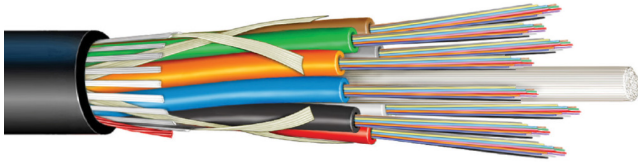
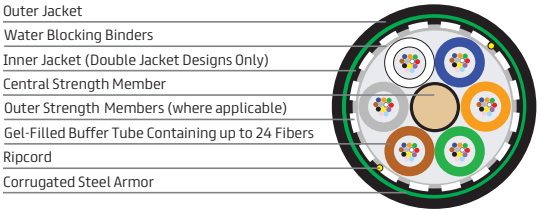
ExtremeLink®

Heavy Duty Loose Tube Cable

Prysmian





OVERVIEW

Prysmian's ExtremeLink® cables provide robust performance for aerial lashed, duct, and direct buried installations under extreme cold, with rated operation to -50°C even for double armored cables. These heavy duty loose tube cables also support cold temperature operation with extended buffer tube storage up to 20 feet (6 meters) as required for certain outside plant pedestal and enclosures.

This heavy duty version combines ezPREP® armor, flexible buffer tubes and swellable water-blocking materials make ExtremeLink® the easiest to use heavy duty loose tube cable available today.

FEATURES AND BENEFITS

Easy Cable Entry and Preparation

- ezPREP® armor greatly improves mid-span entry
- Ripcord speeds cable entry & outer jacket removal
- Dry core design with swellable binders speed cable preparation

Flexible Routing and Termination

- Cold temp operation with extended buffer tube storage up to 20 feet
- 3.0 mm flexible buffer tubes simplify routing & splicing preparation
- Available with bend-insensitive single-mode fiber

Multi-Purpose Installation and Use

- Suitable for aerial lashed, duct, and direct buried installation
- Optional ezPREP® corrugated steel tape armor provides mechanical protection and rodent resistance

Reliable Lifetime Performance

- Guaranteed standards-based performance to -50°C
- Proven water-blocking with swellable core elements and gel-filled buffer tubes

SPECIFICATIONS / RATINGS

Applications	Multi-purpose outdoor, aerial lashed, duct, direct buried
Constructions	Dielectric, armored, double armored
Fiber Count	4 to 432 fibers in color-coded buffer tubes
Fiber Types	Single-mode, multimode, bend-insensitive, NZDSF, hybrid
Options	Copper pair, tonewire
Similar Alternatives	ExpressLT / LT 2.0 & flame rated
Standards	ANSI / ICEA 640, RUS 7 CFR 1755 (RUS LISTED), Telcordia GR20 and IEC 60794-3-11
Registered Supplier	ISO 9001, ISO 14001, TL 9000, and OHSAS 18001

RUS LISTED

Dielectric (Non-Armored) (E3H1JKT)

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
2 to 60	6	E3H1JKT-12-AA-006-BB	5	0.46	11.6	65	97	9	24	5	12	41,010	12,500
	12	E3H1JKT-12-AA-012-BB											
	24	E3H1JKT-12-AA-024-BB											
	36	E3H1 JKT-12-AA-036-BB											
	48	E3H1JKT-12-AA-048-BB											
72	72	E3H1JKT-12-AA-072-BB	6	0.50	12.6	78	116	10	26	5	13	41,010	12,500
84 to 96	96	E3H1JKT-12-AA-096-BB	8	0.58	14.7	98	146	12	30	6	15	41,010	12,500
108 to 120	120	E3H1JKT-12-AA-120-BB	10	0.65	16.5	120	179	13	34	7	17	41,010	12,500
122 to 144	144	E3H1JKT-12-AA-144-BB	12	0.73	18.5	153	227	15	37	7	19	37,494	11,429
144 (24f/tube)	144	E3H1JKT-24-AA-144-BB	6	0.50	12.6	83	124	10	26	5	13	41,010	12,500
156 to 216	216	E3H1JKT-12-AA-216-BB	18	0.73	18.5	153	227	15	37	7	19	37,494	11,429
228 to 264	264	E3H1JKT-12-AA-264-BB	22	0.81	20.7	183	273	16	41	8	21	29,386	8,958
276 to 288	288	E3H1JKT-12-AA-288-BB	24	0.85	21.5	198	294	17	43	9	22	27,462	8,371
288 (24f/tube)	288	E3H1JKT-24-AA-288-BB	12	0.73	18.5	159	236	15	37	7	19	37,494	11,429
290 to 432 (24f/tube)	432	E3H1JKT-24-AA-432-BB	18	0.73	18.5	153	228	15	37	7	19	37,494	11,429

Single Jacket Armored (SP) (E3H1A1J)

