

# Xtra-Guard® 1 Performance Cable



# Xtra-Guard 1 Cable

## Setting the standard in tough PVC cable



Alpha Wire's Xtra-Guard cable brings performance and reliability to the biggest challenges in the toughest environments. No matter what extremes your application faces, you'll find an Xtra-Guard cable that excels in meeting your requirements. Years of abuse in some of the harshest environments have proven Xtra-Guard means peace of mind. With its premium PVC insulation and jacket, Xtra-Guard 1 cable strips cleanly and routes easily. It's available in multiconductor and multipair configurations with 300 V and 600 V ratings.

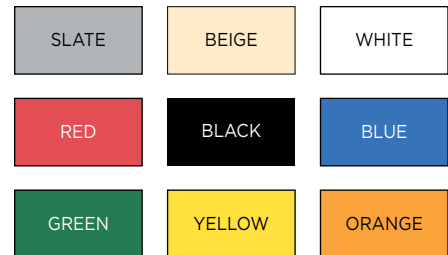
### Features

- Color-coded, tinned copper conductors
- Premium-grade PVC insulation and jacket for easier cable routing in small spaces
- Unshielded, foil shielded, or Supra-Shield® foil/braid
- 105°C temperature rating
- UL VW-1, UL 1685, and CSA FT-4 flammability rating
- NFPA 79 compliant
- Nylon ripcord for easy jacket stripping
- Wide range of cable configurations and lengths in stock, ready to ship same day

- No minimum order quantity on lengths of 100', 500', and 1000'
- Samples of any product can be shipped next day free of charge

### Applications

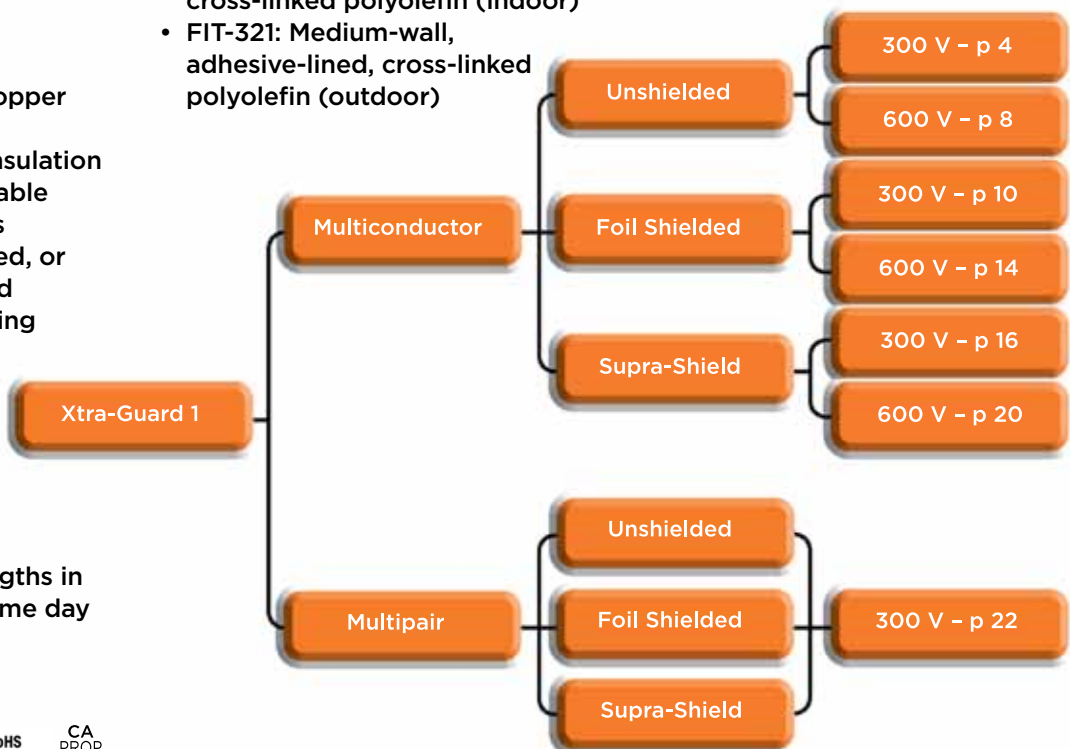
- EIA RS-232 interface
- High technology applications in controlled environments
- Medical electronics
- Point-of-sale equipment
- Computer peripherals
- Industrial process controls



Xtra-Guard cables are available in a range of long-lasting colors for fast, easy identification, for safety reasons, and for matching the color of your system.

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)



### Xtra-Guard shielding options

Alpha Wire offers Xtra-Guard 1 cables in three shielding options to handle virtually any electrical environment.

#### Unshielded

Unshielded cables provide the smallest cable diameter for use in low-noise controlled environments.

#### Foil shielded

Foil-shielded cables use a sturdy aluminum/polyester shield for moderate EMI needs, especially at lower frequencies. A tinned copper drain wire makes grounding the cable easy. Foil shields allow lighter weights and smaller cables.

#### Supra-Shield®

Alpha's exclusive Supra-Shield cables combine a triple-layer aluminum/polyester/aluminum foil with a tinned copper braid shield with tight 70% coverage. Supra-Shield offers exceptional EMI performance and flexibility to protect against noise and maintain overall system integrity. The combination of foil and braid offers better shielding effectiveness than either approach alone against both low- and high-frequency noise.



### There's an Xtra-Guard cable for any application hazard

#### Xtra-Guard 1

High performance in a tough PVC jacket

#### Xtra-Guard 2

Added abrasion resistance to withstand mechanical abuse

#### Xtra-Guard 3

Direct burial—no conduit needed

#### Xtra-Guard 4

Advanced temperature and chemical performance

#### Xtra-Guard 5

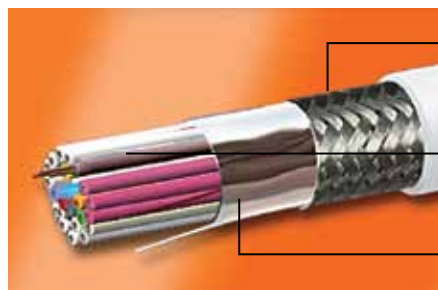
Maximum chemical and temperature performance

#### Xtra-Guard Flex

Continuous flex applications

#### Xtra-Guard Industrial Ethernet

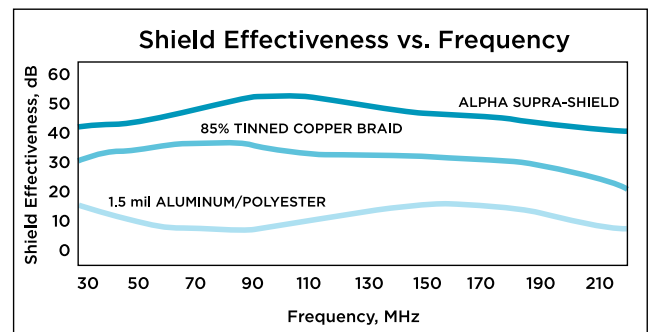
Cat 5e that's beyond factory tough



70% Tinned  
Copper Braid

Easy-To-Terminate,  
Continuous Contact  
Drain Wire

Triple-Laminate Foil  
with 25% Overlap



# Xtra-Guard® 1

High performance  
300 V Unshielded, Multiconductor



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.127 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5920	2	0.138	3.51	0.032	0.81
5921	3	0.144	3.66	0.032	0.81
5922	4	0.153	3.89	0.032	0.81
5923	6	0.174	4.42	0.032	0.81
5924	7	0.174	4.42	0.032	0.81
5925	8	0.185	4.70	0.032	0.81

## 26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5666	2	0.146	3.71	0.032	0.81
5667	3	0.152	3.86	0.032	0.81
5668	4	0.162	4.11	0.032	0.81
5669	6	0.186	4.72	0.032	0.81
5670	7	0.186	4.72	0.032	0.81
5671	8	0.198	5.03	0.032	0.81
5672	10	0.224	5.69	0.032	0.81
5673	15	0.248	6.30	0.032	0.81

## 24 AWG (0.23 mm²)

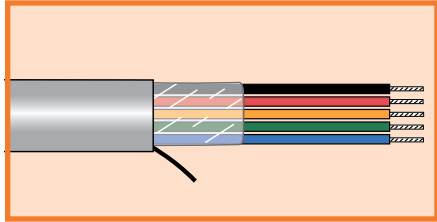
Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5012C	2	0.156	3.96	0.032	0.81
5013C	3	0.163	4.14	0.032	0.81
5014C	4	0.175	4.45	0.032	0.81
5016C	6	0.201	5.11	0.032	0.81
5018C	8	0.215	5.46	0.032	0.81
5020C	10	0.244	6.20	0.032	0.81
5020/15C	15	0.271	6.88	0.032	0.81
5020/20C	20	0.300	7.62	0.032	0.81
5020/25C	25	0.332	8.43	0.032	0.81
5020/30C	30	0.350	8.89	0.032	0.81
5020/40C	40	0.390	9.91	0.032	0.81
5020/50C	50	0.429	10.90	0.032	0.81



