



## Lighting Cable Catalog



**Belden  
Lighting Cable**

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## Belden Lighting Catalog

Belden manufactures over 6,000 different cables, and this catalog is only an overview of products that apply to lighting and lighting control applications. For more details on these or other products, visit [www.belden.com](http://www.belden.com) or contact **1-800-BELDEN-1** to request a custom product.

### Abbreviations and Acronyms

<b>CM</b>	Commercial fire rating
<b>CMG</b>	CM fire rating for USA and Canada (“harmonized”)
<b>CMR</b>	Riser fire rating
<b>CMX</b>	Residential fire rating
<b>DMX</b>	Digital Multiple X (lighting control standard)
<b>FPE</b>	Foam Polyethylene
<b>Ft.</b>	Foot
<b>GHz</b>	Gigahertz
<b>M</b>	Thousand
<b>MHz</b>	Megahertz
<b>m</b>	Metre
<b>kHz</b>	kilohertz
<b>km</b>	kilometre
<b>mm</b>	millimetre
<b>OD</b>	Outer Diameter
<b>PE</b>	Polyethylene (plastic)
<b>pF</b>	Picofarad
<b>PVC</b>	Polyvinyl Chloride (plastic)
<b>TC</b>	Tray Cable
<b>UTP</b>	Unshielded twisted pair
<b>Ω</b>	Ohm

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## Fiber Optic Cable

Fiber is becoming more and more popular in all forms of control architecture, and lighting controls is no exception. If you have wide bandwidth signals, long distances or need superior noise immunity, fiber is the ideal solution.

While customers may know Belden for copper cables, Belden has been involved in the development of optical fiber components for over 40 years. Today, Belden offers FiberExpress®, a full fiber optic product portfolio which includes cable, field termination connectors, kits, assemblies, patch panels systems, and more.

To download the Fiber Optic Catalog or other information about Belden products, visit [www.belden.com/products/catalogs](http://www.belden.com/products/catalogs)

- Broadcast & AV Solutions Guide
- Commercial AV Solutions Guide
- Copper Networking Catalog
- Fiber Optic Catalog
- Security Solutions Guide
- Cabling Solutions for Industrial Applications

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## DMX-512®

DMX lighting control cable is based on RS-485 data cable, 120Ω impedance and a capacitance of 12 pF/ft. or less. Many lighting designers use 100Ω cables for DMX because those cables are smaller, cheaper and easier to find. The impedance mismatch and higher capacitance will make them distance-limited compared to true RS-485. Among the 100Ω cable types are the premise/data cables such as Category 5, Category 5e, Category 6 and Category 6A. Using this cable for DMX is not the same as lighting control run with Ethernet,

which use these same Category cables but in a completely different protocol (i.e. Ethernet) with a 100m distance. Others use standard microphone cables or similar to run DMX. As these cables vary widely in impedance and capacitance, they are poor choices for DMX and only run effectively for very short distances, if at all. Three-pin XLR connectors have been specifically prohibited in the DMX standard since 2004, but many still use them.



9841, One Pair DMX (RS-485)

