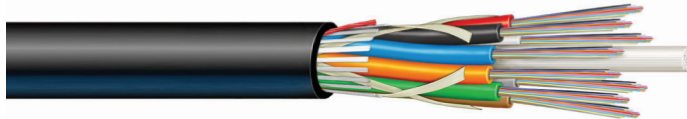




## ezLINK™ Industrial LSZH Loose Tube (dry)

Indoor/outdoor low-smoke / zero-halogen cables



*Multi-use indoor/outdoor cables for industrial applications involving cable trays and spaces where robust mechanical durability are key attributes. Riser or Tray flame rating and low smoke without the use of halogenated materials provides life-safety benefits.*

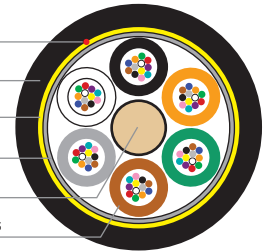
### Overview

Prysmian's indoor/outdoor dry Industrial LSZH loose tube designs provide flame-rated network solutions for a diverse number of network applications. These cables combine a robust, flame retardant LSZH jacket material, flexible dry buffer tubes and swellable water blocking with Prysmian's extensive portfolio of single-mode and multimode optical fibers. Because of its application diversity, this advanced product eliminates the necessity/expense for traditional cable transition points once required in legacy systems. Available in several design options, both with and without metallic armor, to right-size the cable option to the inherent demands of specific applications.

### Product Snapshot

<b>Applications</b>	Versatile indoor/outdoor cable designed for industrial communication and control systems. Riser or Tray rating with complementary reduced smoke and hazardous emissions. Suitable for installations in cable trays per NFPA-70.
<b>Constructions</b>	Dielectric (single & dual jacket), ezPREP® corrugated armor, interlocked armor
<b>Flame Ratings</b>	Riser - low smoke (OFNR-LS / OFCR-LS / FT4 ST1) Tray - OFNG-LS / FT4 ST1
<b>Fiber Count</b>	2 to 288
<b>Fiber Types</b>	Single-mode (ESMF, bend-insensitive) multimode (62.5/125- OM1, 50/125- OM2+, OM3 & OM4)
<b>Standards</b>	TIA/EIA-568, ANSI/ICEA S-83-596, ANSI/ICEA S-104-696, UL-1666, CSA 22.2 No. 230 Telcordia GR-409, Telcordia GR-20, CE RoHS Compliant
<b>Registered Supplier</b>	ISO 9001, ISO 14001, TL 9000, and OHSAS 18001

- Ripcord
- LSZH Outer Jacket
- Flame Retardant Tape
- Aramid Strength & Water Blocking Yarns
- Central Strength Member
- Dry Buffer Tube Containing Up To 12 Fibers



### Features and Benefits

- Fiber identification using TIA standardized color coding
- Dry buffer tubes simplifies access and reduces prep time
- Flame -retardant, black UV-resistant LSZH outer jacket
- Flexible kink-resistant buffer tubes for routing and storage
- Available with bend-insensitive single-mode and multimode optical fibers
- Ideal for applications with more severe hazards such as industrial complexes, transportation systems and tunnel networks
- Will support all high performance networks including OM4/10 gigabit ethernet systems
- Direct buried, DIR BUR, according to UL 1277 and CSA C22.2 No. 230
- Sunlight Resistant, SUN RES, according to UL 1651 and CSA C22.2 No. 232
- Tray Rated as per applicable requirements of UL 1277 and CSA C22.2 No. 232



## ezLINK™ Industrial LSZH Loose Tube (dry)

Indoor/outdoor low-smoke / zero-halogen cables

### ezLINK™ Industrial Dielectric Single LSZH Jacket, IRZHB Series | OFNG-LS / FT4 ST1

Fiber Count	# Buffer Tubes Outer/Inner Layer	Fibers Per Unit or # of Units	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)
2 to 60	5	12	0.43 (11.0)	77 (115)	8.7 (22.0)	4.3 (11.0)
62 to 72	6	12	0.46 (11.8)	84 (126)	9.3 (23.6)	4.6 (11.8)
74 to 84	7	12	0.47 (11.9)	84 (126)	9.3 (23.8)	4.7 (11.9)
86 to 96	8	12	0.50 (12.7)	96 (143)	10.0 (25.4)	5.0 (12.7)
98 to 108	9	12	0.54 (13.8)	114 (169)	10.8 (27.5)	5.4 (13.8)
110 to 120	10	12	0.56 (14.4)	123 (183)	11.2 (28.5)	5.6 (14.3)
122 to 132	11	12	0.60 (15.2)	139 (207)	12.0 (30.5)	6.0 (15.3)
134 to 144	12	12	0.63 (16.1)	155 (231)	12.6 (32.0)	6.3 (16.0)
146 to 216	12 / 6	12	0.66 (16.8)	152 (226)	13.2 (33.6)	6.6 (16.8)
218 to 264	14 / 8	12	0.72 (18.4)	182 (271)	14.4 (36.6)	7.2 (18.3)
266 to 288	15 / 9	12	0.77 (19.5)	204 (304)	15.4 (39.2)	7.7 (19.6)

