



#### Indoor/Outdoor Hybrid Breakout Cables

Revision Number: 6 Revision Date: 1.14.21

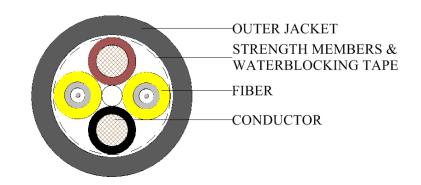


Fiber Express (FX) Hybrid Copper-Fiber Cables allow endusers to take advantage of DC power and fiber in one cable to safely deliver low-voltage power and data over long distances to remote locations where standard power is unavailable or too costly to install. Hybrid cable technology offers installation 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 Rang	ge							
	Riser Plenum								
Operating	$-40^{\circ}$ C to $+70^{\circ}$ C $-40^{\circ}$ F to $+158^{\circ}$ F	-40°C to +70°C -40°F to +158°F							
Storage	$-40^{\circ}$ C to $+70^{\circ}$ C $-40^{\circ}$ F to $+158^{\circ}$ F	$-40^{\circ}$ C to $+70^{\circ}$ C $-40^{\circ}$ F to $+158^{\circ}$ F							
Installation	$-10^{0}$ C to $+60^{0}$ C $14^{0}$ F to $+140^{0}$ F	$0^{\circ}$ C to $+60^{\circ}$ C $32^{\circ}$ F to $+140^{\circ}$ F							



Glass Type	Fiber Grade Code (x)	Subunit 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)
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/-
OS2 - Single Mode	S	Yellow	1310/1550	0.5/0.5	-	-	5000/-	10,000/40,000
OM2 Fiber ava	ilable upon Requ	est						





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	LSZH - UL Type CL3R-OF – 3mm Sub Units												
AWG Size	Fiber Count	Part Number <sup>1</sup>	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbs (N)	Max. Long Term Load lbs (N)						
12	2	HDxB0020212LC	Black	0.359 (9.1)	87 (129)	300 (1330)	90 (400)						
14	2	HDxB0020214LC	Black	0.359 (9.1)	62 (92)	300 (1330)	90 (400)						
1 Substitute (x) w	rith Fiber Grade Co	de											

	LSZH - UL Type CMR-OF – 3mm Sub Units												
AWG Size	Fiber Count Part Number <sup>1</sup> Jacket Color Nom. Jacket lbs/1000ft (kg/km) Max. Install Load lbs (N)												
16	2	HDxB0020216LC	Black	0.332 (8.4)	54 (80)	300 (1330)	90 (400)						
18	2	HDxB0020218LC	Black	0.332 (8.4)	49 (73)	300 (1330)	90 (400)						
20	2	HDxB0020220LC	Black	0.350 (8.9)	44 (65)	300 (1330)	90 (400)						
1 Substitute (x) with	Fiber Grade Code												

	LSZH - UL Type CL3R-OF – 3mm Sub Units - Aluminum Interlocked Armor												
AWG Size	Fiber Count	Part Number <sup>1</sup>	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbs (N)	Max. Long Term Load lbs (N)						
12	2	HDxB0020212CC	Black	0.614 (15.6)	187 (278)	300 (1330)	90 (400)						
14	2	HDxB0020214CC	Black	0.614 (15.6)	162 (241)	300 (1330)	90 (400)						
1 Substitute (x) with	1 Substitute (x) with Fiber Grade Code												

LSZH - UL Type CMR-OF – 3mm Sub Units - Aluminum Interlocked Armor												
AWG Size	Fiber Count Part Number <sup>1</sup> Jacket Color			Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbs (N)	Max. Long Term Load lbs (N)					
16	2	HDxB0020216CC	Black	0.584 (14.8)	149 (222)	300 (1330)	90 (400)					
18	2	HDxB0020218CC	Black	0.584 (14.8)	144 (214)	300 (1330)	90 (400)					
20	2	HDxB0020220CC	Black	0.604 (15.3)	142 (211)	300 (1330)	90 (400)					
1 Substitute (x) with	Fiber Grade Code											





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	LSZH - UL Type CL3R-OF – 2mm Sub Units												
AWG Size	Fiber Count	Part Number <sup>1</sup>	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbs (N)	Max. Long Term Load lbs (N)						
12	2	HDxB0020212LB	Black	0.336 (8.5)	75 (112)	300 (1330)	90 (400)						
14	2	HDxB0020214LB	Black	0.290 (7.4)	53 (79)	300 (1330)	90 (400)						
1 Substitute (x) with	Fiber Grade Code												

	LSZH - UL Type CMR-OF – 2mm Sub Units												
AWG Size	Fiber Count	Part Number <sup>1</sup>	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbs (N)	Max. Long Term Load lbs (N)						
16	2	HDxB0020216LB	Black	0.284 (7.2)	45 (67)	300 (1330)	90 (400)						
18	2	HDxB0020218LB	Black	0.269 (6.8)	37 (55)	300 (1330)	90 (400)						
20	2	HDxB0020220LB	Black	0.252 (6.4)	32 (48)	300 (1330)	90 (400)						
1 Substitute (x) with	Fiber Grade Code												

	LSZH - UL Type CL3R-OF – 2mm Sub Units - Aluminum Interlocked Armor												
AWG Size	Fiber Count	Part Number <sup>1</sup>	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbs (N)	Max. Long Term Load lbs (N)						
12	2	HDxB0020212CB	Black	0.594 (15.1)	172 (256)	300 (1330)	90 (400)						
14	2	HDxB0020214CB	Black	0.544 (13.8)	140 (208)	300 (1330)	90 (400)						
1 Substitute (x) with	Fiber Grade Code												

	LSZH - UL Type CMR-OF – 2mm Sub Units - Aluminum Interlocked Armor													
AWG Size	Fiber Count	Part Number <sup>1</sup>	Jacket Color	Nom. Jacket Dia. in (mm)	Weight lbs/1000ft (kg/km)	Max. Install Load lbs (N)	Max. Long Term Load lbs (N)							
16	2	HDxB0020216CB	Black	0.534 (13.6)	130 (193)	300 (1330)	90 (400)							
18	2	HDxB0020218CB	Black	0.524 (13.3)	120 (179)	300 (1330)	90 (400)							
20	2	HDxB0020220CB	Black	0.504 (12.8)	111 (165)	300 (1330)	90 (400)							
1 Substitute (x) with	Fiber Grade Code													





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								STAN	DARD						
F	X Fiber Cable	I	iber Type	I	Family	Fiber	Count	Conc	luctor Count	Copp	oer Type	1	Flammability	Su	ıbunit Type / Configuration
	HD		3		В	0	02		02		12		R		В
HD	Indoor/Outdoor Hybrid Cable	3	ОМ3	В	Breakout	001	1 Fiber	01	1 Conductor	12	12 AWG	L	LSZH (CMR-OF / CL3R-OF)	В	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	С	LSZH Interlocked Aluminum Armor (OFCR)	С	COPPER: Stranded or Category Cable FIBER: 3.0mm Sub, 1 x 900um Fiber / Sub
		S	OS2 (G.657.A1)							16	16 AWG				
										18	18 AWG				
										20	20 AWG				