

Safe-T-Line Cables

Fire-resistant Circuit Integrity (CI) cables for emergency systems

Product Bulletin

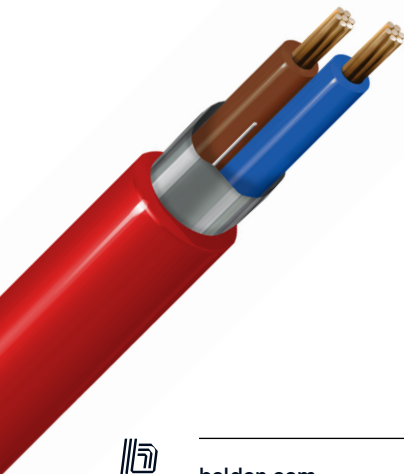


Design and deploy reliable emergency systems with Belden's fire-resistant Circuit Integrity (CI) cable portfolio. Why Safe-T-Line? Large portfolio with ratings for a broad range of regional standards and applications, easy termination and installation — wherever the application demands it.

- **Large portfolio** providing the right balance between cost-effectiveness and performance for each application
- **Compliance with key standards** including BS 6387 CWZ (3-hour rated), EN 50200 PH120, CPR and UL listings
- **Easy termination and installation**, with easy-strippable silicone insulation and aluminium-polyester Beldfoil shielding tape

Key features

- BS 6387 CWZ:
 - » C — 950 °C / 3 hrs
 - » W — water spray 650 °C / 15 min
 - » Z — mechanical shock 950 °C / 15 min
- EN 50200 PH120: circuit integrity for 2 hours
- CPR performance class Cca (s1b,d1,a1)
- NEC / UL cable types: Power-Limited Tray Cable, Industrial Tray Cable, Fire Power Limited Riser
- LPCB third-party approval
- Low smoke, halogen-free construction, operating up to 105 °C where applicable
- ABS type-approved shipboard CI cables



Whatever the application — building life-safety, industrial controlled shutdown or shipboard — **Belden Safe-T-Line CI cables are designed to keep critical circuits operating when it matters most.**



Your Benefits

Safe-T-Line CI cables are designed for environments where circuit integrity cannot be compromised. The range covers multiple fire-resistance ratings and regional standards, giving specifiers the right cable for each application and market.

- BS 6387 CWZ certification ensures continued operation at 950 °C for 3 hours, under water spray and mechanical shock.
- EN 50200 PH120 and CPR Cca (s1b,d1,a1) ratings address extended building compliance requirements.
- LSZH construction minimises toxic smoke emission during a fire event, supporting safer evacuation.
- ABS type approval extends the range to demanding marine applications.
- The aluminium-polyester Beldfoil shielding tape makes Safe-T-Line the easiest CI cable of its kind to terminate on site.

Applications

Safe-T-Line CI cables are specified wherever emergency circuits must remain operational under fire conditions.

- Fire alarm and Emergency Voice-Alarm Communications (EVAC) systems in commercial buildings, hotels and transport hubs rely on fire-resistant rated cables to activate suppression systems and guide safe evacuation.
- Industrial sites use Safe-T-Line for controlled shutdown circuits that keep mission-critical processes safe during emergency events.
- Shipboard installations require the ABS-approved range for reliable emergency communications and safety systems in marine environments.

Markets

Safe-T-Line CI cables serve any environment where life-safety systems must be specified and maintained to code. Key markets include commercial real estate and hospitality (hotels, offices, retail), transportation infrastructure (airports, rail stations, metro systems), healthcare facilities, industrial manufacturing and process plants, and marine and offshore applications. The CPR Cca-rated range specifically addresses European building regulations for new construction and renovation projects across EMEA.



EN50200 PH120 & CPR Cca Rated Cables

Belden CPR Cca (s1b,d1,a1) Safe-T-Line cables are designed for emergency circuits requiring **EN 50200 PH120** circuit integrity performance and **low smoke / halogen-free** compounds.

Safe-T-Line Cable

Description	Size	Part No.	No. of Cond.	Stranding	Bulk Weight	Nominal OD	Nominal Capacitance	Nominal DC Resistance Ω/km"
	mm²				kg/km	mm	pF/m	
Unshielded Multi-conductor • Silicone Rubber (BS7655 EI2) Insulation • Red or White Low Smoke Zero Halogen Jacket • 100V								
EN 50200 PH120 CPR Cca s1b,d1,a1 IEC: 60332-1-2 IEC: 60332-3-25 LSZH 	1.0 mm2	79210ULW	2	Class 2	50	6.2	100	19
	1.5 mm2	79215ULW	2	Class 2	65	7.4	110	12
	2.5 mm2	79225ULW	2	Class 2	92	8.5	120	8
Shielded Multi-conductor • Silicone Rubber (BS7655 EI2) Insulation • Red or White Low Smoke Zero Halogen Jacket • 100V								
EN 50200 PH120 CPR Cca s1b,d1,a1 IEC: 60332-1-2 IEC: 60332-3-25 LSZH 	1.0 mm2	79210FLW	2	Class 2	54	6.3	110	19
	1.5 mm2	79215FLW	2	Class 2	74	7.4	120	12
	2.5 mm2	79225FLW	2	Class 2	100	8.7	140	8

Standard packaging: Red jacket, 500m reel



LPCB Approved CI Cables

Belden Safe-T-Range covers easy-strip LPCB approved cables tailored for the European and Middle East market. The range comes in variants of 2, 3 and 4 conductors, for 1.5 mm² to 4 mm² and is manufactured in Europe.

