OFCR)		
										18	18 AWG	A	Plenum Interlocked Aluminum Armor		
										20	20 AWG				