BELDEN

Multi Conductor & Pair NewGen Cables: For Enhanced Security, Audio and Control

PRODUCT BULLETIN

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, and now features an enhanced design with B2ca CPR rating, meeting the most stringent fire performance requirements.

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 B2ca, 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 (mm² solid)		Conductor Type		# of Conductors		Shielding		Application	
6	Plenum (CMP)	E	8 (8.4 mm²)	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 mm²)			1	3 conductors or 2 pairs			LY	CPR Dca, High capac, 300V, Bare Copper
4	LSZH (Non-UL)	N	4 mm2	2	Solid Multi-Conductor	2	4 conductors or 3 pairs	U	Unshielded (m/c, pairs)	LW	CPR Cca, High capac, 300V, Bare Copper
		0	12 (3.3 mm²)			3	5 conductors or 4 pairs			LV	CPR B2ca, High capac, 300V, Bare Copper
										1	Water-blocked multi-conductor
		M	2.5 mm²	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 mm²)			5	7 conductors or 6 pairs			RE	Circuit integrity (LSZH), FPLR, PLTC
		L	1.5 mm²	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 mm²)			7	9 conductors or 9 pairs			G	Non-riser rated, may be un-cabled.
		K	1.0 mm²	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 mm²)			9	12 conductors			L	Power limited fire protective.
		J	0.75 mm²			A	16 conductors	C	Foil plus 85% braid, overall (m/c, pairs)	N	PVC / Nylon Insulation, NPLF rated
		4	20 (0.52 mm²)			B	20 conductors			P	High Strand Audio
		I	0.5 mm²					M	Mixed shielded/ unshielded combo (only banana peel)	Q	Residential Audio
		5	22 (0.33 mm²)							S	Spline
		6	24 (0.21 mm²)							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
										D	OSDP Design

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

Communications Cable

Product Listing – PVC jacketed - Plenum or Riser - Communication and Control Multi-conductors

Core Count	Core Configuration	Space	Main Ratings	Shield.	Jacket	Insulation Material	Stranding	Cond. Mat.	22 AWG	20 AWG	18 AWG	16 AWG	14 AWG	12 AWG
2	2 Cond or 1 Pair	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6500FE	6400FE	6300FE	6200FE	6100FE	6000FE
							Sol	BC	6520FE		6320FE			
				U/U	PVC	PVC	Str	BC	6500UE	6400UE	6300UE	6200UE	6100UE	6000UE
							Sol	BC	6520UE		6320UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5500FE	5400FE	5300FE	5200FE	5100FE	5000FE
							Sol	BC	5520FE		5320FE			
				U/U	PVC	PO	Str	BC	5500UE	5400UE	5300UE	5200UE	5100UE	5000UE
							Sol	BC	5520UE		5320UE			
3	3 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6501FE	6401FE	6301FE	6201FE	6101FE	
							Sol	BC	6521FE					
				U/U	PVC	PVC	Str	BC	6501UE	6401UE	6301UE	6201UE	6101UE	6001UE
							Sol	BC	6521UE		6321UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5501FE	5401FE	5301FE	5201FE	5101FE	
							Sol	BC	5521FE	5421FE				
				U/U	PVC	PO	Str	BC	5501UE	5401UE	5301UE	5201UE	5101UE	5001UE
							Sol	BC			5321UE			
4	4 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6502FE	6402FE	6302FE	6202FE		
				U/U	PVC	PVC	Str	BC	6502UE	6402UE	6302UE	6202UE	6102UE	6002UE
							Sol	BC	6522UE		6322UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5502FE	5402FE	5302FE	5202FE		
				U/U	PVC	PO	Str	BC	5502UE	5402UE	5302UE	5202UE	5102UE	
							Sol	BC	5522UE		5322UE			
	2 Pairs	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6541FE	6441FE				
							Sol	BC	6561FE					
				U/U	PVC	PVC	Str	BC	6541UE		6341UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5541FE	5441FE	5341FE			
							Sol	BC	5561FE					
				U/U	PVC	PO	Str	BC	5541UE		5341UE			
5	5 Conductors	Plenum	CMP or CL2P	U/U	PVC	PVC	Str	BC		6403UE	6303UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5503FE	5403FE	5303FE			
				U/U	PVC	PVC	Str	BC	5503UE					
						PO	Str	BC		5403UE	5303UE			
6	6 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6504FE		6304FE			
				U/U	PVC	PVC	Str	BC	6504UE		6304UE			
							Sol	BC	6524UE					
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5504FE		5304FE			
				U/U	PVC	PVC	Sol	BC	5524UE					
						PO	Str	BC	5504UE		5304UE			