Safe-T-Line Cable

Circuit Integrity (CI) Fire Alarm – Flame Retardant, Low Smoke, Zero Halogen Jacket, LPCB Approved

BS 6387 CWZ, EN 50200 PH120 + Annex E, IEC 60332-3-24, IEC 60332-3-25

Description	Part No.	No. of Cond.	Stranding	Standard Lengths		Reel Weight		Insulation Thickness		Nominal OD		Nominal Capacitance		Maximum DC Resistance Ω/Mft.
				ft	m	lb	kg	inch	mm	inch	mm	pF/ft	pF/m	
Shielded Multi-conductor • Silicone Rubber (BS7655 EI2) Insulation • Red or White Low Smoke Zero Halogen Jacket														
1.5 mm ² - Solid	79001FS	2	solid	1640	500	83.3	37.8	0.03	0.7	0.31	7.9	21	70	12.10
	79003FS	3				118.6	53.8			0.35	8.8			
	79005FS	4				143.5	65.1			0.37	9.5			
1.5 mm ² - Stranded	79001FF	2	class 2	1640	500	83.3	37.8	0.03	0.7	0.31	7.9	23	75	12.10
	79003FF	3				118.6	53.8			0.35	8.8			
	79005FF	4				143.5	65.1			0.37	9.5			
2.5 mm ² - Solid	79002FS	2	solid	1640	500	121.5	55.1	0.03	0.8	0.36	9.2	24	80	7.41
	79004FS	3				158.0	87			0.38	9.7			
	79006FS	4				203.5	92.3			0.46	11.7			
2.5 mm ² - Stranded	79002FF	2	class 2	1640	500	121.5	55.1	0.03	0.8	0.37	9.3	26	85	7.41
	79004FF	3				158.0	71.7			0.39	9.9			
	79006FF	4				203.4	92.3			0.43	10.9			
4 mm ² - Stranded	79007FF	2	class 2	1640	500	182.0	82.6	0.03	0.8	0.45	11.4	30	100	4.61
	79009FF	3				237.1	107.6			0.48	12.1			
	79011FF	4				303.2	137.6			0.52	13.3			

Industrial 3-hour Rated CI Cables

Belden Type PLTC shielded multi-conductor cables are for industrial use, to be employed in controlled shutdown or emergency situations in circuitry that pertains to mission-critical industrial processes. Belden Part Nos. 5240FRE and 5201FRE are for installation in risers or Power Limited Trays.

Safe-T-Line Cable

PLTC 3-hour Fire Rated/Industrial Control Shutdown Cable – Flame Retardant, Low Smoke, Zero Halogen Jacket, Riser-Rated

Description	Part No.	No. of Cond.	Stranding	Standard Lgths		Standard Unit Wt		Insulation Thickness		Nominal OD		Nominal Capacitance		Nominal DC Resistance Ω/Mft.
				ft	m	lb	kg	inch	mm	inch	mm	pF/ft	pF/m	
Shielded Multi-conductor • Thermoset Elastomer Insulation • Beldfoil Shield • Sunlight Resistant • Red Polyolefin Jacket														
16 AWG														
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120  	5240FRE	2	7 × 24	500	152.4	55	25	0.034	0.86	0.35	8.4	31	102	4.0
				2500	762.0	185	84			0.35	8.9			
	5201FRE	3	7 × 24	500	152.4	88	40			0.37	9.7			
				2500	762.0	230	150			0.37	9.4			



Safe-T-Line Cable

Circuit Integrity (CI) Fire Alarm – Flame Retardant, Low Smoke, Zero Halogen Jacket, Riser-Rated; FPLR

Description	Part No.	No. of Cond.	Stranding	Standard Lgths		Standard Unit Wt		Insulation Thickness		Nominal OD		Nominal Capacitance		Nominal DC Resistance Ω/Mft.
				ft	m	lb	kg	inch	mm	inch	mm	pF/ft	pF/m	
Unshielded Multi-conductor • Thermoset Elastomer Insulation • Red Polyolefin Jacket														
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	18 AWG													
	5320UME	2	solid	1000	304.8	40	18	0.034	0.86	0.31	7.9	17	56	5.9
	5322UME	4				65	30			0.35	8.9			
	5324UME	5				95	43			0.42	10.7			
	5326UME	6				120	55			0.45	11.4			
	16 AWG													
	5220UME	2	solid	1000	304.8	49	22	0.034	0.86	0.33	8.4	19	62	4.0
	5222UME	4				81	37			0.38	9.7			
	14 AWG													
	5120UME	2	solid	1000	304.8	71	32	0.034	0.86	0.36	9.1	21	69	2.5
	5122UME	4				121	55			0.41	10.4			
	12 AWG													
	5020UME	2	solid	1000	304.8	100	45	0.034	0.86	0.39	10	23	75	1.6
	5022UME	4				168	76			0.45	11.4			