### One Pair DMX (RS-485)

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Most Popular	9841	100	152	24 AWG (7x32)	120	12.8	42	100% foil 90% braid + drain	PE	PVC	.232	5.89	CM
		500	305										
		1000	1524										
LSZH Version	9841NH	500	152	24 AWG (7x32)	120	14.5	26	100% foil 90% braid + drain	PE	LSZH	.258	6.55	CMG
		1000	305										
Plenum Version	82841	500	152	24 AWG (7x32)	120	12	39	100% foil 90% braid + drain	Foam FEP	PVC	.204	5.18	CMP
		1000	305										
		5000	1524										
Plenum Version	89841	500	152	24 AWG (7x32)	120	12	40	100% foil 90% braid + drain	Foam FEP	FEP	.202	5.13	CMP
		1000	305										
		5000	1524										
Low Capacitance Version	3105A	500	152	22 AWG (7x30)	120	11	36	100% foil 65% braid + drain	Datalene® Foam PE	PVC	.281	7.14	CM PLTC
		1000	305										
		5000	1524										
Flexible Version (1 million flex cycles)	7200A	500	152	24 AWG (41x40)	120	15	49	100% foil 85% braid + drain	Foam PE /PE	PVC	.240	6.10	CM
		1000	305										
One-pair	9271	100	30	25 AWG (7x33)	124	12	40	100% foil 65% braid + drain	PE	PVC	.240	6.10	CM
		500	152										
		1000	305										
One-pair Low Capacitance	9860	500	152	16 AWG Solid	124	11	36	100% foil 90% braid	Foam PE	PVC	.440	11.18	CMX
		1000	305										
		2000	610										
One-pair 600V Rating	3074F	500	152	18 AWG (7x26)	124	12	40	100% foil 55% braid	PO	PVC UV Resistant	.460	11.68	CMG PLTC ITC TC
		1000	305										
		2500	762										
		5000	1524										

## DMX-512® (continued)

### Multi-Pair DMX (RS-485)

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Two-pair	9842	100 500 1000	30 152 305	24 AWG (7x32)	120	13	42	100% foil 90% braid + drain	PE	PVC	0.34	8.64	CM
Two-pair LSZH	9842NH	1000	305	24 AWG (7x32)	120	14	45	100% foil 90% braid + drain	PE	LSZH	0.323	8.2	CMG
Three-pair	9843	100 500 1000 5000	30 152 305 1524	24 AWG (7x32)	120	13	42	100% foil 90% braid + drain	PE	PVC	0.36	9.14	CM
Four-pair	9844	500 1000	152 305	24 AWG (7x32)	120	13	42	100% foil 90% braid + drain	PE	PVC	0.39	9.91	CM
Two-pair Plenum	82842	500 1000 5000	152 305 1524	24 AWG (7x32)	120	12	39	100% foil 90% braid + drain	FEP	Flamarrest PVC	0.273	6.93	CMP
Two-pair Plenum	89842	500 1000	152 305	24 AWG (7x32)	120	12	39	100% foil 90% braid + drain	FEP	FEP	0.305	7.75	CMP
Two-pair Low Capacitance	3107A	1000 4000 5000	305 1219 1524	22 AWG (7x30)	120	11	36	100% foil 65% braid + drain	Datalene Foam PE	PVC UV Resistant	0.35	8.89	CM PLTC
Three-pair Low Capacitance	3108A	1000 2000 5000	305 610 1524	22 AWG (7x30)	120	11	36	100% foil 65% braid + drain	Datalene Foam PE	PVC UV Resistant	0.374	9.5	CM PLTC
Four-pair Low Capacitance	3109A	1000 2000 5000	305 610 1524	22 AWG (7x30)	120	11	36	100% foil 65% braid + drain	Datalene Foam PE	PVC UV Resistant	0.448	11.38	CM PLTC
Two-pair Armored Low Capacitance	123107A	5000	1524	22 AWG (7x30)	120	11	36	100% foil 65% braid + drain	Datalene Foam PE	PVC UV Resistant	0.65	16.51	CM PLTC
Two-pair Low Capacitance	8132	100 500 1000 5000	30 152 305 1524	28 AWG (7x36)	120	11	36	100% foil 65% braid + drain	Datalene Foam PE	PVC	0.22	5.59	CL2
Three-pair Low Capacitance	8133	100 500 1000	30 152 305	28 AWG (7x36)	120	11	36	100% foil 65% braid + drain	Datalene Foam PE	PVC	0.265	6.73	CL2
Four-pair Low Capacitance (available up to 25 pair)	8134	100 500 1000	30 152 305	28 AWG (7x36)	120	11	36	Overall 100% foil 65% braid + drain	Datalene Foam PE	PVC	0.286	7.26	CL2
Two-pair Low Capacitance	8132FO	500 1000	152 305	28 AWG (7x36)	120	11	36	100% foil + drain wire	Datalene Foam PE	PVC	0.215	5.46	CL2
Four-pair Low Capacitance (Available up to 25 pair)	8134FO	500 1000	152 305	28 AWG (7x36)	120	11	36	100% foil + drain wire	Datalene Foam PE	PVC	0.27	6.86	CL2
Two-pair Flexible (1 million flex cycles)	7201A	500 1000	152 305	24 AWG (41x40)	120	15	49	100% foil 85% braid + drain	Foam PE	PVC Oil Resistant	0.322	8.18	CM
Three-pair Flexible (1 million flex cycles)	7202A	500 1000	152 305	24 AWG (41x40)	120	15	49	100% foil 85% braid + drain	Foam PE	PVC Oil Resistant	0.347	8.81	CM
Four-pair Flexible Version (1 million flex cycles)	7203A	500 1000	152 305	24 AWG (41x40)	120	15	49	100% foil 85% braid + drain	Foam PE	PVC Oil Resistant	0.362	9.2	CM