Product Listing – PVC jacketed - Plenum or Riser - Communication and Control Multi-conductors

Core Count	Core Configuration	Space	Main Ratings	Shield.	Jacket	Insulation Material	Stranding	Cond. Mat.	22 AWG	20 AWG	18 AWG	16 AWG	14 AWG	12 AWG
	3 Pairs	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6542FE		6342FE			
				U/U	PVC	PVC	Str	BC	6542UE		6342UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5542FE	5442FE	5342FE			
							Sol	BC	5562FE					
				U/U	PVC	PO	Str	BC	5542UE		5342UE			
7	7 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC		6405FE				
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC		5405FE	5305FE			
				U/U	PVC	PO	Str	BC		5405UE	5305UE	5205UE		
8	8 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6506FE		6306FE			
				U/U	PVC	PVC	Str	BC	6506UE	6406UE	6306UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5506FE		5306FE			
				U/U	PVC	PO	Str	BC	5506UE	5406UE	5306UE			
							Sol	BC	5526UE					
	4 Pairs	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6543FE	6443FE	6343FE			
				U/U	PVC	PVC	Str	BC	6543UE		6343UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5543FE		5343FE			
				U/F	PVC	PVC	Str	BC	5543PE					
				U/U	PVC	PO	Str	BC	5543UE		5343UE			
9	9 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC		6407FE	6307FE			
				U/U	PVC	PVC	Str	BC			6307UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC		5407FE	5307FE			
				U/U	PVC	PO	Str	BC		5407UE	5307UE			
10	10 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6508FE					
				U/U	PVC	PVC	Str	BC	6508UE		6308UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5508FE					
				U/U	PVC	PO	Str	BC	5508UE	5408UE	5308UE			
12	6 Pairs	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6545FE		6345FE			
				U/U	PVC	PVC	Str	BC	6545UE		6345UE			
		Riser	CMR or CL3R	F/U	PVC	PO	Str	BC	5545FE	5445FE	5345FE			
				U/U	PVC	PO	Str	BC			5345UE			
	12 Conductors	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC			6309FE			
				U/U	PVC	PVC	Str	BC	6509UE		6309UE			
		Riser	CMR or CL3R	U/U	PVC	PO	Str	BC	5509UE	5409UE	5309UE			
							Sol	BC	5529UE					
18	9 Pairs	Plenum	CMP or CL2P	F/U	PVC	PVC	Str	BC	6547FE		6347FE			
				U/U	PVC	PVC	Str	BC	6547UE					
		Riser	CMR or CL3R	U/U	PVC	PVC	Str	BC	5547UE					
20	20 Conductors	Riser	CMR or CL3R	U/U	PVC	PVC	Str	BC		540BUE	530BUE			

Product Listing – LSZH jacketed - EN/IEC rated Communication and Control Multi-conductors