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
2 to 60	6	E3H1A1J-12-AA-006-BB	5	0.52	13.2	111	165	10	26	8	20	41,010	12,500
	12	E3H1A1J-12-AA-012-BB											
	24	E3H1A1J-12-AA-024-BB											
	36	E3H1A1J-12-AA-036-BB											
	48	E3H1A1J-12-AA-048-BB											
72	72	E3H1A1J-12-AA-072-BB	6	0.55	14.0	127	189	11	28	8	21	41,010	12,500
84 to 96	96	E3H1A1J-12-AA-096-BB	8	0.64	16.3	157	234	13	33	10	25	41,010	12,500
108 to 120	120	E3H1A1J-12-AA-120-BB	10	0.72	18.3	184	274	14	37	11	28	37,916	11,557
122 to 144	144	E3H1A1J-12-AA-144-BB	12	0.81	20.6	225	335	16	41	12	31	29,840	9,096
144 (24f/tube)	144	E3H1A1J-24-AA-144-BB	6	0.55	14.0	128	191	11	28	8	21	41,010	12,500
156 to 216	216	E3H1A1J-12-AA-216-BB	18	0.81	20.6	225	335	16	41	12	31	29,840	9,096
228 to 264	264	E3H1A1J-12-AA-264-BB	22	0.88	22.4	263	392	18	45	13	34	25,631	7,813
276 to 288	288	E3H1A1J-12-AA-288-BB	24	0.92	23.4	282	419	18	47	14	35	23,860	7,273
288 (24f/tube)	288	E3H1A1J-24-AA-288-BB	12	0.81	20.6	228	339	16	41	12	31	29,840	9,096
290 to 432 (24f/tube)	432	E3H1A1J-24-AA-432-BB	18	0.80	20.3	225	335	16	41	12	31	31,194	9,622

Double Jacket, Single Armored (PSP) (E3H1A2J)

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
2 to 60	6	E3H1A2J-12-AA-006-BB	5	0.60	15.1	148	220	12	31	9	23	41,010	12,500
	12	E3H1A2J-12-AA-012-BB											
	24	E3H1A2J-12-AA-024-BB											
	36	E3H1A2J-12-AA-036-BB											
	48	E3H1A2J-12-AA-048-BB											
72	72	E3H1A2J-12-AA-072-BB	6	0.64	16.3	167	248	13	33	10	25	41,010	12,500
84 to 96	96	E3H1A2J-12-AA-096-BB	8	0.71	18.0	198	295	14	37	11	28	39,822	12.139
108 to 120	120	E3H1A2J-12-AA-120-BB	10	0.78	19.8	235	349	16	41	12	31	33,220	10,126
122 to 144	144	E3H1A2J-12-AA-144-BB	12	0.85	21.6	279	415	17	44	13	33	27,510	8,386
156 to 216	216	E3H1A2J-12-AA-216-BB	18	0.85	21.6	279	415	17	44	13	33	27,510	8,386
228 to 264	264	E3H1A2J-12-AA-264-BB	22	0.95	24.1	321	478	19	48	14	36	22,030	6,715
276 to 288	288	E3H1A2J-12-AA-288-BB	24	0.98	24.9	338	503	20	50	15	38	20,395	6,182

* Where AA equals glass type and BB equals attenuation

Double Jacket, Double Armored (SPSP) (E3H2A2J)

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
6 to 60	6	E3H2A2J-12-AA-006-BB	5	0.73	18.5	241	359	15	37	11	28	37,494	11,429
	12	E3H2A2J-12-AA-012-BB											
	24	E3H2A2J-12-AA-024-BB											
	36	E3H2A2J-12-AA-036-BB											
	48	E3H2A2J-12-AA-048-BB											
72	72	E3H2A2J-12-AA-072-BB	6	0.77	19.6	265	395	15	39	12	29	33,636	10,253
84 to 96	96	E3H2A2J-12-AA-096-BB	8	0.86	21.8	313	465	17	44	13	33	27,112	8,265
108 to 120	120	E3H2A2J-12-AA-120-BB	10	0.93	23.6	355	528	19	47	14	35	22,294	6,796
122 to 144	144	E3H2A2J-12-AA-144-BB	12	1.01	25.7	411	612	20	51	15	39	19,004	5,793
156 to 216	216	E3H2A2J-12-AA-216-BB	18	1.01	25.7	411	612	20	51	15	39	19,004	5,793
228 to 264	264	E3H2A2J-12-AA-264-BB	22	1.09	27.7	466	693	22	55	16	42	15,868	4,837
276 to 288	288	E3H2A2J-12-AA-288-BB	24	1.13	28.7	492	732	23	57	17	43	15,702	4,786

Triple Jacket, Double Armored (PSPSP) (E3H2A3J)