# Xtra-Guard® 1

## High Performance 300 V Unshielded, Multiconductor



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 22 AWG (0.35 mm<sup>2</sup>)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5002C	2	0.168	4.27	0.032	0.81
5003C	3	0.176	4.47	0.032	0.81
5004C	4	0.189	4.80	0.032	0.81
5006C	6	0.219	5.56	0.032	0.81
5008C	8	0.235	5.97	0.032	0.81
5010C	10	0.268	6.81	0.032	0.81
5010/15C	15	0.299	7.59	0.032	0.81
5010/20C	20	0.331	8.41	0.032	0.81
5010/25C	25	0.368	9.35	0.032	0.81
5010/30C	30	0.389	9.88	0.032	0.81
5010/40C	40	0.434	11.02	0.032	0.81
5010/50C	50	0.478	12.14	0.032	0.81
5010/60C	60	0.518	13.16	0.032	0.81

### 20 AWG (0.56 mm<sup>2</sup>)

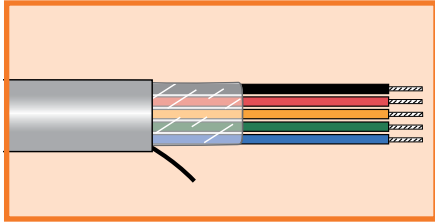
Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5052C	2	0.208	5.28	0.032	0.81
5053C	3	0.219	5.56	0.032	0.81
5054C	4	0.238	6.05	0.032	0.81
5056C	6	0.280	7.11	0.032	0.81
5058C	8	0.302	7.67	0.032	0.81
5060C	10	0.348	8.84	0.032	0.81
5060/15C	15	0.391	9.93	0.032	0.81
5060/20C	20	0.437	11.10	0.032	0.81
5060/25C	25	0.488	12.40	0.032	0.81
5060/30C	30	0.517	13.13	0.032	0.81
5060/40C	40	0.622	15.80	0.053	1.35
5060/50C	50	0.684	17.37	0.053	1.35



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## High Performance 300 V Unshielded, Multiconductor



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**UL AWM 2464 VW-1**  
**CSA CMG FT4**

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- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 18 AWG (0.81 mm<sup>2</sup>)

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5062/1C*	2	0.226	5.74	0.032	0.81
5062C	2	0.226	5.74	0.032	0.81
5063/1C*	3	0.238	6.05	0.032	0.81
5063C	3	0.238	6.05	0.032	0.81
5064C	4	0.259	6.58	0.032	0.81
5066C	6	0.307	7.80	0.032	0.81
5068C	8	0.332	8.43	0.032	0.81
5070C	10	0.384	9.75	0.032	0.81
5070/15C	15	0.433	11.00	0.032	0.81
5070/20C	20	0.484	12.29	0.032	0.81
5070/25C	25	0.542	13.77	0.032	0.81
5070/30C	30	0.617	15.67	0.053	1.35
5070/40C	40	0.688	17.48	0.053	1.35
5070/50C	50	0.758	19.25	0.053	1.35
5070/60C	60	0.881	22.38	0.083	2.11

\*Conductors color-coded per international standards: brown, blue, green/yellow.

### 16 AWG (1.23 mm<sup>2</sup>)

Stranding: 19/0.0117 (19 x 0.29 mm)  
Insulation thickness: 0.016 (0.41 mm)

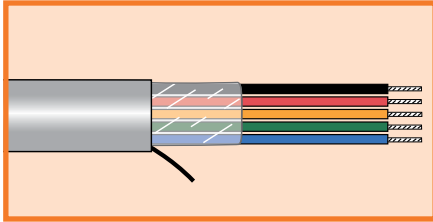
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5072/1C*	2	0.250	6.35	0.032	0.81
5072C	2	0.250	6.35	0.032	0.81
5073/1C*	3	0.264	6.71	0.032	0.81
5073C	3	0.264	6.71	0.032	0.81
5074C	4	0.288	7.32	0.032	0.81
5076C	6	0.343	8.71	0.032	0.81
5078C	8	0.372	9.45	0.032	0.81
5080C	10	0.432	10.97	0.032	0.81
5080/15C	15	0.488	12.40	0.032	0.81
5080/20C	20	0.547	13.89	0.053	0.81
5080/25C	25	0.656	16.66	0.053	0.81
5080/30C	30	0.694	17.63	0.053	0.81
5080/40C	40	0.775	19.69	0.083	2.11
5080/50C	50	0.917	23.29	0.083	2.11

\*Conductors color-coded per international standards: brown, blue, green/yellow.



# Xtra-Guard® 1

## High Performance 300 V Unshielded, Multiconductor



**UL CM**  
**UL AWM 2343 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

24 AWG (0.23 mm <sup>2</sup> )					
Stranding: 7/32 (7 x 0.20 mm) Insulation thickness: 0.010 (0.25 mm)					
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5201C	7	0.263	6.68	0.063	1.60
5202C	12	0.313	7.95	0.063	1.60
5203C	15	0.333	8.46	0.063	1.60
5204C	19	0.350	8.89	0.063	1.60
5206C	37	0.438	11.13	0.063	1.60

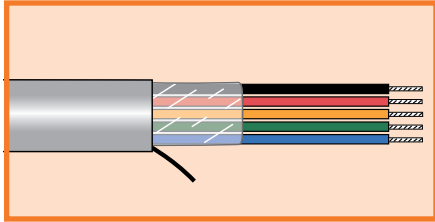
22 AWG (0.35 mm <sup>2</sup> )					
Stranding: 7/30 (7 x 0.25 mm) Insulation thickness: 0.010 (0.25 mm)					
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5210/2C	2	0.230	5.84	0.063	1.60
5211C	7	0.281	7.14	0.063	1.60
5212C	12	0.338	8.59	0.063	1.60
5213C	15	0.361	9.17	0.063	1.60
5214C	19	0.380	9.65	0.063	1.60
5214/25C	25	0.430	10.92	0.063	1.60
5215C	27	0.438	11.13	0.063	1.60
5216C	37	0.480	12.19	0.063	1.60

20 AWG (0.56 mm <sup>2</sup> )					
Stranding: 7/28 (7 x 0.32 mm) Insulation thickness: 0.010 (0.25 mm)					
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5220/2C	2	0.246	6.25	0.063	1.60
5220C	5	0.288	7.32	0.063	1.60
5221C	7	0.305	7.75	0.063	1.60
5222C	12	0.371	9.42	0.063	1.60
5223C	15	0.398	10.11	0.063	1.60
5224C	19	0.420	10.67	0.063	1.60
5224/25C	25	0.478	12.14	0.063	1.60
5225C	27	0.487	12.37	0.063	1.60
5226C	37	0.536	13.61	0.063	1.60



# Xtra-Guard® 1

## High Performance 600 V Unshielded, Multiconductor



**UL CM**  
**UL AWM 2501 VW-1**  
**UL MTW**  
**CSA AWM I/II A/B FT4**

### Operating Temperature

- -30°C to +105°C
- -30°C to +90°C (Dry MTW)
- -30°C to +60°C (Wet MTW)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 22 AWG (0.35 mm<sup>2</sup>)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5402	2	0.318	8.08	0.063	1.60
5404	4	0.358	9.09	0.063	1.60
5405	5	0.385	9.78	0.063	1.60
5409	9	0.473	12.01	0.063	1.60
5409/19	19	0.601	15.27	0.063	1.60

### 20 AWG (0.56 mm<sup>2</sup>)

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5413	3	0.350	8.89	0.063	1.60
5414	4	0.377	9.58	0.063	1.60
5419	9	0.503	12.78	0.063	1.60
5419/12	12	0.554	14.07	0.063	1.60
5419/15	15	0.601	15.27	0.063	1.60
5419/19	19	0.641	16.28	0.063	1.60
5419/25	25	0.742	18.85	0.063	1.60

### 18 AWG (0.81 mm<sup>2</sup>)

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5422	2	0.352	8.94	0.063	1.60
5423	3	0.369	9.37	0.063	1.60
5424	4	0.399	10.13	0.063	1.60
5425	5	0.432	10.97	0.063	1.60
5427	7	0.466	11.84	0.063	1.60
5429	9	0.535	13.59	0.063	1.60
5429/15	15	0.643	16.33	0.063	1.60
5429/19	19	0.686	17.42	0.063	1.60
5429/25	25	0.796	20.22	0.063	1.60