Safe-T-Line Cable

Circuit Integrity (CI) Fire Alarm – Flame Retardant, Low Smoke, Zero Halogen Jacket, Riser-Rated; FPLR

Description	Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD		Nominal Capacitance		Nominal DC Resistance Ω/Mft.
				ft	m	lbs	kg	inch	mm	inch	mm	pF/ft	pF/m	
Shielded Multi-conductor • Thermoset Elastomer Insulation • Beldfoil Shield • Red Polyolefin Jacket														
18 AWG														
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	5320FME	2	solid	1000	304.8	45	20	0.34	0.86	0.31	7.9	27	89	6.5
	5322FME	4				70	32			0.35	8.9			
	5324FME	6				100	45			0.42	10.7			
	5326FME	8				125	57			0.45	11.4			
NEC: FPLR BS 6387 CWZ EN 50200 PH120 	5300FME	2	7 × 26	1000	304.8	47	21	0.34	0.86	0.32	8.1	27	89	6.6
	5302FME	4				72	33			0.36	9.1			
	5304FME	6				104	47			0.44	11.2			
	5306FME	8				130	59			0.48	12.2			
16 AWG														
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	5220FME	2	solid	1000	304.8	55	25	0.34	0.86	0.33	8.4	31	102	4.0
	5222FME	4				88	40			0.38	9.7			
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	5200FME	2	7 × 24	1000	304.8	58	26	0.34	0.86	0.35	8.9	31	102	4.0
	5202FME	4				93	42			0.4	10.2			

All 2-conductor versions are color-coded black and red; 4 or more conductor versions are all black and numbered.
Available through 8 conductor by special order. Contact Belden distribution.

Safe-T-Line Cable

Circuit Integrity (CI) Fire Alarm – Flame Retardant, Low Smoke, Zero Halogen Jacket, Riser-Rated; FPLR

Description	Part No.	No. of Cond.	Stranding	Standard Lengths		Standard Unit Weight		Insulation Thickness		Nominal OD		Nominal Capacitance		Nominal DC Resistance Ω/Mft.
				ft	m	lbs	kg	inch	mm	inch	mm	pF/ft	pF/m	
Shielded Multi-conductor • Silicone Rubber Insulation • Beldfoil Shield • Sunlight Resistant • Red Polyolefin Jacket														
14 AWG														
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	5120FME	2	solid	1000	304.8	81	37	0.034	0.86	0.36	9.1	33	108	2.5
	5122FME	4				131	60			0.41	10.4			
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	5100FME	2	7 × 22	1000	304.8	83	38	0.034	0.86	0.38	9.7	33	108	2.6
	5102FME	4				133	60			0.44	11.2			
12 AWG														
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	5020FME	2	solid	1000	304.8	114	52	0.034	0.86	0.39	10	37	121	1.6
	5022FME	4				182	83			0.45	11.4			
NEC: FPLR, ITC, PLTC BS 6387 CWZ EN 50200 PH120 	5000FME	2	7 × 20	1000	304.8	116	53	0.034	0.86	0.42	10.7	40	131	1.6
	5002FME	4				185	84			0.48	12.1			

Notes: All 2-conductor versions are color-coded black and red; 4 or more conductor versions are all black and numbered.
Available through 8 conductor by special order. Contact Belden distribution.



Shipboard 2-hour Rated CI Cables

Belden also offers ABS-type approved products (Part Nos. 1320SB and 1321SB) with type approved Low Smoke, Zero Halogen properties for use in demanding marine applications.

ABS (the American Bureau of Shipping) is the leading international classification society devoted to promoting the security of marine-related life and property. With ABS-type approval, no additional special approvals or insurance company exceptions are required for Belden cable system installations.

Safe-T-Line Cable

ABS Type Approved 2-hour Fire Rated Shipboard Cable – Flame Retardant, Low Smoke, Zero Halogen Jacket; FPLR, CMG-LS, FT4, IEC 60332-1-2, IEC 60331-23, IEC 60332-3-22

Description	Part No.	No. of Cond.	Stranding	Standard Lgths		Standard Unit Wt		Insulation Thickness		Nominal OD		Nominal Capacitance		Nominal DC Resistance Ω/Mft.
				ft	m	lb	kg	inch	mm	inch	mm	pF/ft	pF/m	
Shielded Multi-conductor • Silicone Rubber Insulation • Beldfoil Shield • Sunlight Resistant • Red Polyolefin Jacket														
18 AWG Solid Bare Copper														
NEC: FPLR,CMG-LS IEC: 60331-23  	1320SB	1	16/2	1000	304.8	55	25	0.034	0.86	0.33	8.4	31	102	4.0
ABS Model Certificate No. 06-HS184641F-PDA														
16 AWG Solid Bare Copper														
NEC: FPLR,CMG-LS IEC: 60331-23  	1321SB	1	16/2	1000	304.8	55	25	0.034	0.86	0.33	8.4	31	102	4.0
ABS Model Certificate No. 06-HS184641F-PDA														