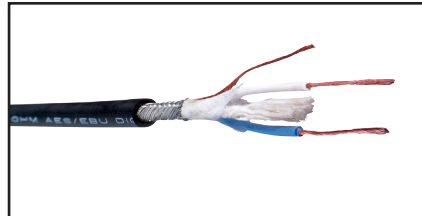


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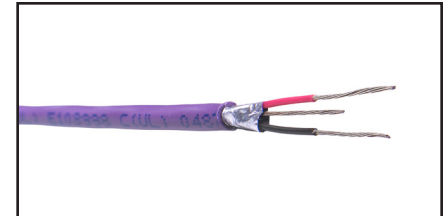


## Digital Audio (AES/EBU)

Digital audio cables have an impedance of 110Ω and a capacitance of 13pF/ft., very close to the requirements for RS-485 and DMX. These cables come in flexible, single and multi-pair versions.



1800F, Digital Audio Flexible/Field-Deployable



1800B, Digital Audio (AES/EBU) Install Cables

### Digital Audio Flexible/Field-Deployable

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Single-pair Riser	1800F	500 1000	152 305	24 AWG (105x44)	110	12	39	French braid + drain wire	Foam PE	PVC	.211	5.36	CMR
Single-pair Miniature Version (fits TA3, bantam and other miniature connectors)	2221	1000	305	26 AWG (30x40)	110	13	43	French braid	Datalene Foam PE	Belflex® PVC	.170	4.32	

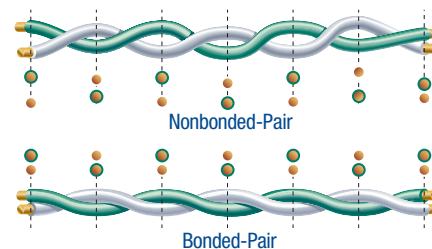
### Digital Audio Install Cables

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Install version	1800B	500 1000 5000	152 305 1524	24 AWG (7x32)	110	12	39	100% foil + drain	Datalene Foam PE	PVC	0.177	4.5	CMG
One-pair Plenum	1801B	500 1000	152 305	24 AWG (7x32)	110	12	39	100% foil + drain	Teflon® Foam FEP	Flamarrest PVC	0.165	4.19	CMP
Two-pair Parallel Jacket	1802B	500 1000	152 305	24 AWG (7x32)	110	12	39	Individual 100% foil + drains	Datalene Foam PE	PVC	.180 x .360	4.57 x 9.14	CMR
Two-pair Round	1802F	500 1000	152 305	24 AWG (7x32)	110	12	39	Individual 100% foil + drains	Datalene Foam FEP	PVC	0.409	10.39	CMG
Two-pair	7891A	500 1000	152 305	26 AWG (7x34)	110	13	41	Individual 100% foil + drains	Datalene Foam PE	PVC	0.343	8.71	CM
Four-pair	7890A	500 1000	152 305	26 AWG (7x34)	110	13	41	Individual 100% foil + drains	Datalene Foam PE	PVC	0.399	10.14	CM
Eight-pair, fits metal 25-pin sub-D connectors (Available up to 16 pair)	7880A	500 1000	152 305	26 AWG (7x34)	110	13	41	Individual 100% foil + drains	Datalene Foam PE	PVC	0.541	13.74	CM
Four-pair round	1803F	500 1000	152 305	24 AWG (7x32)	110	12	39	Individual 100% foil + drains	Datalene Foam FEP	PVC	0.488	12.39	CMG
Eight-pair round. (Available up to 32 pair)	1805F	500 1000	152 305	24 AWG (7x32)	110	12	39	Individual 100% foil + drains	Datalene Foam FEP	PVC	0.661	16.79	CMG