Core Count	Core Configuration	Shield.	CPR Ratings EN50575	Jacket	Insulation Material	Stranding	Cond. Mat.	22 AWG	20 AWG	18 AWG	16 AWG	14 AWG	12 AWG	10 AWG
2	2 Cond. or 1 Pair	F/U	Eca	LSZH	PO	Str	BC	4500FE	4400FE	4300FE	4200FE	4100FE	4000FE	
			Cca	LSZH	LSZH	Str	BC	4500FLW		4300FLW		4100FLW		
			B2ca	LSZH	LSZH	Str	BC	4500FLV*		4300FLV*				
		U/U	Eca	LSZH	PO	Str	BC	4500UE	4400UE	4300UE	4200UE	4100UE	4000UE	4T00UP
			Cca	LSZH	LSZH	Str	BC		4400ULW	4300ULW	4200ULW	4100ULW	4000ULW	
			B2ca	LSZH	LSZH	Str	BC			4300ULV	4200ULV	4100ULV*		
3	3 Conductors	F/U	Eca	LSZH	PO	Str	BC	4501FE		4301FE	4201FE	4101FE		
			Cca	LSZH	LSZH	Str	BC	4501FLW	4401FLW					
		U/U	Eca	LSZH	PO	Str	BC	4501UE		4301UE	4201UE	4101UE		
			Cca	LSZH	LSZH	Str	BC			4301ULW				4T01ULW
4	4 Conductors	F/U	Eca	LSZH	PO	Str	BC	4502FE	4402FE	4302FE	4202FE			
			Cca	LSZH	LSZH	Str	BC	4502FLW	4402FLW	4302FLW				
		U/U	Eca	LSZH	PO	Str	BC	4502UE		4302UE	4202UE	4102UE		
			Cca	LSZH	LSZH	Str	BC			4302ULW	4202ULW	4102ULW	4002ULW	
			B2ca	LSZH	LSZH	Str	BC			4302ULV				
	2 Pairs	F/U	Eca	LSZH	PO	Str	BC	4541FE	4441FE	4341FE				
			Cca	LSZH	LSZH	Str	BC		4441FLW	4341FLW				
		U/U	Eca	LSZH	PO	Str	BC	4541UE						
5	5 Conductors	F/U	Eca	LSZH	PO	Str	BC	4503FE		4303FE				
			Cca	LSZH	LSZH	Str	BC			4303FLW				
		U/U	Eca	LSZH	PO	Str	BC			4303UE				
6	6 Conductors	F/U	Eca	LSZH	PO	Str	BC	4504FE		4304FE	4204FE			
			Cca	LSZH	LSZH	Str	BC	4504FLW**		4304FLW				
			B2ca	LSZH	LSZH	Str	BC			4304FLV				
		U/U	Eca	LSZH	PO	Str	BC	4504UE	4404UE	4304UE				
			Cca	LSZH	LSZH	Str	BC			4304ULW				
	3 Pairs	F/U	Eca	LSZH	PO	Str	BC	4542FE		4342FE				
			Cca	LSZH	LSZH	Str	BC	4542FLW**	4442FLW**					
			B2ca	LSZH	LSZH	Str	BC		4442FLV**					
			Eca	LSZH	PO	Sol	BC	4562FE						
		U/U	Eca	LSZH	PO	Str	BC	4542UE						
			Cca	LSZH	LSZH	Str	BC			4342ULW				
7	7 Conductors	U/U	Cca	LSZH	LSZH	Str	BC			4305ULW				
8	8 Conductors	F/U	Eca	LSZH	PO	Str	BC	4506FE		4306FE	4206FE*			
		U/U	Eca	LSZH	PO	Str	BC	4506UE		4306UE				
	4 Pairs	F/U	Eca	LSZH	PO	Str	BC			4343FE				
			Cca	LSZH	LSZH	Str	BC			4343FLW				
10	10 Conductors	F/U	Eca	LSZH	PO	Str	BC	4508FE						
12	6 Pairs	F/U	Eca	LSZH	PO	Str	BC	4545FE	4445FE	4345FE				
			Cca	LSZH	LSZH	Str	BC	4545FLW						
	12 Conductors	F/U	Cca	LSZH	LSZH	Str	BC			4309FLW				
		U/U	Cca	LSZH	LSZH	Str	BC			4309ULW				
			Eca	LSZH	PO	Str	BC			4309UE				
20	20 Conductors	U/U	Cca	LSZH	LSZH	Str	BC			430BULW				

Legend

Product Available	*Capability – Straight Development	**Capability – Prototype needed	

Acronyms

LSZH: Low Smoke Zero Halogen

Product Listing – Extended Water Exposure - PVC jacketed - Communication and Control Multi-conductors

Core Count	Core Configuration	Space	Main Ratings	Shield.	Jacket	Insulation Material	Stranding	Cond. Mat.	22 AWG	20 AWG	18 AWG	16 AWG	14 AWG	12 AWG
2	2 Cond or 1 Pair	Extended Water Exposure / Burial	CM* or CL*	F/U	PVC	PVC	Str	TC	5500F1	5400F1	5300F1			
				U/U	PVC	PVC	Str	TC	5500U1		5300U1		5100U1	5000U1
	1 Pair	Extended Water Exposure / Burial	CM* or CL*	F/U	PVC	PVC	Str	TC			5340F1	5240F1	5140F1	
				U/U	PVC	PVC	Str	TC			5340U1	5240U1	5140U1	
4	4 Conductors	Extended Water Exposure / Burial	CM* or CL*	F/U	PVC	PVC	Str	TC	5502F1		5302F1	5202F1		
				U/U	PVC	PVC	Str	TC	5502U1		5302U1	5202U1	5102U1	5002U1
	2 Pairs	Extended Water Exposure / Burial	CM* or CL*	U/F	PVC	PVC	Str	BC	5541P1					
6	6 Conductors	Extended Water Exposure / Burial	CM* or CL*	F/U	PVC	PVC	Str	TC	5504F1		5304F1			
				U/U	PVC	PVC	Str	TC	5504U1		5304U1			