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
6 to 60	6	E3H2A3J-12-AA-006-BB	5	0.80	20.2	294	438	16	41	12	31	31,506	9,604
	12	E3H2A3J-12-AA-012-BB											
	24	E3H2A3J-12-AA-024-BB											
	36	E3H2A3J-12-AA-036-BB											
	48	E3H2A3J-12-AA-048-BB											
72	72	E3H2A3J-12-AA-072-BB	6	0.84	21.3	321	478	17	43	13	32	27,868	8,495
84 to 96	96	E3H2A3J-12-AA-096-BB	8	0.93	23.6	369	548	19	47	14	35	22,294	6,796
108 to 120	120	E3H2A3J-12-AA-120-BB	10	1.01	25.7	421	626	20	51	15	39	19,004	5,793
122 to 144	144	E3H2A3J-12-AA-144-BB	12	1.08	27.4	478	712	22	55	16	41	17,186	5,239
156 to 216	216	E3H2A3J-12-AA-216-BB	18	1.08	27.4	478	712	22	55	16	41	17,186	5,239
228 to 264	264	E3H2A3J-12-AA-264-BB	22	1.16	29.5	537	799	23	59	17	44	14,562	4,439
276 to 288	288	E3H2A3J-12-AA-288-BB	24	1.19	30.2	560	834	24	60	18	45	14,296	4,358

* Where AA equals glass type and BB equals attenuation

Installation

Maximum installation load: 600 lbf (2700 N)
Maximum operation load: 180 lbf (800 N)

Temperature Range

Shipping and Storage: -58° F to +167° F (-50° C to +75° C)
Installation: -22° F to +140° F (-30° C to +60° C)
Operation: -58° F to +158° F (-50° C to +70° C)

Mechanical Performance (per ICEA 640 and Telcordia GR20)

Minimum installation bend radius: 20 times the cable diameter
Minimum operating bend radius: 10 times the cable diameter
Short Term Compression: 220 N/cm over 10 cm (125 lb/in over 4 inches)
Long Term Compression: 110 N/cm over 10 cm (62.5 lb/in over 4 inches)
Impact Load: 4.4 Nm

Ordering Guide

The Prysmian Group part number incorporates several significant attributes involving cable design and optical performance.
The appropriate part number can be configured using the process described below

Example: Extremelink® HD loose tube, single armor single jacket (12 fibers/tube) with 72 single-mode fibers (printed in feet)

1 LENGTH MARKINGS	2 PRODUCT FAMILY	3 CONSTRUCTION	4 FIBER GROUPING	5 FIBER TYPE	6 FIBER COUNT	7 FIBER GRADE
F	– E3H	1A1J	– 12	– HB	– 072	– E1

PART NUMBER CONSTRUCTION

1 LENGTH MARKINGS

F = Feet or M = Meters

2 PRODUCT FAMILY

E3H = Extremelink® HD Loose Tube

3 CONSTRUCTION

1JKT = Single Jacket
1A1J = Single Armor, Single Jacket
1A2J = Single Armor, Dual Jacket
2A2J = Double Armor, Dual Jacket
2A3J = Double Armor, Triple Jacket
NA2J = Non Armored, Dual Jacket

4 FIBER GROUPING

12 = 12f per unit or tube
24 = 24f per unit (2, 12f binder units)

FIBER INFORMATION

5 FIBER TYPE

SINGLE-MODE

HB = Single-Mode (ITU G.652 C & D) Low Water Peak
ES = Enhanced Single-Mode (ITU G.652 C & D)
CE = Corning™ SMF28e+ Single-Mode
B1 = Bend-Insensitive Single-Mode (ITU G.657.A1 & G.652.D)
B2 = Bend-Insensitive Single-Mode (ITU G.657.A2 & .B2, & G.652.D)
LE = LEAF NZDSF (ITU G.655)

MULTIMODE	Wavelength (nm)	Bandwidth (MHz)	1 GbE Dist (m)	10 GbE Dist (m)
G6 = OM1 (62.5µm)	850/1300	200/500	300/550	33/__
G5 = OM2+ BIF (50µm) [1]	850/1300	700/500	800	150/__
G3 = OM3 BIF (50µm) [1]	850/1300	1500/500	1000	300/__
G4 = OM4 BIF (50µm) [1]	850/1300	3500/500	1100	550/__

6 FIBER COUNT

004 to 288 fibers

7 FIBER GRADE

SINGLE-MODE Attenuation (dB/km)	Wavelength (nm)	Fiber Type
E1 = 0.40/0.40/0.30	1310/1383/1550	HB, ES, or CE
E3 = 0.35/0.35/0.25	1310/1383/1550	HB, ES, CE, B1, or B2
N1 = 0.25	1550	NZDSF Single-Mode

MULTIMODE Attenuation (dB/km)	Wavelength (nm)
M2 = 3.5/1.0	850/1300
M3 = 3.0/1.0	850/1300

Other cable constructions and fiber performance grades available on request.