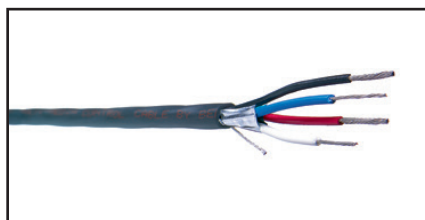
## Data Cables

Many of our Ethernet cables, and some audio cables, feature bonded pairs. This technology bonds the two wires of a twisted pair together without glue so they cannot be separated. As a result, impedance of that pair is constant, even when bent or twisted during installation. Return loss (which can affect signal quality, signal emission, noise immunity and distance) can be significantly improved by using bonded pairs. However, it requires that the pair be split before a connector is attached. Belden offers a tool, 1797B, for this purpose. The increase in cable performance, especially after installation, is worth the few seconds of splitting the pair.

The distance between the conductors, or the conductor-to-conductor centricity, remains fixed and stable along the length of the twisted pair. Only bonded-pair cables offer this type of stability. In typical non-bonded twisted pairs, the slightest manipulation of these cables can cause gaps between the conductors of the pair and impair electrical performance (shown right). Gaps cannot form between the conductors in a bonded-pair, resulting in consistent electrical performance.



9729, Two Pair Data Cables



1502R, Data Cables with Power Pair

### Two Pair Data Cables

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Two-pair	9729	100	31	24 AWG (7x32)	100	13	41	Individual 100% foil + drains	Datalene® Foamed PE	PVC	0.266	6.76	CM
		500	152										
		1000	305										
		10000	3048										
Two-pair Plenum	89729	500	152	24 AWG (7x32)	100	14	44	Individual 100% foil + drains	Foam FEP	PVDF	0.261	6.63	CMP
		1000	305										
Two-pair Plenum	82729	1000	305	24 AWG (7x32)	100	14	44	Individual 100% foil + drains	Foam FEP	PVDF	0.255	6.48	CMP
Three pair	9730	100	31	24 AWG (7x32)	100	13	41	Individual 100% foil + drains	Datalene® Foamed PE	PVC	0.334	8.48	CM
		500	152										
		1000	305										
		5000	1524										
10000	3048												
Four pair (Available up to 27 pair)	9728	100	31	24 AWG (7x32)	100	13	41	Individual 100% foil + drains	Datalene® Foamed PE	PVC	0.363	9.22	CM
		500	152										
		1000	305										
		5000	1524										
One-pair (1 million flex cycles)	7205A	1000	305	24 AWG (41x40)	100	14	44	100% foil 85% braid	Foam PE	PVC Oil Resistant	0.232	5.89	CM

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## Data Cables (continued)