Product Listing – Fire alarm rated - PVC jacketed - Multi-conductors

Core Count	Core Configuration	Space	Main Ratings	Shield.	Jacket	Insulation Material	Stranding	Cond. Mat.	22 AWG	18 AWG	16 AWG	14 AWG	12 AWG
2	2 Cond or 1 Pair	Fire Alarm	FPLR - Riser	F/U	PVC	PO	Str	BC		5300FL	5200FL	5100FL	5000FL
							Sol	BC	5520FL	5320FL	5220FL	5120FL	5020FL
				U/U	PVC	PO	Str	BC		5300UL	5200UL	5100UL	5000UL
							Sol	BC	5520UL	5320UL	5220UL	5120UL	5020UL
			FPLP - Plenum	F/U	PVC	PVC	Str	BC		6300FL	6200FL	6100FL	6000FL
							Sol	BC		6320FL	6220FL	6120FL	6020FL
						FEP	Sol	BC		6320FK	6220FK		
				U/U	PVC	PVC	Str	BC		6300UL	6200UL	6100UL	6000UL
							Sol	BC		6320UL	6220UL	6120UL	6020UL
						FEP	Sol	BC		6320UJ	6220UJ	6120UJ	
			NPLF	F/U	PVC	PVC/Nylon	Sol	BC		5320FN	5220FN	5120FN	5020FN
			FPL	F/U	PVC	PO	Sol	BC		5320FJ	5220FJ	5120FJ	5020FJ
				U/U	PVC	PO	Sol	BC		5320UJ / 5320UV	5220UJ / 5220UV		
3	3 Conductors	Fire Alarm	FPLP - Plenum	U/U	PVC	PVC	Sol	BC		6321UL			
4	4 Conductors	Fire Alarm	FPLR - Riser	F/U	PVC	PO	Str	BC	5502FL	5302FL	5202FL	5102FL	
							Sol	BC	5522FL	5322FL	5222FL	5122FL	
				U/U	PVC	PO	Str	BC		5302UL	5202UL		
							Sol	BC	5522UL	5322UL	5222UL	5122UL	
			FPLP - Plenum	F/U	PVC	PVC	Sol	BC		6322FL	6222FL	6122FL	
				U/U	PVC	PVC	Str	BC		6302UL	6202UL		
							Sol	BC	6522UL	6322UL	6222UL	6122UL	
			NPLF	F/U	PVC	PVC/Nylon	Sol	BC		5322FN	5222FN	5122FN	
				U/U	PVC	PVC/Nylon	Sol	BC		5322UN			
			FPL	F/U	PVC	PO	Sol	BC		5322FJ			
6	6 Conductors	Fire Alarm	FPLR - Riser	U/U	PVC	PO	Str	BC		5304UL			
							Sol	BC	5524UL	5324UL			
			FPLP - Plenum	U/U	PVC	PVC	Sol	BC	6524UL	6324UL			
8	8 Conductors	Fire Alarm	FPLR - Riser	U/U	PVC	PO	Sol	BC		5326UL			
			FPLP - Plenum	U/U	PVC	PVC	Sol	BC		6326UL			
10	10 Conductors	Fire Alarm	FPLR - Riser	U/U	PVC	PO	Sol	BC		5328UL			
			FPLP - Plenum	U/U	PVC	PVC	Sol	BC		6328UL			
12	12 Conductors	Fire Alarm	FPLR - Riser	U/U	PVC	PO	Sol	BC		5329UL			

