

NewGen Cables: For Enhanced Security, Audio and Control Automation Systems

REFERENCE GUIDE



Belden NewGen Cables are the go-to cabling portfolio to achieve optimal signal transmission performance for your Control Automation, Security and Audio systems indoor and outdoor.

This product line represents one of the largest, most economical and up-to-date selection of multi-conductor and coaxial products on the market today.

Application Landscape

- **Security & Safety:** Burglar Alarm, Access Control, CCTV, Fire alarm
- **Automation Control:** HVAC, Door control
- **Audio, Speaker & Intercom**

Feature Highlights

- Multi conductor & Pair, Composite and CCTV coaxial cables
- High flame performance: UL & c(UL) Plenum and non Plenum, CPR Cca and Eca ratings, Fire resistant
- Water-blocked options for installation in intermittently wet environments.
- Belden's well known quality, 10 years product warranty, Worldwide production
- Part number selection Nomenclature (Smart Part Numbering)
- Ripcord included allows easy stripping

To use the below product configurator, make a selection from each category and combine to form a custom part number. See examples below.

Multi Conductor Cables

4		5		0		0		F		LW	
Location	Cross Section AWG (mm ² solid)	Conductor Type	# of Conductors	Shielding	Application						
6	Plenum (CMP)	E	8 (8.4 mm ²)	0	Stranded Multi-Conductor	0	2 conductors	F	Overall foil w/drain (m/c or multipair)	E	CPR Eca, High capac, 300V, Bare Copper
5	Non-Plenum (CMR)	T	10 (5.3 mm ²)			1	3 conductors or 2 pairs			LW	CPR Cca, High capac, 300V, Bare Copper
4	LSZH (Non-UL)	N	4 mm ²	2	Solid Multi-Conductor	2	4 conductors or 3 pairs	U	Unshielded (m/c, pairs)	LY	CPR Dca, High capac, 300V, Bare Copper
		O	12 (3.3 mm ²)			3	5 conductors or 4 pairs			1	Water-blocked multi-conductor
	M	2.5 mm ²	4	Stranded Paired Conductor	4	6 conductors	G	One foil shielded pair w/drain (m/c, pair(s) combo)	ME	Circuit integrity (LSZH), FPLR	
	1	14 (2.1 mm ²)			5	7 conductors or 6 pairs			RE	Circuit integrity (LSZH), FPLR, PLTC	
	L	1.5 mm ²	6	Solid Paired Conductor	6	8 conductors	H	SPOS - shielded pairs and O/A foil shield	A	FEP Insulation / Teflon® jacket, plenum cable	
	2	16 (1.3 mm ²)			7	9 conductors or 9 pairs			G	Non-riser rated, may be un-cabled.	
	K	1.0 mm ²	8	Composite Cable	8	10 conductors or 12 pairs	P	Individual shielded pairs with drain (multipairs)	K	Fire Alarm, Halar® / Flamarrest®, Mid Capacitance	
	3	18 (0.82 mm ²)			9	12 conductors			L	Power limited fire protective.	
	J	0.75 mm ²	A	16 conductors	C	Foil plus 85% braid, overall (m/c, pairs)	N	PVC / Nylon Insulation, NPLF rated	P	High Strand Audio	
	4	20 (0.52 mm ²)									B
	I	0.5 mm ²	M	Mixed shielded/unshielded combo (only banana peel)	Q	Residential Audio					
	5	22 (0.33 mm ²)					S	Spline			
	6	24 (0.21 mm ²)					C	Halar® jacket, plenum cable			
							J	Power limited fire protective. High capacitance. or outer jacket on composite cable			
		H	CPR Eca, High capac, 300V, Tinned Copper								

Not all combinations are possible. For instance, UL listing (CMP, CMR) does not allow metric size conductor. Please check available product on the catalog or feasibility with a Belden representative or partner. Some combination requires Minimum Order Quantity (MOQ) and/or certification lead time.

Examples

Examples	Location	Cross Section	Conductor Type	#conductors	Shielding	Application	Belden Part #
Intercom	4	5	0	0	F	LW	4500FLW
Fire alarm Cable	6	4	2	0	F	L	6420FL
Burglar alarm / Commercial sound	5	1	0	0	U	E	5100UE

Check out available products:



[CPR Rated Copper Cables](#)



[Fire Alarm Cable](#)



[Speaker Cable](#)



[Alarm Cable](#)