### Data Cables with DC Power Pair

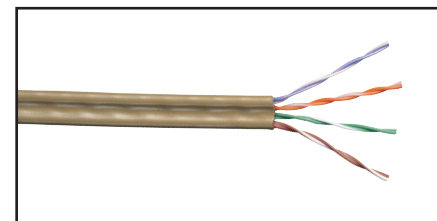
Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type			
		Ft.	m			pF/ft.	pF/m				In.	mm.				
Tinned Copper Riser	1502R	500	152	22 (7x30)	100	14	46	100% Foil + drain	Datalene Foam PE	FR-PVC	0.25	6.35	CMR CMG			
		1000	305													
		5000	1524													
		10,000	3049													
Tinned Copper Plenum	1502P	1000	305	22 (7x30)	100	14	46	100% Foil + drain	Foam FEP	Flamarrest PVC	0.205	5.21	CMP			
		5000	1524													
		10000	3048													
		18 (16x30)	29											95	Unshielded	Flamarrest PVC
Bare Copper Riser	1392A	500	152	22 (7x30)	100	14	46	100% Foil + drain	Datalene Foam PE	FR-PVC	0.25	6.35	CMR CMG			
		1000	305													
		18 (16x30)	29											95	Unshielded	PVC
		18 (16x30)	29											95	Unshielded	PVC
Bare Copper Plenum	1392P	500	152	22 (7x30)	100	14	46	100% Foil + drain	Foam FEP	Flamarrest PVC	0.205	5.21	CMP			
		1000	305													
		18 (16x30)	29											95	Unshielded	Flamarrest PVC
		18 (16x30)	29											95	Unshielded	Flamarrest PVC

## Ethernet

Ethernet cables, with a 100 Ohm impedance, can be used to carry RS-485 (DMX) signals directly. They can also carry Ethernet signals, of course. So you can install Ethernet cables, use them for RS-485 (DMX) signals now and use them also for Ethernet when you change to that format. DMX can run on one or two pair cables, 100 Mbps Ethernet (100baseT) also requires two pair. Ethernet bandwidths beyond that (such as 1 gigabit, 1GbaseT) require four pair.



1588A, Two Pair Data Cable (100MHz Bandwidth)



1872A, MediaTwist® Crescent Shaped Category 6+ Cables (350Mhz Bandwidth)

### Single Pair Data Cables (For use with analog or digital audio)

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m			In.	mm.	
One-pair Category 5e UTP Bonded-pair Riser	1353A	500	152	24 AWG (7x32)	100	15	49	PE	PVC	0.126	3.2	CMR CMG
		1000	305									

### Two Pair Data Cables

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m			In.	mm.	
Two-pair Category 5e	1588A	1000	305	24	100	15	49	PE	PVC	0.183	4.65	CMR
		1640	500									
Two-pair Category 5e Plenum	1590A	1000	305	24	100	14	46	FEP	Flamarrest® PVC	0.165	4.19	CMP

## Ethernet (continued)

### Category 5e UTP Cables

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m			In.	mm.	
Category 5e 350MHz Riser	1212	1000 2000	305 610	24 AWG Solid	100	15	49	PE	PVC	0.21	5.33	CMR
Category 5e 350 MHz Plenum	1213	1000	305	24 AWG Solid	100	15	49	FRPO/FEP	Flamarrest PVC	0.205	5.21	CMP
Category 5e 200MHz Riser	1583A	1000	305	24 AWG Solid	100	15	49	PO	PVC	0.19	4.83	CMR
Category 5e 200MHz Plenum	1585A	1000	305	24 AWG Solid	100	15	49	FRPO/FEP	Flamarrest PVC	0.19	4.83	CMP
Category 5e 350MHz Bonded-pair Riser	1700A	1000	305	24 AWG Solid	100	15	49	PO	PVC	0.2	5.08	CMR
Category 5e 350MHz Bonded-pair Plenum	1701A	1000	305	24 AWG Solid	100	15	49	FEP	Flamarrest PVC	0.195	4.95	CMP
Banana-Peel® Composite Riser (6-components of 1700A)	1700S6	500 1000	152 305	24 AWG Solid	100	15	49	PO	PVC	0.6	15.24	CMR
Banana-Peel® Composite Plenum (6-components of 1701A)	1701S6	500 1000	152 305	24 AWG Solid	100	15	49	FEP	Flamarrest PVC	0.6	15.24	CMP
CatSnake® Tactical CAT 5e UTP Heavy Duty	1304A	500 1000	152 305	24 AWG (7x32)	100	15	49	PO	Matte PVC	0.250	6.35	-
CatSnake® Tactical CAT 5e UTP 4x4 Bundled	1304A4	500 1000	152 305	24 AWG (7x32)	100	15	49	PO	Inner: Matte PVC Outer: Matte PVC	0.757	19.23	-
CatSnake® Tactical CAT 5e UTP Upjacketed	1305A	500 1000	152 305	24 AWG (7x32)	100	15	49	PO	PVC Upjacket	0.300	7.62	-
DataTuff® Stranded Category 5e, bonded pairs, sunlight/oil resistant jacket	7924A	1000	305	24 AWG (7x32)	100	15	49	PO	PVC Oil Resistant	0.242	6.15	CMR