### ezLINK™ Industrial Dielectric Double LSZH Jacket, IRZHC Series | OFNR-LS / FT4 ST1

Fiber Count	# Buffer Tubes Outer/Inner Layer	Fibers Per Unit or # of Units	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)
2 to 60	5	12	0.52 (13.2)	117 (174)	10.4 (26.5)	5.2 (13.2)
62 to 72	6	12	0.55 (13.9)	126 (188)	11.0 (28.0)	5.5 (14.0)
74 to 84	7	12	0.59 (15.0)	145 (216)	11.8 (30.0)	5.9 (15.0)
86 to 96	8	12	0.62 (15.8)	161 (239)	12.4 (31.5)	6.2 (15.8)
98 to 108	9	12	0.66 (16.9)	183 (273)	13.2 (33.6)	6.6 (16.8)
110 to 120	10	12	0.69 (17.4)	196 (291)	13.8 (35.1)	6.9 (17.6)
122 to 132	11	12	0.72 (18.3)	215 (320)	14.4 (36.6)	7.2 (18.3)
134 to 144	12	12	0.76 (19.2)	235 (350)	15.2 (38.6)	7.6 (19.3)
146 to 216	12 / 6	12	0.78 (19.7)	235 (350)	15.5 (39.4)	7.8 (19.7)
218 to 264	14 / 8	12	0.84 (21.3)	271 (404)	16.8 (42.6)	8.4 (21.3)
266 to 288	15 / 9	12	0.88 (22.4)	298 (444)	17.6 (44.8)	8.8 (22.4)

Note. Cable damage may occur if installation temperature limits are exceeded; therefore, Prysmian Group recommends storing I/O cables in appropriate temperature conditions ≥ 24 hours prior to placement.

#### Mechanical Specifications

Maximum installation load:	600 lbf	(2670 N)
<b>(IRZHC Only)</b>	1000 lbf	(4450 N)
Maximum operation load:	180 lbf	(800 N)
<b>(IRZHC Only)</b>	300 lbf	(1330 N)

#### Temperature Range

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

## ezLINK™ Industrial LSZH Loose Tube (dry)

Indoor/outdoor low-smoke / zero-halogen cables

### ezLINK™ Industrial Corrugated Steel Tape Armor with Double LSZH Jacket, IRZHD Series | OFCR-LS / FT4 ST1

Fiber Count	# Buffer Tubes Outer/Inner Layer	Fibers Per Unit or # of Units	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)
2 to 60	5	12	0.63 (16.0)	192 (285)	12.6 (32.0)	6.3 (16.0)
62 to 72	6	12	0.66 (16.8)	206 (306)	13.2 (33.5)	6.6 (16.8)
74 to 84	7	12	0.70 (17.8)	229 (341)	14.0 (35.6)	7.0 (17.8)
86 to 96	8	12	0.73 (18.5)	247 (368)	14.6 (37.1)	7.3 (18.5)
98 to 108	9	12	0.78 (19.8)	278 (413)	15.6 (39.6)	7.8 (19.8)
110 to 120	10	12	0.80 (20.3)	294 (438)	16.0 (40.6)	8.0 (20.3)
122 to 132	11	12	0.83 (21.1)	317 (472)	16.6 (42.2)	8.3 (21.1)
134 to 144	12	12	0.87 (22.1)	343 (510)	17.4 (44.2)	8.7 (22.1)
146 to 216	12 / 6	12	0.90 (22.9)	347 (517)	18.0 (45.7)	9.0 (22.9)
218 to 264	14 / 8	12	0.96 (24.4)	392 (583)	19.2 (48.8)	9.6 (24.4)
266 to 288	15 / 9	12	1.00 (25.4)	424 (631)	20.0 (50.8)	10.0 (25.4)

### ezLINK™ Industrial Corrugated Steel Tape Armor with Single LSZH Jacket, IRZHE Series | OFCG-LS / FT4 ST1

Fiber Count	# Buffer Tubes Outer/Inner Layer	Fibers Per Unit or # of Units	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)
2 to 60	5	12	0.63 (16.0)	192 (285)	12.6 (32.0)	6.3 (16.0)
62 to 72	6	12	0.66 (16.8)	206 (306)	13.2 (33.5)	6.6 (16.8)
74 to 84	7	12	0.70 (17.8)	229 (341)	14.0 (35.6)	7.0 (17.8)
86 to 96	8	12	0.73 (18.5)	247 (368)	14.6 (37.1)	7.3 (18.5)
98 to 108	9	12	0.78 (19.8)	278 (413)	15.6 (39.6)	7.8 (19.8)
110 to 120	10	12	0.80 (20.3)	294 (438)	16.0 (40.6)	8.0 (20.3)
122 to 132	11	12	0.83 (21.1)	317 (472)	16.6 (42.2)	8.3 (21.1)
134 to 144	12	12	0.87 (22.1)	343 (510)	17.4 (44.2)	8.7 (22.1)
146 to 216	12 / 6	12	0.90 (22.9)	347 (517)	18.0 (45.7)	9.0 (22.9)
218 to 264	14 / 8	12	0.96 (24.4)	392 (583)	19.2 (48.8)	9.6 (24.4)
266 to 288	15 / 9	12	1.00 (25.4)	424 (631)	20.0 (50.8)	10.0 (25.4)