# Xtra-Guard® 1

## High Performance 600 V Unshielded, Multiconductor



- UL CM**
- UL AWM 2501 VW-1**
- UL MTW**
- CSA AWM I/II A/B FT4**

### Operating Temperature

- -30°C to +105°C
- -30°C to +90°C (Dry MTW)
- -30°C to +60°C (Wet MTW)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
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### Availability

- 100 ft (30.5 m)
- 500 ft (152 m)
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### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
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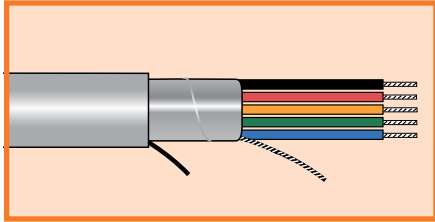
16 AWG (1.23 mm <sup>2</sup> )					
Stranding: 19/0.0117 (19 x 0.29 mm)					
Insulation thickness: 0.032 (0.81 mm)					
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5434	4	0.428	10.87	0.063	1.60
5435	5	0.464	11.79	0.063	1.60
5437	7	0.502	12.75	0.063	1.60
5439	9	0.579	14.71	0.063	1.60
5439/12	12	0.641	16.28	0.063	1.60
5439/15	15	0.698	17.73	0.063	1.60
5439/19	19	0.746	18.95	0.083	2.11
5439/25	25	0.908	23.06	0.083	2.11

14 AWG (2.08 mm <sup>2</sup> )					
Stranding: 41/30 (41 x 0.25 mm)					
Insulation thickness: 0.032 (0.81 mm)					
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5442	2	0.406	10.31	0.063	1.60
5443	3	0.428	10.87	0.063	1.60
5444	4	0.464	11.79	0.063	1.60
5445	5	0.505	12.83	0.063	1.60
5447	7	0.547	13.89	0.063	1.60
5449	9	0.634	16.10	0.063	1.60
5449/12	12	0.703	17.86	0.063	1.60
5449/15	15	0.767	19.48	0.063	1.60
5449/25	25	0.998	25.35	0.083	2.11



# Xtra-Guard® 1

## High Performance 300 V Foil Shielded, Multiconductor



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**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
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- Jacket Colors
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  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)



### 28 AWG (0.09 mm<sup>2</sup>)

Stranding: 7/36 (7 x 0.127 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5926	2	0.142	3.61	0.032	0.81
5927	3	0.148	3.76	0.032	0.81
5928	4	0.157	3.99	0.032	0.81
5929	6	0.178	4.52	0.032	0.81
5930	7	0.178	4.52	0.032	0.81
5931	8	0.189	4.80	0.032	0.81

### 26 AWG (0.14 mm<sup>2</sup>)

Stranding: 7/34 (7 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5674	2	0.150	3.81	0.032	0.81
5675	3	0.156	3.96	0.032	0.81
5676	4	0.166	4.22	0.032	0.81
5677	6	0.190	4.83	0.032	0.81
5678	7	0.190	4.83	0.032	0.81
5679	8	0.202	5.13	0.032	0.81
5680	10	0.228	5.79	0.032	0.81
5681	15	0.252	6.40	0.032	0.81

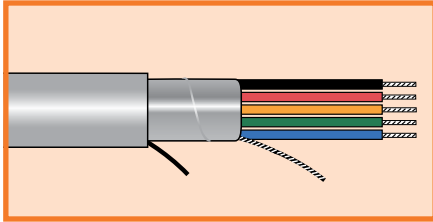
### 24 AWG (0.23 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5092C	2	0.160	4.06	0.032	0.81
5093C	3	0.167	4.24	0.032	0.81
5094C	4	0.179	4.55	0.032	0.81
5096C	6	0.205	5.21	0.032	0.81
5098C	8	0.219	5.56	0.032	0.81
5100C	10	0.248	6.30	0.032	0.81
5100/15C	15	0.275	6.99	0.032	0.81
5100/20C	20	0.304	7.72	0.032	0.81
5100/25C	25	0.336	8.53	0.032	0.81
5100/30C	30	0.354	8.99	0.032	0.81
5100/40C	40	0.394	10.01	0.032	0.81
5100/50C	50	0.433	11.00	0.032	0.81
5100/60C	60	0.468	11.89	0.032	0.81
5100/70C	70	0.505	12.83	0.032	0.81

# Xtra-Guard® 1

## High Performance 300 V Foil Shielded, Multiconductor



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

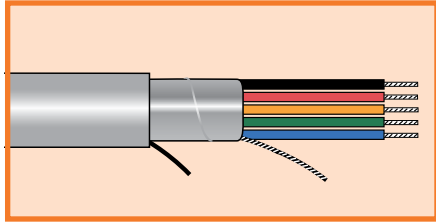


22 AWG (0.35 mm <sup>2</sup> )					
Stranding: 7/30 (7 x 0.25 mm) Insulation thickness: 0.010 (0.25 mm)					
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5192C	2	0.172	4.37	0.032	0.81
5193C	3	0.180	4.57	0.032	0.81
5194C	4	0.193	4.90	0.032	0.81
5196C	6	0.223	5.66	0.032	0.81
5198C	8	0.239	6.07	0.032	0.81
5199/10C	10	0.272	6.91	0.032	0.81
5199/15C	15	0.303	7.70	0.032	0.81
5199/20C	20	0.335	8.51	0.032	0.81
5199/25C	25	0.372	9.45	0.032	0.81
5199/30C	30	0.393	9.98	0.032	0.81
5199/40C	40	0.438	11.13	0.032	0.81
5199/50C	50	0.482	12.24	0.032	0.81
5199/60C	60	0.522	13.26	0.032	0.81
5199/70C	70	0.606	15.39	0.053	1.35

20 AWG (0.56 mm <sup>2</sup> )					
Stranding: 7/28 (7 x 0.32 mm) Insulation thickness: 0.016 (0.41 mm)					
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5462C	2	0.212	5.38	0.032	0.81
5463C	3	0.223	5.66	0.032	0.81
5464C	4	0.242	6.15	0.032	0.81
5466C	6	0.284	7.21	0.032	0.81
5468C	8	0.306	7.77	0.032	0.81
5470C	10	0.352	8.94	0.032	0.81
5470/15C	15	0.395	10.03	0.032	0.81
5470/20C	20	0.441	11.20	0.032	0.81
5470/25C	25	0.492	12.50	0.032	0.81
5470/30C	30	0.521	13.23	0.032	0.81
5470/40C	40	0.626	15.90	0.053	1.35
5470/50C	50	0.688	17.48	0.053	1.35

# Xtra-Guard® 1

## High Performance 300 V Foil Shielded, Multiconductor



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)



### 18 AWG (0.81 mm²)

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5382C	2	0.230	5.84	0.032	0.81
5382/1C*	2	0.230	5.84	0.032	0.81
5383C	3	0.242	6.15	0.032	0.81
5383/1C*	3	0.242	6.15	0.032	0.81
5384C	4	0.263	6.68	0.032	0.81
5386C	6	0.311	7.90	0.032	0.81
5388C	8	0.336	8.53	0.032	0.81
5390C	10	0.388	9.86	0.032	0.81
5390/15C	15	0.437	11.10	0.032	0.81
5390/20C	20	0.488	12.40	0.032	0.81
5390/25C	25	0.588	14.94	0.053	1.35
5390/30C	30	0.621	15.77	0.053	1.35
5390/40C	40	0.692	17.58	0.053	1.35
5390/50C	50	0.762	19.35	0.053	1.35
5390/60C	60	0.885	22.48	0.083	2.11

\*Conductors color-coded per international standards: brown, blue, green/yellow.

### 16 AWG (1.23 mm²)

Stranding: 19/0.0117 (19 x 0.29 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5362C	2	0.254	6.45	0.032	0.81
5362/1C*	2	0.254	6.45	0.032	0.81
5363C	3	0.268	6.81	0.032	0.81
5363/1C*	3	0.268	6.81	0.032	0.81
5364C	4	0.292	7.42	0.032	0.81
5366C	6	0.347	8.81	0.032	0.81
5368C	8	0.376	9.55	0.032	0.81
5370C	10	0.436	11.07	0.032	0.81
5370/15C	15	0.492	12.50	0.032	0.81
5370/20C	20	0.593	15.06	0.053	1.35
5370/25C	25	0.660	16.76	0.053	1.35
5370/30C	30	0.698	17.73	0.053	1.35
5370/40C	40	0.779	19.79	0.083	2.11

\*Conductors color-coded per international standards: brown, blue, green/yellow.