### Category 5e Shielded Cables

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Category 5e, F/UTP Riser	1212F	500 1000	152 305	24 AWG Solid	100	15	49	Foil + drain	PE	PVC	0.26	6.6	CMR
Category 5e, F/UTP Plenum	1213F	1000	305	24 AWG Solid	100	15	49	Foil + drain	FEP	Flamarrest PVC	0.235	5.97	CMP
DataTuff® Category 5e F/UTP	7939A	1000	305	24 AWG (7x32)	100	15	49	Foil + drain	PO	PVC Oil Resistant	0.315	8	CMR
DataTuff® Stranded Category 5e, (10 million flex cycles)	7938A	500 1000	152 305	24 AWG (7x32)	100	15	49	100% foil 85% braid + drain	PO	TPE	0.342	8.69	

### MediaTwist® Crescent Shaped Category 6+ UTP Cables

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m			In.	mm.	
Category 6 Bonded-pair Riser	1872A	1000	305	23 AWG	100	15	49	PE	PVC	0.365 x 0.165	9.27 x 4.19	CMR
Category 6 Bonded-pair Plenum	1874A	1000	305	23 AWG	100	15	49	FEP	Flamarrest PVC	0.365 x 0.165	9.27 x 4.19	CMP



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**Ethernet** (continued)

**Category 6 UTP Cables**

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m			In.	mm.	
Category 6 Bonded-pair Plenum	7851A	1000	305	23 AWG	100	15	49	PE	PVC	0.227 x 0.315	5.77 x 8.00	CMR
Category 6 Bonded-pair Plenum	7852A	1000	305	23 AWG	100	16	51	FEP	Flamarrest PVC	0.218 x 0.29	5.54 x 7.37	CMP
Category 6 Non-bonded Riser	2412	1000	305	23 AWG	100	17	56	PO	PVC	0.22	5.59	CMR
Category 6 Non-bonded Plenum	2413	1000	305	23 AWG	100	15	49	FRPO/FEP	Flamarrest PVC	0.225	5.72	CMP

**Category 6 Shielded Cables**

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Category 6 F/UTP Riser	2412F	1000	305	23 AWG	100	14	46	100% foil + drain	PO	PVC	.290	7.37	CMR
Category 6 F/UTP Plenum	2413F	1000	305	23 AWG	100	14	46	100% foil + drain	FEP	Flamarrest PVC	.285	7.24	CMP

**Category 6A CatSnake® Tactical Shielded Cables**

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD	
		Ft.	m			pF/ft.	pF/m				In.	mm.
Category 6A F/STP	1302E	500 1000 1640	152 305 500	23 AWG (7 Strand)	100	17	56	Ind. foil + o/a TC Braid	FPE	Matte PVC	0.311	7.9
Category 6A F/STP Upjacketed	1303E	500 1000 1640	152 305 500	23 AWG (7 Strand)	100	17	56	Ind. foil + o/a TC Braid	FPE	Inner: PVC Outer: Matte PVC	0.34	8.7
Category 6A F/STP Rugged PU Jacket	1303EPU	500 1000 1640	152 305 500	23 AWG (7 Strand)	100	17	56	Ind. foil + o/a TC Braid	FPE	Inner: PVC Outer: Polyurethane	0.34	8.7

