

NP 263

**Access Control
Composite Cables**

Composite cables provide a cost-effective way to handle access control installations. With no overall jacket, Belden Banana Peel® composites offer additional labor-saving advantages.



Belden® Expands Its Access Control Composite Cable Line, Offering More Cable Designs

Belden Access Control Composite cables enable more cost-effective security installations, since they offer the installers of access control doors a host of labor-saving and easy-identification features. Whether your installation takes place in a commercial building, a hospital, school, corporate site or government facility, Belden Access Control cables bring a whole new level of ease and convenience to the work site.

Features and Benefits

In general, the use of composite cables will decrease your labor costs since they are easier and quicker to install than the more labor-intensive procedure of bundling and pulling individual cables.

Belden now offers a new jacketed multi-conductor/multi-pair composite (see *Part No. 658AFJ*) and a number of Banana Peel® composites. Banana Peel cables go a step further by being both easier and faster to install than traditional jacketed composite cables.

Belden Access Control Banana Peel Composites feature a patented design that affixes the individual cables to a center spline, eliminating the need for an overall jacket. Without the overall jacket:

- A whole step in the termination process is eliminated.
- The individual cable components are all instantly identifiable, they are color-coded by application, they have the application printed on the individual jackets, and they are ready for termination.
- The Banana Peel composite has a smaller OD than traditional composites. This improves the cable's overall bend radius for faster, easier installation. A smaller OD also means a smaller size conduit.
- Breakout versatility is assured since the individual cables can be connected to the junction box or can be rerouted to the point of termination.
- Experience and studies have shown installing one cable instead of four saves time and money. In one Belden-sponsored study involving Belden unjacketed Banana Peel Composites, the savings equalled or exceeded 31% for labor and 14% in end-user costs.

Door Function

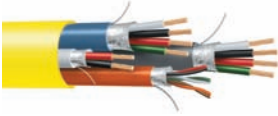
Cable Reference	Lock Power (Gray)	Card Reader (Orange)	Door Contact (White)	Request Exit/Spare (Blue or Yellow)	Assembly
Standard					
CMR 558AFS CMP 658AFS	4C, 18 AWG, Shielded	3 Pr, 22 AWG, OA Shield	2C, 22 AWG, Shielded	4C, 22 AWG, Shielded (Blue)	Banana Peel®
Extended Distance					
CMR 538AFS CMP 638AFS	4C, 16 AWG, Shielded	3 Pr, 18 AWG, OA Shield	2C, 18 AWG, Shielded	4C, 18 AWG, Shielded (Blue)	Banana Peel
Style 2					
CMR 558GMS CMP 658GMS	4C, 18 AWG, Unshielded	6C, 22 AWG, Shielded	4C, 22 AWG, Unshielded (incl. spares)	4C, 22 AWG, Unshielded (Blue)	Banana Peel
Exit Reader					
CMR 558GFS CMP 658GFS	4C, 18 AWG, Shielded	3 Pr, 22 AWG, OA Shield	2C, 22 AWG, Shielded	3 Pr, 22 AWG, OA Shield (Yellow)	Banana Peel
Standard, w/Jacket					
CMR 558AFJ CMP 658AFJ	4C, 18 AWG, Shielded	3 Pr, 22 AWG, OA Shield	2C, 22 AWG, Shielded	4C, 22 AWG, Shielded (Blue)	Jacketed, Yellow PVDF

Composite Access Control Cable; Jacketed Riser and Plenum

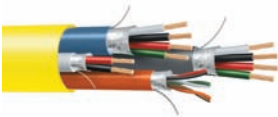
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Overall Nom. OD		Component Descriptions	Component Jacket Material & Colors	Component Nom. OD	
			Ft.	m	Lbs.	kg	Inch	mm			Inch	mm

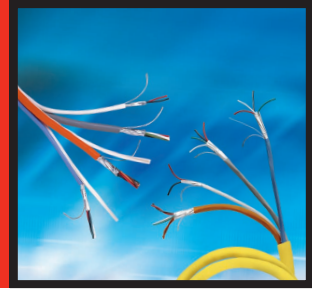
Composite • (3) Shielded Multi-conductors • (1) Shielded Multi-pair