# Xtra-Guard® 1

## High Performance 300 V Foil Shielded, Multiconductor



**UL CM**  
**UL AWM 2343 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 24 AWG (0.23 mm²)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5599/3C	3	0.229	5.82	0.063	1.60
5599/5C	5	0.254	6.45	0.063	1.60
5599/7C	7	0.267	6.78	0.063	1.60
5599/12C	12	0.317	8.05	0.063	1.60
5599/15C	15	0.337	8.56	0.063	1.60
5599/19C	19	0.354	8.99	0.063	1.60
5599/27C	27	0.405	10.29	0.063	1.60

### 22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5580/2C	2	0.234	5.94	0.063	1.60
5580C	5	0.270	6.86	0.063	1.60
5581C	7	0.285	7.24	0.063	1.60
5582C	12	0.342	8.69	0.063	1.60
5583C	15	0.365	9.27	0.063	1.60
5584C	19	0.384	9.75	0.063	1.60
5586C	37	0.484	12.29	0.063	1.60

### 20 AWG (0.56 mm²)

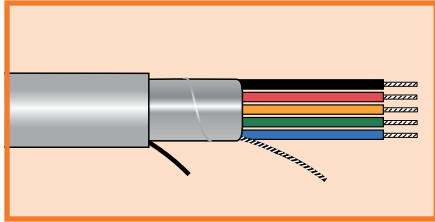
Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5560/2C	2	0.250	6.35	0.063	1.60
5560C	5	0.292	7.42	0.063	1.60
5561C	7	0.309	7.85	0.063	1.60
5562C	12	0.375	9.53	0.063	1.60
5563C	15	0.402	10.21	0.063	1.60
5564C	19	0.424	10.77	0.063	1.60



# Xtra-Guard® 1

## High Performance 600 V Foil Shielded, Multiconductor



**UL AWM 2501 VW-1**  
**CSA AWM I/II A/B FT4**  
**UL MTW**

### Operating Temperature

- 30°C to +105°C
- 30°C to +90°C (Dry MTW)
- 30°C to +60°C (Wet MTW)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 22 AWG (0.35 mm<sup>2</sup>)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5410/2	2	0.322	8.18	0.063	1.60
5410/3	3	0.337	8.56	0.063	1.60
5410/4	4	0.362	9.19	0.063	1.60
5410/5	5	0.389	9.88	0.063	1.60
5410/9	9	0.477	12.12	0.063	1.60
5410/12	12	0.525	13.34	0.063	1.60

### 20 AWG (0.56 mm<sup>2</sup>)

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5420/3	3	0.354	8.99	0.063	1.60
5420/4	4	0.381	9.68	0.063	1.60
5420/5	5	0.411	10.44	0.063	1.60
5420/7	7	0.442	11.23	0.063	1.60
5420/9	9	0.507	12.88	0.063	1.60
5420/12	12	0.558	14.17	0.063	1.60

### 18 AWG (0.81 mm<sup>2</sup>)

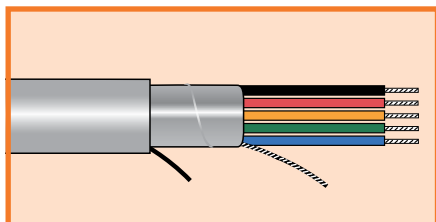
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5430/2	2	0.356	9.04	0.063	1.60
5430/3	3	0.373	9.47	0.063	1.60
5430/4	4	0.403	10.24	0.063	1.60
5430/5	5	0.436	11.07	0.063	1.60
5430/7	7	0.470	11.94	0.063	1.60
5430/9	9	0.539	13.69	0.063	1.60
5430/12	12	0.595	15.11	0.063	1.60
5430/15	15	0.647	16.43	0.063	1.60
5430/19	19	0.690	17.53	0.063	1.60
5430/25	25	0.800	20.32	0.063	1.60



# Xtra-Guard® 1

## High Performance 600 V Foil Shielded, Multiconductor



**UL AWM 2501 VW-1**  
**CSA AWM I/II A/B FT4**  
**UL MTW**

### Operating Temperature

- -30°C to +105°C
- -30°C to +90°C (Dry MTW)
- -30°C to +60°C (Wet MTW)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 16 AWG (1.23 mm<sup>2</sup>)

Stranding: 19/0.0117 (19 x 0.29 mm)  
Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5440/2	2	0.380	9.65	0.063	1.60
5440/3	3	0.399	10.13	0.063	1.60
5440/4	4	0.432	10.97	0.063	1.60
5440/5	5	0.468	11.89	0.063	1.60
5440/7	7	0.506	12.85	0.063	1.60
5440/9	9	0.583	14.81	0.063	1.60
5440/12	12	0.645	16.38	0.063	1.60
5440/15	15	0.702	17.83	0.063	1.60

### 14 AWG (2.08 mm<sup>2</sup>)

Stranding: 41/30 (41 x 0.25 mm)  
Insulation thickness: 0.032 (0.81 mm)

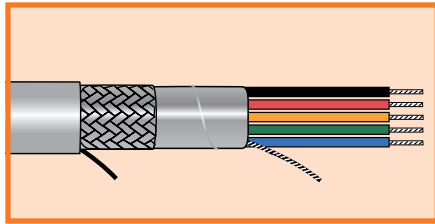
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5450/2	2	0.410	10.41	0.063	1.60
5450/3	3	0.432	10.97	0.063	1.60
5450/4	4	0.468	11.89	0.063	1.60
5450/5	5	0.509	12.93	0.063	1.60
5450/7	7	0.551	14.00	0.063	1.60
5450/12	12	0.707	17.96	0.063	1.60



# Xtra-Guard® 1

High Performance

300 V Supra-Shield® Foil/Braid, Multiconductor



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- 30°C to +80°C (AWM)
- 30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)  
 Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.127 mm)  
 Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5932	2	0.166	4.22	0.032	0.81
5933	3	0.172	4.37	0.032	0.81
5934	4	0.181	4.60	0.032	0.81
5935	6	0.202	5.13	0.032	0.81
5936	7	0.202	5.13	0.032	0.81
5937	8	0.213	5.41	0.032	0.81

## 26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)  
 Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5682	2	0.174	4.42	0.032	0.81
5683	3	0.180	4.57	0.032	0.81
5684	4	0.190	4.83	0.032	0.81
5685	6	0.214	5.44	0.032	0.81
5686	7	0.214	5.44	0.032	0.81
5687	8	0.226	5.74	0.032	0.81
5688	10	0.252	6.40	0.032	0.81
5689	15	0.276	7.01	0.032	0.81

## 24 AWG (0.23 mm²)

Stranding: 7/32 (7 x 0.20 mm)  
 Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5112C	2	0.184	4.67	0.032	0.81
5113C	3	0.191	4.85	0.032	0.81
5114C	4	0.203	5.16	0.032	0.81
5116C	6	0.229	5.82	0.032	0.81
5118C	8	0.243	6.17	0.032	0.81
5120C	10	0.272	6.91	0.032	0.81
5120/15C	15	0.299	7.59	0.032	0.81
5120/20C	20	0.328	8.33	0.032	0.81
5120/25C	25	0.360	9.14	0.032	0.81
5120/30C	30	0.378	9.60	0.032	0.81
5120/40C	40	0.418	10.62	0.032	0.81
5120/50C	50	0.457	11.61	0.032	0.81

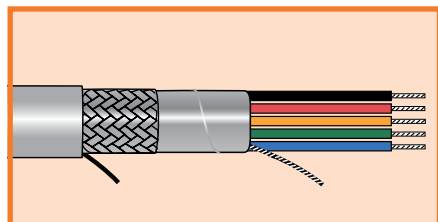




# Xtra-Guard® 1

High Performance

300 V Supra-Shield® Foil/Braid, Multiconductor



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors
- Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5102C	2	0.196	4.98	0.032	0.81
5103C	3	0.204	5.18	0.032	0.81
5104C	4	0.217	5.51	0.032	0.81
5106C	6	0.247	6.27	0.032	0.81
5108C	8	0.263	6.68	0.032	0.81
5110C	10	0.296	7.52	0.032	0.81
5110/15C	15	0.327	8.31	0.032	0.81
5110/20C	20	0.359	9.12	0.032	0.81
5110/25C	25	0.396	10.06	0.032	0.81
5110/30C	30	0.417	10.59	0.032	0.81
5110/40C	40	0.462	11.73	0.032	0.81
5110/50C	50	0.506	12.85	0.032	0.81
5110/60C	60	0.588	14.94	0.053	1.35
5110/70C	70	0.630	16.00	0.053	1.35
5110/80C	80	0.665	16.89	0.053	1.35