### ezLINK™ Industrial Aluminum Interlock Armor with Double LSZH Jacket, IRZHBAJ Series | OFCG-LS / FT4 ST1

Fiber Count	# Buffer Tubes Outer/Inner Layer	Fibers Per Unit or # of Units	Diameter inches (mm)	Cable Weight lb/kft (kg/km)	Bend Radius Load inches (cm)	Bend Radius No Load inches (cm)
2 to 60	5	12	0.77 (19.6)	200 (297)	15.4 (39.1)	7.7 (19.6)
62 to 72	6	12	0.80 (20.3)	212 (316)	16.0 (40.6)	8.0 (20.3)
74 to 84	7	12	0.80 (20.3)	242 (360)	16.0 (40.6)	8.0 (20.3)
86 to 96	8	12	0.83 (21.1)	263 (391)	16.6 (42.2)	8.3 (21.1)
98 to 108	9	12	0.90 (22.9)	323 (481)	18.0 (45.7)	9.0 (22.9)
110 to 120	10	12	0.92 (23.4)	341 (507)	18.4 (46.7)	9.2 (23.4)
122 to 132	11	12	0.95 (24.1)	368 (547)	19.0 (48.3)	9.5 (24.1)
134 to 144	12	12	1.00 (25.4)	399 (594)	19.8 (50.3)	9.9 (25.1)
146 to 216	12 / 6	12	1.02 (25.9)	405 (602)	20.4 (51.8)	10.2 (25.9)
218 to 264	14 / 8	12	1.08 (27.4)	455 (677)	21.6 (54.9)	10.8 (27.4)
266 to 288	15 / 9	12	1.12 (28.4)	492 (732)	22.4 (56.9)	11.2 (28.4)

Note. Cable damage may occur if installation temperature limits are exceeded; therefore, Prysmian Group recommends storing I/O cables in appropriate temperature conditions ≥ 24 hours prior to placement.

#### Mechanical Specifications

Maximum installation load:	600 lbf	(2670 N)
(IRZHC Only)	1000 lbf	(4450 N)
Maximum operation load:	180 lbf	(800 N)
(IRZHC Only)	300 lbf	(1330 N)

#### Temperature Range

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

## ezLINK™ Industrial LSZH Loose Tube (dry)

Indoor/outdoor low-smoke / zero-halogen cables

### 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 in the example.

**Example:** ezLink™ loose tube | I/O industrial riser | dry buffer tubes | LSZH single jacket | 12 single-mode fibers per buffer tube | 72 fibers total

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

### PART NUMBER CONSTRUCTION

<b>1 LENGTH MARKINGS</b>
F = Feet or M = Meters
<b>2 PRODUCT FAMILY</b>
<b>STRANDED LOOSE TUBE PRODUCTS :</b>
IRZHB = I/O Industrial LSZH Tray All-Dielectric (single jacket)
IRZHC = I/O Industrial Riser LSZH Tray All-Dielectric (double jacket)
IRZHD = I/O Industrial Riser LSZH Tray Armored (double jacket)
IRZHE = I/O Industrial LSZH Tray Armored (single jacket)
IRZHBAJ = ezINTERLOCK I/O LSZH Tray Interlock Armor
<b>3 CONSTRUCTION</b>
(blank) = None
AJ = Jacket Aluminum
<b>4 FIBER GROUPING</b>
12 =12f per unit or tube

### Outer Jacket Color For Interlock Armor

Cable Type	Standard Jacket Color
Single-Mode Premises	Yellow
Standard Multimode Premises	Orange
Laser-Optimized 50 µm Premises	Aqua

### FIBER INFORMATION

<b>5 FIBER TYPE</b>				
<b>SINGLE-MODE</b>				
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)				
<b>MULTIMODE</b>				
	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)	850/1300	700/500	800	150/___
G3 = OM3 BIF (50µm)	850/1300	1500/500	1000	300/___
G4 = OM4 BIF (50µm)	850/1300	3500/500	1100	550/___
<b>6 FIBER COUNT</b>				
002 to 288 fibers				
<b>7 FIBER GRADE</b>				
<b>SINGLE-MODE</b>	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, B1, B2, or CE		
<b>MULTIMODE</b>	Attenuation (dB/km)	Wavelength (nm)	Fiber Type	
M2 = 3.5/1.0	850/1300	OM1 (62.5µm)		
M3 = 3.0/1.0	850/1300	OM2+, OM3, OM4 (50µm)		
Other cable constructions and fiber performance grades available on request.				