Fire Resistant Range

Standards	Circuit integrity	BS 6387 CWZ EN 50200 PH120	BS 6387 CWZ EN 50200 PH120			BS 6387 CWZ EN 50200 PH120	IEC 60331-23
	Flame retardency	IEC 60332-3-24/25	FPLR			FPLR, PLTC	FPLR
	Add. Certif	LPCB approved					ABS type approved
Core Stranding		Solid	Solid	Solid	Stranded (7)	Stranded (7)	Solid
Screen		Foil	Foil		Foil	Foil	Foil
#conductor	Cross section						
2	AWG 18		5320FME	5320UME	5300FME		1320SB
	AWG 16		5220FME	5220UME	5200FME	5240FRE	1321SB
	1.5 mm2	79001FS					
	AWG 14		5120FME	5120UME	5100FME		
	2.5 mm2	79002FS					
	AWG 12		5020FME	5020UME	5000FME		
3	1.5 mm2	79003FS					
	2.5 mm2	79004FS					
4	AWG 18		5322FME	5322UME	5302FME		
	AWG 16		5222FME	5222UME	5202FME	5240FRE	
	1.5 mm2	79005FS					
	AWG 14		5122FME	5122UME	5102FME		
	2.5 mm2	79006FS					
	AWG 12		5022FME	5022UME	5002FME		
6	AWG 18		5324FME	5324UME	5304FME		
8	AWG 18		5326FME	5326UME	5306FME		

Composite Access Control Range

Description	Card reader	Door Contact	REX/ Spare	Lock Power	CMP CPR Eca PVC	CMR CPR Eca PVC	CPR Eca CMG LSZH	CPR Cca CMG LSZH	CPR B2ca CMG LSZH
Banana Peel Jacketless, Shielded	3Pr #18	2C #18	4C #18	4C #16	638AFS	538AFS			
Banana Peel Jacketless, Shielded	3Pr #22	2C #22	4C #22	4C #18	658AFS	558AFS	558ANH	558ALW	558ALV
Overall Jacket , Shielded	3Pr #18	2C #18	4C #18	4C #16	638AFJ	538AFJ			
Overall Jacket , Shielded	3Pr #22	2C #22	4C #22	4C #18	658AFJ	558AFJ			
Banana Peel Jacketless, Shielded	6C #22	4C #22	4C#22	4C #18	658GMS	558GMS			
Banana Peel Jacketless, Shielded	3Pr #22	2C #22		4C#18	658GFS	558GFS			
Banana Peel Jacketless, Card reader pair shield	3Pr #18	2C #18	4C #18	4C #16	638AMS	538AMS			
Banana Peel Jacketless, Card reader pair shield	3Pr #22	2C #22	4C #22	4C #18	658AMS	558AMS			
Overall Jacket, Card reader pair shield	3Pr #18	2C #18	4C #18	4C #16	638AMJ	538AMJ			
Overall Jacket, Card reader pair shield	3Pr #22	2C #22	4C #22	4C #18	658AMJ	558AMJ			
Overall Jacket, Pair Shielded	3Pr #22	3Pr #22	4C #22	4C #18	658BMJ				

Check out available products:



[Access Control Cable](#)

Coaxial CCTV Cables

6		3		19		3		5	
Location		AWG Size		Conductor Type		Shielding		Insulation	
4	LSZH	0	12 / 3.3 mm ² (solid) / 3.6 mm ² (stranded)	19	Stranded Conductor	3	75 Ohm, 90% Braid	4	Solid PE Dielectric
5	Non-Plenum	1	14 / 2.1 mm ² / 2.2 mm ²	39	Solid Conductor	4	75 Ohm, 95% Braid	5	Foam PE Dielectric
6	Plenum	2	16 / 1.3 mm ² / 1.4 mm ²	99	Specialty Cable	B	DuoFoil + 60% Braid	8	Foam FEP Dielectric
		3	18 / 0.82 mm ² / 0.90 mm ²			C	DuoFoil + 80% Braid		
		4	20 / 0.52 mm ² / 0.56 mm ²			D	DuoFoil + 95% Braid		
		5	22 / 0.33 mm ² / 0.36 mm ²			Q	75 Ohm, Quad Shield (DuoFoil+Braid60%+DuoFoil+Braid-40%)		
		6	24 / 0.21 mm ² / 0.23 mm ²			V	75 Ohm, DuoFoil + Braid, Waterblocking Tape		
		7	25			W	75 Ohm, DuoFoil + Braid, CoreGuard Gel Filled		
		K	1.0 mm ²			X	75 Ohm, 95% Braid, Waterblocking Tape		
		L	1.5 mm ²			Y	93 Ohm, 95% Braid		
		M	2.0 mm ²						

Examples

Type Cross section Core	Shield	Environment	Cable PVC	Cable LSZH
RG-59 AWG 20 Solid Bare Copper	95% Copper Braid Coverage	Non-Plenum CPR Eca	543945	443945
		Non-Plenum Indoor/Outdoor CPR Eca	5439X5	—
		Plenum CPR Eca	643948	—
Non-Plenum CPR Eca		533945	433945	
RG-6 AWG 18 Solid Bare Copper		Plenum CPR Eca	633948	—
		Non-Plenum Indoor/Outdoor CPR Eca	5339X5	—
	Quad Shield	Plenum —Quad Shield CPR Eca	6339Q8	—

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Check out available products:



CCTV Cable



Connector Selector Tool



CPR Rated Copper Cables



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