## 20 AWG (0.56 mm²)

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)

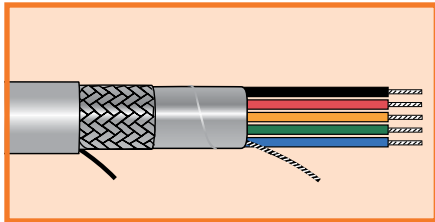
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5152C	2	0.236	5.99	0.032	0.81
5153C	3	0.247	6.27	0.032	0.81
5154C	4	0.266	6.76	0.032	0.81
5156C	6	0.308	7.82	0.032	0.81
5158C	8	0.330	8.38	0.032	0.81
5160C	10	0.376	9.55	0.032	0.81
5160/15C	15	0.419	10.64	0.032	0.81
5160/20C	20	0.465	11.81	0.032	0.81
5160/25C	25	0.516	13.11	0.032	0.81
5160/30C	30	0.545	13.84	0.032	0.81
5160/40C	40	0.656	16.66	0.053	1.35
5160/50C	50	0.718	18.24	0.053	1.35
5160/60C	60	0.774	19.66	0.053	1.35



# Xtra-Guard® 1

High Performance

300 V Supra-Shield® Foil/Braid, Multiconductor



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

**Operating Temperature**

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

**Conductor Color Coding**

- 28, 26, 24, 22 AWG: Chart E (page 31)
- 20, 18, 16 AWG: Chart D (page 30)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

**Materials**

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

**Availability**

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)  
 Bulk, cut to length

**FIT® Tubing Recommendations**

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

**18 AWG (0.81 mm<sup>2</sup>)**

Stranding: 16/30 (16 x 0.25 mm)  
 Insulation thickness: 0.016 (0.41 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5162/1C*	2	0.254	6.45	0.032	0.81
5162C	2	0.254	6.45	0.032	0.81
5163/1C*	3	0.266	6.76	0.032	0.81
5163C	3	0.266	6.76	0.032	0.81
5164C	4	0.287	7.29	0.032	0.81
5166C	6	0.335	8.51	0.032	0.81
5168C	8	0.360	9.14	0.032	0.81
5170C	10	0.412	10.46	0.032	0.81
5170/15C	15	0.461	11.71	0.032	0.81
5170/20C	20	0.512	13.00	0.032	0.81
5170/25C	25	0.612	15.54	0.053	1.35
5170/30C	30	0.651	16.54	0.053	1.35
5170/40C	40	0.722	18.34	0.053	1.35

\*Conductors color-coded per international standards: brown, blue, green/yellow.

**16 AWG (1.23 mm<sup>2</sup>)**

Stranding: 19/0.0117 (19 x 0.29 mm)  
 Insulation thickness: 0.016 (0.41 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5172/1C*	2	0.278	7.06	0.032	0.81
5172C	2	0.278	7.06	0.032	0.81
5173/1C*	3	0.292	7.42	0.032	0.81
5173C	3	0.292	7.42	0.032	0.81
5174C	4	0.316	8.03	0.032	0.81
5176C	6	0.371	9.42	0.032	0.81
5178C	8	0.400	10.16	0.032	0.81
5180C	10	0.460	11.68	0.032	0.81
5180/15C	15	0.516	13.11	0.032	0.81
5180/20C	20	0.617	15.67	0.053	1.35
5180/25C	25	0.690	17.53	0.053	1.35

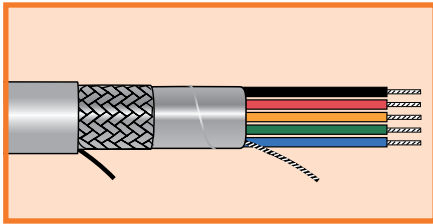
\*Conductors color-coded per international standards: brown, blue, green/yellow.



# Xtra-Guard® 1

High Performance

300 V Supra-Shield® Foil/Braid, Multiconductor



**UL CM**  
**UL AWM 2343 VW-1**  
**CSA CMG FT4**

**Operating Temperature**

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

**Conductor Color Coding**

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

**Materials**

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

**Availability**

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)  
 Bulk, cut to length

**FIT® Tubing Recommendations**

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

**24 AWG (0.23 mm<sup>2</sup>)**

Stranding: 7/32 (7 x 0.20 mm)  
 Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5300C	5	0.278	7.06	0.063	1.60
5301C	7	0.291	7.39	0.063	1.60
5302C	12	0.341	8.66	0.063	1.60
5303C	15	0.361	9.17	0.063	1.60
5304C	19	0.378	9.60	0.063	1.60
5305C	27	0.429	10.90	0.063	1.60
5306C	37	0.466	11.84	0.063	1.60
5307C	48	0.517	13.13	0.063	1.60

**22 AWG (0.35 mm<sup>2</sup>)**

Stranding: 7/30 (7 x 0.25 mm)  
 Insulation thickness: 0.010 (0.25 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5310C	5	0.294	7.47	0.063	1.60
5311C	7	0.309	7.85	0.063	1.60
5312C	12	0.366	9.30	0.063	1.60
5313C	15	0.389	9.88	0.063	1.60
5314C	19	0.408	10.36	0.063	1.60
5316C	37	0.508	12.90	0.063	1.60
5318C	60	0.608	15.44	0.063	1.60

**20 AWG (0.56 mm<sup>2</sup>)**

Stranding: 7/28 (7 x 0.32 mm)  
 Insulation thickness: 0.010 (0.25 mm)

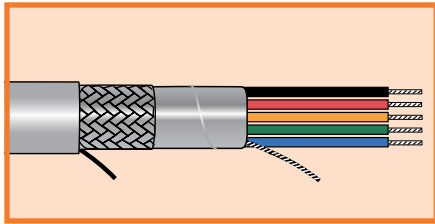
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	Mm
5320/4C	4	0.299	7.59	0.063	1.60
5320C	5	0.316	8.03	0.063	1.60
5321C	7	0.333	8.46	0.063	1.60
5322C	12	0.399	10.13	0.063	1.60
5323C	15	0.426	10.82	0.063	1.60
5324C	19	0.448	11.38	0.063	1.60
5325C	27	0.515	13.08	0.063	1.60
5326C	37	0.564	14.33	0.063	1.60



# Xtra-Guard® 1

High Performance

600 V Supra-Shield® Foil/Braid, Multiconductor



**UL AWM 2501 VW-1**  
**CSA AWM I/II A/B FT4**  
**UL MTW**

### Operating Temperature

- -30°C to +105°C
- -30°C to +90°C (Dry MTW)
- -30°C to +60°C (Wet MTW)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors
- Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)  
 Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)  
 Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5504	4	0.386	9.80	0.063	1.60
5507	7	0.442	11.23	0.063	1.60
5509/12	12	0.549	13.94	0.063	1.60

## 20 AWG (0.56 mm²)

Stranding: 10/30 (10 x 0.25 mm)  
 Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5514	4	0.405	10.29	0.063	1.60
5517	7	0.466	11.84	0.063	1.60
5519	9	0.531	13.49	0.063	1.60
5519/12	12	0.582	14.78	0.063	1.60
5519/19	19	0.675	17.15	0.063	1.60

## 18 AWG (0.81 mm²)

Stranding: 16/30 (16 x 0.25 mm)  
 Insulation thickness: 0.032 (0.81 mm)

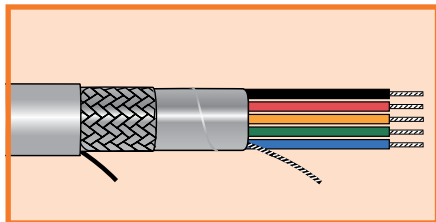
Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5522	2	0.380	9.65	0.063	1.60
5523	3	0.397	10.08	0.063	1.60
5524	4	0.427	10.85	0.063	1.60
5525	5	0.460	11.68	0.063	1.60
5527	7	0.494	12.55	0.063	1.60
5529	9	0.563	14.30	0.063	1.60
5529/12	12	0.619	15.72	0.063	1.60
5529/15	15	0.677	17.20	0.063	1.60
5529/19	19	0.760	19.30	0.083	2.11



# Xtra-Guard® 1

High Performance

600 V Supra-Shield® Foil/Braid, Multiconductor



**UL AWM 2501 VW-1**  
**CSA AWM I/II A/B FT4**  
**UL MTW**

### Operating Temperature

- -30°C to +105°C
- -30°C to +90°C (Dry MTW)
- -30°C to +60°C (Wet MTW)