Riser • PVC Insulation • PVC Jackets • Overall PVC Jacket													
NEC Article 800	558AFJ	NEC:	500	152.4	73.0	31.8	.493	12.52	Lock Power:	4C 18 AWG, Shielded 5302FE Type	PVC Gray	.192	4.88
		CMR	1000	305.0	122.0	54.1			Card Reader:	3TP 22 AWG, OAS 5542FE Type	PVC Orange	.223	5.66
		CEC: CMG FT4							Door Contact:	2C 22 AWG, Shielded 5500FE Type	PVC White	.130	3.30
									Rex/Spare:	4C 22 AWG, Shielded 5502FE Type	PVC Blue	.151	3.84
									Overall Jacket:	—	PVC Yellow	.493	12.52



Plenum • Flamarrest® Insulation • Flamarrest Jackets • PVDF Overall Jacket													
NEC Article 800	658AFJ	NEC:	500	152.4	70.0	31.8	.463	11.76	Lock Power:	4C 18 AWG, Shielded 6302FE Type	Flamarrest Gray	.191	4.85
		CMR	1000	305.0	119.0	54.1			Card Reader:	3TP 22 AWG, OAS 6542FE Type	Flamarrest Orange	.218	5.55
		CEC: CMG FT6							Door Contact:	2C 22 AWG, Shielded 6500FE Type	Flamarrest White	.131	3.33
									Rex/Spare:	4C 22 AWG, Shielded 6502FE Type	Flamarrest Blue	.150	3.81
									Overall Jacket:	—	PVDF Yellow	.463	11.76





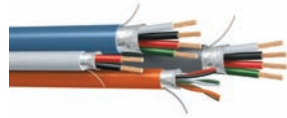
Composite Access Control Cable

Banana Peel® Jacketless Cables
Standard—Riser and Plenum

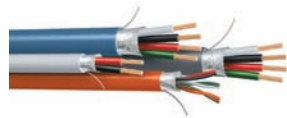
Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Overall Nom. OD		Component Descriptions	Component Jacket Material & Colors	Component Nom. OD	
			Ft.	m	Lbs.	kg	Inch	mm			Inch	mm

Composite • (3) Shielded Multi-conductors • (1) Shielded Multi-pair

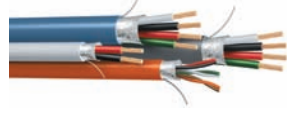
Riser • PVC Insulation • PVC Jackets • No Overall Jacket												
NEC Article 800	558AFS	NEC: CMR CEC: CMG FT4	500 1000	152.4 305.0	58.5 101.2	26.56 46.0	.448	11.38	Lock Power:	4C 18 AWG, Shielded 5302FE Type	PVC Gray	.202 5.13
									Card Reader:	3TP 22 AWG, OAS 5542FE Type	PVC Orange	.233 5.92
									Door Contact:	2C 22 AWG, Shielded 5500FE Type	PVC White	.140 3.56
									Rex/Spare:	4C 22 AWG, Shielded 5502FE Type	PVC Blue	.161 4.09



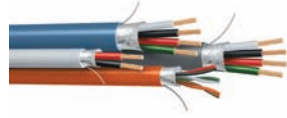
Plenum • Flamarrest® Insulation • Flamarrest Jackets • No Overall Jacket												
NEC Article 800	658AFS	NEC: CMP CEC: CMG FT6	500 1000	152.4 305.0	59.5 97.8	27.01 45.4	.420	10.67	Lock Power:	4C 18 AWG, Shielded 6302FE Type	Flamarrest Gray	.191 4.85
									Card Reader:	3TP 22 AWG, OAS 6542FE Type	Flamarrest Orange	.218 5.54
									Door Contact:	2C 22 AWG, Shielded 6500FE Type	Flamarrest White	.131 3.33
									Rex/Spare:	4C 22 AWG, Shielded 6502FE Type	Flamarrest Blue	.150 3.81



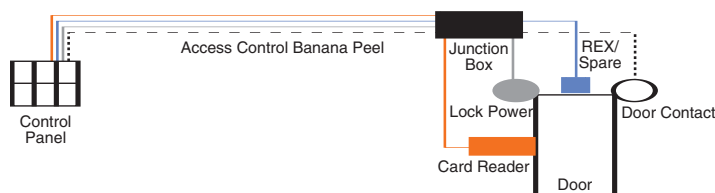
Riser • PVC Insulation • PVC Jackets • No Overall Jacket												
NEC Article 800	538AFS	NEC: CMR CEC: CMG FT4	1000	305.0	170.0	77.1	.516	13.11	Lock Power:	4C 16 AWG, Shielded 5202FE Type	PVC Gray	.230 5.84
									Card Reader:	3TP 18 AWG, OAS 5342FE Type	PVC Orange	.285 7.24
									Door Contact:	2C 18 AWG, Shielded 5300FE Type	PVC White	.175 4.45
									Rex/Spare:	4C 18 AWG, Shielded 5302FE Type	PVC Blue	.202 5.13