Product Listing – PVC jacketed - Non Riser non plenum Rated - Multi-conductors

Core Count	Core Configuration	Space	Main Ratings	Shield.	Jacket	Insulation Material	Stranding	Cond. Mat.	24 AWG	22 AWG	18 AWG
2	1 Pair or 2 Conductors	Non Riser non plenum	CM	U/U	PVC	PO	Str	BC		5500UG	5300UG
4	4 Conductors	Non Riser non plenum	CM	U/U	PVC	PO	Str	BC		5502UG	
							Sol	BC		5522UG	
6	6 Conductors	Nurse Call & Paging	CM	U/U	PVC	PO	Sol	BC	5624UG		
	3 Pairs	Nurse Call & Paging	CM	U/U	PVC	PO	Sol	BC	5662UG		
8	8 Conductors	Nurse Call & Paging	CM	U/U	PVC	PO	Sol	BC	5626UG		

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	CM Indoor/ Outdoor
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	438AFJ	438AFJW		
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	438AMJ	438AMJW		558AM1
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					

These items have 2 Reader Cables	3Pr.22AWG	

Belden Part Number	Flame Rating	Lock Power (Gray)	Card Reader (Orange)	Door Contact (White)	Request Exit/Spare (Blue or Yellow)	Assembly
OSDP Reader						
658HMS	CMP	4C, 18 AWG, Unshielded	1 Pr, 22 AWG, Shielded Reader + 18/2 Unshld Power	2C, 22 AWG, Unshielded	4C, 22 AWG, Unshielded (Blue)	Banana Peel
668AMD	CMP	4C, 18 AWG, Unshielded	2 Pr, 24 AWG, OA Shield	4C, 22 AWG, Unshielded	4C, 18 AWG, Unshielded	Banana Peel
538HMD1	CM Indoor/Outdoor	4C, 18 AWG, Unshielded	1 Pr, 22 AWG, Shielded Reader + 18/2 Unshld Power	2C, 22 AWG, Unshielded	4C, 18 AWG, Unshielded	PVC Black Indoor/Outdoor

UL Listed Plenum

Part No	No. of Cond	CondType	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance and Impedance	Jacket Colors
6640FD	1 Pair	24AWG (7x32) TC 26 Ohms/1000ft	Foam FEP .025"	Overall 100% Foil Shield	Flex Plenum .015"	.186"	CMP	10.8 pf/ft 120 Ohms	Orange
6540FD	1 Pair	22AWG (7x30) TC 16.3 Ohms/1000ft	Foam FEP .023"	Overall 100% Foil Shield	Flex Plenum .015"	.210"	CMP	13.5 pf/ft 120 Ohms	White, Black
6541FD	2 Pair	22 AWG (7x30) TC 16.3 Ohm/1000ft	Foam FEP .023"	Overall 100% Foil Shield	Flex Plenum .016"	.292"	CMP	13.5 pf/ft 120 Ohms	White, Black
6641FD	2 Pair	24AWG (7x32) TC 26 Ohms/1000ft	Foam FEP .021"	Overall 100% Foil Shield	Flex Plenum .016"	.252"	CMP	13.5 pf/ft 120 Ohms	Black, Orange
6381MD	1 Pair	24AWG (7x32) TC 26 Ohms/1000ft	Foam FEP .025"	Overall 100% Foil Shield	Flex Plenum .020"	.215"	CMP	13.5 pf/ft 120 Ohms	Black, Orange and Gray
	2 Cond	18AWG (7x26) BC 6.2 Ohms/1000ft	PVC .010"	None					
6281MD	1 Pair	22 AWG (7x30) TC 16.3 Ohm/1000ft	Foam FEP .030"	Overall 100% Foil Shield	Flex Plenum .020"	.246"	CMP	13.5 pf/ft 120 Ohms	Black
	2 Cond	16AWG (19x29) BC 4.2 Ohms/1000ft	PVC .010"	None					
5381M1	1 Pair	22 AWG (7x30) TC 16.3 Ohm/1000ft	Foam PE Polyethylene .025"	Overall 100% Foil Shield	Waterblocking Tape UV Resistant PVC .032"	.272"	Indoor/ Outdoor CM	13.5 pf/ft 120 Ohms	Black
	2 Cond	18AWG (7x26) BC 6.2 Ohms/1000ft	PVC .010"	None					

Color Code

Part No	Data Pair	Power
6381MD 6281MD 5381MD	Blue, White	Black, Red
6640FD	Blue, White	
6541FD 6641FD	White, Green Brown, Blue	