**Category 6A (Augmented) 10GX System (625MHz Bandwidth)**

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m			In.	mm.	
Category 6A Non-Bonded Riser	10GXS12	1000	305	23 AWG Solid	100	17	56	PO	PVC	0.273	6.934	CMR
Category 6A Non-Bonded Plenum	10GXS13	1000	305	23 AWG Solid	100	17	56	FEP	Flamarrest PVC	0.265	6.731	CMP
Category 6A Bonded Riser	10GXS32	1000	305	23 AWG Solid	100	17	56	PO	PVC	0.273	6.934	CMR
Category 6A Bonded Plenum	10GXS33	1000	305	23 AWG Solid	100	17	56	FEP	Flamarrest PVC	0.265	6.731	CMP

**Shielded Category 6A (Augmented) 10GX System**

Description	Belden Part Number	Standard Lengths		Gauge	Impedance (Ω)	Capacitance		Shield	Insulation	Jacket	Nominal OD		UL NEC/C(UL) Type
		Ft.	m			pF/ft.	pF/m				In.	mm.	
Category 6A F/UTP Riser	10GX62F	1000	305	23 AWG	100	17	56	100% foil + drain	PO	PVC	0.3	7.62	CMR
Category 6A F/UTP Plenum	10GX63F	1000	305	23 AWG	100	17	56	100% foil + drain	FEP	Flamarrest	0.295	7.49	CMP

## Power Cables

These cables can carry high voltages, 120VAC/240VAC some up to 480VAC. Amperage can be determined at using the Current Ratings Table. (See table on following page)

To use the current capacity chart, first determine conductor size, temperature rating, and number of conductors from the applicable product description for the cable of interest. Next, find the current value on the

chart for the proper temperature rating and conductor size. (See chart on following page)

To calculate the maximum current rating/ conductor, multiply the chart value by the appropriate conductor factor. The chart assumes cable is surrounded by still air at an ambient temperature of 25°C. Current values are in RMS Amperes and are valid for copper conductors only.

**Note:** Current ratings are intended as general guidelines for low power electronic communications and control applications. Current ratings for power applications generally are set by regulatory agencies such as UL, CSA, NEC, and others.

### 600 Volt Flexible Power Cordage

Description	Belden Part Number	Standard Lengths		Gauge	Insulation	Jacket	Nominal OD	
		Ft.	m				In.	mm.
Three-conductor	19109	250	76	18 AWG (42x34)	EPDM	Rubber	0.38	9.65
Three-conductor	19108	250	76	16 AWG (65x34)	EPDM	Rubber	0.405	10.29
Three-conductor	19107	250	76	14 AWG (41x30)	EPDM	Rubber	0.535	13.59
Three-conductor	19106	250	76	12 AWG (65x30)	EPDM	Rubber	0.64	16.26
Three-conductor	19105	250	76	10 AWG (105x30)	EPDM	Rubber	0.681	17.3