### Conductor Color Coding

- Chart E (page 31)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)  
 Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 16 AWG (1.23 mm<sup>2</sup>)

Stranding: 19/0.0117 (19 x 0.29 mm)  
 Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5532	2	0.404	10.26	0.063	1.60
5533	3	0.423	10.74	0.063	1.60
5534	4	0.456	11.58	0.063	1.60
5535	5	0.492	12.50	0.063	1.60
5537	7	0.530	13.46	0.063	1.60
5539	9	0.607	15.42	0.063	1.60
5539/12	12	0.675	17.15	0.063	1.60
5539/15	15	0.772	19.61	0.063	1.60
5539/19	19	0.820	20.83	0.083	2.11

## 14 AWG (2.08 mm<sup>2</sup>)

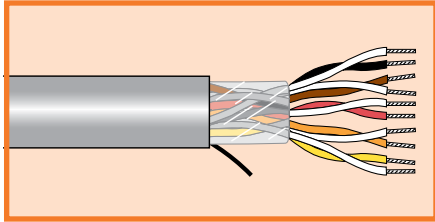
Stranding: 41/30 (41 x 0.25 mm)  
 Insulation thickness: 0.032 (0.81 mm)

Part Number	Conductors	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5542	2	0.434	11.02	0.063	1.60
5543	3	0.456	11.58	0.063	1.60
5544	4	0.492	12.50	0.063	1.60
5547	7	0.575	14.61	0.063	1.60
5549	9	0.668	16.97	0.063	1.60
5549/12	12	0.777	19.74	0.083	2.11
5549/15	15	0.841	21.36	0.083	2.11



# Xtra-Guard® 1

High Performance  
300 V Unshielded, Multipair



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 24, 22 AWG: Chart B (page 29)
- 20, 18 AWG: Chart A (page 29)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 24 AWG (0.23 mm<sup>2</sup>)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5261C	1	0.156	3.96	0.032	0.81
5262C	2	0.212	5.38	0.032	0.81
5263C	3	0.224	5.69	0.032	0.81
5264C	4	0.243	6.17	0.032	0.81
5265C	5	0.264	6.71	0.032	0.81
5266C	6	0.286	7.26	0.032	0.81
5269C	9	0.332	8.43	0.032	0.81
5269/11C	11	0.357	9.07	0.032	0.81
5269/15C	15	0.401	10.19	0.032	0.81
5269/27C	27	0.512	13.00	0.032	0.81
5269/77C	77	0.904	22.96	0.083	0.81

## 22 AWG (0.35 mm<sup>2</sup>)

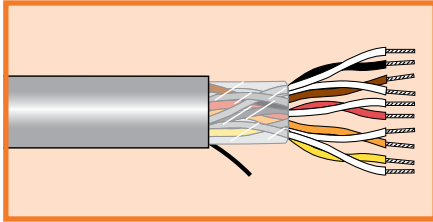
Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5021C	1	0.168	4.27	0.032	0.81
5022C	2	0.232	5.89	0.032	0.81
5023C	3	0.245	6.22	0.032	0.81
5024C	4	0.267	6.78	0.032	0.81
5025C	5	0.291	7.39	0.032	0.81
5026C	6	0.316	8.03	0.032	0.81
5029/15C	15	0.447	11.35	0.032	0.81



# Xtra-Guard® 1

High Performance  
300 V Unshielded, Multipair



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 24, 22 AWG: Chart B (page 29)
- 20, 18 AWG: Chart A (page 29)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 20 AWG (0.56 mm<sup>2</sup>)

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>5282C</b>	2	0.298	7.57	0.032	0.81
<b>5283C</b>	3	0.316	8.03	0.032	0.81
<b>5286C</b>	6	0.415	10.54	0.032	0.81
<b>5289C</b>	9	0.487	12.37	0.032	0.81
<b>5289/12C</b>	12	0.545	13.84	0.032	0.81

## 18 AWG (0.81 mm<sup>2</sup>)

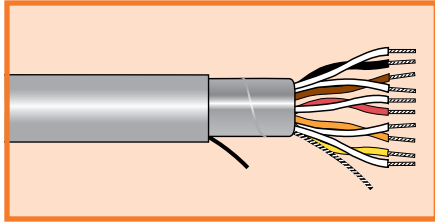
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
<b>5032C</b>	2	0.327	8.31	0.032	0.81
<b>5033C</b>	3	0.348	8.84	0.032	0.81
<b>5036C</b>	6	0.460	11.68	0.032	0.81
<b>5039C</b>	9	0.541	13.74	0.053	1.35
<b>5039/12C</b>	12	0.648	16.46	0.053	1.35



# Xtra-Guard® 1

## High Performance 300 V Foil Shield, Multipair



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B (page 29)
- 20, 18 AWG: Chart A (page 29)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.12 mm)  
Insulation Thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5938	2	0.187	4.75	0.032	0.81
5939	3	0.196	4.98	0.032	0.81
5940	4	0.211	5.36	0.032	0.81
5941	5	0.228	5.79	0.032	0.81
5942	6	0.246	6.25	0.032	0.81

### 26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5690	2	0.200	5.08	0.032	0.81
5691	3	0.210	5.33	0.032	0.81
5692	4	0.227	5.77	0.032	0.81
5693	5	0.246	6.25	0.032	0.81
5694	6	0.265	6.73	0.032	0.81

### 24 AWG (0.23 mm²)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)

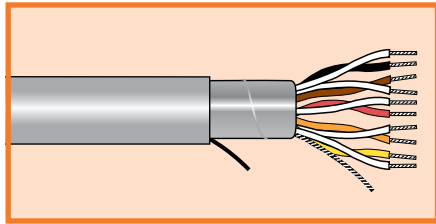
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5491C	1	0.160	4.06	0.032	0.81
5492C	2	0.216	5.49	0.032	0.81
5493C	3	0.228	5.79	0.032	0.81
5494C	4	0.247	6.27	0.032	0.81
5495C	5	0.268	6.81	0.032	0.81
5496C	6	0.290	7.37	0.032	0.81
5499C	9	0.336	8.53	0.032	0.81
5499/11C	11	0.361	9.17	0.032	0.81
5499/15C	15	0.405	10.29	0.032	0.81
5499/19C	19	0.433	11.00	0.032	0.81
5499/27C	27	0.516	13.11	0.32	0.81





# Xtra-Guard® 1

## High Performance 300 V Foil Shield, Multipair



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B (page 29)
- 20, 18 AWG: Chart A (page 29)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Aluminum/polyester foil shield, with 25% overlap and foil facing inward
- Tinned copper drain wire sized the same as cable conductors
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 22 AWG (0.35 mm<sup>2</sup>)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5481C	1	0.172	4.37	0.032	0.81
5482C	2	0.236	5.99	0.032	0.81
5483C	3	0.249	6.32	0.032	0.81
5484C	4	0.271	6.88	0.032	0.81
5485C	5	0.295	7.49	0.032	0.81
5486C	6	0.320	8.13	0.032	0.81
5489C	9	0.372	9.45	0.032	0.81
5489/11C	11	0.400	10.16	0.032	0.81
5489/15C	15	0.451	11.46	0.032	0.81
5489/19C	19	0.483	12.27	0.032	0.81
5489/27C	27	0.619	15.72	0.053	1.35

### 20 AWG (0.56 mm<sup>2</sup>)

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5452C	2	0.302	7.67	0.032	0.81
5453C	3	0.320	8.13	0.032	0.81
5456C	6	0.419	10.64	0.032	0.81
5459C	9	0.491	12.47	0.032	0.81
5459/12C	12	0.549	13.94	0.032	0.81
5459/19C	19	0.689	17.50	0.053	1.35

### 18 AWG (0.81 mm<sup>2</sup>)

Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

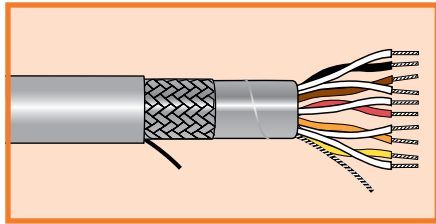
Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5373C	3	0.352	8.94	0.032	0.81
5376C	6	0.464	11.79	0.032	0.81



# Xtra-Guard® 1

High Performance

300 V Supra-Shield® Foil/Braid, Multipair



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B (page 29)
- 20, 18 AWG: Chart A (page 29)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
 500 ft (152 m)  
 1000 ft (305 m)  
 Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

## 28 AWG (0.09 mm²)

Stranding: 7/36 (7 x 0.12 mm)  
 Insulation Thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5943	2	0.211	5.36	0.032	0.81
5944	3	0.220	5.59	0.032	0.81
5945	4	0.235	5.97	0.032	0.81
5946	5	0.252	6.40	0.032	0.81
5947	6	0.270	6.86	0.032	0.81