OSDP Composite Cable

OSDP Reader w/Power

Part No.	Eement Type.	No of Cond/ pairs	Cond Type	Insulation Type and Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance & Impedance	Jacket Colors
658HMS	OSDP Reader	1 Pair	24AWG (7x32) TC	Foam PE .029"	Overall 100% Foil Shield	Flex Plenum .020"	.215"	CMP	12.8pf/ft 120 Ohms	Orange
		2 Cond	18AWG (7x26) BC	PVC .010"	None					
	Door Contact	2 Cond	22AWG (7x30) BC	PVC .008"	None	UV Resistant PVC	.116"		34pf/ft	White
	Lock power	4 Cond	18AWG (7x26) BC	PVC .008"	None	UV Resistant PVC	.182"		27pf/ft	Gray
	REX/ Spare	4 Cond	22AWG (7x30) BC	PVC .008"	None	UV Resistant PVC	.136"		34pf/ft	Blue

Overall Jacket:	None - Banana Peel
Overall Cable O.D.	.455"

Dual OSDP Reader

Part No.	Eement Type.	No of Cond/ pairs	Cond Type	Insulation Type and Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance & Impedance	Jacket Colors
668AMD	OSDP Reader	2 Pair	24AWG (7x32) TC	Foam FEP .021"	Overall 100% Foil Shield	Flex Plenum .018"	.252"	CMP	13pf/ft 120 Ohms	Orange
	Door Contact	4 Cond	22AWG (7x30) BC	Plenum PVC .008"	None	Flex Plenum	.141"			White
	Lock power	4 Cond	18AWG (7x26) BC	Plenum PVC .010"	None	Flex Plenum	.182"			Gray
	REX/ Spare	4 Cond	18AWG (7x26) BC	Plenum PVC .010"	None	Flex Plenum	.182"			Blue

Overall Jacket:	None - Banana Peel
Overall Cable O.D.	.472"

OSDP Reader w/Power Indoor/Outdoor

Part No.	Eement Type.	No of Cond/ pairs	Cond Type	Insulation Type and Thickness	Shielding	Jacket Type & Thickness	Nom. OD	NEC Type	Nom. Capacitance & Impedance	Jacket Colors
538HMD1	OSDP Reader	1 Pair	22AWG (7x30) TC	Foam PE .029"	Overall 100% Foil Shield	UV Resistant PVC .032"	.272"	Indoor/ Outdoor CM	13.5 pF/ft 120 Oms	Orange
		2 Cond	18AWG (7x26) BC	PVC .011"	Waterblock Tape					
	Door Contact	2 Cond	22AWG (7x30) BC	PVC .009"	Waterblock Tape	UV Resistant PVC	.168"			White
	Lock power	4 Cond	18AWG (7x26) BC	PVC .010"	Waterblock Tape	UV Resistant PVC	.232"			Gray
	REX/ Spare	4 Cond	22AWG (7x30) BC	PVC .010"	Waterblock Tape	UV Resistant PVC	.187"			Blue

Overall Jacket:	UV Resistant PVC
Overall Cable O.D.	.566"

