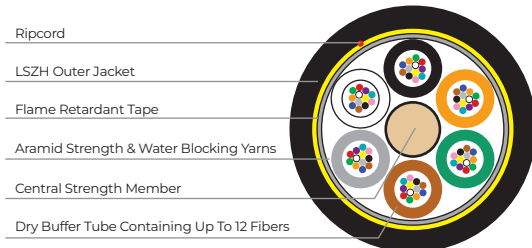
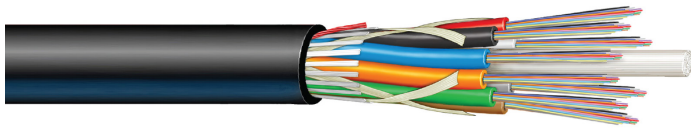


GenSPEED® Industrial LSZH Loose Tube (Dry)

Indoor/Outdoor Low-Smoke / Zero-Halogen Cables



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.

SPECIFICATIONS / RATINGS

Applications 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

Constructions Dielectric (single & dual jacket), ezPREP® corrugated armor, interlocked armor

Flame Ratings Riser - low smoke (OFNR-ST1 / OFCR-ST1 / FT4 ST1)
Tray - OFNG-ST1 / FT4 ST1

Fiber Count 2 to 288

Fiber Types Single-mode (ESMF, bend-insensitive) multimode (62.5/125- OM1, 50/125- OM2+, OM3, OM4 and OM5)

Standards TIA/EIA-568, ANSI/ICEA S-83-596, ANSI/ICEA S-104-696, CSA 22.2 No. 230 Telcordia GR-409, Telcordia GR-409 Telcordia GR-20, UL-1666, IEEE 1202, NFPA 130 compliant, CE RoHA Compliant

Registered Supplier TL 9000, ISO 9001, ISO 14001, and OHSAS 18001

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 OM5/100 gigabit ethernet systems
- 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



GenSPEED® Industrial LSZH Loose Tube (Dry)

Indoor/Outdoor Low-Smoke / Zero-Halogen Cables



GenSPEED® Industrial Dielectric Single LSZH Jacket (1J - Dry), IRZHB Series | 12-60F OFNR-ST1/FT4 ST1 | 72+ OFCG-ST1/ FT4 ST1

Fiber Count Range	Rec. Fiber Count	Recommended Part Number		# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius Load		Bend Radius No Load		Max. Reel Length	
		Prysmian*	General Cable**		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
6 - 48	6	IRZHB-12-AA-006-BB	XX0064MIZ-DT	5	0.43	11.0	77	115	9	22	4	11	41,010	12,500
	12	IRZHB-12-AA-012-BB	XX0124MIZ-DT											
	24	IRZHB-12-AA-024-BB	XX0244MIZ-DT											
	36	IRZHB-12-AA-036-BB	XX0364MIZ-DT											
	48	IRZHB-12-AA-048-BB	XX0484MIZ-DT											
72	72	IRZHB-12-AA-072-BB	XX0724MIZ-DT	6	0.46	11.8	85	126	9	24	5	12	41,010	12,500
96	96	IRZHB-12-AA-096-BB	XX0964MIZ-DT	8	0.50	12.7	96	143	10	25	5	13	41,010	12,500
120	120	IRZHB-12-AA-120-BB	XX1204MIZ-DT	10	0.57	14.4	123	183	11	29	6	14	41,010	12,500
144	144	IRZHB-12-AA-144-BB	XX1444MIZ-DT	12	0.63	16.1	155	231	13	32	6	16	41,010	12,500
216	216	IRZHB-12-AA-216-BB	XX2164MIZ-DT	18	0.66	16.8	153	226	13	34	7	17	33,573	10,233
288	288	IRZHB-12-AA-288-BB	XX2884MIZ-DT	24	0.77	19.5	205	304	15	39	8	20	33,573	10,233

GenSPEED® Industrial Dielectric Double Jacket (2J - Dry) IRZHC series | OFNR-ST1 / FT4-ST1

Fiber Count Range	Rec. 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 - 48	6	IRZHC-12-AA-006-BB		5	0.52	13.2	117	174	10	26	5	13	41,010	12,500
	12	IRZHC-12-AA-012-BB												
	24	IRZHC-12-AA-024-BB												
	36	IRZHC-12-AA-036-BB												
	48	IRZHC-12-AA-048-BB												
72	72	IRZHC-12-AA-072-BB		6	0.55	13.9	126	188	11	28	5	14	41,010	12,500
96	96	IRZHC-12-AA-096-BB		8	0.62	15.8	161	239	12	32	6	16	41,010	12,500
120	120	IRZHC-12-AA-120-BB		10	0.69	17.4	196	291	14	35	7	17	35,377	10,783
144	144	IRZHC-12-AA-144-BB		12	0.76	19.2	235	350	15	38	8	19	35,377	10,783
216	216	IRZHC-12-AA-216-BB		18	0.78	19.7	153	350	16	39	8	20	25,633	7,813
288	288	IRZHC-12-AA-288-BB		24	0.88	22.4	205	444	18	45	9	22	25,633	7,813

* Where AA equals glass type and BB equals attenuation

** Where XX equals glass type

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)

Mechanical Performance

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)

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.