## 26 AWG (0.14 mm²)

Stranding: 7/34 (7 x 0.16 mm)  
 Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5695	2	0.224	5.69	0.032	0.81
5696	3	0.234	5.94	0.032	0.81
5697	4	0.251	6.38	0.032	0.81
5698	5	0.270	6.86	0.032	0.81
5699	6	0.289	7.34	0.032	0.81

## 24 AWG (0.23 mm²)

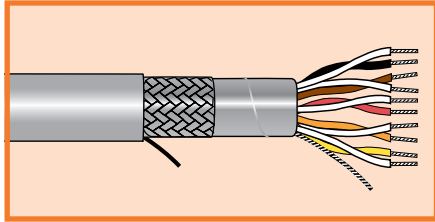
Stranding: 7/32 (7 x 0.20 mm)  
 Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5271C	1	0.184	4.67	0.032	0.81
5272C	2	0.240	6.10	0.032	0.81
5273C	3	0.252	6.40	0.032	0.81
5274C	4	0.271	6.88	0.032	0.81
5275C	5	0.292	7.42	0.032	0.81
5276C	6	0.314	7.98	0.032	0.81
5279C	9	0.360	9.14	0.032	0.81
5279/11C	11	0.385	9.78	0.032	0.81
5279/15C	15	0.429	10.90	0.032	0.81
5279/19C	19	0.457	11.61	0.032	0.81
5279/27C	27	0.540	13.72	0.032	0.81
5279/51C	51	0.739	18.77	0.053	1.35



# Xtra-Guard® 1

## High Performance 300 V Supra-Shield® Foil/Braid, Multipair



**UL CM**  
**UL AWM 2464 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- 28, 26, 24, 22 AWG: Chart B (page 29)
- 20, 18 AWG: Chart A (page 29)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5121C	1	0.196	4.98	0.032	0.81
5122C	2	0.260	6.60	0.032	0.81
5123C	3	0.273	6.93	0.032	0.81
5124C	4	0.295	7.49	0.032	0.81
5125C	5	0.319	8.10	0.032	0.81
5126C	6	0.344	8.74	0.032	0.81
5129C	9	0.396	10.06	0.032	0.81
5129/11C	11	0.424	10.77	0.032	0.81
5129/15C	15	0.475	12.07	0.032	0.81
5129/19C	19	0.507	12.88	0.032	0.81
5129/27C	27	0.649	16.48	0.053	1.35

### 20 AWG (0.56 mm²)

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5292C	2	0.326	8.28	0.032	0.81
5293C	3	0.344	8.74	0.032	0.81
5296C	6	0.443	11.25	0.032	0.81
5299C	9	0.515	13.08	0.032	0.81
5299/19C	19	0.719	18.26	0.053	1.35

### 18 AWG (0.81 mm²)

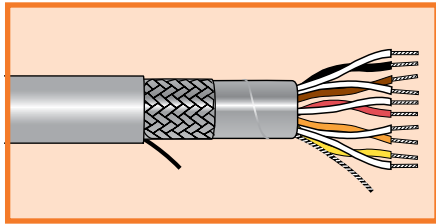
Stranding: 16/30 (16 x 0.25 mm)  
Insulation thickness: 0.016 (0.41 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5132C	2	0.355	9.02	0.032	0.81
5133C	3	0.376	9.55	0.032	0.81
5136C	6	0.488	12.40	0.032	0.81
5139C	9	0.611	15.52	0.053	1.35
5139/27C	27	1.004	25.50	0.083	2.11



# Xtra-Guard® 1

## High Performance 300 V Supra-Shield® Foil/Braid, Multipair



**UL CM**  
**UL AWM 2343 VW-1**  
**CSA CMG FT4**

### Operating Temperature

- -30°C to +80°C (AWM)
- -30°C to +105°C (CM)

### Conductor Color Coding

- Chart B (page 29)
- Jacket Colors
  - Put-ups: slate
  - Bulk: nine colors available (page 2, minimums may apply)

### Materials

- Stranded tinned copper conductors
- Premium PVC insulation
- Supra-Shield foil + braid shield: Aluminum/polyester/aluminum foil with 25% overlap min. Tinned copper drain wire sized the same as conductors Tinned copper braid, 70% coverage min.
- Nylon ripcord
- Premium PVC jacket
- UV resistant

### Availability

100 ft (30.5 m)  
500 ft (152 m)  
1000 ft (305 m)  
Bulk, cut to length

### FIT® Tubing Recommendations

- FIT-221: General-purpose, cross-linked polyolefin (indoor)
- FIT-321: Medium-wall, adhesive-lined, cross-linked polyolefin (outdoor)

### 24 AWG (0.23 mm²)

Stranding: 7/32 (7 x 0.20 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5330C	5	0.354	8.99	0.063	1.60
5331C	7	0.376	9.55	0.063	1.60
5332C	12	0.458	11.63	0.063	1.60
5333C	15	0.491	12.47	0.063	1.60
5334C	19	0.519	13.18	0.063	1.60
5335C	27	0.602	15.29	0.063	1.60
5336C	37	0.669	16.99	0.063	1.60

### 22 AWG (0.35 mm²)

Stranding: 7/30 (7 x 0.25 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5340/2C	2	0.322	8.18	0.063	1.60
5340C	5	0.381	9.68	0.063	1.60
5341C	7	0.406	10.31	0.063	1.60
5342C	12	0.499	12.67	0.063	1.60
5344C	19	0.569	14.45	0.063	1.60
5345C	27	0.669	16.99	0.063	1.60
5346C	37	0.738	18.75	0.063	1.60

### 20 AWG (0.56 mm²)

Stranding: 7/28 (7 x 0.32 mm)  
Insulation thickness: 0.010 (0.25 mm)

Part No.	Pairs	Nominal Diameter		Jacket Thickness	
		Inch	mm	Inch	mm
5350/4C	4	0.388	9.86	0.063	1.60
5350C	5	0.416	10.57	0.063	1.60
5351C	7	0.446	11.33	0.063	1.60
5351/9C	9	0.505	12.83	0.063	1.60
5353C	15	0.597	15.16	0.063	1.60
5354C	19	0.634	16.10	0.063	1.60
5355C	27	0.749	19.02	0.063	1.60



# Conductor Color Coding

## Multipair Cables

Chart A							
Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	Black + Red	14	Green + Blue	27	Brown + Yellow	40	Slate + Blue
2	Black + White	15	Green + White	28	Violet + Red	41	Slate + Brown
3	Black + Green	16	Green + Brown	29	Violet + White	42	Slate + Yellow
4	Black + Blue	17	Green + Orange	30	Violet + Green	43	Slate + Orange
5	Black + Brown	18	Green + Yellow	31	Violet + Blue	44	Slate + Black
6	Black + Yellow	19	White + Blue	32	Violet + Brown	45	White/Black + Red
7	Black + Orange	20	White + Brown	33	Violet + Yellow	46	White/Black + Green
8	Red + Green	21	White + Orange	34	Violet + Orange	47	White/Black + Blue
9	Red + White	22	White + Yellow	35	Violet + Slate	48	White/Black + Brown
10	Red + Blue	23	Blue + Brown	36	Violet + Black	49	White/Black + Yellow
11	Red + Yellow	24	Blue + Orange	37	Slate + Red	50	White/Black + Orange
12	Red + Brown	25	Blue + Yellow	38	Slate + White	51	White/Black + Violet
13	Red + Orange	26	Brown + Orange	39	Slate + Green		