EN/IEC LSZH rated Cables

Part No.	No. of Cond	Cond Type	Insulation Type & Thickness	Shielding	Jacket Type & Thickness	Nom. OD	CPR Euroclass	Nom. Capacitance & Impedance	Jacket Colors
4640FDW	1 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 1.1mm	5.1 mm	Cca	~40 pf/m 120 Ohms	Orange
4640FDZ	1 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 0.6mm	4.1 mm	Eca	~40 pf/m 120 Ohms	Orange
4540FDW	1 Pair	22 AWG	Foam PE 0.72mm	Overall 100% Foil Shield	LSZH 0.9mm	6.60 mm	Cca	~40 pf/m 120 Ohms	Orange
4540FDZ	1 Pair	22 AWG	Foam PE 0.72mm	Overall 100% Foil Shield	LSZH 0.6mm	6.3 mm	Eca	~40 pf/m 120 Ohms	Orange
4440FDW	1 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 0.9mm	7.2 mm	Cca	~40 pf/m 120 Ohms	Orange
4440FDZ	1 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 0.6mm	7.2 mm	Eca	~40 pf/m 120 Ohms	Orange
4340FDW	1 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 0.9mm	8.1 mm	Cca	~40 pf/m 120 Ohms	Orange
4340FDZ	1 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 0.7mm	8 1mm	Eca	~40 pf/m 120 Ohms	Orange
4641FDW	2 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 0.9mm	6.80 mm	Cca	~40 pf/m 120 Ohms	Orange
4641FDZ	2 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 0.6mm	6.2 mm	Eca	~40 pf/m 120 Ohms	Orange
4541FDW	2 Pair	22 AWG	Foam PE 0.65mm	Overall 100% Foil Shield	LSZH 1.1mm	7.80 mm	Cca	~40 pf/m 120 Ohms	Orange
4541FDZ	2 Pair	22 AWG	Foam PE 0.65mm	Overall 100% Foil Shield	LSZH 0.6mm	6.8 mm	Eca	~40 pf/m 120 Ohms	Orange
4441FDW	2 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 1mm	11.1 mm	Cca	~40 pf/m 120 Ohms	Orange
4441FDZ	2 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 1mm	11.1 mm	Eca	~40 pf/m 120 Ohms	Orange
4341FDW	2 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 1mm	11.6 mm	Cca	~40 pf/m 120 Ohms	Orange
4341FDZ	2 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 1mm	11.6 mm	Eca	~40 pf/m 120 Ohms	Orange
4642FDW	3 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 1.1mm	7.5 mm	Cca	~40 pf/m 120 Ohms	Orange
4642FDZ	3 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 0.6mm	6.5 mm	Eca	~40 pf/m 120 Ohms	Orange
4542FDW	3 Pair	22 AWG	Foam PE 0.6mm	Overall 100% Foil Shield	LSZH 1.1mm	8.4 mm	Cca	~40 pf/m 120 Ohms	Orange
4542FDZ	3 Pair	22 AWG	Foam PE 0.6mm	Overall 100% Foil Shield	LSZH 0.7mm	7.6 mm	Eca	~40 pf/m 120 Ohms	Orange
4442FDW	3 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 1mm	11.6 mm	Cca	~40 pf/m 120 Ohms	Orange
4442FDZ	3 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 1mm	11.6 mm	Eca	~40 pf/m 120 Ohms	Orange
4342FDW	3 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 1mm	12.7 mm	Cca	~40 pf/m 120 Ohms	Orange
4342FDZ	3 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 1mm	12.7 mm	Eca	~40 pf/m 120 Ohms	Orange
4643FDW	4 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 1.1mm	8.1 mm	Cca	~40 pf/m 120 Ohms	Orange
4643FDZ	4 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 0.7mm	7.3 mm	Eca	~40 pf/m 120 Ohms	Orange
4543FDW	4 Pair	22 AWG	Foam PE 0.6mm	Overall 100% Foil Shield	LSZH 1mm	10.2 mm	Cca	~40 pf/m 120 Ohms	Orange
4543FDZ	4 Pair	22 AWG	Foam PE 0.6mm	Overall 100% Foil Shield	LSZH 0.8mm	9.8 mm	Eca	~40 pf/m 120 Ohms	Orange
4443FDW	4 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 1mm	12.7 mm	Cca	~40 pf/m 120 Ohms	Orange
4443FDZ	4 Pair	20 AWG	Foam PE 0.82mm	Overall 100% Foil Shield	LSZH 1mm	12.7 mm	Eca	~40 pf/m 120 Ohms	Orange
4343FDW	4 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 1.1mm	14.5 mm	Cca	~40 pf/m 120 Ohms	Orange
4343FDZ	4 Pair	18 AWG	Foam PE 0.9mm	Overall 100% Foil Shield	LSZH 1.1mm	14.5 mm	Eca	~40 pf/m 120 Ohms	Orange
4381MDW	1 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 0.9mm	6.5 mm	Cca	~40 pf/m 120 Ohms	Orange
	2 Cond	18 AWG	LSZH	none					
4381MDV	1 Pair	24 AWG	Foam PE 0.4mm	Overall 100% Foil Shield	LSZH 0.9mm	6.5 mm	B2ca	~40 pf/m 120 Ohms	Orange
	2 Cond	18 AWG	LSZH	none					

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	—
RG-6 AWG 18 Solid Bare Copper		Non-Plenum CPR Eca	533945	433945
		Plenum CPR Eca	633948	—
		Non-Plenum Indoor/Outdoor CPR Eca	—	—
	Quad Shield	Plenum —Quad Shield CPR Eca	6339Q8	—

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.

Check out available products:

CCTV Cable

Connector Selector Tool

CPR Rated Copper Cables

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