### 600 Volt Installation Cables

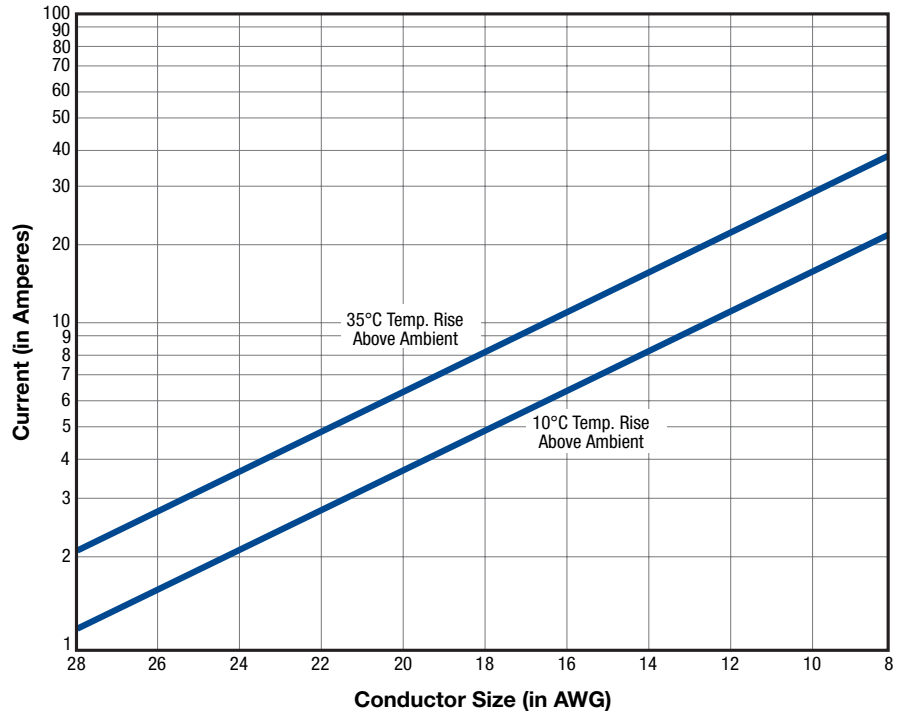
Description	Belden Part Number	Standard Lengths		Gauge	Insulation	Jacket	Nominal OD		Fire Rating
		Ft.	m				In.	mm.	
Three-conductor	27139A	1000 10000	305 3048	10 AWG (7x18)	PVC/Nylon	PVC *UV/Oil Resistant	0.45	11.43	TC THHN/THWN
Four-conductor, round (Available up to 12 conductors)	27140A	1000	305	10 AWG (7x18)	PVC/Nylon	PVC	0.49	12.45	TC THHN/THWN
Four-conductor (1 million flex cycles)	7447W	250 500	76 152	10 AWG (105x30)	PVC	PVC Abrasion Resistant	0.57	14.48	TC-ER, C(UL) 600V Type C1C TC
Three-conductor, round	27150A	1000 5000	305 1524	8 AWG (7x16)	PVC/Nylon	PVC *UV/Oil Resistant	0.59	14.99	TC THHN/THWN
Four-conductor, round	27151A	5000	1524	8 AWG (7x16)	PVC/Nylon	PVC	0.65	16.51	TC NPLF
Three-conductor, round	27153A	5000 10000	1524	6 AWG (7x14)	PVC/Nylon	PVC *UV/Oil Resistant	0.67	17.02	TC NPLF
Four-conductor, round	27154A	Bulk	Bulk	6 AWG (7x14)	PVC/Nylon	PVC	0.73	18.54	TC NPLF
Four-conductor, (1 million flex cycles)	7453W	250	76	6 AWG (266x30)	PVC	PVC Abrasion Resistant	0.925	23.5	TC-ER, C(UL) 600V Type C1C TC
Three-conductor, Round	27156A	5000	1524	8 AWG (7x12)	PVC/Nylon	PVC *UV/Oil Resistant	0.59	14.99	TC NPLF THHN/THWN
Four-conductor, Round	27157A	Bulk	Bulk	8 AWG (7x12)	PVC/Nylon	PVC	0.65	16.51	TC NPLF THHN/THWN
Three-conductor	27159A	5000	1524	2 AWG (7x10)	PVC/Nylon	PVC	0.987	25.07	TC THHN/THWN
Four-conductor	27160A	Bulk	Bulk	8 AWG (7x12)	PVC/Nylon	PVC	0.65	16.51	TC NPLF THHN/THWN



### Current Ratings

No. of Conductors*	Factor
1	1.6
2 to 3	1.0
4 to 5	0.8
6 to 15	0.7
16 to 30	0.5

\*Do not count shields unless used as a conductor



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