GenSPEED® Industrial LSZH Loose Tube (Dry)

Indoor/Outdoor Low-Smoke / Zero-Halogen Cables



GenSPEED® Industrial Corrugated Steel Tape Armor with Double LSZH Jackets (1A2J - Dry) IRZHD series | OFCR-ST1 / FT4 ST1

Fiber Count Range	Rec. 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 - 48	6	IRZHD-12-AA-006-BB	5	0.63	16.0	192	285	13	32	6	16	41,010	12,500
	12	IRZHD-12-AA-012-BB											
	24	IRZHD-12-AA-024-BB											
	36	IRZHD-12-AA-036-BB											
	48	IRZHD-12-AA-048-BB											
72	72	IRZHD-12-AA-072-BB	6	0.66	16.8	206	306	13	34	7	17	41,010	12,500
96	96	IRZHD-12-AA-096-BB	8	0.73	18.5	247	368	15	37	7	19	37,497	11,429
120	120	IRZHD-12-AA-120-BB	10	0.80	20.3	294	438	16	41	8	20	25,974	7,917
144	144	IRZHD-12-AA-144-BB	12	0.87	22.1	343	510	17	44	9	22	25,974	7,917
216	216	IRZHD-12-AA-216-BB	18	0.90	22.9	153	517	18	46	9	23	20,436	6,229
288	288	IRZHD-12-AA-288-BB	24	1.00	25.4	205	631	20	51	10	25	20,436	6,229

GenSPEED® I/O Industrial Corrugated Steel Tape Armor with Single LSZH Jacket (1A1J - Dry) IRZHE series | OFCG-ST1 / FT4 ST1

Fiber Count Range	Rec. 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 - 48	6	IRZHE-12-AA-006-BB	5	0.49	12.4	120	178	10	25	5	12	41,010	12,500
	12	IRZHE-12-AA-012-BB											
	24	IRZHE-12-AA-024-BB											
	36	IRZHE-12-AA-036-BB											
	48	IRZHE-12-AA-048-BB											
72	72	IRZHE-12-AA-072-BB	6	0.52	13.2	130	194	10	26	5	13	41,010	
96	96	IRZHE-12-AA-096-BB	8	0.58	14.7	158	235	12	29	6	15	41,010	12,500
120	120	IRZHE-12-AA-120-BB	10	0.65	16.5	192	286	13	33	6	17	37,917	11,557
144	144	IRZHE-12-AA-144-BB	12	0.72	18.3	232	346	14	37	7	18	37,917	11,557
216	216	IRZHE-12-AA-216-BB	18	0.72	18.3	153	346	14	37	7	18	29,495	8,990
288	288	IRZHE-12-AA-288-BB	24	0.82	20.8	205	391	16	42	8	21	29,495	8,990

Aluminum Interlocking Armor, Black Inner Jacket, Colored Outer Jacket, IRZHBAJ series | 12-60F OFCR-ST1/FT4 ST1 | 72+ OFCG-ST1/ FT4 ST1

Fiber Count Range	Rec. 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 - 48	6	IRZHBAJ-12-AA-006-BB	5	0.73	19.6	200	297	15	39	8	20	14,108	4,300
	12	IRZHBAJ-12-AA-012-BB											
	24	IRZHBAJ-12-AA-048-BB											
	36	IRZHBAJ-12-AA-036-BB											
	48	IRZHBAJ-12-AA-048-BB											
72	72	IRZHBAJ-12-AA-072-BB	6	0.76	20.3	242	360	16	41	8	20	10,827	3,300
96	96	IRZHBAJ-12-AA-096-BB	8	0.83	21.1	263	391	17	42	8	21	11,752	3,582
120	120	IRZHBAJ-12-AA-120-BB	10	0.92	23.4	341	507	18	47	9	23	8,235	2,510
144	144	IRZHBAJ-12-AA-144-BB	12	1.00	25.4	399	594	20	51	10	25	8,235	2,510
216	216	IRZHBAJ-12-AA-216-BB	18	1.02	25.9	405	602	20	52	10	26	6,102	1,860
288	288	IRZHBAJ-12-AA-288-BB	24	1.12	28.4	492	732	22	57	11	28	6,102	1,860

* Where AA equals glass type and BB equals attenuation

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)

Mechanical Performance

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)

Outer Jacket Color for Interlock Armor

Yellow Single-Mode Premises
 Orange Standard Multimode Premises
 Aqua Laser-Optimized 50 µm Premises

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.



Prysmian

4 Tessenore Drive, Highland Heights, KY 41076
 na.prysmian.com
 TLS-DS-D-401-0626

GenSPEED® Industrial LSZH Loose Tube (Dry)

Indoor/Outdoor Low-Smoke / Zero-Halogen Cables



Ordering Guide

The Prysmian 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: GenSPEED® loose tube | I/O industrial riser | dry buffer tubes | LSZH single jacket | 12 single-mode fibers per buffer tube | 72 fibers total (printed in feet)

1	LENGTH MARKINGS	2	PRODUCT FAMILY	3	CONSTRUCTION	4	FIBER GROUPING	5	FIBER TYPE	6	FIBER COUNT	7	FIBER GRADE
F		IRZHB		BLANK		12		B1		072		E1	

PART NUMBER CONSTRUCTION	
1	LENGTH MARKINGS
F = Feet or M = Meters	
2	PRODUCT FAMILY
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	
3	CONSTRUCTION
(Blank) = Not available with interlock armor	
AJ = Jacket Aluminum	
4	FIBER GROUPING
12 = 12f per unit or tube	

FIBER INFORMATION	
5	FIBER TYPE
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)	
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)	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/___
GW = OM5 (50µm)	850/1300 3500/500 1100 550/___
6	FIBER COUNT
002 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 B1 and B2
E3 = 0.35/0.35/0.25	1310/1383/1550 B1 and B2
MULTIMODE	
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, OM5 (50µm)

Other cable constructions and fiber performance grades available on request.



Prysmian

4 Tesseneer Drive, Highland Heights, KY 41076
na.prysmian.com
TLS-DS-D-401-0626