Plenum • Flamarrest® Insulation • Flamarrest Jackets • No Overall Jacket												
NEC Article 800	638AFS	NEC: CMP CEC: CMG FT6	1000	305.0	172.4	78.44	.542	13.72	Lock Power:	4C 16 AWG, Shielded 6202FE Type	Flamarrest Gray	.224 5.69
									Card Reader:	3TP 18 AWG, OAS 6342FE Type	Flamarrest Orange	.291 7.39
									Door Contact:	2C 18 AWG, Shielded 6300FE Type	Flamarrest White	.168 4.27
									Rex/Spare:	4C 18 AWG, Shielded 6302FE Type	Flamarrest Blue	.197 5.00



Access Control Panel

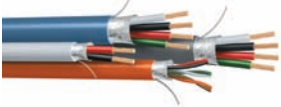


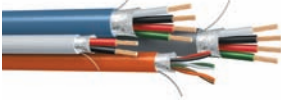
Composite Access Control Cable

Banana Peel® Jacketless Cables
Type 2—Riser and Plenum

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Overall Nom. OD		Component Descriptions	Component Jacket Material & Colors	Component Nom. OD	
			Ft.	m	Lbs.	kg	Inch	mm			Inch	mm

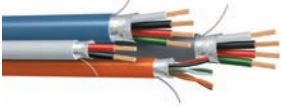
Composite • (3) Unshielded Multi-conductors • (1) Shielded Multi-conductor

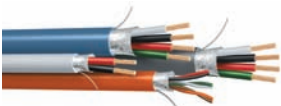
Riser • Flamarrest® Insulation • PVC Jackets • No Overall Jacket													
NEC Article 800	558GMS	NEC: CMR CEC: CMG FT4	1000	305.0	103.0	46.8	.425	10.8	Lock Power:	4C 18 AWG, Unshielded 5302UE Type	PVC Gray	.202	5.13
									Card Reader:	6C 22 AWG, Shielded 5504FE Type	PVC Orange	.189	4.80
									Door Contact:	4C 22 AWG, Unshielded 5502UE Type	PVC White	.161	4.09
									Rex/Spare:	4C 22 AWG, Unshielded 5502UE Type	PVC Blue	.161	4.09

Plenum • Flamarrest® Insulation • PVC Jackets • No Overall Jacket													
NEC Article 800	658GMS	NEC: CMP CEC: CMG FT6	1000	305.0	106.0	48.2	.401	10.2	Lock Power:	4C 18 AWG, Unshielded 6302UE Type	PVC Gray	.190	4.83
									Card Reader:	6C 22 AWG, Shielded 6504FE Type	PVC Orange	.179	4.55
									Door Contact:	4C 22 AWG, Unshielded 6502UE Type	PVC White	.147	3.73
									Rex/Spare:	4C 22 AWG, Unshielded 6502UE Type	PVC Blue	.147	3.73

Exit Reader-Type—Riser and Plenum

Composite • (2) Shielded Multi-conductors • (2) Shielded Multi-pairs

Riser • Flamarrest® Insulation • PVC Jackets • No Overall Jacket													
NEC Article 800	558GFS	NEC: CMR CEC: CMG FT4	1000	305.0	112.0	50.9	.458	11.6	Lock Power:	4C 18 AWG, Shielded 5302FE Type	PVC Gray	.202	5.13
									Card Reader:	3TP 22 AWG, OAS 5542FE Type	PVC Orange	.233	5.92
									Door Contact:	2C 22 AWG, Shielded 5500FE Type	PVC White	.140	3.56
									Rex/Spare:	3TP 22 AWG, OAS 5542FE Type	PVC Yellow	.233	5.92

Plenum • Flamarrest® Insulation • Flamarrest Jackets • No Overall Jacket													
NEC Article 800	658GFS	NEC: CMP CEC: CMG FT6	1000	305.0	106.0	48.2	.456	11.6	Lock Power:	4C 18 AWG, Shielded 6302FE Type	Flamarrest Gray	.191	4.85
									Card Reader:	3TP 22 AWG, OAS 6542FE Type	Flamarrest Orange	.218	5.54
									Door Contact:	2C 22 AWG, Shielded 6500FE Type	Flamarrest White	.131	3.33
									Rex/Spare:	3TP 22 AWG, OAS 6542FE Type	Flamarrest Yellow	.218	5.54