Chart B					
Pair No.	Color Combination	Pair No.	Color Combination	Pair No.	Color Combination
1	White + Black	35	Orange + Slate	69	White/Red + Green
2	White + Brown	36	Yellow + Green	70	White/Red + Blue
3	White + Red	37	Yellow + Blue	71	White/Red + Violet
4	White + Orange	38	Yellow + Violet	72	White/Red + Slate
5	White + Yellow	39	Yellow + Slate	73	White/Orange + Black
6	White + Green	40	Green + Blue	74	White/Orange + Brown
7	White + Blue	41	Green + Violet	75	White/Orange + Red
8	White + Violet	42	Green + Slate	76	White/Orange + Orange
9	White + Slate	43	Blue + Violet	77	White/Orange + Yellow
10	Black + Brown	44	Blue + Slate	78	White/Orange + Green
11	Black + Red	45	Violet + Slate	79	White/Orange + Blue
12	Black + Orange	46	White/Black + Black	80	White/Orange + Violet
13	Black + Yellow	47	White/Black + Brown	81	White/Orange + Slate
14	Black + Green	48	White/Black + Red	82	White/Yellow + Black
15	Black + Blue	49	White/Black + Orange	83	White/Yellow + Brown
16	Black + Violet	50	White/Black + Yellow	84	White/Yellow + Red
17	Black + Slate	51	White/Black + Green	85	White/Yellow + Orange
18	Brown + Red	52	White/Black + Blue	86	White/Yellow + Yellow
19	Brown + Orange	53	White/Black + Violet	87	White/Yellow + Green
20	Brown + Yellow	54	White/Black + Slate	88	White/Yellow + Blue
21	Brown + Green	55	White/Brown + Black	89	White/Yellow + Violet
22	Brown + Blue	56	White/Brown + Brown	90	White/Yellow + Slate
23	Brown + Violet	57	White/Brown + Red	91	White/Green + Black
24	Brown + Slate	58	White/Brown + Orange	92	White/Green + Brown
25	Red + Orange	59	White/Brown + Yellow	93	White/Green + Red
26	Red + Yellow	60	White/Brown + Green	94	White/Green + Orange
27	Red + Green	61	White/Brown + Blue	95	White/Green + Yellow
28	Red + Blue	62	White/Brown + Violet	96	White/Green + Green
29	Red + Violet	63	White/Brown + Slate	97	White/Green + Blue
30	Red + Slate	64	White/Red + Black	98	White/Green + Violet
31	Orange + Yellow	65	White/Red + Brown	99	White/Green + Slate
32	Orange + Green	66	White/Red + Red	100	White/Blue + Black
33	Orange + Blue	67	White/Red + Orange	101	White/Blue + Brown
34	Orange + Violet	68	White/Red + Yellow	102	White/Blue + Red

# Conductor Color Coding

## Multiconductor Cables

Chart D

No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe
1	Black				35	White	Red	Red		69	White	Black	Green	Blue
2	Red				36	White	Red	Green		70	White	Black	Green	Brown
3	White				37	White	Red	Blue		71	White	Black	Green	Orange
4	Green				38	White	Red	Brown		72	White	Black	Green	Slate
5	Orange				39	White	Red	Violet		73	White	Black	Green	Violet
6	Blue				40	White	Green	Black		74	White	Black	Yellow	Blue
7	Brown				41	White	Green	Red		75	White	Black	Yellow	Brown
8	Yellow				42	White	Green	Green		76	White	Black	Yellow	Orange
9	Violet				43	White	Green	Blue		77	White	Black	Yellow	Slate
10	Slate				44	White	Green	Brown		78	White	Black	Yellow	Violet
11	Pink				45	White	Green	Violet		79	White	Black	Blue	Brown
12	Tan				46	White	Blue	Black		80	White	Black	Blue	Orange
13	Red	Green			47	White	Blue	Red		81	White	Black	Blue	Slate
14	Red	Yellow			48	White	Blue	Green		82	White	Black	Blue	Violet
15	Red	Black			49	White	Blue	Blue		83	White	Black	Brown	Orange
16	White	Black			50	White	Blue	Brown		84	White	Black	Brown	Slate
17	White	Red			51	White	Blue	Violet		85	White	Black	Brown	Violet
18	White	Green			52	White	Brown	Black		86	White	Black	Orange	Slate
19	White	Yellow			53	White	Brown	Red		87	White	Black	Orange	Violet
20	White	Blue			54	White	Brown	Green		88	White	Black	Slate	Violet
21	White	Brown			55	White	Brown	Blue		89	White	Red	Black	Green
22	White	Orange			56	White	Brown	Brown		90	White	Red	Black	Yellow
23	White	Slate			57	White	Brown	Violet		91	White	Red	Black	Blue
24	White	Violet			58	White	Violet	Red		92	White	Red	Black	Brown
25	White	Black	Red		59	White	Violet	Green		93	White	Red	Black	Orange
26	White	Black	Green		60	White	Violet	Blue		94	White	Red	Black	Slate
27	White	Black	Yellow		61	White	Black	Red	Green	95	White	Red	Black	Violet
28	White	Black	Blue		62	White	Black	Red	Yellow	96	White	Red	Green	Yellow
29	White	Black	Brown		63	White	Black	Red	Blue	97	White	Red	Green	Blue
30	White	Black	Orange		64	White	Black	Red	Brown	98	White	Red	Green	Brown
31	White	Black	Slate		65	White	Black	Red	Orange	99	White	Red	Green	Orange
32	White	Black	Violet		66	White	Black	Red	Slate	100	White	Red	Green	Slate
33	White	Black	Black		67	White	Black	Red	Violet					
34	White	Red	Black		68	White	Black	Green	Yellow					

# Conductor Color Coding

## Multiconductor Cables

Chart E														
No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe	No.	Base Color	1st Stripe	2nd Stripe	3rd Stripe
1	Black				35	White	Red	Orange		69	White	Black	Orange	Green
2	Brown				36	White	Red	Yellow		70	White	Black	Orange	Blue
3	Red				37	White	Red	Green		71	White	Black	Orange	Violet
4	Orange				38	White	Red	Blue		72	White	Black	Orange	Slate
5	Yellow				39	White	Red	Violet		73	White	Black	Yellow	Green
6	Green				40	White	Red	Slate		74	White	Black	Yellow	Blue
7	Blue				41	White	Orange	Yellow		75	White	Black	Yellow	Violet
8	Violet				42	White	Orange	Green		76	White	Black	Yellow	Slate
9	Slate				43	White	Orange	Blue		77	White	Black	Green	Blue
10	White				44	White	Orange	Violet		78	White	Black	Green	Violet
11	White	Black			45	White	Orange	Slate		79	White	Black	Green	Slate
12	White	Brown			46	White	Yellow	Green		80	White	Black	Blue	Violet
13	White	Red			47	White	Yellow	Blue		81	White	Black	Blue	Slate
14	White	Orange			48	White	Yellow	Violet		82	White	Black	Violet	Slate
15	White	Yellow			49	White	Yellow	Slate		83	White	Brown	Red	Orange
16	White	Green			50	White	Green	Blue		84	White	Brown	Red	Yellow
17	White	Blue			51	White	Green	Violet		85	White	Brown	Red	Green
18	White	Violet			52	White	Green	Slate		86	White	Brown	Red	Blue
19	White	Slate			53	White	Blue	Violet		87	White	Brown	Red	Violet
20	White	Black	Brown		54	White	Blue	Slate		88	White	Brown	Red	Slate
21	White	Black	Red		55	White	Violet	Slate		89	White	Brown	Orange	Yellow
22	White	Black	Orange		56	White	Black	Brown	Red	90	White	Brown	Orange	Green
23	White	Black	Yellow		57	White	Black	Brown	Orange	91	White	Brown	Orange	Blue
24	White	Black	Green		58	White	Black	Brown	Yellow	92	White	Brown	Orange	Violet
25	White	Black	Blue		59	White	Black	Brown	Green	93	White	Brown	Orange	Slate
26	White	Black	Violet		60	White	Black	Brown	Blue	94	White	Brown	Yellow	Green
27	White	Black	Slate		61	White	Black	Brown	Violet	95	White	Brown	Yellow	Blue
28	White	Brown	Red		62	White	Black	Brown	Slate	96	White	Brown	Yellow	Violet
29	White	Brown	Orange		63	White	Black	Red	Yellow	97	White	Brown	Yellow	Slate
30	White	Brown	Yellow		64	White	Black	Red	Green	98	White	Brown	Green	Blue
31	White	Brown	Green		65	White	Black	Red	Blue	99	White	Brown	Green	Violet
32	White	Brown	Blue		66	White	Black	Red	Violet	100	White	Brown	Green	Slate
33	White	Brown	Violet		67	White	Black	Red	Slate					
34	White	Brown	Slate		68	White	Black	Orange	Yellow					

## The cables you trust. The service you deserve.

Every application is critical and cable failure is not an option when the safety of your equipment and personnel is paramount. Specify Xtra-Guard 1 cable for extreme environments and crucial applications, since the integrity of your system is only as robust as the products you use.

## Superior availability

Alpha offers Xtra-Guard 1 cable from stock in most sizes and constructions, in small quantities, so you can order them when you need them. Our products are available for same-day shipment, eliminating long lead times.

## Service and support, second-to-none

Selecting the correct cable is essential to overall system reliability, performance, and safety. So we make it easy for you to select the right Alpha product for your specific application. Our online resources include a wire and cable selection guide, technical information, full product catalog, and a distributor locator to make it easy to select and get the cable, wire, and wire management accessories you need. Just visit **[www.alphawire.com](http://www.alphawire.com)**!

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**AlphaWire**

*Cables you trust. Service you deserve.*





## Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

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